

**MINNESOTA
COMPREHENSIVE
HIV PREVENTION PLAN
2006 - 2008**

**Community Cooperative Council on
HIV/AIDS Prevention
and
Minnesota Department of Health**

Minnesota Comprehensive HIV Prevention Plan 2006 - 2008

Developed by the
Community Cooperative Council on
HIV/AIDS Prevention
and the
Minnesota Department of Health
STD and HIV Section

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Introduction.....

HIV Prevention Community Planning

Prevention strategies still remain our best defense in the battle against HIV (Human Immunodeficiency Virus) and AIDS (Acquired Immune Deficiency Syndrome). Our experience shows that unless HIV prevention programs are developed with input from the communities they propose to reach, they are unlikely to receive the support they need to be effective. In 1993, the Centers for Disease Control and Prevention (CDC) issued a guidance to all state and territorial health departments about how to implement ongoing HIV Community Prevention Planning through the establishment of a community planning group (CPG).

The purpose of having a CPG is to share with the community the responsibility for identifying and developing effective, culturally specific prevention education interventions.

The primary task of the CPG is to develop a comprehensive HIV prevention plan; thus, the development of this document. The comprehensive HIV prevention plan includes detailed information on the following work that is completed through the community planning process:

Epidemiological Profile: The epidemiological profile (epi profile) describes the scope of the HIV epidemic within different populations in the state.

Community Services Assessment: The community services assessment (CSA) is made up of three components: needs assessment, resource inventory, and gap analysis. *Needs assessments* describe how social and cultural characteristics impact HIV infection within specific populations, and identify what the HIV prevention service needs of those populations are. *Resource inventory* is a listing of HIV services that have been implemented to address the needs. *Gap analysis* is a process that is used to determine which prevention needs are still unmet.

Prioritized Target Populations: Populations that have been identified and prioritized as needing prevention efforts due to high rates of HIV infection and high incidence of risky behaviors. The prioritized target populations are identified through using the epi profile and the community services assessment.

Appropriate Science-based Prevention Activities / Interventions: Interventions to reduce infection or transmission that have been identified for each of the prioritized target populations. The interventions are chosen based on effectiveness and cultural/ethnic appropriateness to the target population.

Letter of Concurrence / Concurrence with Reservations / Non-concurrence: A written response from the community planning body that describes to what extent the prevention activities proposed in the health department's grant application agree with the priorities in the comprehensive HIV prevention plan.

The updated community planning guidance developed by the CDC in 2003 describes three goals and eight objectives for HIV prevention community planning. The goals provide overall direction for how community planning should be implemented. However, the goals were purposefully written in broad terms to allow the health departments and community planning groups flexibility in determining how to achieve them.

GOALS AND OBJECTIVES OF COMMUNITY PLANNING

Goal One

Community planning supports broad-based community participation in HIV prevention planning.

Objectives:

- A. Implement an open recruitment process (outreach, nominations, and selection) for CPG membership.*
- B. Ensure that the CPG membership is representative of the diversity of populations most at risk for HIV infection and community characteristics, and includes key professional expertise and representation from key governmental and non-governmental agencies.*
- C. Foster a community planning process that encourages inclusion and parity among community planning members.*

Goal Two

Community planning identifies priority HIV prevention needs (a set of priority target populations and interventions for each identified target population) in each jurisdiction.

Objectives:

- D. Carry out a logical, evidence-based process to determine the highest priority, population specific needs.*
- E. Ensure that prioritized target populations are based on an epidemiological profile and a community services assessment.*
- F. Ensure that prevention activities/interventions for identified priority target populations are based on behavioral and social science, outcome effectiveness, and/or have been adequately tested with the intended target populations for cultural appropriateness, relevance, and acceptability.*

Goal Three

Community planning ensures that HIV prevention resources target priority populations and interventions set forth in the comprehensive HIV prevention plan.

Objectives:

- G. Demonstrate a direct relationship between the comprehensive prevention plan and the health department's prevention grant application.*
- H. Demonstrate a direct relationship between the comprehensive prevention plan and funded interventions.*

Perhaps the most important and controversial part of community planning is the prioritization of target populations. Since there is a finite amount of resources available for HIV prevention, and an infinite number of ways in which to use those resources, the community planning process is responsible for deciding what those resources should be used for, and to which communities the resources should go. This responsibility is becoming ever more challenging as the amount of available resources continues to decrease.

Community Cooperative Council on HIV/AIDS Prevention (CCCHAP)

In 1994, in order to implement all these aspects of community planning, Minnesota formed the Commissioner's Task Force on HIV/STD Prevention Planning (Task Force). In 2004, the group decided to change its name to the Community Cooperative Council on HIV/AIDS Prevention (CCCHAP). This group is selected by, and composed of, community members that represent the cultural and geographic diversity of the HIV epidemic in Minnesota. The CCCHAP is responsible for prioritizing HIV prevention target populations and identifying interventions for each population.

The CCCHAP works closely with the Minnesota Department of Health (MDH) to carry out the community planning process. The MDH receives funding from the CDC and the state to implement HIV prevention programming, and receives limited CDC funding to address sexually transmitted diseases (STDs).

CCCHAP MEMBERSHIP

The CCCHAP may have up to 35 members. At least 25% of the membership should be people who are living with HIV/AIDS. The membership of the CCCHAP should reflect the HIV epidemic in Minnesota in terms of gender, race/ethnicity, age, sexual orientation, risk behavior, and geography. Additionally, the membership should include individuals who have expertise in the areas of epidemiology, health planning, behavioral and social sciences, and program evaluation.

New members are brought on once a year in December. Members may serve up to three consecutive two-year terms. The CCCHAP is chaired by three co-chairs. Two are community co-chairs elected by the membership. The third co-chair is appointed by MDH. The membership also elects a Parliamentarian, who is responsible for advising the co-chairs on CCCHAP procedures and decision making processes.

CCCHAP PLANNING PROCESS

MDH and the CCCHAP implemented a restructured planning process in April 2004. Under this new process, the full CCCHAP meets three to four times a year for two full days, instead of maintaining the previous schedule of monthly meetings that lasted four hours. Committees only meet four to five times a year instead of meeting on a monthly basis.

The restructured process involves a three-year planning cycle, with Year A being the major prioritization year. This major prioritization process occurred in 2005, and will occur again in 2008. Based on the priorities identified by the CCCHAP, a request for proposals (RFP) will be released in the fall of 2005, with new three-year contracts being implemented in the community in the summer of 2006. Years B and C of the planning cycle are "gap analysis" years, during which the CCCHAP will identify needs that have not been met as a result of the prioritization and RFP processes. Unmet needs may be the result of numerous factors,

including insufficient funds or emerging trends that were not identified during the last prioritization process.

An additional focus of the new planning structure is to increase input from community (non-CCCHAP) members into the planning process. MDH staff and CCCHAP members work together to gather community input related to prioritization and gap analysis through attendance at established community groups or by convening community forums.

COMMITTEE STRUCTURE

The work of the CCCHAP had historically been done through its committees and then brought back to the full body for approval. However, with the new planning model, much of the work that was previously done in committee is completed during the full CCCHAP meetings. As a result, two former committees of the CCCHAP were eliminated.

Two committees have continued under the new structure: the Membership & Training Committee and the Process & Procedures Committee. CCCHAP members are required to serve on at least one committee during both years of their first membership term. During their second or third membership term, they are only required to serve on a committee for one year of each two-year term.

Community members have always been welcome to participate in the committees and in the past were able to become voting members of a committee after attending three meetings. Under the new planning structure, community members may attend any committee meeting and are able to fully participate in the decision making process. At full CCCHAP meetings, community members may participate in discussion, but not in decision making.

Membership & Training Committee

The Membership & Training Committee is responsible for implementing Goal One of community planning by ensuring that the membership of the CCCHAP fosters parity, inclusion and representation (PIR). Goals Two and Three are conducted by the full CCCHAP.

Parity: The ability of members to equally participate and carry out planning tasks/duties. In order to achieve parity, members should be provided with opportunities for orientation and skills building to participate in the planning process and to have equal voices in voting and other decision making activities.

Inclusion: Meaningful involvement of members in the process with an active voice in decision making. An inclusive process assures that the views, perspectives, and needs of all affected communities are actively included.

Representation: The act of serving as an official member reflecting the perspective of a specific community. A representative should truly reflect that community's values, norms

Goals of Restructured Planning Process

- ◆ Improve participation (better attendance at CCCHAP meetings and more interest in CCCHAP membership) in community planning by:
 - Changing the requirements related to time spent in meetings
 - Clarifying roles and responsibilities of CCCHAP members
 - Clarifying the purpose/objectives of work to be completed at each meeting
- ◆ Address emerging needs in a more timely manner
- ◆ Improve input into the community planning process by non-CCCHAP members
- ◆ Reduce MDH's administrative burden

and behaviors (members should have expertise in understanding and addressing the specific HIV prevention needs of the populations they represent). Representatives must be able to participate as group members in objectively weighing the overall priority prevention needs of the jurisdiction.

The Membership & Training Committee considers the make-up of the current CCCHAP (gender, race/ethnicity, age, sexual orientation, risk behavior, place of residence) and compares it to the demographics of who is becoming infected with HIV, and who is living with HIV and AIDS in Minnesota. They also consider any gaps in areas of expertise among the current membership and to what extent HIV positive individuals are represented. This assists the committee in understanding who to target for recruitment for membership on the CCCHAP. Recruitment occurs during the summer/early fall of each year.

The Membership & Training Committee conducts interviews with all potential candidates and makes recommendations for membership. New members are elected at a joint meeting of the Membership & Training and the Process & Procedures Committees in November of each year, and begin their membership terms in December. The committee is also responsible for overseeing the orientation of new members and ongoing training for the full membership.

Process & Procedures Committee

The Process & Procedures Committee is charged with reviewing and refining processes and materials used by the CCCHAP to make planning decisions. The committee is responsible for assigning roles and responsibilities for managing CCCHAP meetings, reviewing planning processes and making recommendations for improvement, and for making recommendations regarding changes in the bylaws. The Process & Procedures Committee, jointly with the Membership & Training Committee, also reviews community planning evaluations and determines how to most effectively address identified issues.

The two community co-chairs, the MDH co-chair, and the Parliamentarian are required to serve on this committee. The remaining membership is made up of CCCHAP members who are interested in serving on this committee.

Executive Team

The Executive Team is made up of the two community co-chairs, the MDH co-chair, the Parliamentarian, and MDH staff. While not officially a committee, the Executive Team meets on an as-needed basis for the purpose of strategizing the overall planning process and/or any special planning projects, identifying resources needed to complete specific tasks, considering appeals from CCCHAP members who have been removed due to attendance issues, and for considering grievances related to CCCHAP processes.

An organizational chart of the CCCHAP reflecting the current committee structure is included on page 10.

COMMUNITY INVOLVEMENT

The CCCHAP relies on the involvement and input of community members to accomplish its work. All CCCHAP and committee meetings are open to the community and community members are welcome to participate in the conversation. As mentioned earlier, community members may attend any committee meeting and participate in the discussion and decision making, although they may not participate in decision making at full CCCHAP meetings.

In addition, CCCHAP members attend established community groups and/or conduct community forums in order to gather feedback and information from members of at-risk populations to help ensure that prevention interventions will really meet the needs of those populations.

Evaluation of HIV Prevention Community Planning

The basic evaluation question related to the community planning process is the following, “Is community planning being implemented as intended and achieving its objectives?” MDH has developed an evaluation plan for community planning, which is presented in table form at the end of this chapter, starting on page 11.

The first part of the evaluation plan is designed to evaluate to what degree the community planning process is meeting the goals and objectives defined by CDC, which are presented on page 2 of this chapter. The second part of the evaluation plan describes activities to evaluate how effectively the new planning process is meeting the desired goals of restructuring (summarized on page 4). The evaluation plan describes the purpose, goals, and objectives of the evaluation of community planning, evaluation questions that address each objective, data collection methods used to answer evaluation questions, data collection timeline, and data use and reporting information.

PERFORMANCE INDICATORS

In the new community planning guidance released in 2003, the CDC includes four performance indicators that are used to monitor the progress that health departments and CPGs are making in meeting the goals and objectives of community planning.

Performance Indicator #1

The first performance indicator is designed to measure to what degree the membership of the CCCHAP is reflective of the HIV epidemic in the state, and corresponds to Community Planning Goal 2, Objective B. It is defined as, “*the proportion of populations most at risk (up to 10), as documented in the epidemiological profile and/or the priority populations in the*

The information gathered to evaluate the community planning process will be used to:

- ◆ Document the extent to which HIV prevention community planning objectives are achieved (monitor progress).
- ◆ Determine the factors affecting implementation of HIV prevention community planning (identify strengths and weaknesses).
- ◆ Apply the findings to improve the planning process as needed.
- ◆ Generate concrete information that can be used to inform stakeholders of progress.
- ◆ Report on HIV prevention program performance indicators.

comprehensive plan, that have at least one CPG member that reflects the perspective of each population.”

This is measured by calculating how many of the top ten prioritized target populations in the comprehensive plan are represented by at least one CCCHAP member. Representation of a target population may be by a person who is an advocate for and/or works with that population.

Performance Indicator #2

The second performance indicator is designed to measure CCCHAP members’ perceptions of the quality and relevance of the community planning process. It is defined as, “*the proportion of key attributes of an HIV prevention planning process that CPG membership agree have occurred.*”

This indicator refers to 52 key attributes that are included in the community planning guidance. The key attributes provide more detail as to how the three goals and eight objectives of community planning should be implemented. The CDC designed a survey that is completed by CCCHAP members on an annual basis to determine how many of the key attributes the membership agrees have occurred.

Performance Indicator #3

The third performance indicator is designed to measure to what extent the priorities identified by the CCCHAP in the comprehensive plan are reflected in MDH’s grant application to CDC. This indicator is related to Community Planning Goal 3, Objective G. The indicator is defined as, “*the percent of prevention interventions/other supporting activities in the health department CDC funding application specified as a priority in the comprehensive HIV prevention plan.*”

This indicator is measured by comparing the target populations and interventions included in the comprehensive prevention plan to the interventions proposed for each target population in the grant application.

Performance Indicator #4

The final performance indicator is designed to measure to what extent the priorities in the comprehensive prevention plan are actually being funded by the health department, and is related to Community Planning Goal 3, Objective H. This indicator is defined as, “*the percent of health department-funded prevention interventions/other supporting activities that correspond to priorities specified in the comprehensive HIV prevention plan.*”

This indicator is measured by comparing the target populations and HIV prevention interventions that have been funded by MDH to the target populations and interventions recommended in the comprehensive plan.

The Comprehensive HIV Prevention Plan

The Minnesota Comprehensive HIV Prevention Plan provides a description of all the work performed by the CCCHAP. The plan is developed every three years, and updated on an annual basis. Based on the results of the CCCHAP’s work, the plan sets HIV prevention priorities that will be used by MDH to guide its public health efforts around the control of HIV. It also represents a call and a guide to the community at large to respond most effectively to the needs expressed by their fellow Minnesotans throughout this process.

The plan identifies two groups of needs. One is a simple demand for more and better programs, more education, more outreach and new kinds of behavioral interventions. These sorts of needs are readily addressed through program development and allocation of funds. However, it should be noted that it is probably an unrealistic expectation that HIV transmission can be prevented absolutely 100% of the time, or that individuals will choose safer behavior ALL of the time, even with an abundance of HIV prevention programs in place. HIV is the only public health problem where full compliance to safe behavior is expected. We talk about and plan for relapses related to smoking and substance abuse. We expect people to “fail” multiple times at dieting, seat belt usage, etc. We plan medication adherence programs because we don’t expect that all HIV positive individuals will be able to fully adhere to HIV treatment because of the very difficult regimens. However, when it comes to safer sex or needle use, we expect 100% compliance.

The second group of needs is much more complex and difficult to address. At almost every CCCHAP meeting, issues such as poverty, racism, sexism, homelessness, and homophobia are identified as hindrances to public health efforts designed to address HIV and other STDs. Participants recognized while programs are able to address certain gaps in HIV prevention, effects will be short-term and minimal unless these social problems are also addressed.

How To Use The Plan

This comprehensive plan is designed to be used by anyone proposing to develop or fund an HIV prevention program. Following is a description of the chapters and how they may be useful to you:

Chapter One: Epidemiological Profile describes how HIV/AIDS and other STDs impact different populations in Minnesota.

Chapter Two: Community Services Assessment contains information on needs assessment, resource inventory and gap analysis:

The Needs Assessment section provides a description of why HIV has impacted specific target populations in the ways described in the epidemiological profile. You should use this section to learn about the population you intend to reach with your HIV prevention program.

The Resource Inventory lists programs that are currently in place in Minnesota to reach different target populations.

The Gap Analysis section combines our understanding of the prevention needs and resources available for each target population. By comparing them, we are able to identify gaps in programming for specific target populations.

Chapter Three: Prioritization Process and Results describes the prioritization process the CCCHAP conducted in 2005 and the results of that process. The results include the target populations prioritized as being at highest risk for HIV infection or transmission and the co-factors that most impact HIV risk within each population. You should use this chapter to help select the target population(s) and co-factors you are interested in addressing.

Chapter Four: Effective Interventions describes some of the research available about how to address the problem of HIV among the target populations prioritized by the CCCHAP. You should use this section to help you decide which intervention(s) would be most effective in preventing HIV infection or transmission with your proposed target population.

Chapter Five: Collaboration and Coordination describes current collaborative efforts in Minnesota to address HIV prevention. This chapter can be helpful in identifying organizations that could serve as resources or partners.

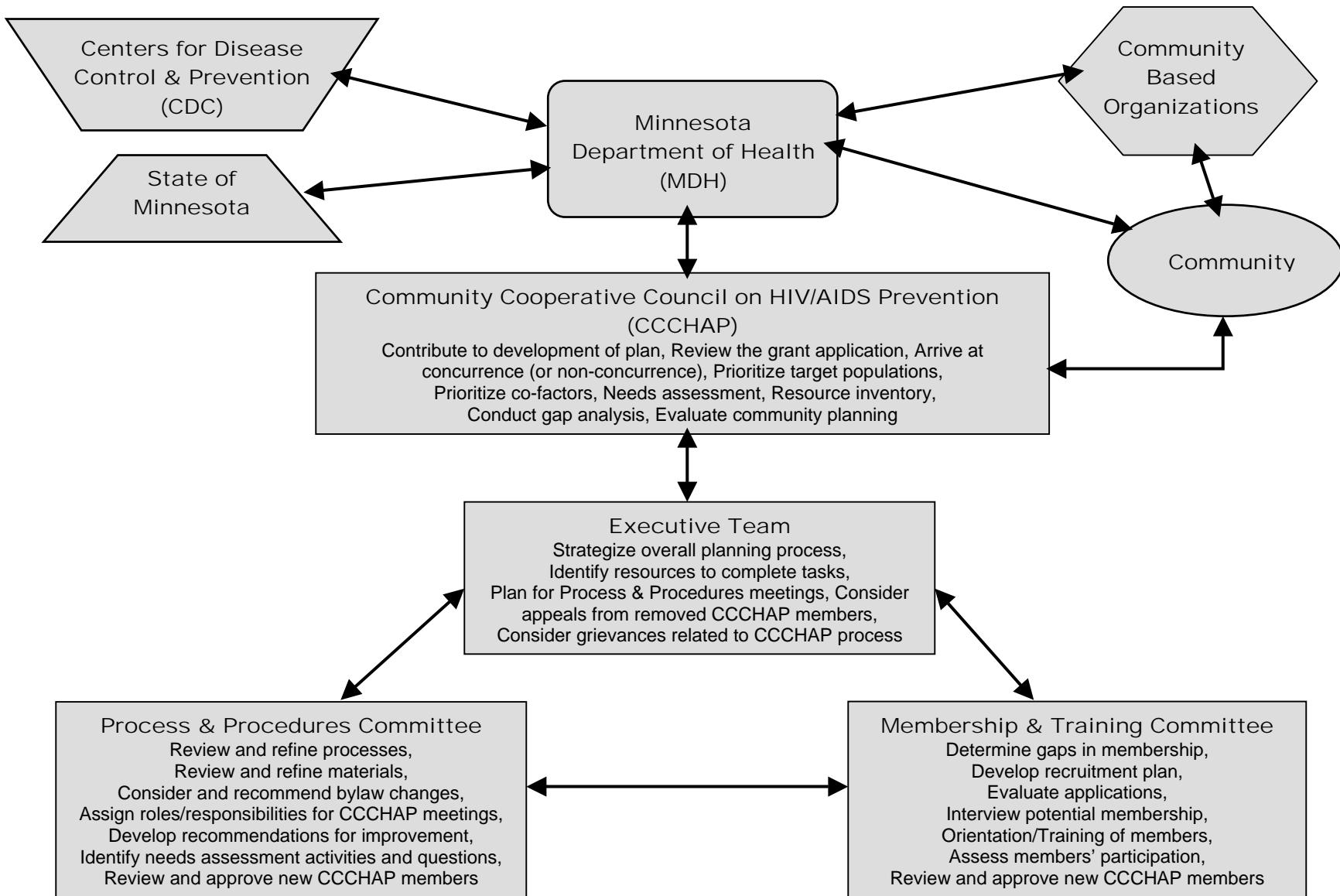
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CCCHAP Organizational Chart



COMMUNITY PLANNING EVALUATION PLAN

COMMUNITY PLANNING EVALUATION PART 1

Purpose: To assess the degree to which community planning goals and objectives are met.

Community Planning Goals and Objectives:

Goal One – Community planning supports broad-based community participation in HIV prevention planning.

- Objective A: Implement an open recruitment process (outreach, nominations, and selection) for CPG members.
- Objective B: Ensure that the CPG membership is representative of the diversity of populations most at risk for HIV infection and community characteristics in the jurisdiction, and includes key professional expertise and representation from key governmental and non-governmental agencies.
- Objective C: Foster a community planning process that encourages inclusion and parity among community planning members.

Goal Two – Community planning identifies priority HIV prevention needs (a set of priority target populations and interventions for each identified target population) in each jurisdiction.

- Objective D: Carry out a logical, evidence-based process to determine the highest priority, population-specific prevention needs in the jurisdiction.
- Objective E: Ensure that prioritized populations are based on an epidemiological profile and a community services assessment.
- Objective F: Ensure that prevention interventions for identified priority target populations are based on behavioral and social science, outcome effectiveness, and/or have been adequately tested with intended target populations for cultural appropriateness, relevance and acceptability.

Goal Three – Community planning ensures that HIV prevention resources target priority populations and interventions set forth in the comprehensive HIV prevention plan.

- Objective G: Demonstrate a direct relationship between the Comprehensive HIV Prevention Plan and the Health Department Application for federal HIV prevention funding.
- Objective H: Demonstrate a direct relationship between the Comprehensive Prevention Plan and funded interventions.

Community Planning Evaluation Part 1

| Evaluation Questions | Data Collection Method(s) | Data Collection Timeline | Using the Data |
|---|---|--|---|
| Are community planning objectives being met? | The Community Planning Membership Survey includes questions about whether the respondent agrees or disagrees that key attributes of community planning process have been met. | CPG members complete the Community Planning Membership Survey each September. | <p>Results from the surveys are reviewed by MDH and the CPG committees each November to identify strengths, weaknesses and gaps in the community planning process, and used to make recommendations for how to improve the process.</p> <p>Results from the Community Planning Membership Survey are used to report Indicator E.2 to CDC.</p> |
| Is CPG membership representative of the diversity of populations most at risk for HIV infection and community characteristics in the jurisdiction, and include key professional expertise and representation from key agencies? | <p>Community Planning Membership Survey</p> <p>CPG membership application</p> <p>Summary table of epidemiological data for Minnesota by gender, race/ethnicity, age, mode of exposure, and geography.</p> | <p>CPG members complete the Community Planning Membership Survey each September.</p> <p>CPG member candidates complete the membership application during the application process.</p> <p>MDH epidemiologist prepares the table and presents information to the Membership and Training Committee each May.</p> | <p>Results of the survey, membership applications, and the table are reviewed by the Membership and Training Committee to address gaps in membership and to target recruitment each May.</p> <p>Results from the Community Planning Membership Survey are used to report Indicator E.1 to CDC.</p> |

Community Planning Evaluation Part 1

| Evaluation Questions | Data Collection Method(s) | Data Collection Timeline | Using the Data |
|--|---|---|--|
| What is the quality of the orientation and training process for CPG members? To what degree do participants understand the material that is presented? How many CPG members attend the required training sessions? | Evaluation forms are completed for each training session to assess what participants learned as well as strengths and weaknesses of the training. A sign-in sheet is used to monitor attendance. | CPG members complete the Evaluation form after participating in training (Orientation training held each December/January; Gap analysis training held in March of gap analysis years, and Prioritization training held in January of prioritization years). CPG members sign in at the training. | Results are used by MDH and Membership and Training Committee to identify strengths, weaknesses and gaps in orientation trainings and apply findings to improve trainings. |
| To what extent does the health department address community-planning priorities in the CDC funding application and in RFPs, contracts, and programs funded by the MDH? | Comparison of Minnesota Comprehensive HIV Prevention Plan to programs identified in CDC funding application. | Comparison completed each July/August for review by CPG during annual concurrence meeting, with an update conducted at the end of each calendar year to report on CDC HIV Prevention Performance Indicators. | Information is reviewed by MDH and the CPG to identify gaps in programming and to ensure that Minnesota planning priorities are being followed. Information used to report Indicators E.3 and E.4 to CDC. |

COMMUNITY PLANNING EVALUATION PART 2

Purpose: To assess if the goals of a restructured community planning process are met.

Goals of restructured planning process:

- To improve participation (better attendance at CPG meetings and more interest in CPG membership) in community planning by:
 - Changing the meeting time requirements (Under the new process, there will be more time spent in full CPG meetings, and less time in committees. The total number of meetings a member has to attend will decrease.)
 - Clarifying roles and responsibilities of CPG members (Focus the work on planning and not on other MDH processes.)
 - Making the purpose/objectives and work to be completed at each meeting clear
- To improve the input into the community planning process for non CPG members through community forums and annual visits by CPG members to community groups
- To reduce administrative burden (MDH)
- To maintain balance between flexibility to address emerging needs and stable support for grantees

| Evaluation Question(s) | Data Collection Method(s) | Data Collection Timeline | Using the Data |
|--|---|--|---|
| Does the new process result in a change in the number of CPG applicants and members? Does the new process result in a change in the demographic characteristics and expertise of CPG members? | Community Planning Membership Survey includes questions about demographic characteristics and professional experience. CPG membership application. | CPG members complete the Community Planning Membership Survey each September. CPG member candidates complete the membership application during the application process. | MDH will compare membership characteristics in 2002 and 2003 to subsequent years to answer evaluation questions (presented each November at joint committee meeting), and monitor membership changes from 2004-2007 to help target recruitment. |
| Is meeting attendance improved under the new community planning process? (Change in meeting schedule) | Meeting attendance records. | CPG attendance is recorded at each meeting. | MDH will compare attendance in 2002 and 2003 to subsequent years to answer evaluation questions (presented each November at joint committee meeting) and monitor attendance from 2004-2007 and make changes to meeting schedule if needed. |

| Evaluation Question(s) | Data Collection Method(s) | Data Collection Timeline | Using the Data |
|---|---|--|---|
| To what degree do CPG members believe the changes to the community planning process (change in meeting schedule and time commitment; work done in larger group rather than committees) foster active participation? What are the strengths and weaknesses of the changes to the process? | Survey new and departing CPG members about the effect of time requirements, member roles and responsibilities, and meeting objectives on their ability and desire to actively participate in the group. | Similar questions will be asked of 2 groups using different methods: an exit survey will be developed in May/June 2004 for use when members resign and questions will be included on the CPG membership survey for current members conducted in September. | MDH and the CPG committees will review survey results (November) and make changes to improve the planning process. |
| To what degree is the work and discussion at each meeting focused on the stated objective? To what degree is time spent on topics unrelated to the meeting objective? Does the new meeting structure allow CPG members enough time to use information presented to make informed decisions? | CPG meeting evaluation form will collect member feedback about their ability to understand and use information presented, and about the degree to which meeting objectives were met. | CPG members complete a meeting evaluation form after each meeting of the full CPG. | MDH staff will review results from evaluation forms after each meeting, and MDH with the CPG committees will review summary results for the year in November to identify meeting strengths and weaknesses and to make recommendations for how to improve future meetings. |
| How many and what type of community groups meet with CPG members to provide input about HIV prevention for their communities each year? How is input used by the CPG? How can the process of gathering community input through forums be improved? | Record of forums convened and community groups visited. Community forum process review and discussion. | CPG keeps a summary record of where input is gathered, forum/group attendance, what input is gathered, and how input is put to use. CPG members review and discuss community forum process in spring. | The Process & Procedures Committee and Executive Team review CPG member discussion of community forums conducted and make recommendations for improvement to process. |

Chapter One

Epidemiological Profile.....

The Epidemiological Profile

The epidemiological (epi) profile presents data on the HIV epidemic in the state of Minnesota. The profile gives the Community Cooperative Council on HIV/AIDS Prevention (CCCHAP) and the Minnesota HIV Services Planning Council (Planning Council) a thorough understanding of the epidemic in our state. By showing us who is becoming infected and who is living with the disease, the epi profile helps us to identify the people who are in need of prevention and care services, both those who are infected and those at risk. The epi profile serves as a starting point for the CCCHAP and the Planning Council in their consideration of which prevention and care services are needed.

The profile presents data for both the state as a whole and the Minneapolis-St. Paul Eligible Metropolitan Area¹ (EMA), consisting of eleven Minnesota counties and two Wisconsin counties.

Description of Minnesota²

GEOGRAPHY

Minnesota is a geographically diverse state. Its 84,363 square miles are comprised of farmlands, river valleys, forests, and lakes. Minnesota has one large urban center made up of Minneapolis and St. Paul (the Twin Cities) in Hennepin and Ramsey Counties, respectively. The Twin Cities are located on opposite banks of the Mississippi River in the southeastern area of the state. The majority (58%) of the state's 4,919,479 residents live in the Twin Cities and the surrounding eleven-county metropolitan region. Duluth (northeast), St. Cloud (central), Rochester (southeast), Mankato (south central), and Moorhead (northwest) are other moderately sized population centers. The rest of Minnesota's population resides in smaller towns, the majority of which have populations of less than 2,000.

Three large interstate highways traverse the state, two of which pass through Minneapolis-St. Paul. I-35 runs north-south and I-94 runs northwest-southeast. I-90 parallels the southern border of Minnesota. A host of state and county roads connect the remaining regions of the state.

AGE

Minnesota's population is growing and, like the rest of the nation, getting older. The median age in Minnesota increased from 32.4 years in 1990 to 34.9 years in 2000 mainly due to the aging "baby boomer" population. Despite the rising median age, population growth was most apparent in younger age groups, particularly among 15 to 19 year olds whose number increased by 26% between 1990 and 2000 (compared to 14% nationally). According to the

¹ The Minneapolis-St. Paul EMA includes the following counties: Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright in Minnesota and Pierce and St. Croix in Wisconsin.

² All data presented in this section are from the U.S. Census Bureau, unless otherwise noted.

2000 Census, 3.25 million persons (66%) living in Minnesota were under the age of 45. As seen in Table 1, there is little difference in the age distribution for the state and EMA.

Table 1. Age Distribution in Minnesota and EMA

| Age | Minnesota (n = 4,919,479) | Minneapolis – St. Paul EMA (n = 2,968,806) |
|---------|------------------------------|---|
| < 13 | 18.5% | 19.3% |
| 13 – 19 | 10.7% | 10.1% |
| 20 – 24 | 6.6% | 6.5% |
| 25 – 29 | 6.5% | 7.3% |
| 30 – 34 | 7.2% | 8.1% |
| 35 – 39 | 8.4% | 9.1% |
| 40 – 44 | 8.4% | 8.7% |
| 45 – 49 | 7.4% | 7.5% |
| 50 – 54 | 6.1% | 6.2% |
| 55 – 59 | 4.6% | 4.4% |
| 60 + | 15.7% | 12.8% |

Table 2. Race and Ethnicity Distribution by Gender in Minnesota and EMA

| | Minnesota | | Minneapolis-St. Paul EMA | |
|--------------------------|---------------|---------------|--------------------------|---------------|
| | (n=2,435,631) | (n=2,483,848) | (n=1,466,277) | (n=1,502,529) |
| Race / Gender | Male | Female | Male | Female |
| White | 89.1% | 89.7% | 85.7% | 86.5% |
| Black / African American | 3.6% | 3.3% | 5.5% | 5.2% |
| American Indian | 1.1% | 1.1% | 0.7% | 0.7% |
| Asian / Pacific Islander | 2.9% | 2.9% | 4.2% | 4.2% |
| Other race | 1.5% | 1.2% | 1.8% | 1.3% |
| Two or more races | 1.7% | 1.7% | 2.1% | 2.1% |
| Hispanic / Latino* | 3.2% | 2.6% | 3.7% | 3.0% |

*Includes all races

RACE/ETHNICITY

While Minnesota is predominantly White (approximately 89%), there has been an increase in the number of Black, Hispanic, and Asian/Pacific Islander persons living in Minnesota since

1990. At that time, 94% of Minnesotans were White, 2.2% Black, 1.2% Hispanic, 1% Native American, and 1.8% Asian. Due to changes in reporting, it is impossible to directly compare 1990 Census data to year 2000 data. However, excluding the 1.7% of the Minnesota population that indicated two or more races, Black, Hispanic, and Asian/Pacific Islander populations increased by about 75%, 150%, and 100% respectively. As of 2000, there were approximately 202,000 Black, 143,000 Hispanic, and 168,000 Asian/Pacific Islander persons living in Minnesota. Additionally, data from the 2000 Census shows that foreign-born individuals account for 5% and 7% of the state and EMA population, compared to 2.6% and 3.5% in 1990.

Table 2 shows the race/ethnicity distribution for Minnesota and the EMA. While the race distribution does not differ greatly by gender it does vary by geography. A significantly larger percent of both White males (89.1% vs. 85.7%) and females (89.7% vs. 86.5%) reside in the rest of the state as compared to the EMA. Additionally, Census data also shows differences in age for Whites versus other groups. Twenty four percent (24%) of Whites in Minnesota were under the age of 18 compared to 37.5% for African Americans and Asians, 38% for Hispanics and American Indians, and 53% of those identifying as multi-racial (two or more races).

Of note is the growing number of African immigrants in Minnesota. Census data shows a 600% increase in the number of African immigrants in Minnesota between 1990 and 2000. According to the 2000 Census the number of African immigrants living in Minnesota is 35,188, however anecdotal estimates put that number closer to 50,000. Somalia, Ethiopia, and Liberia are the most common countries of origin although nearly every country in Africa is represented in Minnesota. In 2003 and 2004, nearly 5,000 primary refugees³ from African countries were resettled in Minnesota (MDH Refugee Health Program).

Additionally, in 2000 Minnesota became one of six initial sites in the United States to receive HIV-infected refugees. Typically immigrants, including refugees, are not permitted entry into the U.S. if they test positive for HIV during their overseas physical exam. For humanitarian reasons, the federal government reinterpreted this rule in 2000 and as a result 10 national social service agencies were authorized to resettle HIV-infected refugees. Two of these agencies with local offices in the Twin Cities have coordinated the arrival of 110 HIV-infected African refugees to Minnesota from August 2000 through December 2004 (MDH Refugee Health Program).

SOCIOECONOMIC STATUS

Poverty and Income

Minnesota overall has fared somewhat better than the nation as a whole in regards to poverty and income. In 2000, an estimated 8% of Minnesotans were living at or below poverty level compared to 13% nationally. Likewise, the per capita income in 2000 for the United States was \$21,690, \$23,198 in Minnesota and \$26,219 in the EMA. While these aggregate numbers are favorable, they misrepresent the disproportionate impact poverty has on persons of color. The MDH Health Economics Program (2005) estimates that 9% of

³ Note: A refugee is a specific type of immigrant. A refugee is a foreign-born person who cannot return to his or her country of origin because of a well-founded fear of persecution due to race, religion, nationality, political opinion, or membership in a particular social group. Primary refugees in Minnesota are those persons who first relocated here; secondary refugees moved to Minnesota after arrival at another site in the United States. The approximated number of 7,000 does not include secondary refugees nor does it include other forms of immigration to the United States.

all Minnesotans were living at or below the poverty level in 2004. However, this percent varied greatly by race, with 6.5% of Whites at or below the poverty level compared to 29%, 25%, 19%, and 38% of Blacks, American Indians, Asians, and Hispanics, respectively.

Employment

According to 2000 Census data, only 2.9% of Minnesota's workforce was unemployed compared to the national average of 3.5%. Estimates of unemployment rates for Blacks and Hispanics were 4.5% and 3.4%, respectively; the rate of unemployment for American Indian men was 7.0%. By the end of June 2005, the unemployment rate in Minnesota had increased to 3.7% compared to the national average of 5% (Minnesota Workforce Center, 2005). However, differences are again noted across racial/ethnic groups.

Education

Minnesota's emphasis on education is reflected in the low statewide percentage (12%) of people age 25 years or older who have less than a high school education; the national average is 18%. However, for persons of color in Minnesota the percentage of those with less than a high school education is greater. According to the 2000 Census, among Blacks, 17% of men and 19% of women are estimated to have less than a high school education compared to 10% and 8% of White men and women, respectively.

ACCESS TO HEALTH CARE

Health Insurance

Overall, Minnesota has one of the lowest rates of uninsured residents in the nation. According to data released from the 2004 Minnesota Health Access Survey, 6.7% of Minnesotans were not covered by health insurance at the time of the survey compared to 5.4% in the 2001 survey (MDH Health Economics Program, 2005). However, the findings in this study suggest that significant differences continue to exist according to race/ethnicity, age, and country of birth. Additionally, the percent of those living at or below the poverty level who are uninsured increased significantly between 2001 and 2004, from 14% to 20%.

Notable differences exist among the different race/ethnicity groups. While only 5% of Whites were uninsured in 2004, the percentages among Hispanics (33%), American Indians (15%), Blacks (12%), and Asians (8%) were considerably higher. Rates were even higher for persons born outside of the United States. In 2001, 37% of persons born in a Hispanic nation and 24% of those born in an African nation were uninsured.

Uninsurance rates were also quite different by age. While less than 1% of those 65 and older were uninsured, the percentages among all other age groups were significantly higher, with 17%, 13%, 6%, 5% and 4%, of those 18-24, 25-34, 35-54, 17 and under, and 55-64 uninsured, respectively.

Unfortunately, several changes were made to the Minnesota Health Care Programs in 2003 that will affect the number of uninsured. As of July 2003, undocumented individuals, with the exception of pregnant women, are no longer eligible for Minnesota Health Care Programs. Additionally, in October of 2003, the income eligibility guidelines for MinnesotaCare and General Assistance Medical Care (GAMC) changed from 175% to 75% of the federal poverty level. Individuals with incomes between 75% and 175% are still eligible under the MinnesotaCare Limited Benefit Program, but these benefits can be exhausted before the end of the year, leaving the individual without coverage. Due to additional

changes during the 2005 legislative session, the cap on the Limited Benefit Program will be removed as of January 1, 2006. The full effect of all of these changes is not yet known.

Prenatal Care

Minnesota is known for its caliber of health care. Unfortunately, when it comes to prenatal care, women do not access health services equally. Overall, 86% of Minnesota mothers giving birth in 2003 began prenatal care in the first trimester. However, while 89% of White women began prenatal care in the first trimester, only 72% of Black, 66% of American Indian, 75% of Asian/Pacific Islander, and 71% of Hispanic women did (Minnesota Center for Health Statistics, 2005); the national averages for Black and Hispanic women are 75% and 77%, respectively (CDC, 2003).

GAY, LESBIAN, BISEXUAL AND TRANSGENDER (GLBT) PERSONS IN MINNESOTA

Accurate estimates of the GLBT population in Minnesota are unavailable. However, the 2000 Census provides some data related to GLBT persons in Minnesota. Although not a valid measure of the extent of same sex relationships in Minnesota, unmarried partners of the same sex made up an estimated 9,940 households in Minnesota in the year 2000, with approximately 74% of those in the EMA.

While there have been some national studies that have attempted to estimate the prevalence of same sex behavior, that is different than estimating the number of GLBT persons since some people may engage in same sex behavior but not identify as GLBT. In early work by Kinsey and colleagues in the 1940s and 1950s, 8% of men and 4% of women reported exclusively same-gender sex for at least 3 years during adulthood (Kinsey et al., 1948; Kinsey et al., 1953). Generalizing these findings to the general population is very questionable because these data were based on convenience samples.

Subsequent to this work, studies more representative of the general U.S. population have been undertaken. Comparing national surveys from 1970 and 1991, Siedman and Rieder (1994) estimated that from 1% to 6% of men had sex with another man in the preceding year. In another population-based study, Sell et al. (1995) estimated the incidence of same sex behavior in the preceding five years at 6% for males and 4% for females. Estimates vary for a number of reasons, including varying definitions of homosexuality and/or methods of data collection. Approximately 146,000 men and 99,400 women in Minnesota would be predicted to engage in same sex behavior using the percentages from the Sell study. The accuracy of these numbers is difficult to gauge, at best.

More recently, the SHAPE 2002 study conducted in Hennepin County found that 4% of males and 2% of females in Hennepin County identified as GLBT (Hennepin County Community Health Department, 2003). Applying these percentages to the entire state, we would estimate that approximately 97,400 men and 49,600 women identify as GLBT.

Also relevant to the context of GLBT life in Minnesota is the fact that Minnesota and the Twin Cities, in particular, attract individuals with a variety of sexual orientations. A strong gay community exists in the Minneapolis-St. Paul area. Additionally, Minnesota is one of three states in the country that has laws banning discrimination based on sexual orientation and gender identity.

A nationally renowned center for individuals seeking transgender support and services is located in Minneapolis. Although transgender people identify as heterosexual, bisexual, gay, and lesbian, variances in gender identity complicate the categorization. Some male to

female transgender individuals identify as lesbian, some as heterosexual, and others as bisexual. Similarly, some female to male individuals identify as gay, some are heterosexual, and others are bisexual. Politically, and sometimes for access to services, many transgender individuals find alliances within the gay and lesbian community.

All of these factors may contribute to a larger GLBT population in Minnesota than would be predicted based upon national averages. Any estimates for the GLBT population must be used with caution.

SENSORY DISABILITY

Written and/or verbal communication can be hindered for persons with a sensory disability(ies). Depending on the medium, general HIV awareness and prevention messages cannot be assumed to reach such populations. According to 2000 Census data, just over 63,000 (2.2%) Minnesotans between the ages of 21 and 64 are estimated to be living with a sensory disability (defined in the survey as "blindness, deafness, severe vision, or hearing impairment").

Epidemiological Surveillance – Data Quality and Sources

HIV/AIDS REPORTING SYSTEM (HARS)

The Minnesota Department of Health (MDH) collects confidential name-based case reports of HIV infection (since 1985) and AIDS diagnoses (since 1982) through a passive and active HIV/AIDS surveillance system. In Minnesota, laboratory-confirmed infections of human immunodeficiency virus (HIV) are monitored by MDH through this active and passive surveillance system. State law (Minnesota Rule 4605.7040) requires both physicians and laboratories to report all cases of HIV infection (HIV or AIDS) directly to MDH (passive surveillance). Additionally, regular contact is maintained with the following five clinical sites to help ensure completeness of reporting (active surveillance): Hennepin County Medical Center, Regions Hospital, HealthPartners Clinic in Robbinsdale, Park Nicollet Medical Center, and the HIV/AIDS Clinic at the University of Minnesota. Demographic, exposure, and clinical data are collected on each case⁴ and entered into Minnesota's HIV/AIDS Reporting System (HARS) database developed by the U.S. Centers for Disease Control and Prevention (CDC).

Factors that impact the completeness and accuracy of HIV/AIDS surveillance data include: compliance with case reporting, timeliness of case reporting, test-seeking behaviors of HIV-infected individuals, and the availability and targeting of HIV testing services.

Given the long period of time between infection with HIV and the clinical manifestation of AIDS, patterns of new HIV case reports are believed to describe the current epidemic more accurately than AIDS case reports. The introduction of highly active antiretroviral therapies in the mid-1990s further delayed the onset of AIDS for many patients and makes AIDS case reporting a weak tool for describing the present epidemic. Including AIDS case reports is useful for looking at the whole epidemic or trends over time.

⁴ CDC has refined the case definition for AIDS over the years. The most recent change to the case definition occurred in 1993 when (in conjunction with confirmed HIV infection) tuberculosis, recurring pneumonia, invasive cervical cancer, or a CD4 count of less than 200 (or below 14% of lymphocytes) joined 23 other AIDS-defining infections/conditions.

While HIV case reports do represent persons more recently infected than AIDS case reports, there are still several limitations that affect the completeness and timeliness of the data. There are multiple ways for a case to be undetected by the state surveillance system promptly after seroconversion.

First, CDC estimates that about 30% of HIV-infected individuals are unaware of their status. And for gay/bisexual men, recent evidence suggests this percentage is much higher (77%) (McKellar et al., 2002). This is partly because early HIV infection does not produce severe nor distinct symptoms and so delays in testing are common. Additionally, many people acknowledge avoiding testing for fear of a positive test result or because they believe that they are not at risk.

Second, cases of new HIV infection can also go undetected by disease surveillance due to the availability of anonymous testing. Once a person begins care, however, other HIV/AIDS surveillance reporting mechanisms would most likely detect the case. Thus, although HIV case reporting is our best estimate of new HIV infections, the system does not capture all new cases and there are varying amounts of delay between infection, testing, and reporting.

Annual HIV/AIDS Surveillance Summaries

Annual HIV/AIDS surveillance summaries for Minnesota are available on the MDH website <http://www.health.state.mn.us/divs/idepc/diseases/hiv/hivstatistics.html>

New testing methodologies are becoming more widely available (e.g. STARHS⁵) and will enable more timely descriptions of the epidemic as it continues to unfold. In addition, continued efforts to encourage testing and counseling help limit the amount of undiagnosed HIV infection.

ADDITIONAL HIV/AIDS SURVEILLANCE ACTIVITIES

HIV Subtyping in Minnesota

Minneapolis/St. Paul has experienced the highest growth rate in its African-born population of any city in the country in the last ten years, and most particularly within the last five years. Non-B subtypes of HIV-1 have become more common in Minnesota due to this increased immigration from and subsequent travel to regions where diverse strains of HIV are endemic.

The MDH STD and HIV Section and Public Health Laboratory have incorporated HIV drug resistance and subtype surveillance into routine HIV surveillance. This activity will provide a description of the prevalence of HIV drug resistance and subtypes among individuals newly diagnosed with HIV in Minnesota. Minnesota's disease reporting rules were revised in 2005 to require submission of clinical materials from newly diagnosed cases of HIV infection. HIV drug resistance testing and viral subtype determination are conducted on all eligible specimens.

The subtype surveillance program will be a continuation of the sentinel surveillance for HIV-2 and non-B HIV-1 subtypes initiated in January 2003 with a publicly funded STD clinic that serves a diverse cross-section of the Twin Cities sub/urban population and identifies approximately 40 new HIV infections per year. HIV testing for this clinic is carried out at the Public Health Laboratory at the MDH. HIV-1 subtype is determined for 100% of HIV-1

⁵ STARHS: Serologic Testing Algorithm for Recent HIV Seroconversion

EIA/Western Blot-positive isolates submitted to MDH for HIV testing; isolates will also be screened for HIV-2.

Divergent strains of HIV have implications for testing, clinical care, and vaccine research/implementation. Systems to monitor the introduction and spread of non-B subtypes of HIV-1 and, to a lesser extent, HIV-2 in the U.S. will be critical for biotechnology to evolve effectively alongside a dynamic epidemic.

The SHAS Project

MDH received funding for several years to implement the Supplemental to HIV and AIDS Surveillance (SHAS) Project. Funding for SHAS ended on December 31, 2003, and the project was terminated. The project was designed so that an MDH staff person conducted an in-depth interview with HIV positive persons who agreed to participate and who had known about their diagnosis for six months to three years.

Participants received a stipend of \$25 and a \$10 certificate for use at a grocery store. Participants were recruited through several means: physicians informed individuals when they were diagnosed that this was an opportunity in six months, flyers were distributed to clinics and HIV service providers, and individuals were referred by other persons who had participated in the project.

The interview included in-depth questions related to demographics, substance use, sexual behavior and STD history, reproductive and gynecological history, HIV testing and medical therapy, and utilization of health and social services.

SEXUALLY TRANSMITTED DISEASE (STD) SURVEILLANCE SYSTEM

In the state of Minnesota, laboratory-confirmed infections of chlamydia, gonorrhea, syphilis, and chancroid are monitored by MDH through a passive, combined physician and laboratory-based surveillance system. State law (Minnesota Rule 4605.7040) requires both physicians and laboratories to report all cases of these four bacterial STDs directly to MDH. In 2002, the Minnesota Department of Health added an active component to the surveillance system for chlamydia and gonorrhea infections, and in 2004 changed the case report form to include gender of sexual partners and country of origin to better describe STDs in Minnesota. In addition to the regular surveillance, additional behavioral information is collected on syphilis and antibiotic resistant gonorrhea. Other common sexually transmitted conditions caused by viral pathogens, such as herpes simplex virus (HSV) and human papillomavirus (HPV), are not reported to MDH. Factors that impact the completeness and accuracy of the available data on STDs include: level of screening, accuracy of diagnostic tests, and compliance with case reporting. Thus, any changes in STD rates may be due to one of these factors, or due to actual changes in STD occurrence.

Annual STD Surveillance Summaries

Annual STD surveillance summaries for Minnesota are available on the MDH website <http://www.health.state.mn.us/divs/idepc/dtopics/stds/stdstatistics.html>

BEHAVIORAL SURVEILLANCE

MDH collects a small amount of behavioral data as it relates to HIV and AIDS surveillance information. For example, reports of HIV infection received by MDH include information on drug use and sexual behaviors. Additionally, from time to time MDH will undertake special

projects with the intent of collecting behavioral data on specific populations. Examples of these are the Minnesota STD Prevalence Study (ages 12-24) and the Twin Cities Men's Health Survey (MSM 18 and older).

OTHER DATA SOURCES

Data regarding risk factors for acquiring HIV that are presented in this report include sexually transmitted disease rates (MDH Epidemiology, Surveillance and Evaluation Unit), teen pregnancy rates (Minnesota Center for Health Statistics), chemical health indicators (Minnesota Behavioral Risk Factor Surveillance System), behavioral survey data (Minnesota Student Survey and Minnesota Behavioral Risk Factor Surveillance System), a variety of social and economic data from the 2000 Census (U.S. Census Bureau), and results from specific scientific studies. These data serve to characterize the population at risk for acquiring or transmitting HIV.

Counseling, Testing and Referral System

The Counseling, Testing and Referral (CTR) System consists of MDH-funded agencies that provide free or low cost HIV testing to Minnesota residents. The system offers anonymous and confidential testing offered in clinical and office settings or during outreach. In the past year a few of the sites started offering an HIV rapid test (OraQuick) as an alternative to the more traditional blood draw and the OraSure tests used by most community based testing programs. Confidential tests are name-based and can therefore be reported to MDH and added to the yearly surveillance statistics. Anonymous tests are code-based and are not included in yearly surveillance. Occasionally, an anonymous test will be linked to a surveillance case if the individual mentions having received a previous positive diagnosis and recalls the date and site of that test, as well as the code given to him/her.

The number of tests conducted by the CTR agencies has steadily grown from 8,780 in 2000 to 10,517 in 2002, with the positivity percent decreasing from 1.2% in 2000 to 0.8% in 2002. In 2003 the total number of testing sites decreased, and the total number of tests conducted during the past two years reflected that with 9,625 tests in 2003 and 9,792 tests in 2004. The positivity rate in 2004 was 1.3%.

In 2004, 20% of those tested chose an anonymous test and 14% of the tests were done during outreach. The majority of those tested were males (71%), between the ages of 20 and 39 (68%), and White (55%). Of the 9,792 tests conducted, 23% indicated male-to-male sex, and 3% indicated injecting drug use in the past 12 months. Table 3 shows the number of tests by client characteristics along with positivity rate.

Twenty-seven percent (27%) of those tested had never had a previous test, 41% had either one or two previous tests, and the remainder had three or more previous tests. Of those with a previous test, 97% reported a negative result for their most recent HIV test.

Table 3. CTR System Tests by Gender, Race, and Age, 2004

| Client Characteristics* | Number of Tests (%) | Positivity Rate |
|-------------------------|---------------------|-----------------|
| Gender | | |
| Male | 6,910 (71) | 1.5 |
| Female | 2,882 (29) | 0.6 |
| Transgender | 0 | 0.0 |
| Race/Ethnicity | | |
| White | 5,358 (55) | 1.2 |
| African American/Black | 2,903 (30) | 1.2 |
| Asian/Pacific Islander | 302 (3) | 1.0 |
| American Indian | 173 (2) | 0.0 |
| Other | 662 (7) | 1.8 |
| Hispanic [†] | 853 (9) | 1.1 |
| Age | | |
| 19 and under | 921 (9) | 0.0 |
| 20 – 29 | 4,204 (43) | 0.9 |
| 30 – 39 | 2,461 (25) | 2.1 |
| 40 – 49 | 1,514 (15) | 1.6 |
| 50 and older | 692 (7) | 1.3 |
| Total | 9,792 | 1.3 |

* Numbers will not add to total

† Includes all races

Impact of HIV/AIDS on Minnesotans

Compared with the rest of the nation, Minnesota is considered to be a low to moderate HIV/AIDS incidence state. In 2003, state-specific AIDS rates ranged from 0.5 per 100,000 persons in North Dakota to 34.8 per 100,000 persons in New York. Minnesota had the 12th lowest AIDS rate (3.6 AIDS cases reported per 100,000 persons). Compared with surrounding states (IA, ND, SD, & WI), Minnesota's AIDS rate was the highest, followed by Wisconsin at 3.4. State-specific HIV rates cannot be compared nationally because HIV case surveillance is at various stages of implementation among different states.

CUMULATIVE CASES

As stated earlier, AIDS has been tracked in Minnesota since 1982 and HIV since 1985. As of December 31, 2004, a cumulative total of 7,547 cases of HIV infection have been reported among Minnesota residents. This includes 4,334 AIDS cases and 3,213 HIV, non-AIDS cases. Of these 7,547 HIV/AIDS cases, 2,697 are known to be deceased through correspondence with the reporting source, other health departments, reviews of death certificates and obituaries, active surveillance, and matches with the National Death Index.⁶

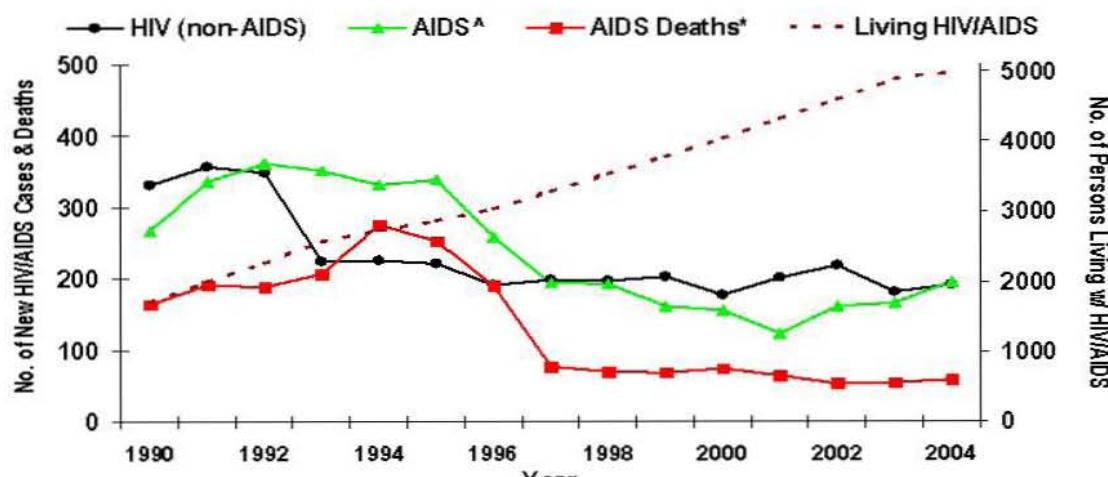
⁶ This number includes persons who reported Minnesota as their state of residence at the time of their HIV and/or AIDS diagnosis. It also includes persons who may have been diagnosed in a state that does not have HIV reporting and who subsequently moved to Minnesota and were reported here. HIV-infected persons currently residing in Minnesota, but who resided in another HIV-reporting state at the time of diagnosis are excluded.

OVERVIEW OF HIV/AIDS IN MINNESOTA, 1990-2004

Two common terms used throughout the epi profile are incidence and prevalence. **Incidence, or incident cases**, refers to new HIV and/or AIDS infections diagnosed during a particular time period; for example, from January 1, 2004 through December 31, 2004. **Prevalence, or prevalent cases**, refers to the number or percentage of people living with HIV and/or AIDS at any given time, for example, at the end of 2004.

As depicted in Figure 1, the annual number of new AIDS cases increased steadily from the beginning of the epidemic to the early 1990s, reaching a peak of 370 cases in 1992. Beginning in 1996, both the number of newly diagnosed AIDS cases and the number of deaths among AIDS cases declined sharply, primarily due to the success of new antiretroviral therapies including protease inhibitors. These treatments do not cure, but can delay progression to AIDS among persons with HIV (non-AIDS) infection and improve survival among those with AIDS. Thus, over the past three years the number of newly diagnosed AIDS cases has increased slightly from 123 in 2001 to 196 in 2004 (newly diagnosed AIDS cases include those that are AIDS at first report, as well as cases of HIV infection that have newly progressed to AIDS). Furthermore, the number of prevalent HIV/AIDS cases has continued to increase over time. An estimated 5,002 persons with HIV/AIDS are assumed to be living in Minnesota as of December 31, 2004. This number includes persons whose most recently reported state of residence was Minnesota, regardless of residence at time of diagnosis.

Figure 1. HIV/AIDS in Minnesota: Number of New Cases, Prevalent Cases, and Deaths by Year, 1990-2004



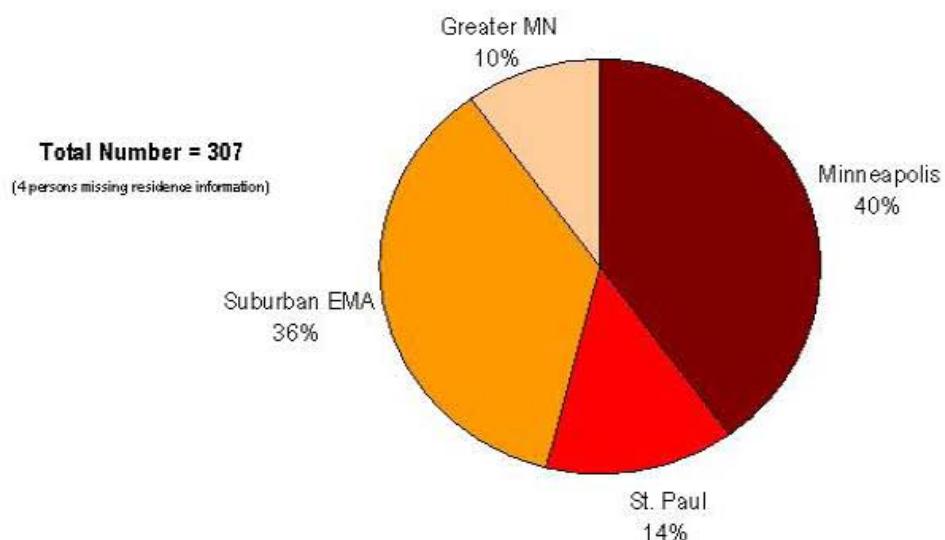
*Deaths among AIDS cases, regardless of cause.

^aIncludes refugees in the HIV+ Resettlement Program diagnosed with AIDS subsequent to their arrival in the United States.

Geography

Historically, about 90% of new HIV infections diagnosed in Minnesota have occurred in the Minneapolis-St. Paul EMA. New HIV infections refer to any HIV-infected Minnesota resident who was diagnosed in a particular calendar year and reported to MDH. This includes persons whose first diagnosis of HIV infection is AIDS (AIDS at first diagnosis). As depicted in Figure 2, this trend continued in 2004 with 40% of new cases diagnosed among people living in Minneapolis, 14% in St. Paul, 36% in the surrounding suburbs, and 10% outside of the EMA. Over the past three years, residents in the suburban EMA have accounted for an increasing percentage of new infections, from 30% in 2000 to 36% in 2004. Although HIV infection is more common in communities with higher population densities and greater poverty, there are people living with HIV or AIDS in over 80% of counties in Minnesota (Figure 3). However, 88% of those infected live in the EMA.

Figure 2. New HIV Infections* in Minnesota by Residence at Diagnosis, 2004



Suburban EMA = Thirteen-county area including Anoka, Carver, Chisago, Dakota, Hennepin (except Minneapolis), Isanti, Ramsey (except St. Paul), Scott, Sherburne, Washington and Wright counties in MN and Pierce and St. Croix counties in WI. Greater MN = All other Minnesota counties, outside the EMA.

* HIV or AIDS at first diagnosis

Figure 3. Living HIV/AIDS Cases by County of Residence, 2004

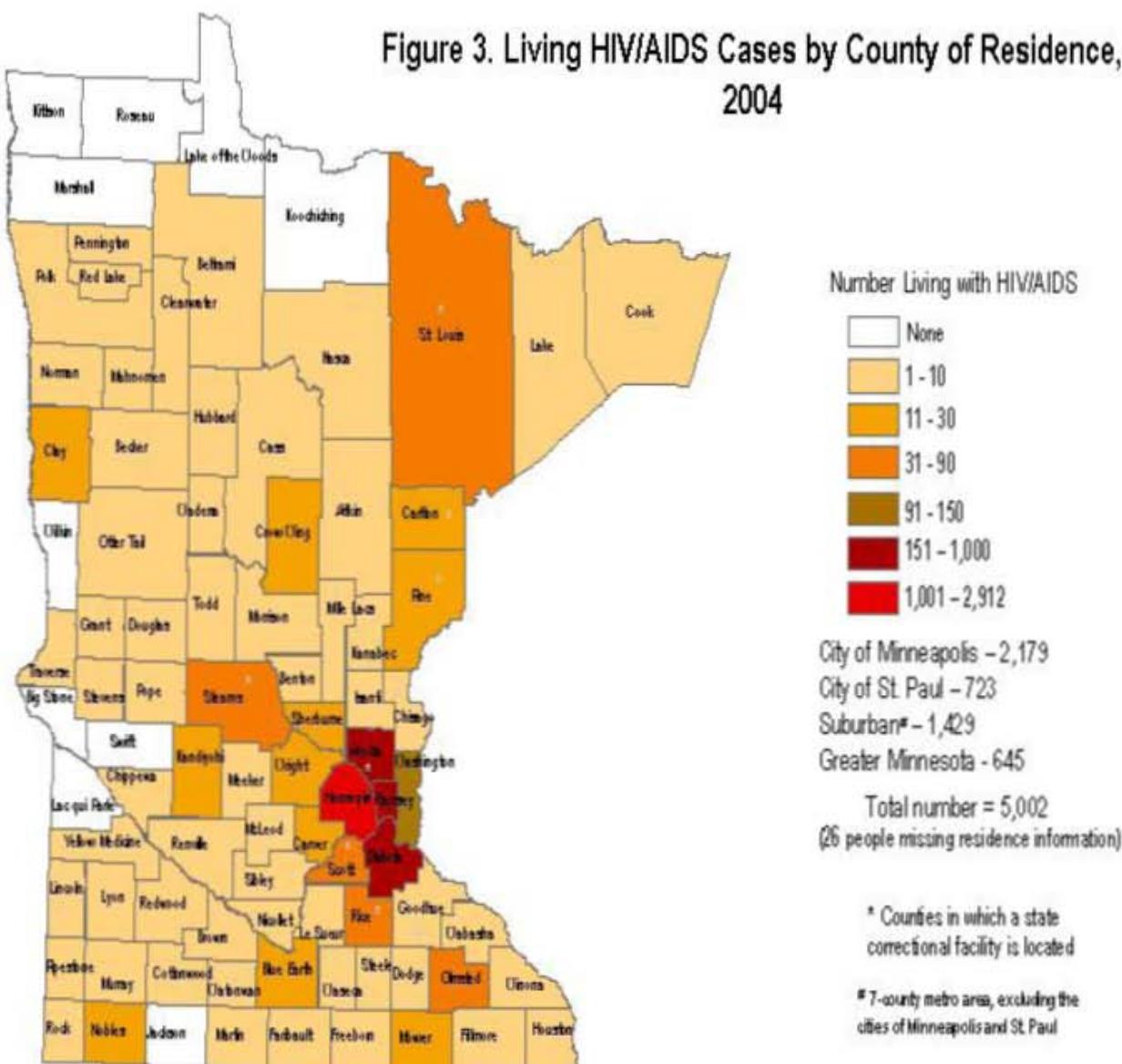
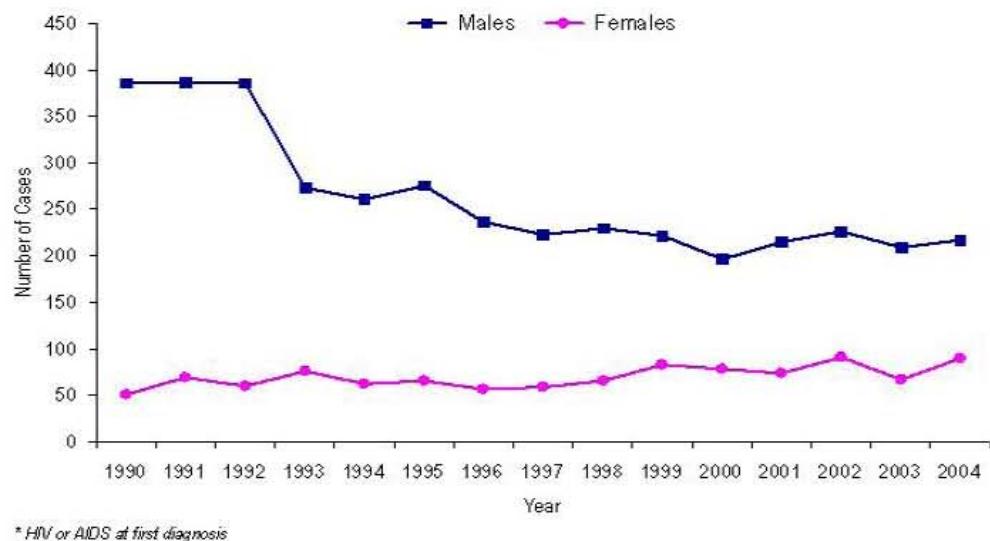


Figure 4. New HIV Infections* by Gender and Year of Diagnosis, Minnesota 1990-2004



Gender

Since the beginning of the epidemic, males have accounted for a majority of new HIV infections diagnosed per year. However, during the past 10 years the number of cases among females has increased while the number of cases among males has decreased (Figure 4). In 1990, males accounted for 90% of new HIV infections. In 2004, 71% of new infections occurred among males and 29% occurred among females. Males currently account for 78% of those living with HIV/AIDS in Minnesota.

Race/Ethnicity

In Minnesota, as well as the EMA, the epidemic affects populations of color disproportionately. According to the 2000 Census, Whites make up about 89% of the state population, but only accounted for 47% of all new HIV infections in 2004, while populations of color make up 11% of the population and 53% of new HIV infections. The same pattern is true for the EMA.

Trends in the annual number of new HIV infections diagnosed among males differ by racial/ethnic group (Table 4, Figure 5). New cases among White males drove the epidemic in the 1980s and early 1990s. Although Whites still account for the largest number of new infections among males, this number has generally been decreasing since 1991. A recent exception to this trend occurred between 2000 and 2001 when 136 cases were diagnosed among White males in 2001 compared to only 98 cases in the previous year. However, the number of cases among White males decreased again in both 2002 and 2003. 2004 saw a slight increase in the number of cases among White males back to 2002 levels. In Table 4, Black race was broken down into African-born and African American (Black, not African-born).

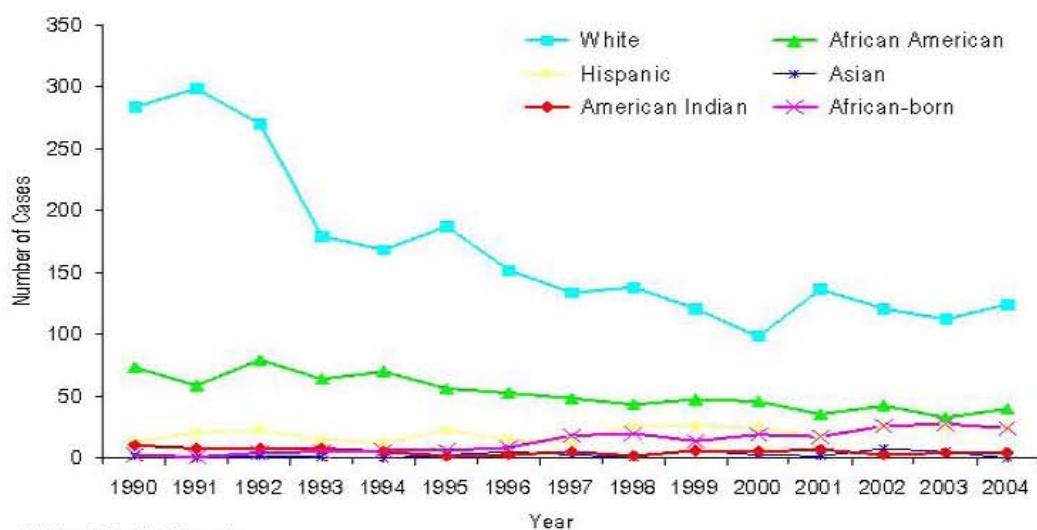
In contrast to the overall large decline in the annual number of new cases among White males during the last decade, the decline among African American males was more gradual. The annual number of cases for African American males peaked in 1992 at 81 and gradually decreased to 33 in 2003, after a small increase was observed in 2002. As with White males, in 2004 the number of cases among African American males increased back to 2002 levels.

Table 4. Annual Number of New HIV Infections Among Males by Race/Ethnicity and Year of Diagnosis, Minnesota 1992 – 2004

| Race/Ethnicity | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| White | 270 | 179 | 168 | 187 | 152 | 134 | 138 | 121 | 98 | 136 | 121 | 112 | 124 |
| Black: | | | | | | | | | | | | | |
| African Amer. | 79 | 64 | 70 | 56 | 53 | 48 | 43 | 47 | 46 | 35 | 42 | 33 | 40 |
| African-Born | 4 | 5 | 6 | 6 | 9 | 18 | 20 | 14 | 19 | 17 | 26 | 28 | 24 |
| Hispanic | 22 | 15 | 12 | 22 | 15 | 14 | 26 | 26 | 25 | 17 | 25 | 25 | 24 |
| Amer. Indian | 8 | 8 | 5 | 2 | 3 | 5 | 2 | 6 | 5 | 7 | 3 | 4 | 4 |
| Asian | 2 | 1 | 0 | 3 | 5 | 3 | 1 | 6 | 3 | 2 | 8 | 5 | 0 |
| Other* | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 1 |
| Total | 386 | 273 | 261 | 276 | 237 | 223 | 230 | 221 | 196 | 215 | 226 | 209 | 217 |

*Other includes those with unknown race.

Figure 5. New HIV Infections* Among Males by Race/Ethnicity and Year of Diagnosis, Minnesota 1990-2004



* HIV or AIDS at first diagnosis

t "African-born" refers to Blacks who reported an African country of birth; "African American" refers to all other Blacks. Cases with unknown race are excluded.

Cases among Hispanic males have doubled from 12 in 1990 to 24 in 2004, and among African-born males there has been a six-fold increase from 4 cases in 1990 to 24 cases in 2004. It is worth noting that during the same time period the Hispanic population in Minnesota increased by 577%, while among African-born the increase was 620% (U.S. Census Bureau, Census 2000). The numbers of new cases in all other racial/ethnic groups during this same time remained stable. Overall, the proportion of new HIV infections diagnosed among men of color as a whole has been increasing over time.

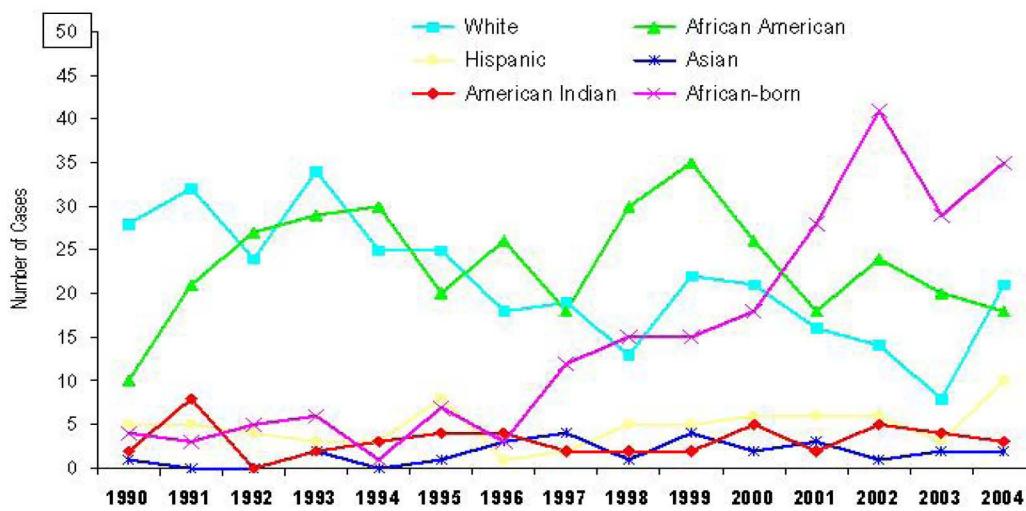
Similarly, trends in the annual number of HIV infections diagnosed among females differ by racial/ethnic group (Table 5, Figure 6). In the beginning of the epidemic, White women accounted for a majority of newly diagnosed cases among females. Since 1991, the number of new infections among women of color has exceeded the number among White women. The number of new infections among African Americans has steadily increased since 1991, peaking in 1999 at 35 cases. In 2004 there were 18 new infections among African Americans. Since 1996, over a ten-fold increase was observed among African-born females (35 cases in 2004). The annual number of new infections diagnosed among Hispanic, American Indian, and Asian females continues to be quite small.

Table 5. Annual Number of New HIV Infections Among Females by Race/Ethnicity and Year of Diagnosis, Minnesota 1992 – 2004

| Race/Ethnicity | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| White | 24 | 34 | 25 | 25 | 18 | 19 | 13 | 22 | 21 | 16 | 14 | 8 | 21 |
| Black: | | | | | | | | | | | | | |
| African Amer. | 27 | 29 | 30 | 20 | 26 | 18 | 30 | 35 | 26 | 18 | 24 | 20 | 18 |
| African-Born | 5 | 6 | 1 | 7 | 3 | 12 | 15 | 15 | 18 | 28 | 41 | 29 | 35 |
| Hispanic | 4 | 3 | 3 | 8 | 1 | 2 | 5 | 5 | 6 | 6 | 6 | 3 | 10 |
| Amer. Indian | 0 | 2 | 3 | 4 | 4 | 2 | 2 | 2 | 5 | 2 | 5 | 4 | 3 |
| Asian | 0 | 2 | 0 | 1 | 3 | 4 | 1 | 4 | 2 | 3 | 1 | 2 | 2 |
| Other* | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Total | 60 | 76 | 62 | 65 | 56 | 58 | 66 | 83 | 78 | 73 | 91 | 67 | 90 |

*Other includes those with unknown race.

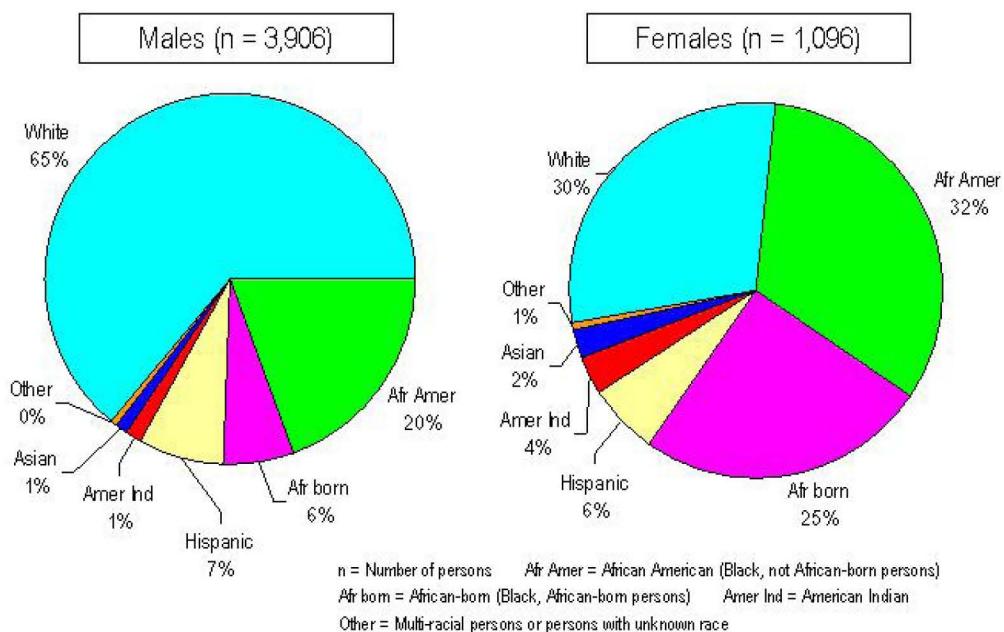
Figure 6. New HIV Infections* Among Females by Race/Ethnicity and Year of Diagnosis, Minnesota 1990-2004



* HIV or AIDS at first diagnosis

t "African-born" refers to Blacks who reported an African country of birth; "African American" refers to all other Blacks. Cases with unknown race are excluded.

Figure 7. People Living with HIV/AIDS by Gender and Race/Ethnicity, Minnesota 2004



While men and women of color overall are disproportionately affected by HIV/AIDS, in Minnesota this disparity is most glaring among women. While Whites make up approximately 89% of the female population, they accounted for only 23% of new infections among women in 2004, whereas women of color make up approximately 11% of the female population and accounted for 77% of the new infections among women.

Whites account for 56% of those living with HIV/AIDS in Minnesota, compared to 22% for African Americans, 10% for African-born, 7% for Hispanics, and 2% and 1% for American Indians and Asians, respectively. However, the distribution by race varies across gender with White males accounting for 64% of males living with HIV/AIDS, compared to 30% for White females (Figure 7).

African-born Persons

African immigration to Minnesota increased markedly during the mid-1990s; the current Census estimate of African-born residents in the state is approximately 35,000⁷. However, many believe this to be an underestimate of the true African population in Minnesota. The number of new HIV infections diagnosed among African-born persons in Minnesota has been steadily increasing from 7 cases in 1990 to 59 cases in 2004 (data not shown). African-born persons accounted for 19% of new HIV infections diagnosed in 2004, but account for well under 1% of the statewide population. More cases of HIV infection were diagnosed among African-born females (35 cases) than any other female racial/ethnic group in 2004. The number of cases among African-born females has increased over ten-fold between 1996 (3 cases) and 2004 (35 cases).

A notable difference in the local epidemic among African-born persons is the almost equal distribution of cases between males and females. In 2004, 59% of the new infections diagnosed among African-born persons were females compared to 22% among the remaining infections (data not shown).

The sheer diversity of cultures (more than 25 different African countries are represented among Minnesota cases; many nations are home to tens of cultures within their borders), lack of education about HIV, and language and cultural barriers all pose significant challenges for HIV prevention and care efforts.

Race/Ethnicity as a Marker

Please note that race is not considered a biological reason for disparities in the occurrence of HIV experienced by persons of color. Race, however, can be considered a marker for other personal and social characteristics that put a person at greater risk for HIV exposure. These characteristics may include, but are not limited to, lower socioeconomic status, less education, and greater prevalence of drug use. As previously mentioned, there are great disparities in income between Whites and communities of color. While the per capita income for Whites in Minnesota is \$24,351, it is about \$10,000 less for Blacks (\$13,741), American Indians (\$13,040), and Asians (\$15,389). The disparity is even greater in the EMA.

⁷ Based on U.S. Census 2000 data, the U.S. Census Bureau estimates between 20,424 and 35,188 African-born persons are living in Minnesota out of a total population of 4,919,479. Because there are many reasons African-born persons may not be included in the census count (e.g. difficulties with verbal or written English), even 35,188 is likely an underestimate of the actual size of the African-born population living in Minnesota.

AIDS at First Diagnosis

Over the past three years the percentage of new HIV infections that were diagnosed as AIDS at first report has increased from 31% in 2002 to 37% in 2004. Although the overall number has remained relatively stable, this masks important differences by race and ethnicity. While in the past three years 30% of new infections among White males and 31% of new infections among African American males were AIDS at first diagnosis, this percentage was significantly higher among Hispanic (49%) and African-born (41%) men. Of important note is that among Hispanic males, 78% of the AIDS at first diagnosis cases were foreign-born. The pattern is very similar among women. Forty-three percent (43%) and 42% of new infections among African-born and Hispanic women, respectively, were AIDS at first diagnosis compared to 31% for both White and African American females. Among Hispanic women, 50% of the AIDS at first diagnosis cases were foreign-born. The numbers of cases among American Indians and Asians over the past three years were too small to draw any conclusions.

Age

In recent years, Hispanic and African American males were slightly younger (average age = 32 and 35 years, respectively) than other males (average age = 38 years) at the time of HIV diagnosis. During the past ten years, the average age at HIV diagnosis has been approximately 32 years for females of most racial/ethnic groups. While the number of cases is small, American Indian and Asian women appear to be older (average age = 40 and 37, respectively). Age at HIV diagnosis can be used as a proxy for age at HIV *infection*. However, due to differences in testing behavior (e.g. variable lengths of time between HIV infection and diagnosis) across time and between socio-demographic groups, comparisons of average age at diagnosis are difficult to interpret (Table 6).

Table 6. Average Age at HIV Diagnosis Among Men and Women: Three-Year Averages

| Race/Ethnicity | Average Age* in Years (Number of Cases) | | |
|------------------|---|-----------|-----------|
| | 1989-1991 | 1994-1996 | 2002-2004 |
| Men | | | |
| White | 33 (895) | 35 (507) | 38 (357) |
| Black: | | | |
| African American | 32 (205) | 34 (178) | 35 (115) |
| African-Born | 29 (5) | 36 (21) | 37 (78) |
| Hispanic | 31 (51) | 33 (49) | 32 (74) |
| American Indian | 29 (28) | 29 (10) | 40 (11) |
| Asian | 25 (5) | 38 (8) | 37 (13) |
| Women | | | |
| White | 30 (86) | 32 (68) | 34 (44) |
| Black: | | | |
| African American | 29 (50) | 30 (76) | 31 (62) |
| African-Born | 24 (8) | 31 (11) | 32 (105) |
| Hispanic | 33 (15) | 36 (12) | 32 (19) |
| American Indian | 29 (16) | 30 (11) | 34 (12) |
| Asian | -- | -- | 40 (5) |

*Average age not displayed for subgroups with fewer than five cases.

Cases with unknown age or race were excluded.

Adolescents and Young Adults⁸

Many people are infected with HIV for years before they actually seek testing and become aware of their HIV status. This phenomenon especially affects the observed case counts for younger age groups. And as a result, the reported number of HIV infections among youth (with few or no reports of AIDS at first diagnosis) is likely to underestimate the true number of new infections occurring in this age group more than the reported number of cases in older age groups does.

In 1990, 9% of new HIV infections reported to the MDH were among youth. In 2004 this percentage was 16%. Among young men, the number of new HIV diagnoses peaked in 1992 at 43 cases and then declined through the mid 1990s to a low of 14 cases in 1997 (Figure 8). Since 1997 the annual number of cases diagnosed among young men increased steadily to 29 in 2000, but then dropped to 18 cases in 2002 before increasing to 25 in 2004.

Unlike young men, the annual number of new HIV infections diagnosed among young women has remained relatively consistent over time (Figure 8). However, in 2004 the number of new infections among young women increased to 23, the highest ever recorded among young women. Females accounted for 48% of new HIV infections diagnosed among adolescents and young adults in 2004. In contrast, adult females (25 years of age or older) only accounted for 25% of all adult cases.

Similar to the adult HIV/AIDS epidemic, persons of color account for a disproportionate number of new HIV infections among adolescents and young adults. Among young men, Whites accounted for 35% of new HIV infections diagnosed between 2002 and 2004, African Americans accounted for 28% and Hispanics for 24% of the cases. Among young women, African-born accounted for 34%, African Americans for 28%, and Whites for 17% of the new infections diagnosed during the same time period.

Men having sex with men (MSM) is the predominant estimated⁹ mode of HIV exposure among adolescent and young adult males, accounting for 90% of the new HIV infections diagnosed between 2002 and 2004 (Figure 7). The joint risk of MSM and injecting drug use (MSM/IDU), heterosexual contact, and injecting drug use were estimated to account for 6%, 2%, and 2% of the cases, respectively.

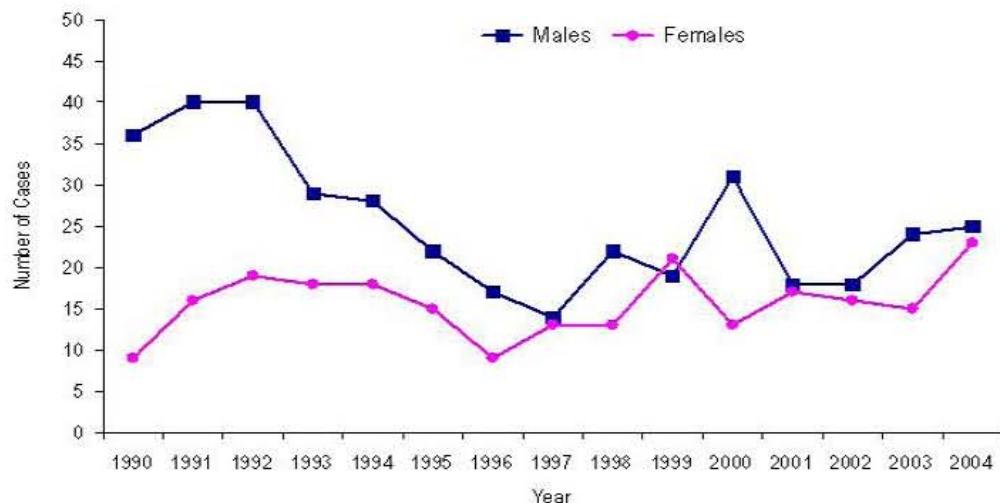
Among females, heterosexual contact is estimated to account for 83% of new HIV infections diagnosed between 2002 and 2004 (Figure 9). IDU is estimated to account for the remainder 17% of the cases.

Adolescents and young adults accounted for 4% of those living with HIV/AIDS in Minnesota in 2004. This percent has stayed constant over the past three years.

⁸ In this report, adolescents are defined as 13-19 year-olds and young adults as 20-24 year-olds; these two groups are jointly referred to as "youth." Analyses are performed for adolescents and young adults combined because case numbers are too small to present meaningful data separately for each.

⁹ In 2004, the MDH estimated mode of exposure for both new and living cases of HIV/AIDS. For details on the process see the HIV Surveillance Technical notes report on our website or contact 612-676-5414 for a copy.

Figure 8. New HIV Infections* Among Adolescents and Young Adults† by Year of Diagnosis, 1990-2004

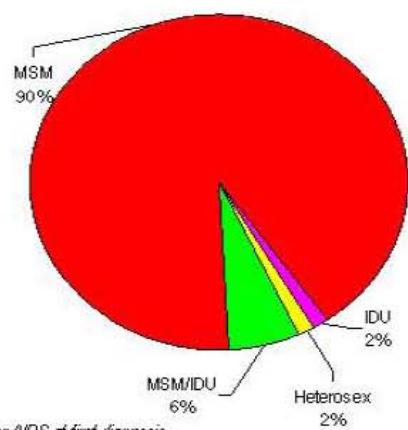


* HIV or AIDS at first diagnosis

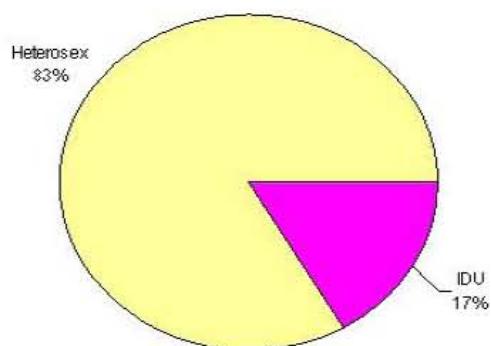
† Adolescents defined as 13-19 year-olds; Young Adults defined as 20-24 year-olds.

Figure 9. HIV Infections* Among Adolescents and Young Adults† by Gender and Estimated Exposure Group‡, 2002-2004 Combined

Males (n = 67)



Females (n = 54)



* HIV or AIDS at first diagnosis

† Adolescents defined as 13-19 year-olds; Young Adults defined as 20-24 year-olds.

‡ Mode of Exposure proportions have been estimated using cases for 2002-2004 with known risk. For more detail see the HIV Surveillance Technical notes.

n = Number of persons

MSM = Men who have sex with men

IDU = Injecting drug use

Heterosex = Heterosexual contact

Mode of Exposure

Since the beginning, the majority of HIV/AIDS cases in Minnesota have been among men with male-to-male sex (MSM) being the predominant mode of exposure reported. Though still the majority, both the number and proportion of new HIV infections attributed to MSM have been decreasing since 1991 (Figure 10). On a much smaller scale, the numbers of male cases attributed to IDU and MSM/IDU also have been decreasing over the past decade, while the number of cases attributed to heterosexual contact has been increasing. The number of cases without a specified risk has also been increasing (Figure 11).

Cases can have unspecified risk for two reasons. The first is that the person has not yet been interviewed or has refused an interview by a Disease Intervention Specialist from MDH, and therefore we have no information on their risk category. Disease Intervention Specialists have reported difficulty interviewing recent cases due to language and cultural barriers, as well as difficulty locating the individuals. Second, and this applies primarily to women, the person may have no obvious risk other than heterosexual. However, heterosexual contact as a mode of HIV transmission is only assigned when the person knows that their partner was HIV-infected or at increased risk for HIV. Often this level of knowledge about sexual partners (anonymous, casual, or exclusive) may be unknown. According to a study conducted by the CDC, it is likely that at least 80% of women with unspecified risk acquired HIV through heterosexual contact (Lansky et al., 2001).

Throughout the epidemic, heterosexual contact has been the predominant mode of HIV exposure reported among females (Figure 12). IDU is the second most common mode of transmission making up 6% of cases among women in 2004. Unspecified risk has been designated for a growing percentage of cases for the past several years. In 1996, 7% of women diagnosed with HIV infection did not have a specified mode of transmission. This percentage grew to 30% in 2004, with an additional 34% of female cases who would not agree to or could not be interviewed by a Disease Intervention Specialist from MDH. Some of these cases represent women who have not yet been interviewed and, thus, some of these women will later have an identified mode of transmission.

In 2004, MDH began estimating mode of exposure for cases with unspecified risk in its annual PowerPoint summary slides (posted on the MDH website). Estimation was done by using the risk distribution for cases reported between 2002 and 2004 with known risk by race and gender and applying the distribution to those with unspecified risk of the same race and gender. There were two exceptions to this method, African-born cases and Asian/Pacific Islander women. For both African-born and Asian/Pacific Islander women, a breakdown of 95% heterosexual risk and 5% other risk was used. For African-born males, a breakdown of 5% male-to-male sex, 90% heterosexual risk, and 5% other risk was used. These percentages are based on epidemiological literature and/or community experience.

Figure 10. HIV Infections* Among Males by Mode of Exposure and Year of Diagnosis, 1990-2004

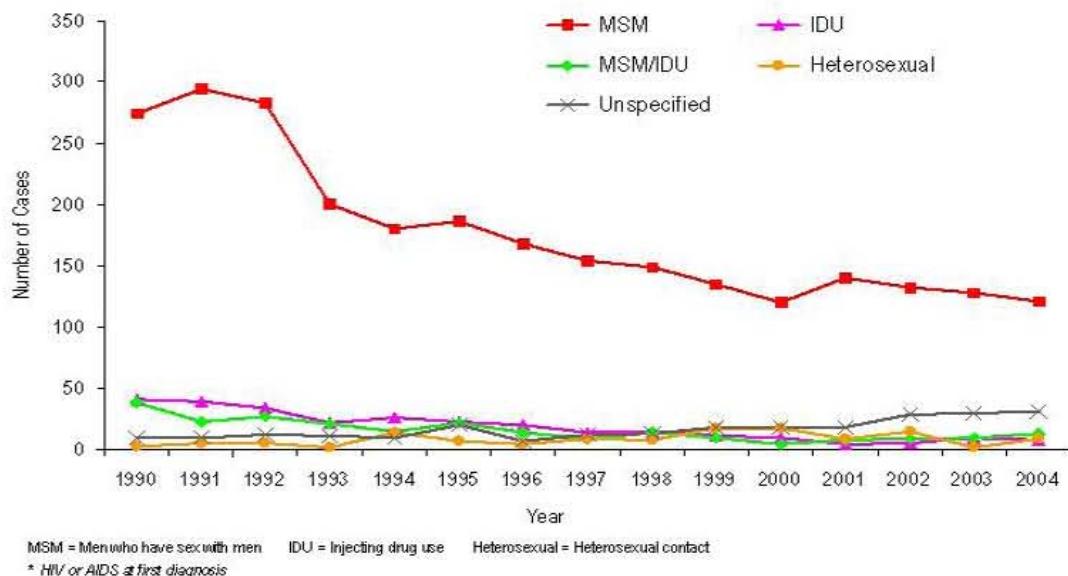


Figure 11. HIV Infections* Among Males by Mode of Exposure and Year of Diagnosis, 1990-2004 (excluding MSM)

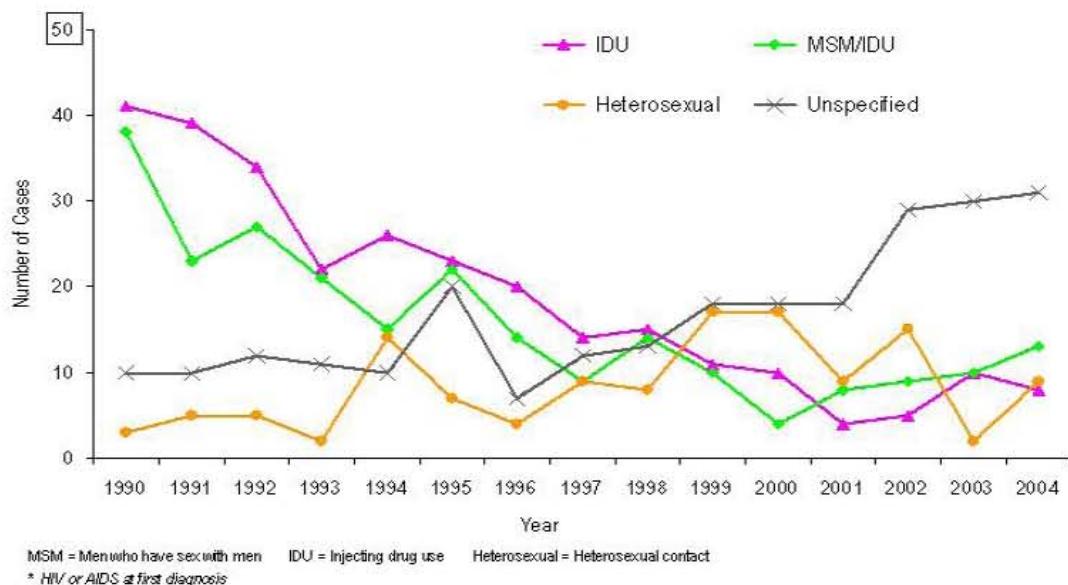
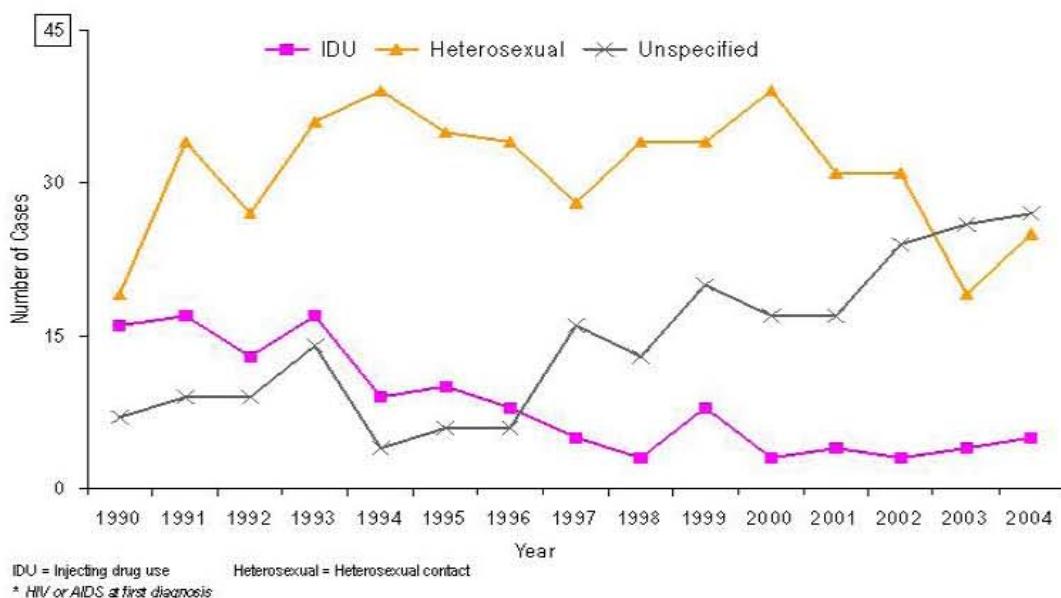


Figure 12. HIV Infections* Among Females by Mode of Exposure and Year of Diagnosis, 1990-2004



The proportion of cases attributable to a certain mode of exposure differs not only by gender, but also by race. All of the numbers presented in the tables below are based on the estimated mode of exposure using the method mentioned above. Of the new HIV infections diagnosed among males between 2002 and 2004, MSM or MSM/IDU were estimated to account for 95% of cases among White males, 86% of cases among Hispanic males, 72% of cases among African American males, and 5% of cases among African-born males. Additionally, heterosexual contact was estimated to account for 90% of cases among African-born males, compared to 13%, 7% and 3% for cases among African American, Hispanic and White males, respectively (Table 7).

Heterosexual contact with a partner who has or is at increased risk for HIV infection is estimated to account for 86% of cases among White females during 2002-2004, 80% of cases among African American females, and 93% of cases among African-born females (Table 8). IDU was estimated to account for 14% of cases among Whites, 10% among African Americans, and 0% among African-born. While mode of exposure was estimated for cases among Hispanic, Asian and American Indian women, the number of cases for the years 2002-2004 was insufficient to make generalizations regarding risk (less than 20 cases in each group).

Table 7. New HIV Infections Among Men by Race/Ethnicity and Estimated Mode of Exposure*, Minnesota - Diagnosis Years 2002 - 2004 Combined

| Race/Ethnicity | Mode of Exposure | | | | | | | | | | | |
|------------------|------------------|-----|-----|-----|---------|-----|----------------------|-----|-------|----|-------|------|
| | MSM | | IDU | | MSM/IDU | | Heterosexual Contact | | Other | | Total | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| White | 309 | 87% | 8 | 2% | 30 | 8% | 10 | 3% | 0 | 0% | 357 | 100% |
| Black: | | | | | | | | | | | | |
| African American | 78 | 68% | 17 | 15% | 5 | 4% | 15 | 13% | 0 | 0% | 115 | 100% |
| African-Born | 4 | 5% | 0 | 0% | 0 | 0% | 70 | 90% | 4 | 5% | 78 | 100% |
| Hispanic | 64 | 86% | 5 | 7% | 0 | 0% | 5 | 7% | 0 | 0% | 74 | 100% |
| American Indian | 4 | 36% | 4 | 36% | 1 | 10% | 2 | 18% | 0 | 0% | 11 | 100% |
| Asian | 10 | 77% | 1 | 8% | 1 | 8% | 1 | 8% | 0 | 0% | 13 | 100% |

* Mode of Exposure numbers have been estimated using cases for 2002-2004 with known risk. For more detail see the HIV Surveillance Technical notes.

Table 8. New HIV Infections Among Women by Race/Ethnicity and Estimated Mode of Exposure*, Minnesota - Diagnosis Years 2002 - 2004 Combined

| Race/Ethnicity | Mode of Exposure | | | | | | | |
|------------------|------------------|------|-----|-----|-------|-----|-------|------|
| | Heterosexual | | IDU | | Other | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| White | 37 | 86% | 6 | 14% | 0 | 0% | 43 | 100% |
| Black: | | | | | | | | |
| African American | 50 | 80% | 6 | 10% | 6 | 10% | 62 | 100% |
| African-Born | 98 | 93% | 0 | 0% | 7 | 7% | 105 | 100% |
| Hispanic | 15 | 79% | 3 | 16% | 1 | 5% | 19 | 100% |
| American Indian | 6 | 50% | 6 | 50% | 0 | 0% | 12 | 100% |
| Asian | 5 | 100% | 0 | 0% | 0 | 0% | 5 | 100% |

* Mode of Exposure numbers have been estimated using cases for 2002-2004 with known risk. For more detail see the HIV Surveillance Technical notes.

Pediatric Cases of HIV/AIDS

Pediatric cases are defined in accordance with the CDC criteria as those cases of HIV or AIDS who were less than 13 years of age at the time of test or diagnosis. In Minnesota, 88 cases of pediatric HIV infection have been diagnosed to date, 72 (82%) of whom are still assumed to be alive. Seventy-six percent (76%) of the 88 cases resulted from perinatal exposure, 8% associated with hemophilia or other coagulation disorder, 6% associated with blood transfusion, and 10% were undetermined.

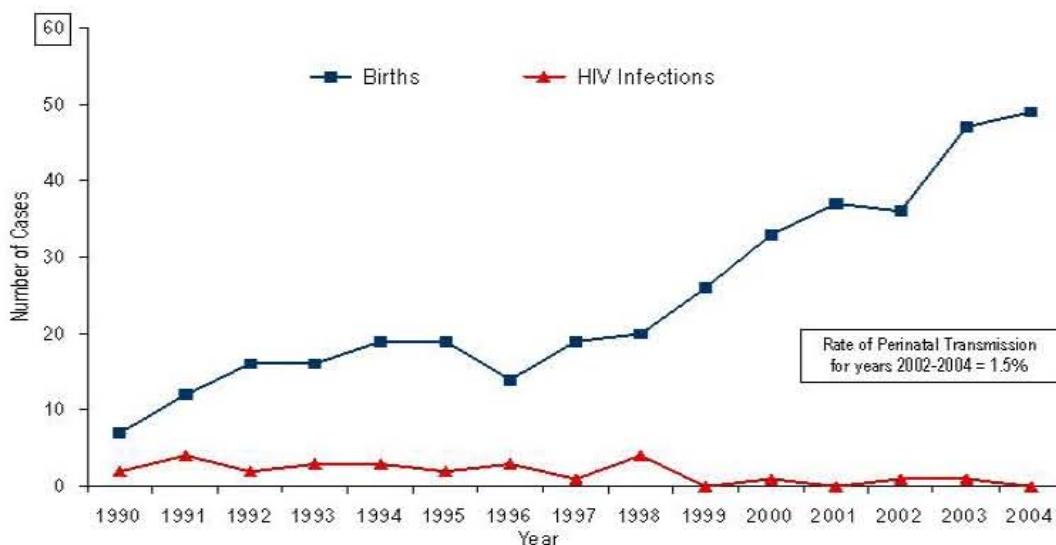
One of the few success stories in the history of HIV infection is the use of medication to successfully reduce perinatal transmission of the virus. Without treatment, the risk of HIV transmission from a pregnant woman to her child before or during birth is approximately 25%. Preventive antiretroviral treatment can reduce this percentage to 1-2% (CDC). If breastfeeding is avoided, nearly all children born to HIV-infected mothers can be spared infection themselves.

The U.S. Public Health Service released guidelines in 1994 for the use of zidovudine to prevent perinatal transmission of HIV and in 1995 recommended universal counseling and voluntary HIV testing for pregnant women. With the widespread adoption of these guidelines, perinatal HIV transmission in the United States decreased 81% between 1995 and 1999 (Bulterys et al., 2002).

The trend in Minnesota has been similar but on a much smaller scale. Between 1990 and 1995, 16 cases of perinatally acquired HIV infection were diagnosed among children born in Minnesota compared to 11 cases between 1996 and 2004. While the difference in number of cases is small (5), the difference in the rate of transmission is over four-fold, from 18% in 1990-1995 to 4% in 1996-2004.

The rate of transmission for 2002-2004 was 1.5%. Figure 13 shows the trend lines for both births among HIV-infected women and the number of perinatally acquired infections, by year of birth. Reporting of births to HIV positive women is known to be incomplete. As a result of a project conducted in 2001, MDH has implemented an active component for perinatal surveillance in collaboration with three pediatric HIV clinicians in the Twin Cities to increase reporting of births to HIV-infected mothers. In addition, surveillance staff matches surveillance records with vital statistics records on a yearly basis to identify births to HIV positive women.

Figure 13. Births to HIV-Infected Women and Number of Perinatally Acquired HIV Infections* by Year of Birth, 1990-2004



* HIV or AIDS at first diagnosis for a child exposed to HIV during mother's pregnancy, at birth, and/or during breastfeeding.

Differences between Greater Minnesota and the EMA

While the concentration of new HIV/AIDS infections is in the EMA (90%), there are some notable differences between Greater Minnesota and the EMA in the racial and risk category distribution of those infected.

Looking at the state as a whole, men who have sex with men (MSM) accounted for 42% and IDU accounted for 4% of new HIV/AIDS infections between 2002 and 2004. However, during the same time period, MSM accounted for only 38% of new infections in Greater Minnesota compared to 42% for the EMA. Conversely, IDU accounted for 13% of new infections in Greater Minnesota compared to only 3% of new infections in the EMA (Figure 14).

Similarly, looking at the racial/ethnic distribution of the new infections over the past three years, there are differences between Greater Minnesota and the EMA. The main differences occur in the African, African American, Hispanic and White communities. Africans account for 9% of new infections in Greater Minnesota and 22% in the EMA, and African Americans account for 12% and 20%, respectively. In contrast Whites and Hispanics make up a greater percentage of new infections in Greater Minnesota than the EMA. Hispanics account for 14% of infections in Greater Minnesota compared to 10% in the EMA, while Whites account for 58% in Greater Minnesota and 43% in the EMA (Figure 15).

There are no significant differences in the distributions for gender and age.

Figure 14. New HIV/AIDS Infections By Mode of Exposure, Greater Minnesota & EMA 2002 - 2004

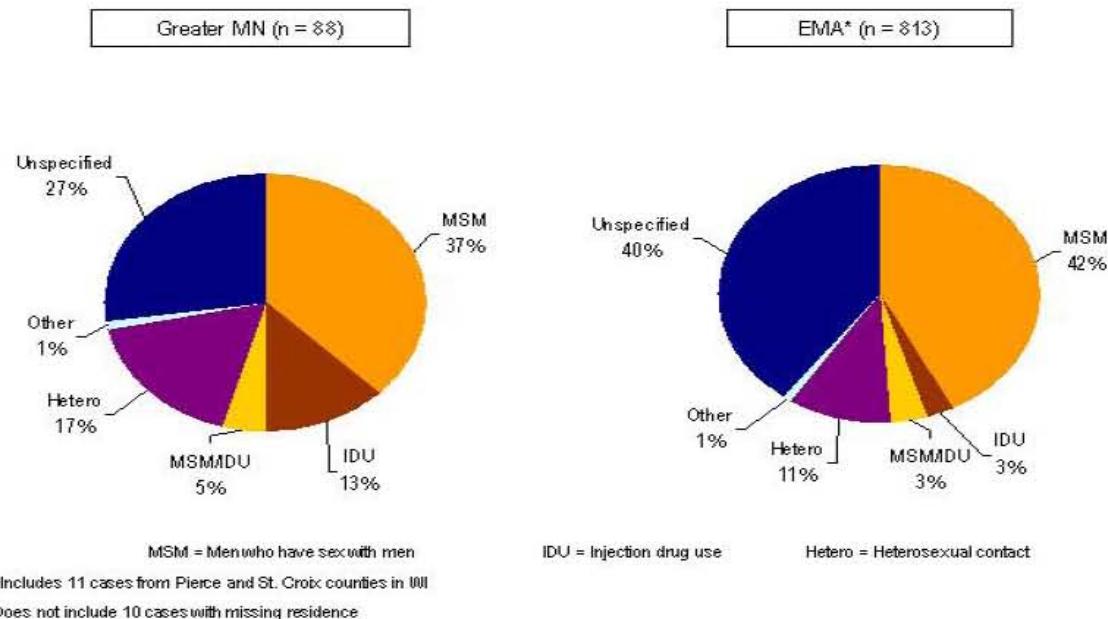
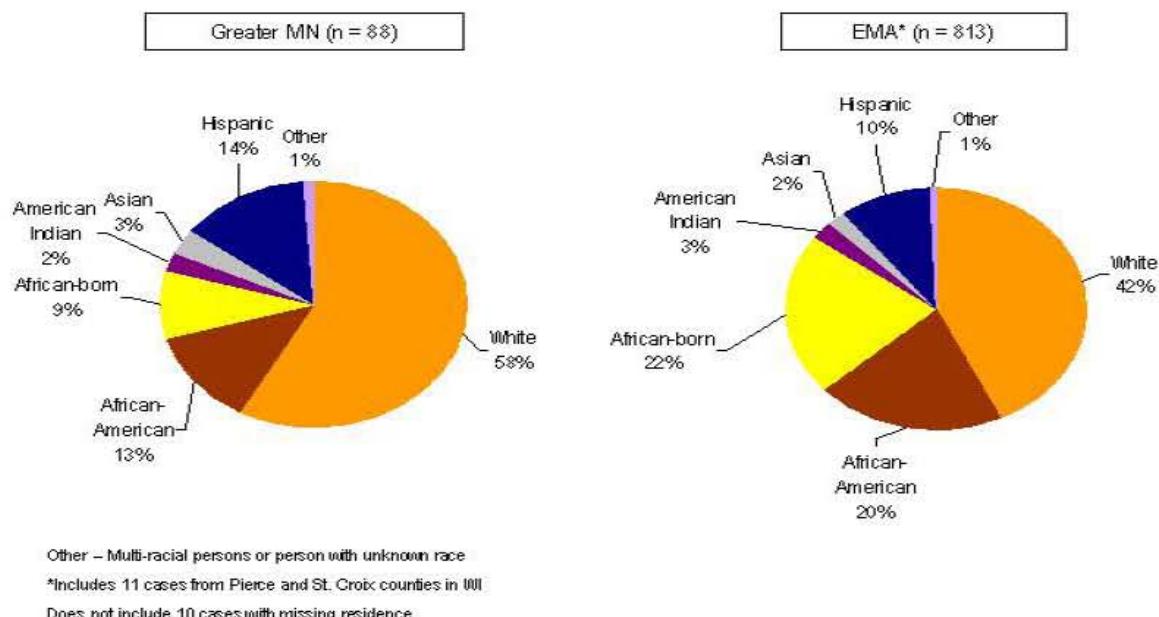


Figure 15. New HIV/AIDS Infections By Race/Ethnicity, Greater Minnesota & EMA 2002 - 2004



Characteristics of HIV/AIDS in Priority Target Populations

In this section of the epidemiological profile, HIV/AIDS surveillance data are used to describe the state of the HIV/AIDS epidemic in the target populations prioritized through the CCCHAP's prioritization process. Other sources of available data are also utilized to enhance understanding of the epidemic.

MEN WHO HAVE SEX WITH MEN (MSM)

Estimates of MSM in Minnesota

As previously stated, accurate estimates of same sex behavior in Minnesota are not available. However, a 1995 national study estimated that 6% of males engaged in same sex behavior during the previous 5 years (Sell et al., 1995). Using this finding and U.S. Census 2000 data, approximately 146,000 MSM would be predicted to reside in Minnesota, with 60% of those residing in the EMA. However, the estimated range for this population would be much broader.

Proportion of the Epidemic Among MSM

Men who have sex with men are estimated to account for the majority of cases living with HIV/AIDS in Minnesota (53% or 2,634 cases); the remaining risk categories represent much smaller proportions of the epidemic. However, as previously stated, MSM do not account for as great of a proportion of the epidemic in Greater Minnesota.

In the past, the CDC has estimated that approximately 30% of persons infected with HIV are unaware of their status. However, recent data presented at the 14th International AIDS Conference from a CDC study designed to estimate HIV seroprevalence among MSM using randomly selected sites in seven U.S. cities raise concern that the vast majority (77%) of HIV-infected gay/bisexual men are unaware of their status (MacKellar et al., 2002). The estimates varied by race. Ninety percent (90%) of Blacks were unaware of their infection, followed by 70% of Hispanics, and 60% of Whites. Thus, the extent of the epidemic among MSM may be remarkably underestimated.

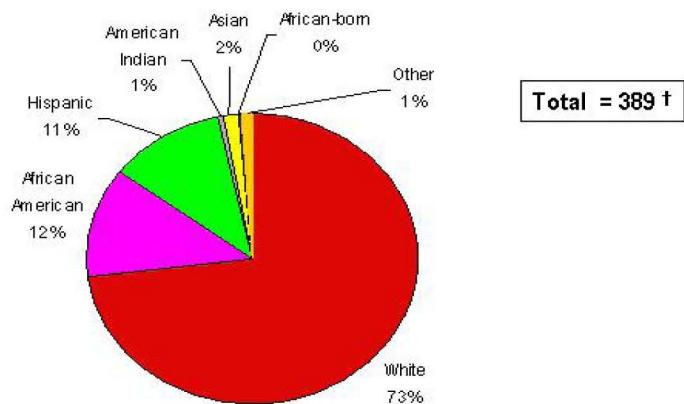
Racial/Ethnic Trends Among MSM

White MSM make up the largest proportion of HIV infections diagnosed in the past three years (73%, Figure 16). However, MSM of color are disproportionately represented when taking race-specific population size into account. Specifically, in the epidemic among MSM, African Americans make up 12% of new HIV infections diagnosed between 2002 and 2004, but African American males represented only 4% of the state's male population in 2000. Similarly, Hispanics represent 11% of the recent epidemic among MSM and only 3% of the male population. This disproportional impact is even greater among young MSM (13 to 24 years of age). Men of color account for 58% of cases among young MSM compared to 33% among adult MSM. Especially impacted are African American and Hispanic males, with young men accounting for 25% and 26% of MSM cases, respectively (data not shown).

In general, the number of new HIV infections diagnosed among White MSM has been declining over the last decade while numbers for MSM of color have remained stable or increased (Figure 17). Thus, MSM of color have made up a growing proportion of cases among MSM. In 2001, the number of infections among White MSM increased by 38% (from 79 to 109 cases). The number of new infections decreased in both 2002 and 2003, however in 2004 that trend was reversed and the number of infections among White MSM is up 20% from 2000. There is still some concern that an increase in HIV cases among MSM

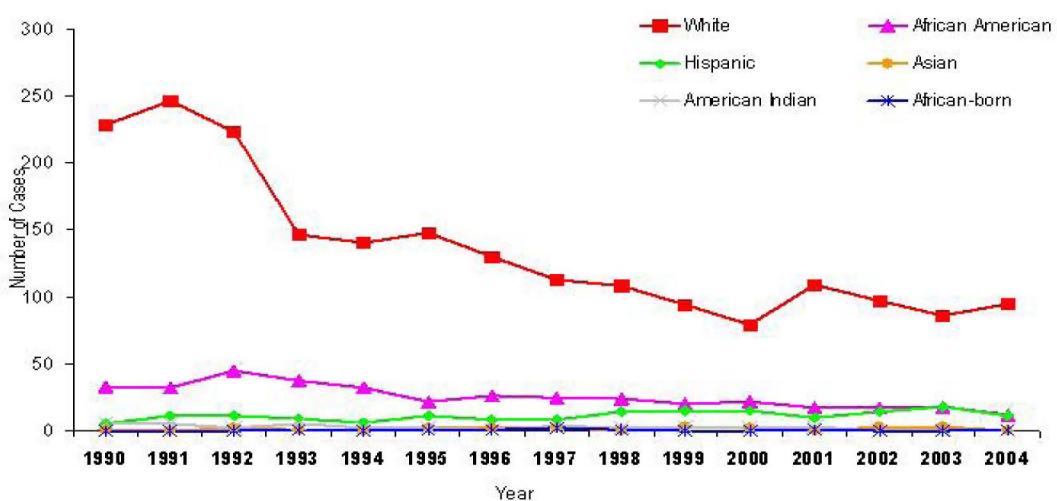
in the Minneapolis-St. Paul area may follow the outbreak of syphilis detected among MSM in the metro area that started in early 2002 and has continued through 2005. In 2002, approximately half of the syphilis cases among MSM were co-infected with HIV, however that decreased to about a quarter in 2004. This phenomenon has already been observed in a number of U.S. cities (CDC, 2001; San Francisco Public Health Department).

Figure 16. New HIV Infections Diagnosed Among MSM in 2002 - 2004 by Race/Ethnicity, Minnesota



† Includes 8 cases from Pierce and St. Croix counties, WI.
Other – Multi-racial persons or persons with unknown race

Figure 17. HIV Infections Among MSM by Race/Ethnicity, Minnesota 1990-2004



Age Trends Among MSM

The largest percentage of recent cases of HIV infection among MSM was among men aged 30 to 39 years (45%, Figure 18), followed by men between the ages of 20 to 29 (25%). Young MSM (13 to 24 years of age) accounted for 12% of recent infections among MSM.

Figure 19 depicts the trends in new HIV infections diagnosed over time for six age groups. As the annual number of new infections diagnosed among MSM ages 20-39 decreased over the past decade, the number among those 40 years and over remained relatively stable.

Figure 18. New HIV Infections Diagnosed Among MSM in 2002 - 2004 by Age at Time of Diagnosis, Minnesota

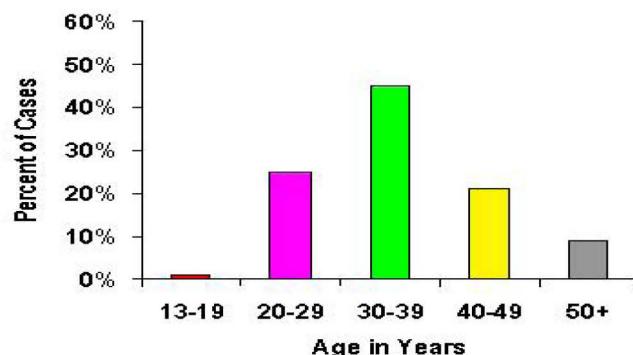
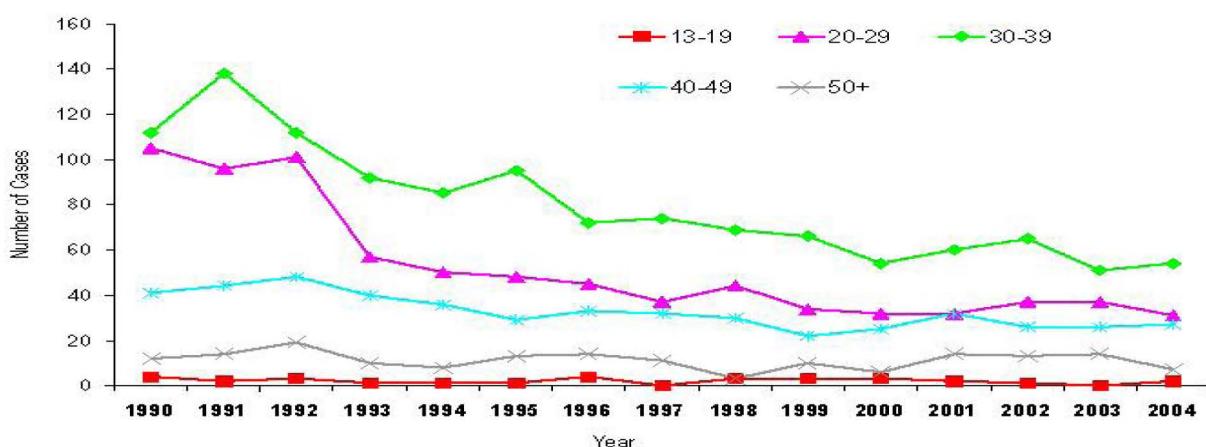


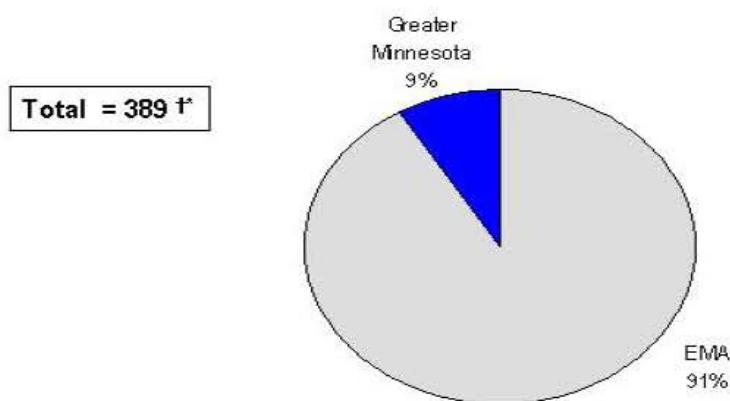
Figure 19. HIV Infections Among MSM by Age at Diagnosis, Minnesota 1990-2004



Geography of HIV Among MSM

Between 2002 and 2004, 9% of new HIV infections diagnosed in MSM lived outside the Minneapolis-St. Paul EMA (Figure 20). This percentage has not changed significantly over time (data not shown).

Figure 20. New HIV Infections Diagnosed Among MSM in 2002-2004 by Region of Residence, Minnesota



† Includes 8 cases from Pierce and St. Croix Counties, WI
‡ 8 cases missing location

HIV Seroprevalence Studies

HIV seroprevalence surveys were conducted at two STD clinics in Minneapolis-St. Paul from 1988 through 1995 (data not shown). Of the various groups tested, the seroprevalence of HIV among gay and/or bisexual men was greater than for any other groups – consistently 12% or higher in the first five surveys and dropping down to 6-7% by the final survey in 1995.

STD Surveillance Data

An outbreak of syphilis that began in 2002 and its implications are discussed in the next section. Aside from syphilis data, STD surveillance information specific to men who have sex with men is largely unavailable because mode of exposure data has not been collected routinely and it is not feasible for MDH to systematically follow up the nearly 12,000 annual reports of chlamydia and gonorrhea to obtain sexual behavior data. In 2004, MDH added gender of sexual partners to the STD case report form. Because this was the first year these data were collected, the gender of sexual partners is missing in a large number of cases. However, based on the available data, 6% of chlamydia and 19% of gonorrhea cases were among MSM. Additionally, in 2004, Minnesota saw an increase in the prevalence of antibiotic resistant gonorrhea, with an overall prevalence of 8%, and a much higher prevalence of 27% among MSM (MDH STD Surveillance System).

Behavioral Data

Unprotected sex between men accounts for the majority of HIV transmission in Minnesota. Data from Minnesota and other locations suggest that risky sexual behavior may be on the rise among both HIV-infected and uninfected men who have sex with men.

In early 2002, a steep increase of syphilis among MSM was detected in the Minneapolis-St. Paul area. Compared to the first quarter of 2001, when only 1 case of syphilis was linked to male-to-male sex, 8 such cases occurred in the first quarter of 2002, 4 of whom were co-infected with HIV. By the end of 2002, 80% of male syphilis cases were among MSM, with 45% of these cases being co-infected with HIV. This trend continued in 2003, with 85% of new syphilis cases among males linked to male-to-male sex, of which 42% were co-infected with HIV. These trends have continued in 2004 and 2005, and while there was a decrease in the number of cases in 2004, the number of cases (60) by the end of June 2005 had already surpassed the total number (34) for 2004. Additionally, as mentioned previously, there were 23 cases of antibiotic resistant gonorrhea among MSM (out of 85 tested).

Many published studies suggest that multiple factors may be contributing to increases in risky sexual behavior by MSM. Some of the factors, as identified by the CDC, include the following: less concern about infection due to new treatments (Ostrow et al., 2002); growing numbers of young males without direct experience with HIV/AIDS; incorrect assumptions about partners' HIV status; difficulty in sustaining sexual behavior change over time; racism, stigma, and lack of services in minority communities; and the continued role of substance use, which studies indicate is often accompanied by increased sexual risk behavior (Purcell et al., 2001). In addition, the Internet is increasingly being used as an avenue for MSM to socialize and meet potential friends, sex partners, and/or lovers through chat rooms. Benotsch et al. (2002) found that among a sample of 609 men attending a gay pride festival, 34% reported having met a sexual partner through the Internet. These men reported higher rates of crystal meth use, as well as higher rates of unprotected receptive and insertive anal sex than men who did not report meeting partners online.

In 2000, a needs assessment study was conducted among 129 self-identified sex workers (trade sex for money, drugs, etc.) recruited from various locations around the Minneapolis-St. Paul area (Persell and Fritz, 2000). Thirty (30) of the 129 sex workers were male and nearly all had been sexual with other men. The following percentages apply to the whole study group and so are not generalizable specifically to male sex workers. On average, across six risky sexual behaviors, 60% of sex workers reported that they used a condom half of the time or less with their personal partners. The corresponding percentage for work partners was 42.5%. Condom use with known HIV-infected partners was sporadic depending on the sexual activity, but typically was less than half the time. Again these do not refer exclusively to hetero- or homosexual contact.

In a survey conducted among MSM in southwest Minnesota during 1995-1997, 60% of respondents did not feel that they were at risk for HIV. However, about 17% of respondents indicated that they had more than 10 sexual partners in the past year, and 51% indicated that they did not always use condoms. Fourteen percent (14%) reported that they never use condoms. Only 50% of the individuals that reported having more than 10 partners in the last year reported always using condoms. National research supports this finding of high levels of HIV risk behavior among gay men in rural Minnesota. Preston et al. (2004) interviewed 93

HIV negative MSM living in rural areas and found that almost half reported engaging in receptive anal sex, and 37% of these did not always use condoms.

A recent survey of men attending the Twin Cities Pride Festival in June 2004 provided some additional behavioral data on MSM. Of the 379 men interviewed, 300 (79%) said they had sex with men, and of these, 41% had had multiple sexual partners in the previous 12 months. Additionally, of those engaging in anal sex in the past 12 months, 47% reported having unprotected sex (72% for men with single partners, 42% for men with multiple partners).

In relation to HIV testing, 88% of those interviewed reported having been tested, and of those, 41% reported having had an HIV test in 2004. Of those tested, 8% were positive. Additionally, 5% of those interviewed reported having an STD diagnosis in the previous 12 months (MDH, 2004).

Gay/Bisexual Youth

Minneapolis was one of several sites in a national study of sexually active young MSM (YMSM) in 1999. Participants were randomly sampled from popular venues for participation in structured interviews about demographic and psychosocial characteristics, sexual behavior, drug use, health care service delivery, and HIV test experience. Of 255 YMSM interviewed in Minnesota, more than one in four reported unprotected anal sex with men in the last three months (35%), and the majority reported multiple male partners in the last three months (57%). Unprotected intercourse happened more often with main partners (16%) than with non-main partners (6%). A sizeable minority reported prostitution (8%), and unprotected intercourse with women (8%) (CDC, 1999). An update to this study shows that the percent of YMSM reporting unprotected anal intercourse increased from 27% in 1999 to 34% in 2002 (Guenther-Gray et al., 2005).

Between 1994 and 1998, the Young Men's Survey recruited 3,492 young MSM ages 15-22 from 194 public venues in seven major U.S. metropolitan areas who agreed to be interviewed and tested for HIV (Valleroy et al., 2000). Overall prevalence was 7.2%, and increased with age, from 0% percent among 15 year olds to 9.7% among 22 year olds. HIV prevalence was higher among Blacks (14.1%), among young men of mixed or other race (12.6%), and among Hispanics (6.9%) than Whites (3.3%) or Asians (3.0%).

Additionally, in a study conducted with adolescents and young adults (ages 13-24) in Minnesota, 4% identified as gay, bisexual or transgender (MDH STD Prevalence Study, 2001). When asked about condom use in the last six months when having vaginal, oral, oral-anal, insertive anal or receptive anal sex, 47%, 75%, 90%, 61% and 61% respectively reported that they used a condom half the time or less. For vaginal, insertive and receptive intercourse, 25%, 21% and 35% reported never using protection, respectively.

All of these studies show that sexual risk behaviors are prevalent among gay/bisexual youth, which is of concern given the increase in HIV cases among young men seen over the last few years.

INJECTION DRUG USERS (IDU)

Estimates of Injection Drug Use in Minnesota

Data on IDU in Minnesota are very limited and are based on admissions to treatment programs and emergency room visits, thereby excluding users who do not present at these locations. The estimated number of IDUs in Minnesota is between 6,000 and 10,000 (Access Works). A more recent estimate by Friedman et al. (2003) puts the number of IDUs at 8,100.

Considerable data are available about drug use indicators, including cause-specific mortality trends, emergency room admissions, and law enforcement activities. The Hazelden Foundation of Minnesota monitors these indicators and produces a report every six months. The most recent report published in June 2005 documents evidence of a growing heroin problem in the Minneapolis-St. Paul metropolitan area. First, opiate-related deaths have more than doubled in Hennepin County and tripled in Ramsey County since 1997. In 2004, there were 47 opiate-related deaths in Hennepin and 25 in Ramsey (Falkowski, 2005).

The 2005 report again highlights an injection drug use problem in Hennepin and Ramsey counties related to oxycodone, which is a popular prescription narcotic drug introduced in 1995. Recently the abuse of oxycodone, in particular the abuse of OxyContin (long-acting oxycodone), increased. Additionally, law enforcement seizures of oxycodone have increased as well.

An additional study provides context regarding risk behavior among IDUs in the Twin Cities metro area. In order to evaluate the impact of state legislation enacted in July 1998 that provided for voluntary pharmacy sales of syringes/needles without a prescription for an accompanying drug, 270 pre- and 300 post-legislation interviews were conducted with active IDUs in 1998 and 1999 (Cotton-Oldenburg et al., 2001). One year after enactment of the legislation, significantly fewer IDUs reported sharing syringes. Nevertheless, 24% of respondents still reported sharing syringes within the past 30 days and over 80% reported reusing a syringe in the past month. These data demonstrate that risky drug use behavior is present among IDUs in Minnesota.

In recent study of adolescents and young adults in Minnesota conducted between 1999 and 2001 by MDH, 3% of respondents reported ever having used heroin and of these, 11% reported current use (MDH STD Prevalence Study, 2001).

Unfortunately in 2003, a treatment center for IDUs closed, decreasing access to health care and prevention for this group. Also in 2003, due to budget cuts, Access Works decreased the amount of HIV testing in this same community.

Proportion of Epidemic Among IDUs

IDU was an associated risk factor (either IDU alone or MSM/IDU) for 7% (67/900) of new HIV/AIDS infections for 2002-2004 and 13% (645/5,002) of those living with HIV/AIDS in Minnesota at the end of 2004 (data not shown).

Gender and Race/Ethnicity Among IDU and MSM/IDU

Men make up the majority of cases among IDUs, including MSM/IDU (82%) (data not shown). Among the 67 cases of IDUs for 2002-2004, 57% were White and 24% African American. Hispanic, Asian and American Indian persons accounted for the remainder of the cases (Figure 21).

Over the last decade the number of new infections among White and African American IDUs has been decreasing, while the number of new infections have remained stable and small in other communities. However, in 2003 the number of White IDUs doubled (from 7 to 15) and stayed at that level again in 2004 (Figure 22).

Figure 21. New HIV Infections Diagnosed Among IDU and MSM/IDU in 2002 - 2004 by Race/Ethnicity, Minnesota

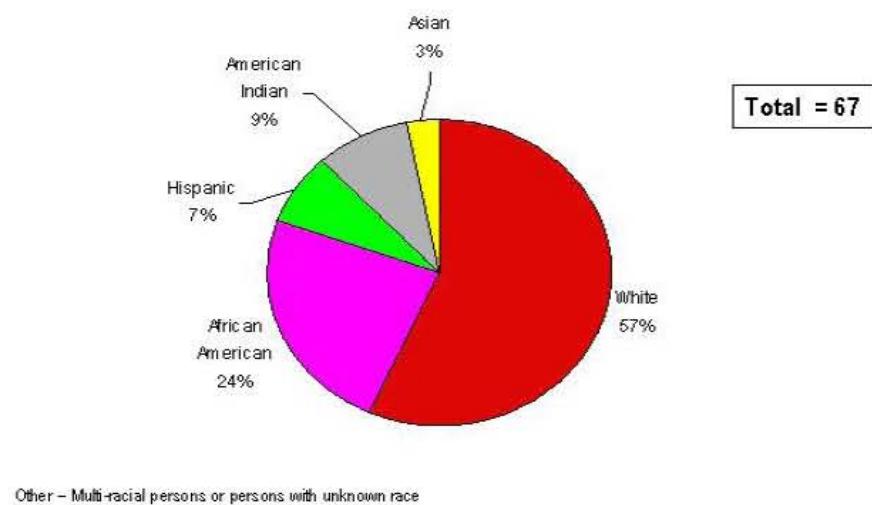
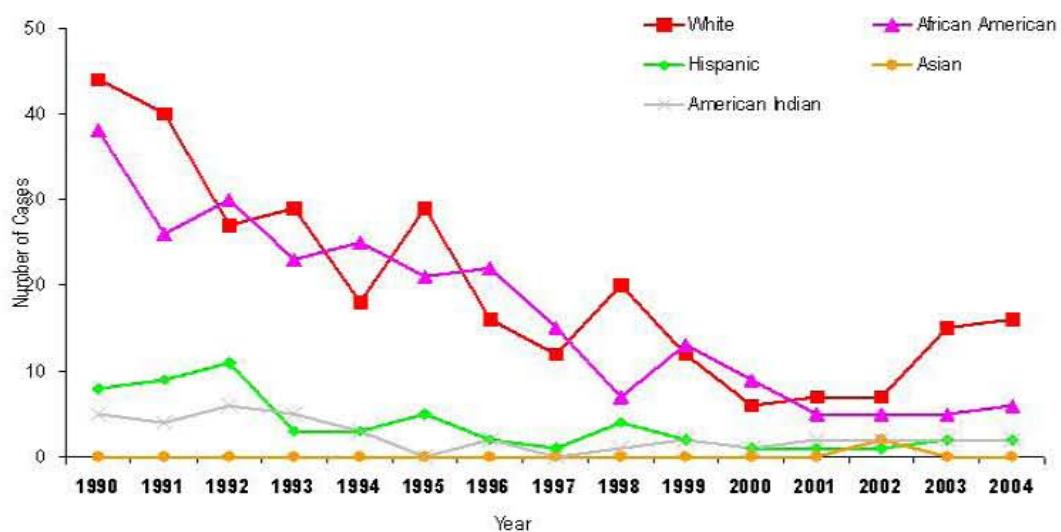


Figure 22. HIV Infections Among IDU and MSM/IDU by Race/Ethnicity, Minnesota 1990-2004



Among living female IDU HIV/AIDS cases at the end of 2004, African Americans were extremely over represented, accounting for 44% of cases but no more than 3% of the general population. Similarly, American Indian women accounted for 8% of cases and only 1% of the population. White women accounted for 41% of cases and 89% of the population. Hispanic women accounted for the remaining 8% of IDU cases among women living with HIV/AIDS. There are no reported cases among Asian women (data not shown).

African Americans also represent the largest percentage of 244 living HIV/AIDS cases diagnosed among male IDUs through 2004 (50%), but again represent only 3% of the general population. White men accounted for 32% of cases among IDUs and 89% of the general population, and Hispanic males accounted for 14% of cases and 3% of the population. American Indian and Asian males accounted for the remaining 3% of male IDUs living with HIV/AIDS (data not shown).

MSM/IDU exhibit a different racial/ethnic distribution; disparities are not quite as great for this risk category, though still present. White men accounted for 68% of 260 living HIV/AIDS cases diagnosed among MSM/IDU through 2004; African American men accounted for 25% of MSM/IDU cases; and Hispanic and American Indian men each accounted for 3% of cases (data not shown).

Age Trends Among IDUs

The largest percentage of recent cases of HIV infection among IDUs was among those ages 30 to 39 years (40%, Figure 23), followed by those between the ages of 40 to 49 (27%).

Figure 24 depicts the trends in new HIV infections diagnosed over time for six age groups. The annual number of new infections diagnosed has decreased among all age groups over the past few years, however among those ages 30 to 39 the numbers have slightly increased since 2001.

Figure 23. New HIV Infections Diagnosed Among IDU and MSM/IDU in 2002 - 2004 by Age at Time of Diagnosis, Minnesota

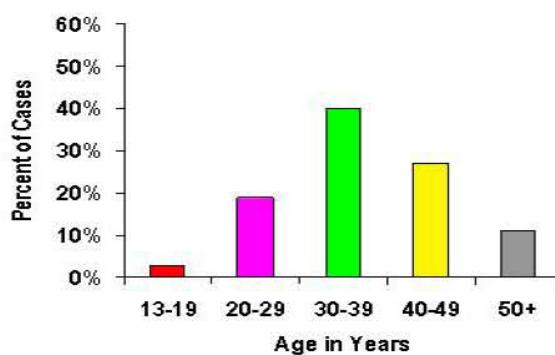
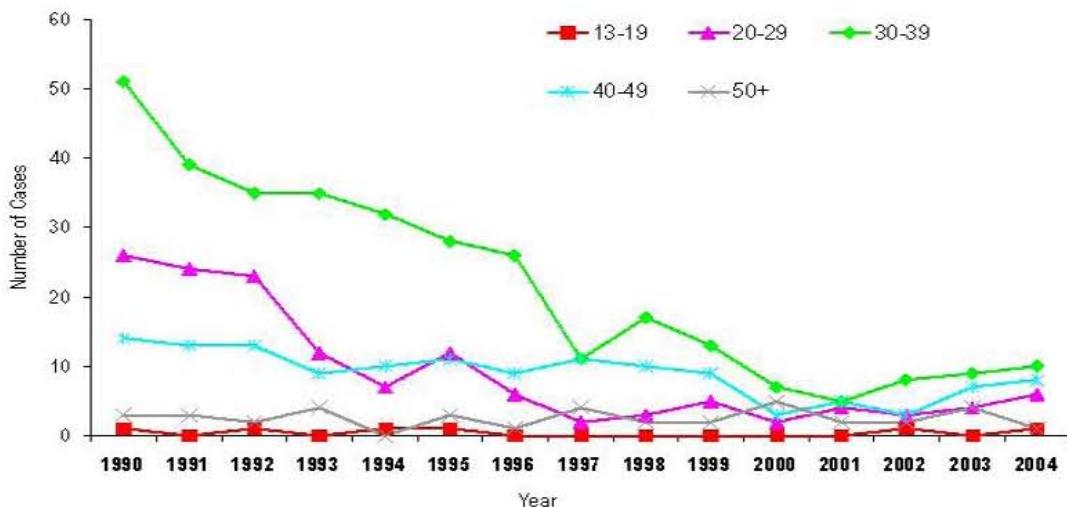


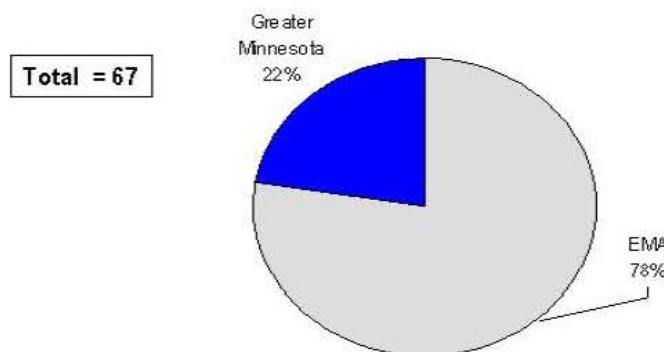
Figure 24. HIV Infections Among IDU and MSM/IDU by Age at Diagnosis, Minnesota 1990-2004



Geography of HIV Among IDUs

Figure 25 demonstrates that the recent HIV/AIDS epidemic among IDUs is more likely to affect Greater Minnesota (22%) than the larger epidemic statewide in which only 10% of new cases reported living outside the Minneapolis-St. Paul metropolitan area.

Figure 25. New HIV Infections Diagnosed Among IDU and MSM/IDU in 2002-2004 by Region of Residence, Minnesota



HIV Seroprevalence Data

Clients of drug treatment centers receive a physical examination upon entry that includes blood being collected and tested for hepatitis serology. Between 1988 and 1995, MDH conducted surveys at three clinics testing blood (when a sufficient quantity remained after hepatitis testing) in a blinded unlinked fashion for HIV antibodies.

The seroprevalence among clients of drug treatment centers remained extremely low (<0.5% for injecting drug users) (data not shown). Injection drug users not in treatment may be more likely to be infected with HIV than those in treatment; however, even if they were two to three times as likely to be infected with HIV, the overall seroprevalence rate among IDUs would still be expected to be low.

HIGH RISK HETEROSEXUALS

Establishing Heterosexual Contact as the Mode of HIV Exposure

In order for a case of HIV or AIDS to be included in the heterosexual mode of exposure category, the case must have knowledge that his/her heterosexual partner has, or is at increased risk for, HIV infection (i.e. partner injects drugs, is a bisexual man [female cases], and/or has received blood, blood products, or an organ transplant). Oftentimes cases do not have this sort of knowledge about their partners.

Sixty-three percent (63% or 157/248) of female HIV/AIDS cases and 29% (190/652) of male cases in 2002 - 2004 in Minnesota have no specified mode of exposure. Although a similar study has not been conducted for men, results from a CDC study suggest that 80% of female cases with an unspecified mode of exposure can be attributed to heterosexual exposure (Lansky et al., 2001). As previously mentioned, in 2004, MDH re-distributed risk for cases with unspecified risk. This increased the number of new female heterosexual HIV/AIDS cases from 75 to 210. For purposes of this analysis, only HIV/AIDS cases officially categorized as due to heterosexual exposure will be included.

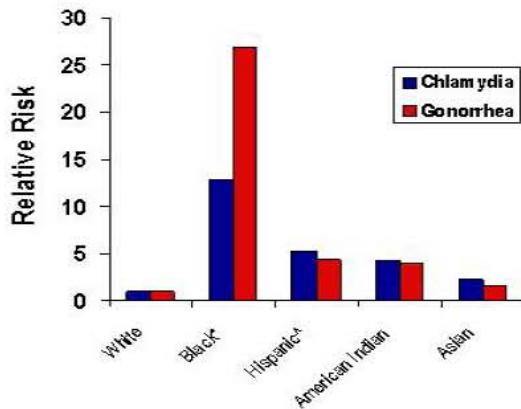
Estimates of High Risk Heterosexual Contact

Quantifying the number of persons in Minnesota who engage in heterosexual contact that puts them at high risk of HIV exposure is difficult at best. In a broad manner, diagnosis of an STD may be used as an indicator of risky heterosexual behavior. In 2004, MDH added gender of sexual partners to the STD case report form and while the data is not complete, we can use it as an estimate for heterosexual contact. In 2004, 11,601 cases of chlamydia, 2,957 cases of gonorrhea, and 48 cases of early syphilis were reported in Minnesota. However, 71% (34) of early syphilis cases were associated with male-to-male sex. Rates of chlamydia and gonorrhea in 2004 were highest among those 15-24 years old followed by those 25-29 years old. Females accounted for a greater percentage of chlamydia cases than males (73% vs. 27%); the gender distribution for gonorrhea cases was more equal, 58% female and 42% male. If we remove those known to be in same sex relationships, then 96% of chlamydia cases and 91% of gonorrhea cases are possibly the result of heterosexual contact.

Rates of STDs were higher in more densely populated areas. For example, in 2004 rates of chlamydia were highest in Minneapolis (694 per 100,000), St. Paul (639 per 100,000) and their counties (Hennepin: 366 per 100,000 and Ramsey: 418 per 100,000). However, the counties in which the cities of Duluth, St. Cloud, Rochester, Mankato and Moorhead are located had rates of STDs higher than other Greater Minnesota counties.

The most striking disparity is the continued high rates of STDs among Blacks compared to other racial/ethnic groups (Figure 26). Statewide in 2004, Blacks were 13 times more likely than Whites to be diagnosed with chlamydia and 27 times more likely to be diagnosed with gonorrhea. Persons of color, in general, were more likely to be diagnosed with an STD in Minnesota than were Whites.

Figure 26. Relative Rates of Chlamydia and Gonorrhea by Race/Ethnicity, Minnesota 2004



*Includes African Americans and African-born Blacks.

^aPeople of Hispanic origin may be of any race.

Proportion of Epidemic Among High Risk Heterosexuals

Heterosexual transmission accounted for 11% (101 of 900 cases) of new HIV/AIDS cases for the period of 2002 – 2004 in Minnesota (data not shown). The majority of these cases were women (74% or 75 cases). Of the heterosexual cases, 65% of men and 69% of women had unsafe sexual contact with a partner they knew to be infected with HIV (Table 9).

Table 9. HIV Infections Attributed to Heterosexual Transmission by Sexual Partner Type, Minnesota 2002 - 2004

| Partner | Men | | Women | | Total | |
|----------------------------|-----|------|-------|------|-------|------|
| | No. | % | No. | % | No. | % |
| HIV-infected (HIV or AIDS) | 17 | 65% | 52 | 69% | 69 | 66% |
| Injection Drug User | 9 | 35% | 15 | 20% | 29 | 28% |
| Bisexual Male | - | - | 8 | 11% | 8 | 6% |
| Total | 26 | 100% | 75 | 100% | 104* | 100% |

* Includes 3 cases from Wisconsin, with unknown gender and partner status

Racial/Ethnic Trends Among High Risk Heterosexuals

Among females, Whites and African Americans make up the largest percentage of the 75 heterosexually acquired HIV infections that were diagnosed in the past three years (34% and 31%, Figure 27); African Americans, however, only make up 3% of the state population.

Likewise for other women of color, African-born women account for 17% of the recent cases and less than 1% of the population, Hispanic women for 13% of cases and 3% of the population and American Indian women for 4% of cases and 2% of the population. There were no cases among Asian women in the past three years.

It should be noted that 85% of the 105 cases diagnosed among African-born women during the past years have an unspecified mode of exposure (compared to 53% in the next highest group). Due to language and cultural barriers, assessing risk behavior information among African-born cases has been difficult. However, given that heterosexual contact is the main mode of HIV transmission in their countries of origin and that the gender distribution of the cases residing in Minnesota reflects that of the African epidemic, heterosexual transmission is likely for most of the unspecified cases among African-born persons.

For males, Whites and African Americans make up the largest proportion of heterosexually acquired HIV infections diagnosed in the past three years (34%, Figure 28). However, men of color are disproportionately represented when taking race-specific population size into account. Specifically, in the epidemic among high risk heterosexuals, Hispanics make up 12% of new HIV infections diagnosed between 2002 and 2004, but only 3% of the state population in 2000. Similarly, African-born men represent 12% of cases and less than 1% of the population. There were only two heterosexually associated cases diagnosed during 2002 through 2004 among American Indian and Asian men.

Figure 29 depicts the annual number of heterosexually acquired HIV infections diagnosed between 1990 and 2004 by race/ethnicity. A fair amount of fluctuation over time is exhibited, in part due to relatively small numbers among race/ethnicity categories.

Figure 27. Heterosexually-Acquired HIV Infections Diagnosed Among Females in 2002-2004 by Race/Ethnicity, Minnesota

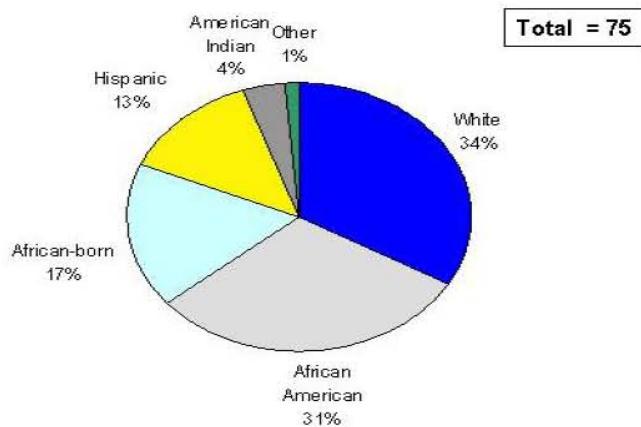


Figure 28. Heterosexually-Acquired HIV Infections Diagnosed Among Males in 2002-2004 by Race/Ethnicity, Minnesota

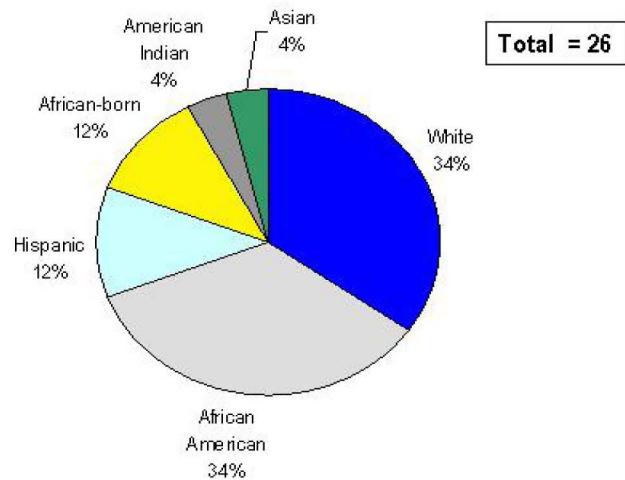
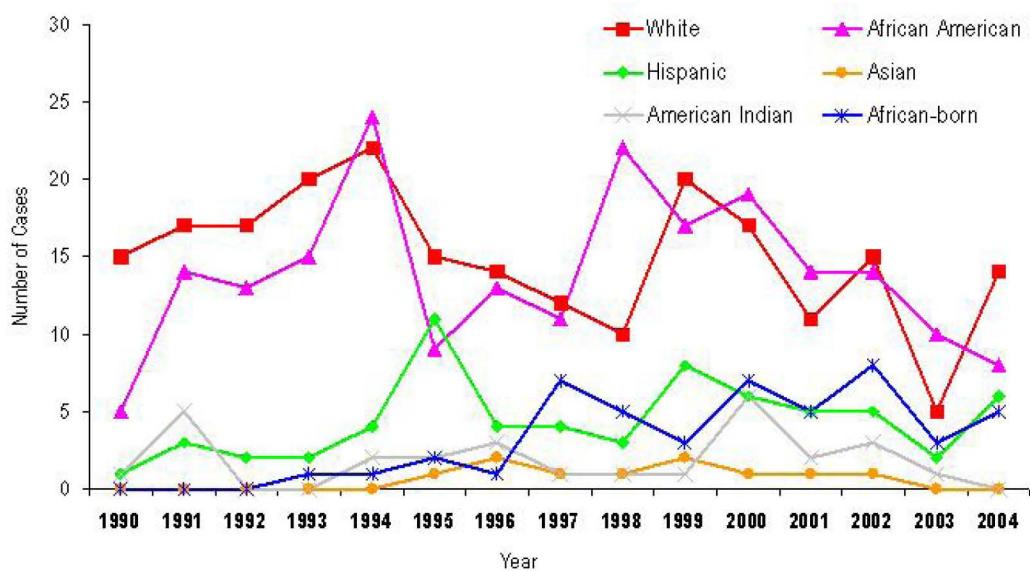


Figure 29. Heterosexually-Acquired HIV Infections by Race/Ethnicity, Minnesota 1990-2004



Age Trends Among High Risk Heterosexuals

As depicted in Figure 30, the largest percentage of the recently diagnosed cases of HIV infection attributed to heterosexual contact occurred in the 30-39 year age group (36%) followed by 28% in the 40-49 year age group, and 20% in the 20-29 year age group. Adolescents and young adults (ages 13-24) comprise 16% of newly diagnosed cases. Figure 31 shows the age trends among heterosexual cases over the past decade. A fair amount of fluctuation over time is exhibited, in part due to relatively small numbers among age categories.

Figure 30. Heterosexually-Acquired HIV Infections Diagnosed in 2002-2004 by Age at Diagnosis, Minnesota

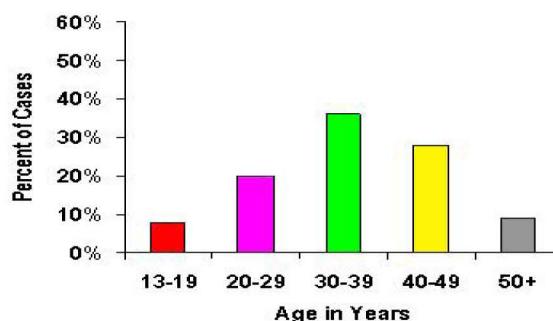
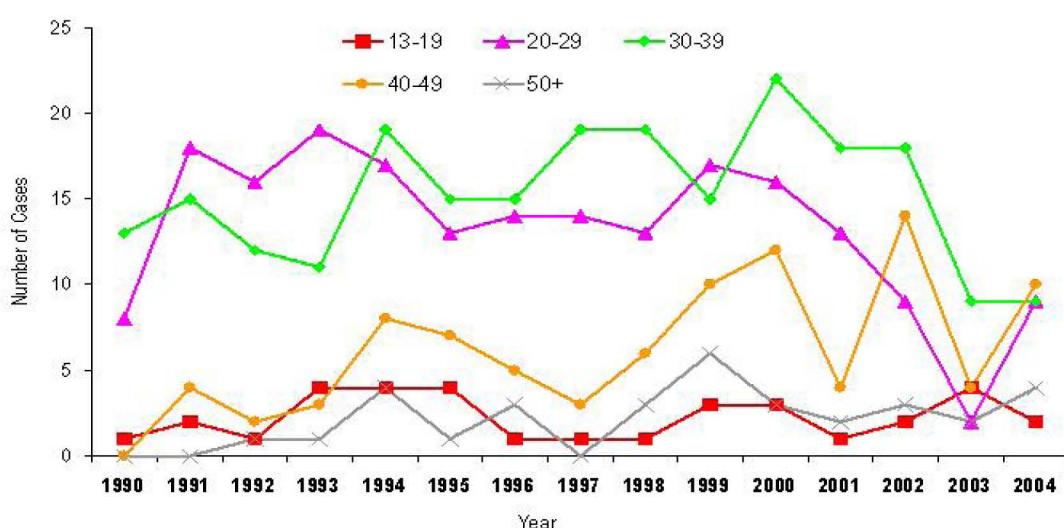


Figure 31. Heterosexually-Acquired HIV Infections by Age at Diagnosis, Minnesota 1990-2004

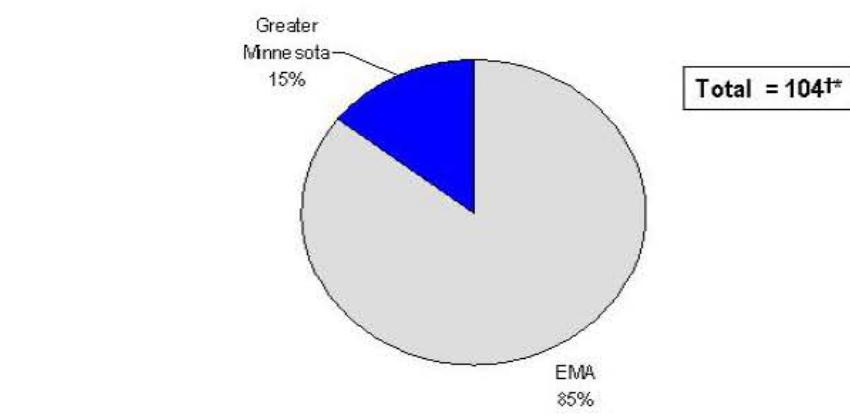


Females accounted for 94% of adolescent and young adult heterosexual cases compared to 70% of adult heterosexual cases. Additionally, this varied greatly by race/ethnicity. While 40% of cases among Hispanic women were young adults, the figure was much smaller among African American, White and African-born women, with 22%, 20% and 8% of the cases occurring among young women.

Geography of HIV Among High Risk Heterosexuals

Figure 32 demonstrates that the recent HIV/AIDS epidemic among high risk heterosexuals is more likely to affect Greater Minnesota (15%) than the larger epidemic statewide in which only 10% of new cases reported living outside the Minneapolis-St. Paul metropolitan area.

Figure 32. Heterosexually-Acquired HIV Infections Diagnosed in 2002-2004 by Region of Residence, Minnesota



*Includes 3 cases from St. Croix and Pierce counties, WI

*One case missing residence information

HIV Seroprevalence Studies

HIV seroprevalence surveys were conducted at two STD clinics in Minneapolis-St. Paul from 1988 through 1995. STD clinic patients are an ideal group to look at to determine the extent of HIV infection in the population because, as evidenced by their attendance at an STD clinic, they are sexually active persons practicing unsafe sexual behaviors.

At the clinics, new patients routinely had blood drawn for syphilis serology. Specimens drawn on patients attending the clinic for an initial diagnosis or treatment of an STD during the study period (a pre-determined time of the year; same time for each successive survey) were tested in a blinded unlinked fashion for HIV antibodies. Overall, there was a remarkably low seroprevalence for all (presumably) heterosexual clients tested. For heterosexual men the seroprevalence rate was less than 1%, and for heterosexual women the rate was less than 0.4% (based on only 1-2 female cases per year) (data not shown).

The most recent survey conducted to measure the seroprevalence of HIV infection in women in Minnesota was completed in 1995. All newborns in Minnesota have blood collected by a heel-stick in order to test for treatable metabolic and other disorders. Because HIV antibodies are passively transferred across the placenta, testing of newborns allows an assessment of the prevalence of HIV infection among childbearing women. MDH began this blinded unlinked survey of childbearing women in July 1988. Initially only births from the Minneapolis-St. Paul area were included. This was expanded in 1989 to include all births statewide.

Results indicated a higher HIV infection level in the Twin Cities metropolitan area compared to Greater Minnesota. This is consistent with surveillance data. Infection levels increased slightly over time from 1.5 per 10,000 in 1990 to 4.0 per 10,000 women delivering a live birth in 1995 statewide, although this increase is not statistically significant (data not shown). These results are among the lowest reported in the U.S. for the 45 states (and District of Columbia and Puerto Rico) that conducted this survey. These seroprevalence surveys ceased in 1996.

Behavioral Data

Drug use (other than injecting drug use) in the Twin Cities

Drug use is discussed here because of the strong association between drug use and high risk sexual activities. It should be noted that this association is not limited to heterosexuals even though these drug use data are presented in the section on high risk heterosexuals.

Although accurate estimates of the magnitude of substance use in Minnesota are not available, data that reflect the relative increase or decrease in usage are. One report by provides evidence that use of some illegal drugs in Minneapolis-St. Paul has increased over the past few years (Falkowski, 2005). For example, patients addicted to methamphetamine (meth) accounted for 10% of total treatment admissions in the Twin Cities in 2004, which is a record high. Marijuana accounted for more treatment admissions than any other drug in 2004. Twenty percent (20%) of patients entering treatment identified marijuana as the primary substance problem compared to only 8% in 1991. Most of these patients were males (76%), and 66% were White, 22% African American, 5% Hispanic, 3% American Indian, and 1% Asian.

Data from the 2002 and 2003 National Surveys on Drug Use and Health (SAMHSA) indicate that any illicit drug use in the past month is slightly lower in Minnesota than nationwide (7.59% vs. 8.25%). Rates of last month use were very similar for cocaine (2.51% vs. 2.5%) and marijuana (6.57% vs. 6.18%) in Minnesota compared to the nation. However, alcohol use was slightly higher in Minnesota compared to national use. Fifty-eight percent (58%) of Minnesota respondents used alcohol in the past month compared to 51% of national respondents. In addition, 28% of Minnesota respondents reported binge drinking (five or more drinks on the same occasion) in the past month compared to 23% nationwide.

Beginning in 1998, Minneapolis joined the National Institute of Justice's Drug Use Forecasting Program. Males and females who were arrested but not convicted of misdemeanors and felonies in Hennepin County were recruited to participate in an interview and provide a urine sample. In 2000, 51% of eligible male arrestees agreed to participate in the interview, and 92% of these agreed to provide a urine sample (the sample of female arrestees was too small to include in the report). Sixty-seven percent (67%) of males tested positive for at least one drug. Twenty-six percent (26%) of males tested positive for cocaine

and 54% tested positive for marijuana. Only 1.6% tested positive for meth. Sixty-five percent (65%) reported engaging in binge drinking in the last year and 54% within the last month. White males (76%) were more likely to report binge drinking in the last month than Black males (54%). The highest rate of last month binge drinking (66%) was among males 31-35 years old (U.S. Department of Justice, 2003).

Additionally, in a study conducted with adolescents and young adults in Minnesota, 75% of participants reported ever using drugs and of these, 34% reported current use (MDH STD Prevalence Study, 2001).

Sexual Risk Behavior

A 2001 MMWR article reported on the prevalence of sexual risk behaviors among states participating in the Behavioral Risk Factor Surveillance System in 1997 (CDC, 2001). Eighty-one percent (81%) of a random sample of Minnesotans older than 18 identified themselves as sexually active and 11.5% reported having multiple sex partners. Of the persons reporting multiple sex partners, only 54% reported using a condom during most recent intercourse. This data cannot be assumed to refer to only heterosexual persons.

In 2000, a needs assessment study was conducted among 129 self-identified sex workers (trade sex for money, drugs, etc.) recruited from various locations around the Minneapolis-St. Paul area. On average, across six risky sexual behaviors, 60% of sex workers reported that they used a condom half the time or less with their personal partners. The corresponding percentage for work partners was 42.5%. Condom use with known HIV positive partners was sporadic depending on the sexual activity, but was typically less than half the time (Persell and Fritz, 2000). Please note that these data do not refer exclusively to heterosexual contact. The majority of participants in the sex workers needs assessment also reported that they received counseling in the past for drug or alcohol use (72%), felt that their drug and/or alcohol use was a problem (67%), and believed that the use of drugs or alcohol affected their safe sex practices (71%).

In a needs assessment of 247 African American women in Minnesota, Jackson et al. (2002) found that 50% of participants had engaged in unprotected vaginal intercourse in the past two months, while 11% reported unprotected anal intercourse during the same time period. Eleven percent (11%) reported having sex with a bisexual male in the last 5 years and 15% had engaged in sex with an injection drug user during that time period. Thirty percent (30%) reported knowing their last three sexual partners a week or less before having sex with them. Half of the sample had been tested for STDs two or more times within the last ten years, and 37% of these had been diagnosed with one or more STDs during those ten years.

In a study with adolescents and young adults in Minnesota, participants were asked several questions about their sexual behavior. Fifty-five percent (55%) reported using protection half the time or less when having vaginal sex, 91% when having oral sex, 66% when having insertive anal sex and 77% when having receptive anal sex. The percentage reporting never using protection was 17%, 41%, 2% and 2% for vaginal, oral, insertive anal and receptive anal, respectively. Additionally, 23% tested positive for an STD (MDH STD Prevalence Study, 2001).

Risk assessment data were collected from 1,367 women by the Catholic Charities Seton Program, which performed outreach to women at risk on the streets of St. Paul in July 1998. Six percent (6%) of these women reported having more than four sexual partners in the last

year, 13% reported trading unprotected sex for money, drugs, alcohol or favors. Forty-nine percent (49%) reported engaging in unprotected anal or vaginal sex at least once in the previous year, and 55% reported using condoms never or only sometimes when they had sex. Forty percent (40%) reported having sex while drunk or high in the previous year. The biggest reason given for not using condoms was "I am only having sex with one partner" (37%). Sixteen percent (16%) reported that they did not use condoms because "I use another form of birth control." Twenty-two percent (22%) reported ever having an STD. Nine percent (9%) reported using injectable drugs.

In 1998, a survey was conducted with clients of battered women's shelters, family service agencies, women's correctional facilities, public health agencies, educational facilities, pregnancy centers, college student health centers, family planning agencies, and GLBT organizations in northwest Minnesota. One hundred and ninety-three (193) clients completed surveys. Approximately 36% of women surveyed stated that they had sex with two or more partners in the last year. Five percent (5%) of women surveyed had sex with six or more partners. Only 19% of women said they always use condoms when they have sex, and 23% said they never used condoms when having sex. Twenty percent (20%) of respondents had ever been diagnosed with an STD. Only a slight majority of respondents stated that they trusted their partners to tell them if they acquired an STD (61%), or if they were having sex with other people (55%). A small minority stated that their partners would not let them use condoms (5%), or that they did not dare ask their partners about HIV/STDs (7%).

In a survey distributed between 1995 and 1997 in five cities in northeastern Minnesota to people of color, 68% of respondents claimed to be sexually active, and 13% of these had 6 or more sexual partners in the past year. Of the sexually active respondents, 68% never or only sometimes used condoms. Twelve percent (12%) reported that they had sex with multiple partners.

HIV POSITIVE PERSONS

As of December 31, 2004 it was estimated that 5,002 persons with HIV/AIDS were living in Minnesota. Of these, the majority are White males (50% or 2,493 cases), followed by African American males (15% or 758 cases). For women, the largest number of living cases is among African American women (359 cases) and White women (324 cases) (data not shown).

Mode of Exposure among HIV Positive Persons

The majority of living cases are among MSM (53% or 2,634 cases). IDU (including MSM/IDU), and heterosexually acquired infections account for 13% and 12% of living cases, respectively. Among living cases, 21% have an unspecified mode of exposure, although this figure is much greater for women (41%) than men (14%). Mode of exposure by gender is shown in Figures 33 and 34 on the following page.

Figure 33. Living HIV/AIDS Cases Among Males by Mode of Exposure, 2004

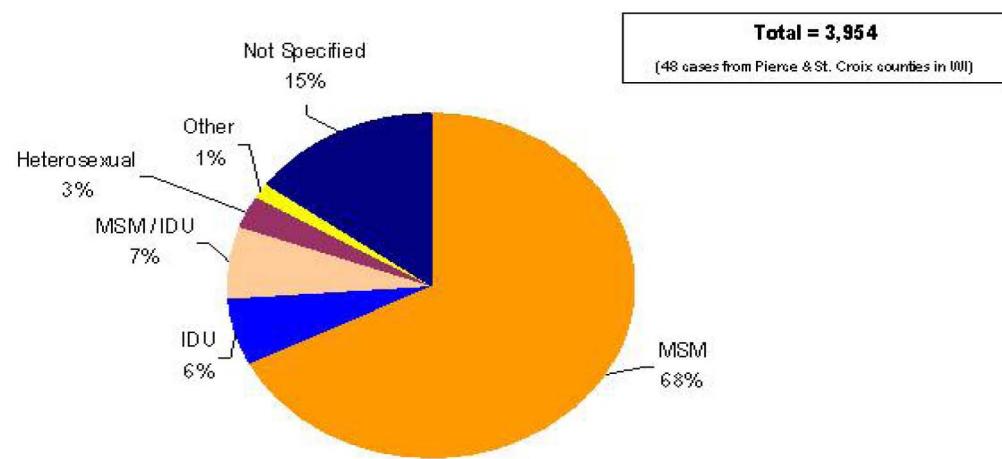
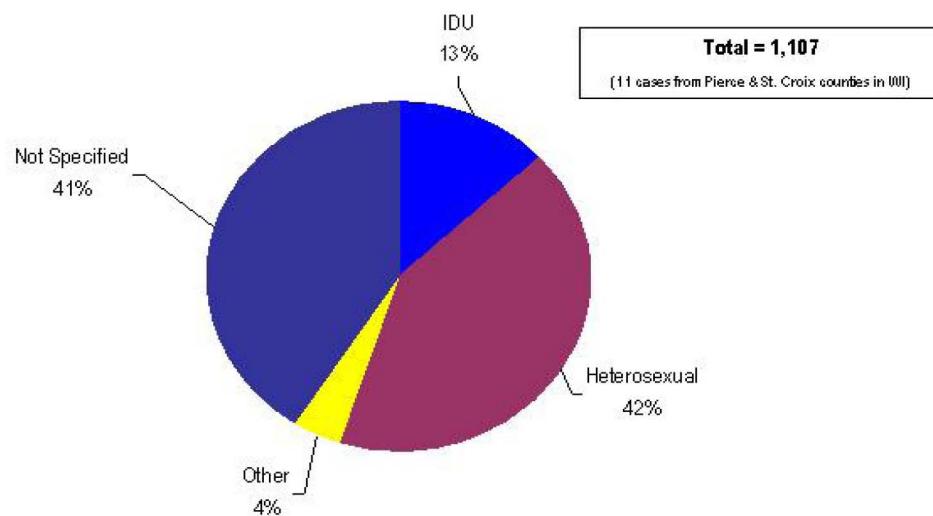


Figure 34. Living HIV/AIDS Cases Among Females by Mode of Exposure, 2004

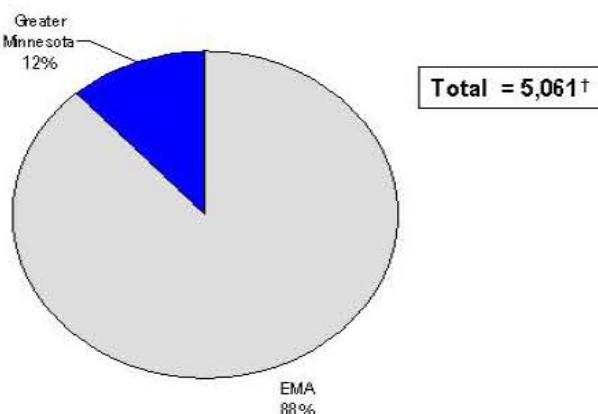


Geography Among HIV Positive Persons

While 10% of new infections occurred in Greater Minnesota, 12% of those living with HIV/AIDS live in Greater Minnesota (Figure 35). The gender distribution by geography is similar for both males and females with 89% of males living with HIV/AIDS residing in the EMA compared to 87% of females (data not shown).

There are some differences in race by region of residence. While 14% of White living cases reside in Greater Minnesota, this percentage is considerably smaller among African Americans (7%) and African-born (6%). Seventeen (17) and twelve (12) are the percentages for HIV positive Hispanics and American Indians living in Greater Minnesota, respectively. This is not surprising since there are several Indian reservations in Greater Minnesota, as well as large Hispanic communities in southwestern Minnesota (Table 10).

Figure 35. Living HIV/AIDS Cases by Region of Residence*, Minnesota 2004



† Includes 59 cases from Pierce and St. Croix Counties.
* Does not include 26 cases with missing residence.

Table 10. Persons Living with HIV/AIDS by Race/Ethnicity and Region of Residence, Minnesota 2004*

| Race/Ethnicity | EMA N (%) | Greater Minnesota N (%) | Total N (%) |
|------------------------|--------------|----------------------------|----------------|
| Hispanic | 299 (83) | 59 (17) | 358 (100) |
| American Indian | 83 (88) | 11 (12) | 94 (100) |
| Asian/Pacific Islander | 51 (75) | 17 (25) | 68 (100) |
| African American | 1,028 (93) | 82 (7) | 1,110 (100) |
| White | 2,419 (86) | 386 (14) | 2,805 (100) |
| African-born | 488 (94) | 31 (6) | 519 (100) |
| Other | 19 (86) | 3 (14) | 22 (100) |

*Does not include 59 cases from Pierce and St. Croix counties nor 26 cases with missing residence.

STD Surveillance Data

As previously mentioned, Minnesota saw the beginning of a syphilis outbreak among MSM in 2002. Between 2002 and 2004 there were 163 cases of syphilis among MSM, which represented 83% of all cases among males. In addition, 66 of the MSM cases were also infected with HIV (40%). While the percentage of HIV and syphilis co-infected MSM have decreased over the past two years, during the first half of 2005 there were 60 cases of syphilis among MSM, of which 17 (28%) were HIV co-infected. Minnesota has also seen an increase in antibiotic resistant gonorrhea among MSM, and 18% of the cases among MSM in 2004 were co-infected with HIV.

Age Distribution of HIV Positive Persons

Most of those living with HIV or AIDS in Minnesota are forty years of age or older. However, the age distribution varies both by race and gender. While adolescents and young adults account for 4% of those living with HIV/AIDS, they make up only 2% of male cases compared to almost 10% of female cases. Additionally, while almost 40% of living cases among men are 45 and older, this age group accounts for only 25% of living cases among women (Table 11).

Table 11. Age Distribution for Persons Living with HIV/AIDS by Gender, Minnesota 2004

| Age* | Males | | Females | |
|--------------|-------|------|---------|------|
| | # | % | # | % |
| 12 and under | 5 | 0.1 | 25 | 2.3 |
| 13 – 19 | 10 | 0.3 | 21 | 1.9 |
| 20 – 24 | 60 | 1.5 | 83 | 7.6 |
| 25 – 29 | 193 | 5.0 | 123 | 11.2 |
| 30 – 34 | 384 | 9.9 | 186 | 17.0 |
| 35 – 39 | 706 | 18.1 | 200 | 18.2 |
| 40 – 44 | 1,010 | 25.9 | 184 | 16.8 |
| 45+ | 1,530 | 39.2 | 274 | 25.0 |
| Total | 3,898 | 100 | 1,096 | 100 |

*Age missing for 8 people.

Age differences are also present by race/ethnicity. African-born and Hispanic males have a significantly higher percentage of living cases between 13-29 years of age than African American and White males; 20% and 15% compared to 8% and 4%, respectively. The same pattern is true for women, where females between 13-29 years of age account for 31% and 28% of cases among African-born and Hispanic females compared to 16% for both White and African American females (data not shown).

Births to HIV Positive Women

The number of births to HIV positive women has more than doubled in the past ten years. In 1994, there were 19 births to HIV positive women compared to 49 in 2004. While the number of births has increased, the rate of perinatal transmission has decreased, with the rate of transmission between 2002 and 2004 staying flat at 1.5% (data not shown).

HIV/AIDS in Other Populations

MIGRANT FARM WORKERS

Migrant workers, most of whom are Hispanic, are a mainstay of the agricultural workforce in Minnesota. Anywhere between 15,000 and 25,000 travel north, primarily from south Texas, each growing season (Pioneer Press, March 2003). Most migrant workers spend their time in southern Minnesota, where 60% of HIV/AIDS cases among Hispanic men reside.

While we lack epidemiological information on this population, research has shown that migrant workers are at high risk for becoming infected because of working and living conditions. Language and cultural barriers, as well as poverty, substandard living conditions, and lack of access to health care and prevention services are some of the risk factors faced by migrant workers. Furthermore, studies conducted in the migrant community have shown an overall low level of knowledge about HIV/AIDS (National Center for Farmworker Health, 2003). Finally, some researchers have begun to assess HIV seroprevalence in migrant farm workers, and have identified rates that range from a low of 2.6% to a high of 13% (Organista et al., 1998; CDC, 1987).

TRANSGENDER PERSONS

Minnesota appears to attract a relatively large number of individuals who describe themselves as transgender due to the available treatment programs and access to hormonal and surgical sex reassignment. While the transgender population considers itself to be at elevated risk for transmission due to circumstances described in the needs assessment section of this plan, we lack comprehensive epidemiological data on this population.

Studies show that transgender individuals have elevated rates of HIV, particularly among transgender sex workers. These studies focus primarily on male to female transgender individuals. Possible reasons for the higher rates among transgender sex workers are more frequent anal receptive sex; increased efficiency of HIV transmission by the neovagina; use of injectable hormones and sharing of needles; and a higher level of stigmatization, hopelessness, and social isolation.

Female to male transgender persons who identify as gay or bisexual may be having sexual intercourse with biological men who are gay or bisexual. Because the prevalence of HIV is higher among MSM, female to male transgender persons who identify as gay or bisexual are at greater risk for HIV than those who identify as heterosexual.

Studies by the University of Minnesota's Program in Human Sexuality identified specific risk factors such as sexual identity conflict, shame and isolation, secrecy, search for affirmation, compulsive sexual behavior, prostitution, and found that transgender identity complicates talking about sex (Bockting et al., 1998; Bockting et al., 2005).

SENSORY DISABLED PERSONS

Written and/or verbal communication can be hindered for persons with a sensory disability(ies). Depending on the medium, general HIV awareness and prevention messages cannot be assumed to reach such populations. According to the Health Resources and Services Administration (HRSA, 2001), despite improved access to services – in large part through the Americans with Disabilities Act – the deaf and hard of hearing still do not have good access to the educational and social resources others take for granted. Based on two limited studies, the CDC estimates that between 8,000 and 40,000 deaf and hard of hearing individuals are living with HIV/AIDS in the United States. There are few available

studies about addressing HIV or its associated risk behaviors among persons with a sensory disability.

The Minnesota Chemical Dependency Program for Deaf and Hard of Hearing Individuals conducted a risk assessment evaluating HIV knowledge among 250 deaf or hard of hearing individuals. Only 15% of respondents from the community demonstrated knowledge of HIV transmission facts.

Other Modes of Transmission

PERINATAL TRANSMISSION

HIV infected women are at risk of transmitting HIV to their children through perinatal exposure and/or breastfeeding. In Minnesota the rate of transmission is very low, 1.5% for 2002 - 2004. During this time period, no transmission occurred when the mother received appropriate therapy. However, women of color and foreign-born women were more likely to be diagnosed after the birth of their child, indicating the need for efforts that will make universal HIV testing during pregnancy more acceptable to women of all races and cultures.

As a result of the Enhanced Perinatal Surveillance project undertaken in 2001, MDH has added an active perinatal transmission component to its core HIV surveillance in order to obtain more accurate information on perinatal HIV exposure and the exposed infants' serostatus.

FEMALE-TO-FEMALE SEX

No cases of female-to-female sexual transmission have been documented. However, women who have sex with women (WSW) are at risk for HIV infection through other behaviors they may engage in. A study of lesbians and bisexual women in San Francisco found that 82% reported having sex with a man in the last 3 years. Of those women, 39% reported unprotected vaginal sex and 11% reported unprotected anal sex (Lemp et al., 1995). In another survey of lesbians and bisexual women in 16 small U.S. cities, among women who were currently sexually active with a male partner, 39% reported having sex with a gay/bisexual man, and 20% reported having sex with an IDU (Norman et al., 1996).

Summary of the HIV/AIDS Epidemic in Minnesota

More people than ever are living with HIV/AIDS in Minnesota due to both the introduction of new therapies that have slowed the progression of disease for many and, unfortunately, a consistent number of new infections diagnosed each year.

The epidemic in Minnesota is driven by sexual exposure, primarily among MSM, who represent the largest percentage of living (53%) and new cases (39% in 2004). Among females, heterosexual contact accounts for the vast majority of living (61% - adjusted) and new cases (79% - adjusted). Injection drug use directly or indirectly accounts for 13% percent of living cases and particularly impacts persons of color.

The HIV epidemic in Minnesota affects racial and ethnic minorities disproportionately, especially African Americans, who are over represented in every risk group. Additionally, the emerging epidemic among African-born persons shows no evidence of leveling off.

HIV/AIDS continues to be geographically centered in the Twin Cities metropolitan area, although injection drug users and heterosexual people living with HIV/AIDS appear to be more likely than other groups to live in Greater Minnesota than the EMA.

Ryan White CARE Act Services in Minnesota

This section of the profile provides a description of people who use the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act services in Minnesota, both within the EMA (Title I and Title II) and Greater Minnesota (Title II), and quantifies the unmet need for primary medical care.

DATA SOURCES

The data presented in this section comes primarily from two sources, the HIV/AIDS Reporting System (HARS) and the HIV Services Client-Level Reporting System (CLRS) used by all agencies providing Titles I and II services.

The CLRS System was first implemented in 1995, with the first full year of data collection occurring in 1996. This reporting system started out with 26 agencies, 15 programs and 1,771 clients, and has grown to 39 agencies, 25 programs and 3,838 clients. (Note: agencies that are funded to provide services that are not direct client services do not collect or submit this type of data.) Data is collected on every individual by each agency and submitted to MDH two times a year. MDH generates an annual overall summary report, as well as yearly reports by agency and program.

To receive services, other than emergency financial assistance and case management, an individual must have an income that is at or below 300% of the Federal Poverty Guideline (FPG). For emergency financial assistance, the cutoff is 175 % of the FPG.

There is no income requirement for case management; however, clients must meet one of the following eligibility criteria in order to receive case management services:

- On or eligible for Medical Assistance
- English as a second language, Non-English speaking
- Less than 21 years old
- HIV positive and pregnant
- Mental illness or dementia
- Income under 300% of the FPG
- Transmission issues
- Physically ill or disabled without adequate support system
- Unstable housing
- Visual or hearing impairment
- Caring for an HIV positive child
- Developmentally disabled
- Chemically dependent
- Other crisis situation without adequate support system

Due to data collection differences and eligibility considerations for CARE Act services and surveillance, caution should be taken when comparing the information. Differences in data collection will primarily affect the ability to compare the racial/ethnic distribution of people in services and surveillance. In 2002, the CLRS system began collecting race and ethnicity as two separate variables as well as allowing for a person to choose multiple race categories. That change was not made in HARS until January 1, 2003. For the purposes of

this document, in any instances where surveillance and services data are compared, Hispanics in services will be those that checked Hispanic ethnicity and no other race.

Additionally, since almost all Ryan White CARE Act services are dependent on financial eligibility, it should not be expected that everyone living with HIV/AIDS in Minnesota would be eligible and/or receiving Ryan White CARE Act services. Therefore, surveillance data should not be used as the standard by which services are measured, but as an additional piece of the puzzle in describing HIV/AIDS care in Minnesota.

OVERVIEW OF RYAN WHITE CARE ACT SERVICES IN MINNESOTA

The number of clients utilizing CARE Act services has steadily grown from 1,771 in 1996 to 3,838 in 2004. Additionally, over the past three years, several of the funded services have seen large increases in the number of people being served. Figures 38 and 39 show the increase in some of the essential care and essential access services. Essential care services are those services considered necessary to address care needs, and essential access are services that help people gain access to HIV care and support services.

Figure 38. Number of People Utilizing Ryan White CARE Act Essential Care Services, Minnesota 2002-2004

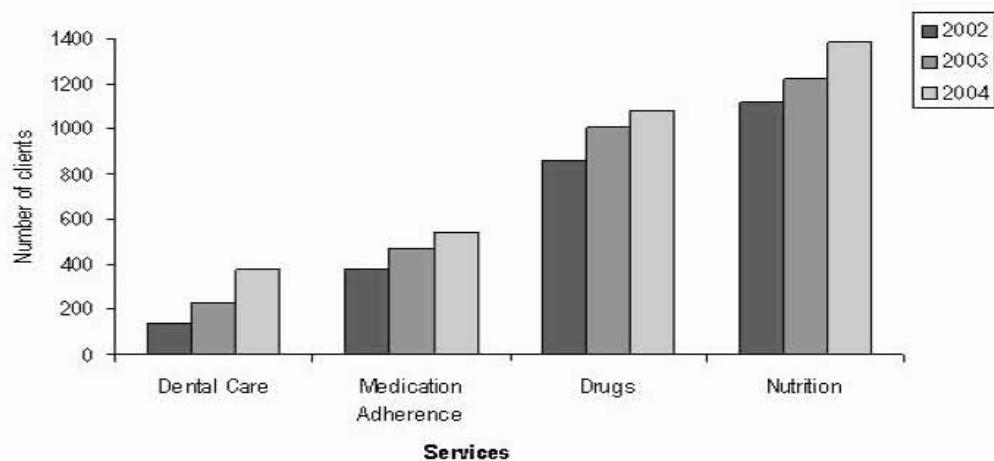
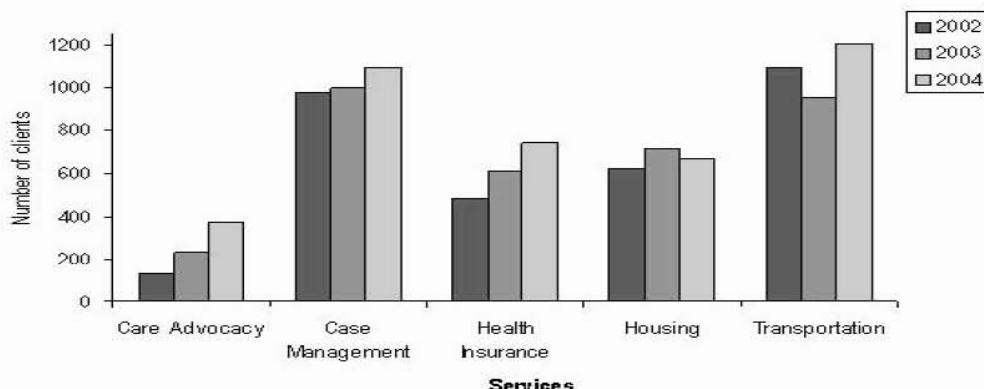


Figure 39. Number of People Utilizing Ryan White CARE Act Essential Access Services, Minnesota 2002-2004



COMPARISON OF EPI AND UTILIZATION DATA

As previously stated, while the center of the epidemic in Minnesota is the Minneapolis-St. Paul EMA, there are people living with HIV/AIDS in over 80% of Minnesota counties. In 2004, 3,838 people utilized Ryan White CARE Act Services in Minnesota, compared to 5,002 people living with HIV/AIDS in Minnesota.

Gender

Males comprise the majority of those living with HIV/AIDS in Minnesota, accounting for 78% of all cases. A similar distribution is seen among those receiving services, with males accounting for 74% of clients and females accounting for 26%. Transgender persons make up less than 1% of those receiving services (data not shown).

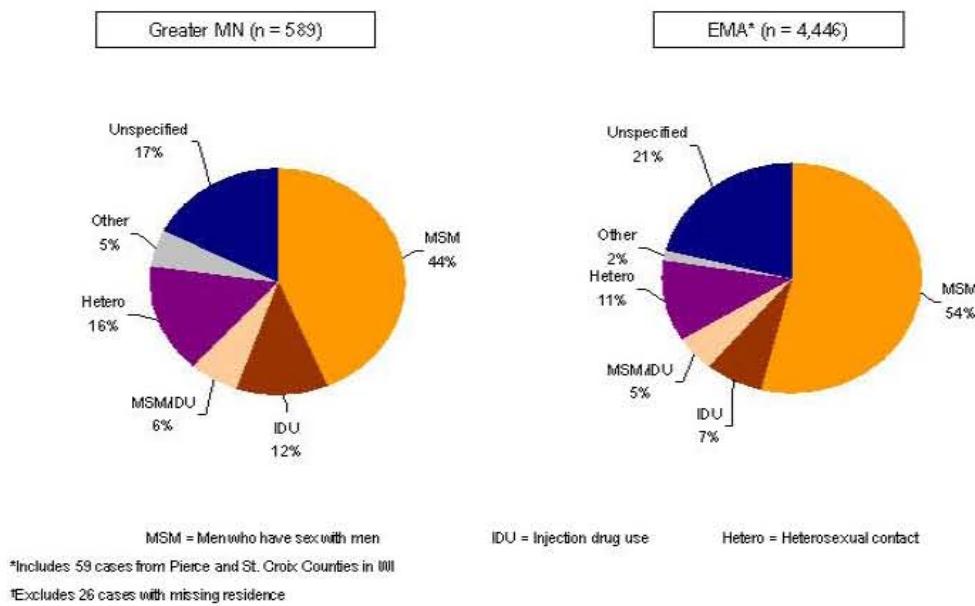
Mode of Exposure

There are also significant differences in the mode of exposure distribution of those living with HIV/AIDS in the EMA and Greater Minnesota. Figure 38 shows that while MSM account for 54% of those living with HIV/AIDS in the EMA, they only account for 44% in Greater Minnesota. Additionally, while IDU-associated (IDU, MSM/IDU) and heterosexual contact account for 18% and 16% of living cases in Greater Minnesota, they account for only 12% and 11% of people living with HIV/AIDS in the EMA, respectively.

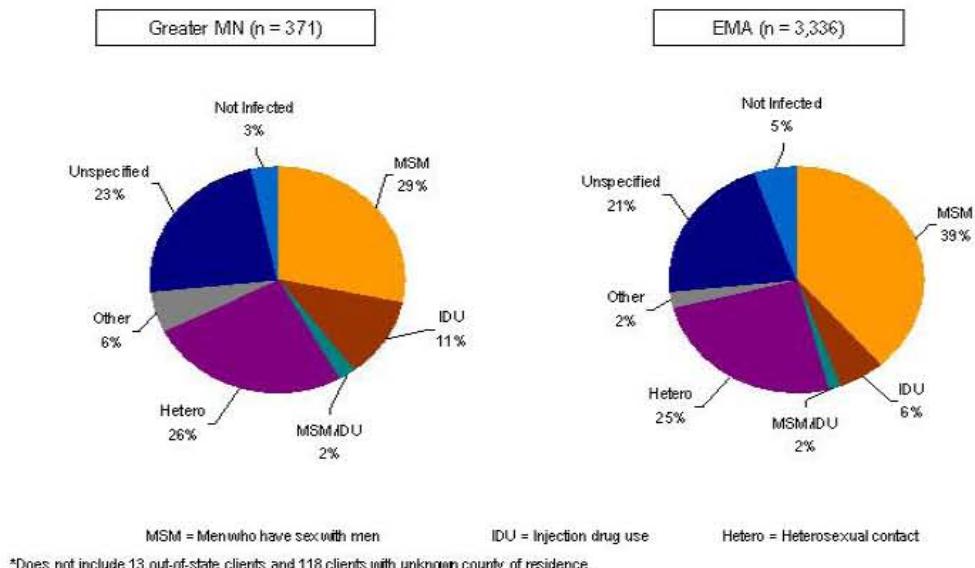
Mode of exposure for those in services also differs for people residing in the EMA and those residing in Greater Minnesota. MSM account for 39% of those receiving services in the EMA compared to 29% in Greater Minnesota. IDU-associated (IDU and MSM/IDU) cases account for 8% of clients in the EMA compared to 13% in Greater Minnesota. Additionally, people who are not HIV-infected account for 3% of those receiving services in Greater Minnesota compared to 5% for the EMA (Figure 39).

Additionally, as with surveillance, there are differences in mode of exposure for those in services by gender and race, especially among males. MSM account for 64% of White male clients compared to 32% of African American and 31% of Hispanic clients. IDU-associated (IDU and MSM/IDU) cases account for 7% of White male clients compared to 11% of African Americans and 8% of Hispanics (data not shown).

**Figure 38. Living HIV/AIDS Cases[†] By Mode of Exposure,
Greater Minnesota & EMA 2004**



**Figure 39. People* Receiving Ryan White CARE Act Services By Mode of Exposure,
Greater Minnesota & EMA 2004**

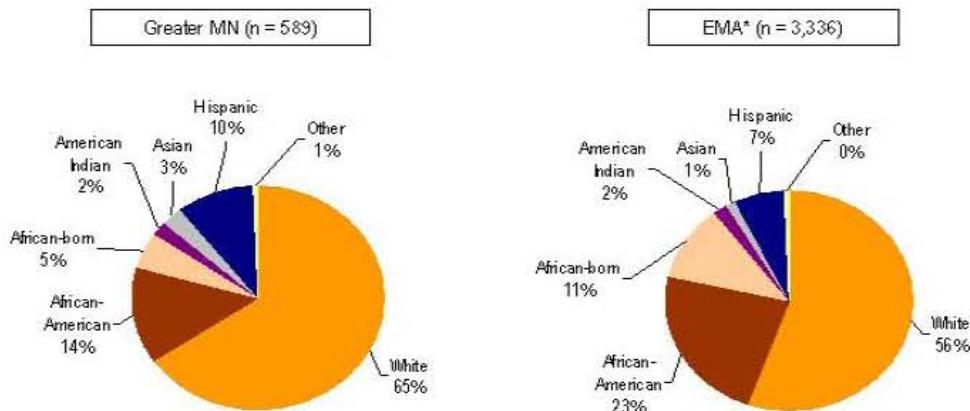


Race/Ethnicity

There are significant differences in the racial/ethnic distribution between those living with HIV/AIDS in the EMA and Greater Minnesota. Figure 40 shows the racial breakdown for people living with HIV/AIDS (PLWHA) in Greater Minnesota and the EMA. While Whites account for the majority of cases in both areas, people of color make up 35% of cases in Greater Minnesota compared to 44% in the EMA.

As with surveillance there are racial/ethnic differences between those receiving services in the EMA and Greater Minnesota. While Whites account for 46% of those receiving services in Minnesota, they account for 67% in Greater Minnesota compared to 46% in the EMA. Additionally, Blacks (includes African-born) account for 17% of those receiving services in Greater Minnesota compared to 30% in the EMA (Figure 41).

Figure 40. Living HIV/AIDS Cases¹ By Race/Ethnicity, Greater Minnesota & EMA 2004

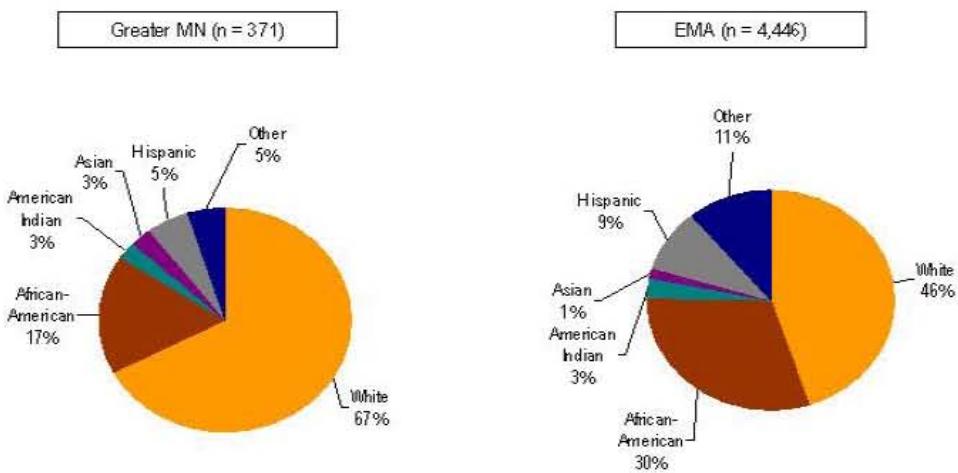


¹Includes 59 cases from Pierce and St. Croix counties in MN

¹Excludes 26 cases with missing residence information

Other – Multi-racial persons or persons with unknown race

Figure 41. People* Receiving Ryan White CARE Act Services By Race/Ethnicity, Greater Minnesota & EMA 2004



*Does not include 13 out-of-state clients and 118 clients with unknown county of residence.

Other – Multi-racial persons or persons with unknown race

Geography

Table 12, shows the proportion of people receiving services in Greater Minnesota and the EMA. Based on the numbers of people served, it appears that a significantly higher percentage of those in the EMA (75%) are accessing services than in Greater Minnesota (63%). This is a change from previous years where there was no difference in access to services. The map shown in the next page (Figure 42) shows the distribution of those receiving services by county. For a majority of the counties (73%), the number of people living with HIV/AIDS and the number of those being served are within the same range (data not shown).

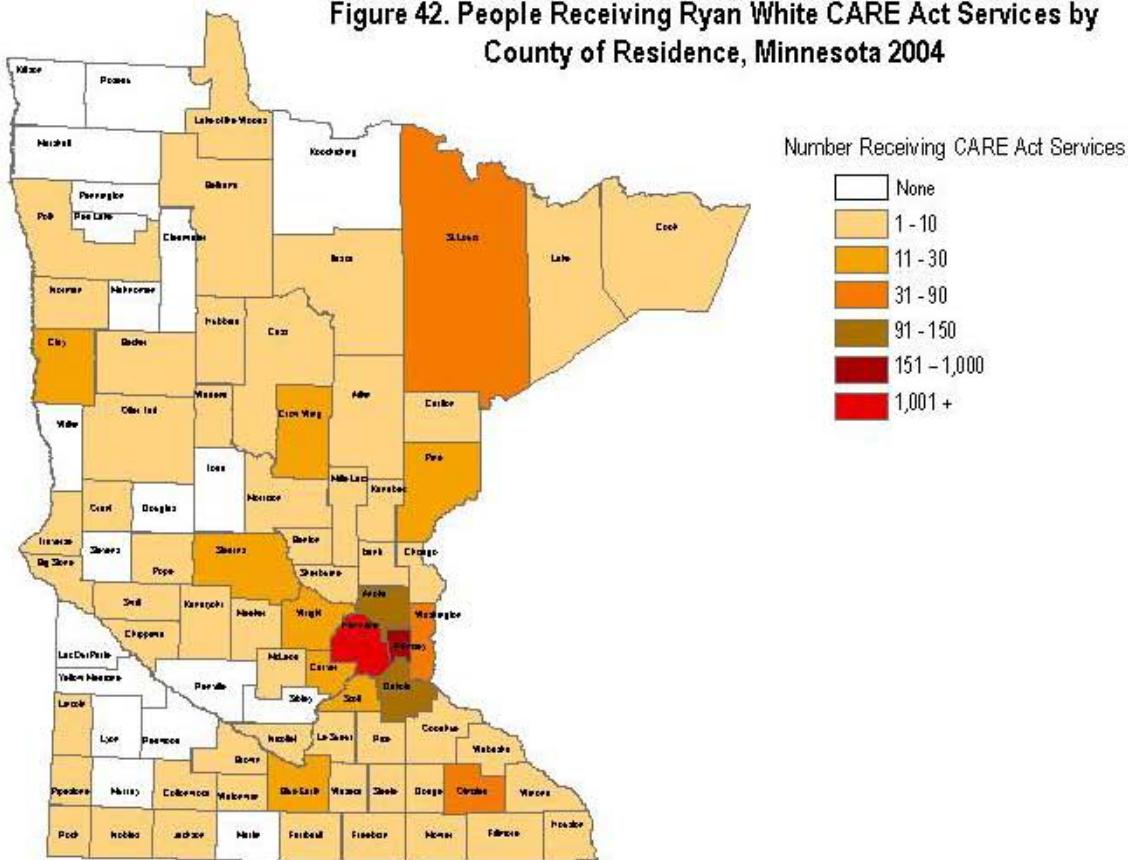
Table 12. Number of People Receiving Ryan White CARE Act Services and Living Cases of HIV/AIDS, Minnesota 2004

| | Number Receiving Services* | Number in Surveillance† | Ratio of Services to Surveillance |
|---------------|----------------------------|-------------------------|-----------------------------------|
| Greater MN | 371 | 589 | 63% |
| 13-County EMA | 3,336 | 4,446 | 75% |

*Does not include 13 out-of-state cases and 118 cases with unknown county of residence.

† Does not include 26 cases with unknown residence. Includes 59 cases from Pierce and St. Croix counties.

Figure 42. People Receiving Ryan White CARE Act Services by County of Residence, Minnesota 2004



Age

Persons ages 30–49 account for the majority (69%) of those receiving services. Adolescents and young adults (ages 13–24) account for 6% of those receiving services. The age distribution of those receiving services is similar to those living with HIV/AIDS. People ages 30–49 account for 70% of those living with HIV/AIDS and adolescents and young adults account for 4% (data not shown).

SERVICES RECEIVED IN 2004

In 2004, the service category of Meals was the most utilized, with 1,265 clients (33% of total clients) accessing meals programs. Meals programs include on-site meals, home delivered meals, and food shelf services. Transportation was the next most utilized service with 1,201 clients (31% of total clients), followed by Case Management with 1,093 clients (28% of total clients), and Drug Assistance with 1,079 clients (28% of total clients). The next most used services were Emergency Financial Assistance and Health Insurance, with 764 and 743 clients, respectively.

While CARE Act funds in many states are primarily used to pay for primary medical care for people living with HIV/AIDS, Minnesota has historically been fortunate enough to provide extensive access to health insurance through public programs. Additionally, several clinics and hospitals throughout Minnesota have had a tradition of providing extensive charitable care for HIV/AIDS. This has reduced the need to use CARE Act Title I and II funds to support

primary medical care, and allowed the dollars to be used to create a comprehensive system of support services. However, due to the rise in health care costs, hospitals and clinics are cutting back on the amount of charitable care provided, which may signal a change in the way in which Title I and II funds will be spent in Minnesota in the future.

Because of the high rate of clients in the service system who are able to access health care-related services through their health insurance, the number of clients served through these types of CARE Act funded programs are rather low. For example, in 2004, the two Primary Care programs served 144 clients. Home Health Care served 24 clients and the Mental Health programs served 77 clients.

CHARACTERIZING UNMET NEED FOR PRIMARY CARE AMONG HIV POSITIVE PEOPLE

Efforts to update the measure for unmet need for primary care in Minnesota among HIV positive persons are currently in the planning stages. The estimate presented here was calculated using the same method used in the unmet care study conducted in Minnesota in 2002 (Kroll and Jackson, 2002).

The definition of unmet need for primary medical care is: "An individual with HIV or AIDS is considered to have an **unmet need for care** (or to be **out of care**) when there is no evidence that s/he has received any of the following three components of HIV primary medical care during a defined 12-month time frame: (1) viral load testing, (2) CD4 count, or (3) provision of anti-retroviral therapy (ART)." ¹⁰

The study conducted in 2002 used data from HARS¹¹ and information from three additional clinical systems that do not report CD4 counts or viral loads. The clinics are Hennepin County Medical Center (HCMC), Veteran's Administration (VA), and Allina Hospitals and Clinics (Clinic 42 and The Doctors). The investigators used HARS to obtain both the number of people living with HIV/AIDS in Minnesota as of December 31, 2001 and how many of those individuals had received a CD4 or viral load test in 2001. Additionally, for the clinical systems listed, investigators collected the total number of HIV-infected people that had received care in the past year. Using this information, the estimated percent of individuals who know their HIV status and are not receiving medical care in Minnesota was 37%, compared to the national estimate of 33% (Fleming et al., 2002).

Using a similar methodology, estimates for unmet need in Minnesota have been computed for 2003 and 2004 and are presented in Table 13. However, there is no way to determine if the individuals being seen in the clinics that do not report viral loads and CD4 counts are unduplicated from those in HARS.

By December 31, 2004 there were 5,002 persons living with HIV/AIDS in Minnesota. This represents an increase of 2% from the previous year. After obtaining the number served by the clinical centers mentioned above and the information from HARS, we are able to determine that the number of those not receiving primary medical care for their HIV is 1,899 or 38% of those living with HIV/AIDS in Minnesota (Table 13).

¹⁰ HRSA/HAB definition of unmet need

¹¹ Data from HARS spanned a 15-month period to allow for reporting delays

Table 13. Unmet Need Among HIV+ Persons, Minnesota 2003 & 2004

| Data Source | Reporting Period | |
|--|-------------------------|-------------------------|
| | January – December 2003 | January – December 2004 |
| HARS: | 1,466 | 1,582 |
| HCMC: | 945 | 1,052 |
| VA Hospital: | 119 | 117 |
| Allina Systems: | 350 | 352 |
| Total for all sources | 2,880 | 3,103 |
| People living with HIV/AIDS in MN | 4,895 | 5,002 |
| Percent not in care | 41% | 38% |

Summary of Ryan White CARE Act Services in Minnesota

More people than ever are living with HIV/AIDS and utilizing Ryan White CARE Act services in Minnesota. The number of people utilizing services has steadily grown from 1,771 clients in 1996 to 3,838 in 2004 – a 116% increase. The system has also grown from 15 to 25 programs distributed over 39 different agencies.

As with the epidemic, in 2004, men accounted for the majority of those served (74%), Whites accounted for 46% of all served, and the majority (87%) lived in the EMA.

There are racial/ethnic and mode of exposure differences among those being served in the EMA and in Greater Minnesota. While Whites account for 67% of those being served in Greater Minnesota, they account for 46% in the EMA. Similarly, while MSM account for 39% of those being served in the EMA, they account for only 29% in Greater Minnesota.

While the epidemic continues to be geographically centered in the EMA, there are people living with HIV/AIDS and utilizing Ryan White CARE Act services in 77% of Minnesota counties.

Chapter Two

Community Services Assessment...

Community Services Assessment

Community services assessment, or CSA, is a term that the CDC introduced in the new community planning guidance released in 2003. While it is a newer term, the CSA is made up of components that the CCCHAP has been responsible for since its inception.

The first component is **needs assessment**, which is a process for getting and analyzing information to identify risk behaviors, co-factors related to increased risk for HIV, and prevention service needs of a specific population or geographic area. Needs assessment information is used, along with data from the epi profile, to identify the priority target populations most at risk for becoming infected with HIV. Needs assessment data is also used to help identify what types of prevention services are needed by each of the target populations. Information from local and national needs assessment studies are included in the first section of this chapter.

The second component is a **resource inventory**, which is a description of current HIV prevention activities and other education and prevention activities that are likely to contribute to HIV risk reduction in the state of Minnesota. The list of resources is comprehensive, including services funded through funding sources other than the CDC HIV prevention grant. The resource inventory is included in the second section of this chapter.

The third and final component is the **gap analysis**, which is a process used to compare the needs of high risk populations, as determined by needs assessment, to existing services in the resource inventory. This comparison assists the CCCHAP and MDH in identifying what service needs are being met, and which types of services should be prioritized.

After the major prioritization process has occurred, the CCCHAP also conducts gap analysis by comparing the resource inventory, which includes prevention activities funded as a result of the prioritization process, to all of the priorities that were identified in this plan. This comparison again helps the CCCHAP in identifying what services needs are being met, and where there are still gaps in service as a result of priorities not being addressed. The plan for gap analysis activities to be undertaken in 2006 and 2007 is included in the third section of this chapter.

Needs Assessment.....

Overview of Needs Assessment

Needs assessment is a process for gathering and analyzing information about current needs in populations at risk for HIV infection identified through the epidemiological profile. This information is only one of the pieces that help the CCCHAP prioritize target populations and co-factors.

This chapter summarizes needs assessment data for each of the populations prioritized by the CCCHAP as being at highest risk for HIV infection or transmission.

DATA SOURCES

Data were collected through a variety of sources. Primary data were collected through behavioral surveillance, needs assessments, community forums and surveys conducted with members of at-risk communities over the past few years. Since 2000, needs assessments have been conducted with African American women, African men and women, sex workers and MSM. Unfortunately, there has not been funding available to implement further needs assessment projects.

In 2001, community forums conducted by the CCCHAP focused primarily on gathering input on effective interventions for each particular at-risk population.

In 2003, a series of five forums were held in the Latino community and focused on knowledge of HIV and STDs, barriers to HIV testing, and how to address those barriers. In addition, a survey was conducted to assess whether Latinos have access to information about HIV, barriers to HIV testing, and what can be done to make it easier to get tested.

In 2004-2005, community forums focused on gathering input about co-factors contributing to HIV risk, availability and effectiveness of prevention interventions, and what is needed in the various communities to reduce the risk of HIV infection or transmission.

The majority of the data included in this chapter were collected through secondary data sources, including STD and Hepatitis surveillance systems, research findings from journal articles and needs assessments conducted by the Minnesota HIV Services Planning Council.

In 2005, the CCCHAP prioritized the following target populations in Minnesota as being at highest risk for HIV infection or transmission. They are broken into four broad categories with subpopulations identified within each category.

HIV Positive Persons (HIV+)

- HIV+ Men Who Have Sex with Men
- HIV+ Injecting Drug Users
- HIV+ High Risk Heterosexuals
- HIV+ Youth (ages 13 – 24)
- HIV+ Greater Minnesota

Men Who Have Sex with Men (MSM)

- MSM of All Races
- MSM of Color
- Young MSM (ages 13 – 24)

High Risk Heterosexuals (HRH)

- African Men and Women
- African American Men and Women
- Latino/a Men and Women
- Native American Men and Women
- Young HRH All Races (ages 13 – 24)
- Asian/Pacific Islander Men and Women
- White Men and Women

Injecting Drug Users (IDUs)

- MSM/IDU
- IDU All Races/All Genders

Index of Needs Assessment

This chapter presents findings from a variety of studies conducted to identify the needs of each of the priority target populations. Following is an index to assist you in finding information for specific target populations:

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HIV Positive Persons.....

Overview of HIV Positive Persons

It is a national priority, as well as a priority identified within the Minnesota HIV prevention community planning process, to provide effective behavioral change interventions to HIV positive persons in order to assist them in maintaining their own health as well as in preventing further transmission of the virus.

NEEDS ASSESSMENT OF HIV POSITIVE MINNESOTANS

In 2003, the Minnesota HIV Services Planning Council conducted a needs assessment of 242 HIV positive persons living in Minnesota (Kroll and Jackson). The sample was 64% male, 33% female, and 3% transgender. In terms of sexual orientation, 33% self-identified as gay or lesbian, 48% as heterosexual, 15% as bisexual, and 4% as other.

Thirty-six percent (36%) of respondents reported that they were European American, 34% African American or Black, 9% Latino, 7% Native American, 6% African-born, 5% biracial/multi-racial or other, and 2% Asian or Pacific Islander.

The majority (59%) of respondents resided in the Minneapolis/St. Paul metro area. Another 22% were from suburban areas in Hennepin and Ramsey counties. Five percent (5%) were from additional counties in the seven county metropolitan area. Fourteen percent (14%) lived in Greater Minnesota.

Please note that the Needs Assessment of HIV Positive Minnesotans was not based on a random sample and the findings cannot be generalized to all HIV positive persons in Minnesota.

Factors in Becoming HIV Positive

When asked about factors that may have contributed to becoming infected, 40 individuals (17%) felt that sexual abuse played a role in their becoming HIV positive, while 138 persons (57%) believed that drug or alcohol use or abuse had a role.

Sexual Behavior

Interviewees were asked questions about the number of sexual partners they had during the last year. A total of 45 persons (20%) reported not having sex in the previous year, with either men or women.

Ninety-nine persons (41%) reported that their most recent sexual partner was also HIV positive. Forty-five people (19%) stated that they did not know the serostatus of their most recent partner.

Testing for HIV

Respondents described their reasons for being tested for HIV and where they first tested positive:

| Reasons for Testing | % |
|------------------------|-----|
| Illness | 30% |
| Member of risk group | 16% |
| Sex partner was sick | 15% |
| Blood donor | 5% |
| Pregnancy | 4% |
| Test offered at clinic | 4% |

| Where first tested positive | % |
|-----------------------------|-----|
| HIV testing site | 36% |
| Hospital | 18% |
| Private physician | 13% |
| Blood bank | 6% |
| Other medical clinic | 5% |

The findings from this study indicate that an individual's identity in terms of sexual orientation does not strictly define the gender of their sexual partners. Of 46 men who self-identified as heterosexual, 5 reported having sex with men in the previous year. Seventy-four (74) men identified as gay and 7 of these stated they had sexual relations with women. Of the 65 women who identified as heterosexual, 5 reported sexual relations with women in the past twelve months. Of the 3 women who identified as lesbian, 2 reported having sex with men.

Necessity forces people at times to use sex as currency. Nearly twenty-six percent (25.8%) of those interviewed stated they had at some point exchanged sex for something they needed, such as a place to stay (5.8%), drugs (11.6%), money (5.8%), and food (1.7%).

One hundred fifty-seven (157) people reported having had an STD ever in the past. This would include STD infections that may have occurred prior to becoming HIV positive. Thirty-nine individuals (18%) had an STD in the past year. Ten individuals out of the total interviewed were diagnosed with HIV in 2003. It is not possible from the report to determine whether they were among the respondents who reported an STD, and if so, whether it was prior to their HIV diagnosis.

Condom Use

Of the 193 persons who indicated they engaged in sexual activity in the past year, a greater percentage reported using condoms all or almost all of the time with a non-steady partner (79%) than with a steady partner (61%). Only 3% reported never using condoms with a non-steady partner, while 11% reported they never use condoms with a steady partner.

Information about Safer Sex

The following were identified by those interviewed as very useful sources of information about safer sex: physicians (54%), written materials (41%), other HIV positive people (41%), case manager (38%), educational program (33%), prevention with positives program (33%), nurse or other health professional (29%), and partner/spouse/lover (25%). Only 12% identified the Internet as a very useful source of information, and 9% identified the AIDSLine.

More than half (63%) of all those interviewed stated that they would be interested in participating in an HIV prevention program (such as a workshop, seminar or conference) designed for people who are HIV positive.

| Reason for not using condom or barrier | # | % |
|--|----|-----|
| Don't like using condoms or barriers | 63 | 26% |
| Partner doesn't like using condoms or barriers | 53 | 22% |
| Just wanted to forget about HIV for a while | 45 | 19% |
| In a monogamous relationship | 40 | 17% |
| Sometimes high on drugs or alcohol during sex | 38 | 16% |
| Condoms or barriers not always available | 36 | 15% |
| Thought partner was HIV positive | 34 | 14% |
| Partner would be upset if asked to use condoms or barriers | 20 | 8% |
| It's not really sex with condoms or barriers | 16 | 7% |
| Other | 10 | 4% |
| Just don't care | 9 | 4% |
| Don't know how to talk about condoms/barriers | 8 | 3% |
| Want to have a baby | 7 | 3% |
| Allergic reaction to condom | 4 | 2% |

Drug and Alcohol Use

Forty-one percent (41%) of the sample felt that alcohol and/or drugs use affects their safer sex practices.

Nearly 30% of respondents reported they never used alcohol, while 8% reported daily use in the past six months, 33% used alcohol once or twice a week, and 19% used once or twice a month.

Marijuana was the drug most commonly used. During the previous six months, 15% used it daily, 13% used it weekly, and 9% monthly. The next most commonly used drug was crack, with 4% reporting daily use, 2% weekly use, and 5% monthly use. Ninety percent (90%) of those interviewed reported never having used crystal meth.

Of all respondents, 55 (23%) had ever injected drugs. Of those, only 5 persons were currently injecting drugs. Of everyone who had ever injected, 16 had participated in needle exchange at some point. Thirty (30) people stated they knew where they could go to exchange needles.

SUPPLEMENT TO HIV AND AIDS SURVEILLANCE

The Supplement to HIV and AIDS Surveillance (SHAS) project involved in-depth interviews with 215 HIV positive persons from August 2000 through December 2003 (Minnesota Department of Health 2004). All respondents had to be living in the 11-county Minneapolis/St. Paul eligible metropolitan area (EMA) for a year or more, be 18 years or older, and have been diagnosed with HIV or AIDS at first diagnosis at least 6 months ago but not more than three years prior.

Men accounted for 70% of the sample and women for the other 30%. The mode of exposure to HIV was as follows: MSM (66%), IDU (13%), MSM/IDU (4%), heterosexual (21%), other/not reported (15%). The racial/ethnic make-up of participants was White (40%), African American (42%), African (6%), Latino (7%), Asian (<1%), and Native American (4%).

Socioeconomic Status

Of the total sample, 51% were employed at time of interview. Forty-seven percent (47%) had experienced a job change since their HIV diagnosis, with 60% of these reporting that they quit or were laid off due to having AIDS and 19% reporting that they had decreased hours or changed jobs for HIV-related reasons. Forty percent (40%) of the sample reported salary as their main source of income, followed by Social Security (32%), public assistance (9%), spouse (8%), and other (7%). Three percent (3%) reported no income. Forty-one percent (41%) of participants reported an annual household gross income of less than \$10,000, with another 23% reporting an income less than \$20,000. Only 7% had a household income of \$50,000 or greater.

Sexual Behavior

About one third of male (31%) and female (32%) participants had ever been involved in sex work during their lifetime (Africans were excluded from sex work analyses). Fewer men (9%) and women (11%) were involved in sex work during the 12 months prior to their interview.

Of 83 men who had sex with men in the previous 12 months, 66% had at least one new partner. During their last sexual encounter, 5% reported risky insertive anal sex and 11% reported risky receptive anal sex with a casual or steady partner. Risky sex was defined as

unprotected sex with a person whose HIV status was negative or unknown. Of the 13 men reporting risky anal sex, 46% were drunk or on drugs at the time of the sexual encounter.

Of 50 men who had sex with females in the previous 12 months, 40% had at least one new partner. Twenty-four percent (24%) engaged in risky vaginal sex at last sexual encounter, and 42% of these reported drug or alcohol use at that time. Seven of the 50 men also reported having sex with men during the last year.

Of the 50 women who reported sex with men in the past year, 32% had at least one new partner. At last sexual encounter, 16% reported engaging in risky vaginal sex and 38% of these also reported drug or alcohol use at the time.

STD infection is an indicator of risky sexual behavior. Sixty-six percent (66%) of respondents reported ever having an STD. Twenty-five (25) persons reported being treated for an STD 6 months or longer after learning of their HIV diagnosis.

Substance Use

Of 203 participants (Africans were excluded from substance use analyses), 99% reporting ever using alcohol, and 54% reported a possible alcohol problem. Eighty-three percent (83%) reported ever having used an illegal drug, with 27% reporting illegal substance use in the 12 months prior to interview. Eighteen percent (18%) had ever injected drugs in their lifetime and 3% had injected in the previous year. Of those who had ever injected, 54% reported sharing needles.

CO-INFECTION WITH SEXUALLY TRANSMITTED DISEASES

Based on a comparison of the Minnesota HIV/AIDS and STD surveillance systems, of 7,826 persons who were diagnosed with HIV/AIDS before January 1, 2003 and were alive as of January 1, 1992, there were 451 STD reports that occurred after HIV diagnosis among 331 individuals (4% of the HIV/AIDS cases). Of total STD reports, there were 277 gonorrhea cases, 155 chlamydia cases, and 54 syphilis cases. The median time between HIV diagnosis and a subsequent STD diagnosis was 3 years. Fifteen percent (15%) of co-infected persons received an STD diagnosis less than one year after their HIV diagnosis. Twenty-one percent (21%) had two or more STD episodes after their HIV diagnosis. The distribution of persons who had an HIV and STD co-infection was similar to the distribution of HIV cases by mode of exposure, with 67% of the co-infections occurring among MSM, 10% among heterosexuals, 7% among IDU, 5% MSM/IDU and 1% other.

NATIONAL RESEARCH

With the advent of new antiretroviral drugs, many people living with HIV are living long and healthy lives, which include sexual activity. Recent studies have shown that most HIV

Most Commonly Used Drugs

SHAS participants reported the following drugs as being the most commonly used:

| Non-injection Drugs | Ever Used | Current Use |
|---------------------|-----------|-------------|
| Crack | 43% | 18% |
| Cocaine | 43% | 11% |
| Methamphetamine | 15% | 4% |
| Party drugs | 12% | 3% |
| Hallucinogens | 19% | 1% |
| Amphetamines/speed | 22% | <1% |

| Injection Drugs | Lifetime Use |
|--------------------|--------------|
| Cocaine | 12% |
| Heroin | 10% |
| Heroin/cocaine mix | 8% |

positive individuals do their best to protect their sexual partners from HIV. For example, it has been found that knowledge of HIV infection makes it more likely that safer behaviors will be adopted that may decrease HIV transmission (CDC, 2000) suggesting that early HIV testing may reduce the subsequent spread of HIV.

Disclosure of Status

Patterns of disclosure of HIV status vary across groups as demonstrated in a national study conducted with 1,421 HIV positive adults in medical care (Ciccarone et al., 2003). Of this sample, 606 were gay or

bisexual men, 287 were heterosexual men, and 504 were women. The study found that in the previous six months, 42% of the MSM, 19% of the heterosexual men, and 17% of the women had intercourse with either a casual or steady partner(s) without disclosure.

Across groups, most people who didn't disclose their status reported only having protected anal or oral intercourse, which pose less risk of transmission. This suggests that most people who don't disclose their status take steps to reduce the risk of transmission, or consider that disclosure is not necessary since they have taken these steps.

The study found that in the previous six months, 58% of MSM, 48% of women, and 47% of heterosexual men had been with partners who were HIV negative or whose status was unknown. Across groups, 13% of serodiscordant partnerships involved unprotected anal or vaginal intercourse without disclosure. Also in each group, most unprotected intercourse involved nondisclosure on the part of both partners. More women (5%) did not disclose their status to serodiscordant exclusive partners compared to all men (1-2%).

The study suggests that since disclosure rates are lower among MSM, the norms around disclosure may be different in this community. As the HIV epidemic is older in the gay

Factors Influencing Ongoing Risky Behavior Among HIV Positive Persons

A national survey of studies (Marks et al., 1999) identified the following individual and social causes/needs related to continued high-risk sexual behaviors among HIV positive individuals:

- ◆ Desire for sexual intimacy and pleasure.
- ◆ Feeling by HIV + people that their physical appearance, preferred sexual activities, or nonverbal cues constitute disclosure.
- ◆ Disclosure is difficult - may stigmatize person, precipitate refusal to have sex.
- ◆ Question why they must shoulder the responsibility of protecting others - partners who are willing to forego condoms have accepted the risk of exposure.
- ◆ Anger, anxiety and tension promote escapist behaviors, including drug use.
- ◆ Optimism about new HIV therapies may be associated with sexual risk taking.
- ◆ Environmental factors encourage sexual risk taking - communities exhibit a powerful system of social rewards for practicing risky sex and having multiple partners.
- ◆ Social and legislative policies deter gay persons from forming permanent and monogamous relationships. Social and economic policies may have the same effect on poor and minority groups.
- ◆ Absence of strong campaigns to promote a norm of condom use.

community and HIV prevalence is higher among MSM than heterosexuals, this may provide a basis for men to assume that their partners are aware of HIV transmission risk.

Substance Use

In addition to affecting risky sexual behavior, substance use can impact adherence to highly active antiretroviral treatment (HAART). Some HIV positive patients who are using drugs may need to delay HAART until they receive substance use treatment. Patients who are constantly worrying about getting drugs may not be able to adhere to HAART. However, it is recommended that each patient be evaluated individually. Anecdotal experience has shown that when basic needs such as food, shelter and safety are addressed, substance abusers can be as adherent to HAART as non-abusers (Vaughn, 2004).

Mental Health

A review of studies related to mental health among HIV positive persons found that estimates in most studies of current depressive disorders range from 10 to 20%, compared to national estimates in the general population of 5 to 10%. Estimates of lifetime prevalence of depressive disorders among HIV positive persons range from 30 to 50% compared to 6 to 17% in the general population. Estimates of rates for current anxiety disorder among HIV positive persons (10 - 15%) are more similar to estimates in the general population (13 - 17%) (Klinkenberg and Sacks, 2004).

HIV Positive Men Who Have Sex with Men

SUBSTANCE USE

Studies show that substance use impacts sexual behavior. A comparison study of substance use among 1,278 HIV positive MSM, IDUs and heterosexuals found that MSM use marijuana, hard drugs and alcohol at higher rates during sex than IDUs and heterosexuals. (Beckett et al., 2003). Among MSM, poppers and cocaine were the most commonly used hard drugs during sex. The study also found that among MSM, using alcohol or hard drugs in conjunction with sex or having a partner who used alcohol or drugs increased the odds of engaging in high risk sex.

Patterson and Semple (2003) conducted in-depth interviews with 5 HIV positive MSM crystal meth users who revealed that their primary reason for using meth was for sexual pleasure. They enjoyed the sexual experience of being on crystal meth, but not the hold the drug had over them or how they felt when they were coming down. From surveys conducted with 90 HIV positive crystal meth using MSM, Patterson and Semple also found that 46% identified as binge users (using large quantities for a period of time until they ran out or physically couldn't do it anymore). Binge users reported significantly more sexual risk behaviors, mental and physical health problems, and more social difficulties than non-binge users.

Substance use patterns have been found to be similar among young HIV positive gay and bisexual men. A study of 231 racially/ethnically diverse young HIV positive MSM ages 13 – 23 found that both groups of young MSM (YMSM) initiated use of alcohol and marijuana at a young age (average age 13.7 for alcohol and 14.9 for marijuana) (Solorio et al., 2003). Lifetime prevalence of usage was similar among gay and bisexual YMSM for alcohol (93% and 100%, respectively) and marijuana (78% vs. 88%, respectively). Youth in both groups began using harder drugs between ages 16 and 18, and had similar rates of lifetime use of amphetamines, cocaine and heroin. Only crack was significantly more common among bisexual youth compared to gay youth (39% vs. 27%, respectively).

MENTAL HEALTH

Studies have found rates of depression to be quite high among HIV positive MSM. In a study of 475 HIV positive (non-AIDS) MSM, 37% were found to be classified as depressed. Depression was significantly more common among those who were younger, unemployed, those who had a lower income, no health insurance, lower CD4 counts, HIV-related symptoms, lower social support, and those without a partner (Katz and Douglas, 1996).

A chart review of 56 HIV positive MSM presenting for a mental health intake found the most frequently reported problems from the patients' perspective were: depression; anxiety; HIV-related

Sexual Compulsivity

MSM with high sexual compulsivity report significantly more risky sexual behaviors than those with low sexual compulsivity:

- ◆ More likely to give someone drugs, money or shelter for sex
- ◆ More likely to report having symptoms of STDs
- ◆ More likely to engage in unprotected receptive anal sex with more than one partner
- ◆ More frequently use cocaine in conjunction with sex
- ◆ Reported lower self esteem, and previous treatment for mental health conditions

Benotsch et al., 1999

issues, such as being recently diagnosed or an anniversary of a positive diagnosis; relationship issues; substance use; and sleeping problems. Major depressive disorders were diagnosed in 21% of the patients. Nearly 16% reported some form of suicidal ideation, but none reported suicidal plans (Berg et al., 2004).

Mental health issues also affect safer sex practices. A study of 212 HIV positive MSM enrolled in a prevention program who reported having unprotected anal or oral sex with at least one HIV negative or serostatus unknown partner in the past 4 months found that 49% of the total sample had engaged in unprotected anal sex with a person of unknown or negative status during that time. Men who reported unprotected anal sex reported twice as many partners who were negative or of unknown serostatus during the previous 4 months (10.8 vs. 4.5). Analyses indicated that avoidant coping was the factor that best predicted who had unprotected anal sex, suggesting that some HIV positive MSM with poor communication skills choose to have unprotected sex rather than talking to their partner(s) about using condoms. Or, they may have adequate communication skills but prefer to simply avoid situations perceived as unpleasant (Semple et al., 2000).

CO-INFECTION WITH SYPHILIS AND HEPATITIS

Minnesota has experienced an increase in the number of syphilis cases among MSM since 2001. Although the number of cases diagnosed in 2004 was lower than the previous two years, early data for 2005 indicate an increase back to 2003 levels. In 2004, there were 34 cases of syphilis diagnosed among MSM, with 32% also being infected with HIV. During the first half of 2005, there have been 60 cases diagnosed among MSM, and 28% were co-infected with HIV (Minnesota STD Surveillance System).

A comparison of the Minnesota HIV/AIDS and Hepatitis surveillance systems conducted in 2002 found that 240 (5%) of the 4,598 people living with HIV/AIDS had a positive test for hepatitis B. Of these, 65% were MSM. Of the 480 federal and private inmates, 27 also had hepatitis B. Of these, 26% were MSM. Similar numbers are not available for HIV/hepatitis C co-infection among MSM.

SEXUAL BEHAVIOR

Relationship Between HAART and Risk Behavior

National and international studies draw varying conclusions regarding how the use of HAART affects risky behavior. A study conducted in London, England with 420 HIV positive gay men found that all men reported high risk sexual behavior. However, men who were taking HAART had fewer sexual partners compared to those who were not on treatment, engaged in less unprotected anal sex, and were diagnosed with fewer STDs in the previous 12 months (Stephenson et al., 2003). However, a study by Katz et al. (2002) found an increase in risky behavior among HIV positive MSM in San Francisco during a time period that the use of HAART was also increasing. The study found that the use of HAART had increased from 4% in 1995 to 54% in 1999. However, the percentage of MSM living with AIDS who reported unprotected anal intercourse and multiple sexual partners increased from 24% in 1995 to 45% in 1999.

Several studies indicate that there is a reduced concern about HIV transmission since the advent of HAART. A reduced concern about the consequences of having HIV due to improved treatment was the strongest predictor of taking sexual risk in a study among HIV positive gay men. Whether the participants' viral load was detectable or undetectable was not found to

be a significant predictor of risk (Venable et al., 2003). Another study of 554 MSM (17% HIV positive) found that 20% of HIV positive participants not on HAART and 25% of HIV positives on HAART agreed that by taking HAART, an HIV positive man decreases the chances he will infect his partners. Fourteen percent (14%) of those not on HAART and 23% of those on HAART agreed that an HIV positive man whose viral load is undetectable is unlikely to transmit HIV. Reduced concern about HIV was found to be more strongly associated with unprotected anal sex and number of partners among HIV positive men than HIV negative men (Venable et al., 2000)

Sexual Behavior Before and After Learning of HIV Diagnosis

Studies have shown that the majority of MSM reduce their risky sexual behavior after learning of their HIV diagnosis. A study of 970 HIV positive MSM found that men who were aware of their HIV infection for less than half of the year before interview were significantly more likely to have engaged in unprotected anal intercourse during the previous year (52%) than men who were aware of their infection for most of the year before interview (30%) or men who were aware of their infection for the entire year before interview (21%) (Denning and Campsmith, 2005).

Another study was conducted to determine the potential for transmission of HIV among newly infected MSM during their HIV seroconversion period (defined as the interval between the time of their last negative HIV test and the time they received their first positive HIV test), and for the 12 months after learning that they were HIV positive (see sidebar). The study did not find evidence that men sought out other HIV positive men or that they changed from insertive to receptive anal intercourse with HIV negative men or men whose status was unknown as risk reduction strategies. The study recommends that early testing is needed, and that effective risk reduction counseling should be provided to MSM during at least the first year after receipt of a positive test result (Colfax et al., 2002).

Risk Behavior During Seroconversion

In their study with 66 newly infected MSM, Colfax et al. (2002) found that:

- ◆ More than 50% reported unprotected anal sex with partners who were HIV negative or whose status was unknown during the seroconversion period
- ◆ Unprotected anal sex was significantly reduced after participants received their HIV diagnosis
- ◆ Self-reported risk behavior increased at 9- and 12-month follow-up, but did not reach level or risk reported during seroconversion
- ◆ Although a small minority, men who reported putting others at risk soon after receiving their positive HIV test results were more likely to continue doing so up to 9 months later

Sexual Networks

The Internet and public sex environments offer the opportunity for MSM to find sex partners and potentially engage in anonymous and unprotected sex. In a study of 112 HIV positive MSM (77% White) recruited from Internet sites where men go to meet other men, 84% reported at least one act of barebacking (intentional unprotected anal sex) in the past 3 months. Of these, 49% reported barebacking only with other HIV positive men, 49% reported barebacking with both HIV positive and HIV negative or status unknown partners, and 2% reported barebacking only with HIV negative or status unknown partners. Men who barebacked with both HIV positive and HIV negative/status unknown partners were found to have higher levels of sexual adventurism than those who did not report any barebacking and those who barebacked only with HIV positive men (Halkitis and Parsons, 2003).

In a study of 456 HIV positive racially/ethnically diverse MSM from San Francisco and New York, Parsons and Halkitis (2002) examine risk behaviors of men who frequented public sex environments (PSEs, places such as parks where men cruise for sex partners) and commercial sex environments (CSEs, places such as bath houses and sex clubs where an admission is paid). Of the total sample, 50% reported going to a PSE and 41% reported going to a CSE at least once in the past 3 months; 24% reported going to both. There were no differences in terms of race/ethnicity related to going to PSEs. However, African American men were less likely to have been to a CSE than Latino men and White men.

Barebacking

Within the gay community, the term “barebacking” refers to intentionally not using condoms during anal intercourse. A brief street intercept survey was conducted with 518 gay and bisexual men in New York City. Of the 448 men who were familiar with the term, 204 (46%) reported engaging in bareback sex during the previous 3 months. HIV positive men were significantly more likely to report this behavior than men who were HIV negative.

Reasons for Barebacking

Halkitis et al. (2003) found that from an emotional standpoint, barebacking was associated with feelings of intimacy, connectedness, and masculinity.

Reasons commonly given for engaging in bareback sex included:

- ◆ The Internet and availability of sexually oriented chat rooms
- ◆ Advances in HIV treatment
- ◆ Emotional fatigue related to HIV
- ◆ Popularity of “club drugs”

Comparison of PSEs and CSEs

Parsons and Halkitis (2002) found that:

- ◆ Men who went to PSEs reported higher levels of sexual compulsivity compared to other men
- ◆ Men who frequented CSEs reported higher levels of depression and sensation seeking, as well as lower levels of perceived responsibility to protect sex partners from HIV than those who did not go to CSEs
- ◆ There were no significant differences in the frequencies of unprotected sexual behaviors between participants who did and did not go to PSEs
- ◆ Men who attended CSEs reported significantly higher levels of unprotected insertive and receptive anal sex with men who were HIV negative men and men whose status is unknown than men who did not attend CSEs
- ◆ Qualitative interviews with these participants revealed that men who frequent CSEs often assumed that men who go to CSEs are willing to risk infection by virtue of being in that environment, and thus they were more willing to not use condoms in a CSE setting

Wolitski et al. 2004

Participants were significantly more likely to engage in bareback sex with persons of the same HIV status than to bareback with persons of a different HIV status (Halkitis et al., 2003).

Men Who Have Sex with Men and Women

A sample of 5,156 HIV positive MSM interviewed as part of the SHAS project in 12 states, not including Minnesota, found that the proportion of MSM who also have sex with women varies by race/ethnicity. Thirteen percent (13%) of White MSM, 13% of Native American, 19% of Asian/Pacific Islander, 26% of Latino and 34% of Black MSM reported also having sex with women. Significantly more men who had sex with men and women self-identified as heterosexual (11%) compared to men who only had sex with men (1%). These proportions did not differ significantly

between racial/ethnic groups. Among HIV-infected women in the SHAS study, a small proportion reported sex with a bisexual man, with fewer Latina and Black women reporting sex with a bisexual man than White women, although a greater proportion of Latino and Black men reported bisexual activity. These findings seem to indicate that some bisexual men do not tell their female partners that they are having sex with men, and that some communities experience stronger stigma against homosexuality than others (Montgomery et al., 2003). A study with a subset of this sample found that self-identifying as heterosexual was one of the factors associated with engaging in unprotected anal sex among men who had known of their HIV status for the full year prior to interview (Denning and Campsmith, 2005).

STIGMA

HIV positive MSM experience both the stigma of being identified as gay and of having HIV infection. Focus groups with African American and Latino HIV positive MSM revealed that both gay and non-gay identified men felt that having relationships with women provided a cover and made their lives easier. Non-gay participants were not comfortable with being labeled gay or MSM; they were not able to find a label to describe themselves. They reported more feelings of isolation and loneliness than gay-identified participants. All participants were wary of disclosing their HIV status, and some participants had experienced rejection from friends and family after learning of their HIV status and sexual orientation (Williams et al. 2004). A study of 231 HIV positive young MSM ages 13 – 23 found that 50% of gay and bisexual youth reported that people had learned of their sexual orientation in spite of their attempts to hide it and that the people tended to be rejecting. Gay and bisexual youth reported similar rates of gay bashing (32% and 23%, respectively) (Solorio et al., 2003).

Stigma and past experiences of rejection are related to issues of disclosure with sexual partners. In a study of 456 HIV positive MSM, some decided not to have sexual relationships in order to not have to deal with disclosure and other men reported only having sex with anonymous partners in public sex environments where nondisclosure is perceived as the norm (Wolitski et al., 2004)

Impact of Stigma

Klitzman et al. (2004) found that fear of HIV-related stigma and discrimination affected people's adherence to HAART:

- ◆ Some people try to hide medications or have dosing schedules that allow them to hide the medications
- ◆ Some take medications in public but lie about what they are for
- ◆ Some don't take medications at work to avoid side affects that others might notice

Ullrich et al. (2003) found that greater concealment of homosexual identity was related to the following in HIV positive MSM:

- ◆ Lower CD4 counts
- ◆ Higher depressive symptoms
- ◆ Lower satisfaction with social support
- ◆ Higher constraints about being able to talk to others about thoughts and feelings related to being HIV positive

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Rates of domestic violence and sexual victimization are quite high among HIV positive MSM. A study of 231 racially/ethically diverse HIV positive young MSM found that gay and bisexual

youth reported similar rates (46%) of sexual abuse before age 13 and unwanted sex (Solorio et al., 2003). Among 56 HIV positive adult MSM at a mental health clinic, 36% had a history of physical abuse, 34% had a history of emotional abuse, and 30% had a history of sexual abuse. Indicators of HIV disease (CD4 count, viral load) were not associated with past abuse (Berg et al., 2004).

Another study found that a history of childhood sexual abuse was related to risky sexual behavior in adulthood, as well as other indicators. Of 456 HIV positive MSM, 15% reported childhood sexual abuse, which was associated with greater anxiety, hostility and suicidality. Men with a history of childhood sexual abuse were significantly more likely than men who had not been abused to report unprotected insertive (33% vs. 20%) and receptive (43% vs. 27%) anal sex in the past 90 days (O'Leary et al., 2003).

A study examining the prevalence of intimate partner violence among 1,421 HIV positive persons (44% MSM) found that 27% of the total sample reported either perpetrating or being the victim of physical and/or sexual abuse in the past 6 months. Overall, abuse perpetration and victimization occurred equally often, with 48% of those in abusive relationships reporting mutual abuse. MSM were found to have similar likelihoods of being either victims or perpetrators of abuse. People with partners who were also HIV positive were more likely to be victims than those with partners who were negative or status unknown. People with HIV positive partners were also more likely to be perpetrators of abuse than those with partners whose status was unknown. This suggests that couples in which both partners are coping with the stresses of living with HIV may raise the risk of abuse (Galvan et al., 2004).

SUMMARY OF THE NEEDS OF HIV POSITIVE MEN WHO HAVE SEX WITH MEN

- Programs that address substance use and its impact on HIV risk, as well as overall health:
 - Substance use (alcohol and/or drugs) in conjunction with sexual activity increases the odds of engaging in high risk sex.
 - Binge use of crystal meth report is related to more sexual risk behaviors, mental and physical health problems and more social difficulties.
- Programs that address mental health issues and their impact on HIV risk:
 - Rates of depression are quite high among HIV positive MSM.
 - Mental health issues impact the ability of HIV positive MSM to make healthy choices regarding sexual and drug using behaviors.
- Programs that increase awareness of syphilis and increase access to syphilis testing:
 - Rates of syphilis cases in Minnesota are increasing among MSM, with 28% of cases during the first half of 2005 being co-infected with HIV.
- Programs that support the reduction of risky sexual behaviors, including strategies to reach men who meet partners via the Internet or public sex environments:
 - Reduced concern about HIV transmission due to HAART has been found to be associated with increased unprotected anal sex and number of partners.
 - The Internet and public sex environments offer the opportunity for MSM to potentially engage in anonymous and unprotected sex.

- Effective risk reduction activities targeting men who identify as heterosexual and have sex with men and women:
 - Self-identifying as heterosexual was one of the factors associated with engaging in unprotected anal sex among men who had known of their HIV status for a full year.
- Strategies to reduce stigma related to HIV and homosexuality:
 - Fear of rejection is a barrier to disclosing HIV status and/or sexual orientation to sexual partners, family and friends.
 - Stigma impacts sexual risk behavior, adherence to HAART, as well as physical and mental health.
- Programs that address domestic violence and sexual victimization and their relationship to HIV risk:
 - A history of childhood sexual abuse has been shown to be related to risky sexual behavior in adulthood.
 - HIV positive MSM were equally likely to be victims and perpetrators of intimate partner violence.

HIV Positive Injection Drug Users

SUBSTANCE USE

Díaz et al. (1998) found that many HIV positive IDUs continue to share needles after becoming aware of their HIV infection, although this behavior seems to decrease with the length of time a person is aware of his/her HIV status. Findings from the SHAS project in 12 states (not including Minnesota) indicate that of the 1,527 people who had ever shared syringes and reported injecting in the five years before the interview, 51% had injected in the year before the interview. Of these, 50% had shared needles during that year.

Researchers also found that IDUs who were aware of their HIV infection for more than one year were less likely to share (43%) than those who have been aware of their infection for one year or less (65%).

The Seropositive Urban Drug Injectors Study (SUDIS) of 161 HIV positive IDUs found that study participants continued to inject drugs, often increasing their drug use right after finding out they were positive in order to escape reality. However, after this higher risk period, HIV served as a wake up call, motivating many HIV positive IDUs to access services and develop drug management strategies in order to maintain or improve their health. The drug management strategies included reducing the number of times they injected, drug substitution, not sharing needles, abstaining from alcohol and stimulants, and methadone maintenance. (Center for AIDS Prevention Studies and the AIDS Research Institute, 1999).

The SUDIS study found that the majority of risk behavior occurring among HIV positive IDUs was sexual. The researchers encourage providers to emphasize sexual risk reduction in all HIV education and prevention efforts targeting this population.

Injection of Crystal Meth

Semple et al. (2004) found that:

- ◆ HIV positive meth users who inject used more meth compared to non-injectors (7.8 grams vs. 2.2 grams), and used it more often (average of 12 days vs. 8 days) in the last month
- ◆ 45% of meth injectors reported sharing needles in past 2 months. Of these:
 - ◆ 18% shared needles without cleaning them
 - ◆ 37% injected with a borrowed needle
 - ◆ 28% loaned their needle to others

safety from violence, housing, transportation, being able to work, having money, food, and childcare) in order of their importance to them, those who ranked HIV as most important used fewer injection drugs during the last 30 days than those who did not rank HIV as the top priority. Those who ranked HIV as their top priority were less likely to backload. Those who did not rank HIV as the top priority were more likely to report injecting a heroin/stimulant (cocaine or amphetamine) mixture in the past 30 days (Mizuno et al., 2003).

Using drugs in conjunction with sex has

been shown to increase risky sexual behavior. A comparison study of substance use among 1,278 HIV positive MSM, IDUs and heterosexuals found that IDUs are less likely to use marijuana, hard drugs and alcohol in conjunction with sex than MSM and more likely to use them than heterosexuals (Beckett et al., 2003). The study also found that among IDUs,

using alcohol or hard drugs in conjunction with sex or having a partner who used alcohol increased the odds of engaging in high risk sex.

MENTAL HEALTH

Studies show high rates of mental health disorders among IDUs, regardless of HIV status. One study of 30 HIV positive and 30 HIV negative IDUs found that 43% of each group had been diagnosed with a depressive disorder during their lifetime, and 27% of each group had attempted suicide (Malbierger and de Andrade, 2000).

In a study of HIV positive crystal meth users, Semple et al. (2004) found that there were no significant differences in psychiatric disorders between those that inject meth and those who don't inject. Fifty-two percent (52%) of the entire sample reported a psychiatric diagnosis, with the most common diagnoses being depression (66%), bipolar disorder (21%), and anxiety (5%).

Mental Health and Substance Use

In a study of 137 HIV positive IDUs:

- ◆ 55% had a history of mental health problems
- ◆ A history of mental health problems was associated with an increased frequency of injection drug use in the past month
- ◆ Using a greater number of non-injection drugs during the last month was also associated with reporting more depressive symptoms

Mizuno et al., 2003

CO-INFECTION WITH HEPATITIS

A comparison of the Minnesota HIV/AIDS and Hepatitis surveillance systems conducted in 2002 found that 240 (5%) of the 4,598 people living with HIV/AIDS had a positive test for hepatitis B. Of these, 14% were IDU or MSM/IDU. Of the 480 federal and private inmates, 27 also had hepatitis B. Of these, 42% were IDU or MSM/IDU. Of the total population living with HIV/AIDS in 2002, 377 (8%) had a positive test for hepatitis C. The majority of cases were among IDU (44%) and MSM/IDU (16%). Of the 480 federal and private inmates, 114 (24%) tested positive for hepatitis C. Of these, 65% were IDU and 17% were MSM/IDU.

SEXUAL BEHAVIOR

Many of the participants in the SUDIS project reported that becoming HIV positive brought a new or renewed interest in settling down in a meaningful relationship, either with previous or new partners. Looking back on a high risk drug and sex lifestyle that led to HIV infection motivated many participants to reinvest in monogamy and stability. This shift in lifestyle often coincided with greater ability to manage drug use and to cope with HIV. Greater intimacy in relationships did not guarantee a reduction in sexual risk taking. Some serodiscordant couples felt that their bond would be stronger if they were both HIV positive. For some, the willingness of their partners to have unprotected sex was the highest expression of love and commitment (Knight et al., 2005).

Participants in the same study were asked to prioritize 7 areas (HIV, safety from violence, housing, transportation, being able to work, having money, food, and childcare) in order of their importance to them. Those who ranked HIV as their top life priority were less likely than others to engage in unprotected vaginal sex with primary partners whose HIV status was negative or unknown (17% vs. 46%) (Mizuno et al., 2003).

Relationship Between HAART and Risk Behavior

There were some differences in sexual risk behavior found in a study that compared HIV positive IDUs who were on HAART and those who were not. The proportion that reported any sexual activity increased from 55% to 61% over a year and a half for those on HAART, and decreased from 67% to 63% in the untreated group. Unprotected sex increased among those on treatment from 18% to 20%, and decreased for those not receiving treatment from 36% to 28% (Vlahoy et al., 2001).

A study of HIV positive and HIV negative IDUs found that HIV positive IDUs were significantly more likely to agree with the statement that HIV is less likely to be transmitted through unprotected sex with an HIV positive person receiving antiretroviral treatments or with an undetectable viral load. Among HIV positive participants, those who had the strongest belief in reduced HIV transmissibility due to treatments/reduced viral load were 5 times more likely to engage in unprotected sex than those who had the weakest belief in reduced HIV transmissibility. This relationship between belief in reduced transmissibility and engaging in unprotected sex was not observed among HIV negative participants (Tun et al., 2003).

Exchanging Sex for Money or Drugs

Dependence on drugs can lead to the need to exchange sex in order to obtain money or drugs, placing people in a very vulnerable position in terms of negotiating safer sex options. Among the SUDIS study participants who engaged in the exchange of sex for drugs or money, women were primarily the sex workers and men primarily bought the sex, placing the women lower in the power hierarchy. The buyers controlled the sexual decision making and determined whether a condom was used. Physical withdrawal symptoms were a strong motivator for participants to engage in sex work, and those buying sex used this vulnerability by controlling access to drugs (Knight et al., 2005).

Another study comparing HIV positive MSM who injected crystal meth with those who use meth but did not inject found that nearly twice as many men who injected reported exchanging sex for drugs or money compared to those who did not inject (26% vs. 14%) (Semple et al., 2004).

STIGMA

Semple et al. (2004) also found that HIV positive MSM who injected meth scored significantly higher on a scale that measured experiences of stigma related to being a meth user compared to those who did not inject. When looking at a set of variables that predicted injection use, the strongest association was found with having higher scores on the stigma scale.

Another study with the 161 SUDIS participants examined the consequences of disclosure of their HIV status. A common theme among the participants was the fear of stigma and rejection. A majority (61%) of participants who reported sex with casual partners expressed fear of being rejected on both a personal and sexual level if they disclosed their status. Some participants suggested that much of the stigma experienced by HIV positive persons is due to a lack of empathy and unreasonable fear on the part of HIV negative persons. Fifteen percent (15%) of the total sample stated that they preferred to avoid sexual relationships in order to minimize opportunities for intimacy and having to disclose. A number of participants also spoke about the fear of violence and threats to their person. Several participants had witnessed or experienced violence upon disclosure (Parsons et al., 2004).

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Participants in SUDIS study spoke about the violence experienced, particularly by sex workers. Most often they reported histories of physical assault and rape that occurred when they refused to have sex without getting paid (Knight et al. 2005). When participants in this study were asked to identify the most important issues in their lives, 32% of females ranked safety from violence as the third priority or higher compared to 16% of men (Mizano et al., 2003).

SUMMARY OF THE NEEDS OF HIV POSITIVE INJECTION DRUG USERS

- Programs that address injection and non-injection substance use (including alcohol) and its impact on HIV risk:
 - Substance use (alcohol and/or drugs) in conjunction with sex increases the odds of engaging in high risk sexual activity.
 - Crystal meth users who injected used more meth and used it more often than meth users who did not inject.
 - IDUs who have been aware of their HIV status for one year or less were more likely to share needles than those who have been aware of their status for more than one year.
- Programs that address mental health issues and their impact on HIV risk:
 - A history of mental health problems was associated with an increased frequency of injecting drugs.
- Integration of hepatitis prevention (particularly hepatitis C) into HIV prevention with positives programs:
 - The majority of HIV positive people in Minnesota who are co-infected with hepatitis C are IDU or MSM/IDU.
- Programs that support the reduction of risky sexual behaviors:
 - Unprotected sexual behavior is also a risk factor for HIV positive IDUs.
 - Reduced concern about HIV transmission due to HAART has been associated with increased unprotected sex.
- Programs that assist individuals in achieving financial independence:
 - Persons exchanging sex for drugs or money often are not in a position to negotiate safer sex.
- Strategies to reduce stigma related to HIV and injection drug use:
 - HIV positive IDUs fear rejection on both a personal and sexual level if they disclose their HIV status.
 - HIV positive MSM who injected meth experienced more stigma related to being a meth user than those who did not inject.

HIV Positive High Risk Heterosexuals

SUBSTANCE USE

Of the 87 women (78% heterosexual) interviewed as part of the Needs Assessment of HIV Positive Minnesotans (Kroll and Jackson, 2003), 56% believed that alcohol or drug use played a role in their becoming HIV positive. Sixteen percent (16%) reported ever injecting drugs, and 26% felt that their drug or alcohol use was a problem. Thirty-two percent (32%) had ever had Rule 25 assessment and 28% had been in treatment in the past 5 years.

Substance use can affect many things in the lives of HIV positive individuals, including sexual risk behavior, entry into care, and adherence to HAART. A comparison study of substance use among 1,278 HIV positive persons found that the participants exposed through heterosexual contact used marijuana during sex at lower rates than either MSM or IDUs; the same pattern held true for use of hard drugs and alcohol during sex. The study also found that among heterosexuals, using alcohol in conjunction with sex or having a partner who used marijuana increases the odds of engaging in high risk sex (Beckett et al., 2003).

In-depth interviews with 31 African American, Puerto Rican and White HIV positive women revealed that several of the women turned to drugs or alcohol to escape from the feelings of despair they felt when learning of their HIV diagnosis. These women noted that they had also used drugs/alcohol as a coping strategy in response to traumatic events prior to being diagnosed with HIV. A number of other women in the study were actively abusing alcohol or drugs at the time of their HIV diagnosis and they stated that addiction was so dominant in their lives that they weren't capable of comprehending the significance of their infection. Both the women who were abusing drugs at the time of diagnosis and those that turned to drugs/alcohol after diagnosis delayed getting into medical care for a period of months to years (Raveis et al., 1998).

Using SHAS data from across a number of states participating in the project (Minnesota not included), researchers found that among 1,655 women interviewed, 376 reported crack use. Of these, 81% were African American. Crack users were less likely to always adhere to HAART treatment regimens compared to users of other drugs and women who did not use any drugs. Crack users typically binge until the supply runs out; they may continue for days

Crack Use and Sexual Risk

A study of 137 HIV positive African American crack cocaine users (36% heterosexual, 36% bisexual, and 32% gay) found significant sexual risks among the respondents:

- ◆ 82% of the sample reported daily crack use
- ◆ Respondents reported an average of 17 sex partners during the previous 6 months (19.8 for men, 10.7 for women)
- ◆ 57% reported having a casual partner in the last 30 days and of these, 67% reported inconsistent condom use and 54% reported being high when having sex
- ◆ Of 54 persons who traded sex for drugs, 82% were not using condoms
- ◆ Of 40 persons who traded sex for money, 73% were not using condoms

Timpson et al., 2003

without sleep, until the body is exhausted. This cycle, followed by looking for more drugs, can make it challenging to adhere to treatment (Sharpe et al., 2004).

MENTAL HEALTH

Several studies indicate that mental health and physical health are interrelated for HIV positive women. In a study that spanned a period of 7.5 years, women who had chronic depressive symptoms were more than twice as likely to die compared to those with intermittent or no symptoms. Women who were in the terminal phase of their AIDS-related illnesses were more than twice as likely to report recent significant depressive symptoms. Women who received mental health services were significantly less likely to die from AIDS-related causes during the study period (Cook et al., 2004). Another study found that women who had more HIV-related physical symptoms reported higher levels of depressive symptoms. The researchers also found that high levels of unsupportive social interactions with friends or with a lover/spouse were associated with higher levels of depression (Schrimsaw, 2003).

HIV positive refugees arriving to the United States may have experienced physical and mental trauma that continues to affect their mental health. In a study of 34 HIV positive refugees (82% African) to the U.S., 30 participants were willing to disclose whether they had suffered torture. Of these, 77% had endured torture of various types, such as beatings, threats, shackles, forced observation of dead bodies, and rape. Fifty-six percent (56%) of the participants were diagnosed with major depression, and 32% were diagnosed with posttraumatic stress disorder. Common psychological symptoms included loneliness, insomnia, avoidance, intrusive recollections, and anxiety (Moreno et al., 2003).

SEXUAL BEHAVIOR

Relationship Between HAART and Risk Behavior

Studies conducted with heterosexual participants draw varying conclusions regarding the relationship between HAART and sexual behavior. Among 104 serodiscordant heterosexual couples, HIV positive respondents taking HAART were 2.4 times less likely to report unprotected intercourse compared with those not on treatment. However, more than two thirds of couples had unprotected vaginal and/or anal intercourse during the 6 months preceding the survey. Up to 33% of positive partners and 40% of negative partners acknowledged being less concerned about transmission of HIV with the new treatments. HIV negative individuals were more likely than their positive partners to acknowledge increased risk taking and reduced HIV transmission concerns. The study recommended that providers discuss the effect of HAART on the risk of sexual transmission of HIV with their clients, as well as with the serodiscordant partners (van der Straten et al., 2000).

Beliefs Regarding HAART and HIV Transmission Risk

A study of 196 HIV positive persons (71% heterosexual) found that:

- ◆ 34% believed AIDS is not as big of a threat because of HAART
- ◆ 91% believed that safer sex is still important, but 19% believed HAART made safer sex less important
- ◆ 23% practice safer sex less often since availability of HAART
- ◆ 15% believed there is a reduced risk of HIV transmission when a person is on HAART

Demmer, 2002

Other studies indicate a relationship between adherence to HAART and engaging in risky sexual behavior. In a study of 255 men and women living with HIV and receiving HAART, researchers found that people who were not adherent to their medication regimen reported having significantly more sex partners, greater rates of unprotected vaginal intercourse, and less protected sexual behaviors, including with partners who were HIV negative or whose HIV status was unknown (Kalichman and Rompa, 2003). Another study of 766 HIV positive women found that among sexually active women, lower adherence rates were associated with an increased risk of inconsistent condom use. The study stated that counseling regarding sexual behavior and adherence to treatment regimens is usually done separately, and recommended that the relation between these two factors be discussed together (Wilson et al., 2002).

Co-infection with STDs and Trading Sex

Of the 87 women interviewed in the Needs Assessment of HIV Positive Minnesotans (Kroll and Jackson, 2003), nearly half (47%) reported that they had an STD in the past year. Thirty-seven percent (37%) of these women reported ever having exchanged sex for something they needed. Of these, 19% had exchanged sex for a place to stay, 19% for drugs, 13% for money, and 6% for food.

Knowledge of Partners' HIV Status

Knowledge of a partner's HIV status may influence the decision to use condoms or not. HIV positive persons who believe that their partners are also positive may choose not to use condoms, leading to the possibility of transmission. One study involving predominantly heterosexual participants found that perception of partners' HIV status was not very accurate. HIV positive respondents were asked to report the HIV status of their sexual partners via survey. Of 94 named partners, 42 were tested for HIV and had sufficient identifiers to link HIV test results to survey data. The study found that 64% of partners thought to be HIV positive were actually HIV negative, and 42% of partners believed to be uninfected were actually infected. Less than half of the sample (46%) accurately perceived their partners' infection status. In relationships with uninfected partners who were thought to be infected, 71% of HIV positive respondents reported "knowing" their partner's infection status, as opposed to "guessing" their status. HIV positive respondents were more likely to correctly assess that their partners were also HIV positive if it was an occasional partner (75%) vs. a main partner (28%), as well as being more likely to correctly assess that their partners were infected if they were not living together (53%) than if they were living together (0%) (Niccolai et al., 2002).

STIGMA

The fear of stigma and rejection due to HIV status is very real and, unfortunately for many, the fear is justified. In a qualitative study with 9 White women (8 heterosexual, 1 lesbian), participants spoke about how they completely redefined themselves as people after receiving their diagnosis. Regardless of who they had been before diagnosis (mothers, wives, teachers, etc.), they saw themselves as women living with HIV/AIDS. They had all had preconceived ideas about HIV positive women as promiscuous, immoral or drug abusing, and none of them had considered themselves to be at high risk. All of the women experienced rejection on different levels as they revealed their status to different people. While some women had supportive family members, others experienced anger and disgust, and had family members that were reluctant to share food or allow them to have contact with children. The women had negative experiences with a number of health care providers.

Some doctors added to the stigma upon diagnosis by encouraging them not to tell anybody because they would be rejected. Some of the women had been refused treatment by health care providers, including dentists. The women also spoke about how any complaint they had was always attributed to HIV. Those participants who were active in church found that their pastors ignored them and would not visit when they were ill. The women spoke about the psychological stress and isolation that was a result of keeping their disease a secret from many people (Carr and Gramling 2004). Another study involving HIV positive African American women found that as the level of perceived stigma increased, the level of disclosure of HIV status decreased. The study also found that as perceived stigma increased, the level of psychological functioning decreased among the women who had a high level of disclosure (Jordon Clark et al., 2003).

HIV-related stigma can also impact access to medical care as indicated through another qualitative study with 31 HIV positive women. One of the barriers to treatment described by these women was the fear that they would be shunned or rejected if others learned of their HIV status. A couple of the women described how they were afraid of going to the clinic in their community for fear of being recognized and delayed care until they were able to find alternate clinics where they were unlikely to see anyone they knew (Raveis et al., 1998).

Stigma in Immigrant Communities

Stigma surrounding HIV is even stronger within immigrant communities. In interviews conducted with 79 African HIV positive patients at the Hennepin County Medical Center (HCMC) Infectious Disease Clinic from 2003 - 2005, 21% reported that their families did not know about their HIV status. Shame (29%), becoming an outcast (22%), and fear of being thought of as promiscuous (12%) were some of the reasons cited for not revealing their HIV status. When asked to rank the level of stigma around HIV in their community on a scale of 1 to 10 (10 being highest), 58% ranked it as 10, and only 8% ranked it as 5 or lower (MDH and HCMC, 2005).

Participants in a qualitative study conducted with 57 HIV positive Mexican, Dominican and Central American immigrants in New York City described denial, shame, fear of being seen as gay, and fear of disclosure to family and friends as being barriers to accessing care and services. Most attended clinics that were ethnically mixed or predominantly Latino and few reported experiencing bias or discrimination (Shedlin and Shulman, 2004).

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Researchers find that men and women who experience childhood sexual assault are more likely to engage in high risk sexual activity (e.g. unprotected sex, anonymous sex, sex with multiple partners, sex work) and drug use (Brief et al., 2004).

A review of literature indicates high rates of traumatic events in the lives of HIV positive women. In interviews with 230 HIV positive

Experiences of Minnesota Women

HIV positive Minnesotan women (n=87) reported that:

| Experiences of Violence | % |
|---|----------|
| Believe sexual abuse played a role in becoming HIV positive | 22% |
| Ever sought protection from domestic violence | 26% |
| Ever stayed in domestic violence shelter | 20% |
| Ever had a partner that: | |
| Threatened her | 56% |
| Verbally abused her | 64% |
| Pushed her | 63% |
| Hit her | 54% |
| Hit her children | 10% |

Kroll and Jackson, 2003

women, primarily African American and Latina, 43% had experienced childhood physical abuse and 38% had experienced childhood sexual abuse. They also found a significant correlation between childhood abuse and assault in adulthood (Simoni and Ng, 2000). In a racially/ethnically diverse sample of 490 women, researchers found that HIV seropositivity was associated with a severe trauma history involving exposure to multiple events, such as childhood sexual assault, adult sexual assault, and/or physical violence (Wyatt et al. 2002). Qualitative interviews with HIV positive women indicated that their HIV status had a direct relationship with their acceptance of the abuse. As one woman stated, "After I found out I was positive, I let him do what he wanted. It didn't make a difference, I was just going to stay." (McDonnell et al., 2003).

SUMMARY OF THE NEEDS OF HIV POSITIVE HIGH RISK HETEROSEXUALS

- Programs that address substance use and its impact on HIV risk:
 - Over half of HIV positive women interviewed in Minnesota needs assessment felt that alcohol or drug use played a role in their becoming HIV positive.
 - Using alcohol or drugs during sex increases the odds of engaging in high risk sex.
 - Substance use can delay entry into medical care.
- Programs that address mental health issues and their impact on health:
 - HIV positive women with chronic depressive symptoms were twice as likely to die as women with intermittent or no symptoms.
 - Women with more HIV-related physical symptoms and less social support had higher levels of depression.
 - HIV positive refugees who have experienced physical or mental trauma (e.g., torture) continue to suffer depression and/or posttraumatic stress disorder.
- Programs that support the reduction of risky sexual behaviors:
 - Reduced concern about HIV transmission due to HAART has been associated with increased unprotected sex.
 - Nearly half of HIV positive women interviewed in Minnesota needs assessment had an STD in the past year.
- Programs that assist individuals in achieving financial independence:
 - HIV positive persons without adequate financial support are sometimes forced to exchange sex for things they need (e.g., money, shelter, drugs, food).
- Education about the effect of HAART on the risk of sexual transmission of HIV:
 - Reduced concern about HIV transmission due to HAART has been associated with increased unprotected sex.
 - Lower adherence to HAART regimens was associated with having more sex partners and greater rates of unprotected sex.
- Strategies to reduce HIV-related stigma:
 - Stigma impacts access to medical care.
 - Higher perceived stigma was associated with less disclosure of status.
 - Women experience rejection from family, friends, health care providers, and pastors.
- Programs that address domestic violence and its impact on HIV risk:
 - Childhood sexual assault is associated with risky sex and drug use in adults.
 - Nearly one quarter of HIV positive women interviewed in Minnesota needs assessment felt sexual abuse played a role in their becoming HIV positive.

HIV Positive Youth

SUBSTANCE USE AND MENTAL HEALTH

Seventeen youth ages 18 - 24 were interviewed as part of the Needs Assessment of HIV Positive Minnesotans. Thirty-three percent (33%) of the youth respondents reported using marijuana daily and 10% reported using designer or party drugs within the last 6 months. When asked to self-rate their mental health on a scale of 1 (excellent) to 5 (poor), the average score was 2.88. When asked to self-rate their efficacy in managing mood and depression on a scale of 1 (not at all confident) to 10 (totally confident), the average score was 6.84 (Kroll and Jackson, 2003).

A study of 350 HIV positive youth (252 males and 98 females) ages 13 – 23 was conducted to identify lifetime and current risk behaviors. Ninety-five percent (95%) of males self-identified as gay or bisexual, and 86% of females identified as heterosexual. Throughout their lifetime, almost all youth had smoked cigarettes; used alcohol, marijuana and hard drugs, but only 15% had ever injected drugs. Seventeen percent (17%) reported currently using alcohol or some drug on a daily basis, and 9% reported injecting drugs during the last 3 months. The study also found that emotional distress and the number of mental health counseling visits were higher among those who were symptomatic and those who had AIDS (Rotheram-Borus et al., 2001).

When comparing risk behaviors among 139 HIV positive youth under age 25 to 2,880 HIV positive adults, Diamond and Buskin (2000) found some differences in substance use and mental health issues based on age and gender (see sidebar). The study also found that that alcohol abuse, injection drug use and psychiatric disorders were found to increase the odds of continued risky sexual behavior among young men.

Although adherence to HAART is difficult for many HIV positive adolescents, depression appears to further impact their ability to adhere to treatment. In a study of 161 HIV positive youth ages 12–19, a higher level of depression was found to be associated with a lower reported frequency of medication use. Only 29% of depressed participants were fully adherent compared to 55% of non-depressed youth (Murphy et al., 2001).

HOMELESSNESS

Of the 17 youth participants in the Needs Assessment of HIV Positive Minnesotans (Kroll and Jackson, 2003), 70% had ever been homeless. Fifty-two percent (52%) reported experiencing homelessness once, and the remainder had been homeless between 2 and 20 times. Forty-three percent (43%) of those who had been homeless had stayed in a shelter;

Comparison of HIV+ Youth and Adults

- ◆ 28% of young men used non-injection drugs compared to 20% of adult men
- ◆ 30% of young women used non-injection drugs compared to 27% of adult women
- ◆ The rate of alcohol abuse was the same among young men and adult men (27%)
- ◆ The rate of alcohol abuse among young women was quite a bit higher than among adult women (40% vs. 28%)
- ◆ Youth had been diagnosed with fewer psychiatric disorders (anxiety, depression, psychosis) than adults
- ◆ Young women had fewer psychiatric disorders than young men (34% vs. 55%)
- ◆ 9% of youth experienced suicidal ideation compared to 13% of adults

Diamond and Buskin, 2000

others managed by staying with friends, family or on the streets. A study assessing predictors of HIV status in 8,196 youth found that male participants who were homeless were twice as likely to be HIV positive than those who were not homeless. This same association was not observed for female participants (Huba et al., 2000).

SEXUAL BEHAVIOR

A good proportion of youth and young adults living with HIV/AIDS take steps to reduce their risk after learning of their diagnosis. In the study of 350 HIV positive youth ages 13–23 conducted by Rotheram-Borus et al. (2001), 51% reported having no unprotected intercourse since receiving their HIV diagnosis. Thirty-nine percent (39%) of all respondents had ever exchanged sex for something they needed (34% of males and 22% of females); this was more common among youth with an AIDS diagnosis. When considering sexual activity in the past three months, 19% reported abstinence. Among those who were sexually active, 31% reported using condoms all the time during those three months. Males had significantly more partners than females and used condoms less often. However, overall, most (89%) vaginal and anal intercourse was protected. Fifty-four percent (54%) disclosed their serostatus to their partners.

Experiences of HIV+ Minnesotan Youth

HIV positive Minnesotan youth (n=17) reported that:

- ◆ 47% had an STD in the past year
- ◆ 37% had ever exchanged sex for something they needed. Of these:
 - ◆ 19% exchanged sex for a place to stay
 - ◆ 19% exchanged sex for drugs
 - ◆ 13% exchanged sex for money
 - ◆ 16% exchanged sex for food

Kroll and Jackson, 2003

A study assessing predictors of HIV status in 8,196 youth found that female participants who had engaged in survival sex were 2.5 times as likely to be HIV positive than those who had not engaged in survival sex. There was also an increased risk of being HIV positive for male participants who had engaged in survival sex (Huba et al., 2000).

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Youth participants who participated in the Needs Assessment of HIV Positive Minnesotans reported high rates of violence and victimization. Respondents reported that they have had a partner who verbally abused them (55%), threatened them (48%), pushed them (48%), hit them (41%), and sexually abused them (21%). Thirteen percent (13%) had ever sought protection from domestic violence (Kroll and Jackson, 2003).

SUMMARY OF THE NEEDS OF HIV POSITIVE YOUTH

- Programs that address substance use and mental health and their impact on HIV risk and overall health:
 - Alcohol abuse, injection drug use and psychiatric disorders increased the odds of continued risky sexual behavior among young HIV positive men.
 - Youth who were symptomatic and have AIDS experienced higher emotional distress.
 - Depression impacts youths' ability to adhere to HAART.

- Programs that address financial needs of HIV positive youth and provide support to homeless youth:
 - Almost three quarters (70%) of youth interviewed in the Minnesota needs assessment had experienced homelessness at least once.
 - Over one third of youth in the needs assessment had ever exchanged sex for something they needed (e.g. money, drugs, shelter, food).
- Programs that support the reduction of risky sexual behaviors:
 - Ongoing support is needed for the many HIV positive youth who report having no unprotected sex or are abstinent.
 - Nearly half of the youth interviewed in the Minnesota needs assessment had an STD in the past year.
- Programs that address domestic violence and sexual victimization:
 - Youth who participated in the Minnesota needs assessment reported high rates of violence and victimization.

HIV Positive Greater Minnesotans

There continues to be a perception among rural Minnesotans that HIV does not occur in Greater Minnesota. Consequently, HIV infected people in Greater Minnesota experience an immense sense of isolation. The lack of peer connections in Greater Minnesota for persons living with HIV is the most significant barrier to providing HIV/STD prevention education to this population. The long distances required to travel to access health care and support services is challenging, especially when a person does not have transportation or is not feeling well. Difficulty in accessing basic health care and HIV treatment is also a barrier, since this is a primary source of information for prevention education for HIV infected people. As with other communities living in Greater Minnesota, HIV positive individuals lack confidence that confidentiality will be respected by local health care services.

Little data exist about HIV positive persons living in rural areas. Even less data exist specifically about HIV positive persons living in Greater Minnesota. Much of the information presented in this section is taken from the Geographic Analysis of the Needs Assessment of HIV Positive Minnesotans (Geographic Analysis) conducted by Swanson Kroll (2005). In this analysis, findings from the needs assessment were analyzed based on place of residence of the respondents. Of the total 241 participants, 32 (13%) lived in Greater Minnesota (defined as outside of the 11 county eligible metropolitan area [EMA]), 155 (64%) lived in Minneapolis or St. Paul (Twin Cities), and 54 (22%) lived in the non-Twin Cities area of the 11 county EMA (EMA). Note: this data cannot be generalized to all HIV positive persons in Minnesota.

SUBSTANCE USE

The proportion of respondents in the Geographic Analysis who reported they believed that substance use played a role in their becoming HIV positive was similar regardless of place of residence (56.3% Greater Minnesota, 57.4% Twin Cities, 55.6% EMA). Greater Minnesota residents were significantly less likely to use marijuana than respondents living in the Twin Cities or the EMA. However, Greater Minnesota residents were more likely to have ever injected drugs, although none reported current injection drug use. There were no significant differences associated with the use of alcohol or other drugs. Greater Minnesota residents were more likely to report trying to enter a drug or alcohol treatment program in the last 5 years but being unable to do so (Swanson Kroll, 2005).

MENTAL HEALTH

When asked to self rate their mental health on a scale of 1 (excellent) to 5 (poor), the overall average response was 2.74, with no differences based on place of residence. However, 28% of Greater Minnesota respondents rated their mental health as excellent compared to 14% of Twin Cities and 15% of EMA residents. Although similar proportions of respondents from each geographical area rated their mental health as excellent or very good (approximately 36% across groups), 38% of Greater Minnesotans rated their mental health as fair or poor compared to 18% of Twin Cities and 26% of EMA respondents (Swanson Kroll, 2005).

A study related to thoughts of suicide was conducted with 210 HIV positive individuals in 8 states living in communities of 50,000 people or less located at least 20 miles from a city of 100,000 or more. The study found that 38% of participants had engaged in thoughts of suicide in the last week. Eighty-six percent (86%) of these indicated that they were unlikely

to actually attempt suicide. Results indicate that there were no differences by gender, race, HIV vs. AIDS diagnosis, age, length of time living with HIV/AIDS, population size or distance from a larger city. The presence of suicidal thoughts was associated with more depressive symptoms, increased stress related to the fear of possibly infecting others, more stress due to HIV-related stigma, less support from family and friends, and more barriers to care due to limited personal resources. Suicidal thoughts were not predicted by alcohol or drug use, or barriers to care due to inadequate medical and mental health care services (Heckman et al., 2002).

CO-INFECTION WITH SEXUALLY TRANSMITTED DISEASES

According to the match conducted between the Minnesota HIV and STD Surveillance Systems, 5% of the 331 HIV positive persons diagnosed with an STD after their HIV diagnosis from 1992 – 2002 lived outside of the 7 county metropolitan area. Comparatively, the proportion of people living with HIV/AIDS who resided in Greater Minnesota during that time period was consistently around 10%.

According to the Geographic Analysis, only 1 (3%) Greater Minnesota respondent reported having an STD in the year prior to interview compared to 19% of respondents living in the Twin Cities (Swanson Kroll, 2005).

SEXUAL BEHAVIOR

In another study with the 210 HIV positive persons living in rural areas, Heckman et al. (2003) found that 54% of sexually active men and 43% of sexually active women inconsistently used condoms during anal or vaginal sex. Of men who engaged in sex with males during the past 3 months, 59% never or only rarely used condoms. Of men who had vaginal sex with female partners during the same time period, 14% never used condoms. Of 29 men who indicated that all of their sex partners in the last 3 months were HIV negative, 79% reported at least one occasion of unprotected anal or vaginal intercourse. Among female participants, 14% had a male anal sex partner in the past 3 months and 50% of these never used condoms. Thirty-one percent (31%) of women who engaged in vaginal sex never used condoms. Of 15 women who had only HIV negative partners in the last 3 months, 87% reported at least one occasion of unprotected vaginal or anal intercourse.

Findings Regarding Sexual Behavior from the Geographic Analysis

| | Greater MN | Twin Cities | EMA |
|---|---------------|----------------|-----|
| Sexually active in past year | 66% | 83% | 76% |
| Consistent condom use with steady partner | 89% | 74% | 72% |
| Consistent condom use with non-steady partner | 100% | 90% | 79% |
| Ever exchanged sex: | 19% | 27% | 26% |
| For money | 0% | 27% | 21% |
| For drugs | 67% | 39% | 50% |
| For shelter | 33% | 20% | 29% |
| For food | 0% | 10% | 0% |

Swanson Kroll, 2005

STIGMA

Participants in a study of 82 HIV positive women living in rural Georgia identified the following types of stigma they had experienced: being looked down on because they were HIV positive, internal stigma of feeling ashamed of their HIV status, and feeling that others were uncomfortable being with them. Younger women (ages 15 – 27) were more fearful of losing friends than women ages 40 and above. African American women were more likely to fear rejection by their families than White women, although White women were more likely to fear that their family would be hurt if anyone found out about their HIV status. The highest level of disclosure was to health care providers with 90% reporting that they disclose to all providers. Sixty-nine percent (69%) reported they disclosed their HIV status to all sexual partners. Sixty-five percent (65%) had disclosed to both parents, and 51% had disclosed to all siblings (Sowell et al., 1997).

Findings Regarding Stigma from the Geographic Analysis

Greater Minnesota participants were more likely to have lost the support of friends and family members due to their HIV diagnosis

| | Greater MN | Twin Cities | EMA |
|--|---------------|----------------|-----|
| Lost support of friends | 47% | 39% | 33% |
| Some family members no longer supportive | 38% | 19% | 15% |
| Lost support of entire family | 6% | 3% | 7% |

Swanson Kroll, 2005

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Findings Regarding Domestic Violence from Geographic Analysis

| Ever Had a Partner Who: | Greater MN | Twin Cities | EMA |
|-------------------------|---------------|----------------|-----|
| Threatened you | 25% | 43% | 30% |
| Verbally abused you | 34% | 51% | 35% |
| Pushed you | 28% | 48% | 33% |
| Hit you | 31% | 41% | 28% |
| Sexually abused you | 13% | 22% | 7% |
| Hit your children | 2% | 7% | 2% |

Swanson Kroll, 2005

The Geographic Analysis found that HIV positive persons in Greater Minnesota experienced high rates of domestic violence, but they were less likely to have experienced domestic violence compared to those living in the Twin Cities (Swanson Kroll, 2005).

SUMMARY OF THE NEEDS OF HIV POSITIVE GREATER MINNESOTANS

- Programs that address substance use and mental health:
 - HIV positive Greater Minnesotans were just as likely to believe that alcohol or drug use played a role in their becoming HIV positive compared to respondents living in the Twin Cities and EMA.
 - A greater proportion of Greater Minnesota respondents in the needs assessment rated their overall mental health as fair or poor.
 - A national study found that 38% of HIV positive respondents in rural areas thought about suicide in the last week.
- Programs that support the reduction of sexual risk behaviors:
 - Although Minnesota needs assessment data indicate that HIV positive persons in Greater Minnesota may engage in less unprotected sex, less sex trading, and have fewer STDs compared to the Twin Cities and EMA, the data also indicate that sexual risk behaviors do occur.
- Strategies to reduce HIV-related stigma:
 - Greater Minnesota needs assessment participants were more likely to have lost the support of family and friends due to their HIV diagnosis than participants living in the Twin Cities and EMA.
- Programs that address domestic violence and sexual victimization:
 - Greater Minnesotans who participated in the needs assessment reported concerning rates of violence and victimization.

Men Who Have Sex with Men.....

Men of All Races Who Have Sex with Men

SUBSTANCE USE

In 2004, the MDH and CDC collaborated to conduct the Twin Cities Men's Health Survey at the Twin Cities GLBT Pride Festival. Of 379 participants, 38% reported using non-injection drugs in the last 12 months. Ten percent (10%) reported using drugs once a day or more and 21% used drugs once a week or more.

Seven percent (7%) reported ever having injected drugs, with only 1% having injected drugs in the last year. Alcohol or drug use before or during last sexual encounter was more common among participants with multiple partners. Of 189 men who reported multiple partners, 30% stated they used alcohol or drugs in conjunction with their last sexual encounter compared to 13% of the 112 men who had single partners (MDH, 2004a).

National studies indicate that substance use is associated with engaging in high risk sexual behaviors. The Urban Men's Health

Study of 2,172 MSM (21% men of color) found that men who reported using multiple drugs were 2 times more likely to engage in high risk sexual behavior and 2 times more likely to be HIV positive than men who did not report polydrug use (Stall et al., 2001). The EXPLORE study involving 4,295 HIV negative MSM (27.5% men of color) found that men who reported using drugs in the 6 months before the study were significantly more likely than men who did not use drugs to report unprotected anal sex during that same time period, regardless of the serostatus of their partners. Heavy alcohol use was significantly associated with unprotected receptive anal sex with partners of unknown serostatus and HIV positive partners, as well as with insertive anal sex with partners of unknown status (Koblin et al., 2003a).

Recent evidence from the East and West coasts indicate that crystal meth use is increasing and that its use is contributing to increases in risky sex and higher rates of HIV and STD transmission among MSM. The effects of the drug increase feelings of self-esteem, confidence, sexual pleasure and invulnerability, which greatly lower inhibitions and often lead to unsafe sex practices (National Alliance of State and Territorial AIDS Directors [NASTAD] and National Coalition of STD Directors [NCSD], 2004).

The CDC and San Francisco Department of Public Health found that men reporting crystal meth use were more likely than non-users to be infected with HIV or other STDs. Specifically, crystal meth users were more than twice as likely to be HIV positive, 4.9 times more likely to be diagnosed with syphilis, 1.9 times more likely to test positive for chlamydia, and 1.7 times more likely to test positive for gonorrhea (NASTAD and NCSD, 2004).

Most Common Drugs Reported in Twin Cities Men's Health Survey

| Drug | % Who Used in Past Year |
|--------------|-------------------------|
| Marijuana | 80% |
| Poppers | 34% |
| Viagra | 16% |
| Mushrooms | 14% |
| Cocaine | 13% |
| Crystal meth | 12% |
| Ecstasy | 9% |
| Crack | 7% |

Data collected by the Center for HIV/AIDS Education Studies and Training (CHEST) at New York University indicate that in New York City, MSM who use crystal meth are 3 times more likely to contract HIV through receptive anal intercourse than MSM who don't use the drug. Fifty percent (50%) of the men using meth were HIV positive. The CHEST study also found that 62% of MSM party/club drug users reported significant and frequent use of crystal meth. This is an increase from the early 1990s when the usage rates ranged between 5% and 25%. Forty-five percent (45%) of men reporting crystal meth use were men of color (NASTAD and NCSD, 2004).

MENTAL HEALTH

Studies have shown that MSM have elevated rates of mental illness compared to men who only have sex with women (MSW) (Cochran and Mays, 2000a; Cochran and Mays, 2000b).

Another study of 2,881 MSM found that the 7-day prevalence of depression among this sample was 17%. Both distress and depression were associated with the lack of a domestic partner, not identifying as gay, experiencing multiple episodes of antigay violence in the previous 5 years, and high levels of community alienation. Distress was also associated with being of other than Asian/Pacific Islander ethnicity and experiencing early antigay harassment. In addition, depression was associated with histories of attempted suicide, child abuse, and recent sexual dysfunction (Mills et al., 2004).

| <i>Mental Illness in MSM and MSW</i> | | |
|--|------------|------------|
| | MSM | MSW |
| Lifetime suicidal ideation | 41% | 17% |
| Recurrent depression | 12% | 4% |
| Affective disorder | 22% | 9% |
| Major depression | 13% | 5% |
| Panic attacks | 6% | 2% |
| Diagnosed with at least one psychiatric syndrome | 29% | 15% |

Cochran and Mays, 2000a and 2000b

In addition, depression was associated with histories of attempted suicide, child abuse, and recent sexual dysfunction (Mills et al., 2004).

SEXUALLY TRANSMITTED DISEASES

Of the 301 Twin Cities Men's Health Study participants who reported having sex with a man in the past year, 6% (19) had been diagnosed with an STD in the past year. Of these, 74% (14) were White and 25% (5) were men of color (MDH, 2004a).

Minnesota experienced an increase in syphilis cases among MSM in 2002 and 2003. The number of cases decreased somewhat in 2004, but preliminary data for 2005 indicate that the cases are on the rise again. In 2004, there were 34 syphilis cases among gay/bisexual men compared to 71 cases in 2003, 56 cases in 2002 and 5 cases in 2001. Of the 34 cases reported in 2004, 80% were White, 71% lived in Hennepin County, average age was 37, and 32% were also HIV positive. During the first half of 2005, there were 60 syphilis cases reported among gay/bisexual men, and 28% were co-infected with HIV. The Internet was reported as the most common venue for meeting sexual partners (78%). Most (81%) of the MSM diagnosed with syphilis in 2005 reported having anonymous sex, and of these, 41% reported no condom use (Minnesota STD Surveillance System).

In 2004, there were 28 total cases of quinolone resistant gonorrhea cases in Minnesota, which is 5 times higher than the number of cases in 2002. Of these, 22 (79%) of the cases

were among MSM. Quinilone resistant gonorrhea is a strain that is resistant to quinilone, which is first line of treatment for gonorrhea; however, this strain is treatable with other medications. Eighteen percent (18%) of the MSM cases were also HIV positive. A majority of all cases reported having multiple sex partners in the previous 60 days (Minnesota STD Surveillance System).

SEXUAL BEHAVIOR

Of the 301 participants in the Twin Cities Men's Health Study (MDH, 2004a) who said they had sex with men during the last year, 189 men (63%) had multiple sexual partners in the previous 12 months, with 25% of these having 2 to 4 partners and 14% having 10 or more. Additionally, of those engaging in anal sex in the past 12 months, 47% overall reported having unprotected sex (72% of men with single partners, 42% of men with multiple partners).

In a study of 4,295 HIV negative MSM, 45% reported engaging in unprotected receptive anal sex with ejaculation, 48% reported engaging in unprotected receptive anal sex, and 55% reported engaging in unprotected insertive anal sex. Although the men with HIV positive partners reported less unprotected sex, 21% of men with HIV positive partners reported unprotected receptive anal intercourse, and 37% reported unprotected insertive anal sex. Men who had multiple partners were significantly more likely to report sexual risk behaviors than men who had a single primary partner. Almost 25% of men with multiple partners who were HIV positive reported engaging in unprotected receptive anal sex; however, they were more likely to engage in unprotected insertive sex. Most researchers have found that riskier behavior is associated with one primary partner. However, the baseline data from this study indicate that men with multiple partners of unknown and HIV positive status were having as much unprotected sex as men with one primary partner (Koblin et al, 2003).

Relationship Between HAART and Perception of Risk

Some areas of the United States have experienced increases in HIV infection among MSM in the last few years and studies have shown that the perception of risk has decreased since the advent of HAART. HIV negative men attending a gay pride festival felt that having intercourse with an HIV positive man who is taking HAART and has an undetectable viral load was no more risky than having intercourse with an HIV negative man or a man whose HIV status was unknown. They felt the greatest risk was having intercourse with an HIV positive man who was not taking HAART (Suarez et al., 2001). A study of 554 MSM found that only 6% of respondents agreed with the statement, "I am less concerned about having anal sex without a condom now that combination treatments are available," and 21% agreed that, "An HIV positive man whose level of virus in the blood has become undetectable is unlikely to transmit HIV to his

Reasons for Increase in Risky Behavior

Focus groups in California with 113 racially and ethnically diverse MSM identified the following 3 factors associated with increased risky behavior:

- ◆ More effective therapies have led to the perception that HIV is not as much of a threat as in the past
- ◆ MSM are communicating less about HIV, and there is less social support for safer sex
- ◆ There has been a shift in community norms with unsafe sex becoming more acceptable

Morin et al., 2003

partner." Scores on questions related to reduced HIV concern did not vary by HIV status of the respondents. Reduced HIV concern was an independent predictor of reporting unprotected anal sex, unprotected anal sex with an HIV positive partner, and the number of sexual partners. Reduced concern was more strongly related to unprotected anal sex and the number of sexual partners for HIV positive men than HIV negative men. The respondents also perceived unprotected anal or oral sex with an HIV positive partner to be less risky when the HIV positive partner was taking combination therapies and had an undetectable viral load. There was no difference related to this perception between HIV positive and HIV negative men (Venable et al., 2000).

Sex Workers

A study of 399 drug-using male sex workers, of which 55% self-identified as bisexual, 33% as gay, and 12% as heterosexual, found that condom use was inconsistent with all types of partners and varied by sexual orientation and HIV status. Heterosexually identified men were more likely to use condoms during anal sex with male casual partners than with male paying partners. HIV positive men were less likely to use condoms during vaginal or anal sex with female casual partners and during anal sex with male paying partners. The sample reported an approximate total of 20,000 sex partners within the last 30 days, with 10% of them being women (Williams et al., 2003).

Sexual Networks

A number of venues exist that, while not always being their primary function, serve as an environment for MSM to find sexual partners. Studies have found associations between the use of these venues and unprotected sexual activity. Circuit parties, which tend to occur at the same time and in the same cities each year and can attract more than 20,000 MSM from the local area and across the country, are one example of such a venue. From a sample of 295 gay and bisexual men who had attended a circuit party in the last year, Mansergh et al. (2001) found that 29% reported attending multiple sex parties during the circuit party weekend. Of these, 47% reported engaging in unprotected anal sex, and 24% reported engaging in unprotected anal sex with a serodiscordant or serostatus unknown partner. Of 137 men who had a primary partner, 27% had encounters with multiple sex partners during their most recent circuit party. Of these, 62% reported unprotected anal sex and 30% reported unprotected anal sex with a serodiscordant or serostatus unknown partner. The possibility of HIV and STD transmission among those who attend the parties and the subsequent transmission to partners in their home communities was identified as a public health concern by the researchers.

Data from the Urban Men's Health Study was analyzed to assess risk associated with MSM who attend sex venues according to type of venue: public cruising areas (park, beach, bookstore, restrooms), bathhouses (baths), or both cruising areas and baths (Binson et al., 2001). Of the total sample of 2,478 MSM, about half (1,331) reported going to a sex venue. Men who were younger, less educated, used party drugs, and reported unprotected sex with a nonprimary partner were more likely to attend sex venues. Men of color generally reported attending sex venues more than White men.

The study found that men who attended baths and those who attended both types of venues were more likely than men who only went to public cruising areas (cruisers) to be HIV positive, to have had an STD, and to report using party drugs. Men who attended both types of venues consistently reported more risky behavior, followed by those who attend baths

only; cruisers reported the least amount of risky behavior. Fifty percent (50%) of men who went to both types of venues reported unprotected anal sex with a nonprimary partner in the past year compared with 34% of men who attended baths and 20% of cruisers. Seventy percent (70%) of men who used both types of venues reported engaging in group sex (14.5% of these reported unprotected anal sex in group settings), compared to 52% of men who go to baths (9% unprotected anal sex in group settings), and 25% of cruisers (2% unprotected anal sex in group settings). HIV positive men and those reporting frequent drug use were more likely to engage in unprotected anal sex in a public setting (Binson et al., 2001).

The Internet has grown in popularity over time as a mechanism to meet sexual partners. Participants of a CCCAP-sponsored community forum with MSM identified Internet use as one of the top three co-factors contributing to HIV infection or transmission in the gay community (MDH, 2004b). National studies point to the association between Internet use and risk behaviors. Benotsch et al. (2002) found that among a sample of 609 men attending a gay pride festival, 34% reported having met a sexual partner through the Internet. These men reported higher rates of crystal meth use, as well as higher rates of unprotected receptive and insertive anal sex than men who did not report meeting partners online. Men meeting sexual partners online also reported have sex with more male partners in the previous 6 months (average = 8.38) than men not meeting partners online (average = 3.13). In another sample of 391 MSM seeking public STD services, 125 (32%) reported meeting a sexual partner over the Internet in the last year. These men were more likely to report having casual partners and to having sex with an HIV positive person in the last year compared to men who did not have online partners. HIV negative MSM with online partners were more likely than HIV negative MSM without online partners to have received money or drugs for sex in the past year (5% vs. 0%) and to report sex with an HIV positive person (17% vs. 7%) in the last year (Kim et al., 2001).

A study of 1,776 MSM found some differences between MSM participants and those who have sex with both men and women (MSM/W). Ninety-seven percent (97%) of the total sample reported that they had ever had sex with a person they met online. This was very similar across race/ethnicity, age and level of education. However, almost 100% of MSM reported having had sex with someone they met on the Internet compared to 84% of MSM/W. Almost all men had experience finding a sex partner through a chat room, and this process was used significantly more often by White than non-White men and by MSM than MSM/W. Eighty-six percent (86%) of the total sample reported seeking sex partners via the Internet at least once a week; MSM were more likely to do so than MSM/W, as were men over 30 compared to men under 30. The most popular place to meet sex partners after meeting online was a public restroom, particularly by MSM/W; followed by at partner's house; at participant's house; coffee shop or restaurant; and bar (Bull et al., 2004).

Sexual Orientation and Sexual Behavior

Although a review of studies suggested greater variance between sexual identity and sexual behavior in communities whose norms and values narrowly define gender roles and reject homosexuality as "unmanly," such as in African American and Latino cultures (Doll and Beeker, 1996), a recent study conducted in Houston found slightly different results. A survey of 1,494 African American, Asian, White and Latino men and women found the greatest lack of concordance in African American and White men. Of the 206 African American men interviewed, 49% who self-identified as heterosexual reported having sex with both men and women during the previous 3 months. Of 200 White men, 47% of those who identified as

heterosexual reported having sex with men and women. The percentages were much lower among Asian and Latino men, with only 17% of heterosexually identified Asians and 18% of heterosexually identified Latinos reporting sex with both genders. This study points to the need for prevention programs and clinical practices to ask questions about sexual behavior. Assumptions about behavior should not be made based on how an individual identifies their sexual orientation (Ross et al., 2003).

STIGMA

Antigay prejudice, discrimination and violence have existed throughout history, and have been sanctioned through the mechanisms of law and religion. Studies have shown that stigma leads gay, lesbian and bisexual persons to experience alienation, lack of integration with community, and difficulties with self-acceptance. Such stressors can lead to depression, substance use and suicidal ideation. Internalized homophobia has been shown to be a significant correlate of mental health issues, including depression and anxiety, substance use, and suicidal ideation. A relationship between internalized homophobia and self-harming behaviors, including sexual risk behaviors, is also suggested (Meyer, 2003).

Another study of 99 MSM (95% White) living in rural Pennsylvania found that 94% of participants thought their health care providers were somewhat or very supportive of people with HIV/AIDS. Sixty-one percent (61%) rated family acceptance of gays/bisexuals and people living with HIV/AIDS above a score of 3 on a 5-point scale. Community acceptance of gays/bisexuals and people living with HIV/AIDS was rated lowest, with only 35% rating community attitudes at a 3 or above. Men whose families were less tolerant of homosexuality and HIV were found to be less likely to engage in high risk sexual activity. Conversely, men whose health care providers were less tolerant of people with HIV/AIDS were more likely to engage in high risk sexual activity (Preston et al. 2004).

Stigma's Impact on HIV Risk

Stigma (including religious values and homophobia) experienced both within and outside the gay community, was identified as one of the top three co-factors contributing to HIV infection or transmission by participants in a CCCHAP-sponsored community forum.

MDH, 2004b

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Data from the Urban Men's Health Study suggest that MSM experience higher rates of physical or sexual abuse at the hands of an intimate partner. Twenty-three percent (23%) of MSM participants in the study reported intimate partner physical or sexual violence in the last 5 years compared to 8% of heterosexual men from a nationally representative sample who reported lifetime experiences of violence perpetrated by a partner. A nationally representative sample of married/cohabitating women found a 3% annual prevalence of severe violence and a 12% annual prevalence of total violence compared to the 22% of MSM who reported physical violence in the last 5 years. The Urban Men's Health Study found that there were no differences in the experience of abuse based on race/ethnicity or level of income. MSM with a graduate or professional degree were less likely to experience any type of partner abuse than men with a college degree or less. HIV positive men were more likely than HIV negative men to experience all types of battering except sexual abuse. (Greenwood et al., 2002).

Studies also point to a correlation between experiences of abuse and engaging in high risk behaviors. A telephone survey of 2,881 MSM found that men who had experienced partner violence in the past 5 years or childhood sexual abuse were more likely to engage in high risk sexual behavior than men who had not experienced abuse. Men who had experienced partner violence were also 1.5 times more likely to be HIV positive (Stall et al., 2003). In another sample of 608 men attending a gay pride festival, men who were sexually abused as children were more likely to have tested positive for HIV (40%) compared to men who were not sexually abused as children (19%). Sexually abused men were more likely to report tobacco, crack cocaine and meth use in the past 6 months. Additionally, a higher proportion of sexually abused men reported engaging in unprotected receptive anal sex with 2 or more partners in the last 6 months (28%) compared to men who had not been sexually abused as children (15%). Men with a history of childhood sexual abuse were more likely to have traded sex for money, drugs or a place to stay. Additionally, men who had been sexually abused as children were more likely to have been hit by a relationship partner as an adult compared to men with no history of childhood sexual abuse (Kalichman et al., 2004).

SUMMARY OF THE NEEDS OF MEN OF ALL RACES WHO HAVE SEX WITH MEN

- Programs that address substance use and its impact on HIV risk:
 - Substance use (both alcohol and drugs) is associated with unprotected anal sex.
 - Crystal meth users are more likely to be infected with HIV and/or other STDs.
- Programs that address the mental health needs of MSM:
 - Studies show that MSM have higher rates of mental illness than men who only have sex with women.
 - Depression was related to not identifying as gay, experiencing antigay violence, high levels of community alienation, and not having a partner.
- Programs that increase awareness of syphilis and increase access to syphilis testing:
 - Rates of syphilis cases in Minnesota are increasing among MSM, with 28% of cases during the first half of 2005 being co-infected with HIV.
- Programs that support the reduction of risky sexual behaviors, including strategies to reach men who meet partners via the Internet or public sex environments, and men who don't identify as gay or bisexual:
 - Most MSM diagnosed with syphilis in Minnesota identified the Internet as the most common venue for meeting sexual partners.
 - Most MSM diagnosed with syphilis in Minnesota reported anonymous sex, and 41% of these reported no condom use.
 - National studies also show an association between meeting partners over the Internet and greater rates of unprotected sex.
 - Some heterosexually identified men also have sex with men, and prevention messages targeting gay men may not reach them.
 - There is increased support in the MSM community for unsafe sex.
 - Reduced concern about HIV due to HAART is associated with unprotected sex.
- Strategies to reduce stigma related to HIV and sexual orientation:
 - Participants in a Minnesota community forum identified stigma as one of the top three co-factors related to HIV infection and transmission in the MSM community.

- Stigma leads some MSM to experience alienation, lack of integration with community, and difficulties with self-acceptance.
 - Internalized homophobia is associated with mental health issues, and a relationship with self-harming behaviors, including sexual risk behaviors, is suggested.
- Programs that address domestic violence and sexual victimization and their impact on HIV risk:
 - Studies show that MSM experience higher rates of intimate partner violence than heterosexual men and women.
 - MSM who experienced partner violence were more likely to engage in high risk sexual behavior than men who did not experience partner violence.
 - Childhood sexual abuse is associated with being HIV positive, drug use, and engaging in unprotected sex and trading sex.

Men of Color Who Have Sex with Men

The changing face of the HIV epidemic has had a disproportionate impact on racial/ethnic minority MSM, especially African Americans and Latinos. In Minnesota, while African Americans make up only 4% of the population, they account for 12% of new cases among MSM from 2002 through 2004. Similarly, Latino men make up only 3% of the state's population, and account for 11% of newly diagnosed cases among MSM during the same time period.

Race/ethnicity itself is not a risk factor for HIV infection; however it may act as a marker for other social and economic factors that are more prevalent within those communities, including homophobia, high rates of poverty and unemployment, and lack of access to prevention services and health care. Such factors may serve as barriers to receiving HIV prevention information or accessing HIV testing, diagnosis, and treatment (CDC, 2001).

Gay men of color often have to face both issues of racism and homophobia. Some cultures believe that same sex orientation does not exist within their culture; others are not accepting of homosexuality, or believe it to be deviant or sinful. Gay men of color often have to separate their life as a gay man from family and friends of their racial or ethnically defined culture. Men of color may also feel isolated and marginalized by the gay community. They may encounter such discrimination from White gay men; however, there are also stereotypes and prejudices between gay men of color of different racial or ethnic backgrounds. Overall, images and issues pertaining to people of color are often ignored in major gay media (Safe Zone Ally Program).

SUBSTANCE USE

Of the 379 participants in the Twin Cities Men's Health Study, 71 self-identified as men of color. There were no significant differences related to drug use found between White men and men of color. Eight percent (8%) of men of color and 7% of White men reported ever having injected drugs. Forty-two percent (42%) of men of color and 38% of White men had ever used non-injecting drugs (MDH, 2004a).

National studies indicate a high rate of substance use among men of color who have sex with men (MCSM) and an association between substance use and risky behavior. A study of 238 African American men (43% gay, 42% bisexual) in San Francisco found that 80% of the participants reported drinking alcohol in the past 6 months, with 20% frequently having 5 or more drinks at one sitting more than once a week. Eighty-four percent (84%) reported using recreational drugs, with 69% using weekly. Thirty-six percent (36%) had a history of injecting drug use. The most commonly used drugs were marijuana (60%), crack (54%), and crystal meth (22%) (Center for AIDS Prevention Studies and AIDS Research Center, 2001).

A New York City sample of 307 Latino MSM (Colombian, Dominican, Mexican and Puerto Rican) found that alcohol and drug use were positively associated with unprotected anal sex, particularly with casual partners. Sensation-seeking, self-worth, and machismo were related to substance use and unprotected anal sex (Dolezal et al., 2000). In a study of 110 Black and Latino MSM aged 50 or older, Jimenez (2003) found that 84% reported using alcohol just before or during sex in the last 6 months. The most commonly used drugs were marijuana, poppers, rock cocaine, and/or heroin. As part of a focus group, 38 Asian/Pacific Islander MSM (59% born outside of the United States, average length of time living in U.S.

was 15 years) reported the use of alcohol and drugs (speed, ecstasy, GHB) as a way to lose inhibitions and feel more confident. They also reported an association between club drugs and having casual sex and multiple partners. Drugs and alcohol seemed to expand the scope of partner preferences and increase sexual arousal, but clouded their judgment and memories about sexual acts. Many participants reported using drugs explicitly for enhancing their sex drive and potency (Nemoto et al., 2003).

One study found some differences in patterns of substance use between lesbian, gay and bisexual (two-spirit) Native Americans and their heterosexual counterparts. Two-spirit participants, on average, had their first alcoholic drink at a younger age than heterosexuals. Two-spirit participants did not differ from their heterosexual counterparts in respect to current drinking style or lifetime marijuana use, although they were more likely to have used illicit drugs other than marijuana (Balsam et al., 2004).

MENTAL HEALTH

Balsam et al. (2004) also found that two-spirit Native American participants scored higher than heterosexual participants on an overall measure of mental health symptoms, as well as specifically on measures related to anxiety and posttraumatic stress. Native Americans are unique in terms of the oppression and forced relocation they suffered as European immigrants were settling in this country. This population has experienced historical trauma, which is defined as the “cumulative emotional and psychological wounding over the lifespan and across generations, emanating from massive group trauma experiences.” Responses to historical trauma include depression, self-destructive behaviors, suicidal ideation and acts, anxiety, low self-esteem, anger, and difficulty recognizing and expressing emotions (Management Sciences for Health and HRSA, 2003). All of these responses can contribute to HIV risk behaviors.

A study of African American MSM, MSM/W, and heterosexual men found that high psychological distress was a predictor of risky sexual behavior for MSM and MSM/W. Every 10-point increase in psychological distress was associated with a 2.9% increase in risky sexual behavior (Myers et al., 2003).

Depression Among Immigrant MSM

A study of 912 Latino MSM (77% immigrants) found that in the last 6 months:

- ◆ 80% had experienced sadness and depression at least once or twice
- ◆ 22% experienced depressed mood many times
- ◆ About half experienced feelings of anxiety
- ◆ 17% reported suicidal ideation at least once or twice

Díaz et al., 2001

A study of 190 Asian/Pacific Islander MSM (75% immigrants) found that:

- ◆ 45% were at risk of clinical depression
- ◆ 29% were at high risk of clinical depression

Yoshikawa et al., 2004

SEXUALLY TRANSMITTED DISEASES

Of the 71 men of color who participated in the Twin Cities Men’s Health Study, 5 (7%) reported that they had been diagnosed with an STD in the past year (MDH, 2004a). Of the 34 syphilis cases reported among Minnesotan MSM in 2004, 20% were men of color. Of the 22 quinolone resistant gonorrhea cases reported among MSM in Minnesota in 2004, 5 were men of color (Minnesota STD Surveillance System).

SEXUAL BEHAVIOR

Only 75% of the men of color who participated in the Twin Cities Men's Health Study identified as gay or bisexual, compared to 91% of White participants. Of the 71 men of color, 69% reported having sex with a man in the past year. Of the 25 men who reported engaging in insertive anal sex during their last sexual encounter, 33% reported that they did not use condoms. Of the 21 men who reported engaging in receptive anal sex during their last sexual encounter, 33% reported not using condoms (MDH, 2004a).

Perception of Risk

A study of 395 Latino MSM in New York City (65% foreign-born) found that respondents who agreed with the statement, "I will get HIV sooner or later" were almost 3 times more likely to report unprotected receptive anal sex with at least one partner of different or unknown HIV status in the past 6 months than those who disagreed with the statement. Those who agreed with the statement, "I will let a guy f*** me if he has undetectable viral load" were more than 5 times more likely to report having unprotected receptive anal sex with a partner of different or unknown serostatus than those who disagreed with the statement (Muñoz-Laboy et al., 2005).

Sexual Orientation and Sexual Behavior

Because the lack of acceptance of same sex orientation is so strong within some cultures, there are a number of men of color who engage in sexual behavior with other men, but do not identify themselves as being either gay or bisexual. Often they are in relationships, or also have sexual intercourse, with women. This poses an HIV prevention issue not only for men who have sex with men, but also for the women with whom they are having sex with. Recent studies indicate the need to expand prevention programs to reach men who don't identify as gay but engage in same sex behavior. It is difficult to reach these men with targeted prevention messages

because they do not frequent gay clubs or other hangouts, and do not read gay-oriented media.

In a study of 110 African American and Latino MSM aged 50 or older in Chicago, 52% self-identified as mostly or completely gay, 29% identified as bisexual, and 16% as mostly or completely straight. About 40% had been or were currently married to a woman. Of the total sample, 90% of the men reported sexual activity with a man during the past 3 months. Of these, 20% reported unprotected receptive anal sex with male partners during the previous 3 months. Thirty-six percent

(36%) of the sample reported sexual activity with a woman during the last 3 months, with 72% reporting unprotected vaginal sex. In addition, 84% reported drinking alcohol just before or during sex, and substantial proportions reported drug use. In spite of these risky behaviors, 74% of the participants believed they had no chance or a low chance of contracting HIV (Jimenez, 2003).

Risk Behavior of Heterosexually Identified Men

In a study of 90 HIV infected and 272 HIV negative African American men who self-identified as heterosexual, the following risk behaviors were reported:

| Risk Behavior | HIV+ | HIV- |
|--|------|------|
| Had anal sex with men | 31% | 16% |
| Inconsistently used condoms during anal sex with men | 100% | 67% |
| Inconsistently used condoms during anal sex with women | 46% | 37% |

Wohl et al.. 2002

Sexual Networks

Findings from a sample of 303 Asian/Pacific Islander MSM indicate high rates of sexual mixing with men of other races/ethnicities. Approximately two thirds of sex partners were non-Asian/Pacific Islander men (44% White, 12% Latino, 8% multiethnic, and 3% African American). The study also found that Asian/Pacific Islander MSM were more likely to have unprotected anal intercourse with an Asian/Pacific Islander partner compared to a non-Asian/Pacific Islander partner. These data provide some evidence that HIV prevalence among Asian/Pacific Islander MSM may have remained low because they are more likely to engage in unprotected sex within the Asian/Pacific Islander MSM population, which has a lower pool of infection compared to other MSM populations (Choi et al, 2003).

A survey was conducted with 1,026 Latino MSM who use the Internet to meet partners. The study found that men who scored high on a scale measuring the degree to which they like the opportunity for interaction via Internet before having real life interaction were not more likely to have phone sex prior to meeting in person. However, when on the phone, they were more likely to discuss and decide that they were going to have unprotected sex than those who scored low on this scale (Ross et al, 2004).

In a study conducted with 21 African American MSM (24% self-identified as gay), 71% reported having sex with women in the past year. When asked how they identified gay men in their community, the participants tended to rely on stereotypes (e.g., men with a certain “flamboyance”, by the way they act, by their mannerisms); however, they expressed a preference for “straight-seeming” men. When asked to describe circumstances in which they would approach a “straight-seeming” man and how they determine if he was also an MSM, two techniques emerged. Older men reported attending sex clubs that usually took place in an apartment, were run on a fee-for-service basis, and often involved drug use and dealing. Sexual interactions in these sex clubs were sometimes paid for with drugs. Younger men reported using the Internet and phone services to find new sex partners. When asked about race of sexual partners, with the exception of some paying partners, all sexual partners were reported as being African American (Miller et al., 2005).

Sex Trading

A study of 367 drug-using MSM (58% African American, 13% Latino, 30% White) found that 63% of the total sample engaged in sex trading for money, drugs, food or shelter.

There were no differences by race/ethnicity.

- ◆ MSM who had used crack cocaine in the past week were 3.7 times more likely trade sex.
- ◆ MSM who injected drugs in the past 30 days were more likely to trade sex.
- ◆ MSM who self-identified as heterosexual, bisexual or transgender were 2.2 times more likely to trade sex compared to those who identified as gay.
- ◆ MSM who had experienced childhood sexual and/or physical abuse were 2.6 times more likely to trade sex.
- ◆ MSM who were homeless were 1.9 times more likely to trade sex.

The authors recommend that interventions targeting MSM who trade sex may need to address drug dependence and economic hardship in order to reduce HIV risk behaviors. They also note that gay-identified programs may not reach sex trading MSM who do not identify as gay.

Newman et al., 2004

STIGMA

Homophobia

Numerous studies indicate high levels of stigma surrounding homosexuality in communities of color. When a sample of African American and Latino men over age 50 were asked to rank the severity of social stigma associated with being gay, 58% ranked it as high. Fifty-three percent (53%) of the respondents acknowledged being open about their same sex relationships with between less than one half and none of their family members (Jimenez, 2003). From their sample of 21 African American MSM, Miller et al. (2005) also learned that respondents tried to blend into their communities by “dressing down” for safety reasons and in order to conform to social expectations of the masculine role. Even men who openly identified as gay made efforts to downplay their sexual identity due to fear of possible violence or being viewed negatively. Looking masculine and straight was important to most of the participants, who stated that they would be frightened and mortified if they were “outed.”

A study of 912 Latino gay/bisexual men found that the three most common experiences of homophobia during childhood were hearing that gays are not normal people, hearing that gay people grow up to be alone, and a deep feeling that the respondent’s homosexuality hurt and embarrassed his family. Sixty-four percent (64%) of the men reported having to pretend to be straight at some point in their adult lives, 29% had to move away from family or friends in order to live as gay men, and 20% reported some form of police harassment in relation to being gay (Díaz et al., 2001). Carballo-Diéquez et al. (2002) describe that among Latino men, the significance attached to insertive anal sex is different than that attached to receptive anal sex. The insertive role is associated with the active and masculine role. Being the receptive partner is associated with being passive and “feeling” or “acting like” a woman. The passive role is more associated with shame, stigma and loss of masculinity (Carballo-Diéquez et al., 2002).

Being gay is also strongly stigmatized by most Asian/Pacific Islander families and communities. The family, and the support it provides, is very important in Asian/Pacific Islander communities. Asian/Pacific Islander MSM may be forced to choose between remaining closeted in order to be with their families, or coming out and losing the support or acceptance of their families. In order to stay within the family structure, some Asian/Pacific Islander MSM will marry and have hidden sexual relationships with men (Chng et al., 2003).

Historically, the concept of two-spirit in Native American communities related to a middle gender, or people who occupied a social and spiritual position somewhere in between men and women. In most tribes, these people were held in high esteem within the community. (National Native American AIDS Prevention Center [NNAAPC], 2003). The use of the term two-spirit in the Native American community has been an attempt by Native American GLBT activists to reclaim what in many Native American cultures was an acceptance of more than two gender roles. NNAAPC reports that, “while some Native Americans may know of alternative gender roles and sexualities within their tribes, they may not embrace these roles as acceptable. Native American individuals and communities are just as likely to exhibit the same type of homophobia prevalent in mainstream society.” (NASTAD, 2004).

Racism and Anti-immigrant Discrimination

In addition to homophobia, MSM of color experience other types of discrimination, including racism and anti-immigration discrimination. Men of color often experience these types of discrimination within the gay community.

Through in-depth interviews, 23

Asian/Pacific Islander MSM reported that the most common type of discrimination they experienced was racism, followed by homophobia, discrimination based on stereotypes of passivity and submission, and anti-immigrant discrimination.

Interviewees reported experiencing discrimination most often within the gay

community and in public settings. They also encountered discrimination within their families (Wilson and Yoshikawa, 2004). Racism is experienced in subtle forms, such as there being low visibility of Asian/Pacific Islanders in gay media, being held to White standards of attractiveness, and being considered sexual objects by White gay men (Nemoto et al., 2003). Another study of 192 Asian/Pacific Islander MSM found that experiences of discrimination were associated with higher levels of depressive symptoms (Yoshikawa et al., 2004).

In their study of 912 Latino gay/bisexual men, Díaz et al. (2001) also found that experiences of racism were less frequent than homophobia and occurred most often in adulthood. The authors note that 72% of respondents were immigrants and many did not grow up in the United States as an ethnic minority. Sixty-two percent (62%) reported having been sexually objectified in the gay community due to their race or ethnicity, and 26% reported feeling uncomfortable in places primarily frequented by White gay men.

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

A community based sample comparing two-spirit and heterosexual Native Americans found that 40% of two-spirit participants reported experiencing childhood physical abuse at the hands of a parent or caretaker compared to 20% of the heterosexual participants. Although two-spirit participants did not report significantly higher rates of other types of trauma, the percentages of those who had experienced childhood sexual abuse (40%) and lifetime sexual assault (48%) were higher than for the heterosexual participants. A similar percentage of two-spirit (28%) and heterosexual (24%) participants reported ever having been physically abused by a partner (Balsam et al., 2004).

In a qualitative study involving 23 HIV positive African American and Latino MSM, the respondents noted that the cultural silence around sex made it unlikely that sexual abuse as a child would be disclosed. While men acknowledged that they were aroused by early sexual encounters, none felt that they were in control or had the option to say no. Also, the participants had always heard sex being described as something that was highly sought after by men and they felt a societal and gender-based pressure to think of any sexual experience, including abuse, as being pleasurable. Vulnerability to abuse continues into adulthood for some men. Several of the participants reported being with current partners who were physically and emotionally abusive. Several Latino men stated that young Latino men who do not speak English or who have recently come to the United States often are in need of a place to sleep, food, and/or clothing and are vulnerable to being exploited sexually (Williams et al., 2004).

Discrimination and Risk Behavior

Experiences of discrimination (racism, homophobia, and/or anti-immigrant) and low levels of conversation with family members about their experiences of discrimination was associated with higher levels of unprotected anal sex.

Yoshikawa et al., 2004

SUMMARY OF THE NEEDS OF MEN OF COLOR WHO HAVE SEX WITH MEN

- Programs that address substance use and its impact on HIV risk:
 - Alcohol and drugs use were associated with unprotected anal sex in a study of Latino MSM.
 - Alcohol and drugs were used by Asian/Pacific Islander MSM to reduce inhibitions and feel more confident. Club drugs were associated with having casual sex and multiple partners.
 - MSM who used crack cocaine or injected drugs were more likely to engage in sex trading compared to other drug-using MSM.
- Programs that address mental health issues and their impact on HIV risk:
 - Psychological distress was associated with an increase in risky sexual behaviors in a study of African American MSM and MSM/W.
 - Immigrant Latino and Asian/Pacific Islanders reported high rates of depression.
- Programs that support the reduction of sexual risk behaviors, including programs targeting heterosexually identified men who have sex with men:
 - Men who identify as heterosexual and have sex with men and women reported high rates of unprotected sex with both men and women.
 - Men who identify as heterosexual, bisexual or transgender were more likely to engage in sex trading than those who identify as gay.
 - Reduced concern about HIV due to HAART was associated with unprotected receptive anal sex with partners of different or unknown serostatus.
- Programs that assist individuals in achieving financial independence:
 - Men who were homeless were more likely to engage in sex trading.
- Strategies to reduce stigma related to sexual orientation, race/ethnicity, and immigration:
 - High levels of stigma related to homosexuality exist in communities of color.
 - Latino and Asian/Pacific Islander men reported being sexually objectified by White MSM.
 - Low visibility of Asian/Pacific Islanders in gay media.
- Programs that address domestic violence and sexual victimization and their impact on HIV risk:
 - Two-spirit Native Americans experienced higher rates of childhood sexual and physical abuse than their heterosexual counterparts.
 - Men who were sexually abused as children felt that it would be unlikely that a child would disclose this type of abuse.
 - MSM who experienced childhood sexual and/or physical abuse were more likely to engage in sex trading.

Young Men Who Have Sex with Men

Developmentally, adolescence is a time when people are more likely to experiment with sex and drugs, take risks, and believe themselves to be invulnerable. Youth are also struggling to develop and integrate their adult identities. In addition to all of the challenges faced by adolescents, young gay and bisexual men also have to deal with exploring a sexuality identity that involves feelings and behaviors that are not generally accepted by the society at large. Unlike many of their heterosexual counterparts, gay youth often don't have built-in support systems or assurances that family and friends will not reject them. Additionally, gay and bisexual youth have been confronted since childhood with negative attitudes towards homosexuality through the media and social institutions (Ryan and Futterman, 1997).

HIGH INCIDENCE OF HIV AMONG YOUNG MSM OF COLOR

Recently the Young Men's Survey, a study measuring HIV incidence among young men who have sex with men, found a high prevalence and incidence of HIV and associated risks among young MSM (CDC, 2001). Among young MSM ages 15 – 22, the prevalence of HIV infection was 7.2%, increased with age, and was higher among Blacks, Hispanics, and men of mixed race than among Whites or Asians/Pacific Islanders. These findings and the high prevalence of unprotected anal intercourse during the preceding six months (41%), suggest that HIV incidence was high among these young men. The estimate of HIV incidence was 3% overall, 4% among Blacks and 5% among men of mixed race. Among young MSM aged 23 - 29, prevalence was 7% for Whites, 14% among Hispanics, and 34% among Blacks. Incidence among this age group was 4% overall, 3% among Whites, 4% among Hispanics, and 15% among Blacks.

Young Black Men Who Have Sex with Men

Further analysis was conducted on the data gathered from 920 young Black MSM who participated in the Young Men's Survey (CDC, 2002). Sixteen percent (16%) of the 920 young Black MSM were HIV positive, and almost all of those who tested positive (93%) were unaware of their infection. Of those who had not known they were infected, 71% stated prior to knowing the results that there was no chance, or it was very unlikely or unlikely that they were infected with HIV. Forty-two percent (42%) perceived that they were at low risk of ever becoming infected. Of the total sample, 64% had previously tested for HIV, but not many tested frequently. Of the 336 men who had never had an HIV test before, the reasons they gave for not testing were: they thought they were at low risk for HIV (45%), fear of learning the results (41%), and fear of needles (21%).

SUBSTANCE USE

Several studies that included young MSM from Minneapolis found an association between substance use and risky sexual behavior. The Community Intervention Trial for Youth (CITY) Project interviewed 3,075 racially and ethnically diverse young MSM ages 15–25 in 13 urban areas in the United States, including Minneapolis/St. Paul. Of the 2,624 men who reported sexual contact with a male partner in the last 3 months, nearly one third reported being high the last time they had sex with a non-main partner. Those who were high were 60% more likely to have engaged in unprotected receptive anal sex with a non-main partner. This did not vary based on race/ethnicity, age, or self-identification of sexual orientation.

Between 1989 and 1997, trends in drug use and their impact on unprotected anal intercourse were monitored in Minneapolis through a study of 9 annual cross-sectional cohorts. The entire sample included 877 men (79% White) ages 13-21 who self-identified as gay, bisexual or men who have sex with men. Overall, 34% of respondents reported unprotected anal intercourse with any of their last 3 sexual partners during the previous year. Alcohol, marijuana, cocaine, amphetamines, barbiturates, heroin, LSD, volatile nitrates, tranquilizers, and methaqualone were associated with unprotected anal intercourse. The study found an increase in amphetamine, marijuana and cocaine use in 1997 compared to 1994. The study also found that White YMSM drank more than all participants of color (85% vs. 78%) and African Americans (85% vs. 73%). White YMSM also used more alcohol before or during sex than participants of color (61% vs. 53%) (McNall and Remafedi, 1999).

A sample of Massachusetts high school students found that gay, lesbian and bisexual (GLB) students were significantly more likely than their heterosexual peers to have used drugs in the past 30 days, and in their lifetime. In the past 30 days, 58% of GLB students had used marijuana and 19% had used cocaine compared to 32% and 3% of heterosexual students, respectively. In their lifetime, GLB students were more likely to have used miscellaneous drugs (61%) and to have injected drugs (24%) compared to heterosexual students (27% and 2%, respectively). While alcohol use during the last 30 days was greater among GLB youth, the difference was not statistically significant (Blake et al., 2001).

MENTAL HEALTH

As children and adolescents are developing, most feel awkward and embarrassed by sexual conflicts. GLBT youth may have an even more difficult time since their sexuality is not adequately acknowledged. Although the coming out process can occur in adulthood, most GLBT youth have an awareness of being different. Many GLBT youth have feelings of self-hatred, depression and anxiety as a result of living in a society that condemns and rejects people who are different from the majority (Gay and Lesbian Medical Association, 2001).

Several local studies indicate high rates of suicide attempts among young MSM. Data from the Minnesota Adolescent Health survey found that adolescent males who identified as gay or bisexual were 4 times more likely to report suicidal intent and 7 times more likely to report suicide attempts than their heterosexual male peers (Remafedi et al, 1998). Another study of 255 YMSM ages 15-25 in Minneapolis/St. Paul found that one third of all respondents reported at least one lifetime suicide attempt and 5% attempted suicide in the past year. Ingestion of drugs and cutting or stabbing were the most common methods used,

Other Findings from the CITY Project

Additional findings from the CITY Project indicate that:

- ◆ Men in their 20s were more likely than adolescents to report being high during intercourse
- ◆ Young MSM born in the United States were more likely than immigrants to use substances
- ◆ Young men who had sex with men and women were more likely to be high during sex than men who only had sex with men
- ◆ Self-identification as bisexual, straight or questioning was not related to being high during sex
- ◆ Substance use was also related to having multiple male sex partners, trading sex, and weaker peer support of condom use

Stueve et al., 2002

accounting for 82% of all attempts. When controlling for other variables, only not being in school was associated with previous suicide attempts (Remafedi, 2002). Additionally, a study analyzing data from American Indian and Alaska Native male youth ages 12–19 in Minnesota and Alaska who completed the Indian Adolescent Health Survey found that 44% of gay and heterosexual youth believed that “life is hopeless.” Gay adolescents were significantly more likely to have both thoughts of suicide (47% vs. 24%) and/or to have attempted suicide (23% vs. 11%). Gay adolescents were less satisfied with life, and had a greater history of being depressed or sad (Barney, 2003).

Analyses of data from the Young Men’s Study in Seattle of 429 young MSM ages 23–29 found that 23% reported symptoms that classified them as depressed. There were no differences between depressed and non-depressed respondents based on age, race or employment status. Sexual characteristics associated with depression included having more than 50 lifetime male partners, not self-identifying as gay or bisexual, having first episode of anal sex before age 18, ever being forced to have sexual contact, and ever having been physically assaulted or threatened because of their sexual orientation. Reporting 3 or more male sex partners in the last 6 months was also associated with depression, but reporting unprotected anal sex with a casual partner in the last 6 months was not (Perdue et al., 2003).

SEXUAL BEHAVIOR

The CITY Project found a non-significant increase in unprotected anal intercourse among Minneapolis/St. Paul participants. In 2001, 30% of the Twin Cities sample reported unprotected anal intercourse in the previous 3 months. In 2002, the proportion increased slightly with 34% of Twin Cities participants reporting unprotected anal intercourse. Across study sites, approximately one third to one half of all men who had unprotected anal intercourse reported having at least one sex partner who was serodiscordant or of unknown HIV status in 2001 and 2002 (Guenther-Grey et al., 2005).

In their study of high school students in Massachusetts, Blake et al. (2001) found that GLB students were

significantly more likely than heterosexual students to report lifetime and recent sexual intercourse, and to report using drugs or alcohol before last sexual intercourse. Among sexually active youth, GLB students reported an earlier age of first intercourse, more lifetime and recent sexual partners, and a higher frequency of either being or getting someone pregnant in comparison to heterosexual students.

Sexual Networks

National studies indicate that the sexual networks of young MSM impact their likelihood of becoming infected with HIV. A study of 438 racially and ethnically diverse young MSM ages 23–29 in Los Angeles found that 87% of Asian/Pacific Islander participants reported having

Reasons for Not Using Condoms

Of the 920 young Black MSM who participated in the Young Men’s Survey, there were 79 persons who were unknowingly HIV positive and had engaged in unprotected anal sex in the previous 6 months. The following reasons were given for not using condoms:

- ◆ They knew they were HIV negative (24%)
- ◆ They knew their partners were HIV negative (20%)
- ◆ They thought their partners were at low risk (35%)
- ◆ There were no condoms available (43%)

CDC, 2002

sex partners of a different race/ethnicity (62% of whom were White) compared to 73% of African Americans, 48% of Latinos, and 37% of Whites. Twenty-seven percent (27%) of African Americans, 12% of Latinos, 3% of Whites and 2% of Asian/Pacific Islanders reported that the majority of their sexual partners in the past 12 months were African American. The researchers note that the tendency among African American MSM to have more partners who are African American, combined with the relatively small size of the African American MSM population and the high HIV prevalence and incidence among this population in Los Angeles, could facilitate the spread of HIV among African American MSM (Bingham et al., 2003).

A study of 496 young Asian/Pacific Islander MSM ages 18–29 in San Francisco found that 20% had ever attended a circuit party. The odds of being HIV infected were more than 6 times greater among participants who had attended a circuit party compared to those who had not (Choi et al., 2004).

Factors Associated with Unprotected Anal Intercourse

A study of 253 Asian/Pacific Islander MSM ages 15–25 found that 33% of participants reported unprotected anal intercourse in the previous 3 months. Participants were more likely to engage in unsafe sex with main partners than with non-main partners. The authors felt that one possible explanation for why men who self-identify as gay or bisexual are more likely to engage in risky behavior is that they feel more relationship to the mainstream gay community where they can enjoy more sexual freedom than in the general Asian/Pacific Islander community. However, they may not receive adequate prevention messages from the gay community because the messages are not culturally sensitive and Asian/Pacific Islander men don't appear in visual materials. The study recommends that prevention programs targeting young Asian/Pacific Islander MSM should look at steady relationships as a possible source of HIV transmission and promote discussion of sexual risk with main partners and joint testing of couples. The promotion of peer norms to practice safe sex is also important as participants who felt that their peers engaged in safer sex were more likely to do so (Choi et al., 2002).

Having ties to ethnic community appears to be very important in reducing risk among young Latino MSM. A study of 475 young Latino MSM, ages 15–25 showed that young men who were attached to their ethnic community were 40% less likely to engage in any unprotected anal intercourse in the 3 months prior to the survey. Even more dramatic was the finding that young men who have ties to their ethnic community were 60% less likely to engage in unprotected anal intercourse with a non-primary partner (O'Donnell et al., 2002).

Relationship Between HAART and Perception of Risk

A study of 906 young MSM in New York and Seattle found that 45% of all participants had heard of HAART. Of the 364 men who had heard of HAART, 10% agreed with the statement that the new treatments are a cure for AIDS. Nine percent (9%) agreed that, with the advent

Factors Predicting Unsafe Sex among Asian/Pacific Islander Young MSM

The following factors were found to predict unsafe sex:

- ◆ Having multiple sex partners in the last 3 months
- ◆ Having been tested for HIV
- ◆ Feeling that peers don't endorse safer sex
- ◆ Self-identifying as gay or bisexual

Choi et al., 2002

of the new treatments, they were less concerned about becoming infected or with the seriousness of HIV. Very few agreed that it was OK to have unprotected sex with someone on HAART (0.8%) or with someone with a low viral load (0.6%). Those who expressed lower concern with becoming infected or the seriousness of HIV infection were more likely to report 10 or more male partners in the past 6 months. There was no association found between lower concern and having unprotected insertive or receptive anal sex (Koblin et al, 2003b).

Sexual Orientation and Sexual Behavior

A study of 3,267 male youths ages 12–18 in Massachusetts found incongruence between sexual behavior and sexual identity. Almost all males with only female partners identified themselves as heterosexual, but 45 young men reporting only heterosexual activity self-identified as gay or bisexual. Nearly half of the young men who had male sexual partners self-identified as heterosexual. The youth with bisexual experience were found to have substantially higher levels of risk than males with either heterosexual or same sex only experience (Goodenow, 2002).

HOMELESSNESS

A survey of homeless youth and young adults in Minnesota conducted one night in October 2003 found that among youth ages 8–17, 6% self-identified as bisexual, 3% as gay or lesbian, and 7% as unsure of their sexual orientation. Among homeless young adults ages 18–20, 6% self-identified as bisexual, 4% as gay or lesbian, and 3% as questioning (Wilder Research, 2005).

A study of homeless youth ages 13–21 in Seattle found some similarities and some differences in the experiences of GLBT and heterosexual youth. Both groups cited leaving home due to family conflict, a desire for freedom or difficulties with a family member. GLBT youth were more likely to leave home because of physical abuse in the home. Twelve (12) GLBT youth left home due to conflict with parents over their sexual orientation. The study also found that gay/bisexual homeless male youth experienced higher levels of physical victimization in the last 3 months than heterosexual males, and reported being sexually victimized by an average of 6.74 people since leaving home compared to an average of 0.17 perpetrators against heterosexual

Homeless Youth and Survival Sex

A study of 542 male street youths in Montreal, Canada found that:

- ◆ 28% reported involvement in survival sex
- ◆ 41% had only male paying clients, 27% had both male and female clients, and 32% had only female clients
- ◆ In contrast, 1% had only male non-paying partners, 38% had both male and female partners, and 64% had only female partners
- ◆ Youth mostly engaged in oral sex in the context of survival sex
- ◆ Of 20% who reported engaging in anal sex with male clients, 26% reported unprotected anal sex
- ◆ Youth with a history of sexual abuse were 4 times more likely to be involved in survival sex
- ◆ Youth who had been homeless less than 6 months and reported IDU sexual partners were 6.4 times more likely to engage in survival sex than youth who had been homeless the same amount of time but did not have IDU sexual partners

Haley et al., 2004

males. GLBT homeless youth also had almost twice as many lifetime sexual partners than their heterosexual peers, and more than twice as many GLBT youth reported not always using protection during intercourse (Cochran et al., 2002).

STIGMA

Due to the constant exposure to heterosexist messages in the media and social institutions, some gay and bisexual young men question the “normality” of their attraction and feelings for members of the same sex (Harper and Schneider, *American Journal of Community Psychology*, 2003). This stigma is reinforced as they learn about discriminatory laws that deny them the same rights as heterosexuals, such as the right to serve in the army and to marry (Harper and Wilson, *The Community Psychologist*, 2003).

A number of studies show that GLBT youth suffer experiences of harassment, discrimination and violence due to their sexual orientation. A nationwide survey found that 83% of GLBT students reported verbal harassment at school. Seventy-four percent (74%) of transgender students reported sexual harassment and 21% of all GLBT youth reported being punched, kicked or injured with a weapon at school because of their sexual orientation (Kosciew and Cullen, 2001). A study of 1,248 gay and bisexual men ages 18–27 in Phoenix and Houston found that 37% of participants reported experiencing verbal harassment during the previous 6 months because of their sexual orientation. Eleven percent (11%) reported discrimination (such as in housing, employment, insurance) and 5% reported physical violence. Men who were ages 18–21, men who were more open about their sexual orientation, and HIV positive men most often reported these events (Huebner et al., 2004).

Quote from African American MSM

“It teaches you how to...be schizophrenic, really. You act this way here, then you act this way here...if you are with your sisters, you act soft. It’s when you’re going to work, be professional. You wear so many different masks...When you come home and you’re all alone and you look in the mirror, you have to look deep to find out who you really are and make sure that you’ve maintained that little piece of who you really are.”

Kraft et al., 2000

Experiences of GLBT High School Students

GLBT high school students in Massachusetts were more likely than heterosexual students to experience harassment, discrimination and violence.

| | GLBT | Straight |
|---|------|----------|
| Missed school for personal safety reasons | 50% | 20% |
| Been threatened or injured with a weapon | 28% | 7% |
| Had property stolen or damaged | 52% | 28% |

Blake et al., 2001

them in coming to terms with what it means to be gay, and appropriate behavior according to the setting (Kraft et al., 2000).

Interviews and focus groups held with 15 gay, lesbian and bisexual Asian youth between the ages of 15 and 24 living in Canada highlighted the homophobia that exists in Asian cultures, and how that affected the youth. Participants reported that homophobic comments and jokes are frequently made. Many felt that coming out was not an option because the position of their family in the community would be affected. For those that had come out, their sexual orientation was often viewed as a temporary phase, or they were told not to display their homosexual behaviors in public. Some parents withdrew financial support. Another issue discussed by participants was the negative stereotypes of Asian gay men. Many felt that they are portrayed as passive, submissive, exotic, or someone looking for a White sugar daddy. They noted that the gay community is defined by White standards of beauty, such as being buff, while Asian men more often have smooth, thin bodies (Poon and Ho, 2002).

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

A study assessing differences in self-perceived health status between gay adolescent Native American males and their heterosexual counterparts found that gay adolescents were more likely to have been both physically and sexually abused. Thirteen percent (13%) of gay adolescents had been sexually abused compared to 2% of heterosexual participants. Seventeen percent (17%) of gay participants had been physically abused compared to 8% of the heterosexual males (Barney, 2003).

Studies have shown that abuse is linked to HIV infection and depression. Analyses of data from the Young Men's Study in Seattle of 429 young MSM ages 23–29 found that 29% of respondents reported symptoms that classified them as depressed. Sexual characteristics associated with depression included, among others, ever being forced to have sexual contact, and ever having been physically assaulted or threatened because of their sexual orientation (Perdue et al., 2003). In another survey of 425 young MSM ages 17–22 in San Francisco and Berkeley, 35% reported ever being forced to have sexual contact. Among Whites and Latinos, but not Blacks, being forced to have sex was associated with HIV infection (Valleroy et al., 2000). As reported earlier in this section, a history of sexual abuse has also been shown to be associated with survival sex among homeless male youth (Haley et al., 2004).

SUMMARY OF THE NEEDS OF YOUNG MEN WHO HAVE SEX WITH MEN

- Programs that address substance use and its impact on HIV risk:
 - Several studies found an association between substance use and unprotected sex.
 - Substance use was associated with having multiple male partners, trading sex, and weaker peer support of condom use.
 - GLB high school students were significantly more likely to have used drugs in the past 30 days and in their lifetime compared to heterosexual students.
- Programs that address mental health issues and their relationship to HIV risk:
 - Many GLBT youth have feelings of self-hatred, depression and anxiety as a result of living in a society that condemns and rejects people who are different from the majority.

- Several local studies indicate high rates of suicide attempts among young MSM.
 - Characteristics found to be associated with depression among young MSM included having more than 50 lifetime male partners, not identifying as gay or bisexual, having first episode of anal sex before age 18, ever being forced to have sexual contact, and ever having been physically assaulted or threatened because of sexual orientation.
- Programs that support the reduction of risky sexual behaviors, including programs targeted at youth with bisexual experience:
 - GLB high school students were more likely to report lifetime and recent sexual intercourse, more lifetime and recent partners, and using drugs or alcohol before last sexual intercourse than heterosexual students.
 - Having ties to ethnic community appears to be very important in reducing risk among young Latino MSM.
 - Young males with bisexual experience had substantially higher levels of risk than males with either heterosexual or same sex only experience.
- Programs that address financial needs of young MSM and provide support to homeless youth:
 - Gay/bisexual homeless male youth experienced higher levels of physical and sexual victimization than their heterosexual counterparts.
 - A study of homeless male youth indicates that young men engaging in survival sex have commercial sex with men although they may not have sex with men in their personal life.
- Strategies to address stigma related to sexual orientation:
 - GLBT high school students were more likely to have experienced harassment, discrimination and violence than heterosexual students.
 - Young GLBT people of color struggle with feeling alienated from their communities because of their sexual orientation.
- Programs that address domestic violence and sexual victimization and their impact on HIV risk:
 - Native American gay adolescents were more likely to have been both physically and sexually abused than their heterosexual counterparts.
 - A history of sexual abuse was associated with engaging in survival sex among homeless male youth.

High Risk Heterosexuals.....

African High Risk Heterosexuals

Minnesota is home to the tenth largest African population and the second largest population of East Africans in the United States (Ronningen B, 1999). As the African population in Minnesota has grown over the last decade, so has the number of African persons living with HIV/AIDS. Although they make up less than 1% of the state's population, Africans accounted for an estimated 48% of new HIV infections through heterosexual contact from 2002 – 2004¹² (Minnesota HIV/AIDS Surveillance System).

KNOWLEDGE OF HIV AND AIDS

African immigrants and refugees arrive in the United States with varying levels of HIV/AIDS knowledge based on their personal experiences as well as the level to which their country of origin has implemented HIV education activities. Africans also come from a very different reality; one where receiving an HIV diagnosis has been a death sentence for most people due to limited access to treatment in their home countries.

In 2002, Rainbow Research, Inc. conducted an assessment of the level of understanding and cultural attitudes towards HIV/AIDS among the Oromo and Somali communities in Minnesota (Othieno and Smith, 2003). Focus groups were held with 40 Oromo and Somali male and female refugees, with the groups separated according to gender and nationality.

Understanding of HIV and AIDS

The participants acknowledged that they did not know much about HIV/AIDS, although they had heard about it. They noted that both the Oromo and Somali communities are not comfortable talking about HIV. They use phrases such as, "the dangerous disease," "the disease," "the slimming disease," and "the disease with no medicine" to refer to HIV/AIDS. The Somali community in particular felt that people are not comfortable talking about HIV because is it associated with sexually-related issues such as immorality, unacceptable premarital sex,

Strategies for Prevention Messages

Oromo and Somali participants in the focus groups all agreed that it is important for everyone to know about HIV/AIDS. They suggested the following strategies:

- ◆ Prevention messages should be focused towards the youth, who are not as religious and are sexually active.
- ◆ Religious leaders would be the most effective in communicating information about HIV in the Somali community.
- ◆ Women should also provide information to the community, as they are considered the best teachers. Women should be used to educate other women.
- ◆ Youth would benefit from peer trainings.
- ◆ Provide group discussions and radio programs in native languages.
- ◆ Provide open forums featuring medical professions and people living with HIV/AIDS as speakers.
- ◆ Messages should be positive instead of instilling fear, and should communicate that everyone, including Muslims, can become infected

Othieno and Smith, 2003

¹² Estimate based on the risk redistribution process as described on page 37 of Chapter One. Risk redistribution was used to develop all estimates of new infections for high risk heterosexual populations included in this chapter.

dishonesty of a spouse, and adultery. If they acknowledge that HIV and AIDS exists in their culture, they are also admitting that there are people who are not living according to Islam.

Participants stated that HIV is transmitted by sex, blood transfusion, contaminated blood, touching, sharing toothbrushes, and living with someone who has HIV or AIDS. Some of the Somali participants felt that the disease is contracted according to Allah's will. Some of the participants said that they didn't know how to protect themselves. The most common responses were: spouses need to be faithful, abstinence until marriage, and use of condoms. Other responses included being careful about sharing combs and toothbrushes. Some of the Somali participants felt they could protect themselves by following Allah's rules.

Most participants first heard about HIV/AIDS from the radio or television. Others had read about it in the newspaper, or seen billboards in Kenya, Somalia or Oromia. They remember the messages as being frightening, because they said there was no cure and they should be careful about what they eat or share. They felt the messages were confusing. Participants stressed the importance of communicating factual statements (Othieno and Smith, 2003).

Separate gender-specific focus groups held with 29 Somali men and women highlighted similar issues. Participants spoke frequently about the seriousness of HIV and that it does not have a cure. The majority of men and women identified that HIV is transmitted through sexual intercourse, used or dirty needles, blood transfusion, bone marrow transplant, touching tainted blood, dental procedures, and blood-fed insects. Some of the participants identified perinatal transmission. A few of the women, however, were skeptical about HIV being transmitted through sex or blood. Methods of preventing HIV infection included medical check-ups, premarital check-ups, avoiding unprotected sex, using condoms, avoiding adultery, and trusting in Allah. In the men's groups, several men believed HIV could be prevented by doing good deeds, obeying Allah, and by adhering to the rules of Islam (Minnesota International Health Volunteers, 2004).

In a sample of 79 HIV positive African patients receiving care at the HCMC Infectious Disease Clinic, 75 - 80% had a high level of understanding of HIV and HIV transmission. However, 15% of respondents did not think that HIV could be transmitted through breastfeeding, 20% believed that HIV is a curse from God or others, 30% did not think HIV is a problem in the United States, 32% believed that mosquitoes can transmit HIV, 24% believed that contaminated toilet seats can cause HIV, and 18% believed that unclean needles in medical settings are a common cause of HIV in the United States. Twenty-nine percent (29%) of the sample believed there is a cure for HIV, and 61% of these believed the cure to be God/prayer (MDH and HCMC, 2005).

Prevention Strategies for Somali Community

Male focus group participants identified the following educational methods for Somali men:

- ◆ Television
- ◆ Audio/video cassettes
- ◆ Health education from health professionals
- ◆ Community health education forums
- ◆ Outreach through Imams and teachers

Female participants identified the following educational methods for Somali women:

- ◆ Health education from health professionals
- ◆ Education through health care centers
- ◆ Education through community leaders
- ◆ Flyers
- ◆ Television
- ◆ Somali Yellow Pages
- ◆ Community gatherings and forums

Minnesota International Health Volunteers, 2004

SUBSTANCE USE

There is very little information available about substance use in African immigrant populations. Falkowski (2005) reported that khat, a plant with stimulant effects that is chewed or brewed in tea in East African cultures, remained a drug of abuse in Somali communities of the Twin Cities and Rochester in 2004. Khat's active ingredients, cathonine and catheine, are controlled substances in the United States.

A national study comparing health status of foreign-born Black men (country of origin not specified) to U.S.-born Black and White men found that foreign-born Black men were much less likely to report being heavy drinkers (0.8%) compared to American-born Black men (5%) or White men (6%) (Lucas et al., 2003).

MENTAL HEALTH

Information about mental health in African immigrant populations is currently not available; however, information does exist about mental health issues encountered by refugees. This information is not specific to African refugees and cannot necessarily be generalized to immigrants who choose to come to the United States.

Many refugees are at high risk for mental health problems as a direct result of the refugee experience, which includes experiences of war, trauma and displacement. Imprisonment, rape and other assaults, torture, and witnessing mass killings and executions are things that may have been experienced by refugees. They are forced to leave their home and possessions behind. Family members may be separated, wounded or killed. Many times family members are left behind and never seen again, which is a source of chronic grief for many survivors. Life in a refugee camp is usually difficult. These and other factors lead to a high incidence of anxiety disorders, particularly posttraumatic stress disorder or combat stress reaction, and to a lesser degree depressive disorders. Grief is a major factor in the lives of many refugees (Kemp, 1999).

Studies have shown that refugee women are affected differently than men by the events that they have lived through. Depression and anxiety disorders are seen in approximately 58% and 24% of refugee women, respectively. The most common diagnosis among refugee women is posttraumatic stress disorder. Among those who have experienced physical or sexual torture, even more develop the disorder (Kang et al., 1998).

Some studies have shown that the greatest period of psychological stress for refugee women is the first year after their arrival in the United States. They may find themselves in a completely different setting than what they are used to. If they do not speak English, learning a new language can cause a lot of stress. Role strain is common as women try to adjust to their new lives, while attempting to maintain the traditions and cultures of their homelands as their children are often becoming more interested in American culture. Refugee women often had a more subservient role in their home countries, and the greater independence experienced by women in the United States can be difficult for both refugee women and men to reconcile. Respect of family and elders is usually much stronger in refugee families compared to American families. However, as the children adapt much more quickly to the United States than their parents, it causes stress for women as they feel they are losing control of their children and losing the influence of their traditions and culture. Being separated from extended family can also be stressful as a great source of support has been lost (Foster et al, 2000).

SEXUALLY TRANSMITTED DISEASES, HEPATITIS B AND TUBERCULOSIS

STD cases tracked in the Minnesota STD Surveillance System do not report country of birth. However, the MDH Refugee Health Program tracks STD screening among refugees. Of 3,585 primary refugees who arrived in Minnesota in 2004 from sub-Saharan Africa, 2,071 were screened for syphilis and 30 (1.3%) were found to be infected. Of 126 refugees who tested for gonorrhea and 140 who tested for chlamydia, none were infected.

As of the end of February 2005, there were 14,458 total cases of hepatitis B in Minnesota, with 24% of the cases among Blacks. Although it is not possible to separate the data for Africans and African Americans, the risk factor of being born outside of the United States was associated with 62% of the cases among Blacks (Minnesota Hepatitis Surveillance System, 2005). The MDH Refugee Health Program also tracks hepatitis B and tuberculosis screening. Of the primary refugees who arrived in Minnesota in 2004 from sub-Saharan Africa, 2,722 were screened for hepatitis B, and 225 (8%) were found to be positive. Of the 2,745 who were screened for tuberculosis, 55% were found to be positive.

SEXUAL BEHAVIOR

There is very little data currently available about sexual behavior among African immigrants. One study was conducted with 309 African immigrants in Houston, where the largest immigrant groups are from Nigeria, Ethiopia, Ghana, Somalia, and Eritrea (Rosenthal et al., 2003). Of the total sample, 64% reported that they had ever used a condom. Men reported far greater condom use than women, but no significant differences in ever having used a condom were found based on country of origin, religion, marital status, or educational attainment. Those who reported previous condom use were asked about the frequency of condom use in the past 3 months, with 75% reporting they used condoms 75% or less of the time. Within the past 3 months, 67% of men and 41% of women reported using condoms 75-100% of the time. Not surprisingly, married respondents were less likely to have used a condom all or most of the time in the past 3 months compared to unmarried respondents.

Another study was done of sexual mixing patterns of 1,660 sub-Saharan, Surinamese and Antillean immigrants in Amsterdam, the Netherlands. The sample included 518 Ghanaians and 73 Nigerians. Among the total sample, both men and women reported consistent condom use more often with partners of a different ethnic group than with partners of their own ethnic group. Consistent condom use was also reported more commonly with casual sex partners than with steady partners (Gras et al., 1999).

Sexual Mixing Patterns

The study conducted in Amsterdam found that:

- ◆ 35% of Ghanaian men and 52% of Nigerian men reported casual sex outside of a steady relationship in the past year
- ◆ 6% of Ghanaian women and 18% of Nigerian women reported casual sex outside of a steady relationship in the last year
- ◆ Ghanaian men and women were more likely than Nigerian men and women to have casual and steady partners from their own country (the Nigerian community was smaller)
- ◆ Sexual mixing between Ghanaians and Nigerians was not common.

Gras et al., 1999

STIGMA

HIV-related stigma is still very strong in African immigrant communities. In interviews conducted with 79 African HIV positive patients at the HCMC Infectious Disease Clinic, 21% reported that their families did not know about their HIV status. Shame (29%), becoming an outcast (22%), and fear of being thought of as promiscuous (12%) were some of the reasons cited for not revealing their HIV status. When asked to rank the level of stigma around HIV in their community on a scale of 1 to 10 (10 being highest), 58% ranked it as 10, and only 8% ranked it as 5 or lower (MDH and HCMC, 2005).

In their study with African immigrants in Houston, Rosenthal et al. (2003) found that only one third of respondents agreed that people with HIV are treated “openly, with sympathy, like any patient with a chronic illness” within African communities. Nearly two thirds agreed that people in their communities respond to HIV positive individuals “with fear, avoidance, and secrecy.” Almost half said that members of their community would react by “gossiping about how the person contracted the disease” or “by making the person with HIV/AIDS feel as a social outcast.” The researchers found that females tend to be more pessimistic than males about how their communities react to people with HIV, and Christians perceived more HIV-related stigma in their communities than Muslim participants. Also, participants who have been in the United States longer were less likely to perceive stigmatization of people with HIV than those who have been here a shorter amount of time.

POWER IMBALANCE BETWEEN GENDERS

Throughout sub-Saharan Africa, it is a common tradition for a man to pay a bride price to the family of the woman he is going to marry. This tradition continues among immigrants in the United States. Traditionally, the bride price was a demonstration that the groom has come of age and is capable of supporting himself and his wife.

Acceptance of the bride price signifies the support and blessing of the brides' family. However, there are concerns about the tradition of the bride price related to HIV risk (see sidebar) (Wendo, 2004).

Female genital mutilation is most prevalent in African countries, such as Nigeria, Ethiopia, Sudan, Egypt, as well as some areas of the Middle East. Reasons given for the continuation of this practice include cultural traditions, social acceptance within the community, and ensuring chastity and fidelity of women by decreasing sexual desire and pleasure.

There are many health concerns related to female genital mutilation, including hemorrhage, infection, urinary retention, shock, tetanus, cysts, pelvic inflammatory disease, and infertility. Risks related to HIV transmission that have been identified are the practice of using the same equipment to perform the mutilation on multiple girls, as well as the damage caused to vaginal tissue. Women who have had female genital mutilation have just a small opening

Concerns Related to Bride Price

The International Conference on Bride Price, held in Uganda in 2004, identified the following concerns with the practice of bride price and its relationship to HIV risk:

- ◆ Once the bride price is paid, a woman loses control over her sexual life
- ◆ Women cannot decide how many children to have or when
- ◆ Women who try to leave such marriages meet resistance from parents who worry they will have to repay the bride price
- ◆ Women cannot refuse to have sex with their husbands or demand that they use condoms because they are considered to be property of the husband

Wendo, 2004

that allows urine and blood to pass. Sexual penetration is difficult, often resulting in tissue damage, lesions, and postcoital bleeding. In the United States, a law was passed in 1997 that prohibits performing female genital mutilation on girls under 18 years of age, but does not address women over 18 (Brady, 1999).

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Although there are no data available about abuse and violence in African immigrant populations in the United States, studies conducted in Africa suggest that intimate partner violence impacts women's ability to protect themselves. One study of 4,066 young women in South Africa found that nearly 4% reported having been physically forced to have sex by their most recent partner. Women who reported that their most recent partner forced them to have sex were 5.77 times more likely to not use condoms consistently with that partner compared with those who had not been forced to have sex by their most recent partner (Pettifor et al, 2004).

A report regarding domestic violence in Uganda highlighted issues that place women at risk. Men have control of sexual relationships and men, as well as many of the women interviewed, viewed sex as a marital obligation. Marital rape does not exist as a legal concept in Uganda, although 34 out of 50 women reported that their husbands physically forced them to have sex against their will. Many others reported verbal threats of eviction and abandonment if they refused to have sex. Since the majority of women were economically dependent on their husbands, they were not in a position to refuse. The report indicated

that women who believed their husband was at risk or knew he was HIV positive may have been reluctant to engage in sex with him, but the resistance was met with violence or coercion. Many women were afraid of asking their husbands to use condoms for fear of being beaten either for suspecting their husbands of having extramarital affairs or because their husbands would accuse them of adultery. Even many of the women who had HIV positive husbands were unable to negotiate condom use. Women reported that their husbands said condoms were not effective, or there was no reason for him to die alone. Women reported that their husbands often forced them to have unprotected sex in order to have children (Human Rights Watch, 2003).

Sexual Assault and HIV Risk

A study of 272 South African women found that 44% had ever been sexually assaulted. Women who had been sexually assaulted were more likely to have:

- ◆ Unprotected vaginal and anal sex
- ◆ Shared needles to inject drugs
- ◆ Exchanged sex for money or a place to stay
- ◆ Used alcohol
- ◆ Been diagnosed with an STD
- ◆ Been hit by a relationship partners
- ◆ Been afraid of telling a sex partner to use a condom

Kalichman and Simbaya, 2004

SUMMARY OF THE NEEDS OF AFRICAN HIGH RISK HETEROSEXUALS

- Education about HIV and how it can be prevented provided through a variety of methods:
 - Misconceptions exist about how HIV is transmitted and how it can be prevented.
 - Religious leaders, community leaders, women, youth peers, people living with HIV/AIDS and health professionals were identified as people who could provide prevention messages

- Television, video/audio cassettes, community forums, flyers and Somali Yellow Pages were identified as mediums that could be used to deliver prevention messages.
- Programs that address mental health issues specific to immigrants and refugees:
 - Refugees may have experienced a variety of traumatic events, including war, displacement, torture, imprisonment, rape, and witnessing mass killings and executions. Family members may be separated, wounded or killed.
 - Refugee women are affected differently than men, and experience high rates of depression, anxiety and posttraumatic stress disorder.
 - Role strain is common among refugee women, and is a challenge for men as well.
- Testing and treatment for hepatitis B and tuberculosis:
 - African refugees arriving in Minnesota have high rates of hepatitis B and tuberculosis.
- Programs that support the reduction of sexual risk behaviors:
 - Almost 40% of a sample of African immigrants in Houston had never used a condom, with women being less likely to have used a condom than men.
 - A study in Amsterdam indicates high rates of casual sexual encounters outside of the context of a steady relationship, although condom use was more common with casual partners than steady partners.
 - Programs must address the lack of power that many African women have over their own sexual behavior.
- Strategies to address HIV-related stigma:
 - Stigma is very strong in African communities.
 - In Islamic cultures, a barrier to discussing HIV is that acknowledging that HIV/AIDS exists means also acknowledging that some people are not living according to Islamic principles.
- Programs that address domestic violence and sexual victimization and their relationship to HIV risk:
 - Women who had been sexually assaulted were much more likely to engage in unprotected sex, as well as in other risk behaviors.
 - Women who are financially dependent on their partners are not in a position to refuse unsafe sex.
 - Programs must address the lack of power that many African women have over their own sexual behavior.

African American High Risk Heterosexuals

African American heterosexuals have also been disproportionately impacted by HIV in Minnesota. Although African Americans/Blacks make up only 3.5% of the state's population, African Americans accounted for an estimated 16% of new HIV infections through heterosexual contact from 2002 – 2004 (Minnesota HIV/AIDS Surveillance System).

SUBSTANCE USE

A number of national studies also point to the link between substance use and HIV risk behaviors. A study conducted with a convenience sample of 180 African American women found that women were less likely to use condoms if they consumed alcohol between 20 and 30 days of the month, and that they were more likely to have multiple sex partners if they had smoked crack in the past month (Wingood and DiClemente, 1998a). In another study examining the relationship between non-injecting drug use and HIV risk-related sex behaviors of 780 African American adults, researchers found that HIV risk behaviors, including having multiple sex partners and not using condoms, were much more prevalent among cocaine users than marijuana or alcohol users (Wang et al., 2000).

Results from a study involving interviews with 1,464 homeless women in Los Angeles County, over half of whom were African American, supported previous research that substance abuse was strongly associated with HIV risk behaviors among homeless women. Homeless women in the study who were drug abusers were nearly 10 times more likely to trade sex than were other homeless women, and those with alcohol dependence problems were 5 times more likely to inject drugs (Kilbourne et al., 2001).

MENTAL HEALTH

In a study of suicide and depression rates in the United States, African Americans were found to have a lower one-year prevalence of major depression and lower annual suicide rates compared to Whites (Oquendo et al., 2001). Based on findings from national studies, the relationship between mental health and HIV risk behaviors in the African American community is unclear. Findings from the study involving homeless women indicate that neither depression nor psychosis symptoms were associated with HIV risk behaviors (Kilbourne et al., 2001). The study conducted with 180 African American women in Birmingham did not find a significant association between depression and HIV risk behaviors, such as multiple sexual partners and inconsistent condom use (Wingood and Clemente, 1998).

Substance Use Among African American Women in Minnesota

A local needs assessment of 247 African American women found that:

| Substance Use | % |
|---|-----|
| Use alcohol weekly or daily | 34% |
| Use marijuana daily | 21% |
| Used crack in last 6 months | 29% |
| Injected one or more drugs in last 6 months (of these, all participated in needle exchange) | 9% |
| Have partner that uses drugs and/or alcohol | 26% |
| Feel that alcohol or drug use affects their safer sex practices | 33% |

Jackson et al., 2000

However, Wang et al. (1997) found that among 570 African Americans, depressive symptoms were related to multiple drug use (alcohol, marijuana, and cocaine). In a more recent study of HIV transmission among African American women, one of the most common reasons reported by study participants for engaging in behaviors that place them at risk for HIV infections was low self-esteem coupled with a need to feel loved by a male figure (CDC, 2005).

SEXUALLY TRANSMITTED DISEASES AND HEPATITIS C

As of the end of February 2005, there were 22,356 people living with hepatitis C virus (HCV) in Minnesota, of which 15% were African American/Black. The greatest majority of cases among African Americans were related to illicit drug use (33%); injection drug use (19%); past and current incarceration (12%); blood/plasma donor (10%); and high risk sexual activity, including sex with an HCV positive person, IDU or multiple sex partners (7%). Exposure categories are not mutually exclusive (Minnesota Hepatitis Surveillance System).

African Americans/Blacks accounted for 25% of chlamydia cases diagnosed in Minnesota in 2004, with a rate of 1,456 per 100,000 persons. African Americans accounted for 41% of gonorrhea cases diagnosed in 2004, which is a rate of 592 per 100,000 persons. Youth under the age of 25 accounted for 2,557 (61%) of the chlamydia and gonorrhea cases among African Americans (Minnesota STD Surveillance System).

In their needs assessment of 247 African American women in Minnesota, Jackson et al. (2000) found that half of the sample reported having been tested 2 or more times for an STD in the last ten years, with 37% being diagnosed with one or more STDs during that same time period. One quarter of the interviewees reported having an STD two or more times. Chlamydia and gonorrhea were the most common STDs.

SEXUAL BEHAVIOR

Risk Behaviors of Women in Minnesota Needs Assessment

Jackson et al. (2000) also found that half of the women reported that they regularly carry condoms, and 40% had condoms with them at the time of the interview. Only 27% of women reported using a condom all of the time with their steady partner. Thirty-eight percent (38%) reported using a condom when having sex with an unsteady partner. Fifty percent (50%) of the women engaged in unprotected vaginal intercourse in the previous two months, while 11% of women reported unprotected anal intercourse during the same time period.

Thirty percent (30%) reported knowing their last three sexual partners a week or less before having sex with them. A little more than 15% had sex on the same day they met their partners; however, this is about the same percentage of women who self-identified as prostitutes.

Reasons for Not Using Condoms

The most common reasons given by participants for not using condoms:

- ◆ Were with main partner
- ◆ Believed their partner was only engaging in unsafe sex with them
- ◆ Were in love
- ◆ Did not have a condom at the time

Jackson et al., 2000

Trading Sex

Of the 247 women in the Minnesota needs assessment, 37 (15%) said they were prostitutes. The study identifies both similarities and differences between the sex workers and non-sex workers. Seventy-five percent (75%) of sex workers believed they were at risk for getting an STD compared to 43% of other women, although the percentage of women who had actually had an STD was similar in both groups. Women who identified as prostitutes were more likely to report daily use of alcohol (62%), marijuana (68%), and crack (24%) compared to other women (14%, 13% and 8%, respectively). Sex workers were also more likely to report injection drug use in the last 6 months (38% vs. 3%). Sixty percent (60%) of sex workers believed that alcohol/drug use affected their safer sex practices compared to 30% of other women (Jackson et al., 2000).

Participants of a CCCHAP-sponsored community forum conducted with 8 African American women engaged in sex work identified unprotected sex, multiple sexual partners, and the lack of education regarding HIV prevention as the three factors that most impact HIV transmission in their community (MDH, 2005).

In a study of 176 female sex traders in Harlem (65% African American), almost all (99%) reported trading vaginal sex for money or drugs in the last month, 78% reported trading oral sex, and 9% had traded anal sex. The average number of sex trading partners during that time was 30. Ninety-nine percent (99%) had exchanged sex for money, 52% had exchanged sex for crack, and 4% had exchanged sex for other drugs. Forty-two percent (42%) reported always using condoms during vaginal sex with paying partners. However, of the women who reported vaginal sex with non-paying partners, only 17% reported always using condoms (El-Bassel et al., 1997).

Sexual Networks

Jackson et al. (2000) found that one in five women said that they travel from Minnesota to other cities to meet men. Chicago and Atlanta were named most often. Nearly all of the women who reported going to other cities to meet men also reported engaging in sexual intercourse with men in those cities.

Evidence suggests that patterns of sexual networks may differ for African American and other populations in ways that foster more rapid dissemination of sexually transmitted

Risk Behaviors of Sex Workers

Following is a summary of sexual risk behaviors of sex workers compared to non-sex workers:

| | Sex Workers | Non-sex Workers |
|---|-------------|-----------------|
| Always use condoms with steady partner | 30% | 37% |
| Always use condoms with non-steady partners | 43% | 37% |
| Unprotected vaginal sex, last 30 days | 70% | 35% |
| Unprotected anal sex, last 30 days | 46% | 2% |
| Sex with bisexual man, last 5 years | 49% | 5% |
| Sex with IDU, last 5 years | 49% | 9% |
| Last sex partner was HIV positive | 11% | 9% |
| Did not know HIV status of last partner | 55% | 32% |

Jackson et al., 2000

infections among African Americans. One difference is that African Americans are more likely to choose other African Americans as sex partners, resulting in sexual networks that are more racially segregated than those of other racial or ethnic groups (Laumann and Youm, 1999). The prevalence of concurrent sexual partnerships (two or more sexual partners during the same time period) was found to be greater among African American women (21%) in the preceding 5 years than among white women (11% in the preceding 5 years). This difference appears to be mostly due to lower marriage rates and younger age at first sexual intercourse among African American women (Adimora and Schoenbach, 2002). Another study found an even higher prevalence of concurrent partnerships among African American men (53% in the preceding 5 years) (Adimora et al., 2004).

In focus groups conducted with African Americans in rural North Carolina, both men and women believed that the scarcity of men and the extremely adverse socioeconomic conditions profoundly influence partner selection, the sexual availability of women, the type of male sexual behavior that women tolerate, and the participation of both sexes in high risk sexual behaviors (Adimora et al., 2001). The

disproportionate incarceration of African American men also negatively impacts sexual relationships in the African American community. Nearly one third of all African American men have been incarcerated as adolescents or adults. This negatively affects African American men's ability to keep and maintain jobs and relationships. Maintaining a sexual relationship with just one person is difficult when African American men are incarcerated at high rates and cycle in and out of the prison system. Fewer available African American men in the community means African American couples have less opportunity for long-term monogamy and more chance for multiple partnerships, which may increase the risk of HIV/STD transmission (Center for AIDS Prevention Studies, 2004).

Sexual Orientation and Sexual Behavior

Men who self-identify as heterosexual may not consider themselves at risk for HIV and may not heed educational messages about condom use. A study of 90 HIV positive and 272 HIV negative heterosexually-identified African American men found that:

| | HIV+ | HIV- |
|---|------|------|
| Had anal sex with men | 31% | 15% |
| Always insertive partner during anal sex with men | 50% | 95% |
| Never used condom during anal sex with men | 61% | 37% |
| Had anal sex with men and vaginal sex with women | 89% | 100% |
| Had anal sex with men and women | 46% | 37% |
| Never used condoms during anal sex with women | 70% | 70% |

Wohl et al., 2002

BELIEFS ABOUT HIV AND PERCEPTION OF HIV RISK

In a study of HIV/AIDS conspiracy beliefs as a barrier to HIV prevention among African Americans, a significant proportion of respondents endorsed government-related conspiracy beliefs. For example, 43% strongly agreed that, "A lot of information about AIDS is being held back from the public" and 33% strongly agreed that, "HIV is a man-made virus." Twenty-six percent (26%) somewhat or strongly believed that, "AIDS is a form of genocide against African Americans" and 23% somewhat or strongly believed that, "AIDS was created by the government to control the African American population." Stronger government conspiracy

beliefs were significantly associated with more negative condom attitudes and inconsistent condom use, whereas stronger belief in HIV treatment-related conspiracy theories (e.g., "The medicine used to treat HIV causes people to get AIDS") was associated with more positive attitudes towards condoms and a greater likelihood of condom use in the future.

Researchers concluded that government and public health entities should work toward obtaining the trust of Black communities by addressing current discrimination within the health care system as well as by acknowledging the origin of conspiracy beliefs in the context of historical discrimination and experimentation (Bogart and Thorburn Bird, 2005).

Eighty-one percent (81%) of the 247 Minnesotan women interviewed by Jackson et al. (2000) reported having at least one HIV test. Twenty-six percent (26%) thought that it was likely or very likely that they were HIV positive, while 21% thought it was likely they would get HIV in the future. Half of the women said that they think about HIV almost all of the time or a lot of the time. A national survey of adults found that 56% of African American respondents were either very or somewhat concerned with becoming infected with HIV, which represents a decrease in concern since 1995. Still, African Americans were much more likely to than Whites (33%) to express personal concern about contracting HIV (Kaiser Family Foundation, 2001).

However, national studies have found that many heterosexual African American women do not perceive AIDS to be a major health risk and consider themselves at low risk for acquiring HIV (see sidebar). Consequently, many heterosexual African American women may not consider unprotected sex with their partners as a risk factor for contracting HIV (McNair and Prather, 2004). In focus groups conducted with 69 African American men and women, participants reported myths and misperceptions about HIV transmission such as denial of personal risk, perceptions that HIV was a disease that happened to outsiders and others, and the perceived role of the government in the development of HIV as contributing factors to the efficiency of HIV transmission in this population (Essien et al., 2002).

Low Perception of Risk

McNair and Prather (2004) found that for many African American women, low perception of HIV risk is related to two beliefs:

- ◆ AIDS is a disease that primarily affects White gay men
- ◆ Being in a monogamous relationship protects them from HIV

STIGMA

In a national survey of 2,683 adults, the Kaiser Family Foundation (2001) found that over one half of African Americans (56%) say they would be very or somewhat concerned that people would think less of them if they found out they had been tested for HIV. Those with less education and income were significantly more likely to be very concerned that people would think less of them compared with those with higher education and incomes. Overall, similar proportions of African Americans, Latinos and Whites say that prejudice and discrimination against people living with HIV/AIDS exist in the U.S. today; however, African Americans and Latinos are significantly more likely than Whites to believe that a lot of discrimination exists (65%, 57%, and 49% respectively).

Another national survey with 5,641 adults included the statement, "People who got AIDS through sex or drug use have gotten what they deserve." Among the minority of respondents

who gave a response that suggests they may have stigmatizing attitudes about persons with HIV, fewer Blacks (7%) held this view than Whites (21%) and Hispanic/Latinos (11%) (CDC, 2000).

POWER IMBALANCE BETWEEN GENDERS

Several studies indicate that African American women may not feel that they are in a position to insist on condom use. In a study that involved interviews with more than 600 African American men and women in Maryland and Washington DC (Whitehead, 1997), results showed that women were reluctant to have their male partners use condoms (see sidebar).

A study of 128 African American women in San Francisco found that not using condoms was strongly associated with a woman's perception that asking one's partner to use a condom may imply infidelity or may compromise the stability in the sexual relationship. Also, women who were found to be sexually nonassertive were 3 times more likely to not use condoms. Researchers concluded that the limited bargaining power that women have in sexual relationships may make it difficult for them to negotiate safer sex (Wingood and DiClemente, 1998b). In a focus group investigation of how HIV-related risks are perceived by 19 heterosexual adult African American women, participants agreed that they were ultimately responsible for protecting themselves from HIV, however there was a sense of lack of control over men's behavior that resulted in inconsistent condom use and sexual activity outside of the relationship (Timmons and Sowell, 1999).

Reasons for Not Using Condoms

African American women's reluctance to have their male partners use condoms was based on:

- ◆ Need or desire to maintain their ongoing relationship
- ◆ Fear that men would leave them because of strong male dislike of condoms
- ◆ Some men associate a woman initiating condom use with her being "sexually loose"
- ◆ Because condoms have traditionally been associated with disease prevention, they are associated with women who are "dirty" or diseased

Whitehead, 1997

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Studies indicate high rates of intimate partner violence among African American heterosexuals. In a study of African American and Latina women in New York City, 20% reported intimate partner violence (IPV) in their current primary heterosexual relationships; about 13% reported experiences IPV in the preceding 6 months. In contrast, a national survey conducted in the general population at about the same time found the prevalence of IPV to be 1.5% in the preceding 5 years (Wu et al., 2003).

A multi-site sample of Black, Latino and White couples found that the rates of male-to-female partner violence (MFPV) and female-to-male partner violence (FMPV) were highest among Black couples (23% and 30%), followed by Latino couples (17% and 21%), and White couples (12% and 16%) in 1995 (Caetano et al., 2000). Follow-up interviews conducted in 2000 indicated that Black couples were 3 times more likely to engage in MFPV and 2 times more likely to engage in FMPV than White couples. The study also found that the Black respondents experienced higher rates of childhood physical abuse than Whites and Latinos (Field and Caetano, 2003).

Several studies also highlight the association between abuse/violence and HIV risk behaviors. Wu et al. (2003) found that African American and Latina women who reported past or current violence by their intimate partners were more likely to report HIV risk behaviors such as having multiple sexual partners, a past or current STD, inconsistent use or nonuse of condoms, and a partner with known HIV risk factors. In a study of 112 women (84% African American), researchers found that exposure to violent trauma – particularly physical assault by a partner – was associated with HIV risk behaviors including crack use, exchanging sex for money or drugs, and unprotected vaginal sex. Non-violent trauma was also found to be associated with HIV risk behaviors, particularly smoking crack and bartering sex (Brown-Peterside et al., 2002). In another study of 1,645 women (64% African American), childhood sexual abuse was associated with a lifetime history of domestic violence and risk behaviors such as drug use, having more than 10 male partners, having male partners at risk for HIV, and exchanging sex (Cohen et al., 2000).

SUMMARY OF THE NEEDS OF AFRICAN AMERICAN HIGH RISK HETEROSEXUALS

- Programs that address substance use and its impact on HIV risk:
 - One third of women participating in a local needs assessment felt that alcohol or drug use affects their safer sex practices.
 - National studies also find an association between substance use and risky sexual behavior.
- Programs that address mental health issues and its impact on HIV risk:
 - Some studies did not find a relationship between mental health and HIV risk, however one study found that common reasons for women engaging in risk behaviors included low self-esteem coupled with the need to feel loved by a man.
 - Another study found depressive symptoms were related to multiple drug use.
- Integration of STD and hepatitis C prevention messages into HIV prevention programs:
 - Illicit drug use accounted for 33% of hepatitis C cases among Blacks in Minnesota and high risk sexual activity accounted for 7%.
 - Blacks accounted for 25% of chlamydia cases and 41% of gonorrhea cases in Minnesota in 2004.
- Programs that support the reduction of sexual risk behavior, including programs that target heterosexually identified men who have sex with men:
 - Nearly 60% of women participating in local needs assessment did not use condoms when having sex with a non-regular partner.
 - Programs must address the impact of high incarceration rates of African American men on sexual relationships.
 - Prevention messages must be developed to reach both heterosexually identified men who have sex with women, and those who have sex with men and women.
- Strategies to address conspiracy beliefs and low perception of HIV risk:
 - Historical experiences of discrimination and experimentation (e.g., Tuskegee) perpetrated against African Americans help maintain current conspiracy beliefs.
 - Studies found that some African Americans believe that HIV only happens to others.
- Programs that address gender power imbalance and domestic/sexual violence:
 - African American women don't feel they are in a position to request condom use.
 - There is a high rate of intimate partner violence in African American couples.
 - Studies have found a relationship between abuse/violence and HIV risks, such as multiple sex partners, unprotected sex, STDs, alcohol and drug use, and trading sex.

Latino/a High Risk Heterosexuals

The Latino population in Minnesota has grown considerably in the last decade, with 37% of the population moving to Minnesota from 2000 to 2004. A little over half of Minnesota's Latino population (52%) in 2004 was born outside of the United States (MDH Health Economics Program, 2004). According to the 2000 Census, Mexicans/Mexican Americans account for the largest proportion of Latinos in the state (68%), followed by Puerto Ricans (5%). In 2000, Latinos accounted for 3% of the state's population (U.S. Census Bureau). Latinos accounted for an estimated 5% of new HIV infections through heterosexual contact in Minnesota from 2002 – 2004 (Minnesota HIV/AIDS Surveillance System).

NEEDS ASSESSMENT OF LATINO COMMUNITY IN MINNESOTA

Survey of Community

In 2003, a community advisory group assisted the CCCHAP and MDH by developing and conducting a survey in the Latino community to learn more about access to HIV information, barriers to HIV testing, and what could be done to make it easier for Latinos to get tested (MDH, 2003). The survey was conducted at the Cinco de Mayo celebration in St. Paul, and was subsequently distributed by providers to their clients.

The needs assessment project was focused on Latino men because of the concerning epidemiological trends that were identified among men, such as Latino men having a higher proportion of: AIDS cases, living HIV/AIDS cases under the age of 30, and new infections that were AIDS at first diagnosis. However, both men and women completed the survey.

The survey was available in English and Spanish. The great majority were completed in Spanish. A total of 119 surveys were completed. Questions related to country of birth and time living in Minnesota were added after the Cinco de Mayo celebration, resulting in 71 surveys with responses to those questions. Because there was a concern on the part of the community advisory committee that respondents would not truthfully answer questions related to sexual orientation, there were no questions included about sexual orientation or gender of sexual partners.

Access to Information

Overall, 61% of respondents received information about HIV/AIDS in the past year. Seventy-nine percent (79%) of the women received information compared to 48% of the men. Only 16% of women felt that it was difficult to get information about HIV/AIDS compared to 28% of men. The most common reason given across genders for the difficulty was not knowing where to look for information. The proportion of all respondents who received information specifically about testing for HIV in the past year was somewhat less (53%). However,

Demographics of Survey Respondents

| Characteristic | % |
|------------------------|-----|
| <i>N = 119</i> | |
| Male | 54% |
| Female | 44% |
| Transgender | <1% |
| Minneapolis - St. Paul | 70% |
| Suburban metro area | 10% |
| Greater Minnesota | 12% |
| <i>N=71</i> | |
| Born in Mexico | 63% |
| Born in US | 11% |
| Lived in MN 1-5 years | 49% |
| Lived in MN 5-10 years | 34% |
| Lived in MN < 1 year | 13% |

women again were more likely to have received the information (63% of women) compared to men (48% of men).

Respondents were asked to identify: 1) the most common sources of information about HIV/AIDS; 2) the best ways of getting information about HIV/AIDS; and 3) the most common sources of information about HIV testing. Four sources of information were listed among the top five in response to all three questions: Clinic/hospital, brochure in Spanish, outreach worker (Spanish-speaking), and TV in Spanish. Spanish-speaking doctor or nurse was mentioned among the top five answers in response to two out of the three questions.

Barriers to Testing

Fifty-one percent (51%) of all participants had never been tested for HIV. Thirty percent (30%) had been tested at some point in their life, and 18% of respondents did not answer the question. Women were much more likely to have been tested (51% of women) compared to men (25% of men).

Responses regarding what would make it easier to get tested were related to three basic concerns: confidentiality, access to testing, and information.

Confidentiality

- Knowing that nobody will recognize me when I go to get tested (29%)
- Having a guarantee that my test results will not be reported to anybody (25%)
- Having a guarantee that my test results will not be reported to immigration officials INS (15%)

Access to Testing

- Information about where I can get a free test (28%)
- Information in Spanish about Spanish-speaking places I can get tested (23%)
- Information about where I can get tested (22%)

Information

- Knowing more about HIV/AIDS (19%)
- Information about where I can go for help if I have HIV/AIDS (18%)
- Information about how the test is done (18%)
- Having my doctor or nurse talk to me about getting tested (18%)

Additionally, 13% of all respondents stated that nothing would make it easier to test since they did not think it was difficult. Three percent (3%) said that nothing would make it easier because they did not want to get tested.

Reasons for Not Testing

Participants were asked to identify what would prevent them from getting tested for HIV. The most common reasons given by men and women were similar, although the frequency with which they were chosen varied by gender:

| Reason | Women N = 52 | | Men N = 64 | |
|--|-----------------|----|---------------|----|
| | # | % | # | % |
| Don't think I'm at risk | 12 | 23 | 10 | 16 |
| I feel healthy | 11 | 21 | 10 | 16 |
| Don't have money to pay for test | 9 | 14 | 7 | 13 |
| Don't know where to go | 6 | 12 | 20 | 31 |
| Don't have transportation | 6 | 12 | 9 | 14 |
| Don't know what I would do if I had HIV | 6 | 12 | 9 | 14 |
| Don't know of a place to get tested where they speak Spanish | 4 | 8 | 13 | 20 |

Community Forums

Five community forums with 41 total participants were also held as part of the needs assessment project in the Latino community. Each forum was targeted to a different audience: young men ages 17–25 (Mankato), women (Minneapolis), HIV positive men (Minneapolis), men who have sex with men (Minneapolis), and male migrant farm workers (Montgomery).

The purpose of the community forums was to gather further information regarding knowledge of STDs and HIV, barriers to testing, and how to make testing easier. The forums were focused on gathering information from Latino men. The advisory group recommended holding a forum with women because they would be able to provide valuable insight into the men in their lives, as well as to raise awareness of the issue since it also directly impacts women.

Knowledge of HIV and STDs

Across the various groups, the community forum participants were able to provide accurate information about the various types of diseases, how they are transmitted, symptoms and effects of HIV and STDs, and treatment. Some misconceptions also existed in relation to how HIV can be transmitted; for example, that only specific groups (gays and injection drug users) can get the disease, and that married people cannot. Throughout the discussions, all groups mentioned the lack of education about HIV, STDs and sexuality in Latin American schools, as well as the lack of communication related to these issues in the general Latino community.

Community forum participants provided the following recommendations for how to increase testing among Latino men:

- Address cultural issues.
- Improve communication within Latino families about sex and sexuality, HIV, oral sex.
- Provide more communication and education in Spanish through media targeting the Latino community.

Barriers to Testing

Community forum participants identified the following cultural barriers to testing:

- ◆ Fear of rejection by family and friends
- ◆ Machismo
- ◆ Pena (being ashamed or embarrassed) to talk about HIV/AIDS, STDs, and sex and sexuality
- ◆ Religious beliefs
- ◆ Pattern of seeking medical care only when sick
- ◆ Stigma associated with HIV/AIDS

Participants also identified the following general and personal barriers:

- ◆ Lack of information about HIV/AIDS, testing and testing locations, treatment options, and where to go for help
- ◆ Feeling healthy
- ◆ Not engaging in risky behaviors such as injecting drugs or having sex with multiple partners
- ◆ It is better not to know if one is positive
- ◆ Fear of screening tests/blood tests
- ◆ Belief that nothing can be done if one tests positive (not aware of treatment advances, do not have health insurance, do not have legal immigration status)
- ◆ Lack of confidentiality (do not want to provide name, address and social security number; do not want to be recognized at clinic; fear that friends, family and government will learn the test results)
- ◆ Lack of time to get tested

- Focus education on risk behaviors and not on sexual orientation.
- Fund more health educators to provide information and services in the evening.
- Provide mobile testing in places such as laundry mats, mobile clinics, and soccer games.
- Normalize testing so that it is not seen as something to be afraid of.
- Provide free or reduced cost tests, or pay people to get tested.
- Provide anonymous testing.
- Provide testing at work.
- Provide self-testing kits online.
- Provide test results more quickly with the option to receive results over the phone.
- Provide testing as the cover or entrance fee to dances and/or clubs

Provider Forum

The final step in the Latino needs assessment project was to hold a forum with providers serving the community. The findings from the survey and community forums were shared, and the providers were asked for their recommendations for how to increase testing in the Latino community, and particularly among men.

The providers placed the most emphasis on having enough human resources to do prevention work. They identified the need for in-depth outreach interventions that allow the workers the opportunity to build a trusting relationship with the clients, and the need for workers to be available in the evening. They felt that it was important to include testing as a component of outreach programs.

The providers did not feel that funds should be spent on media efforts to encourage testing without having an infrastructure in place to offer culturally and linguistically appropriate testing services. They did encourage MDH and providers serving the Latino community to collaborate with community media outlets in order to get free space/time to provide information about HIV/AIDS.

Finally, the providers identified the need to use local and national capacity building providers to increase the capacity of social service and medical providers to: 1) serve the Latino community; 2) conduct effective risk assessments (particularly with MSM); and 3) to access other resources.

SUBSTANCE USE

A study of 60 HIV positive Latinos receiving medical care at West Side Community Health Services in St. Paul revealed a higher risk of unsafe IDU behavior among Latinos born in Puerto Rico and the United States. Fifty-six percent (56%) of the Puerto Rican participants and 27% of U.S. born participants identified IDU as a probable source of HIV infection (Ruiz et al., 2000).

Analyses of data from a national multiracial/ethnic study focused on 269 male and 294 female Latino/a respondents and looked at the relationship between alcohol use, acculturation, and high risk sexual behavior. Overall, 22% of men and 6% of women reported being heavy drinkers (more than 5 drinks a month). Men with a low level of acculturation (29%) and men with a medium level of acculturation (29%) were more likely to be heavy drinkers, compared to men who were highly acculturated (13%). Women who were less acculturated were less likely to be heavy drinkers (0.6%) compared to those with a medium

level (9%) or high level (6%) of acculturation. Men who were heavy drinkers and men who were less acculturated were found to be 4 times more likely than men who were abstainers and men who were more acculturated to have multiple partners and not use a condom consistently. Among women, those who were nondrinkers and those who were less acculturated were more likely to engage in risky behavior (Hines and Caetano, 1998).

Interviews with 109 male and female Latino/a migrant workers (87% Mexican/Mexican American, 13% Central American) in Southeast Michigan revealed that 60% of the total sample reported ever drinking alcohol. Frequency of drinking among men ranged from every day to less than once a month, with more than half drinking 4 or more drinks at each occasion. Frequency for women was 1 to 3 times a month, averaging 1-2 drinks each time. Seven percent (7%) reported using other drugs, including cocaine and marijuana (Ford et al., 2001).

MENTAL HEALTH

Migrant workers experience specific stressors based on their employment and immigrant status. Interviews with 151 migrant and seasonal farm workers in North Carolina revealed that 51% perceived themselves to be at a high level of stress that may subsequently put them at greater risk for experiencing psychological difficulties. The greatest stressors are identified in the sidebar (Kim-Goodwin and Bechtel, 2004).

A study using nationally representative data found that foreign-born Mexican Americans were at significantly lower risk for mood and anxiety disorders than Mexican Americans born in the United States. Additionally, U.S. born Mexican Americans were at significantly lower risk for psychiatric disorders than U.S. born Whites (Grant et al., 2004).

However, immigrants who have experienced political violence are at greater risk for mental health conditions. A study of Latino immigrants who were primary care patients in Los Angeles compared the mental health status of people who had been exposed to political violence compared to those who had not. Patients from El Salvador (55%) and Guatemala (22%) accounted for a greater proportion of the sample that had experienced political violence compared to those from Mexico (15%). The types of violence reported included torture, witnessing violence against their family, forced disappearance of family members, witnessing mass violence, life endangered by bombs or heavy weapons, witnessing torture or an execution, and rape. Patients reporting political violence had higher rates of depressive symptoms and posttraumatic stress disorder compared to those who had not (Eisenman et al., 2003).

SEXUALLY TRANSMITTED DISEASES AND HEPATITIS

Latinos accounted for 7% of chlamydia cases diagnosed in Minnesota in 2004, with a rate of 594 per 100,000 persons. Latinos accounted for 5% of gonorrhea cases diagnosed in 2004, which is a rate of 97 per 100,000 persons. Youth under the age of 25 accounted for 566 (57%) of the chlamydia and gonorrhea cases among Latinos (Minnesota STD Surveillance System).

Greatest Stressors for Migrant Workers

Migrant workers identified the following as being extremely stressful:

- ◆ Mobile lifestyle
- ◆ Language barriers
- ◆ Insecure job and legal status
- ◆ Financial constraints
- ◆ Long working hours

Kim-Goodwin and Bechtel, 2004

As of the end of February 2005, there were 14,458 people living with hepatitis B virus (HBV), of which 113 (0.8%) cases were among Latinos. The risk factor of being born outside of the United States was associated with 26% of the cases among Latinos. The other most common risk factors were perinatal transmission (8%), same sex activity (5%), and IDU (5%).

As of the end of February 2005, there were 22,356 people living with hepatitis C virus (HCV) in Minnesota, of which 2.5% were Latinos. The greatest majority of cases among Latinos were related to past and current incarceration (35%), illicit drug use (25%) and injection drug use (18%) (Minnesota Hepatitis Surveillance System).

SEXUAL BEHAVIOR

Sexual Networks

Studies indicate that migrant workers, as well as immigrants who come alone to the United States to work, engage in sexual behaviors that put them and their primary partner back home at risk. A survey was conducted of 789 males and 367 females in Mexico. The study found differences (see sidebar) in sexual behavior between the 125 who left to work outside of Mexico (migrants) and those who either didn't leave their home or traveled to work in another location within Mexico (nonmigrants).

A study of 501 Mexican migrant workers found that 44% of male migrant workers reported having sex with sex workers while in the United States. Seventy percent (70%) of these reported frequent to very frequent condom use. Although the frequency of having sex with sex workers did not vary between single and married men, married men were less likely than non-married men to use condoms. Thirteen (13%) of male migrants reported having shared the same sex worker with several men in succession (Organista et al., 1997). Results from another study with Mexican immigrants indicate that Mexican men who were not accompanied by their wives while working in the United States reported more lifetime sexual partners, more partners in the previous 2 years, more extramarital affairs, and more sex with prostitutes compared to men whose wives came with them to the U.S. (Viadro and Earp, 2000).

Interviews with the wives of Mexican migrant workers indicate that they are at risk of contracting HIV. Of a sample of 100 rural Mexican women whose husbands were migrant workers in the United States, 66% did not have protected sex with their husbands when they returned to visit, in spite of being knowledgeable about HIV transmission and feeling at risk for HIV because they knew or suspected their husbands had not been faithful (Salgado de Snyder et al., 1996). A follow-up study comparing these women to 100 Mexican wives of migrant workers living with their husbands in Los Angeles indicates an acculturation trend among the women living in Los Angeles who reported more lifetime sexual partners, a wider variety of sexual behaviors, greater condom use during last sex with their husbands, and a higher frequency of asking their husbands to use condoms (Salgado de Snyder et al., 2000).

Differences in Sexual Behavior Between Mexican Migrants and Non-Migrants

- ◆ Migrant males and females had a greater number of sexual partners
- ◆ Migrant males were more likely to have sex with a sex worker (41%) or non-regular partner (35%) compared to nonmigrant males (17% and 20%)
- ◆ Migrant males were more likely to use condoms with wives/regular partners
- ◆ Migrant males were less likely to use condoms with non-regular partners

Magis-Rodríguez et al., 2004

A national study indicates that Latina women reported low prevalence of concurrent relationships (more than one sexual partner during the same time period). The study found that approximately 8% of all the Latina women had concurrent relationships during the 54-month study period compared to 21% of Black women, 11% of White women and 6% of Asian/Pacific Islander women (Adimora et al., 2002).

Sex Workers

A study of 311 Puerto Rican female sex workers ages 18–34 from various municipalities of Puerto Rico found that the women worked under pressure to meet the basic material needs of their families and themselves. With the money they earned from clients, they were able to feed and clothe their children, help their parents and maintain themselves. Often the fear of contracting HIV seemed less immediate than the need to meet their basic needs and those of their families. Condom use was a point of agreement and negotiation for some of the women; far more were primarily concerned with negotiating the size of their payment and the specific sexual services to be provided. The women identified arrest, violence, a client not paying for services, physical illness, and withdrawal from drugs as concerns in addition to the need to take care of themselves and their families (Hansen et al., 2002).

STIGMA

Stigma related to HIV impacts both the ability of HIV positive Latinos to access health care and the ability of HIV negative Latinos to maintain safer behaviors. A study of 60 HIV positive Latinos in care at the West Side Community Health Center in St. Paul found that one of the factors that was significantly associated with delaying entry into medical care after being diagnosed with HIV was the fear of others finding out that they were infected. They noted that it is difficult to maintain the disease a secret, particularly from family members, when treatment requires so many medical appointments and medications. The fear of people in the community finding out about their HIV infection was also a barrier to maintaining medical care (Ruiz et al., 2000).

Denial and stigmatization of homosexuality are common in Latino communities. Many Latino men have different conceptions than gay White men about the meaning of same sex sexual practices and gay identity. Latino men may engage in same sex behavior but not identify as gay or bisexual, and they are unlikely to tell their female partners about their same sex experiences, placing the women at risk (HRSA, 1999).

POWER IMBALANCE BETWEEN GENDERS

Several traditional Latino cultural values and gender roles impact power imbalances between the genders. *Machismo* emphasizes the male dominance in social and sexual relationships.

Men are expected to be strong and protect the family. Men are allowed and encouraged to assert their masculinity through sexual conquests before and during relationships.

Marianismo emphasizes the female role as submissive and obedient to male authority figures such as fathers and husbands.

Women are expected to remain sexually inexperienced prior to marriage and to remain faithful and submissive to their

Traditional Cultural Values

Cultural values that impact gender power imbalance include:

Machismo: Emphasizes the male dominance in social and sexual relationships

Marianismo: Emphasizes the female role as submissive and obedient to male authority figures

husbands during marriage. A traditional belief held by many Latinos is the association of condoms with prostitution or promiscuous sex. If a woman requests that a man use a condom, it may be interpreted as a sign of infidelity and be seen as a challenge to their masculinity or position of power. They may react by accusing their female partner of being unfaithful, ending the relationship, or by physically or psychologically abusing the woman (Dávila, 2002).

A study using life history interviews with 13 Mexican migrant women in Atlanta and 13 women in Mexico highlighted the differences among older and younger women in relation to their expectations of marriage. Among the women age 35 or older, the goals of marriage centered on the fulfillment of a set of gender-specific obligations. For these women, sex produced children and thus helped to direct the husband's resources towards her and her children. The older women valued acting ignorant about their husbands' extramarital affairs. They felt a husband's sexual behavior was largely his own concern as long as he still provided financial support and some measure of respect to his family and didn't publicly embarrass his wife. They suggested that a man physically needs sex on a regular basis and his involvement with another woman need not threaten a marriage. The younger women, on the other hand, spent more time together with their husbands, experienced somewhat less strict gendered division of roles, and stated they were engaged in more joint decision making in many areas of domestic or economic concern, although often with ultimate male authority. The younger women felt that mutually pleasurable sex strengthens the intimacy of their relationship and saw infidelity as a threat/betrayal of that intimacy (Hirsch et al., 2002).

The study conducted by Hirsch et al. (2002) also indicates that economic dependence on a male partner places women at risk. When asked how they would hypothetically respond to evidence that their husband had been unfaithful, 6 (23%) stated that they would leave him. Only the women who could financially support themselves chose this option; 5 of the 6 also had at least a high school diploma. Six women said they would do nothing; these women were all older, less educated, had less work experience and fewer opportunities for economic independence. These two response groups both included women living in Atlanta and in Mexico. The remaining women who couldn't afford to leave their husbands either responded that they would try to talk with their husbands about the infidelity or use their feminine abilities to please and hold onto their husbands.

Having less power in a relationship also limits a woman's ability to insist on safer sex. A study of 369 women ages 18-45 (88% Latina, mostly Puerto Rican and Dominican) found

Low Sexual Assertiveness

Results from a study of 170 low income, primary foreign-born Latina women found that 41% reported low sexual assertiveness. This was defined by the following factors:

- ◆ Never refused sex with a partner when they were not in the mood
- ◆ Never asked a partner to wait while they got a condom
- ◆ Never told a partner how to treat them sexually
- ◆ Never refused to engage in sex practices they didn't like
- ◆ Never asked partner to use a condom
- ◆ Never demanded that a partner use a condom
- ◆ Never refused sex because a partner did not want to use a condom

Raj et al., 2004

that women with high levels of relationship power were found to be 5 times more likely to report consistent condom use than women with low relationship power. An estimated 52% of the lack of consistent condom use among women in the sample could be attributed to low sexual relationship power (Pulerwitz et al., 2002).

DOMESTIC ABUSE AND SEXUAL VICTIMIZATION

A national study of intimate partner violence among Latino, White and Black couples found that rates of male-to-female partner violence (MFPV) and female-to-male partner violence (FMPV) among Latino couples (17% and 21%, respectively) were higher than in White couples (12% and 16%) and lower than in Black couples (23% and 30%) (Caetano et al., 2000). In a follow-up study with the partners who were still together, Latino couples were almost 3 times more likely to engage in MFPV and 2 times more likely to engage in FMPV than White couples (Field and Caetano, 2003).

Studies show that women in relationships that involve intimate partner abuse or violence are less likely to report consistent condom use. Raj et al. (2004) found that among the 170 Latina women interviewed, 21% reported intimate partner violence. Abused women were significantly more likely to report male partner control of the sexual relationship and fear of partner response to condom negotiation than women who were not abused. These fears were specific to verbal abuse and infidelity rather than fear of the partner leaving the relationship or being physically abusive. Abused women were also significantly more likely to indicate greater sexual risk due to their partners being unfaithful. In another study, Mexican American women from a battered women's shelter indicated that their male partners made the ultimate decisions regarding condom use. The women reported lack of condom negotiation due to the fear of or previous experience of physical, psychological and sexual abuse (Dávila, 2002).

IMMIGRATION

A 2003 survey of 119 Latino men and women living in Minnesota found that fear of being deported can be a barrier to undocumented immigrants getting tested for HIV. Twenty-five percent (25%) of survey respondents reported it would be easier to get tested if they knew their results would not be reported to anyone, and 15% thought it would be easier to test if they knew their results would not be reported to immigration officials. Eight percent (8%) stated that the fear of getting deported would stop them from getting tested (MDH, 2003).

A study of HIV/AIDS knowledge was conducted with Latino heterosexuals of Mexican and Puerto Rican ethnicity. Among Mexican respondents, researchers found that having spent more time in the United States, having legal immigration status, and being more acculturated to the United States were predictive of higher levels of HIV knowledge. Among Puerto Rican respondents, greater acculturation to the United States was also predictive of greater HIV knowledge (Loue et al., 2003a). Another study that assessed HIV risk among the same participants found that the more time an individual spent in the United States was predictive of higher actual risk for HIV among Mexican participants only and among the combined sample of Mexican and Puerto Rican respondents (Loue et al., 2003b).

SUMMARY OF THE NEEDS OF LATINO/A HIGH RISK HETEROSEXUALS

- Counseling and testing efforts targeting Latinos:
 - There are high rates of AIDS at first diagnosis in the Latino community.
 - Half of Minnesota survey respondents had never been tested. Men were less likely to have been tested than women.
 - Fear of deportation is a barrier to getting tested.
 - Testing services must be available in Spanish. Information in Spanish about the test, where to get a free test, and availability of testing services in Spanish should also be available in the community.
- Educational/informational efforts targeting the Latino community:
 - Nearly 40% of Minnesota survey respondents had not received any information about HIV in the last year. Almost half had not received information about HIV testing.
 - Suggestions from the survey for best sources of information include clinics/hospitals, brochures in Spanish, Spanish-speaking outreach workers, Spanish language TV, and Spanish-speaking doctors/nurses.
 - Community forum participants also suggested providing more communication and education about HIV through Spanish language media (e.g., newspapers, radio, TV).
- Programs that address substance use and its impact on HIV risk:
 - Men who were heavy drinkers and less acculturated were more likely to have multiple partners and not use condoms consistently.
 - In a sample of 60 HIV positive Latinos in Minnesota, unsafe injection drug use was a more common risk factor among persons born in Puerto Rico and the United States.
- Programs that address mental health issues in the Latino community, particularly among migrant workers and immigrants who have experienced political violence:
 - Migrant workers experience high levels of stress that may put them at risk for greater psychological difficulties.
 - Immigrants who experienced political violence had high rates of depressive symptoms and posttraumatic stress disorder.
- Integration of STD and hepatitis prevention messages into HIV prevention programs:
 - Latinos accounted for 7% of chlamydia cases and 5% of gonorrhea in 2004.
 - Most hepatitis B cases in Latinos were related to being born outside of the U.S. Hepatitis C cases were related to incarceration, illicit drug use, and IDU.
- Programs that support the reduction of sexual risk behaviors, including programs specifically targeting immigrants and migrant workers:
 - Studies found high rates of sexual relationships with sex workers or non-regular partners among migrant workers and immigrants, particularly those who came to the United States without their wives.
- Strategies to address stigma related to HIV and sexual orientation:
 - Latino men who have sex with men may not identify as gay or bisexual, and may not tell their female partners about their same sex experiences.
 - HIV stigma was found to delay entry into care for Latinos who tested positive for HIV.
- Programs that address gender power imbalance and domestic/sexual violence:
 - Programs must address the lack of power that many Latino women have over their own sexual behavior.
 - Abused women were more likely to report male control of the sexual relationship and fear of partner's response to condom negotiation.

Native American High Risk Heterosexuals

According to the 2000 Census, Native Americans make up 1.6% of Minnesota's population. Approximately 23% of the Native American population live on the 11 reservations in the state. Minnesotans who identify as Native American alone or in combination with another race reported affiliation with the following tribes with the greatest frequency: Chippewa (49%), Sioux (9%), and Cherokee (3%). According to the Minnesota HIV/AIDS Surveillance System, Native Americans accounted for an estimated 2% of new HIV infections through heterosexual contact from 2002 – 2004. It is important to note that Native Americans may be undercounted in the surveillance system as the Indian Health Services is not required to report HIV/AIDS cases to the MDH; however, through initial investigation, it appears that most tribes do report.

SUBSTANCE USE

Native Americans in Minnesota generally use alcohol, marijuana and other illicit drugs at higher rates in nearly all age groups than all other racial/ethnic groups in the state combined. Substance use among Native Americans peaks from late adolescence through young adulthood, but rates of use for some substances remain relatively high during mid and late life. The use of illicit drugs is much less prevalent than the use of alcohol among Native Americans. Although the rate of alcohol use in adults is less among Native American than other groups, and the rate of binge drinking (5 or more drinks per occasion) decreases in older Native American age groups, the rate of binge drinking remains higher among Native American adults than other populations (Minnesota Department of Human Services, 2000).

National studies also indicate high rates of alcohol and drug use among Native Americans. One study points to the use of alcohol as having a greater impact on HIV risk than drug use. Of 147 Native American drug users who completed an alcohol questionnaire, 100% reported alcohol use in the past month, 42% reported they drank every day, and 50% drank until they were drunk half of the time or more. IDUs demonstrated the highest frequency and quantity of alcohol use in the past 30 days. Many participants reported blacking out while drinking and learning later that they had unprotected sex with complete strangers or persons they would not otherwise accept as partners. Interviewees agreed that in their communities, alcohol presented at least as great a risk of HIV infection as drug abuse, and most felt that it was a greater risk (Baldwin et al., 2000).

A study of 100 Native Americans in New York found that 43% reported alcohol and other drugs use for non-ceremonial purposes during the last 6 months. Twenty-seven percent (27%) had used alcohol to the point of being drunk, 22% used marijuana, and 4% reported injecting drug use. Respondents who had engaged in sex while drunk or high were 14.35 times more likely than those who did not to engage in risky sexual behaviors (Walters et al., 2000).

MENTAL HEALTH

The experiences of Native Americans since the time that European colonialists arrived in the United States have left a long-term negative impact on the mental health of this community. Federal policies allowed for the extermination of Native Americans through military force. Federal policies also allowed for forced relocation from traditional homelands to

reservations, as well as the formation of boarding schools. Many Native children were forcibly removed from their homes to attend boarding schools where they were punished for speaking their own languages and were taught to reject their cultures (NNAAPC and Mountain Plains AIDS Education and Training Center [MPAETC], 2001). From 1890 through 1978, the federal government also outlawed Native American spiritual and cultural practices, including dances, traditional medicine and funerary rights (Walters et al, 2002). The predominant perception of mental health services in the Native American community is a distrust based on different cultural approaches to mental health and the belief that mental health services are an extension of the dominant society's attempt to assimilate them (NNAAPC and MPAETC, 2001).

Comparing the three leading causes of death for males ages 25–44 in Minnesota from 1997–2001, the second leading cause for Native American males was suicide (49.9 per 100,000) compared to White males (21.0 per 100,000). Suicide did not appear as one of the top three major causes of death for other race/ethnic groups (MDH, 2004).

Findings from national studies also point to high rates of mental health conditions among Native Americans. A study of 234 Native American women in primary care conducted in Albuquerque found that the 44% of the women had suffered from a mood disorder during their lifetime, and 86% of these suffered from major depression. Twenty-one percent (21%) had suffered a mood disorder in the past year, and 81% of these had major depression. Anxiety disorders were the most common with 63% of the women meeting criteria for any lifetime anxiety disorder. The most common were a specific phobia (31%) and posttraumatic stress disorder (29%). The levels of mood and anxiety disorders were higher among Native American women than women of other race/ethnicities found in comparable studies (Duran et al., 2004).

SEXUALLY TRANSMITTED DISEASES AND HEPATITIS

Native Americans accounted for 3% of chlamydia cases diagnosed in Minnesota in 2004, with a rate of 488 per 100,000 persons. Native Americans accounted for 2% of gonorrhea cases diagnosed in 2004, which is a rate of 89 per 100,000 persons. Youth under the age of 25 accounted for 329 (70%) of the chlamydia and gonorrhea cases among Native Americans (Minnesota STD Surveillance System).

As of the end of February 2005, there were 14,458 people living with hepatitis B virus (HBV), of which 59 (0.4%) cases were among Native Americans. The risk factor of IDU was associated with 24% of the cases among Native Americans. Most of the cases (65%) had an unknown risk factor.

As of the end of February 2005, there were 22,356 people living with hepatitis C virus (HCV) in Minnesota, of which 5% were Native Americans. The greatest majority of cases among

Mental Health in Native Americans

A study of 374 Native American adults in the Denver area found that:

- ◆ 50% had experienced depression
- ◆ 20% experienced suicidal thoughts or attempting suicide
- ◆ 29% felt overwhelmed at least weekly
- ◆ 28% felt anxiety at least weekly
- ◆ 25% felt lonely at least weekly
- ◆ 24% felt depressed at least weekly
- ◆ 56% sought help
- ◆ The church and traditional methods were the most common forms of help that were sought.

King, 1999

Native Americans were related to illicit drug use (33%); injection drug use (24%); high risk sexual activity, including sex with an HCV positive person, IDU or multiple sex partners (9%); past and current incarceration (8%), and blood/plasma donor (8%) (Minnesota Hepatitis Surveillance System).

SEXUAL BEHAVIOR

A mail survey conducted with 155 Native American women in the New York metropolitan area found that 60% of the total sample reported engaging in vaginal intercourse. Of these, 46% never used condoms, while 24% reported always using them. Eighteen percent (18%) of the total sample reported engaging in anal intercourse. Of these women, 82% reported never using a condom, while only 11% always used them. Almost half (48%) of the total sample engaged in unprotected vaginal or anal intercourse during the last 12 months. The study found an association between having a higher blood quantum and engaging in fewer lifetime high risk sexual behaviors. The authors suspect that higher blood quantum may indicate a greater level of involvement in and identification with the Native American community, which may in turn be a protective factor against HIV risk behavior (Simoni et al, 2004).

Another study of Native American men and women in New York found that 78% of women who reported sexual activity with a man in the last 6 months engaged in unprotected vaginal or anal sex with at least one partner. Eighty-two percent (82%) of men reporting sex with women had engaged in unprotected vaginal or anal sex with at least one woman during that same time period (Walters et al, 2000).

Sexual Networks

Many Native Americans who live on reservations or in rural areas may travel weekly, monthly or several times a year back and forth to urban areas. This may mean that HIV is being carried back from urban areas to reservations or vice versa (Management Sciences for Health and HRSA, 2003).

A study conducted with 110 Native American drug users found differences in the race/ethnicity of sexual partners according to gender, as well as differences in risk behavior according to the race/ethnicity of the partner. Study results indicate that male participants were more likely to have had at least one Native American sex partner in the last 30 days compared to women (74% vs. 30%). Among female participants, 23% of their partners in the last 30 days were White, 15% were Black, 40% Hispanic and 30% Native American. Overall,

Reasons for Not Using Condoms

Study participants gave the following reasons for not using condoms:

- ◆ Were with steady partner (87%)
- ◆ Assumed they were safe (68%)
- ◆ Respondent did not have AIDS (63%)
- ◆ Respondent did not want to use condom (57%)
- ◆ Partner did not want to use condom (41%)
- ◆ Partner said s/he did not have AIDS (37%)
- ◆ Did not have condom at the time (29%)
- ◆ Sex was too exciting that they did not want to use a condom (26%)
- ◆ Finding condoms painful or uncomfortable (14%)
- ◆ Wanted to become pregnant (6%)
- ◆ Partner got angry for suggesting the use of a condom (6%)
- ◆ Too embarrassed to get condom (4%)
- ◆ Not able to talk about condom use (2%)
- ◆ Forced to have sex (2%)

(Walters et al., 2000)

women were more likely than men to report never using condoms for vaginal or anal sex during the last 30 days (55% vs. 23%). The lowest amount of condom use occurred within sexual partnerships of Native American women and White men, with only 1 of 18 pairs using a condom at least once. Conversely, Native American men were more likely to use condoms with White women (50%) than with Black (26%), Native American (15%) or Latina (10%) women. White partners of Native women were also more likely to be IDUs than partners of other races/ethnicities (Fenaughty et al., 1998).

KNOWLEDGE OF HIV AND PERCEPTION OF RISK

In a study of 53 low income Native American women in western New York state, 40% felt they were currently at risk of getting HIV, 30% suspected they have been exposed to HIV, and 33% believed that in the past 10 years they have had sex with someone who could have put them at risk for HIV. Although 42% reported that they needed to change some of their sexual behaviors, only 28% had planned new ways to practice safer sex, 20% were not willing to make sacrifices in order to have safer sex, and 26% were not committed to making lasting changes (Morrison-Beedy et al., 2001).

In the study conducted by Walters et al. (2000) with 100 Native Americans, respondents reported they had no (32%), low (52%), moderate (13%) or high (2%) risk of getting HIV/AIDS while 52% of the sample reported they never used condoms. The average level of HIV knowledge was high (19.91 out of a possible 23), with higher levels of knowledge among those who personally knew someone with HIV, those who had a family member or close friend with HIV, those who had considered taking an HIV test, and those who had actually taken the test. A study of 155 Native American women found that 36% agreed or strongly agreed that AIDS is another form of germ warfare on Indians (Simoni et al., 2004).

STIGMA AND DISCRIMINATION

In some Native American communities, the stigma against HIV is similar to that found in the dominant society. In others, there is denial that HIV is a significant problem. Native Americans living with HIV/AIDS are often not able to be open about their infection to friends and family members.

Stereotypes and the effects of assimilation policies may result in internalized racism in Native American communities. Internalizing negative attitudes of the dominant culture can break down a positive Native American identity and lead individuals to abandon the cultural traditions that can help mitigate the trauma and other stressors that may put individuals at risk for HIV infection (NASTAD, 2004).

Misperceptions About HIV

The study of 53 Native American women found the following misperceptions of HIV:

- ◆ 21% did not know a person could be HIV positive and not have symptoms
- ◆ 15% believed HIV could be transmitted from a toilet seat
- ◆ 55% believed HIV could be transmitted by donating blood
- ◆ Participants believed the following would protect against HIV: withdrawal during intercourse (27%), douching (23%), or taking vitamins (21%)
- ◆ 43% believed they were always tested for HIV during routine Pap smears

Morrison-Beedy et al., 2000

Native Americans experience prejudice and discrimination ranging from avoidance to murder. According to the U.S. Department of Justice, from 1992–2001 Native Americans experienced violence at a rate (101 violent crimes per 100,000 Native Americans) more than twice as high as the rest of the nation (41 per 100,000 persons). In Minnesota, from 1997–1999, the proportion of murder victims who were Native American (7%) was greater than the proportion of the Native American population of the state (1.6%). Fifty-eight percent (58%) of Native Americans were murdered by someone of another race (U.S. Department of Justice, 2004).

POWER IMBALANCE BETWEEN GENDERS

Traditionally, although specific roles varied across tribes, female and male gender roles were complementary in maintaining community stability. Men and women valued the contributions made by each gender. In some tribal social systems, women played critical economic, political and spiritual roles. Although varying by tribe, both patrilineal and matrilineal patterns of inheritance and descendency existed, and continue to exist. White colonizers' assimilation strategies resulted in the breakdown of the traditional complementary male-female relations in the tribes and a general increase in tribal male dominance and control over Indian women. In this day and age, women have continued to maintain the role of passing on Native culture and traditions to the children (Encyclopedia of North American Indians).

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Studies highlight the relationship between experiences of abuse and risky behavior. A study of 155 Native American women identified rates of various types of abuse and assault (see sidebar). Partner physical trauma was associated with greater lifetime (but not current) injection drug use, and partner sexual trauma was associated with greater lifetime (but not current) high risk sex (2 or more sexual partners in a month, sex with a stranger, acquired an STD, and sex with an HIV positive person) and injection drug use (Simoni et al., 2004).

Walters et al. (2000) found that of 100 Native American men and women, 20% of the sample reported ever having been physically or sexually assaulted by a partner. Twenty-six percent (26%) reported sexual assault and 29% reported physical assault by a non-partner. Those who had experienced domestic violence were 9.26 times more likely to engage in risky sexual behaviors than those who had not experienced domestic violence. Having a history of sexual assault by a non-partner was also associated with decreased consistency of condom use in the past 6 months.

Experiences of Native American Women
Women reported the following experiences of abuse and assault:

| Type of Abuse/Assault | % |
|--|-----|
| Experienced some type of abuse/assault during lifetime | 52% |
| Sexual abuse/assault by a sexual partner | 20% |
| Sexual abuse/assault by non-partner | 34% |
| Sexual abuse/assault by both partner and non-partner | 15% |
| Physical abuse/assault by sexual partner | 31% |
| Physical abuse/assault by non-partner | 20% |
| Physical abuse/assault by both partner and non-partner | 14% |

Simoni et al., 2004

SUMMARY OF THE NEEDS OF NATIVE AMERICAN HIGH RISK HETEROSEXUALS

- Programs that address substance use and its impact on HIV risk:
 - Native Americans in Minnesota use alcohol, marijuana and other illicit drugs at higher rates in nearly all age groups than other racial/ethnic groups.
 - Drug using participants in a study identified alcohol as being as great of an HIV-related risk as drug use, if not more.
 - Persons who engaged in sex while drunk or high were much more likely to engage in risky sexual behaviors.
- Programs that address mental health issues:
 - The second leading cause of death among Native American males from 1997-2001 was suicide.
 - National studies also find high rates of mental health conditions among Native Americans.
 - Historical context must be taken into consideration when addressing mental health issues in the Native American community.
- Integration of STD and hepatitis prevention messages into HIV prevention programs:
 - Native Americans accounted for 5% of hepatitis cases in Minnesota. Most common risk factors were illicit drug use, injection drug use and high risk sexual activity.
 - Native Americans accounted for 3% of chlamydia and 2% of gonorrhea cases in Minnesota in 2004 (although 70% were among youth under the age of 25).
- Programs that support the reduction of risky sexual behavior:
 - Studies indicate high rates of unprotected vaginal and anal sex (although one study indicated that most unprotected sex occurred with a steady partner).
- Educational/informational efforts targeting the Native American community:
 - Misperceptions about how HIV can be transmitted and prevented exist.
- Strategies to address HIV-related stigma and racism:
 - HIV-related stigma and denial exist in Native American communities.
 - Stereotypes and the effects of forced assimilation policies may result in internalized racism, which can lead individuals to abandon cultural traditions that can help mitigate the trauma and other stressors that put people at risk for HIV infection.
 - Native Americans experience violent crimes at a higher rate than all other racial/ethnic groups, and the persons of other races/ethnicities perpetrate the majority of crimes against Native Americans.
- Programs that address domestic violence and sexual victimization and their impact on HIV risk:
 - Women who had experienced domestic violence were more likely to engage in risky sexual behaviors.
 - Women who had experienced sexual assault by a non-partner were also more likely to engage in risky sexual behaviors.

Young High Risk Heterosexuals

A report released by the Center for AIDS Prevention Studies (1997) clearly and simply describes the factors that put youth at risk for HIV in America today. It states, *“Simply counseling abstinence or rational sexual behavior won’t stop the epidemic. Those most at risk – young men who have sex with men, young women, young people of color, and homeless and runaway youth – must confront an array of personal and external social factors in order to protect themselves.”* Some of the factors that youth and young adults face include social conditions (e.g., homophobia, sexism, poverty, homelessness, and sex work) that limit youth’s ability to insist upon safer sex; the need to find acceptance, respect and love through sex; the discovery phase of sex; power dynamics involved with older partners; coercion and force; and difficulty in communicating personal needs. And while trying to deal with these factors, young people are surrounded by TV shows, movies, ads and music that promote sex without addressing the possible consequences of unprotected sex or providing education on safer sex skills.

Research related to adolescent sexual behavior has shown that youth experiencing vulnerable lives are more likely to initiate sexual intercourse at early ages. Early sexual intercourse is associated with high risk factors for HIV at a later age, including more partners, multiple concurrent partners, and more frequent sex. Risky sexual behaviors tend to be just one element in an array of risky behaviors that vulnerable youth engage in, which suggests that it is important to address underlying causal factors of all of these behaviors. For example, use of alcohol, tobacco, marijuana, dating violence, physical violence, and carrying weapons are all associated with an increased number of sexual intercourse partners among youth (Valois, 1999; Moore et al., 1999).

SUBSTANCE USE

A study using nationally representative data for high school seniors found some differences in drug and alcohol use by race/ethnicity. Overall, 37% of high school seniors reported having used marijuana during the previous year (data for 1996–2000 combined), with annual prevalence highest among Native Americans (45%); at intermediate levels among Whites, Mexican American, Cuban Americans and Puerto Ricans; somewhat lower among African American and other Latino seniors, and lowest among Asians (22%). Alcohol was the most widely used substance across racial and ethnic groups. Approximately 75% of White, Latino, and Native Americans reported alcohol use during the previous year, with more than 50% of African American and Asian seniors also reporting alcohol use during the same time period. Frequent heavy drinking (5 or more drinks in a single setting within past 2 weeks) was most common among White and Native American seniors, and least common among African Americans and Asian Americans (Wallace et al., 2002).

Results from the Minnesota Student Survey conducted in 2004 indicate that students enrolled in alternative schools and correctional facilities have higher rates of substance use than students in public schools. Findings from the surveys are summarized on the following page.

Substance Use
Comparison of Minnesota Student Population: 2004 Minnesota Student Survey

| | Public Schools, 9 th Graders N = 49,210 | | Public Schools, 12 th Graders N = 34,521 | | Alternative Schools N = 3,331 | | Correctional Facilities N = 798 | |
|---|--|--------|---|--------|-------------------------------------|--------|---------------------------------------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| Frequent binge drinking in last year | 7% | 5% | 28% | 15% | 39% | 22% | 32% | 37% |
| Used only alcohol in past year | 23% | 27% | 33% | 40% | 18% | 19% | 10% | 7% |
| Used only drugs in past year | 2% | 1% | 2% | 1% | 4% | 5% | 9% | 8% |
| Used both alcohol and drugs in past year | 17% | 18% | 30% | 25% | 57% | 56% | 56% | 73% |
| Used marijuana in last 30 days more than twice | 8% | 6% | 16% | 10% | 42% | 34% | 19% | 30% |
| Used other people's prescription drugs more than twice in past year | 3% | 4% | 6% | 4% | 17% | 14% | 21% | 26% |
| Used amphetamines more than 2 times in past year | 3% | 4% | 5% | 4% | 12% | 17% | 21% | 31% |
| Used meth more than twice in past year | 2% | 2% | 4% | 2% | 13% | 17% | 24% | 25% |
| Used crack more than twice in past year | 2% | 2% | 4% | 2% | 13% | 14% | 17% | 26% |
| Used ecstasy more than twice in past year | 3% | 1% | 3% | 1% | 7% | 5% | 14% | 14% |
| Used LSD more than twice in past year | 2% | 1% | 3% | 1% | 9% | 4% | 13% | 15% |
| Used heroin/other narcotics more than twice in past year | 2% | 1% | 2% | 0% | 6% | 3% | 10% | 5% |
| Used barbiturates more than twice in past year | 2% | 2% | 3% | 1% | 8% | 7% | 13% | 11% |

Source: Minnesota Department of Education et al., 2004 Minnesota Student Survey

Results from a survey of homeless youth and young adults in Minnesota highlight some differences in substance use by gender, age, and geography. Findings are compared for male and female youth under the age of 18 in the metro area and Greater Minnesota, as well as for young male and female adults ages 18 to 20 in the metro area and Greater Minnesota (Wilder Research, 2005).

Past Week Substance Use Among Homeless Minnesota Youth and Young Adults, 2003

| | Metro Youth Under 18 N = 63 | | Greater MN Youth Under 18 N = 66 | | Metro Young Adults, 18-20 N = 199 | | Greater MN Young Adults N = 103 | |
|---|-----------------------------------|--------|--|--------|---|--------|---------------------------------------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| Alcohol use last week | 21% | 21% | 12% | 8% | 29% | 13% | 26% | 19% |
| Marijuana use last week | 16% | 26% | 12% | 21% | 38% | 13% | 19% | 10% |
| Meth use last week | 5% | 5% | 0% | 3% | 5% | <1% | 5% | 0% |
| Crack cocaine use last week | 5% | 5% | 0% | 3% | 3% | 2% | 5% | 0% |
| Consider self alcoholic or chemically dependent | 5% | 5% | 15% | 21% | 15% | 14% | 33% | 26% |
| Ever been in treatment | 16% | 10% | 19% | 19% | 20% | 13% | 30% | 23% |

Source: Wilder Research, Homeless Youth in Minnesota, 2005

A study of homeless youth ages 13–23 in Northern California found that 99% reported lifetime use of some drug. The majority of youth who used cocaine (82%) and combined speed and cocaine (85%) did not use condoms during intercourse with last partner, and 69% of those who combined speed and cocaine reported using drugs during their last sexual encounter with their main partner. During most recent sexual encounter with a casual partner, those who primarily used speed were the least likely to use drugs (49%) and most likely to have unprotected sex (60%) (Gleghorn et al., 1998).

MENTAL HEALTH

Data from the 2003 Youth Behavioral Risk Surveillance System (YBRSS) of students in grades 9–12 indicate that 29% of students nationwide felt so sad or hopeless almost every day for 2 or more weeks in a row that they stopped doing some usual activities. Overall, the prevalence was higher among females (36%) than males (22%). Prevalence was higher among Latino females (45%), White females (33%), and Black females (31%) than Latino males (26%), White males (20%), and Black males (22%).

Seventeen percent (17%) of students had seriously considered attempting suicide during the 12 months prior to the survey. Overall, the prevalence of considering suicide was higher among females (21%) than males (13%). Among females, Latinas had the highest prevalence (23%) compared to White (21%) and Black (15%) female students. Among males, Latino males had the highest prevalence (13%), followed closely by White males (12%), and then Blacks (10%). Nine percent (9%) of students had attempted suicide one or more times during the previous 12 months. Again, the prevalence of attempting suicide was higher among females (12%) than males (5%). The prevalence was higher among Latina females (15%) than White (10%) and Black (9%) female students, and higher among Black males (8%) than Latino (6%) and White (4%) male students (CDC, 2004).

Data from the 2000 National Health Survey on Drug Abuse (NHSDA) also found that Latina females ages 12–17 were at higher risk for suicide than Latino male youth, and male and female youth of other racial/ethnic groups. Latina females born in the United States were found to be at higher risk for suicide compared to foreign-born Latinas (SAMHSA, 2003).

A study of 64 rural youth ages 12-18 found that 28% had modest or high depression scores at the baseline measure. A slight increase was found at follow-up, which was completed an average of 1.8 years later, with 31% reporting modest or high depression scores. At baseline, depression was related to the following factors: not getting enough exercise, history of physical/sexual abuse, peer problems, drug abuse, violence, tobacco, problems with school, and self-esteem. At follow-up, depression scores were related to violence, problems with school, and problems with family. The study also found that the youth who had higher baseline depression scores had higher rates at follow-up of sexual activity, drug abuse, violence, tobacco use, history of sexual/physical abuse, and problems with school (Burns et al., 2004).

Suicide Thoughts and Attempts in Past Year: Minnesota Student Survey 2004

Comparison of local data indicates that females overall are at greater risk for suicide than males, and that students in alternative schools and correctional facilities are at higher risk for suicide than students in public schools.

| | Thoughts of Suicide | Attempted Suicide |
|---|--------------------------------|------------------------------|
| <i>Public School, 9th graders</i> | | |
| Males | 15% | 4% |
| Females | 28% | 10% |
| <i>Public School, 12th graders</i> | | |
| Males | 14% | 4% |
| Females | 16% | 4% |
| <i>Alternative Schools</i> | | |
| Males | 20% | 7% |
| Females | 26% | 11% |
| <i>Correctional Facilities</i> | | |
| Males | 22% | 11% |
| Females | 43% | 24% |

Source: MN Department of Education, 2004 Minnesota Student Survey

Wilder Research (2005) examined rates of lifetime suicidal thoughts and suicide attempts in homeless youth ages 17 and under and young adults ages 18–20 in the metro area and Greater Minnesota. Since these are lifetime rates instead of rates within the last year, it is not possible to make direct comparisons to data from the 2004 Minnesota School Survey.

Lifetime Suicidal Thoughts and Attempts Among Homeless Minnesota Youth and Young Adults, 2003

| | Metro Youth Under 18 N = 63 | | Greater MN Youth Under 18 N = 66 | | Metro Young Adults, 18-20 N = 199 | | Greater MN Young Adults N = 103 | |
|----------------------------|-----------------------------------|--------|--|--------|---|--------|---------------------------------------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| Ever thought about suicide | 32% | 36% | 26% | 39% | 40% | 42% | 49% | 55% |
| Ever attempted suicide | 16% | 25% | 19% | 26% | 18% | 25% | 23% | 30% |

Source: Wilder Research, Homeless Youth in Minnesota, 2005

SEXUALLY TRANSMITTED DISEASES

Youth and young adults under the age of 25 accounted for 62% of all chlamydia and gonorrhea cases reported in Minnesota in 2004, with higher rates among the 20–24 age group. Females accounted for 77% of the total 9,089 cases of chlamydia and gonorrhea among youth and young adults. Youth/young adults in Greater Minnesota made up the greatest proportion of cases (31%), compared to 27% in suburban areas, 23% in Minneapolis, and 16% in St. Paul (Minnesota STD Surveillance System).

Race/Ethnicity of Chlamydia and Gonorrhea Cases Under Age 25, Minnesota 2004

- ♦ 28% Black
- ♦ 25% White
- ♦ 6% Latinos (any race)
- ♦ 4% Native Americans
- ♦ 3% Asian/Pacific Islanders

SEXUAL BEHAVIOR

The 2004 Minnesota Student Survey included questions about sexual behavior. The following table summarizes the responses for 9th and 12th grade male and female students, as well as male and female students in alternative schools and juvenile correctional facilities. Results show that across groups, female students are less likely to report always using condoms and more likely to report that they did not use condoms at last sexual intercourse. Students in alternative schools and correctional facilities are more likely to report having sex 3 or more times.

Sexual Behavior
Comparison of Minnesota Student Population: 2004 Minnesota Student Survey

| | Public Schools, 9 th Graders N = 49,210 | | Public Schools, 12 th Graders N = 34,521 | | Alternative Schools N = 3,331 | | Correctional Facilities N = 798 | |
|--|--|--------|---|--------|-------------------------------------|--------|---------------------------------------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| Never had sex | 79% | 82% | 54% | 51% | 25% | 15% | 19% | 12% |
| Sexual intercourse 3 or more times | 11% | 10% | 35% | 42% | 61% | 75% | 81% | 88% |
| 1 or more male partners in last 12 months | 3% | 17% | 4% | 47% | 7% | 83% | 9% | 82% |
| 1 or more female partners in last 12 mos | 20% | 2% | 46% | 2% | 72% | 8% | 74% | 7% |
| Been pregnant or gotten someone pregnant 1 or more times | 2% | 1% | 3% | 4% | 12% | 32% | 22% | 29% |
| <i>Of sexually active students:</i> | | | | | | | | |
| Never talk to partners about protection from STDs/HIV | 38% | 32% | 33% | 21% | 27% | 16% | 33% | 16% |
| Never use condoms | 14% | 11% | 12% | 16% | 16% | 24% | 16% | 17% |
| Always use condoms | 60% | 56% | 51% | 41% | 41% | 26% | 33% | 16% |
| Did not use condom during last intercourse | 30% | 32% | 34% | 43% | 44% | 59% | 56% | 68% |

The 2004 Minnesota Student Survey asked students who reported they do not have sexual intercourse to indicate all factors that influence their decision not to have sex. The responses are summarized in the following table.

Reasons for Sexual Abstinence
Comparison of Minnesota Student Population: 2004 Minnesota Student Survey

| | Public Schools, 9 th Graders N = 49,210 | | Public Schools, 12 th Graders N = 34,521 | | Alternative Schools N = 3,331 | | Correctional Facilities N = 798 | |
|--|--|--------|---|--------|-------------------------------------|--------|---------------------------------------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| One or both parents would object | 51% | 62% | 41% | 53% | 17% | 25% | 19% | 20% |
| I don't want to have sex | 22% | 61% | 25% | 55% | 23% | 49% | 22% | 56% |
| Most students in my school do not have sex | 13% | 8% | 5% | 1% | 7% | 6% | 13% | 0% |
| My friends don't have sex | 24% | 35% | 14% | 19% | 7% | 6% | 10% | 0% |
| I don't think it's right for a person my age to have sex | 45% | 70% | 30% | 47% | 17% | 31% | 18% | 44% |
| I'm afraid of getting caught | 27% | 27% | 14% | 15% | 9% | 13% | 15% | 4% |
| My religious or spiritual beliefs | 29% | 49% | 35% | 49% | 12% | 20% | 12% | 12% |
| Sex education at school has shown me the advantages of waiting until I'm older | 30% | 38% | 20% | 25% | 17% | 23% | 26% | 36% |
| Don't want to get an STD | 53% | 68% | 46% | 55% | 40% | 54% | 41% | 60% |
| Fear of pregnancy | 41% | 72% | 48% | 68% | 34% | 52% | 30% | 44% |
| My parents taught me the advantages of waiting until I'm older | 31% | 45% | 25% | 40% | 17% | 29% | 23% | 32% |
| I have chosen to wait until I'm married | 36% | 53% | 40% | 53% | 26% | 36% | 29% | 40% |

Source: Minnesota Department of Education et al., 2004 Minnesota Student Survey

Among young adults, spring break appears to be a particularly risky time. A study of 532 female and male undergraduate students ages 18-25 (83% White, 97% heterosexual) found high rates of risky sexual behavior, often in the context of alcohol and/or drug use.

Approximately one third of the sample reported having sex with someone they met on spring break; 26% of men and 35% of women did not use a condom during their last sexual encounter with someone they had just met on spring break. Student reported that decisions about sex were influenced by their alcohol and/or drug use, with 68% stating that they regretted having sex after drinking and 10% regretted having sex following drug use. Of the total sample, 74% of males and 88% of females reported never or rarely worrying about HIV or STDs (Apostolopoulos et al., 2002).

Sexual Networks

Studies of the sexual networks of youth show a high frequency of concurrent relationships. Concurrent relationships set the stage for more rapid STD transmission through a sexual network than would occur in a sexual network made up of serial or sequential relationships (Adimora and Schoenbach, 2005). An analysis of data collected as part of a national adolescent health study described the nature of sexual relationships over the previous 18 months among middle and high school students. Fifty-six percent (56%) reported more than one partner; of these, 54% had concurrent relationships (Ford et al., 2002). Another study of low-income African American and Latino youth ages 15–24 found that of those in relationships, 54% were in monogamous relationships, 13% had serial partners, and 33% had concurrent relationships. Female students were more likely than males and Latina students were more likely than all others to report monogamous partners (Norris and Ford, 1999).

Other studies highlight differences in race/ethnicity and age of sexual partners. Among middle and high school students who reported more than one partner, 69% had partners who were from different age groups. Whites and Black students were more likely to have partners of the same race (85%) than were Latino students (58%) (Ford et al., 2002). Another analysis of the low-income African American and Latino youth ages 15–24 found that the vast majority of African-Americans (97%) had African American partners compared to only 54% of Latinos who had partners of the same ethnicity. Females were more likely to have older partners than males. There were few differences in condom use based on the age or ethnicity of partners. The authors concluded although relationships with people of similar background and age were common, bridges exist for STD transmission across racial/ethnic and age groups (Ford et al., 1997). A study of African American adolescent females found that 53% had partners 2–4 years older and 10% reported typical sex partners at least five years older. Girls with older sex partners were more likely to report unprotected sex than those with partners close to the same age (DiClemente et al., 2002).

A study comparing the use of the Internet to find sexual partners between young adults ages 18–24 to adults over 25 found that the younger group were less likely to be White, more likely to be Latino, more likely to be female, and just as likely to use the Internet every day or almost every day. Young adults reported having sex for the first time at a younger age than the older respondents. They were less likely to ever have been tested for HIV or an STD, and less likely to discuss HIV or STDs with partners they met over the Internet. Young adults were less likely to have had sex with partners they did not meet on the Internet. Young adults were more likely to report having partners of the opposite sex (53%) than older respondents (46%). Condom use with partners met over the Internet was the same between the two age groups (McFarlane et al., 2002).

HOMELESSNESS

Homeless youth and young adults are a particularly vulnerable population. Wilder Research (2005) estimates that between 12,000 and 22,000 Minnesota youth under the age of 18 experienced at least one episode of homelessness on their own (not with their parents) during 2003. Wilder Research also estimates that 3,720 to 6,000 young adults ages 18–20 experienced homelessness during 2003. In the survey conducted on one night in October 2003, Wilder Research interviewed 129 homeless youth and 302 homeless young adults. About two thirds of homeless youth were Black, Native American, Asian or multiracial (65%).

Among homeless young adults, 60% were people of color. The number of homeless young people of color is disproportionately high compared to the general population of Minnesota youth, of which only 15% are people of color.

PERCEPTION OF RISK

One of the defining characteristics of youth is their sense of invincibility, which can influence choices related to engaging in risky behavior. In a 2000 national survey of HIV knowledge among teens aged 12-17, 34% of the respondents reported being "very" concerned about becoming infected with HIV. However, there was wide variation between races on this question, with 60% of African American youth being very concerned compared to 28% of Whites. Slightly over 90% of the total sample knew that HIV could be transmitted via unprotected sex or needle sharing. A total of 79% knew that there is no cure for AIDS but only 51% knew that there are drugs available that can lengthen the life of someone with HIV (Kaiser Family Foundation, 2000).

Results from the Minnesota Behavioral Risk Factor Surveillance System (BRFSS) found that in 2000, 54% of 18-24 year olds reported they had no risk of getting infected with HIV, 34% reported low risk, 6% reported medium risk, and 6% reported high risk. Twenty-five percent (25%) of 18-24 year olds had ever been tested for HIV and of those, 55% had been tested in the last year (CDC, 2000).

A study of HIV knowledge among young adult Native Americans conducted in two Northern Plains communities found that 54% of participants provided correct answers to HIV knowledge questions. The level of perceived risk was relatively low, although only 42% of the sample reported consistent condom use (Mitchell et al. 2002).

POWER IMBALANCE BETWEEN GENDERS

There is consistent evidence from the research on sexual networks that adolescent women are likely to have sexual partners who are at least two years older. This age gap and the contrast between the greater sexual experience of older male partners and lack of interpersonal skills and lack of maturity in young women make it difficult for young women in these relationships to insist on condom use (Wolfe, 2003).

Sexual Experiences of Homeless Youth and Young Adults in Minnesota

Homeless Youth

- ◆ 29% of females and 21% of males have had sexual relations that resulted in pregnancy
- ◆ 6% of youth had an STD in the past 12 months
- ◆ 2% were HIV positive
- ◆ 13% of females and 4% of males had exchanged sex
- ◆ 12% had been told by someone how to make money in the sex industry; most (64%) were approached by an adult

Homeless Young Adults

- ◆ 59% of females and 27% of males have had sexual relations that resulted in pregnancy
- ◆ 8% of young adults had an STD in the past 12 months
- ◆ Less than 1% were HIV positive
- ◆ 16% of females and 17% of males had exchanged sex
- ◆ 25% had been told by someone how to make money in the sex industry; most (81%) were approached by an adult

Wilder Research, 2005

Young women are more likely than young men to have unwillingly engaged in sexual activities. Female teens cite pressure from a boyfriend, the desire to please or keep a boyfriend, and/or feeling that don't have the option to say "no" as reasons for participating in unwanted sexual activities. Sexually experienced female teens were 2 times more likely than male teens to report having someone pressure them to do more sexually than they were comfortable with or that a relationship moved too fast sexually (Kaiser Family Foundation and YM Magazine, 1998).

There is also evidence that suggests that there are additional gender power imbalance factors at work in African American and Latino/a relationships. As noted in the Latino/a High Risk Heterosexual section, traditional Latino cultural values and gender roles, such as *machismo* (male dominance in social and sexual relationships) and *marianismo* (female submission and obedience to male authority figures), impact power imbalances between the genders (Dávila, 2002). Research on African American male attitudes towards relationships and sex suggests that a significant subpopulation of African American males adopt a manipulative and exploitive attitude towards African American women. The evidence suggests that this can result in increased violence and sexual aggression towards women (Wolfe, 2003).

A study of 247 community college students ages 18–28 found that similar rates of men and women reported instances of unwanted non-condom use due to a partner's influence since age 16. However, 65% of females reported ever having engaged in unwanted sexual intercourse due to their partner's influence since age 16 compared to 32% of males. When examining gender differences by race/ethnicity, females within each racial/ethnic group more often experienced unwanted intercourse than males (Smith, 2003).

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Data from the Minnesota Student Survey indicate that students in alternative schools and juvenile correctional facilities have experienced higher rates of physical and sexual violence. Female students across groups experience greater prevalence of abuse and violence than males.

Sexual and Physical Abuse and Violence Comparison of Minnesota Student Population: Minnesota Student Surveys 2004

| | Public Schools, 9 th Graders N = 49,210 | | Public Schools, 12 th Graders N = 34,521 | | Alternative Schools N = 3,331 | | Correctional Facilities N = 798 | |
|--|--|--------|---|--------|-------------------------------------|--------|---------------------------------------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| Ever been physically abused by family member | 9% | 14% | 7% | 10% | 14% | 21% | 24% | 39% |
| Ever been victim of violence on a date | 5% | 5% | 5% | 7% | 9% | 20% | 16% | 30% |
| Ever been victim of date rape | 3% | 3% | 4% | 4% | 5% | 13% | 7% | 22% |
| Ever been sexually abused by family member | 2% | 4% | 2% | 4% | 3% | 8% | 10% | 17% |
| Ever been sexually abused by non-family member | 3% | 9% | 3% | 8% | 5% | 20% | 15% | 38% |

A national study of youth risk behavior among high school students found that 9% of all students had been hit, slapped or physically hurt on purpose by their boyfriend/girlfriend during the previous 12 months. Overall, the prevalence of dating violence was higher among Black females (14%) than Latina (9.2%) or White (7.5%) females, and higher among Black males (13.7%) than Latino (9.2%) or White (6.6%) male students. Rates of dating violence were similar between males and females within each of these racial/ethnic groups (CDC, 2004).

Thirty-eight percent (38%) of homeless youth in Minnesota interviewed by Wilder Research (2005) had been physically abused and 28% had been sexually abused. Thirty percent (30%) reported that their parents neglected to provide food, shelter, or medical care, or consistently ignored their physical and/or emotional needs. Among homeless young adults, nearly half (46%) had been physically abused and 29% had been sexually abused. Thirty-two percent (32%) stated that their parents neglected to provide food, shelter, or medical care, or consistently ignored their physical and/or emotional needs.

SUMMARY OF THE NEEDS OF YOUNG HIGH RISK HETEROSEXUALS

- Programs that address substance use and its impact on HIV risk:
 - Minnesota youth, including homeless youth, have high rates of alcohol and drug use. Youth in alternative schools and correctional facilities have especially high rates compared to youth in public schools.
 - Use of cocaine and combined speed and cocaine was associated with unprotected sex in a study of homeless youth.
- Programs that address mental health issues and their impact on HIV risk:
 - Female youth generally have higher rates of suicidal thoughts and suicide attempts than male youth. Latina females had higher rates of suicidal thoughts and attempts than males and females of other racial/ethnic groups in two studies.
 - Minnesota youth in alternative schools and correctional facilities are more likely to think about and attempt suicide than students in public schools.
 - Depression was related to higher rates of sexual activity, drug abuse, violence, and history of sexual/physical abuse in a study of rural teens.
- Programs that increase access to information about STDs and STD testing and treatment:
 - Youth and young adults accounted for 62% of chlamydia cases and gonorrhea cases in Minnesota in 2004. Females accounted for 77% of all cases among youth and young adults.
 - A greater proportion of STD cases among youth and young adults were found in Greater Minnesota and suburban areas compared to Minneapolis and St. Paul.
 - Black youth/young adults are the population most disproportionately impacted by STDs.
- Programs that support the reduction of sexual risk behavior:
 - Female students in Minnesota are more likely than males to report not using a condom at last intercourse. Students in alternative schools and correctional facilities were more likely to not use condoms at last intercourse than students in public schools, however rates of never using condoms were similar across school setting.

- Young females with older sex partners were more likely to engage in unprotected sex than girls with partners close to the same age.
 - Studies indicate a high rate of concurrent relationships among youth and young adults, which facilitates the transmission of STDs.
 - Spring break is a time when young adults engage in risky sexual behavior, often under the influence of alcohol and/or drugs.
 - Young adults who meet partners over the Internet were less likely than their older counterparts to have ever been tested for HIV or STDs, and less likely to discuss HIV/STDs with partners they met over the Internet.
 - Youth have a sense of invincibility, which can influence decisions related to sexual behavior.
- Programs that address financial needs of youth/young adults, and provide support for homeless youth and young adults:
 - Between 4% and 17% of homeless youth and young adults in Minnesota have exchanged sex for something they needed.
 - Twelve percent (12%) of homeless youth and 25% of homeless young adults have been told by someone (mostly an adult) how to make money in the sex industry.
- Programs that address gender power imbalance and domestic violence/sexual victimization and their impact on HIV risk:
 - Young women are more likely than young men to have unwillingly engaged in sexual activities.
 - It is difficult for young women who have older sexual partners to insist on condom use.
 - Traditional Latino cultural values and manipulative attitudes adopted by some African American men towards women are additional gender power imbalance factors in these communities.
 - Female students in alternative schools and correctional facilities in Minnesota experience higher rates of physical and sexual abuse compared to male students in those facilities and compared to male and female students in public schools.
 - Homeless youth and young adults in Minnesota have also experienced high rates of physical and sexual abuse.

Asian/Pacific Islander High Risk Heterosexuals

According to the 2000 Census, the Asian/Pacific Islander (API) population in Minnesota increased from 77,886 in 1990 to 168,281 in 2000, and currently account for 3.4% of the state's population. Sixty percent (60%) of all Asian/Pacific Islanders in Minnesota are foreign born. Asian/Pacific Islanders accounted for an estimated 2% of new HIV infections through heterosexual contact during 2002 – 2004 (Minnesota HIV/AIDS Surveillance System).

There is a lack of published research related to the HIV prevention needs of heterosexual Asian/Pacific Islanders. Management Sciences for Health and HRSA (2003) created a document that summarizes many of the issues facing Asian/Pacific Islander communities in general, and women specifically:

- Immigration laws exclude most HIV positive individuals from obtaining permanent status, which may scare Asian/Pacific Islander immigrants away from counseling and testing services.
- The disqualification of many immigrants from Medicaid, Social Security, and other public benefits prevents some Asian/Pacific Islanders from receiving health care.
- Because the incidence and prevalence of HIV in the general Asian/Pacific Islander community is low, people may believe that they are not at risk.
- Asian/Pacific Islander communities may view HIV/AIDS as a disease that only affects Westerners.
- Many Asian/Pacific Islanders associate shame and stigma with issues related to sex, sexuality, and drug use. Many are unaware of HIV risk factors and are uncomfortable talking about how to protect themselves.
- An alarming number of Asian/Pacific Islander women (the highest percentage of all racial or ethnic groups) could not identify what puts them at risk for HIV infection.
- Some immigrant Asian/Pacific Islander women who work in massage parlors engage in activities that put them at risk for HIV. For many of these women, immediate survival needs take precedence over protecting themselves from HIV.

Largest API Populations in Minnesota by Ethnic Group, 2000

| Ethnic Group | # | % |
|-------------------------|--------|-------|
| Hmong | 45,443 | 27.0% |
| Vietnamese | 20,570 | 12.2% |
| Asian Indian | 19,963 | 11.9% |
| Chinese (not Taiwanese) | 18,622 | 11.0% |
| Korean | 15,255 | 9.1% |
| Laotian | 11,516 | 6.8% |
| Filipino | 9,696 | 5.8% |
| Cambodian | 6,533 | 3.9% |
| Japanese | 6,483 | 3.9% |
| Other Asian | 7,113 | 4.2% |
| Pacific Islander | 4,423 | 2.6% |
| Native Hawaiian | 1,526 | 0.9% |

Source: U.S. Census Bureau, 2000 Census

A qualitative study of risk in Asian Pacific Islander women in California identified three cultural norms/values that directly impact Asian/Pacific Islander women's ability to engage in an open conversation with their partners about HIV and/or to request the use of a condom: 1) discomfort with open discussion about issues related to sex and sexuality, 2) priority placed upon making others feel comfortable, and 3) a traditional romantic ideal. The study found that instead of directly talking with their partner about risk, Asian/Pacific Islander women tend to make inferential assessments of their partners' risk, which may lead to a false sense of control and safety (Chin, 1999).

SUBSTANCE USE

Results from the 2003 National Survey on Drug Use and Health (SAMHSA, 2003) indicate that rates of current illicit drug use varied significantly among the major racial/ethnic groups in 2003. Asians had the lowest rate at 3.8%.

Rates were highest among Native Hawaiians (11.1%), American Indians or Alaska Natives (12.1%), and persons reporting two or more races (12%). Rates were 8.3% for Whites, 8% for Hispanics, and 8.7% for Blacks.

The national survey also found that 39.8% of Asians and 43.3% of Native Hawaiians or Other Pacific Islanders reported current use of alcohol in 2003. Whites were more likely than any other racial/ethnic group (54.4%) to report current use of alcohol. The rate of binge alcohol use was lowest among Asians (11%), while the highest rate was among Native Hawaiians or other Pacific Islanders (29.8%).

Substance Use Rates

According to the 2003 National Survey on Drug Use and Health:

- ♦ Asians had the lowest rate of current illicit drug use
- ♦ Native Hawaiians had one of the highest rates of illicit drug use
- ♦ Asians had the lowest rate of binge alcohol use
- ♦ Native Hawaiians and other Pacific Islanders had the highest rates of binge alcohol use

SAMHSA, 2003

Analyses of data from four national surveys compared substance use among five ethnic groups (Japanese, Filipino, Chinese, Korean, Vietnamese) to Whites. The study found that use and abuse rates among Japanese Americans are close to those of Whites for most substances. Vietnamese Americans reported the lowest levels of substance use and abuse (Kato Price, 2002). Another study of alcohol use among Asians revealed that 20% of Filipino respondents reported heavy drinking. In the same study, 51% of Filipino respondents reported not using alcohol, including 80% of Filipinas (Kitano and Chi).

MENTAL HEALTH

The 2003 National Survey on Drug Use and Health (SAMHSA, 2003) found that rates of serious mental illness in 2003 were lowest among Asians (6.1%) and highest among Native Hawaiians or Other Pacific Islanders (12.4%) and adults reporting two or more races (12.6%).

The Asian and Pacific Islander Health Forum in San Francisco compiled health briefs for a number of Asian communities in which they summarize mental health issues facing this population. Many Vietnamese, Cambodian, Laotian, Hmong, and Chinese refugees are diagnosed with posttraumatic stress disorder as a result of being survivors of war, which may involve being prisoners of war, victims of rape, or having suffered severe personal losses in terms of loved ones and personal possessions (Ton-That, 1998). Premigration

trauma and refugee camp experiences have been noted as significant predictors of psychological stress even five years or more after migration (Chung and Kagawa-Singer, 1993). Surveys with Vietnamese men in San Francisco, Alameda, Santa Clara County, and Houston found that men who were the least proficient in English, poorer, unemployed or disabled, and veterans were more likely to be depressed (Hinton et al., 1998).

A number of studies have described mental health problems of Cambodians in the United States. Cambodians who were in Cambodia from 1970–1980 were found to have experienced 8–16 major trauma experiences during this time, including torture, long periods of malnutrition, slave labor, imprisonment, and witnessing atrocities (Kinzie et al., 1984; Realmuto et al., 1992; Mollica et al., 1990). It is estimated that 85% of Cambodians suffer from depression, and up to 60% have some symptoms of post-traumatic stress disorder (Cambodian Association of America, 2000).

Interviews of 1,747 Chinese Americans ages 18–65 in Los Angeles found that 7% of respondents had experienced an episode of major depression and 5% had experienced dysthymia (low-grade depression lasting two years or more) in their lifetime. The 12-month rates of depressive episode and dysthymia were 3% and 1%, respectively (Takeuchi, 1998).

SEXUALLY TRANSMITTED DISEASES AND HEPATITIS

Asian/Pacific Islanders accounted for 4% of chlamydia cases diagnosed in Minnesota in 2004, with a rate of 260 per 100,000 persons. Asian/Pacific Islanders accounted for 2% of gonorrhea cases diagnosed in 2004, which is a rate of 36 per 100,000 persons. Youth under the age of 25 accounted for 253 (51%) of the chlamydia and gonorrhea cases among Asian/Pacific Islanders (Minnesota STD Surveillance System).

As of the end of February 2005, there were 14,458 people living with hepatitis B virus (HBV), of which 6,840 (47%) cases were among Asian/Pacific Islanders. The risk factor of being born outside of the United States was associated with 76% of the cases among Asian/Pacific Islanders.

As of the end of February 2005, there were 22,356 people living with hepatitis C virus (HCV) in Minnesota, of which 2% were Asian/Pacific Islanders. The risk factor for most cases among Asian/Pacific Islanders was unknown (59%). The other more common risk factors were related to illicit drug use (8%) and injection drug use (6%) (Minnesota Hepatitis Surveillance System).

SEXUAL BEHAVIOR

A survey of Vietnamese men ages 18–35, Vietnamese men ages 36–45, and Vietnamese women ages 18–35 in California revealed that 72% of older men believed that condoms interfere with sexual pleasure compared to 48% of younger men and 28% of women. Of sexually active men, younger men were more likely to report having sex with a prostitute ever (18%) and in the last 12 months (11%) compared to older men (11% and 3%, respectively). More men reported multiple sex partners in the past year compared to women. Of respondents with sexual experience who were not married, 24% of younger men, 17% of older men, and 40% of women reported never using condoms. Only 1% reported ever engaging in anal sex, and none reported same sex activity (Gellert et al., 1995).

In a northeastern urban area, focus groups were conducted with 22 immigrant Vietnamese, Laotian, and Cambodian women, as well as a focus group with providers serving these

communities. Service providers and Cambodian women stated that men, particularly those of the older generation who are less acculturated, are not willing to use condoms as it is seen as a threat to their manhood. Some participants in the Vietnamese/Laotian focus group stated they used condoms as a method of birth control (Jemmott et al., 1999).

The Cambodian focus group participants also reported that their male partners sleep with prostitutes both in Cambodia and in the United States, and expressed fear that their partners would infect them with HIV after returning from trips to Cambodia, where the prevalence of HIV is high. On the other hand, the Vietnamese and Laotian women all stated that their partners were faithful (Jemmott et al., 1999).

KNOWLEDGE OF HIV AND PERCEPTION OF RISK

In their survey of Vietnamese men and women, Gellert et al. (1995) found that participants had high levels of knowledge regarding HIV transmission, although a substantial proportion of each of the three subgroups (older men, younger men, younger women) held misperceptions about how HIV can be transmitted (see sidebar). Among younger men and women, greater HIV knowledge was associated with greater acculturation to the United States. Twenty-nine percent (29%) of the total sample believed that HIV would not affect them personally, while 38% were very worried that they would get AIDS. Eighty-three percent (83%) were very worried that a family member would get AIDS. Eleven percent (11%) of respondents agreed with the statement that the risk of acquiring an STD is not high enough to bother with condom use during sex.

Misperceptions About HIV

A proportion of Vietnamese men and women believe that HIV could be transmitted by:

- ◆ An ancestor's "bad actions"
- ◆ Casual contact
- ◆ Going to school with an infected child
- ◆ Working with an infected person
- ◆ Toilet seats
- ◆ Shared eating utensils

Gellert et al., 1995

Another study of 249 Asian and Pacific Islander women found that 58% had a low level of HIV knowledge, and 48% reported that they were worried that they or a family member might become infected with HIV. Predictors of perceived risk included having an education level greater than high school, being 30 years of age or older, engaging in risk behaviors, and knowing an HIV positive person (Cooper et al., 2001).

In interviews with 16 undocumented HIV positive Asian immigrants from China, Japan, India, Bengali and Burma, participants described a lack of HIV knowledge within their ethnic communities. This was partially due to the lack of attention given to the disease in these communities and the belief that Asian/Pacific Islanders are less susceptible to HIV infection than other ethnic groups. Participants also held some misperceptions about HIV transmission that predated their infection. The Chinese participants were afraid of transmitting the virus through casual contact, although many acknowledged that their fears were unfounded. Consequently, they chose to live alone and limit interaction with family and friends (Kang et al., 2003).

STIGMA

Kang et al. (2003) also found that the HIV positive study participants viewed HIV as a highly stigmatized disease because of its association with shameful behaviors. HIV was commonly referred to as the “demon-plague” and was perceived as only affecting homosexuals, people who sleep with sex workers, drug users, and foreigners. The participants believe that individuals are personally responsible for contracting the disease as a consequence of deliberate behavior. This stigma led to secrecy regarding their infection. Although the majority did not report discrimination, they were afraid of being rejected if others learned of their illness. Participants also reported not disclosing their status to family because they did not want to emotionally burden them or cause them shame. Ten out of the 16 respondents had not disclosed their HIV status to anyone except their caseworkers. Many preferred to live and work outside of their ethnic neighborhood.

GENDER POWER IMBALANCE AND DOMESTIC VIOLENCE

Although Asian/Pacific Islanders represent diverse cultures, languages, and experiences, they share some values that affect a woman’s ability to protect herself. Asian/Pacific Islanders place the interests of the family ahead of the needs of the individuals. Family disputes remain within the family, and seeking outside assistance to deal with an issue is considered to bring shame and dishonor to the family. For this reason, many Asian/Pacific Islander women will endure abuse in order to “save face.” Traditional gender roles place men in the position of power and authority, while women are socialized to defer to the male head of the family (Weil and Lee, 2004).

In a telephone survey of Chinese families, Yick and Agbayani-Siewert (1997) found that family violence was generally disapproved of. However, there was support for violence in specific situations that included learning of a wife’s extramarital affair; a wife losing emotional control; or a wife not following traditional gender roles, such as making a financial decision without her husband’s approval. Older respondents and men were more tolerant towards domestic violence.

In a survey conducted in the Chinese, Cambodian, Korean, Vietnamese, and South Asian communities in Massachusetts, 38% of the total sample reported knowing a woman who was being physically abused (Yoshioka and Dang, 2000). A summary table of findings from the 5 communities is included on the following page.

Findings from Asian Family Violence Report, Massachusetts

| | Cambodian | South Asian | Vietnamese | Korean | Chinese |
|--|--|--|--|--|---|
| Know a woman who has been physically abused by partner | 47% | 44% | 39% | 32% | 24% |
| Know a man who is beaten by partner | 37% | 5% | 22% | 3% | 9% |
| Regularly hit by parents as children | 70% | 79% | 72% | 80% | 61% |
| Think abused woman should not tell anybody | 22% | 5% | - | 29% | 18% |
| Other input from respondents | Do not believe a woman has the right to divorce, leave a husband who hits her, or that an abusive husband should be arrested. Genocide has made people vulnerable to stress, which may lead to violence. | Women become property of husband. Women cannot turn to family for help once married and parents are not supposed to intervene. In-laws play a critical role in family violence issues. | The man has the right to discipline wife, expect sex whenever he wants it, and is the ruler of the home. Wives deserve beatings. Women do not have the right to divorce or leave abusive husband, and men shouldn't be arrested. | Korean men support domestic violence more than women. Koreans feel sense of powerlessness because of being immigrants and take out frustration on someone with less power. | Older Chinese are more tolerant of the use of force and saw more situations as justifiable. Younger Chinese less likely to see divorce, leaving the abuser, or arrest as viable alternatives. |

Source: Yoshiaka and Dang, 2000

SUMMARY OF THE NEEDS OF ASIAN/PACIFIC ISLANDER HIGH RISK HETEROSEXUALS

- Programs that address substance use and their impact on HIV risk:
 - Alcohol and drug use is more common among Native Hawaiians and other Pacific Islanders than among Asians.
- Programs that address mental health issues and their impact on HIV risk:
 - Many refugees from Southeast Asia suffer from posttraumatic stress disorder due to being survivors of war and the refugee camp experiences.
 - Cambodian refugees who were in Cambodia during 1970-1980 experience high rates of depression and posttraumatic stress disorder.
- Programs that increase access to hepatitis B testing and treatment:
 - Asian/Pacific Islanders accounted for nearly half of the hepatitis B cases in Minnesota. Being born outside of the United States was associated with 76% of these cases.
- Integration of STD prevention messages into HIV prevention messages:
 - Asian/Pacific Islanders accounted for 4% of chlamydia and 2% of gonorrhea cases in Minnesota in 2004.

- Programs that support the reduction of risky sexual behavior:
 - Older Vietnamese men were more likely to believe that condoms interfere with sexual pleasure compared to younger Vietnamese men and women.
 - Vietnamese women were less likely to report using condoms than Vietnamese men.
 - Older Cambodian men were not willing to use condoms as it was seen as a threat to their manhood.
 - Cambodian women were afraid of becoming infected with HIV due to their male partners' sleeping with prostitutes in the United States and Cambodia.
 - Programs must address the lack of power that many Asian/Pacific Islander women have over their own sexual behavior.
- Educational/informational efforts targeted to Asian/Pacific Islander communities:
 - Misperceptions about HIV transmission exist in Asian/Pacific Islander communities.
 - Asian/Pacific Islander communities may view HIV as something that only affects others.
- Strategies to reduce HIV-related stigma:
 - HIV is believed to affect only homosexuals, people who sleep with sex workers, drug users and foreigners.
 - Stigma led HIV positive persons to hide their disease for fear of being rejected. Many preferred to live and work outside of their ethnic communities.
- Programs addressing gender power imbalance and domestic violence and their impact on HIV risk:
 - Traditional gender roles place men in the position of power and women are socialized to defer to the male.
 - Many Asian communities do not believe that a woman has the right to divorce or leave a man who is abusive.

White High Risk Heterosexuals

According to the 2000 Census, Whites account for 89% of the population in Minnesota. Although Whites make up the great majority of the state's population, they accounted for only an estimated 13% of new HIV infections through heterosexual contact during 2002 – 2004 (Minnesota HIV/AIDS Surveillance System). Because White heterosexuals account for a small proportion of HIV cases nationwide, there is a lack of research available about HIV risk behaviors within this population.

SUBSTANCE USE

On a national level, Whites were more likely than any other racial/ethnic group to report current use of alcohol in 2003 (see table). Another study found that Whites were least likely to perceive a risk for substance abuse although they have the highest prevalence of lifetime drug use of most types of drugs (except crack cocaine and heroine) as compared to Blacks and Latinos. Whites were also found to have the highest prevalence of alcohol use during the past month (Ma and Shive, 2000). Data from the National Comorbidity Survey indicate that Whites were more likely than Blacks to report alcohol disorders than African Americans. Whites were more likely than African Americans overall to report drug disorders, but there were no race differences among metropolitan residents (Diala et al., 2004).

Past Month Alcohol Use by Race/Ethnicity, United States 2003

| Race/Ethnicity | # |
|--|-------|
| Whites | 54% |
| Two or more races | 44% |
| Native Hawaiians/Other Pacific Islanders | 43% |
| Native Americans | 42% |
| Latinos | 41.5% |
| Asians | 40% |
| Blacks | 38% |

SAMHSA, 2003

In a study comparing risk behaviors between women who have sex with men only (WSM) and women who have sex with both men and women (WSMW), Gonzales et al. (1999) found that WSMW were more likely to report lifetime and recent use of illicit drugs than WSM, as well

as being more likely to report injection drug use in the past year. WSMW were also more likely to report using alcohol or drugs in conjunction with sex during the previous 30 days (52%) compared to WSM (44%).

A large study of 258,567 people found that gay and bisexual men were more likely to report non-injection methamphetamine use than heterosexual participants. However, 4% of heterosexual men and 3% of heterosexual women reported non-injection meth use. Across sexual orientation, a greater proportion of Whites and Native Americans reported meth use. Across sexual orientation

Risk Behaviors of Crystal Meth Users

- ♦ Heterosexual male meth users more likely to report anal sex with women than non-users
- ♦ Heterosexual female meth users more likely to report anal sex than non-users
- ♦ Heterosexual male meth users were 2 times more likely to report sex with a prostitute, 2.5 times more likely to have traded sex, and 4.4 times more likely to have an IDU sex partner
- ♦ Heterosexual female meth users were 3.8 times more likely to report sex with a prostitute, 6.7 times more likely to have traded sex, and 4.7 times more likely to have an IDU sex partner

Moliter et al., 1998

groups, meth users were less likely to use condoms during vaginal or anal sex, during sex with a prostitute, and during sex with a known IDU (Moliter et al., 1998).

MENTAL HEALTH

CDC examined the prevalence of frequent mental distress among U.S. adults by race/ethnicity using Behavioral Risk Factor Surveillance System (BRFSS) data from 1993 – 2001. They found that overall the prevalence of frequent mental distress increased for Whites from 8.1% to 9.7% from 1993 to 2001. The prevalence of frequent mental distress was more common in White women (10.3%) compared to White men (6.8%). Across racial/ethnic groups, respondents who were younger, female, separated, divorced, widowed, unemployed or unable to work, earned less than \$15,000 a year, had less than a high school education, or had no health insurance reported significantly more frequent mental distress (CDC, 2004).

Another study comparing depression and suicide rates across several racial/ethnic groups found that White males (22.5 per 100,000) and females (5.8 per 100,000) were found to have the highest annual suicide rates compared to the other groups. The one-year prevalence rate of major depression was highest among Puerto Ricans (6.9%), followed by Whites (3.6%), Blacks (3.5%), Mexican Americans (2.8%) and Cuban Americans (2.5%) (Oquendo et al., 2001).

SEXUALLY TRANSMITTED DISEASES AND HEPATITIS

Whites accounted for 44% of chlamydia cases diagnosed in Minnesota in 2004, with a rate of 113 per 100,000 persons. Whites accounted for 33% of gonorrhea cases diagnosed in 2004, which is a rate of 22 per 100,000 persons. Youth under the age of 25 accounted for 3,886 (65%) of the chlamydia and gonorrhea cases among Whites (Minnesota STD Surveillance System).

As of the end of February 2005, there were 14,458 people living with hepatitis B virus (HBV), of which 1,882 (13%) cases were among Whites. The risk factor of being born outside of the United States was associated with 13% of the cases among Whites. Other common risk factors included injection drug use (7%), heterosexual sexual activity (3%), and perinatal transmission (3%). The risk factor for the greatest amount of cases (60%) was unknown.

As of the end of February 2005, there were 22,356 people living with hepatitis C virus (HCV) in Minnesota, of which 44% were Whites. The greatest majority of cases among Whites were related to illicit drug use (33%); injection drug use (24%); past and current incarceration (9%); high risk sexual activity, including sex with an HCV positive person, IDU or multiple sex partners (7%); blood/plasma donor (9%); and transfusion (9%) (Minnesota Hepatitis Surveillance System).

SEXUAL BEHAVIOR

In a study of 1,268 sexually active women, 33% of the 254 White participants reported engaging in anal sex. Across racial/ethnic groups, women who reported anal sex reported more unprotected vaginal sex compared to women who only engaged in vaginal sex. The 415 women who engaged in both anal and vaginal sex reported that 90% of vaginal and/or anal sex was unprotected in the previous 6 months. Women who only engaged in vaginal sex reported that 81% of their sexual episodes were unprotected during the same time period (Gross et al., 2000).

The study comparing risk behaviors of WSM and WSMW (48% of the sample was White) found that WSMW were more likely to be White than the participants who reported sex with men only. WSMW were significantly less likely to report sometimes or always using a condom with a nonsteady partner in the last 30 days (67% vs. 84%), but the two groups reported similar rates of condom use with a steady partner in the last 30 days and at last intercourse with a steady or nonsteady partner (Gonzales et al., 1999).

A study of 1,276 women who responded to an Internet survey found that 43% reported ever having sex with a partner they met over the Internet; 81% of these were White.

Among women who reported sex with an Internet partner, the average number of lifetime Internet sex partners was 3.8, with an average of 2.1 partners in the last 12 months. Most Internet sexual partners were men (84%), but 11% reported partners of both genders. The women reported using condoms 84% of the time with Internet

partners, but only 40% stated they used a condom for vaginal sex the last time they had sex with an Internet partner. Almost three quarters (74%) had discussed HIV with their Internet partners. Chat rooms and browsing profiles were the most common ways of meeting partners. A restaurant/coffee house was the most common place to meet an Internet partner in person, although approximately 30% reported meeting at either their home or the partner's home. Both women who reported Internet sex partners and those who didn't expressed willingness to learn about HIV and STD prevention online, with about 50% of each group preferring the messages to be delivered via e-mail (McFarlane et al., 2004).

Risk Behaviors of WSMW

Compared to women who only had sex with men (WSM), women who had sex with men and women (WSMW) were more likely to report:

- ◆ More recent and lifetime male sexual partners
- ◆ First consensual sexual experience at an earlier age
- ◆ Someone forced them to have sex during childhood or adolescence
- ◆ Exchanging sex for money or drugs
- ◆ Having a male sex partner believed to have had sex with a prostitute in the last year

Gonzales et al., 1999

KNOWLEDGE OF HIV AND PERCEPTION OF RISK

A study comparing 220 homeless (33% White) and 216 low-income mothers (29% White) found that the level of HIV knowledge was good and did not vary significantly between the two groups. Members of both groups reported some misconceptions about HIV transmission. Fifty percent (50%) of both groups believed that HIV could be transmitted by kissing an infected person, and approximately 30% of each group believed that HIV could be contracted by using a public toilet. Fifteen percent (15%) of both groups were unaware that condom use can prevent HIV transmission. Of the total sample, 39% were considered to be at high risk for HIV. Of these, approximately 75% perceived themselves as having low or no risk of HIV infection, and 16% reported that they did not know what their risk for HIV was (Weinrab et al., 1999).

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

A national study of intimate partner violence among Latino, White and Black couples found that rates of male-to-female partner violence (MFPV) and female-to-male partner violence (FMPV) were lower among White couples (12% and 16%, respectively) compared to Black (23% and 30%) and Latino couples (17% and 21%) (Caetano et al., 2000). In a follow-up

study with the partners who were still together, the prevalence of MFPV and FMPV was 8% and 10%, respectively, among White couples, 20% and 22% among Black couples, and 21% and 20% among Latino couples. Significant predictors of MFPV among White couples included intimate partner violence at baseline and the female drinking five or more drinks on one occasion. Significant predictors of FMPV among White couples included weekly male alcohol consumption (Field and Caetano, 2003).

A study of 208 non-drug using female partners (21% White) of male drug users found that White women reported the highest rate of abuse history, with 79% reporting they had ever been raped, 72% had been physically hurt by a sex partner, and 61% had been threatened with assault by a sexual partner. Thirty-five percent (35%) of White women reported being raped before age 13 and 50% had been molested before age 13. Women of all races/ethnicities who had experienced sexual and physical abuse were more likely to engage in risk behaviors. Women who had been raped were more likely to have multiple sex partners and engage in unprotected anal sex than those who were not raped. Women who had been threatened with assault were also more likely to have multiple sex partners and to engage in unprotected anal sex than women who had not been threatened. Women who were sexually molested (not raped) before age 13 were more likely to have multiple sex partners than those who were not molested. A higher percentage of those who had been raped reported having asked their main partner to use a condom in the last year; however, there was no difference in actual consistent condom use (He et al., 1998).

SUMMARY OF THE NEEDS OF WHITE HIGH RISK HETEROSEXUALS

- Programs that address substance use and its impact on HIV risk:
 - Whites reported the highest rate of current alcohol use in 2003 compared to other racial/ethnic groups nationwide.
 - Women who have sex with men and women are more likely to report illicit and injection drug use than women who only have sex with men, and were more likely to use alcohol or drugs in conjunction with sex.
 - Heterosexual crystal meth users engaged in more sexual risk behaviors (e.g., sex with a prostitute, sex with an IDU, trading sex) than heterosexual non-users.
- Programs that address mental health issues:
 - The prevalence of frequent mental distress increased for Whites from 1993 to 2001, and was more common among White women than men.
- Integration of STD and hepatitis C prevention messages into HIV prevention programs, as well as increased access to STD and hepatitis testing and treatment:
 - Whites accounted for 44% of chlamydia and 33% of gonorrhea cases in Minnesota in 2004 (65% of cases were among youth under age 25).
 - Whites accounted for 44% of hepatitis C cases in Minnesota.
- Programs that support the reduction of sexual risk behavior:
 - Women who engaged in anal sex reported more unprotected vaginal sex than women who only engaged in vaginal sex.
 - Women are also using the Internet to meet sexual partners, and less than half (40%) used a condom the last time they were with an Internet sex partner. Women indicated an interest in receiving HIV/STD prevention information via e-mail.

- Women who have sex with men and women reported greater risk behaviors than women who only have sex with men.
- Programs that address domestic violence and sexual victimization and their impact on HIV risk:
 - White women had the highest rates of abuse history in a study of non-drug using female partners of male drug users.
 - Women of all races/ethnicities who had experienced sexual and physical abuse were more likely to engage in risk behaviors.

Injection Drug Users.....

Men Who Have Sex with Men and Inject Drugs

SUBSTANCE USE

A forum held in San Francisco with researchers, providers and community members identified several drug use patterns among men who have sex with men and inject drugs (MSM/IDU). Some have only occasional and planned drug use, such as during a circuit party or special events. This group may plan for long weekend binges and then go back to work. They may be highly functional and not self-identify as IDUs. Others may inject regularly but are self-regulating, with jobs and homes. They don't see drug use as a problem. The most visible group are those who are addicts who may not be able to control their drug use, are living on the streets or have marginal housing. The participants in the forum noted that people may move from one category to another (Center for AIDS Prevention Studies, 2000).

Participants in a series of focus groups and individual interviews conducted with 98 MSM drug users in 7 cities (37% injected drugs) talked about crack cocaine and meth increasing sexual desire or enhancing the sexual experience, which results in more sexual activity with more partners. Some of the men stated that being under the influence of these drugs reduces inhibitions and causes men to do things sexually that they wouldn't necessarily normally do. Others, however, did not agree with the assertion that once high, most men will engage in sex with other men regardless of their self-identified sexual orientation. All participants, except those that reported only occasional drug use, agreed that their drug habit was the major focus of their lives. Everything else, including sexual activity and sexual orientation, was secondary. Participants noted that having sex with men served as a mechanism to get drugs or money to buy drugs. Having drugs was also described as a way of attracting desirable sex partners. Although participants mentioned several barriers to consistent condom use, the major one was that drug use reduced personal control, even if the intention to use condoms exists. Most of the participants who injected drugs stated that they generally tried to avoid sharing needles or other supplies; however, they acknowledged sharing if the opportunity to get high arose and they didn't have a clean needle. If bleach was immediately available and no one was drug sick (in urgent need of a fix), they would usually clean the needles before sharing (Rhodes et al., 1999).

Injection of Crystal Meth

A study of 194 HIV positive MSM crystal meth users (injectors and non-injectors) found that:

- ♦ Injectors used more meth compared to non-injectors (7.8 grams vs. 2.2 grams), and used it more often (average of 12 days vs. 8 days) in the last month
- ♦ 45% of meth injectors reported sharing needles in past 2 months. Of these:
- ♦ 18% shared needles without cleaning them
- ♦ 37% injected with a borrowed needle
- ♦ 28% loaned their needle to others

Semple et al., 2004

MENTAL HEALTH

In their study of 194 injection and non-injection methamphetamine using HIV positive MSM, Semple et al. (2004) found that 52% of the total sample reported having a psychiatric diagnosis. The most common diagnoses were depression (66%), bipolar disorder (21%) and anxiety (5%). Thirty-one percent (31%) were currently taking psychiatric medications. There were no significant differences in terms of mental health between the injectors and non-injectors.

SEXUAL BEHAVIOR

A recent longitudinal study of 1,800 IDUs in Baltimore found that same sex activity among male IDUs was the strongest predictor of HIV infection; even greater than risky drug using behaviors. Results indicate that the incidence of HIV infection among male IDUs who had engaged in same sex behavior within the previous 6 months was 10% a year, compared to 3% among men who did not report same sex activity (Strathdee et al., 2001).

A study of 100 MSM/IDU in Denver found that, when asked about the relationship between sex and drugs, 35% said that sex was most important and they used drugs to enhance their sex. Twenty-three percent (23%) said drugs were more important and sex was something they did while they are high. Participants with non-primary female and sex exchange partners were less likely to use condoms while high with these partners than men with primary male, non-primary male and primary female partners. Over half of the men (57%) stated they had sex with someone in the last 6 months whose HIV status was unknown; 26% of these never used condoms for anal or vaginal sex with these partners (Bull et al., 2002).

Trading Sex

In the sample of 357 MSM/IDU in San Francisco, 50% of the total sample traded sex for money or drugs during the past 6 months. Seventy-three percent (73%) of heterosexually identified MSM/IDU reported trading sex compared to 58% of bisexual and 40% of gay MSM/IDU. Heterosexually identified MSM/IDU were also more likely to be homeless than gay or bisexual participants (Kral et al., 2005).

Homelessness and sex trading were found to be associated in a study conducted with 387 drug using MSM in Long Beach. Nearly 60% of the total sample was homeless and 70% had injected drugs in the last 30 days. Men who were homeless were almost twice as likely to engage in trading sex than those who were not homeless. Injection drug use was also significantly associated with trading sex among those who did not inject crack (Newman et al., 2004).

Injection Drug Use and Sex Trading

A study of 1,290 drug using MSM found that:

- ◆ Of the 86 participants who injected drugs, 55% exchanged sex for drugs or money
- ◆ 40% of 117 men who had traded sex also injected drugs
- ◆ 19% of MSM/IDU and 13% of men who traded sex self-identified as heterosexual
- ◆ Researchers suggest some heterosexually identified MSM/IDU are willing to engage in same sex activity in order to finance their addiction

Reitmeijer et al., 1998

Sexual Orientation and Sexual Behavior

A study of 357 MSM/IDU in San Francisco found that gay (68%) and bisexual (53%) MSM/IDU were more likely than heterosexually identified men (35%) to have had any anal intercourse with men in the past 6 months, and were more likely to have had 6 or more male partners during that time period. Bisexual (68%) and heterosexual (62%) MSM/IDU were more likely to have female partners in the past 6 months than gay MSM/IDU (3%) (Kral et al., 2005).

Through focus groups and individual interviews with 98 drug using MSM (37% IDU), Rhodes et al. (1999) learned that 28% of the men currently had a steady female partner, and 52% had engaged in sex with at least one woman during the last year. Many of the female partners did not use drugs and were not aware of their male partners' drug use or same sex behavior. Participants also reported that sexual interaction with men from the local gay community occurred mostly in the context of sex trading, and usually involved drug use or the exchange of drugs, in addition to money. These types of interactions usually happened in a public sex environment, particularly for those who didn't identify as gay. Sexual interactions with non-street heterosexual and bisexual men also usually happened in the context of sex trading. Participants agreed that there is a large group of non-gay men, usually married and very closeted, who regularly cruise MSM drug-user hangouts looking to buy sex.

STIGMA

Participants in the same study also spoke about stigma. MSM who identified as bisexual or heterosexual tended to avoid talking directly about sexual activity with other men, and offered rationale or justification for their behavior (see comments in sidebar). A number of gay-identified participants reported not being active in the local gay scene because they felt that the mainstream gay community was elitist and disapproving of drug use (Rhodes et al., 1999).

Participants in a community forum about MSM/IDU held in San Francisco with researchers, providers, and community members felt that there is stigma in the MSM community against men who inject drugs, and that stigma also exists in the IDU community against MSM (Center for AIDS Prevention Studies, 2000).

PERCEPTION OF RISK

In their study with 98 drug using MSM, Rhodes et al. (1999) found that overall, condom use was an issue, with some never using them and others wanting to, but being unable to consistently do so. Barriers to condom use included a fatalistic view of life (e.g., believing they would die of a heroin overdose anyway), the belief that condoms are unnecessary if sex partners are "clean," and the belief that condoms are not necessary with main, steady, or other non-anonymous sex partners. Most

Rationale for Same Sex Behavior

Bisexual and heterosexual MSM/IDU provided the following justifications for engaging in sex with men:

"If you go out there and do something for money, that doesn't make you homosexual, because you don't do it that often."

"You get so twisted [when you're on drugs] that you end up just crossing the lines...and it doesn't matter whether it's a woman or a man."

"We're not gay, we're not bisexual...we're kind of out there doing what we got to do...we don't discriminate [men or women]."

Rhodes et al., 1999

of the participants were aware of the risk of HIV through needle sharing and tried as a rule not to share; however, they agreed that if the opportunity to get high arose and they did not have a clean needle, they would often go ahead and share. Bull et al. (2002) found that when asked what they believe is placing MSM/IDU at risk for HIV infection, 36% of respondents felt that anal sex without a condom is the greatest risk factor and 37% believed that sharing needles or injection equipment presents the greatest risk.

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

In a study of 387 drug using MSM, 26% of whom injected drugs in the last 30 days, 53% of the total sample reported experiencing childhood sexual abuse and 70% reported parental violence. Sixty-three percent (63%) of the sample reported engaging in sex trading. These individuals were 14.57 times more likely to report childhood sexual or physical abuse than those who were not involved in sex trading (Newman et al., 2004).

SUMMARY OF THE NEEDS OF MEN WHO HAVE SEX WITH MEN AND INJECT DRUGS

- Programs that address substance use (injection and non-injection) and its impact on HIV risk:
 - MSM who inject meth used more of the drug and used it more often compared to MSM who used meth but didn't inject. The injectors also reported high rates of sharing needles.
 - Crack cocaine and meth increase sexual desire and enhance the sexual experience. Some men did things sexually under the influence of these drugs that they wouldn't normally do.
 - Men admitted to sharing needles if the opportunity to get high arose and they didn't have a clean needle.
- Access to clean needles through needle exchange programs and syringe access at pharmacies
- Programs that support the reduction of sexual risk behaviors:
 - A longitudinal study of IDUs found that same sex behavior among male IDUs was the strongest predictor of HIV infection; even greater than risky drug using behaviors.
 - Of MSM/IDU that also have sex with women, many of the female partners did not know of their male partners' drug use or same sex behavior.
 - Fatalistic views, such as feeling they would die anyway from an overdose, are barriers to condom use.
 - Sex trading for drugs or money was a common theme in many studies.
- Programs that assist individuals in achieving financial independence:
 - Men who were homeless were almost twice as likely to engage in trading sex than those who were not homeless.
 - Heterosexually identified MSM/IDU were more likely to be homeless than gay or bisexual MSM/IDU.
- Strategies to reduce stigma related to HIV and injection drug use:
 - Stigma exists in the gay community against injection drug use.
 - Stigma also exists in the IDU community against men who have sex with men.
- Programs that address domestic violence and sexual victimization:
 - Drug using MSM involved in sex trading were more likely to report childhood sexual or physical abuse than those not involved in sex trading.

Injection Drug Users of All Races and Genders

In Minnesota, the impact of injecting drug use on HIV infection rates in women is of particular concern. In 2004, 27% of all living female HIV/AIDS cases were attributed to injection drug use or heterosexual sex with an IDU. In comparison, 14% of all living HIV/AIDS cases among men were attributed to injection drug use, having sex with men and injecting drugs, or heterosexual sex with an IDU (Minnesota HIV/AIDS Surveillance System).

Overall, however, new cases of HIV infection through injecting drug use have been relatively low in Minnesota over the last decade. In 2004, 30 newly diagnosed HIV cases were attributed to IDU, MSM/IDU, or heterosexual contact with an IDU, accounting for 12% of all new infections. Planning for needle exchange in Minnesota began in 1993, with the very first needle exchange program being implemented in 1995. Other needle exchange programs soon followed, and two are still in existence today.

FACTORS IMPACTING HIV RISK AS IDENTIFIED BY MINNESOTAN IDUS

In 2000, two community forums were held with 30 injection drug users at Access Works in order to gather input on their needs, as well as their thoughts about effective interventions for this population. Another community forum was held with 10 IDUs in 2004 to gather their input on factors that impact their risk for HIV and to learn what is needed to prevent HIV in their community.

Risk Factors

It is not only the risky sexual activity and sharing of needles that puts this community at risk; poverty and homelessness go hand in hand with drug addiction, leaving individuals (especially women) open to sexual exploitation, including the imperative to engage in prostitution to survive (MDH, 2000).

Knowledge of HIV and Risk

Participants in 2000 emphasized that HIV prevention was important to them, and many talked about how fortunate they felt to have escaped infection before information was available to them about how to remain safe from HIV. They felt, however, that access to information about cleaning of needles is limited. Some believe that exchanging parts of needles, or cookers is safe. Some believe that if they cannot see blood in the works, the works are clean. However, participants also noted that sharing of needles is in no way a universal behavior within the community. Some feel that if they ask to share needles they must also share their drugs. More individuals seem to be going out of their way to clean their needles. Participants in 2004 rated ignorance of proper or safe injection practices as one of the top factors impacting HIV risk in their community. The 2004 participants also identified a need for increased education and public awareness about HIV in the IDU community. They noted that people are tired of the same old messages (MDH, 2004).

Risk Factors Identified by Community Forum Participants

- ◆ Increase in sex drive that occurs when coming off non-stimulant drugs, causing high risk sexual activities for a period of time
- ◆ Poor sexual decision making when under the influence of stimulants (e.g., cocaine)
- ◆ Increased needle sharing when injecting cocaine because it has to be injected more frequently to maintain the high
- ◆ Alcohol is the “king of making bad sexual choices”

Syringe Access

In 2000, participants emphasized that bleach kits and condoms are not readily available to this community. Since 1999, it has been legal in Minnesota to purchase up to 10 syringes without a prescription. Paraphernalia laws have also been changed to support this legislation, so that carrying of unused needles is no longer illegal. Many participants viewed this syringe access initiative as a very positive step, but they continued to express fear of being apprehended, even with clean needles. Many users talked about the need to expand needle exchange programs, and the need for legislation that prohibits the prosecution of people trying to access needle exchange programs while carrying used syringes.

“People should not be prosecuted for doing the right thing!”

However, while increasing availability of clean syringes promotes HIV risk reduction among injecting drug users, the continued lack of readily apparent and available syringe disposal methods weakens the effectiveness of this intervention.

Perception of Social Services

In addition, a proportion of participants in 2000 stated they would not access social service agencies due to the belief that social service agencies are a part of a genocidal conspiracy on the part of the government to wipe out communities of color, low-income communities, and drug users. This is not so far-fetched a belief when one considers that many addicted women who are pregnant will not seek prenatal care or HIV testing because of the fear that child protection will take their children from them. Participants reported that medical

providers exhibit prejudice and racism by more frequently ordering drug tests for women of color.

Prevention Services Needs

Participants in 2004 identified that the following types of services provided at a drop-in center setting are particularly effective:

- ◆ Harm reduction
- ◆ Counseling
- ◆ Support groups
- ◆ HIV testing
- ◆ Hepatitis testing and vaccine
- ◆ Syringe exchange
- ◆ Provision of free condoms

Societal Denial

While denial may be a barrier to HIV prevention education within the IDU community, denial within society at large around the prevalence and impact of substance abuse was also identified as a barrier in 2000 to reducing transmission in the drug using community. As a result, this community found the lack of basic services like childcare, transportation, and health insurance to be barriers to HIV prevention.

Barriers to Syringe Access

Participants in 2004 identified the following barriers to accessing syringes at pharmacies:

- ◆ Cost, which varies from pharmacy to pharmacy.
- ◆ Being hassled by the pharmacist
- ◆ Being turned down by the pharmacist
- ◆ Being stopped or arrested by law enforcement for carrying dirty syringes

SUBSTANCE USE

Two national studies also point to the link between alcohol use and risk for HIV among IDUs. One was a study of 196 IDUs who participated in a needle exchange program. Researchers found that increasing levels of alcohol use were associated with more frequent sharing of needles or works. Sixty-nine percent (69%) of at risk drinkers (14 drinks or more a week for men, 7 or more a week for women) reported sharing compared to 38% of non-drinkers. This study also found that cocaine use was associated with needle sharing (Stein et al., 2000). The other study involved focus groups with 67 Native American drug users. Participants overwhelmingly agreed that in their communities, alcohol posed as much of an HIV risk as drug abuse, and most felt that alcohol was the greater risk. This study also compared survey data from 118 Native American drug users (50% IDU and 50% non-IDU) and found that IDUs were about 2 times more likely than non-IDUs to report drinking alcohol once a day in the last 30 days (Baldwin et al., 2000).

A study of 101 IDUs in Milwaukee found that the average age of first injection was 22.2 years. Cocaine (71%) and crack (66%) were the most commonly injected drugs in the past 3

Risk Factors Related to Alcohol Use

Native American drug users identified the following risk factors related to alcohol use:

- ◆ Poor judgment
- ◆ Carelessness
- ◆ Not having a condom when needed
- ◆ Sense of invulnerability
- ◆ Frequent sexual contact with multiple partners
- ◆ Loss of control
- ◆ Vulnerability to rape

Baldwin et al., 2000

Gender Differences in Injection Risks

A study of 531 needle exchange program clients found some gender differences in injecting risk behavior:

| Behavior | % Women | % Men |
|--|------------|----------|
| Had steady partner who injects drugs | 43% | 27% |
| Injected 90 or more times in previous month | 43% | 33% |
| Used a needle and gave it to others to inject (distributive sharing) | 29% | 30% |
| Injected with needles used by others (receptive sharing) | 29% | 23% |

Riehman et al., 2004

months and the most likely to be shared. Heroin (42%) and heroin/cocaine mix (43%) were the next most commonly injected drugs. Non-injected cocaine use was reported by 28% daily and 50% at least weekly. Daily alcohol use was reported by 33% of participants, with an additional 45% drinking at least once a week. Participants who injected more frequently were more likely to engage in vaginal sex without a condom more frequently. Those who shared needles more often were also more likely to engage in risky sexual behaviors. The single strongest predictor of high risk sexual behavior was injecting cocaine in the last 90 days (Somlai et al., 2003).

Studies comparing injection risk behaviors have found some differences by racial/ethnic groups. One study of African American, Puerto Rican, and Mexican American IDUs found that Mexican Americans were more likely to knowingly use works previously used by others and

were less likely to use bleach to clean their needles (Estrada, 1998). Another study comparing risk behaviors of U.S. born IDUs to those born in Cuba, Mexico and Puerto Rico found that nearly 40% of the Puerto Rican sample injected drugs 4 or more times a day. None of the other nationalities approached this frequency. Puerto Ricans were also more likely to report that they always used new needles or cleaned used needles before injecting. All immigrant IDUs (note: in this study, immigrants include Puerto Ricans) were more likely to clean their needles than U.S. born IDUs. In comparison to U.S. born and other immigrant participants, Mexican immigrants were more likely to share needles, which may be due to a culture that is supportive of injected medications and vitamins administered by nonmedical personnel (Freeman et al., 1999).

MENTAL HEALTH

Studies indicate that mental health problems impact injection risk behaviors among IDUs. A study of 1,228 IDUs found that 47% were characterized as depressed. In the past month, depressed IDUs were more likely than non-depressed IDU to have injected with a previously used needle, practiced backloading (sharing a needle to divide drugs before injection), and to have shared works. Depressed respondents were more likely to be female, White, younger than 44, not residing in their own home or apartment, unemployed, and to consider themselves homeless (Perdue et al., 2003). Another study of 109 IDUs also found that a greater severity of depression was associated with increased sharing of needles.

Depression did not increase the frequency of injection in this sample (Stein et al., 2003).

A study of 729 IDUs in Baltimore found that 30% had ever overdosed, with 4% having overdosed in the last 12 months. Intentional overdose was not common, with 91% stating that they did not intend to die. Those who had overdosed in the last 12 months reported greater use of heroin, cocaine and alcohol than those who had never overdosed and those who had overdosed more than a year ago. Individuals who had a score of probable clinical depression were more than 3 times more likely to report having an overdose in the last 12 months than those whose depressive symptoms scores were lower (Tobin and Latkin, 2003).

HEPATITIS

Of the total 14,458 living cases of hepatitis B in Minnesota at the end of February 2005, only 2% reported IDU as a risk factor, with the greatest proportion (80%) of these being among Whites. Of the 22,356 living hepatitis C cases at the end of February 2005, 18% were related to injecting drug use. The greatest proportion of these cases were among Whites (59%) and Blacks (17%) (Minnesota Hepatitis Surveillance System).

SEXUAL BEHAVIOR

Although injecting practices are often considered to be the primary risk factor for IDUs, a study published in 2001 found that high risk sexual behavior was the most significant predictor of HIV infection for both male and female IDUs (Strathdee et al., 2001). High risk same sex behavior was the most important factor in HIV transmission for men, while high risk heterosexual sex was most significant for women. The study found that risky drug use behaviors were also strong predictors of HIV transmission for men, but were less significant for women. Women who reported having a recent STD had more than 2.5 times the rate of HIV infection than women who did not have an STD. Heterosexual female IDUs tend to have more of an overlap in their sexual partners and their drug use than men do, putting them at

increased risk because they are sharing needles and having unprotected sex with a partner who is more likely to be infected with HIV.

Sexual Networks

A study of 662 IDUs in New York City found that 81% of sexual partnerships reported by the participants in the last 2 years were with people belonging to the same racial/ethnic group. Seventy-five percent (75%) of drug injection partnerships were also between people of the same racial/ethnic group. These two findings indicate that there were relatively few risk contacts between groups through which HIV could be transmitted across racial/ethnic lines (Kottiri et al., 2002).

A study of 401 African American IDUs in Washington DC found that males and females were more likely to select drug injecting partners that were like them in terms of gender and age. However, having an injection partner who was a lover increased injection risk by approximately 1.5 times compared to injections partner who were an associate or friend (Johnson et al., 2002).

It is estimated that women injection drug users who have sex with women (WSW/IDU) make up 20% to 30% of American female IDUs. A study of 803 female IDUs in 5 cities (34% WSW) found that WSW/IDU had more male sex partners and were 3.42 times more likely to report having unprotected sex with an MSM/IDU, 1.7 times more likely to have had sex with an IDU, and 2.5 times more likely to have had sex with someone they knew or thought was infected with HIV compared to non-WSW female IDUs (Friedman et al., 2003).

Trading Sex

In a study of 702 sexually active drug users (54% IDU), 25% of men and 2% of women reported purchasing sex with money or drugs during the past 90 days. Women (21%) were much more likely than men (5%) to report trading sex for money or drugs during the last 90 days. Women and men who injected drugs at least once daily were 1.85 times more likely to trade sex than those who did not inject (Latkin et al., 2003).

A study conducted with 1,371 female IDUs compared risk behaviors between women in the study who were classified as sexually active, those who were not sexually active, and those who were current sex workers. Sex workers were much more likely to have been homeless during the past 6 months compared to sexually active and non-sexually active women (42% vs. 14% and 18%, respectively). During the past 30 days, sex workers were more likely to inject daily and smoke crack daily than their counterparts; and to share needles, backload, and visit a shooting gallery compared to other women. Sixty-three percent (63%) of sex workers reported always using a condom with commercial partners. Current sex workers had sex with a primary partner less often than other sexually active women; however, they were more likely to report unprotected sex with primary partners (69% vs. 57%) and casual partners (42% vs. 24%) (Paone et al., 1999).

Sexual Risk Behaviors

The Milwaukee study of 101 IDUs (primarily African American) found high levels of risky sexual behavior:

- 71% had multiple sexual partners in last 3 months
- 96% had unprotected vaginal sex in last 3 months
- No differences were found between male and female participants in the number of partners and number of unprotected vaginal and anal contacts
- Women (64%) were more likely than men (35%) to exchange sex for money or drugs

Somlai et al., 2003

KNOWLEDGE OF HIV AND PERCEPTION OF RISK

A study comparing IDUs born in the United States, Puerto Rico, Mexico, and Cuba found that Cuban and Mexican immigrants were more likely than Puerto Rican respondents to provide incorrect answers to questions about HIV knowledge, and Puerto Ricans were more likely than U.S. born participants to answer incorrectly. Immigrants were more likely than U.S. born respondents to believe that HIV can be transmitted through casual means (toilet seats, shaking hands), had greater overall ignorance of how to reduce sex-related HIV transmission risks, and had lesser awareness of the importance of bleaching injection equipment. However, overall, the knowledge within this sample related to HIV risks associated with using dirty needles was greater than the level of knowledge related to sexual risks (Freeman et al., 1999).

POWER IMBALANCE BETWEEN GENDERS

A study with 90 IDUs in Scotland found that 41 out of the 63 female participants had been, or were currently, in sexual relationships with drug-injecting men. Twelve of the 13 women currently in a relationship with an IDU shared needles. From the woman's perspective, this sharing was a way of demonstrating intimacy and trust. They trusted that their partners were not sharing needles outside of the relationship. In contrast, men described their needle sharing in practical terms related to the immediate desire to inject or the unavailability of clean needles; 10 of the 13 male partners reported sharing needles outside of the relationship. In most of the relationships, it was the male who had overall control of the money and drugs, which meant controlling the amount, type and frequency of drugs used by women. The majority of women were injected by their partners, even if they knew how to self-inject. Both partners seemed to view this as a way to reduce or control the woman's injection use. Men rarely permitted their female partners to inject them, and expressed dislike at the thought. If a woman began injecting drugs while in a relationship with a male IDU, there was no conflict as long as he initiated it. However, if the women independently tried to inject without their partners' knowledge or assistance, the result was usually conflict and violence (MacRae and Aalto, 2000).

Epele (2002) examined the effect of power imbalance on female IDUs in a qualitative study conducted with 30 Latino IDUs in San Francisco (see sidebar). The women described how they are usually the ones who provide the resources (money, drugs, place to stay) through sex work or stealing, and the men provide protection and sometimes help with injection. Protection is provided in terms of helping to find good clients for those in the sex trade, forcing clients to pay, and protecting the women from abusive men and rape. Men usually consume more of the drugs, claiming they have a higher tolerance and require more, as well as being the ones to inject first. This means that the women are in the second position during the injection process, putting them at greater risk.

Gender Dynamics

Qualitative interviews revealed the following themes related to gender dynamics in a sample of Latino IDUs:

- ◆ Women cannot be alone; they need male protection
- ◆ Women can only gain respect through a man
- ◆ Women are frequently exposed to sexual and physical violence

Epele, 2000

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

In a study of 1,437 IDUs in Vancouver, Canada, 36% of the total sample reported a lifetime history of sexual violence, with 68% of women and 19% of men having experienced sexual violence. These individuals were more likely to have ever traded sex, to knowingly share needles/works with HIV positive people, to have attempted suicide, to have ever accidentally overdosed, to have binged on alcohol, and to have been diagnosed with a mental disorder/disability. Thirty-three percent (33%) of women and 13% of men had experienced childhood sexual abuse. The prevalence of HIV among people who ever experienced sexual violence was 25% compared to 19% among those who had not experienced sexual violence (Braitstein et al., 2003).

YOUNG INJECTION DRUG USERS

Although not a target population specifically prioritized by the CCCHAP, Young IDU comprise a subset of the IDU All Races and Genders population, and have some specific needs. An article reviewing recent studies related to injecting drug use highlights some of the trends in drugs of choice, as well as concerns related to HIV risk for young IDUs, particularly those who are just beginning to inject (Clatts et al., 2003).

Drugs of Choice

Heroin use has increased dramatically over the last decade, and this trend has been particularly pronounced among young adults. Some studies suggest that heroin is more likely to be the first drug injected by new injectors. In some areas of the country, the purity of the heroin has improved and the cost has decreased, making it an attractive drug for young people. While much of the heroin use over the last three decades was concentrated among low-income African American and Latino men in urban areas, recent data suggest that new heroin users now include working and middle class young White men and women. Other drugs that are injected by youth are crack cocaine and methamphetamine. The injection of ketamine, one of the new “club drugs,” is becoming increasingly popular among high risk youth (Clatts et al., 2003).

Factors Contributing to Risk

New IDUs may not have the information or skills needed to purchase drugs, and may look for the drugs in high risk settings and from groups of experienced injectors. New injectors may often be the last in line as the drugs are being divided and injected, thus sharing needles or cookers that have been previously used. The process for preparing and injecting drugs is complex, and varies depending on the type of drug. New injectors need to depend on more experienced, and often older, IDUs, at least during their first few times. The experienced IDU is likely to control the preparation and injection process, which can put the inexperienced IDU at risk (Clatts et al., 2003).

A study of 320 young IDUs ages 15–23 in Los Angeles found that young female IDUs’ lives are more entrenched in injection drug use networks than young males, and that their sex partners, injecting partners and “hang out” partners overlap to a greater degree, increasing the likelihood of young female IDUs having one or more people in their networks with whom they use drugs and have sex (Montgomery et al., 2002).

In a study of 250 young IDUs ages 18–29 in Baltimore, participants showed signs of instability and poverty. In the year preceding enrollment, one third received most of their money from illegal sources, such as theft, selling drugs, or trading sex for money; 21% had

been runaways; 47% had been homeless; 38% had been in drug treatment; and almost 70% had spent time in jail (Doherty et al., 2000).

In a study of 186 young homeless, runaway and street youth ages 12–23, Martínez et al., (1998) compare life experiences of IDU youth and non-IDU youth. IDU youth were significantly more likely than non-IDU youth to report parental substance abuse. IDU youth were more likely than non-IDU youth (18% vs. 2%) to report that their parents introduced them to high risk, high dependency drugs and used those drugs with them. IDU youth and non-IDU youth reported similar rates of physical (12% vs. 11%) and sexual abuse (6% vs. 4%). However, IDU youth were more likely to have been kicked out of their homes by their parents than non-IDU youth (21% vs. 11%).

SUMMARY OF THE NEEDS OF INJECTION DRUG USERS OF ALL RACES AND GENDERS

- Programs that address substance use (injection and non-injection) and its impact on HIV risk:
 - Alcohol use is associated with engaging in high risk sexual activity.
 - Sex drive is increased when coming off non-stimulant drugs, leading to high risk sexual activity for a period of time.
 - Sharing of injection equipment is more common when using cocaine because it has to be injected more often to maintain the high.
 - Those who injected more frequently and shared needles more often were more likely to engage in risky sexual behaviors.
 - Young IDUs who are just beginning to inject face particular risks.
- Access to clean syringes:
 - Need for legislation that prohibits the prosecution of people carrying dirty needles while accessing needle exchange programs.
 - Improvements to the Syringe Access Initiative, such as consistent low cost of syringes across pharmacies and being treated with respect by pharmacists.
- Programs that address mental health issues and their impact on HIV risk:
 - IDUs with depression were more likely to inject with previously used needles, to backload, and to share works.
 - Depression was also associated with overdosing.
- Integration of hepatitis C prevention messages and testing into HIV prevention programs:
 - 18% of hepatitis cases in Minnesota are related to injection drug use.
- Programs that support the reduction of sexual risk behavior:
 - High risk sexual activity was found to be the most significant predictor of HIV injection in male and female IDUs. High risk same sex behavior was most significant for men and high risk heterosexual sex was most significant for women.
 - Women who inject drugs and have sex with women were more likely to engage in risky sexual behavior than female IDUs who don't have sex with women.
 - Young female IDUs are more likely than young male IDUs to have sex partners and injecting partners that overlap.

- Programs that assist individuals in becoming financially independent:
 - IDUs who are homeless are more likely to trade sex.
 - IDUs who do not have their own home, or were unemployed or homeless were more likely to be depressed.
- Educational/informational efforts targeting IDU community:
 - Community forum participants identified ignorance of safe injection practices as one of the top factors impacting HIV risk.
 - Community forum participants also stated that there is a need for increased education and awareness in the IDU community because people are tired of the same old messages.
 - Immigrant IDUs were less knowledgeable about sexually-related HIV risk than injection-related risk.
- Programs addressing gender power imbalance and domestic violence/sexual victimization and their impact on HIV risk:
 - In two studies, men had control over drug use and the injection process, putting women in the position of using dirty needles.
 - Male and female IDUs who experienced sexual violence were more likely to have ever traded sex, to knowingly share needles and/or works with HIV positive people, to have attempted suicide, to have ever accidentally overdosed, to have binged on alcohol, and to have been diagnosed with a mental health condition.

Other At Risk Populations.....

The CCCHAP prioritized target populations by HIV status, major risk behaviors (male-to-male sex, heterosexual contact, and injection drug use), race/ethnicity, age, and geography. However, within the target populations identified by the CCCHAP, there are additional at-risk populations that deserve special consideration.

Sex Workers

Although not a target population specifically prioritized by the CCCHAP, sex workers are a high risk population and include individuals from across the prioritized high risk heterosexual populations, as well as the HIV positive, MSM and IDU populations. Two needs assessments of sex workers were conducted in Minnesota in 2000 and provide helpful information for addressing the needs of sex workers from any of the prioritized target populations.

One of the needs assessments was performed by the Red Door Clinic with 129 self-identified sex workers recruited from the Red Door Clinic, as well as from nude modeling clubs, strip dance clubs, and through street outreach. Seventy-five percent (75%) of this sample was female, 23% male, and 3% transgender. Racially, the group was diverse, with 36% of the participants identifying as African American/Black, 31% as White, 14% as bi- or multi-racial, 12% as Native American, 2% as Latino, and 2% as Asian (Persell and Fritz, 2000). The second assessment was conducted by Breaking Free through face-to-face individual surveys with 145 prostitutes, as well as three focus groups with prostituted women. In this assessment, 65% of respondents were African American, and only 7% were male (Breaking Free, Inc., 2000).

Despite the differences in race and gender in these two populations, the survey groups were quite similar. Both samples saw extremes in monthly income (ranging from \$0 to \$300,000), and a fair degree of stability in terms of housing (approximately 75% in both samples were in stable housing situations). Participants also seemed to have relatively good access to health care, with 73% in the Red Door Clinic sample having health insurance, and between 82% and 92% of participants in both samples accessing medical care within the previous year.

HIV Risk Behaviors

Both samples measured extensive risk behaviors for HIV transmission. In the Red Door Clinic sample, 16 of the sex workers had personal partners who were HIV positive, and 10 (8%) had work partners who they knew were HIV positive. In the Breaking Free sample, 3 individuals admitted to having unprotected intercourse with partners they knew to be HIV infected. In both studies, researchers found that sex workers use condoms inconsistently, and were less likely to use condoms with their personal sexual partners than with their work partners. In both samples, 11% of individuals identified as HIV positive.

Both samples showed high rates of STDs. In the Breaking Free sample, participants averaged one STD in the previous year, and 100% of participants had received testing and treatment for an STD during the last year. Eighty-two percent (82%) of Red Door Clinic participants indicated that they had ever had a sexually transmitted disease.

Both samples showed high rates of drug use. In the Red Door Clinic sample, for example, 33% used crack/cocaine daily, and 21% had injected drugs at some point in their lives. Seventy-one percent (71%) stated that drugs or alcohol had affected their safe sex practices. In the Breaking Free sample, 19% reported injecting street drugs during the last year, and 25 individuals reported sharing needles while shooting up. In the focus groups performed by Breaking Free, drug use was described as almost universal. Eighty-three percent (83%) reported being high on drugs or alcohol while turning tricks. Sex for drugs was common, and desire for drugs was described as contributing to HIV transmission risk in two ways - firstly, by making women willing to accede to demands for unsafe sex, and secondly, because being high makes them less likely to think about safer sex.

Sexual Orientation and Sexual Behavior

In the Red Door Clinic sample, 58% self-identified as heterosexual, 22% as bisexual, and 15% as gay/lesbian. When asked about the gender of sex partners, 97% had been sexual with men, 74% had been sexual with women, 13% with male to female transgenders, and 4% with female to male transgenders. The findings highlight the fact that when participants traded sex for money, they frequently engaged in sexual behavior that was not compatible with their self-identified sexual orientation.

Barriers to Safer Sex Among Sex Workers

Although participants in the Red Door sample demonstrated a high level of HIV/STD knowledge, many continue to engage in high risk behaviors. Participants identified the following barriers to safer sex:

- ◆ The influence of drugs and money
- ◆ Prevention messages have been heard too many times
- ◆ Prevention messages are provided in the wrong places and at the wrong times
- ◆ Lack of transportation
- ◆ Lack of time
- ◆ Lack of incentives
- ◆ Fears about HIV testing and/or feeling embarrassed or uncomfortable

that prevention messages did influence them to practice or maintain safer sexual behaviors, but that they needed daily messages or at least occasional messages.

Quotes Related to Drug Use

Participants provided the following insights into drug use and its relationship to unsafe sex:

"It's the drug, crack, that prevents women from being safer."

"That drug has power that makes you do things you would never normally do."

"A woman who is prostituting will not use a condom if she is offered more money, especially if she is high and needs more drugs."

"There is nothing you could do to stop unsafe behavior with such powerful addiction."

Levels of HIV Knowledge

Levels of HIV knowledge were high in both samples, and in both groups individuals overwhelmingly knew where to access condoms, free HIV and STD testing, and HIV/ STD prevention and care services. The majority of individuals in both groups had been tested for HIV/STDs at some time in their lives. Most sex workers received information about HIV through health care settings, through brochures and TV, and from friends and family. They also felt that these were the best ways in which to reach them. In the Red Door Clinic sample, 90% of sex workers said

Recommendations for HIV Prevention with Sex Workers

Participants in the needs assessments provided the following recommendations regarding what would be effective in reaching them:

- ◆ Targeted street outreach utilizing appropriately trained former prostitutes or survivors of prostitution. Women felt a peer who is also HIV positive would be most effective. Provide outreach during late afternoon, evening, and early morning.
- ◆ Mobile outreach van, providing HIV testing and counseling that makes scheduled stops at outreach sites to distribute condoms, prevention messages, as well as clothes, food, etc.
- ◆ Group HIV prevention discussions at hotels and strip clubs, including HIV testing and education.
- ◆ Condom distribution to sex workers on the streets, in businesses, or any other location they frequent.
- ◆ Work with sex workers to find prevention methods that are compatible with their lifestyle.
- ◆ Address sexual risk behaviors with personal partners.
- ◆ Media – billboards, posters, flyers in strategic locations.
- ◆ Drop-in center in the prostitution zone.

The Johns Study

The Breaking Free study also interviewed 117 johns, or men who use prostitutes. They were predominantly White, employed, higher income and had more stable living circumstances than the prostituted individuals.

The johns averaged two unprotected sexual encounters per week. Most carried condoms on them more than half the time. Sixty percent (60%) reported never having oral sex without a condom, and up to 92% reported never having insertive anal intercourse without a condom. Only 32% reported being high on drugs or alcohol when having sex with a prostitute. Only 6% reported injecting street drugs during the last year. Three johns reported unprotected intercourse with a known HIV positive individual. Reasons given for soliciting prostitutes included "just for fun," "for sexual variety," "sexual addiction," and "not in a relationship."

The johns recommended that HIV prevention messages reach them through prevention education at john's schools (65%), through churches (45%), TV/radio (41%), and outreach (41%).

Deaf and Hard of Hearing Persons

The CDC estimates that between 8,000 and 40,000 deaf and hard of hearing individuals are HIV positive in the United States. While the numbers are an estimate, there is little doubt that seroprevalence among the deaf and hard of hearing community is higher than in the general population. The Minnesota Chemical Dependency Program for Deaf and Hard of Hearing Individuals conducted a risk assessment of 250 individuals, of which 22% were program participants and the remainder were from the community at large. Only 15% of respondents from the community demonstrated knowledge about how HIV is transmitted (HRSA, 2001).

BARRIERS TO PREVENTION

A primary reason for the ignorance about HIV is that information has not been developed in a way that is understandable to deaf people. Deaf people often have difficulty understanding written material. Deaf and hard of hearing people largely communicate through American Sign Language (ASL). The average deaf person reads at a fourth- or fifth-grade level, partly because ASL sign language is so structurally and grammatically different from written English. As opposed to the hearing community, deaf people don't have the opportunity to gather information by listening to news or prevention messages on the radio or TV (Sleek, 1998). There is also very little HIV or sexuality education in schools for the deaf, especially for teenagers. As a result, deaf children have less awareness about HIV (Center for AIDS Prevention Studies, 1999).

While accurate information about HIV has been lacking, the mainstream misinformation, as well as the stigma and prejudice about and towards persons with HIV/AIDS and gay people, is present within the deaf community. Many members are afraid to access mainstream services for fear of having their confidentiality violated, particularly when they need to communicate with service providers through an interpreter (Center for AIDS Prevention Studies, 1999).

Recommended Strategies

Deaf participants of two community forums held in St. Paul in 2001 recommended the strategies for reaching the deaf community:

- ◆ HIV education for deaf children
- ◆ Strong visuals and graphics in brochures and other media
- ◆ Simple language
- ◆ TTY Hotline
- ◆ HIV prevention workshops for deaf people only
- ◆ Easy access to condoms and dental dams in deaf clubs, Minnesota Rainbow Alliance for the Deaf (MNRAD) meetings, Communication Services for the Deaf (CSD)
- ◆ Brochure to be handed out with condoms that explains how to use them in simple language and pictures
- ◆ Deaf advocate to accompany people to testing and arrange for interpreter
- ◆ Conduct outreach and testing together at deaf clubs, MNRAD events, bars, coffee shops
- ◆ Doctors should speak to deaf persons about sexual behaviors and risks. They think that deaf people don't have sex
- ◆ Prevention case management should be provided by someone who is culturally competent instead of using an interpreter
- ◆ Support group for deaf persons who are HIV positive

MDH, 2001

STRATEGIES FOR REACHING THE DEAF AND HARD OF HEARING COMMUNITY

The Center for AIDS Prevention Studies (1999) developed a report that recommends a better understanding of the strengths of the deaf community. Because the deaf community is close, there is a greater degree of physical and emotional intimacy. Because ASL is a visual language, sexual and drug issues must be addressed openly. Deaf persons often have more comfort discussing sexuality and drug use, which can help in understanding and negotiating safer behaviors.

Prevention programs and materials for deaf people should be as clear and as visual as possible. Presentations should incorporate opportunities for longer discussions, physical activities, pictures, dolls, graphic manuals in ASL, and captioned videos. Interactive video and the Internet also provide opportunity to reach the deaf community. Programs for the deaf should also address issues such as negotiating safer sex with a hearing partner, and breaking down barriers about sexual and substance abuse among deaf persons (Center for AIDS Prevention Studies, 1999).

Transgender Persons

The term “transgender” is used as an umbrella term to describe people who, “...have gender identities, expressions, or behaviors not traditionally associated with their birth sex” (Gender Education & Advocacy, Inc., 2001). Male to female (MTF) transgender persons were born as biological males but identify their gender as female. Female to male (FTM) transgender persons were born as biological females but identify their gender as male. Although MTF and FTM are often used to group transgender people, there is much diversity in the identity of gender among the transgender community. Some transgender persons may identify their gender as both male and female; others as neither male or female (Singer, 1997).

The Governor’s Task Force on Gay and Lesbian Minnesotans estimates that 1 to 5% of the population are transgender or have these feelings, but only a fraction have learned to accept this part of their lives. Transgender persons experience negative stereotypes and public ignorance.

Transgender persons living in Greater Minnesota face significantly greater isolation and lack of support and resources than those persons living in the metro areas. Gender identity counseling is available at the University of Minnesota, and other private clinics in the metro area. Social organizations and support groups also exist. The community is active in trying to educate the public on transgender issues. However, most counselors and human service workers have little knowledge or experience with gender identity issues, and many transgender people are damaged, rather than helped, in their therapy by mental health professionals.

Transgender Identity Terminology

Transsexuals are people who feel that they are not the correct gender for their physical body. Most desire to change their body so that it physically matches their gender through hormonal treatment and/or gender reassignment surgery.

Crossdressers or transvestites are people who dress in the clothing usually associated with another sex.

Transgenderists are people who live in the gender role associated with another sex, without desiring sex reassignment surgery.

Bigender persons identify as male and female.

Drag queens and kings are usually gay men and lesbian women who “do drag” and dress up in, respectively, women’s and men’s clothing, usually for entertainment.

Female and male impersonators are males who impersonate women and females who impersonate men, usually for entertainment (Bockting et al., 2005). Impersonators usually dress less flamboyantly than drag queens and kings.

Genderqueers are persons, often youth, whose gender identify is fluid or androgynous; they do not identify as male or female.

Intersexuals are persons who are born with male and female physical and/or chromosomal traits (MDH staff).

NEEDS ASSESSMENT OF TRANSGENDER PERSONS IN MINNESOTA

A needs assessment was performed with 59 transgender individuals who participated in an HIV prevention education workshop held by the University of Minnesota Program in Human Sexuality in collaboration with City of Lakes Crossgender Community, Minnesota Freedom of Gender Expression, Minnesota AIDS Project, and the Aliveness Project (Bockting et al, 1998).

In the development of the workshop, a needs assessment of transgender persons at risk for HIV infection was performed. Four research focus groups were conducted, consisting of:

1. Compulsive crossdressers;
2. Transgender persons living with HIV/AIDS;
3. Mixed group comprised of individuals representing a spectrum of transgender identities; and
4. Transgender hustlers/prostitutes.

Participants described a number of behaviors and situations prevalent in the transgender community that help to explain elevated HIV transmission risk in this population.

Sexual Risks

Shame, isolation, and fear of rejection contribute to a compulsive sexual acting out pattern, often associated with alcohol and drug use. Many transgender persons, especially crossdressers, are afraid of being found out. Secretive activities may include sexual encounters that are kept secret from their primary partners. Associated guilt, shame, and low self-esteem further amplify the risk for unsafe sexual acting out.

The search for one's true self is often accompanied by sexual experimentation and risk behavior. In addition, being considered attractive as a sexual partner is very affirming to one's crossgender identity. This affirmation may interfere with setting limits and assertiveness during sexual encounters. Sexual negotiation is complicated by the unique physical situation (e.g., women with breasts and penises, men with vaginas). Shame and fear of discovery/rejection may prevent open and clear communication.

Some seek sexual encounters in the crossgender role, and resort to prostitutes to avoid the extra effort involved in finding a sexual partner, to ensure anonymity, prevent rejection, or to act out a fantasy. Others work as hustlers/prostitutes to supplement income that might enable them to pay for sex

Recommended Prevention Strategies

Focus group participants confirmed the need for targeted interventions to address the specific needs of the subgroups of the transgender community, and made the following recommendations:

- ◆ Support for actualization of one's crossgender identity and role as a way to enhance self-esteem and increase responsible behavior
- ◆ Peer education
- ◆ Community involvement
- ◆ Education should respond to specific risk factors, including sexual compulsivity, and risk for assault
- ◆ Provide clear instructions for safer sex
- ◆ Education of health professionals about transgenders to increase their sensitivity and make it safer for transgender clients to discuss issues with their health care providers

Bockting et al., 1998

reassignment, or to compensate for lack of employment due to discrimination. The objectification of the transgender hustler/prostitute by the customer reduces the likelihood of safer sex.

Vulnerability to Assault

MTF transgender participants reported experiences of not being prepared for increased vulnerability in the role of a woman as opposed to the role of a man. In the crossgender role, they experienced lack of safety in situations in which they normally would not have felt threatened. Not "passing" in the crossgender role and being "read" as transgender further increased the fear of assault.

Sharing Needles While Sharing Hormones

Transsexuals may experiment with or acquire hormones through informal networks. Silicon is also sometimes injected to feminize the body.

SUBSTANCE USE

National studies also indicate risky substance use behaviors among transgender persons. In a study of 515 male and female participants, MTF persons reported more drug use than FTM. Sixty-five percent (65%) of MTF participants reported injecting hormonal drugs. Approximately one fifth had injected non-hormonal (street) drugs in the past six months, and this behavior was more common among those who were HIV positive. Almost half of the people who injected street drugs shared needles and backloaded, and 29% shared cookers. Eighteen percent (18%) of FTM participants had a history of injecting street drugs in their lifetime, and 54% had injected hormones. Most participants in the study (both MTF and FTM) obtained their hormone syringes from a medical provider and only 3 FTMs reported that they had shared hormone syringes in the past six months. Only 5 FTM participants had injected street drugs in the last six months, although 4 of them had shared needles and cookers, and backloaded (Clements-Noelle et al., 2001).

Another study of African American, Latino and Asian/Pacific Islander transgender persons found that sex while under the influence of illicit drugs was common. Fifty-five percent (55%) of participants with a primary partner reported sex while under the influence during the last 30 days, as did 45% of participants with casual partners, and 52% of participants reporting commercial sex partners. Having sex while under the influence of drugs was found to be a significant predictor of engaging in unprotected receptive anal sex (Nemoto et al., 2004a).

MENTAL HEALTH

Clements-Noelle et al. (2004) found that rates of mental health hospitalization (20-22%) and suicide attempts were similar for MTF and FTM participants (32%). However, the prevalence of suicide attempts among this transgender sample was much higher than the rate found in two other studies of adult men with same sex partners. Almost two thirds (62%) of MTFs and 55% of FTMs were classified as depressed.

Two needs assessments conducted in Philadelphia with 182 people found that 30% of respondents had ever attempted suicide. The rate was slightly higher among MTF participants compared to FTM participants (32% vs. 26%, respectively). When asked if they had attempted suicide because of being transgendered, 67% of the 49 people who answered the question responded "yes" (Kenagy, 2005).

SEXUAL BEHAVIOR

National studies indicate high rates of risky sexual behavior among transgender, with some conflicting evidence regarding whether MTF transgender persons engage in greater risk than FTM persons. Among the 392 MTF participants interviewed by Clements-Noelle et al. (2004), 37% reported having more than 10 partners in the last 6 months. The majority (75%) had sex with men, 6% with women, and 8% with transgender persons. Rates of unprotected receptive anal sex was greatest with primary partners (62%), followed by casual partners (44%) and sex exchange partners (28%). Only 7% of the MTF participants had undergone vaginal reconstruction surgery, so unprotected receptive vaginal sex was rare (2%).

The 123 FTM participants in this study reported less risky sexual behavior. Twenty percent (20%) had not engaged in anal, vaginal or oral sex in the last 6 months. Fifty-eight percent (58%) had sex with women, 18% with men, and 15% with transgender persons. Nearly half only had 1 partner. Ten percent (10%) reported receptive vaginal sex with a male or transgender person, of whom 67% did not always use condoms. Seven percent (7%) reported receptive anal sex with a male or transgender person, of whom 56% did not always use condoms. Only 2% of FTM participants had undergone penile reconstruction surgery, so insertive vaginal and anal sex was rare. Nearly one third of the FTMs reported a history of sex work or survival sex, and 59% had been forced to have sex (Clements-Noelle et al, 2004).

Kenagy (2005) found that 64% of HIV negative respondents, 82% of HIV positive and 38% of people who didn't know their HIV status engaged in unprotected sexual activity in the past 12 months. This study found similar rates of unprotected sex among MTFs (61%) and FTMs (59%), in contrast to findings of the previous study. The risk of HIV infection from unprotected sex was significantly higher among FTMs of color than White FTMs, with 74% of those of color reporting unprotected sex compared to 22% of White FTMs. The same relationship was not found among male to female participants. Bockting et al. (2005) found that although FTM persons were more likely to have unprotected oral sex than MTF participants (56% vs. 25%), there was no difference in the prevalence of unprotected anal or vaginal sex in the past 3 months.

Trading Sex

Nemoto et al. (1999) also found that a significantly higher number of transgender participants (28%) had exchanged sex for money or drugs in the past 6 months compared to heterosexual females (17%), and gay or bisexual males (8%). A significantly higher percentage of transgender participants (17%) had also paid for sex in the past 6 months compared to gay males (3%) and heterosexual females (4%).

Of 48 MTF transgender persons of color who participated in focus groups, 89% had previously exchanged sex for money and 48% were currently involved in sex work. The most

Comparison of Risk Behaviors

A study comparing risk behaviors of transgender persons, gay/bisexual males, and heterosexual females found that in the last 6 months:

- Transgender persons reported an average of 35.1 sex partners compared to gay/bi males (5.4) and heterosexual females (1.3)
- HIV positive transgender persons reported an average of 66.2 sex partners compared to HIV positive gay/bisexual men (4.79) and HIV positive heterosexual women (1.3)

Nemoto et al., 1999

common reason for engaging in sex work was financial survival needs, which were mostly attributed to discrimination against transgenders in the regular job market. Participants mentioned relying on sex work to pay for costly medical treatments such as gender confirmation surgery, breast implants and hormone treatments. Participants expressed the desire and intention to consistently use condoms, but some acknowledged that when customers offered to pay more for unprotected sex, they agreed to do it because of financial needs. Some also stated that sex work and unprotected sex gave them a sense of validation as women. Participants agreed that drug use was common throughout the community, serving as a coping mechanism. They noted that it is a vicious cycle – they became dependent on drugs to cope with prostitution and social stigma against transgenders and then became dependent on prostitution to pay for drugs. Combined drug use and sex work increased despair and lowered self-confidence and self-esteem (Nemoto et al., 2004b).

STIGMA AND DISCRIMINATION

In a study of 181 participants in a transgender HIV prevention program, the most common HIV risk factor was related to isolation. Sixty-four percent (64%) of participants concealed their sexual behavior from others, and 66% reported being discriminated against because of their gender identity or presentation (Bockting et al., 2005). In the needs assessments conducted in Philadelphia, 26% of 154 persons reported that they had been denied medical care because they were transgender (Kenagy, 2005).

DOMESTIC VIOLENCE AND SEXUAL VICTIMIZATION

Kenagy (2005) also found that of 78 persons who answered a question regarding forced sex, 54% reported that they had ever been forced to have sex. Fifty-six percent (56%) of 80 persons had ever experienced violence in their home and 51% had ever been physically abused. MTF participants were significantly more likely than FTMs to have been forced to have sex (69% vs. 30%), to have experienced violence in their home (67% vs. 39%), and to have been physically abused (65% vs. 29%).

Persons with Current or Past Incarceration History

Incarceration presents its own set of challenges to HIV prevention, both for individuals who are in prison, and for those who have been released. The Council on Crime and Justice (2002) conducted an assessment of the HIV/STD needs of African American ex-offenders, which also provides some information on needs within the prison system. The study focused on the needs of African Americans because they are disproportionately represented in prisons, both locally and nationally. Focus groups and individual interviews were held with approximately 15 male African American ex-offenders, including some HIV positive men, and with 20 service providers in the HIV/STD field.

SERVICE GAPS

Service Gaps Identified by Providers

Housing was identified as the most important service gap facing African American ex-offenders. Landlords are legally allowed to discriminate against people who have a felony conviction, so ex-offenders are in a particularly precarious situation. Maintaining safe behavior, as well as accessing health care for those who are HIV positive, becomes more difficult when basic needs are not being met. The second highest priority was the need to evaluate the effectiveness of prevention education. Providers want to know what works and what doesn't. They also want to learn which interventions change behavior as well as increase knowledge of HIV.

As with housing, many providers noted that ex-offenders need assistance finding employment with a decent salary in order to be able to meet their basic needs. Health insurance coverage is also a significant service gap for many African American ex-offenders. In prison, offenders receive care and treatment without having to pay for it. They need assistance finding affordable health care coverage that will be effective the day they are released. Finally, service providers noted a need for mental health services. One provider indicated a need for family counseling sessions to support the entire family during release. Chemical dependency treatment was also identified as a need by some.

Service Gaps Inside and Outside of Prison Identified by Ex-Offenders

About two-thirds of ex-offenders felt that HIV and STDs are a problem in prison, and most of them felt it was a serious problem. Most believed that more education is needed in prison in order to increase knowledge and reduce stigma. Education about HIV treatment options was identified as a need for individuals who are HIV positive so that they can make informed decisions about their care. Several participants stated that condoms should be made available in prison. They noted that it is not enough to educate prisoners about prevention if they aren't also given the tools to protect themselves and others.

All participants agreed that more prevention education outside of prison about HIV/STDs is needed by ex-offenders, as well as education that encourages them to get tested for HIV. Respondents felt that HIV positive ex-offenders needed more education about treatment options, and education about prevention in order to protect themselves and others. HIV positive individuals often need help teaching their families about HIV. Case management immediately upon release was identified as a need for HIV positive ex-offenders. An appointment with a case manager should be set up before release to occur right after release.

PREVENTION STRATEGIES FOR EX-OFFENDERS

There were some differences in the priorities identified by service providers and by ex-offenders. However, there were two areas where they strongly agreed. The first is that case management is needed for HIV positive African American offenders, both in preparation for their release and after their release. Ex-offenders spoke more about health-related case management, while providers also mentioned housing and employment services. Secondly, they both agreed that more effective education about HIV/STDs is needed.

RELATIONSHIP BETWEEN INCARCERATION AND HIV INFECTION

It is known that inmates engage in high risk activities while incarcerated and it has been estimated that the prevalence of AIDS infection is approximately 4 to 5 times higher in state and federal prisons than in the general population Maruschak (2001). However, a study of risk behaviors during incarceration conducted with 305 HIV positive African American men (cases) and 305 HIV negative men (controls) matched by age and neighborhood of residence found that although risky behaviors clearly occurred in jail/prison, there was no association between those risk behaviors and HIV infection (Wohl et al, 2000).

Anal sex while incarcerated was reported by 23% of the cases and 9% of the controls who had a history of incarceration. Of all men who reported anal sex while incarcerated, 9% of cases and 18% of controls reported having had anal sex for the first time while in jail/prison. Ninety percent (90%) reported never having used a condom for anal sex while incarcerated compared to 42% who reported never using a condom while not incarcerated.

A small percentage of cases (9%) and controls (4%) reported trading sex for drugs, money, or other things while in jail/prison. Of all men with a history of incarceration, 3% reported having sex with a jail or prison guard and 3% reported forced anal sex while incarcerated. Injection drug use during incarceration was reported by 7% of cases and 3% of controls. All these men had injected drugs prior to being incarcerated. Eleven percent (11%) of cases and 17% of controls received tattoos while in jail/prison.

The study found that anal sex during incarceration was not associated with HIV infection. In fact, across all sexual orientations, more anal sex with men was reported during periods of nonincarceration. The study did not find an association between HIV infection and injection drug use or tattooing during incarceration, either.

Prevention Strategies

Ex-offenders provided some ideas for prevention efforts to reach them:

- ◆ Outreach conducted by HIV positive individuals would be the most effective in providing motivation for protecting oneself.
- ◆ Prevention efforts should be focused on the couple rather than the individual.
- ◆ Outreach efforts should be targeted within African American communities.
- ◆ African Americans need to be reached by other African Americans.

Council on Crime and Justice, 2002

HIV Resource Inventory.....

The resource inventory lists HIV prevention programs currently being operated in the state of Minnesota. It is not a comprehensive inventory, but is inclusive of programs that are funded by the Minnesota Department of Health (MDH) with CDC and state funds, as well as programs in the community that are funded through other sources.

Minnesota Department of Health HIV Prevention Programs

COUNSELING, TESTING & REFERRAL

HIV counseling, testing and referral (CTR) sites funded through MDH have provided CTR services to over 100,000 people throughout Minnesota since 1985. In the spring of 2003, MDH staff convened an ad hoc community advisory group to assist in developing a philosophy to shape the CTR system in the future, to agree on and prioritize goals that reflect the philosophy, and to provide guidance on activities to support the goals.

The advisory group identified several guiding principles. The first is that anonymous testing should consistently be promoted and available as an option to individuals who want to test. The group also felt very strongly that counseling should continue to be a component of all HIV testing encounters. Additionally, the group valued referral and follow-up. They felt that CTR providers should have the capacity to make referrals to culturally appropriate medical care as well as prevention, mental health, substance use, and support services. The group suggested that CTR sites may want to consider developing on-site partnerships with mental health, substance use, and prevention with positive programs in order to facilitate access and assure follow through.

Goals for Counseling, Testing and Referral

The advisory group prioritized in rank order the following three goals for the CTR system in Minnesota:

- 1) To prevent infection by:
 - a. Identifying persons at increased risk for HIV;
 - b. Creating a client centered, risk reducing, sexual health promoting behavioral strategy during the CTR session(s); and
 - c. Providing referrals to ongoing prevention programs.
- 2) To prevent transmission by:
 - a. Identifying and notifying individuals who are infected with HIV;
 - b. Creating a client centered, risk reducing, sexual health promoting behavioral strategy during the CTR session(s); and
 - c. Providing referrals to ongoing prevention programs.
- 3) To identify HIV infected persons in order to get them into care and support services.

The CTR System Funded Through MDH

After the community advisory group finished its process, MDH used its input to develop a plan for the implementation of CTR services funded through the health department. The overarching philosophy of the plan is that CTR activities funded through MDH with HIV

prevention dollars must be a component of broader HIV prevention strategies. While there are many possible HIV testing providers and opportunities, the priority for MDH is to provide funding and technical assistance to programs that have the capacity to provide a client centered, risk reducing, sexual health promoting behavioral strategy as a component of CTR. The emphasis of MDH-funded CTR is to provide a behavioral intervention for both high risk and HIV positive individuals as part of the testing encounter, and to provide referral into ongoing prevention services.

In addition to providing CTR services within the context of a prevention strategy, it is also a priority of the MDH CTR system to provide referrals to individuals who are found to be positive into medical care and support services, which provide both a primary and secondary prevention outcome. The use of antiretroviral medications can significantly lower the levels of virus in the blood, which also tends to correlate with lower levels of virus in genital fluids, although the correlation is not exact (Barroso et al., 2003). Several studies have shown that lower viral load was related to decreased transmission (Quinn et al., 2000; Fang et al., 2004). Some Ryan White CARE Act funded support services, such as case management and health education and risk reduction, also provide information on reducing the risk of transmission to others. In addition, medical care and support services provide information and support for improving and maintaining one's health.

CTR sites are expected to provide referrals to culturally appropriate health education and risk reduction, mental health, substance use, and medical care services in the context of an HIV testing encounter. These referrals may also include programs that address the economic, cultural, emotional, and spiritual needs of individuals. In order to assure follow through and facilitate access, CTR sites may want to consider on-site partnerships.

The MDH CTR coordinator is responsible for developing trainings, continuing education curriculum, and protocol guidelines for counseling to be delivered in the context of CTR. Currently, the CTR coordinator provides quarterly trainings to staff of CTR and prevention programs. These trainings focus on providing positive HIV test results, active referrals, and effective HIV prevention counseling, as well as how to work with MDH to notify individuals who test positive and do not return for their results. Employees of agencies funded by MDH to provide OraSure testing are required to complete this training, as well as trainings on HIV

Protocols for Behavioral Intervention

Protocols for delivering a client centered, risk reducing, sexual health promoting behavioral strategy will be developed, keeping in mind the constraints related to doing testing in different environments. The goals of such a behavioral strategy (counseling) are to:

- ◆ Engage the individual in an initial exploration of his/her HIV risk behavior;
- ◆ Facilitate the individual's understanding of issues and circumstances that contribute to his/her risk behavior;
- ◆ Identify constructive risk reduction attempts and explore barriers to behavior change;
- ◆ Develop a specific, concrete and incremental HIV/STD risk reduction plan;
- ◆ Identify resources that will enhance the individual's ability to reduce risk;
- ◆ Link individuals with medical and behavioral resources; and
- ◆ Elicit the names of partners from individuals receiving a positive test result.

prevention counseling and the delivery of OraSure testing prior to conducting OraSure testing. The CTR coordinator continues to work with funded agencies to ensure quality assurance and to provide guidance for protocols related to standards of care. The coordinator will also identify and address CTR system gaps and capacity building needs, and develop an evaluation plan for the CTR system. If funding is available, MDH will develop media campaigns designed to reduce stigma related to HIV and the behaviors that put individuals at risk for HIV. The goal of media will be to encourage testing and knowledge of HIV status.

Venues for Providing CTR

Because the goals of CTR in Minnesota are to reach at risk or HIV infected individuals, resources will be focused in geographic areas of the state with high HIV prevalence and incidence rates. CTR activities will be implemented through several venues that reach populations with the highest positivity rates. The Partner Counseling and Referral Services (PCRS) program will offer OraSure testing to individuals who have been identified as being sexual or needle-sharing partners of a person infected with HIV. This program has historically had the highest positivity rate because they are working with a population that has had a suspected exposure to HIV.

In addition, the two STD clinics (Red Door and Room 111) will continue to be funded. They are serving a population that has reason to believe that they have been exposed to or infected with a sexually transmitted disease, and the two clinics have historically accounted for testing over 30% of new HIV cases in the state.

In 2005, four organizations (Access Works, African American AIDS Task Force, Minnesota AIDS Project, and Red Door) were funded through a combination of prevention and CARE Act Title I dollars to pilot a two-year joint prevention and care outreach and testing project. These agencies are expected to provide outreach activities that include the distribution of prevention literature, safer sex kits, and bleach kits; the provision of field based testing; and referral to prevention services. Persons who test positive, and those who already know they are positive but are not in care, will be assisted in accessing care and support services.

Finally, community based organizations will have the opportunity to compete for funds to provide CTR services through the HERR RFP that will be released in October 2005. Applications will also be evaluated for evidence of one or more of the following: past experience with HIV testing, historical positivity rates, and the demonstrated ability to reach high risk and emerging populations. The sites selected through the RFP process will be funded from July 1, 2006 through December 31, 2008. In addition, several clinic-based sites will be identified through an informal solicitation process in late 2005 to provide testing to African and Latino populations for the one-year period of January through December 2006. A separate RFP for clinic-based testing programs will be released in late 2006, with selected programs receiving funding for the time period of January 2007 through December 2009.

Testing Technologies

For most CTR programs implemented through MDH-funded prevention programs, OraSure testing will continue to be the predominant technology used. However, MDH recognizes the value of new rapid testing technologies. In 2004, using free OraQuick test kits from CDC, rapid testing was implemented by two clinics (Red Door and North Memorial) that had the laboratory infrastructure to support it. In 2005, MDH was able to secure additional free

OraQuick tests from the Substance Abuse and Mental Health Services Administration (SAMHSA) to assist these agencies in maintaining the availability of rapid testing, as well as supplementing the CDC directly funded rapid testing program of one community based agency (Indigenous Peoples Task Force).

Barriers to broader implementation of rapid testing include the higher cost of rapid test kits in comparison to OraSure tests, the need to establish protocol and laboratory oversight for community based organizations, and turnover in the CTR coordinator position at MDH over the last several years. However, the CTR coordinator is currently working on defining state guidelines for rapid testing sites to ensure the best use of rapid testing technologies in community based settings. Once these guidelines have been developed, MDH will begin to expand implementation of rapid testing.

HIV/STD PARTNER COUNSELING AND REFERRAL SERVICES

HIV Partner Counseling and Referral Services (PCRS) are designed to facilitate primary prevention of HIV transmission and secondary prevention of diseases and conditions that may ultimately threaten the lives of infected persons.

The PCRS program provides similar services related to the STDs that are reportable in Minnesota: syphilis, gonorrhea, chlamydia, and chancroid. STD PCRS services include: identifying infected patients through disease surveillance and at STD clinics, ensuring that patients receive and follow appropriate antibiotic therapy, counseling patients about how to prevent re-infection, identifying and notifying sexual partners who may be the patient's source of infection or may have been infected by the patient, and ensuring that partners receive medical evaluation and treatment as appropriate.

Partner Counseling and Referral Services for HIV

Intervention strategies for HIV PCRS include:

- ◆ Counseling infected patients about how they can prevent transmitting HIV to others.
- ◆ Referring patients for a medical evaluation and other services as appropriate.
- ◆ Locating sexual and/or needle sharing partners identified by the patient and notifying them of their risk for infection.
- ◆ Referring partners for HIV antibody testing, further counseling and medical evaluation, when appropriate.
- ◆ Offering OraSure testing to partners, and providing it when partners agree.
- ◆ Counseling uninfected partners about how to reduce their risk of exposure to HIV.
- ◆ If partners are infected, counseling partners about how to prevent transmitting HIV to others.

HEALTH THREAT INVESTIGATION

The purpose of investigation activities is to interrupt and prevent the spread of HIV and other serious communicable diseases such as tuberculosis, that cause serious illness, serious disability, or death. While efforts undertaken by MDH, local health departments, the private medical sector, and community based organizations are successful in working with most communicable disease carriers to prevent the further spread of disease, there remain a small number of carriers who are unwilling or unable to conduct themselves in such a manner as to not place others at risk of exposure to their infections.

Investigative activities intervene with such clients to maintain community protection. The MDH receives and investigates reports received from health and human services

professionals, public health officials, and others about persons who allegedly are HIV-infected, have been informed about their status and how to prevent transmitting HIV to others, and have engaged in behaviors that place others with no or unknown infection at high risk for infection with HIV (e.g., repeated insertive sex without a condom and without informing the partner of HIV infection, misrepresentation of status before engaging in the unsafe behavior). Once an investigation has been completed and key HIV and STD Section managers, MDH administrators, and legal counsel have reviewed its findings, special action may be warranted to intervene and prevent transmission. In such an instance, an administrative order (“health directive”) is issued to the person by the state commissioner of health, pursuant to a state civil statute called the “Minnesota Health Threat Procedures Act.” A health threat directive contains specific orders pertaining to preventing transmissible behavior, as well as a requirement that the person participate in individualized counseling provided by the University of Minnesota’s Program in Human Sexuality (PHS).

INFECTED HEALTH CARE WORKERS PROGRAM

In 1992 the HIV/HBV “Infected Healthcare Worker Program” was mandated by the Minnesota legislature. The addition of HCV in 2000 as a reportable condition is the first major change to the program since its inception. In 2004, the Infected Health Care Workers Program was moved into the STD and HIV Section from another area of MDH.

This program is intended to promote the health and safety of patients and regulated persons by reducing the risk of transmission of HIV/HBV/HCV during the provision of healthcare through the use of universal precautions and other infection control measures. A regulated person is defined as a licensed dental hygienist, a registered dental assistant, a dentist, physician, nurse who is currently registered as a registered nurse or licensed practical nurse, podiatrist, physician's assistant or chiropractor. The law mandates that any information that is provided to MDH as part of the evaluation process is confidential. This includes information from a healthcare provider and employer.

When the evaluation is complete, MDH establishes a written monitoring plan for the regulated person. The monitoring plan addresses the regulated person's scope of practice and any other pertinent issues, and establishes a process for obtaining periodic reports on the health status of the regulated person. In some situations it may be necessary for MDH to refer the regulated person back to their licensing board for evaluation and monitoring.

MASS MEDIA OUTREACH

MDH utilizes mass media channels as a supplemental strategy to help increase awareness about HIV prevention and promote existing resources. Due to current budget limitations, MDH primarily relies on obtaining message placements as a public service. Indoor/outdoor, print, electronic and web media channels are used whenever the opportunities present themselves.

Public service campaigns are organized around specific state and national health observances: National Black HIV/AIDS Awareness Day, National STD Awareness Month, National Hepatitis Month, GLBT Pride Month, National HIV Testing Day, Black GLBT Pride Month, National Latino AIDS Awareness Day, and World AIDS Day. Whenever possible, existing community planning groups and coalitions are used to help develop and distribute campaign messages and materials to audiences disproportionately affected by HIV. Existing

campaign materials are also pursued and adapted from other national organizations, agencies, companies, and coalitions as a cost-saving strategy.

Because of the increase in syphilis cases in the MSM community over the last few years, MDH implemented paid media campaigns about syphilis, which were targeted to MSM during GLBT Pride Month in 2004 and 2005. Strategies implemented during these campaigns included chat room banner ads, as well as print, restroom, and bus shelter media ads. The campaigns also included drop cards, posters and STD coasters at cafes and bars frequented by MSM.

At times there are specialized campaigns to release new information or address disproportionate disease occurrences or outbreaks within specific communities. Examples include the release of the annual HIV and STD surveillance reports, and campaigns related to syphilis in the MSM community, HIV in the African immigrant community, and resistant gonorrhea among MSM.

Technical assistance is offered to MDH-funded HIV testing sites, community based prevention agencies and city/county public health departments so they can implement their own campaigns to promote HIV related programs and services.

PERINATAL HIV PREVENTION

Minnesota experiences a very low rate of perinatal transmission of HIV. Between 2000 and 2004, the overall rate of transmission among all HIV positive pregnant women who gave birth was 2%, and only 3 cases of perinatal HIV have been reported to MDH during that time period. MDH posts information on its website for physicians and HIV positive women about perinatal transmission and prenatal care for HIV positive pregnant women. MDH also continues to monitor rates of perinatal transmission and but, unless an increase is noted, will not undertake any specific efforts with health care providers to promote universal HIV screening of pregnant women.

COMMUNITY BASED HEALTH EDUCATION AND RISK REDUCTION PROGRAMS

Community based health education and risk reduction (HERR) programs provide communities with the opportunity to work intensively with their own members to provide information and build prevention and risk reduction skills. With the grants that began January 2003, MDH provides programmatic funding and technical assistance for 20 community based and governmental organizations. MDH-funded programs provide targeted outreach, individual counseling, group counseling, prevention case management, and health communication/public information interventions to at-risk and HIV positive individuals. Many of these organizations use innovative educational strategies that build skills needed to follow and maintain risk reduction behaviors. The programs are targeted at youth and adults most at risk of acquiring or transmitting HIV or STDs.

A detailed resource inventory of HERR programs funded by MDH for the time period of January 2003 through June 2006 is included at the end of this chapter. The resource inventory also includes CDC directly funded CBOs and programs funded through the MDH Eliminating Health Disparities Initiative, as well as services for HIV positive persons funded through Titles I, II, III, IV and Part F of the Ryan White CARE Act.

HIV Prevention Programs Within Governmental Agencies

COMMUNITY HEALTH BOARDS

There are 51 local Community Health Boards that plan, coordinate and deliver public health and disease prevention services in Minnesota. Community health boards consist of city and county public health departments. The local health departments are responsible for assessing the public health needs of their community, prioritizing the needs and implementing strategies to address the identified priorities. In areas where HIV is identified as a priority, HIV prevention services include: community presentations, one-on-one disease intervention, and risk reduction counseling and referral. MDH provides technical support to the Community Health Boards through monthly informational mailings, periodic district trainings, and technical assistance with media campaign efforts.

MINNESOTA DEPARTMENT OF CORRECTIONS

The Department of Corrections (DOC) provides HIV testing and counseling for inmates of state correctional facilities. Testing is offered to inmates upon arrival at the facilities. Testing is also available throughout their stay, although it becomes more difficult to request testing after arrival as inmates are required to explain why they think they need to be tested, which may mean admitting to behavior that is illegal in prison.

MINNESOTA DEPARTMENT OF EDUCATION

Coordinated School Health Approach, a collaboration between the Minnesota Department of Education (MDE) and MDH, addresses school-related health policy development, instruction, counseling, support, and community education. Staff assists school districts to implement comprehensive curriculum and programs to prevent and reduce the risk of HIV/AIDS and remain in compliance with the state STD statute.

Coordinated School Health Approach

Coordinated School Health Approach provides Minnesota school, community and public health educators with a variety of resources and technical assistance, including:

- ◆ HIV prevention as a component of comprehensive school health.
- ◆ HIV training in Greater Minnesota and smaller school districts.
- ◆ HIV prevention with youth at highest risk.
- ◆ HIV-related resource development.
- ◆ Teacher in-service training.

MINNESOTA DEPARTMENT OF HUMAN SERVICES

The Minnesota Department of Human Services (DHS) is the Ryan White Title II grantee and directly administers the AIDS Drugs Assistance Program (ADAP) for Minnesota, which provides drugs and health insurance for HIV positive individuals. In addition, they directly administer the dental and nutritional supplement programs. DHS also administers HIV case management programs and other services for HIV positive individuals made available through the federal Ryan White CARE Act Title II funds.

DHS has developed and implemented mandatory guidelines for all licensed chemical dependency treatment programs around HIV prevention education. The guidelines were woefully outdated, and DHS worked closely with the Minnesota AIDS Project and the AIDS Substance Abuse Partnership to update the guidelines and bring them in line with protocol

developed by SAMHSA. The DHS chemical dependency guidelines address essential components of AIDS education efforts, elements of HIV risk assessment counseling, infection control, advisability and implications of both on-site and off-site HIV antibody testing and disease prevention counseling, and care and treatment of HIV-infected persons receiving chemical dependency services.

Capacity Building and Technical Assistance

MINNESOTA DEPARTMENT OF HEALTH

MDH is becoming increasingly committed to a long term HIV prevention philosophy that encourages integration of HIV prevention activities into existing services and enables grantees to become self-sufficient. Thus, training and capacity building activities must be made available to agencies and individuals beyond those currently receiving federal or state funds to implement HIV prevention activities.

Changes in the organizational structure of the STD and HIV Section facilitate the provision of broader and more in-depth technical assistance to community based agencies. MDH grant managers have always had responsibility for developing the capacity of providers to ensure that the desired services are delivered in an effective and efficient manner. Grant managers work with individual providers to assess and address organizational and programmatic needs. Under the revised organizational structure, more emphasis is being placed on providing on-site technical assistance. MDH grant manager staff are expected to have a working knowledge of current scientifically evaluated behavioral interventions and the expertise to assist partner agencies in adapting core intervention philosophies to meet the needs of their target population(s). When agencies identify needs that contract managers do not have the capacity to respond to directly, contract managers will make referrals to local and national technical assistance and capacity building providers.

Ongoing Capacity Building Opportunities

MDH routinely provides training opportunities to funded HERR and CTR providers. These opportunities are also available to community health service agencies, community clinics and CARE Act funded providers. The trainings are designed to strengthen the capacity of these agencies to deliver, design, implement and sustain effective HIV prevention interventions. In addition to the trainings provided by MDH staff, the HERR training coordinator also considers opportunities for national capacity building assistance organizations to assist local providers in strengthening infrastructure in order to build greater capacity to provide quality prevention programs.

Other MDH Capacity Building Efforts

In response to high rates of AIDS at first diagnosis among Latinos, a temporary community outreach coordinator position was created at MDH through the end of 2005. This position is responsible for providing guidance to health care providers and other organizations related to addressing and eliminating barriers to HIV testing for Latinos (particularly MSM, immigrants and migrant workers) who are at risk for HIV infection. This individual is responsible for identifying and/or assisting in the development of culturally and linguistically appropriate HIV testing services in communities where large Latino populations reside permanently or temporarily. The community outreach coordinator also works with community leaders to increase awareness in the Latino community about HIV and to promote testing.

MDH maintains a contract with Educational Operations Concepts (EOC), Inc., which provides direct technical assistance and training to prevention providers in relation to process and outcome monitoring. Assistance is provided in the areas of client-level data collection and reporting, and designing and implementing outcome monitoring activities.

MDH also maintains a contract with Peggy Garrett-Brewer to provide various types of capacity building assistance. In the spring of 2005, Ms. Garrett-Brewer held a workshop with agencies funded to reach African communities that provided assistance in crafting prevention messages, defining interventions, peer to peer education skills, program evaluation, data collection and management, and basic budget management and contract expectations. She will also conduct a workshop with agencies selected for funding in 2006 to provide assistance related to basic budgeting/funding management and preparing intervention work plans, and will provide individual agency capacity building/technical assistance to any newly funded agencies that have no previous experience with MDH HIV prevention funding. In addition, Ms. Garrett-Brewer provides ongoing agency capacity building assistance to organizations funded to reach the African American population, as well as skills building trainings for peer educators at these agencies plus an additional agency targeting the African community. In the summer of 2005, she provided specific technical assistance related to staff retention for several funded agencies.

OTHER CAPACITY BUILDING OPPORTUNITIES

The agencies and programs described here also provide opportunities for capacity building, training, and technical assistance.

American Red Cross

The American Red Cross is a humanitarian organization, led by volunteers, that provides relief to victims of disasters and helps people prevent, prepare for, and respond to emergencies. In response to HIV/AIDS, the Red Cross program provides effective community education about how to prevent the spread of HIV infection; reduce unreasonable fear about HIV and AIDS; and foster a compassionate and humane response toward those living with HIV infection and AIDS. The American Red Cross currently offers general HIV/AIDS certification classes, African American culturally specific HIV/AIDS certification classes, Latino culturally specific HIV/AIDS certification classes, and a culturally specific American Sign Language class. In addition, MDH currently has a contract with the Red Cross to develop a culturally and linguistically appropriate HIV education curriculum for Africans, and to provide the training to grantees funded to implement health communication/public information activities in African communities.

Hennepin County Human Services and Public Health Department

The Hennepin County Human Services Department (HSPHD) is the grantee for the CARE Act Title I funds used to provide medical care and support services to people living with HIV/AIDS in the metropolitan area. HSPHD staff routinely offer capacity building opportunities to CARE Act funded providers, and have been generous in inviting prevention providers to attend. Trainings have included the following topics: grant writing, recruiting and maintaining staff, program development and evaluation, and cultural competency. HSPHD and MDH staff also collaboratively implement joint prevention and care provider meetings on at least an annual basis. These meetings are designed to increase the knowledge among providers of available care and prevention services, and to provide networking opportunities for the providers.

MDH Office of Minority and Multicultural Health

The Office of Minority and Multicultural Health (OMMH) receives funding to build the capacity of minority community based organizations to implement HIV interventions. In 2004, OMMH provided the following types of assistance to agencies serving the African American, African and Latino communities: community forums to identify strategies and priorities for training; training on program development and grant writing; training of outreach workers; and training of trainers for individuals from these communities with health, education and management backgrounds. OMMH also implemented follow-up coaching and guidance for organizations that needed it. In 2005, this same type of assistance is being provided to agencies targeting the Native American and Asian American communities, with training scheduled to start in mid-September. OMMH is also preparing to provide small grants to African American, African, Asian, Latino and Native American communities to form a coalition and organize their own capacity building training for their respective communities. OMMH is currently negotiating with the federal Office of Minority Health about how to integrate the capacity building project into the Eliminating Health Disparities Initiative.

MN-TEL HIV Consultation Network

The MN-TEL HIV Consultation Network consists of local physicians, dentists and pharmacists with expertise in treating persons with HIV/AIDS who offer education, training and clinical consultation resources for the management of HIV/AIDS to other health care providers in Minnesota who do not serve a large number of patients with HIV. Minnesota providers can also access the services of national HIV experts through this program. This consultation network was developed collaboratively several years ago by the Midwest AIDS Training and Education Center (MATEC) and MDH, and is currently administered by MATEC through CARE Act Title II funds. All of the local experts who provide consultation services donate the time they dedicate to this project.

Women and Families Network

The mission of the Women and Families Network is to address the needs of Minnesota women and families affected by HIV through collaboration, advocacy, training and resource sharing. The network is coordinated by West Side Community Health Services, the Ryan White CARE Act Title IV grantee, in collaboration with the Women and Families Systems Advocate at MAP. The network is comprised of consumers and providers who address the multiple needs of people living with HIV and their families. The network creates the opportunity for formal and informal partnerships to facilitate referrals, avoid duplication of services, and to provide cross-training and support. In order to ensure that services are meeting the needs of consumers, feedback and input is gathered from consumer network members and Consumer Advisory Boards. The Women and Families Network holds an annual HIV Women's Health Retreat focused on gynecological and other health issues for women with HIV, and learning how to talk with providers and each other about these issues.

Perinatal HIV Nurse Coordinator

The Ryan White Title IV grant also funds a perinatal HIV nurse coordinator. This position is responsible for creating and distributing user-friendly tools that explain the recommendations for care of HIV-infected pregnant women, and offer support and education to OB/GYN providers. The nurse coordinator also provides education and support directly to HIV positive pregnant women, or works closely with their case manager. The nurse coordinator is working to develop a system to help ensure that HIV positive women receive care during and after their pregnancy and their children receive ongoing HIV-related care after birth.

Resource Inventory

The resource inventory starting on page 222 includes information about HIV prevention services funded by MDH through CDC and state dollars. In addition, information is provided about CDC directly funded community based organizations and efforts supported through MDH's Office of Minority and Multicultural Health Eliminating Health Disparities Initiative. Medical care and support services funded through Titles I, II, III, IV, and Part F of the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act are also included.

For each organization providing services, the resource inventory describes the target population, the services provided, and the target area. Under target area, definitions for the metro area vary somewhat for prevention programs and care programs. For prevention programs, it refers to the 7 county Minneapolis - St. Paul metropolitan area. Some programs target clients in a particular portion of the metro area. For CARE Act services, the metro area refers to the 13 county Minneapolis-St. Paul eligible metropolitan area (EMA). In both cases, Greater Minnesota refers to all counties not included in the metro area. Most services in Greater Minnesota are targeted to a specific region. In addition, there are statewide programs that serve clients from the entire state.

MDH-FUNDED HERR PROGRAMS

The MDH-funded HERR programs listed in the resource inventory are based on the previous prioritization process conducted by the CCCHAP in 2000-2001. These programs received funding for the grant period of January 2003 through June 2006.

Please note that in defining target populations in the last RFP process, MDH only required that 50% of the clients served be from the target population. For this reason, you will see, for example, that agencies targeting women also reach men.

During the previous priority setting process, the only HIV positive population to be named as a priority target population was HIV Positive MSM. However, in the RFP, applicants were encouraged to serve HIV positive individuals within the other target populations, as well. Through the RFP process, prevention with positive programs were proposed for heterosexual women and IDUs, as well. As part of the process to address the unallotment of state prevention funds in 2003, three prevention with positive programs were funded. One is specifically targeted at HIV positive MSM. The other two programs have group interventions for HIV positive MSM and also serve HIV positive heterosexuals and IDUs.

Target Populations for HERR Programs

HERR programs included in the resource inventory are targeted to the following populations prioritized by the CCCHAP in 2000-2001:

Men Who Have Sex with Men (MSM)

- ◆ Men of Color Who Have Sex with Men
- ◆ Young Men Who Have Sex with Men
- ◆ Adult Men Who Have Sex with Men
- ◆ HIV+ Men Who Have Sex with Men

Heterosexual Women

- ◆ Adult African American Women
- ◆ Young African American Women
- ◆ Young Women All Races
- ◆ Adult Women All Races

Injecting Drug Users (IDUs)

- ◆ African American Male IDUs
- ◆ African American Female IDUs
- ◆ Male IDUs All Races
- ◆ Female IDUs All Races
- ◆ Young IDUs

Men Who Have Sex with Men and Are Injecting Drug Users (MSM/IDU)

- ◆ No subpopulations identified

Over the last few years of decreased funding, MDH-funded HERR programs have been doing more with less. For example, some programs have integrated testing into their interventions, although they do not receive funding to do so beyond receiving test kits through MDH. Additionally, all funded agencies are expected to integrate STD prevention messages into their programs.

Types of Interventions

During the previous prioritization process, the CCCHAP prioritized intervention categories for each target population. As part of the RFP process, an internal MDH committee reviewed funding recommendations made by the community proposal review committee to ensure that, to the extent possible based on available resources, a comprehensive set of prevention services was available within each of the target populations, and to ensure that the highest ranked intervention category for each target population received funding. Following are definitions of the types of interventions that received funding:

Outreach: Interventions that are designed to identify high risk or HIV positive individuals in their neighborhoods or places they normally congregate; provide condoms, bleach, sexual responsibility kits, and educational materials; and provide referrals to testing and/or services that can help reduce or change risk behaviors. Outreach activities can also include field based HIV testing.

Individual Level Interventions (ILI): Health education and risk reduction counseling provided to one individual at a time. ILI assists clients in assessing risk for HIV infection or transmission, making plans for individual behavior change and ongoing assessment of their behavior. ILI includes skills building components. These services can also facilitate linkages to other services that support the reduction of risk, such as substance use treatment. ILI can include HIV testing.

Group Level Interventions (GLI): Health education and risk reduction counseling with groups of different sizes. GLI models can either be led by peers or by professionals. As with ILI, group interventions contain a skills building component, and assist clients in assessing risk, making plans for behavior change and assessing their progress.

Prevention Case Management (PCM): Client-centered prevention activity focused on assisting clients with multiple, complex issues to adopt HIV risk reduction behaviors. PCM provides intensive, ongoing, and individualized prevention counseling, support, and assistance in accessing other needed services.

Health Communication/Public Information (HC/PI): The delivery of planned HIV prevention messages through one or more mediums to target audiences. The focus of the messages are to build general support for safe behavior, support for personal risk reduction efforts, and/or inform persons at risk how to obtain specific services. HC/PI interventions may be delivered through: electronic media, print media, telephone hotline, information clearinghouse, presentations or lectures, community events, and web sites and chat rooms.

Please note that due to a scarcity of research related to effective interventions for MSM/IDU, the CCCHAP prioritized needs assessment as the priority intervention for this population. Due to the unallotment of state HIV prevention funds in 2003, no needs assessment activities were funded. As a result, no activities are listed for MSM/IDU in the resource inventory.

The resource inventory will be updated in 2006 to reflect the programs that will be funded from July 2006 through December 2008 based on the new priorities identified by the CCCHAP in 2005.

RESOURCE INVENTORY

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---|---------------------------------|---|---|
| MDH Funded Health Education and Risk Reduction (HERR) Programs | | | |
| Chicanos Latinos Unidos en Servicio (CLUES) | MSM of Color (Latinos) | <p><i>Outreach and OraSure Testing</i></p> <ul style="list-style-type: none"> – Outreach and OraSure testing in night clubs, bars, restaurants, coffee shops, places of worship (300 Latinos) <p><i>Individual Level</i></p> <ul style="list-style-type: none"> – Risk assessment, risk reduction counseling about HIV/STDs, substance use, safer sex and building self esteem (18 Latino men) <p><i>Group Level</i></p> <ul style="list-style-type: none"> – Four group sessions focusing on HIV/STDs, substance use, safer sex, self esteem (15 Latino men) | Metro |
| Indigenous Peoples Task Force | MSM of Color (Native Americans) | <p><i>Outreach and OraSure Testing</i></p> <ul style="list-style-type: none"> – Culturally specific outreach and OraSure testing including safer sex information and kits, materials on HIV/STDs and hepatitis at public sex places, bars, street, community centers (450 Native American men) <p><i>Individual Level</i></p> <ul style="list-style-type: none"> – Risk assessment, risk reduction counseling, skill building (8 Native American men) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Presentations at CBOs, health seminars, and when requested by tribal health organizations on HIV/STDs, gender identification and/or relationships in Native communities, abuse and racism (25 Native Americans) – Presentations at Pow Wows on HIV/STD/hepatitis transmission and prevention (500 Native Americans) | Metro and on reservations in Greater MN |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|--------------------------------|--|---|-------------|
| Minneapolis Urban League (MUL) | MSM of Color (African American) | <p><i>Outreach and OraSure Testing</i></p> <ul style="list-style-type: none"> Outreach, HIV/STD risk reduction information, safer sex information and kits, and OraSure testing in bars, parks, neighborhoods, community events (500 African American men) <p><i>Individual Level</i></p> <ul style="list-style-type: none"> Culturally specific risk assessment, risk reduction counseling (15 African American men) | Minneapolis |
| Pillsbury United Communities | MSM of Color (primarily African American and Latino) | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach in bars, sidewalks, shelters, parks, events (2400 persons) <p><i>Individual Level</i></p> <ul style="list-style-type: none"> Risk assessment, risk reduction counseling, individual prevention goals (13 men) <p><i>Group Level</i></p> <ul style="list-style-type: none"> Men's brunch focused on sexual responsibility, condom use, relationships, HIV/STDs, spirituality, racism, coming out, substance use, etc. Chemical health classes offered during brunch four times a year (133 men) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> Presentations at events, CBOs, schools, group homes and treatment centers on HIV/STI risk reduction (800 men) | Minneapolis |
| The City, Inc. | Young MSM (African American) | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach in schools, buses/bus stops, concerts, fast food restaurants, schools, barber shops (25 young African American men and transgender youth) <p><i>Individual Level</i></p> <ul style="list-style-type: none"> Risk assessment, skills building and practice, individual prevention plan (8 young African American men and transgender youth) | Minneapolis |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|--|-------------------|--|---------------------|
| Face to Face Health and Counseling Service | Young MSM | <p><i>Individual Level & OraSure Testing</i></p> <ul style="list-style-type: none"> – Risk assessment, HIV education, risk reduction counseling, skills practice, psychosocial evaluation. OraSure testing at drop-in site (10 young men) <p><i>Group Level</i></p> <ul style="list-style-type: none"> – Support and educational group focused on HIV education, risk reduction, safer sex negotiations, psychosocial evaluation (13 young men) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Health information booths at Pride and World AIDS Day (225 young men) – Presentations to 75 youth-serving providers about GLBT issues affecting youth | St. Paul metro area |
| Youth and AIDS Projects (YAP) | Young MSM | <p><i>Outreach</i></p> <ul style="list-style-type: none"> – Outreach in bars, parks, beaches, restaurants, entertainment venues, and institutions like shelters, drop-in sites, correctional facilities, support groups (125 youth) <p><i>Individual Level & OraSure Testing</i></p> <ul style="list-style-type: none"> – Risk assessment, risk reduction counseling, OraSure testing, monitoring change in knowledge and behavior (25 young men) <p><i>Group Level</i></p> <ul style="list-style-type: none"> – Peer education group session on safer sex, condom use, risk associated with sex and drug use, skills development, role plays, incentives for education program completion, safer sex kits (18 young men) <p><i>Prevention Case Management & OraSure Testing</i></p> <ul style="list-style-type: none"> – Risk assessment, behavior change counseling, individual prevention plan, OraSure testing (25 young men) <p><i>Continued on next page</i></p> | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|--|---------------------|--|-------------|
| Youth and AIDS Projects (YAP) <i>(Continued from previous page)</i> | Young MSM | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> Information on HIV and risk reduction provided at community events and through educational presentations at bars; shelters; drop-in, recreation and counseling centers (500 youth) | Metro |
| Hennepin County Red Door Clinic | Adult MSM All Races | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach at bars, cafes, gyms, restaurants, MSM social groups, public parks, community events, public sex areas, Internet/chat rooms (900 men) <p><i>Individual Level & OraSure/OraQuick</i></p> <ul style="list-style-type: none"> Risk assessment, risk reduction counseling, sexual negotiation, communication, maintenance of safer sex behavior, testing (100 men) <p><i>Group Level</i></p> <ul style="list-style-type: none"> 8-session group focuses on increasing condom use and decreasing internalized homophobia (12 men) Monthly support group for married men who are also attracted to men (48 men) Chemical/sexual health educational and skills building group for MSM in treatment programs (60 men) Ongoing discussion group for sexually active gay/bi men on sexual health and other issues (48 men) Ongoing discussion group for sexually active gay/bi men over the age of 55 on sexual health and other issues (12 men) <p><i>Prevention Case Management</i></p> <ul style="list-style-type: none"> Risk assessment, behavior change counseling, individual prevention plan (3 men) <p><i>Continued on next page</i></p> | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|--|--------------------------|--|--------------------|
| Hennepin County Red Door Clinic <i>(Continued from previous page)</i> | Adult MSM All Races | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Articles on HIV/STDs, sexual health, program info in gay press (12,000 issues per year) – Educational presentations to HIV+/high risk MSM (30 men) – Information, referral and recruitment into program at events (750 men) – Website with program and testing info, postings to chat rooms, email response (150 hits) | Metro |
| Minnesota AIDS Project (MAP) | Adult MSM of All Races | <p><i>Outreach</i></p> <ul style="list-style-type: none"> – Outreach by volunteers at bars and public sex places. Offer OraSure through ILI in a van at outreach site (450 individuals) – Outreach by volunteers and staff on Internet and in chat rooms (150 individuals) <p><i>Individual Level & OraSure Testing</i></p> <ul style="list-style-type: none"> – Risk assessment, risk reduction counseling, individual prevention plan, counseling and testing (163 persons, primarily men) <p><i>Group Level</i></p> <ul style="list-style-type: none"> – Group intervention on sexual health, condom use, risk reduction. Leadership and skills training on providing prevention messages to peers/community (43 men) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Facilitated discussions on how HIV/STDs relate to reality for gay/bi men (115 men) – Print and web ads developed by program participants with prevention messages and promotion of programs – Environmental outreach including distribution of safer sex kits and health promotion messages (17,000 persons) | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|----------------------------------|------------------------|---|-------------|
| Rural AIDS Action Network (RAAN) | Adult MSM of All Races | <p><i>Individual Level</i></p> <ul style="list-style-type: none"> – Risk assessment, risk reduction counseling, mental and chemical health screening, safer sex kits (15 men) <p><i>Group Level</i></p> <ul style="list-style-type: none"> – 10-session peer led groups on homophobia, coming out in Greater MN, HIV/STDs and hepatitis in rural areas, religion and GLBT community, safer sex, domestic violence (8 men) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HIV 101 presentations at rural network meetings and campus health fairs, and information at Pride events in Greater MN (450 persons) | Greater MN |
| Program in Human Sexuality | Adult MSM of All Races | <p><i>Group Level</i></p> <ul style="list-style-type: none"> – Man to Man Seminar on sexual health, condom use, risk reduction (45 men) – Out Sexual Health Seminar (25 persons) – All Gender Health Seminar (20 persons) | Metro |
| Minnesota AIDS Project (MAP) | HIV+ MSM | <p><i>Individual Level</i></p> <ul style="list-style-type: none"> – Face to face risk assessment, individual prevention strategies, self care and health promotion (4 newly diagnosed HIV+ men) – Internet risk assessment, peer support sessions, self care and health promotion (5 newly diagnosed HIV+ men) <p><i>Group Level</i></p> <ul style="list-style-type: none"> – Group training and discussions about risk reduction and self care. Leadership and skills training for core group members to provide prevention messages to peers and community. Some participants will be recruited to volunteer for HC/PI activities (20 HIV+ persons) <p><i>Continued on next page</i></p> | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---|-------------------|--|-------------|
| Minnesota AIDS Project (MAP) <i>(Continued from previous page)</i> | HIV+ MSM | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Core group members provide health education and information at Twin Cities Gay Men's softball league games (150 contacts) – Core group members collaborate with another MAP program to conduct outreach at gay/bi bars (150 contacts) – Core group members maintain regular outreach hours in gay/bi chat rooms on the Internet (75 contacts) | Metro |
| Clinic 42 – Abbott Northwestern Hospital | HIV+ Adults | <p><i>Individual Level</i></p> <ul style="list-style-type: none"> – Risk assessment, develop behavioral goals, supports and barriers (63 HIV+ persons) <p><i>Group Level</i></p> <ul style="list-style-type: none"> – Three groups targeting HIV+ MSM, HIV+ Heterosexuals, and HIV/HCV co-infected persons. Group discussions focus on sexual health, dating and disclosure, sexual and mental/chemical health, body image, safer sex skills (29 HIV+ persons) <p><i>Prevention Case Management</i></p> <ul style="list-style-type: none"> – Risk assessment, behavior change counseling, individual prevention plan (3 HIV+ persons) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Coasters with STD information – Website with health information, resources, message board, live chats targeting HIV+ persons and/or negative sexual partners (50 persons) | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|-----------------------|---|--|-------------|
| The Aliveness Project | HIV+ Adults | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach at homes, coffee shops, street, public sex environments, community venues, and on-site with short prevention messages, safer sex and bleach kits and information (350 HIV+ persons, not unduplicated) <p><i>Individual Level</i></p> <ul style="list-style-type: none"> Staff and peer-led risk assessment, risk reduction counseling. May include sexual partners occasionally (38 HIV+ persons) <p><i>Group Level</i></p> <ul style="list-style-type: none"> Group sessions (one for MSM, another for other HIV+ adults) with opportunity for peer modeling of risk reduction skills. May include sexual partners occasionally (50 HIV+ persons) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> Presentations and brief on-site individual encounters to give out safer sex and bleach kits, and referrals (750 persons) | Metro |
| Breaking Free | Adult African American Heterosexual Women (prostituted) | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach including HIV and STD prevention materials and safer sex kits targeting prostituted women in areas of high prostitution, bars, hair salons (450 persons) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> HIV/STD presentations at treatment centers, halfway houses, Johns school, shelters, churches, community centers, health fairs (1750 persons) | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|-------------------------------|---|--|-------------|
| Wake Up We're Affected (WUWA) | Adult African American Heterosexual Women | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach by peer educators in bars and community events (300 African American women) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> Presentations and lectures at community events to increase awareness of HIV/STDs and empower women to teach others Forums in clubs, places of worship, community settings (1650 African American women) | Metro |
| The City, Inc | Young African American Heterosexual Women | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach at schools, hangouts, bus/bus stops, beauty shops, fast food restaurants, concerts, special events (75 African American youth) <p><i>Individual Level</i></p> <ul style="list-style-type: none"> Risk assessment, risk reduction counseling, skills building and practice, individual prevention plan, encourage testing (8 African American youth) <p><i>Group Level</i></p> <ul style="list-style-type: none"> Staff and peer educator led group with HIV/STD info, risk reduction, sexual violence, skills building (15 African American youth) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> Presentations at City Inc, alternative schools, group homes, churches, "hang-out, condom house," special events, community events, community organizations, community radio (500 African American youth) | Minneapolis |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---|---|---|---------------|
| Hennepin County Red Door Clinic | Young African American Heterosexual Women | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach including HIV/STD and hepatitis prevention information and safer sex kits at strip clubs that have primarily African American dancers and sex businesses (97 young African American women) <p><i>Individual Level & OraSure/OraQuick</i></p> <ul style="list-style-type: none"> Risk assessment, risk reduction counseling, information about HIV/STD testing, pre- and post-test counseling if test requested during Teen Clinic at Red Door (29 young women and sexual partners) <p><i>Group Level</i></p> <ul style="list-style-type: none"> Group workshops and skills building for youth in sex businesses, alternative schools, youth shelters, substance use programs (98 young African American women) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> Info, safer sex strategies at health fairs, community events, parades Website with information, e-mail response with information and referrals (160 young African American women and their partners) | Metro |
| Face to Face Health and Counseling Services | Young Heterosexual Women of All Races | <p><i>Individual Level & OraSure Testing</i></p> <ul style="list-style-type: none"> Risk assessment, risk reduction counseling, skills practice, psycho-social evaluation. OraSure testing offered at drop-in center (25 young women) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> Educational presentations on HIV and risk reduction at schools, other agencies, community health fairs correction facilities Information on HIV, risk reduction at health fairs, community events (375 young women) | St. Paul area |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---------------------------------|--|--|-------------|
| Hennepin County Red Door Clinic | Young Heterosexual Women of All Races | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach including HIV/STD and hepatitis prevention information and safer sex kits at strip clubs, sex businesses (160 young women) <p><i>Individual Level & OraSure/OraQuick</i></p> <ul style="list-style-type: none"> Risk assessment, risk reduction counseling, information about HIV/STD testing, pre- and post-test counseling if test requested during Teen Clinic at Red Door (54 young women and sexual partners) <p><i>Group Level</i></p> <ul style="list-style-type: none"> Group workshops and skills building for youth in sex businesses, alternative schools, youth shelters, substance use programs (102 young women) <p><i>Community Awareness</i></p> <ul style="list-style-type: none"> Info, safer sex strategies at health fairs, community events, parades, etc. (200 young women and their sexual partners) Website with information, e-mail information and referrals (over 2500 hits to date) Staff training about HIV/STDs and hepatitis and how to work with young women regarding sexual health (18 professionals at agencies, medical/educational institutions) | Metro |
| Neighborhood House | Young Heterosexual Women of All Races (Latina) | <p><i>Individual Level</i></p> <ul style="list-style-type: none"> Risk assessment, risk reduction counseling, individual prevention plan, accompany to appointments (15 young Latina women) <p><i>Group Level</i></p> <ul style="list-style-type: none"> Small group discussions on HIV/STDs, risk reduction, family communication, cultural barriers and skills building held at Neighborhood House, in community settings, homes, schools (30 young Latina women) | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|------------------------------|--|---|-------------|
| Africa Solutions | Adult Heterosexual Women of All Races (African-born) | <p><i>Outreach</i></p> <ul style="list-style-type: none"> – Outreach in places Africans congregate (1080 African adults) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Presentations on HIV/STD and hepatitis prevention skills in service organizations and at community events (60 African women and 13 male sexual partners) – Community forum at which an HIV/STD specialist provides accurate and current information about HIV/STDs/hepatitis and testing referrals (25 African women and 5 male sexual partners) | Metro |
| Minnesota AIDS Project (MAP) | African American Male IDUs | <p><i>Outreach</i></p> <ul style="list-style-type: none"> – Outreach in van to street locations and fixed sites. Refer to OraSure provided through ILI (60 persons) <p><i>Individual Level & OraSure testing</i></p> <ul style="list-style-type: none"> – Risk reduction and skill building, harm reduction, negotiation and communication, OraSure testing, Rule 25 assessments (93 persons) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Small group HIV/STD/hepatitis and risk reduction presentations (490 persons) – Brief outreach contact (510 persons) | Metro |
| Turning Point, Inc. | African American Male IDUs | <p><i>Outreach</i></p> <ul style="list-style-type: none"> – Outreach in shooting galleries, bars, shelters, treatment centers, places where drug dealers congregate (206 African American men) <p><i>Individual Level</i></p> <ul style="list-style-type: none"> – Risk assessment, risk reduction and harm reduction counseling (40 African American men) <p><i>Group Level</i></p> <ul style="list-style-type: none"> – Group sessions at treatment center on condom use, cleaning needles, vein care, hepatitis symptoms, harm reduction (200 African American men) | Minneapolis |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---------------------|-----------------------------------|---|------------------|
| Turning Point, Inc. | African American Female IDUs | <p><i>Outreach</i></p> <ul style="list-style-type: none"> Outreach in shooting galleries, bars, shelters, substance use treatment centers, places where drug dealers congregate (94 African American women) <p><i>Individual Level</i></p> <ul style="list-style-type: none"> Risk assessment, risk reduction and harm reduction counseling (15 African American women) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> Presentations on HIV/STD/hepatitis prevention, safer sex, injection information, and harm reduction in treatment centers Outreach at community events (150 persons for all HC/PI activities) | Minneapolis area |
| Access Works | Male and Female IDUs of All Races | <p><i>Individual Level & OraSure</i></p> <ul style="list-style-type: none"> Risk assessment, HIV/hepatitis risk reduction counseling related to substance use and sexual health, harm reduction. OraSure testing provided. Referrals to HAV/HBV vaccinations and hepatitis testing and treatment (75 persons) <p><i>Group Level</i></p> <ul style="list-style-type: none"> HIV/hepatitis education (series of six sessions over 6 month period) providing risk and harm reduction information, testing and treatment information for HCV infected and HIV/HCV co-infected persons. Provide information on HIV/HCV and risk reduction (30 persons) Weekly group for users providing HIV and hepatitis education, risk reduction support, nutritional info, needle cleaning info, skills building and role plays (6 persons) <p><i>Prevention Case Management</i></p> <ul style="list-style-type: none"> Risk assessment; counseling on harm reduction sexual health and substance use; individual prevention plan; accompany to appointments (8 persons) | Minneapolis area |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|------------------------------|---|--|---|
| Leech Lake Band of Ojibwe | Female IDUs of All Races (Native American) | <p><i>Individual Level</i></p> <ul style="list-style-type: none"> – Risk assessment, safer sex and safer drug use counseling (13 Native American women) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Educational presentations focused on HIV/STDs, safer sex and drug use at Pow Wows, traditional gatherings, health fairs and schools on or near reservation (150 Native American women) | Leech Lake Reservation and surrounding area |
| Leech Lake Band of Ojibwe | Young IDUs (Native American) | <p><i>Individual Level</i></p> <ul style="list-style-type: none"> – Risk assessment, risk reduction counseling, HIV/STI and hepatitis info, adolescent health issues, health decision making (15 Native American youth) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Educational presentations focused on HIV/STDs, safer sex and drug use at Pow Wows, traditional gatherings, health fairs and schools on or near the reservation (150 Native American youth) | Leech Lake Reservation and surrounding area |
| Minnesota AIDS Project (MAP) | All target populations, as well as any individual or community in the state concerned about HIV | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Phone hotline and website that provides information about HIV, and referrals to testing, prevention and care services (1100 phone and e-mail contacts) – Quick Connect provides face-to-face information about services for HIV+ individuals – OraSure counseling and testing provided. Risk assessment to determine need for testing is done on phone calls to the AIDSLine | Statewide |
| The Family Tree, Inc | Individuals at risk of STD infection, individuals concerned about STDs | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Phone hotline that provides information about HIV/STDs and referral to appropriate services – Media campaign promoting hotline targeting African Americans | Statewide |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|--------|-------------------|---|-------------|
| MDH | Latino community | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Build awareness of HIV and the benefits of testing through community events, health fairs, media <p><i>Capacity Building</i></p> <ul style="list-style-type: none"> – Build capacity of organizations serving Latinos to provide culturally competent HIV testing, or be able to refer people to testing – Build capacity of organizations to conduct risk assessments | Statewide |

MDH Funded Short-term HERR Programs in African Communities

| | | | |
|---------------------------------------|-----------|--|-------|
| African Assistance Program, Inc (AAP) | Liberian | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HIV/AIDS public service announcements (PSAs) on Cable TV most watched by the Liberian community (5000 viewers) – HIV/AIDS educational TV programs targeting three Liberian tribes (5000 viewers) – Collaborate with Project Lifeline to conduct HIV/AIDS presentations at Liberian places of worship, awareness training to Liberian clergy; host HIV/STD prevention and awareness events, reach youth through music and poetry | Metro |
| Kids Home International (KHI) | Kenyan | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HC/PI presentation targeting youth (20 youth) – In collaboration with places of worship, conduct HC/PI presentations during services (405 people) – Conduct HC/PI presentations with different Kenyan cultural groups (380 people) | Metro |
| Mestawet Ethiopian Newspaper | Ethiopian | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HC/PI presentations at two Ethiopian places of worship (200 participants) – Newspaper HIV/AIDS fact sheets (7500) – In collaboration with Abissinia Ethiopian TV and Ethiopian radio, regularly interview leaders on HIV/AIDS related topics. Also run HIV/AIDS PSAs on radio/TV (5000 Ethiopian listeners/viewers) | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|--|-------------------|---|-------------|
| Minnesota African Women's Association (MAWA) | Liberian | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HC/PI presentations to Liberian women in small groups at locations they congregate (100 participants) – Provide basic HIV education on African Cable TV targeting the Liberian community as a whole | Metro |
| Nyagetinge Umoja | Kenyan | <p><i>Outreach</i></p> <ul style="list-style-type: none"> – HIV prevention education activities at social events, birthday parties, pre-wedding parties (450 people) <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HC/PI presentations at places of worship and at Kenyan community forum (200 people) – Reach youth through music and poetry performed by peers (100 youth) | Metro |
| Oromo Community of Minnesota, Inc (OCM) | Oromo | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Two HC/PI presentations targeting youth (55 youth) – Two HC/PI presentations targeting an existing Oromo women group that meets monthly (55 women) – Two HC/PI presentations targeting elders (50 elders) – Two HC/PI presentations at community events (600 people) – HIV/AIDS prevention education on Oromo TV and radio (7,000 listeners/viewers) | Metro |
| Project Valentine (PV) | Cameroon | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – Present HIV/AIDS education to large group in the form of drama, poetry and music (200 people) | Metro |
| Somali Community Resettlement Services, Inc (SCRS) | Somali | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HIV/AIDS PSAs on local Somali TV (15,000 viewers) – Conduct HIV HC/PI for Somali youth group, women's group, and Somali community as a whole (205 people) – Conduct interviews on local Somali TV on HIV/AIDS epidemic among Africans (15,000 viewers) | Rochester |
| Somali Health Project (SHP) | Somali | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HC/PI presentations at Somali community gatherings, community center, Somali places of worship, etc. (240 people) | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|--|--|--|-------------|
| Sub-Saharan African Youth and Family Services in Minnesota (SAYFSM) | Oromo and Ethiopian | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HC/PI presentations in community and/or places of worship (300 participants) – Collaborative broadcasts (Oromo and Amharic radio and cable TV) to present and educate in the area of HIV/AIDS (11,000 listeners/viewers) – Collaborate with Wee Care Family Services Inc. to provide HIV/AIDS HC/PI presentations specific to youth, women, and men separately (120 participants) | Metro |
| Zyombi Project (ZP) | Cameroon | <p><i>Health Communication/Public Info</i></p> <ul style="list-style-type: none"> – HC/PI presentation to community leaders (40 community leaders) – HC/PI at traditional Cameroonian festivities, birthdays, weddings, etc. (200 people) – Conduct HIV/PI presentations to three Cameroonian cultural groups (120 people) | Metro |
| MDH Public Service Campaigns | | | |
| Most public service campaigns rely on community press and organizations to implement them. | | | |
| MDH | African American Men and Women | <p><i>National Black HIV/AIDS Awareness Day (February)</i></p> <ul style="list-style-type: none"> – Press kit – Posters | Metro |
| MDH | African Refugee Men and Women | <p><i>Release of HIV/AIDS Surveillance Data for Minnesota (April)</i></p> <ul style="list-style-type: none"> – Press kit – MDH web site – E-mail address books | Statewide |
| MDH | Young African American Men and Women HIV+ Persons MSM MSM of Color Health Care Providers | <p><i>National STD Awareness Month and Release of STD Surveillance Data for Minnesota (April – May)</i></p> <ul style="list-style-type: none"> – Press kit – Radio ads – Bus shelter ads – MDH website – STD Hotline website – Internet-based magazines – Phone directories – E-mail address books | Statewide |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|--|---|---|--|
| MDH | General Public Young Adults MSM IDUs | <i>National Hepatitis Month (May)</i> – Press kit – Posters – Outreach | Statewide |
| MDH | General Public Greater Minnesota | <i>National HIV Testing Day (June)</i> – Press kit – Posters | Statewide |
| MDH | MSM MSM of Color | <i>GLBT Twin Cities Pride/GLBT Black Pride (June and August)</i> – Print media ads – Posters – Outreach at events – Community events | Statewide |
| MDH | Latino Men and Women | <i>National Latino AIDS Awareness Day (October)</i> – Press release – Proclamation – Community events – Internet magazines, bulletins – MDH web site – MAP AIDSLine website – E-mail address books | Statewide |
| MDH | Women | <i>World AIDS Day (November-December)</i> – Press release – Proclamation – Community events – Internet magazines, bulletins – MDH web site – MAP AIDSLine website – E-mail address books | Statewide |
| MDH Supported Counseling, Testing and Referral (CTR) Programs | | | |
| Note: MDH HERR Grantees that receive OraSure tests for use during HERR interventions are included in the MDH-Funded HERR Programs portion of this table. CTR programs listed here are those that receive funding from MDH for staff to conduct CTR, or are agencies not currently funded by MDH who receive test kits and/or lab processing. | | | |
| African American AIDS Task Force (AAATF) | At-risk Individuals (African Americans) | <i>Counseling, Testing and Referral</i> – OraSure testing provided in the context of outreach services targeting African Americans and Africans | Metro |
| Hennepin County Red Door Clinic | At-risk Individuals | <i>Counseling, Testing and Referral</i> – HIV counseling and testing provided in an STD clinic (OraQuick, OraSure and serum tests) | Primarily Hennepin County, but can serve clients statewide |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---|--|---|---|
| Minnesota AIDS Project (MAP) | At-risk Individuals (MSM and African American IDU) | <i>Counseling, Testing and Referral</i> – OraSure testing provided on-site and through outreach | Metro |
| North Memorial – University Family Physicians | At-risk Individuals (African Americans) | <i>Counseling, Testing and Referral</i> – OraQuick testing provided in the context of outreach services | Metro |
| St. Paul-Ramsey County Public Health Room 111 | At-risk Individuals | <i>Counseling, Testing and Referral</i> – HIV counseling and testing provided in an STD clinic (serum tests) | Mostly Ramsey County, but can serve clients statewide |
| West Side Community Health Services | At-risk Individuals (Latinos) | <i>Counseling, Testing and Referral</i> – HIV counseling and testing offered in a community clinic predominantly serving Latinos (serum tests) | Metro |

Joint Prevention and Care Outreach and Testing Pilot Project

These programs are jointly funded with prevention and Ryan White CARE Act dollars to provide outreach, OraQuick or OraSure testing, and provide individual assistance (care coordination) in accessing care to those who test positive and those who already knew they were positive but were out of care.

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|--|---|---|---|
| African American AIDS Task Force (AAATF) | At-risk African Americans | <i>Outreach, CTR, and Care Coordination</i> – Street outreach and OraSure testing to clients in central city neighborhoods. Care coordination for HIV+ clients | South Minneapolis |
| Access Works | IDUs | <i>Outreach, CTR, and Care Coordination</i> – Risk assessments and OraSure testing to clients at Plymouth Correctional Facility and at agency storefront. Care coordination for HIV+ clients | Agency storefront, Plymouth Correction Facility |
| Hennepin County Red Door Clinic | MSM and young heterosexual women in public sex environments | <i>Outreach, CTR, and Care Coordination</i> – Outreach and OraQuick testing in public sex environments, bars, chemical dependency treatment centers. Care coordination for HIV+ clients | Mostly Minneapolis, but also other urban areas |
| Minnesota AIDS Project (MAP) | IDUs | <i>Outreach, CTR, and Care Coordination</i> – Mobile street outreach in van, OraSure testing, Rule 25 assessments in partnership with Access Works. Care coordination for HIV+ clients | North Minneapolis |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---|---|--|--------------------------------------|
| CDC Directly Funded Community Based Organizations (CBOs) | | | |
| AIDS Information Duluth | Runaway, Homeless and Street-Involved Youth | <p><i>Community Level Intervention (Street Smart)</i></p> <ul style="list-style-type: none"> – Eight group sessions with role playing and a focus on HIV/STDs, risk, condoms/dental dams, substance use, coping with feelings, negotiation, self talk, staying safe over time – One individual session – Group visit to community health resource – Includes free HIV testing – 12 youth | Duluth and surrounding area |
| Indigenous Peoples Task Force | Native Americans | <p><i>Counseling, Testing and Referral</i></p> <ul style="list-style-type: none"> – Outreach and rapid testing targeting high risk Native Americans – 500 persons <p><i>Community Level Intervention (Popular Opinion Leader)</i></p> <ul style="list-style-type: none"> – Training Pow Wow officials, drummers and singers to promote testing and provide risk reduction education to the community – 330 persons | Metro and reservations in Greater MN |
| Minneapolis Urban League | African American MSM and their partners | <p><i>Community Level Intervention (Community PROMISE)</i></p> <ul style="list-style-type: none"> – Including individual level, group level, outreach, and role model stories – 1,000 interventions per year – 500 risk assessments – 50 HIV tests of very high risk AAMSM – 20 peer advocates trained | Metro |
| Program in Human Sexuality | HIV+ African American MSM | <p><i>Community Level Intervention (Community PROMISE)</i></p> <ul style="list-style-type: none"> – Adaptation of the Community PROMISE intervention for implementation with HIV+ African American MSM | Metro |
| UMOS, Inc. | Latinos and Africans | <p><i>Counseling, Testing and Referral</i></p> <ul style="list-style-type: none"> – Outreach and rapid testing targeting high risk Latinos and Africans – 400 persons | Statewide |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|--|--|---|--|
| MDH Eliminating Health Disparities Initiative Funded Programs | | | |
| African American AIDS Task Force | African American and African | <ul style="list-style-type: none"> – Health education and community outreach at HCMC clinics – Outreach at places of worship and community events | Hennepin County |
| Agape House for Mothers | African American and African American Youth | <ul style="list-style-type: none"> – Training and health education for youth – Conferences for youth about leadership – Workshops to identify positive behaviors | Metro |
| Centro Campesino | Hispanic/Latino | <ul style="list-style-type: none"> – Promote HIV/STI health education for target population including migrant workers – Collaboration with health professionals and organizations | Steele and LeSeuer Counties |
| Children's Health Care | African American, African, Hispanic/Latino Youth | <ul style="list-style-type: none"> – Culturally specific materials and services for youth development and HIV/STI education – Collaborate with partner agencies and faith-based organizations – Offer youth development for those youth not reached by TAMS – English and Spanish speaking staff and outreach | Hennepin County |
| Council on Crime and Justice | African, African American, American Indian, Asian, Hispanic/Latino | <ul style="list-style-type: none"> – Pre-release sexual health and HIV/STI education – Post-release advocacy for HIV+ and HCV+ individuals | Correctional Facilities: Lino Lakes, Rush City, Shakopee, Stillwater |
| Minnesota International Health Volunteers: Somali Health Care Project Initiative | African (Somali) | <ul style="list-style-type: none"> – Health care provider cultural-responsiveness education – Social service provider cultural-responsiveness education – Sexual health and HIV/STI community education and health promotion – Culturally specific language and materials | Metro |
| Turning Point, Inc. | African American and African | <ul style="list-style-type: none"> – Sexual health and HIV/STI education and health forums – Provide culturally specific materials – Augment current HIV education programs – Outreach | Minneapolis |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---|---|---|-----------------------------|
| Other Sources of Funding for Prevention Programs | | | |
| AIDS Information Duluth | At-risk Individuals | <p><i>Outreach</i></p> <ul style="list-style-type: none"> – Outreach in soup kitchens, drop-in centers, etc. <p><i>Community Awareness</i></p> <ul style="list-style-type: none"> – HIV/AIDS prevention education in homeless shelters, transitional housing projects, halfway houses, schools, correctional facilities, youth, homeless persons, GLBT community (2000 persons) | Duluth and surrounding area |
| Access Works | IDUs | <p><i>Needle Exchange</i></p> <ul style="list-style-type: none"> – Needle exchange provided at the storefront – 236,000 needles exchanged/year – 1800 persons (unduplicated) | Metro |
| Upper Midwest American Indian Center | At-risk Native American women and youth | <p><i>Substance Abuse and HIV Prevention</i></p> <ul style="list-style-type: none"> – Integrated HIV and substance abuse prevention services | Metro |
| Minnesota AIDS Project | IDUs (African American Men) | <p><i>Needle Exchange</i></p> <ul style="list-style-type: none"> – Mobile van providing needle exchange – 8000 needles exchanged/year – 115 exchanges with 70 people | Metro |
| Ryan White CARE Act Funded Services | | | |
| Abbott Northwestern Hospital – Clinic 42 | HIV+ Individuals | <ul style="list-style-type: none"> – Medication Adherence – Case Management | Statewide Metro |
| Access Works | HIV+ IDUs | <ul style="list-style-type: none"> – Outreach (Care and Prevention) | Metro |
| African American AIDS Task Force | HIV+ African Americans and Africans | <ul style="list-style-type: none"> – Emotional Support – Health Education/Risk Reduction – ADAP Outreach – Outreach (Care and Prevention) – Transportation | Metro |
| The Aliveness Project | HIV+ Individuals | <ul style="list-style-type: none"> – Care Advocacy – Complementary Care – Congregate Meals – Food Shelf | Metro |
| Community Fitness Today | HIV+ African Americans | <ul style="list-style-type: none"> – Care Advocacy | Metro |
| Family and Children's Service | HIV+ Individuals | <ul style="list-style-type: none"> – Home Health Care | Metro |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---|-------------------------------------|--|--|
| Hennepin County Medical Center | HIV+ Individuals | <ul style="list-style-type: none"> – Case Management – Inreach – Medication Adherence – Primary Health Care – Transportation | Metro |
| Hennepin County Medical Center (Title III) | HIV+ Individuals | <ul style="list-style-type: none"> – Primary Health Care | Metro |
| Hennepin County Medical Center Dental Clinic (Part F) | HIV+ Individuals | <ul style="list-style-type: none"> – Dental Care | Metro |
| Hennepin County Red Door Clinic | HIV+ Individuals | <ul style="list-style-type: none"> – Outreach (Care and Prevention) – Short Term Intervention | Metro |
| Indigenous Peoples Task Force (IPTF) | HIV+ Native Americans | <ul style="list-style-type: none"> – Case Management – Emotional Support – Health Education/Risk Reduction | Metro and Reservations in Greater MN |
| Mayo Clinic | HIV+ Individuals | <ul style="list-style-type: none"> – Care Advocacy – Case Management – Health Education/Risk Reduction – Inreach – Transportation | Southeast and South Central Minnesota |
| Midwest AIDS Training and Education Center (MATEC) (Part F) | Clinicians, health care providers | <ul style="list-style-type: none"> – Training related to quality care in treating HIV+ individuals | Statewide |
| Minneapolis Urban League (MUL) | HIV+ African Americans and Africans | <ul style="list-style-type: none"> – Case Management | Metro |
| Minnesota Department of Human Services | HIV+ Individuals | <ul style="list-style-type: none"> – Dental Program – Drug Program – Health Insurance Program – Nutritional Supplements | Statewide |
| Minnesota AIDS Project | HIV+ Individuals | <ul style="list-style-type: none"> – Benefits Counseling – Outreach (Care and Prevention) – Case Management – Emergency Financial Assistance (EFA) – Emergency Financial Assistance (ADAP/Cost Share) – Emergency Housing Assistance (EHA) – Emotional Support – Health Education/Risk Reduction – Resource Referral (AIDSLine) – Legal Services – Transportation | Metro for all services Case Management & Transportation also in Duluth and St. Cloud areas Statewide Services: AIDSLine, Benefits Counseling, EFA, EHA |

| AGENCY | TARGET POPULATION | INTERVENTIONS AND # OF CLIENTS (# OF CLIENTS BASED ON 6 MONTH TARGETS) | TARGET AREA |
|---|--------------------------------|---|--------------------|
| Minnkota Health Project | HIV+ Individuals | – Emotional Support | Western Greater MN |
| Open Arms of Minnesota | HIV+ Individuals | – Home Delivered Meals | Metro |
| Regions Hospital HIV/AIDS Program | HIV+ Individuals | – Case Management – Primary Health Care – Transportation | East Metro |
| Regions Hospital HIV/AIDS Program (Title III) | HIV+ Individuals | – Primary Health Care | East Metro |
| Rural AIDS Action Network (RAAN) | HIV+ Individuals | – Care Advocacy – Emotional Support – Health Education/Risk Reduction – Transportation | Greater MN |
| Rural AIDS Action Network (Title III) | HIV+ Individuals | – Primary Health Care | Greater MN |
| St. Joseph's Medical Center | HIV+ Individuals | – Care Advocacy – Emotional Support – Transportation | Brainerd area |
| St. Paul Ramsey County Dept. of Public Health – Room 111 | HIV+ Individuals | – Short Term Intervention | East Metro |
| Sub-Saharan African Youth and Family Services in Minnesota (SAYFSM) | HIV+ Africans | – Emotional Support – Health Education/Risk Reduction | Metro |
| Turning Point, Inc. | HIV+ African Americans | – Case Management | Metro |
| West Side Community Health Services | HIV+ Latinos | – Case Management – Emotional Support – Health Education/Risk Reduction – Inreach – Primary Health Care | Metro |
| West Side Community Health Services (Title IV) | HIV+ Latina Women and Families | – Outreach – Primary Health Care | Metro |
| Various Providers | HIV+ Individuals | – Interpretation and Translation | Statewide Metro |

Gap Analysis.....

Gap analysis is a process used to determine what the *met* and *unmet* prevention needs are in Minnesota. The unmet needs that are identified through conducting a gap analysis can be used in several ways. Entities that are not funded through MDH, but are interested in providing prevention activities, can refer to the results of the gap analysis to see what types of activities are not currently funded and have been identified as unmet need. An organization interested in implementing any of those activities would be helping to meet a need in the community.

One method of performing a gap analysis is to define the components of a comprehensive HIV prevention program, and then determine which components are being implemented to a satisfactory extent, are incomplete, or are missing all together. CDC has defined the components of a comprehensive HIV prevention program as summarized in the sidebar.

Gap Analysis Plan

While the role of the CCCHAP is primarily to identify met and unmet HIV prevention needs of priority target populations, it is clear that gaps in other areas of the comprehensive HIV prevention program will impact the scope and effectiveness of such efforts. For example, without quality assurance, technical assistance, and capacity building activities, health education and risk reduction activities targeting high risk populations may not be implemented well, or at all. Thus, the CCCHAP determined that gap analysis should be performed in a number of areas in order to accurately describe met and unmet HIV prevention needs.

Comprehensive HIV Prevention Program

The CDC has defined the nine components of a comprehensive HIV prevention program:

- 1) HIV prevention community planning
- 2) HIV prevention activities, including:
 - HIV prevention counseling, testing, and referral services (CTR)
 - Partner notification, including partner counseling and referral services (PCRS) with strong linkages to prevention and care services
 - Prevention with positive persons
 - Health education and risk reduction (HERR) activities
 - Public information programs
 - Perinatal transmission prevention
- 3) Quality assurance
- 4) Evaluation of major program activities, interventions, and services; including data collection on interventions and clients served
- 5) Capacity building activities
- 6) Sexually Transmitted Diseases (STD) prevention activities
- 7) Collaboration and coordination with other related programs
- 8) Laboratory support
- 9) HIV/AIDS epidemiological and behavioral surveillance

The following categories were identified for inclusion in the CCCHAP's gap analysis process:

- Emerging Populations
- HERR
- CTR
- PCRS
- Public Information
- Provider Capacity
- Needs Assessment
- Evaluation
- MDH Capacity/Infrastructure

IMPLEMENTATION OF THE GAP ANALYSIS PLAN

In 2002, the former Assessment and Evaluation (A&E) Committee of the CCCHAP developed a gap analysis plan, with steps and a timeline for assessing met and unmet needs in each of the nine categories above. The gap analysis plan was slightly revised by the full CCCHAP in 2004. When the plan was originally developed, gap analysis was to be completed every year. However, under the restructured planning process implemented in 2004, the CCCHAP moved to a three year planning cycle. The first year of every planning cycle is dedicated to the prioritization process with gap analysis occurring during the following two years.

The current planning cycle began in 2005 with the CCCHAP completing its prioritization process. Gap analysis will be conducted in 2006 and 2007, with specific gap analysis categories being addressed each year. Once gaps have been identified in each of the categories, the CCCHAP will prioritize the categories in order of greatest need. Should additional funding become available, MDH will refer to the prioritized gaps for guidance in how to use the funds.

Challenges with Implementing the Gap Analysis Plan

When implementing the gap analysis plan for the first time in 2003, it proved to be very challenging to determine what a *met* need was. For example, when looking at HERR activities within the priority target populations, information was provided on the types of activities being implemented, as well as the number and demographics of people being targeted. However, it was difficult to determine whether the interventions being implemented for each target population were sufficient. Some of the unknowns were: 1) population size for all of the priority target populations; 2) an estimate of how many people within each target population are at high risk; 3) numbers of people actually reached (numbers provided were proposed numbers); and 4) whether the members of each target population being reached through the interventions are really at high risk.

The CCCHAP and MDH staff were not at a stage, either, to identify how much of an *unmet* need would have to be implemented in order for it to become a *met* need. For example, if outreach were identified as an unmet need for MSM of Color, we were not able to say how many more people we would need to reach in order for it to no longer be an unmet need. We hope that as we continue to refine the process, we will also develop a method to quantify how much should be done to change an identified *unmet* need to a *met* need.

In 2004, the CCCHAP agreed on several ways to assist in determining *met* need in future gap analysis processes. MDH and the CCCHAP have developed crude estimates of the number of people who are at high risk within a given population. These population estimates

will be compared to the number of people within that population who have been reached through various types of interventions in order to help assess what the gaps are. However, MDH will not collect data about risk behaviors of people served in prevention programs, so whether programs are reaching people who are really at high risk will remain an unknown.

In addition to considering the number of people served in prevention programs, MDH will also conduct surveys or focus groups with prevention providers and their community advisory groups to gather feedback on whether prevention interventions are adequately meeting the needs of each target population. This combination of quantitative and qualitative data will assist the CCCHAP in determining whether needs are being met, and what the remaining unmet needs are. However, it will still be a very rough estimate of unmet need.

Description of the Gap Analysis Plan

The gap analysis plan is presented beginning on the next page. For each category, the plan describes the activities that will be undertaken in 2006 and/or 2007, who is responsible for implementing each activity, expected date of completion, how the information will be used, and the type of met and unmet need identified by each activity. When CCCHAP/MDH updates this comprehensive prevention plan in 2006 and 2007, the results of the gap analysis process will be included.

GAP ANALYSIS PLAN TO IDENTIFY MET AND UNMET NEED

| EMERGING POPULATIONS: What are the met and unmet needs in emerging populations? | | | | |
|---|--|-------------------------|--|--|
| Activities | Person/group responsible for activity | Completion date | Use of information | Type of met and unmet need identified by activity |
| 1. Review epi data to identify emerging populations. Also consider supplemental data, such as STD infections; data from SHAS survey; input Planning Council and CCCHAP; and provider survey (prevention and care) | MDH Staff CCCHAP | April/May 2006 and 2007 | Information will be used to determine which non-prioritized target populations should be identified as emerging populations. | Emerging populations |
| 2. Review existing needs assessment (NA) data for the identified emerging population(s). | MDH Staff CCCHAP | April/May 2006 and 2007 | If no NA data is available, NA is identified as an unmet need for an emerging population. If there are gaps in existing NA data, additional NA is identified as an unmet need. If there are no gaps in existing NA data, NA is identified as a met need. | Needs assessment |
| 3. If there is <u>not</u> a need for NA in an emerging population, use existing NA data and community input to identify priority co-factors | MDH Staff CCCHAP | April/May 2006 and 2007 | Information can be used to identify which factors put the emerging population(s) most at risk | Priority co-factors |

HEALTH EDUCATION AND RISK REDUCTION (HERR): What are the gaps in HERR interventions for each of the priority target populations?

| Activities | Person/group responsible for activity | Timeline | Use of information | Type of met and unmet need identified by activity |
|---|--|------------------|--|--|
| 1. Compare priority co-factors identified for each target population to the interventions that were funded to address priority co-factors as a result of the RFP process. Also compare to interventions funded through other sources. | MDH Staff CCCHAP | April/May 2007 | Information will be used to determine which co-factors are and are not being addressed for each population. | Co-factors being addressed Co-factors not being addressed |
| 2. Gather feedback from community advisory groups as to whether interventions implemented are adequately addressing priority co-factors in target populations. | MDH Staff | Jan - March 2007 | Information will be used to help determine what the met and unmet needs are in terms of addressing priority co-factors | Co-factors adequately addressed Co-factors not adequately addressed |
| 3. Gather feedback from providers (through survey or focus group) as to whether interventions implemented are adequately addressing priority co-factors in populations. | MDH Staff | Jan - March 2007 | Information will be used to help determine what the met and unmet needs are in terms of addressing priority co-factors | Co-factors adequately addressed Co-factors not adequately addressed |

| NEEDS ASSESSMENT: What are the gaps in needs assessment data? | | | | |
|--|--|-------------------------------|---|---|
| Activities | Person/group responsible for activity | Timeline | Use of information | Type of met and unmet need identified by activity |
| 1. Identify populations to consider for needs assessment activities by reviewing existing research and needs assessment data | MDH staff CCCHAP | April/May 2006 and 2007 | If no NA data is available, NA is identified as an unmet need for a population. If there are gaps in existing NA data, additional NA is identified as an unmet need. | Populations that require needs assessment Populations that do not require needs assessment |
| 2. Identify specific gaps in information | MDH staff CCCHAP | April/May 2006 and 2007 | Gaps in information will help identify specific questions that should be addressed through needs assessment activities | Questions that need to be asked Questions that do not need to be asked |

PARTNER COUNSELING AND REFERRAL SERVICES (PCRS): What are the met and unmet needs related to the PCRS program?

| Activities | Person/group responsible for activity | Timeline | Use of information | Type of met and unmet need identified by activity |
|---|---------------------------------------|------------|---|---|
| 1. Review outcomes related to contacting and providing PCRS to patients. In particular, consider reasons DIS not able to contact patients | MDH Partner Services Unit (PSU) staff | April 2006 | <p>Information will identify how well the program is meeting its goals.</p> <p>In particular, information about why people were not reached or why service was declined can help identify gaps.</p> | Contacting and providing PCRS to patients |
| 2. Review outcomes related to contacting and providing PCRS to partners. In particular, consider reasons DIS not able to contact partners | MDH PSU staff | April 2006 | <p>Information will identify how well the program is meeting its goals.</p> <p>In particular, information about why partners were not reached can help identify gaps.</p> | Contacting and providing PCRS to partners |
| 3. Review outcomes related to testing of partners | MDH PSU staff | April 2006 | Information will identify gaps in the program related to the testing of partners. | Providing or referring to CTR |
| 4. Review outcomes related to the effectiveness of counseling in reducing risky behavior | MDH PSU staff | April 2006 | Information will identify whether there is a difference in the reduction of risk among patients/partners who receive PCRS compared to those who don't. | Effectiveness of risk reduction counseling |
| 5. Compare time between date of test and date PSU Unit receives test | MDH Epi staff | April 2006 | Information will help identify areas for improvement in reporting test results. | Time lapse in reporting |
| 6. Gather input from community about PCRS | MDH PSU staff | April 2006 | Information will help identify gaps in overall PCRS program | Overall gaps in PCRS program |

| COUNSELING, TESTING & REFERRAL (CTR): What are the met and unmet needs in relation to CTR services? | | | | |
|---|--|------------------------------------|--|---|
| Activities | Person/group responsible for activity | Timeline | Use of information | Type of met and unmet need identified by activity |
| 1. Review demographic data from testing forms | MDH CTR Coordinator | April 2007 | Information will help determine whether CTR services are being appropriately targeted to populations most at risk and indicate areas for change. | High risk populations being targeted High risk populations not being targeted Low risk populations being targeted that shouldn't be |
| 2. Review hours, locations and staffing of CTR services | MDH CTR Coordinator | April 2007 | Information will help determine whether CTR services are accessible and culturally appropriate to the targeted populations | Accessibility Cultural appropriateness |
| 2. Review positivity rate across CTR sites | MDH CTR Coordinator | April 2007 | Information will help determine whether program is meeting its goals | Positivity rate |
| 3. Review data to see how many of those who test positive receive their results | MDH CTR Coordinator | April 2007 | Information will help determine whether program is meeting its goals | Receipt of positive test results |
| 4. Review progress of CTR sites in responding to quality assurance (QA) requirements | MDH CTR Coordinator | QA plan still in development stage | Information will help identify gaps in quality of CTR services being provided | Quality of services provided |
| 5. Review progress in implementing overarching goals of program. (Also review overarching goals, which create some gaps in and of themselves) | MDH CTR Coordinator | April 2007 | Information will help identify gaps in overall CTR program | Gaps in CTR program |
| 6. Gather input from community about CTR services | MDH CTR Coordinator | April 2007 | Information will help identify gaps in overall CTR program | Gaps in CTR program |

| PUBLIC INFORMATION: What are the met and unmet needs in relation to public information activities? | | | | |
|--|--|-----------------|---|--|
| Activities | Person/group responsible for activity | Timeline | Use of information | Type of met and unmet need identified by activity |
| 1. Review public information efforts implemented by MDH and compare to priority target populations and co-factors identified by the CCCHAP | MDH staff CCCHAP | April 2006 | Information will identify which target populations and co-factors are being addressed through public information efforts Information will identify whether efforts are linguistically and culturally appropriate to target populations | Target populations and co-factors addressed Gaps in appropriateness of public information efforts |
| 2. Review news releases/public service announcements distributed by MDH and those that have been utilized by the media | MDH staff | April 2006 | Information will help determine to what extent materials are being used | Gaps in utilization of materials |

| EVALUATION: What are the gaps in evaluation (process and outcome) data? | | | | |
|--|--|------------------|---|--|
| Activities | Person/group responsible for activity | Timeline | Use of information | Type of met and unmet need identified by activity |
| 1. Review the data collected by MDH, the CCCHAP, and grantees to ensure that it meets the requirements of the Guidance for Evaluating CDC-Funded Health Department HIV Prevention Programs | MDH staff | April 2006 | Information will help identify evaluation activities that need to occur in order to meet CDC's guidelines. | Evaluation |
| 2. Determine additional evaluation needs and/or wishes of MDH, the CCCHAP, and grantees beyond what CDC requires | MDH Staff CCCHAP Grantees | Jan – April 2006 | Information will help identify additional activities that would assist MDH, CCCHAP and/or the grantees in conducting and evaluating their work. | Evaluation |

| PROVIDER CAPACITY: What gaps exist in provider capacity to successfully conduct and evaluate interventions in target populations? | | | | |
|---|--|-----------------|--|--|
| Activities | Person/group responsible for activity | Timeline | Use of information | Type of met and unmet need identified by activity |
| 1. Review needs identified in capacity building plan | MDH Staff CCCHAP | April/May 2006 | Information can be used by MDH to develop/arrange for capacity building/technical assistance (TA) opportunities. | Provider capacity (training, technical assistance) |
| 2. Review progress reports and collect information from grantees and grant managers about what is needed to increase grantee capacity to run and evaluate programs. | MDH staff | April 2006 | Information can be used by MDH to develop/arrange for capacity building/TA opportunities. | Provider capacity (training, technical assistance) |
| 3. Review process monitoring and evaluation data from funded prevention programs to identify gaps in intervention delivery and populations reached. | MDH staff CCCHAP | April 2007 | Information can be used by MDH to develop/arrange for capacity building/TA opportunities. Can also help identify target populations and priority co-factors that are not being addressed. | Provider capacity (training, technical assistance) |
| 4. Review progress reports to assess capacity of providers to engage community members in the development and/or delivery of programs. | MDH Staff | April 2007 | Information can be used by MDH to develop/arrange for capacity building/TA opportunities. | Provider capacity (training, technical assistance) |

HEALTH DEPARTMENT CAPACITY: What are MDH capacity needs to support community planning, distribution of funds, contract management, and training/technical assistance to providers?

| Activities | Person/group responsible for activity | Timeline | Use of information | Type of met and unmet need identified by activity |
|--|---------------------------------------|----------------|---|---|
| 1. Assess existing MDH capacity to support planning activities, distribution of funds, HERR contract management, grantee training activities, evaluation, PCRS, CTR and Public Information programs. Gather input from grantees regarding HERR contract management and from CCCHAP regarding community planning. | MDH staff | April/May 2006 | Information can be used to help identify how to use supplemental funds to support unmet MDH infrastructure needs. | MDH capacity (i.e., staff, equipment, etc.) |
| 2. Conduct a job analysis to determine most efficient use of skills and time for MDH staff. | Consultant | Unknown | Information can be used to help identify how MDH staff can more appropriately make use of time and skills. | MDH capacity |

Chapter Three

Prioritization Process and Results...

Prioritization Process

This chapter describes the processes used by the CCCHAP to prioritize target populations and co-factors during the most recent major prioritization process, which occurred in 2005.

The process of prioritization is used by the CCCHAP to determine which populations in Minnesota are at the highest risk of HIV infection or transmission. Once the target populations were identified and prioritized in order of greatest risk, the CCCHAP went through another process to identify and prioritize the co-factors thought to have the greatest impact on HIV risk within each of the target populations.

Prioritization of Target Populations

During the first half of 2004, MDH and the CCCHAP worked together to develop the process to be used to prioritize target populations in 2005. One of the first steps was to establish the major population categories, categories of subpopulations, and criteria to determine which subpopulations would be considered during the prioritization process.

POPULATION CATEGORIES

The major population categories were determined in advance based on categories defined by CDC: HIV Positive Individuals (HIV+), Men Who Have Sex with Men (MSM), High Risk Heterosexuals (HRH), and Injecting Drug Users (IDU). The HIV+ category was automatically ranked as the highest priority, per CDC guidance. The other behaviorally-defined categories were ranked in order as follows, based on Minnesota epidemiological (epi) data: MSM, HRH, and IDU.

The CCCHAP originally identified Greater Minnesota as a fifth major population category (Greater Minnesota refers to the counties outside of the eleven-county metropolitan area). However, at a later meeting, the CCCHAP decided that a funding allocation should not be set aside for Greater Minnesota. As a result, Greater Minnesota was removed as a major population category. Prior to the prioritization process, MDH convened an ad hoc committee to gather feedback about how to improve the upcoming competitive RFP process so that it would be more accessible to providers wishing to serve populations at risk in Greater Minnesota. The committee recommended including Greater Minnesota as a subpopulation under the HIV+ category, with the understanding that agencies interested in applying for these funds must already be serving people living with HIV/AIDS. The committee also recommended that during the RFP process, agencies be able to propose serving people in Greater Minnesota under any of the other populations and that MDH adopt an internal proposal review principle that would take geographical coverage of programs into consideration. The final recommendation was that the RFP offer two tracks of programming: traditional programs and smaller programs that would not require the same level of MDH oversight.

CRITERIA FOR INCLUSION IN THE PRIORITYZATION PROCESS

Acknowledging the need to target limited prevention funding to the populations that have the greatest need, the CCCHAP agreed on criteria to determine which subpopulations would be included in the prioritization process (see sidebar).

The CCCHAP agreed that youth would be included in the prioritization process as a subpopulation under each category (except IDU), regardless of whether they met any of these criteria. Youth were defined as being 13 through 24 years of age.

IDENTIFICATION OF SUBPOPULATIONS

The CCCHAP then identified the categories of subpopulations to be included under each major population category, recognizing that the determination of which subpopulations would actually be included in the prioritization process would not occur until 2005, and would be based on the most recent epi data from 2004. Subpopulations were identified based on whether prevention interventions would need to be qualitatively different in order to effectively reach the various subpopulations.

The subpopulations (target populations) that were identified are listed below each major population category. The major population categories are listed in rank order, and the target populations are listed in alphabetical order.

Criteria for Inclusion in Prioritization Process

- ♦ Population has an average of 5 or more new infections per year over the last 3 years; AND
- ♦ Population has 100 or more living HIV/AIDS cases.

Populations that did not meet the first two criteria would be included in the prioritization process if they met one of the following two additional criteria:

- ♦ Population has experienced a steady increase in new infections over the last five years; OR
- ♦ Population has an incidence rate that falls within the range of the rate of new infections among the populations that meet the first two criteria.

Target Populations Under Each Major Population Category

#1: HIV Positive Individuals (HIV+)

HRH
IDU
MSM
Youth
Greater Minnesotans

#3: High Risk Heterosexuals (HRH)

African Men and Women
African American Men and Women
Asian/Pacific Islander Men and Women
Latino/a Men and Women
Native American Men and Women
White Men and Women
Young Men and Women All Races

#2: Men Who Have Sex with Men (MSM)

MSM of All Races
MSM of Color
Young MSM

#4: Injecting Drug Users (IDU)

IDUs All Races and All Genders
MSM/IDU

PRIORITIZATION MODEL

The next step was to choose a model for conducting prioritization. The CCCHAP was presented with two possible options; one was the Academy of Educational Development (AED) model developed for use by community planning groups (CPGs), and the other was a forced choice model used by the Minnesota HIV Services Planning Council. Members broke into small groups and engaged in a practice exercise with both models. After discussion, the CCCHAP arrived at consensus to use the AED model.

The AED model consists of four basic components. The first component is the *factors*, or pieces of information, that are used to make prioritization decisions. The second component is the *rating*. The CPG determines a rating scale for each factor. The third component is the *weight*. The CPG is responsible for assigning a weight to each factor, which establishes its relative importance in comparison to the other factors. The final component is the *score*, which is calculated by multiplying the rating and the weight for each factor, and then adding the scores for all factors to get the total score. Using this model, CPG members complete a worksheet for each target population. For each of the populations, the total scores of all CPG members are added together and then averaged to get the final score. Target populations are ranked in order based on their final scores (see page 262 for example of worksheet).

At their May 2004 meeting, the CCCHAP identified the factors that would be considered for each target population that met the criteria for inclusion in the prioritization process.

Through small and large group discussion, the CCCHAP agreed on the following factors:

- **Proportion of new HIV cases in last 3 years**
- **Incidence rate** (new infections per 100,000 in target population)
- **Incidence trends** (new infections have increased, decreased or remained stable over last five years)
- **Proportion of living HIV/AIDS cases in most recent year**
- **Prevalence rate** (living HIV/AIDS cases per 100,000 in target population)
- **Size of population** (estimated number of people within each target population who are at high risk)
- **Community impact** (potential gains in life expectancy, ratio of incidence rate compared to White high risk heterosexuals)
- **Co-morbidities** (STDs, pregnancies, hepatitis B and C, substance use, mental health)
- **Co-factors** (sexual networks, socioeconomic status, level of education, stigma, immigration, population mobility, power imbalance between genders, domestic violence/sexual victimization, perceived risk)
- **Barriers to prevention information and services** (access to health care, language, transportation, affordable health care)
- **Available resources** (resources available for HIV prevention and/or capacity building, utilization and accessibility of prevention services, amount of information available about effective interventions)

The next step in the process was to develop rating scales for each of the factors. MDH staff developed draft rating scales, assisted by the AED prioritization guidance. Further technical assistance was sought directly from AED, as well as from MDH epidemiology staff. The rating scales were presented and discussed with the CCCHAP in August 2004. With several changes, the CCCHAP arrived at consensus on the rating scales. One change involved the scale related to co-morbidities, for which the CCCHAP developed a list of co-morbidities to be considered, and they rated whether the population experienced none, few, some, most or all of the co-morbidities listed. Similar scales were developed for co-factors and barriers.

The weights were determined in March 2005, just prior to conducting prioritization. At the CCCHAP's request, MDH staff proposed weights for each of the factors as a starting point for the discussion. The CCCHAP discussed them, and after making two adjustments, agreed on the weights. The same weights were assigned to each factor across populations.

COMMUNITY FORUMS

In preparation for the upcoming prioritization process, CCCHAP members were asked to convene and facilitate community forums within the target populations in order to gather input to inform the process. The forums focused on the following questions:

1. What are the factors that contribute to HIV infection or transmission in your community?
2. What HIV prevention activities are available to your community?
 - 2a. Which HIV prevention activities are people you know comfortable participating in? Why/what makes them comfortable?
 - 2b. Which HIV prevention activities are people you know not comfortable participating in? Why/what makes them uncomfortable?
 - 2c. How effective do you think these activities are in reducing the risk of HIV infection or transmission in your community?
3. What do you need that you are not getting in order to reduce the risk of HIV in your community?

In spite of a short timeline for implementation, which included two major holidays, five community forums were completed. These forums were conducted with MSM, IDU, African American heterosexual female sex workers, Vietnamese heterosexuals, and persons living in Greater Minnesota.

PRIORITIZATION OF TARGET POPULATIONS

Based on preliminary 2004 epi data, all identified target populations were eligible for inclusion in the prioritization process. Several weeks before prioritization, CCCHAP members received packets of information for each target population. The information packets included quantitative and qualitative data about each of the factors previously identified by the CCCHAP. Input from the community forums was included, as well. Due to time constraints, data related to co-factors (sexual networks, socioeconomic status, level of education, etc.) were not included in these information packets. They were provided for use in the co-factor prioritization process.

On the first day of the March 2005 meeting, CCCHAP members who conducted community forums briefly presented the feedback they received. Then the CCCHAP reviewed each of the information packets. This was an opportunity for CCCHAP members to ask questions about the data and to provide additional information based on their experiences being part of and/or working with the various target populations.

On the second day of the meeting, CCCHAP members spent the morning individually completing their prioritization worksheets for each target population. The CCCHAP previously asked MDH to provide the ratings for the factors related to HIV incidence/prevalence and population size, so CCCHAP members were responsible for rating the factors related to community impact, co-morbidities, barriers and available resources. Upon completion, their worksheets were submitted to MDH staff for tabulation of the final scores. The following page includes an example of the prioritization worksheet for one of the target populations.

| EXAMPLE OF PRIORITIZATION WORKSHEET | | POPULATION: AFRICAN HIGH RISK HETEROSEXUALS | | | | | |
|-------------------------------------|---|--|--------|---|--------|---|-------|
| Factor | Rating Info | Rating Scale | Rating | X | Weight | = | Score |
| Proportion of New HIV Cases | This population accounted for what percentage of all new infections in 2002 – 2004? | 1 0 - <5% 2 5% - <15% 3 15% - <30% 4 30% - <40% 5 ≥40% | 3 | X | 5 | = | 15 |
| Incidence Rate | What was the incidence rate among this population in 2004? | 1 <10.0 2 10.0 - <100.0 3 100.0 - <500.0 4 500.0 - <1000.0 5 ≥1000.0 | 4 | X | 5 | = | 20 |
| Trends | Has the number of new infections in this population increased, decreased or remained steady over the last 5 years? | 1 Marked decrease 2 Moderate decrease 3 Remained steady 4 Moderate increase 5 Marked increase | 5 | X | 4 | = | 20 |
| Proportion of Living HIV/AIDS Cases | This population accounted for what percentage of all living HIV/AIDS cases in 2004? | 1 0 - <5% 2 5% - <15% 3 15% - <30% 4 30% - <40% 5 ≥40% | 2 | X | 3 | = | 6 |
| Prevalence Rate | What was the prevalence rate among this population in 2004? | 1 <10.0 2 10.0 - <100.0 3 100.0 - <500.0 4 500.0 - <1000.0 5 ≥1000.0 | 5 | X | 3 | = | 15 |
| Size of Population | Estimated size of this high risk population | 1 0 - 9,999 2 10,000 - 24,999 3 25,000 - 39,999 4 40,000 - 64,999 5 ≥65,000 | 2 | X | 1 | = | 2 |
| Community Impact | What is the impact of HIV on this community? | 1 Minimal 2 Moderate 3 Significant 4 Critical 5 Crisis | | X | 3 | = | |
| Co-morbidities | Are there significant co-morbidities that indicate risky behavior among this population? | 1 no co-morbidities 2 few co-morbidities 3 some co-morbidities 4 most co-morbidities 5 all co-morbidities | | X | 4 | = | |
| Barriers | Are there significant barriers to reaching the target population with HIV prevention information and/or interventions? | 1 no barriers 2 few barriers 3 some barriers 4 most barriers 5 all barriers | | X | 4 | = | |
| Resources | To what extent do resources exist in this community that are available, accessible, acceptable, accountable and affordable? | 1 Resources have 5 As 2 Resources have 4 As 3 Resources have 3 As 4 Resources have 2 As 5 Resources have 1 or 0 As | | X | 2 | = | |
| Total Score | | | | | | | |

RESULTS OF TARGET POPULATION PRIORITIZATION PROCESS

Once all of the final scores had been tabulated, the average scores and resulting ranking of target populations were shared with the CCCHAP. After discussion about whether it was necessary to run analysis to determine whether the differences in scores were statistically significant, the CCCHAP agreed to accept the results of the process as they were. The prioritization process resulted in the following ranking of target populations:

| TARGET POPULATION | SCORE |
|----------------------------------|-------|
| HIV Positive Persons | |
| HIV+ MSM | 134.0 |
| HIV+ IDU | 114.8 |
| HIV+ HRH | 96.7 |
| HIV+ Youth | 83.9 |
| HIV+ Greater Minnesotans | 81.0 |
| Men Who Have Sex with Men | |
| MSM All Races | 133.6 |
| MSM of Color | 123.0 |
| Young MSM | 92.2 |
| High Risk Heterosexuals | |
| African HRH | 130.6 |
| African American HRH | 93.7 |
| Latino/a HRH | 88.0 |
| Native American HRH | 84.6 |
| Young HRH | 79.0 |
| Asian/Pacific Islanders HRH | 73.6 |
| White HRH | 72.7 |
| Injecting Drug Users | |
| MSM/IDU | 114.0 |
| IDU All Races All Gender | 112.0 |

FUNDING PRINCIPLES

MDH has the responsibility of allocating funds for prevention efforts; this is not a responsibility of the CCCHAP. Following the prioritization process, MDH developed five principles to be used when making funding decisions. The principles were shared with the CCCHAP and currently funded grantees for their input.

- 1) In order to most efficiently prevent new HIV cases, funding will be prioritized to target populations with the highest CCCHAP prioritization scores.
- 2) In order to most effectively prevent new HIV cases, funding will be prioritized to adequately fund a comprehensive spectrum of programs in target populations with the highest CCCHAP prioritization scores rather than funding singular and isolated efforts in all prioritized populations (i.e., focused funding rather than broad funding).

- 3) In order to reduce duplication and address as many needs as possible, MDH will assess how its funding fits into broader state and federal funding for HIV prevention in Minnesota.
- 4) Cost-effectiveness will be considered when identifying eligible interventions and selecting successful proposals.
- 5) Funding decisions will be as transparent and quantitative as possible.

As a result of applying funding principle #1, the following target populations will not be included in the upcoming RFP: HIV+ Youth, HIV+ Greater Minnesotans, Asian/Pacific Islander HRH, and White HRH. In addition, as a result of applying funding principle #3, Native American HRH will not be included in the RFP, either. This is because two agencies are receiving multi-year federal grants targeting Native Americans that total approximately \$450,000, which is close to the amount of funding allocated to the entire HRH category. The five funding principles will continue to be applied throughout the RFP process.

PRIORITIZATION OF CO-FACTORS

In 2004, when MDH and the CCCHAP were developing the prioritization process, MDH proposed and the CCCHAP agreed to implement a process for identifying interventions that is different from what has been done in the past. This process focused on identifying co-factors/co-morbidities (abbreviated as co-factors) that most impact HIV risk within each target population instead of identifying a set of interventions for each target population.

Identifying and prioritizing co-factors takes the burden of reviewing research and recommending interventions away from the CCCHAP. This process was found to be very time consuming and not very useful in the past. Respondents to previous RFPs

have used the interventions suggested by the CCCHAP as recommendations, but have had the flexibility to propose different interventions with justification of effectiveness. The majority of respondents have chosen to do this. Under this revised process, the providers, who have the expertise in serving their target populations, will take on full responsibility for describing and providing justification for the efficacy of their proposed programs in reaching the target population(s) and addressing priority co-factors.

The prioritization of co-factors was implemented after the target populations were prioritized. Soon after, CCCHAP members received information packets that included quantitative and qualitative data related to the co-factors they had previously identified for each population (sexual networks, socioeconomic status, level of education, stigma, immigration, population mobility, gender power imbalance, domestic violence/sexual victimization, perceived risk, STDs, pregnancies, hepatitis B and C, substance use and mental health). They received information packets only for the target populations that will be included in the RFP.

Core HIV Risk Factors

The CCCHAP identified two core HIV risk factors that all prevention programs will be required to address, regardless of which target population they are reaching:

- ♦ Unprotected anal or vaginal sex with a person or persons of unknown or different serostatus.
- ♦ Sharing of injection drug equipment and/or other instruments that puncture the skin.

At the April 2005 meeting, the CCCHAP developed a list of co-factors to be considered for each target population. As they were developing the lists, they were asked to think about how each of the co-factors impacted HIV risk within that population and whether an HIV prevention program could feasibly address each co-factor. CCCHAP members also had the opportunity to add co-factors that were not originally included. CCCHAP members were then given 5 stickers (“dots”) per target population, and they placed these next to the co-factors they felt most impacted HIV risk within each population, based on their experience and the information they received.

Once the “dots” exercise was completed, the results were presented in rank order by target population. The CCCHAP then considered each population individually and determined whether any of the co-factors could be grouped together for that population. Groupings of co-factors were based on whether they had a similar impact on HIV risk and if they could feasibly be addressed together by a prevention program. After the CCCHAP agreed on groupings, they determined how many co-factors or groupings of co-factors should be included in the RFP for each population. This varied by population as the CCCHAP decided not to set a standard limit on the number of co-factors/co-factor groupings.

Following are the co-factors and groupings of co-factors that were identified as priorities for each of the target populations that will be included in the RFP. Although the populations are listed in priority order, it was agreed that once the priority co-factors were identified, they would not be placed in any ranked order. Definitions of the co-factors and a description of their relationship to HIV risk are provided starting on page 270.

PRIORITY CO-FACTORS FOR HIV POSITIVE PERSONS

HIV+ Men Who Have Sex with Men (ages 18+)

- Sexual networks
- Stigma + Disclosure
- Access to health care + Active/untreated STDs + High viral load
- Mental health
- Substance use

HIV+ Injecting Drug Users (ages 18+)

- Access to syringes + Substance use
- Access to health care + Active/untreated STDs + High viral load
- Mental health
- Sexual networks
- Stigma + Disclosure
- Survival sex

HIV+ High Risk Heterosexuals (ages 18+)

- Language barriers + Cultural barriers + Stigma + Disclosure
- Access to health care + Active/untreated STDs + High viral load + Health literacy
- Substance use
- Mental health

Note: Because the HIV+ Youth target population (ages 13 – 24) will not receive funding through the RFP process, the age grouping for the adult HIV+ populations has been adjusted to include young adults ages 18 – 24 in order to reach some of the youth population.

PRIORITY CO-FACTORS FOR MEN WHO HAVE SEX WITH MEN

Men of All Races Who Have Sex with Men (ages 25+)

- Language barriers + Cultural barriers + Religious/spiritual beliefs + Stigma + Disclosure
- Access to health care + Active/untreated STDs + Health literacy
- Sexual networks
- Substance use
- Sexual role power dynamics + Survival sex + Domestic violence/sexual victimization
- Mental health

Men of Color Who Have Sex with Men (ages 25+)

- Language barriers + Cultural barriers + Religious/spiritual beliefs + Stigma + Disclosure
- Access to health care + Active/untreated STDs + Health literacy
- Sexual networks
- Perception of risk
- Mental health
- Substance use

Young Men Who Have Sex with Men (ages 13 – 24)

- Substance use + Access to syringes
- Access to health care + Active/untreated STDs + Health literacy
- Developmental issues + Perception of risk
- Survival sex + Economic dependence + Sexual role power dynamics
- Population mobility + Homelessness
- Sexual networks + Social norms of risky behavior
- Mental health
- Stigma + Language barriers + Education system barriers to discussing safer sex and sexuality

PRIORITY CO-FACTORS FOR HIGH RISK HETEROSEXUALS

African High Risk Heterosexuals (ages 25+)

- Language barriers + Cultural barriers + Religious/spiritual beliefs + Stigma + Disclosure + Perception of risk
- Access to health care + Active/untreated STDs + Health literacy + Tuberculosis
- Gender power imbalance + Survival sex
- Sexual networks

African American High Risk Heterosexuals (ages 25+)

- Access to health care + Active/untreated STDs + Health literacy
- Substance use
- Gender power imbalance + Survival sex + Domestic violence/sexual victimization
- Stigma + Religious/spiritual beliefs
- Perception of risk
- Homelessness

Latino/a High Risk Heterosexuals (ages 25+)

- Language barriers + Cultural barriers + Religious/spiritual beliefs + Stigma
- Access to health care + Active/untreated STDs + Health literacy
- Fear of deportation + Homelessness + Population mobility + Sexual networks
- Gender power imbalance + Survival sex + Domestic violence/sexual victimization + Economic dependence

Young High Risk Heterosexuals (ages 13 – 24)

- Access to health care + Active/untreated STDs + Health literacy
- Education system barriers to discussing safer sex and sexuality
- Sexual networks
- Survival sex + Domestic violence/sexual victimization + Homelessness
- Perception of risk
- Substance use

PRIORITY CO-FACTORS FOR INJECTING DRUG USERS

Men Who Have Sex with Men and Inject Drugs (ages 18+)

- Substance use + Access to syringes
- Sexual networks + Social norms of risky behavior
- Access to health care + Active/untreated STDs + Health literacy
- Survival sex + Homelessness
- Mental health

Injecting Drug Users of All Races and Genders (ages 18+)

- Substance use + Access to syringes
- Access to health care + Active/untreated STDs + Health literacy + Fear of criminal prosecution/incarceration
- Survival sex + Homelessness
- Sexual networks + Social norms of risky behavior
- Mental health

Note: Because Young IDU (ages 13 – 24) was not identified as a target population, the adult IDU populations will include young adults ages 18 – 24 in order to reach some of the youth population.

REQUEST FOR PROPOSALS

MDH will release an RFP in October 2005 describing the prioritized target populations, core HIV risk factors, and the priority co-factors and co-factor groupings. Organizations interested in providing prevention services will be asked to respond to the following types of questions:

- Describe their agency's structure and capacity.
- Describe the target population or populations they propose to reach.
- Describe how they propose to address core HIV risk factors.
- Describe the type of intervention(s) they propose to implement.
- Describe how they will address one to three of the priority co-factors and/or co-factor groupings through the delivery of the intervention(s).
- Present justification for the effectiveness of the proposed intervention(s) in preventing new infections and the appropriateness for the target population.

As described above, organizations will be asked to describe how they will address at least one and not more than three co-factors or co-factor groupings. Organizations proposing to address a grouping of co-factors will be required to address all of the co-factors included in the grouping. Proposals will not be evaluated based on the number of co-factors/co-factor grouping(s) to be addressed; rather, they will be evaluated based on how well the proposed intervention(s) will address the co-factor(s)/co-factor grouping(s) and the feasibility of the proposed programs.

A summary of Diffusing Effective Behavioral Interventions (DEBI) interventions, interventions from the Compendium of HIV Prevention Interventions with Evidence of Effectiveness (Compendium), and descriptions of other interventions with proven effectiveness will be included as an attachment to the RFP. In addition, after the RFP is released, MDH will provide an overview training of the various DEBI interventions. Organizations will also have the option of proposing innovative interventions with accompanying justification supporting their effectiveness with the target population(s) and co-factor(s) or co-factor grouping(s).

A proposal review committee made up of community members and MDH staff will be convened to review and score proposals according to criteria developed by MDH. The criteria will be related to agency capacity, ability to provide the proposed interventions, and feasibility of proposed interventions to address the selected co-factor(s)/co-factor grouping(s). Review committee members will first individually review and score proposals, and make initial recommendations as to whether each proposal should be funded or not. The proposal review committee will then convene in smaller groups to discuss the proposals and arrive at funding recommendations.

Once the proposal review process is completed, an internal review committee of MDH staff will then be convened. The purpose of this committee is to ensure that the funding principles are applied so that a comprehensive set of prevention services will be implemented within each of the target populations, to the extent possible based on available resources and proposed activities; that programs are not duplicating efforts funded through other resources; that interventions are cost-effective for the target populations; that there is some geographic distribution of programming; and that prior performance of previously funded grantees is taken into consideration. The internal MDH committee will make final funding recommendations, which will be forwarded to the Commissioner of Health for review and approval.

MDH staff developed a funding formula to determine the proportion of funding to be allocated to each target population. Funding proportions are based on the average of new HIV cases for 2002 – 2004 and living HIV/AIDS cases for 2004 within each target population. Target populations within the HIV Positive Persons category are the only exception to the formula. The allocation for this category of populations was established through discussion with the CCCHAP and is based on the current amount of funding allocated to prevention with positives programs. Funding amounts for the target populations within the HIV Positive Persons category will be determined through the outcomes of the RFP process. Community based grants awarded through the RFP process will be funded through a combination of state and federal dollars. Estimated annual allocations by eligible target populations are presented on the following page.

Estimated Annual Allocations 2006 - 2008

| TARGET POPULATION | ESTIMATED ALLOCATION | PERCENTAGE OF FUNDING | % OF CHANGE FROM 2005 |
|--|-----------------------------|------------------------------|------------------------------|
| HIV Positive Persons No separate allocations for HIV+ target populations | \$152,000 | 8% | 10% |
| Men Who Have Sex with Men | \$993,000 | 52% | 10% |
| MSM of All Races | \$673,000 | 35% | 49% |
| MSM of Color | \$260,000 | 14% | -9% |
| Young MSM | \$60,000 | 3% | -64% |
| High Risk Heterosexuals | \$523,000 | 28% | 14% |
| African HRH | \$274,000 | 14% | 104% |
| African American HRH | \$122,000 | 6% | 35% |
| Latino/a HRH | \$35,000 | 2% | N/A |
| Young HRH | \$92,000 | 5% | -61% |
| Injecting Drug Users | \$232,000 | 12% | 2% |
| MSM/IDU | \$90,000 | 5% | N/A |
| MSM of All Races and All Genders | \$142,000 | 7% | -38% |
| TOTAL Allocations | \$1,900,000 | 100% | 10% |

N/A = Programs not funded within this target population in previous funding cycle.

Programs selected through this RFP process will be funded for the time period of July 1, 2006 through December 31, 2008.

CO-FACTOR DEFINITIONS

The following table includes definitions of each of the co-factors and a description of their impact on HIV risk.

All funded prevention programs, regardless of the target population they are reaching, will be required to address the following core HIV risk factors:

- Unprotected anal and/or vaginal sex with a person or persons of unknown or different HIV status.
- Sharing of injection drug equipment and/or other instruments that puncture the skin.

| CO-FACTOR | DEFINITION | RELATION TO HIV RISK |
|-----------------------|--|--|
| Access to Health Care | Health care that is available, acceptable, affordable, accountable and utilized (includes access to health insurance and culturally and linguistically competent care). | HIV+ persons who do not have access to health care and/or treatment have an increased chance of viral load being high, which increases transmissibility of HIV and drug resistance. HIV- persons who do not have access to health care are less likely to test for HIV/STDs, less likely to get treatment for STDs, and will not get HIV messages from health care professionals (in some cultures, messages from health care professionals are deemed to be more important/are valued more than messages from other sources). |
| Access To Syringes | Ability to access clean syringes. This may include needles exchange programs and syringes available at pharmacies through the Syringe Access Initiative. Accessibility is related to things such as affordability, location, non-judgmental attitude of person providing syringes. | Sharing needles, syringes or “works” contaminated with blood increases risk of HIV transmission. |
| Active/Untreated STDs | STDs (e.g., gonorrhea, herpes, chlamydia, syphilis) that have not been treated or are active. Many STDs are asymptomatic. | Active/untreated STDs make it easier for HIV to be acquired or transmitted. Active/untreated STDs in an HIV positive person results in an increase in HIV viral load. |

| CO-FACTOR | DEFINITION | RELATION TO HIV RISK |
|--|--|--|
| Cultural Barriers | <p>Cultural attitudes, beliefs and social norms within a specific cultural group that are barriers to HIV prevention messages and interventions (e.g., myths about HIV transmission and cures for HIV, female genital mutilation, bride price, machismo, fatalism, focus on youth culture, belief that most other youth are having sex).</p> | <p>Cultural beliefs and social norms are very deeply engrained within individuals and communities. Individuals/communities may not realize their beliefs/social norms impact risky behavior and/or may not be willing or able to change risky behavior because it would go against their cultural beliefs/norms.</p> |
| Developmental Issues | <p>Age related behavioral changes that occur as a child grows up including: motor skills, problem solving abilities, conceptual understanding, acquisition of language, understanding of consequences of actions, perceptions of vulnerability, moral understanding, and identity formation.</p> | <p>A person's understanding of and ability to make decisions related to HIV risk may be influenced by their psychological development or their age (e.g., a normal stage of adolescent behavior includes risk taking and rebellion which could lead to unprotected sex or unsafe drug use. Adolescents also have feelings of invincibility and often lack of forward thinking about the future).</p> |
| Disclosure | <p>Disclosure involves issues and concerns around revealing something about one's self (e.g., sexual orientation, HIV status, drug use history, bisexual behavior, etc.).</p> | <p>For HIV positive persons, fear of disclosing status to sexual partners and/or family/friends, may lead them to engage in risky behavior or not seek care or support services. HIV negative persons may not seek testing, talk about risk behaviors, HIV or condom use with partners.</p> |
| Domestic Violence/Sexual Victimization | <p>Violence and abuse (including emotional, physical and sexual) perpetrated by family members, acquaintances, strangers, or intimate partners (e.g., spouse, former spouse, boyfriend or girlfriend, ex-boyfriend or ex-girlfriend, or date).</p> | <p>Lack of sexual choice or consent may place persons experiencing abuse at risk for HIV. Persons in an abusive relationship may feel unable to remove themselves from an activity that places them at risk for HIV. A history of childhood sexual abuse has been shown to be associated with risky behavior in youth and adults.</p> |

| CO-FACTOR | DEFINITION | RELATION TO HIV RISK |
|---|--|---|
| Economic Dependence | Depending or relying on others for money or basic needs. | A person who has to rely on others for meeting basic needs may engage in HIV risk behaviors such as survival sex or staying in a relationship that puts them at risk. |
| Education System Barriers to Discussing Safer Sex and Sexuality | Barriers such as reluctance to discuss condom use or sexual orientation within the educational system (schools). | Educational policies such as abstinence until marriage based curriculums and homophobia within schools may lead to misinformation, lack of access to safer sex materials, and social isolation for some students. |
| Fear of Criminal Prosecution/Incarceration | Fear of legal proceedings for engaging in criminal behavior and/or being imprisoned in jail or prison. | Fear of criminal prosecution/incarceration can lead some to be less likely to access clean syringes. This fear may also be a barrier to seeking drug treatment. |
| Fear of Deportation | Deportation - The act of banishing a foreigner from a country, usually to the country of origin. Thus fear of deportation is being afraid of banishment and removal (in this case) from the United States. | The fear of deportation may lead people who are in Minnesota without immigration documentation to engage in survival sex, remain in relationships with gender power imbalance or domestic violence. This fear may also stop HIV- people from getting tested for HIV, or HIV+ people from seeking medical care or other services. |
| Gender Power Imbalance | Gender is the perceived masculinity or femininity of a person or characteristic. A person's aggregate gender is complex, encompassing countless characteristics of appearance, speech, movement and more. Power Imbalance is an unequal distribution of control and/or decision making ability within a relationship. | A person's vulnerability and lack of sexual choice or consent may place them at risk for HIV. An imbalance of power may place one individual at higher risk than another. In some cultures, gender power imbalance favors men over women, making it difficult for women to self determine when, where or how they engage in sex. |

| CO-FACTOR | DEFINITION | RELATION TO HIV RISK |
|---------------------|--|---|
| Health Literacy | Ability to read and comprehend health education material (also, ability to understand Western medical interpretation of health and how the body works). | HIV health education (spoken, visual or written) provided in a manner that does not take into account the client's health literacy will be ineffective. |
| Homelessness | Homelessness is a situation in which a person does not have a permanent place of residence. The federal McKinney Assistance Act of 1987 defines homelessness as "Lacking a fixed, regular, stable, adequate nighttime residence." | Being homeless may place a person at risk for HIV through engaging in survival sex, being economically dependent, or not protecting oneself from HIV due to gender power dynamics. There is also a correlation between substance abuse, mental illness and homelessness. |
| Language Barriers | Difficulties in communication due to not understanding or misunderstanding the dominant language (spoken, read or written). | Lack of educational material and trained professionals able to communicate in the client's preferred language may lead to low understanding of HIV and increased risk behavior. |
| Mental Health | Mental health conditions such as depression, anxiety, sexual compulsivity, etc. | Mental health conditions may impact a person's ability to make healthy choices regarding safer sex and/or drug use. |
| Perception of Risk | A person's understanding of whether s/he is at risk of HIV infection or transmission. A person may believe s/he has no, low, moderate or high risk based on their risk behaviors, their understanding of HIV, their knowledge of their partner's risk, their religious beliefs, etc. | A person's perceived vulnerability to HIV may influence their risk taking behavior (e.g., if a person thinks the people they have sex with are unlikely to have HIV, they may choose not to have safer sex). |
| Population Mobility | Population mobility is a phrase coined to encompass the entire spectrum of people on the move: who moved, when they moved, how they moved, where they moved, and why they moved. Includes individuals or identifiable groups; voluntary, assisted or forced moves; and moves within or beyond established political, socio-cultural, ethnic or environmental boundaries. | Evidence of the relationship between mobile populations and HIV/AIDS is increasingly being seen as significant and there is greater acknowledgement that mobile populations are more vulnerable to HIV infection when compared with local populations. Vulnerability to HIV is greatest when people live and work in conditions of poverty, social exclusion, |

| CO-FACTOR | DEFINITION | RELATION TO HIV RISK |
|---------------------------------------|--|--|
| Population Mobility, <i>continued</i> | “Migrants” are a sub-population of “mobile people.” | loneliness, and anonymity (e.g. traveling regularly, living away from spouses and partners, working in isolated environments with limited social interaction and health facilities, single-sex working and living conditions among men, and work that is dominated by men where women are in a small minority). These conditions may encourage the use of alcohol, drugs and commercial and/or casual sex. Note: Population mobility may be tied to sexual networks. |
| Religious/Spiritual Beliefs | An individual’s or community’s beliefs concerning the supernatural, sacred, or divine, and the practices and institutions associated with such beliefs. | A person’s or community’s religious or spiritual beliefs may conflict with HIV risk reduction measures (condom use, accepting their sexual orientation). Some religious institutions or dogma contribute to stigma. |
| Sexual Networks | <p>Sexual networks refer to a combination of patterns of sexual relationships and where people meet their sexual partners.</p> <p>Patterns of sexual relationships include concurrency, serial monogamy, monogamy, dating within or outside of racial/ethnic group.</p> <p>Places people meet sexual partners include Internet, parks, sex parties, bars, street, traveling, etc.</p> <p>Examples:</p> <p>MSM – Internet, circuit parties</p> <p>Young HRH – friends with privileges, concurrent relationships</p> | <p>HIV prevalence is higher among some populations than others, and HIV risk is higher within a sexual network that has a high prevalence of HIV.</p> <p>Some of the places people meet partners facilitate unprotected sex and/or multiple partners.</p> |

| CO-FACTOR | DEFINITION | RELATION TO HIV RISK |
|---------------------------------|---|--|
| Sexual Role Power Dynamics | <p>Roles that partners in relationships may take on related to active and passive sexual roles and/or traditional male and female gender roles. Sexual role power dynamics are related to an individual's ability to make choices about their behavior regardless of the sexual and/or gender role they may play within a relationship.</p> | <p>A person's vulnerability and lack of sexual choice or consent may place them at risk for HIV. An imbalance of power may place one individual at higher risk than another.</p> |
| Social Norms for Risky Behavior | <p>A norm, or social norm, is a pattern of behavior expected within a particular society (or group of people) in a given situation. The shared belief of what is normal and acceptable shapes and enforces the actions of people in a society. Those who do not follow their social norms are considered eccentric or even deviant and are typically stigmatized. The very fact that others in one's society follow the norm may give them a reason to follow it. Thus, social norms for risky behavior are the shared belief that a risky behavior is normal and acceptable.</p> | <p>Believing that a risk behavior for HIV is normal and acceptable among your peers may lead one to engage in the risk behavior (e.g., adolescents who believe their peers are engaging in unprotected sex are more likely to do so themselves; IDUs whose peers share needles without cleaning them are more likely to do so themselves; a person whose sexual network uses drugs is likely to also use drugs).</p> |
| Stigma | <p>Stigma is a characteristic that an individual or group possesses that is seen as deviant and violates a set of shared values, attitudes and beliefs. Stigmatization can lead to prejudicial thoughts, behaviors and/or actions manifested at the individual or societal level.</p> <p>Examples of stigma at the individual level include rejection of an HIV positive person by family/friends, gay bashing, being passed over for promotion due to race.</p> <p>At the societal level, stigma is experienced through laws, policies, public opinion and social conditions (e.g., laws</p> | <p>Stigma experienced at the individual level may result in denial of risk, fear of getting tested or seeking prevention or care services, fear of talking about HIV and safer behaviors with sexual/needle sharing partners, or being unable to access services that are culturally and linguistically appropriate.</p> <p>Stigma experienced at the societal level may result in prevention messages not being effective with specific populations, or specific populations being unable to access prevention and care services and tools.</p> |

| CO-FACTOR | DEFINITION | RELATION TO HIV RISK |
|--------------------------|--|---|
| Stigma, <i>continued</i> | <p>prohibiting gay marriage, laws prohibiting possession of syringes).</p> <p>Stigma can be internalized or externalized.</p> <p>Stigma can be related to:</p> <ul style="list-style-type: none"> - HIV - Sexuality - Race/ethnicity - Other (poverty, drug use, sex work, gender, age, immigration status, education level, etc.) | <p>Internalized stigma occurs when people believe the attitudes that others have about them. This can lead to loss of self-esteem and a sense that they will inevitably become infected with HIV, or that they deserved to have become infected.</p> |
| Substance Use | Use of alcohol and/or drugs (e.g., crystal meth, Khat, marijuana, cocaine, GHB, ecstasy, heroin, etc.). | Substance use may impact a person's ability to make healthy choices regarding safer sex and/or drug use. Some drugs also make people hypersexual. |
| Survival Sex | Trading sex to get something a person needs (shelter, money, drugs, food, etc.). Includes prostitution. | A person who is trading sex is often not in a position of power to negotiate for condom use. |
| Tuberculosis (TB) | An infectious disease caused by <i>Mycobacterium tuberculosis</i> that typically affects the lungs, but may also occur in other organs (extrapulmonary TB). | <p>Because HIV weakens the immune system, a person who is HIV+ and has latent TB has a <u>much</u> greater risk of developing active TB. When TB is active, the person becomes ill and TB can be spread.</p> <p>Note: Minnesota ranks in the top 2 states with TB cases in foreign-born populations. 80% of MN TB cases occur in populations born outside the U.S. MN has a relatively small number of total cases, right around 200 each year. 7% of the TB cases in MN in 2004 were co-infected with HIV.</p> |
| Viral Load | Amount of HIV in the body, commonly expressed as "copies (of virus) per milliliter (mL) of plasma." Plasma is a component of blood. Viral load values range from fewer than 100 copies/mL to 500,000 or more copies/mL. | Viral load is associated with HIV transmission; the higher the viral load the higher the risk of transmission. This is true for all modes of transmission. Maintaining a low or undetectable viral load is also associated with slower disease progression. |

Chapter Four

Effective Interventions.....

Research on Effective Interventions

There is now a body of evidence demonstrating that behavioral interventions can be effective in reducing sexual and drug related risk behaviors among populations that are at increased risk for contracting and transmitting HIV infection. However, the next major challenge lies in the translation of what has been learned through behavioral research into the realities of implementation in the community (Sweat et al., 2001).

How To Use This Chapter

This chapter summarizes research results related to HIV prevention interventions that have been shown to be effective in reaching the target populations prioritized by the CCCHAP. Any organization with an interest in implementing prevention interventions, including organizations that receive funding from MDH and those that do not, can use the information in this chapter to help in designing effective interventions for each of the priority target populations. If you wish to read the complete reference related to a specific intervention, citations are provided in the References section of this plan. Please note that the amount of research available varies significantly by target population.

INTERVENTION CATEGORIES

In general, within each target population, the interventions and strategies are discussed under seven intervention categories: Counseling, Testing and Referral, Outreach, Individual Level Intervention, Group Level Intervention, Prevention Case Management, Community Level Intervention, and Health Communication/Public Information.

Counseling, Testing and Referral (CTR): HIV testing includes counseling before and after the test is given. High risk individuals who test negative are referred to prevention programs and other support services, and individuals who test positive are referred to medical care and other support services, as well as to prevention programs.

Outreach: Interventions that are designed to identify individuals who are at high risk for being infected with HIV in their neighborhoods or places they normally congregate; give them condoms, bleach, sexual responsibility kits, and educational materials; and refer them to services that can help them reduce or change their risk behaviors. Outreach activities can also include field based testing.

Individual Level Interventions (ILI): Health education and risk reduction counseling provided to one individual at a time. ILI assists clients in assessing their HIV risk and making plans for individual behavior change and ongoing assessment of their behavior. ILI includes skills building components. These services can also facilitate linkages to other services that support the reduction of risk, such as substance use treatment.

Group Level Interventions (GLI): Health education and risk reduction counseling with groups of different sizes. GLI models can either be led by peers or by professionals. As with ILI, group interventions contain a skills building component, and assist clients in assessing their risk, making plans for behavior change and assessing their progress.

Prevention Case Management (PCM): Client-centered prevention activity focused on assisting clients with multiple, complex issues to adopt HIV risk reduction behaviors. PCM provides intensive, ongoing, and individualized prevention counseling, support, and assistance in accessing other needed services.

Community Level Interventions (CLI): Community level interventions combine community organization and social marketing, and are directed at specific populations, rather than at individuals. The primary goal of these interventions is to improve health status by promoting healthy behaviors and changing those factors that negatively affect the health of a community's residents by changing group norms to improve or enhance the quality of health. Community level intervention strategies offer opportunities for peers to acquire skills in HIV risk reduction and, in turn, reinforce these abilities when they become the teachers of these same skills to others.

Health Communication/Public Information (HCPI): The delivery of planned HIV prevention messages through one or more mediums to target audiences. The focus of the messages are to build general support for safe behavior, support for personal risk reduction efforts, and/or inform persons at risk how to obtain specific services. HCPI interventions may be delivered through: electronic media, print media, telephone hotline, information clearinghouse, presentations or lectures, community events, and web sites and chat rooms.

DEBI PROJECT

The CDC is currently coordinating the Diffusion of Effective Behavioral Interventions (DEBI) Project, which is a national level strategy to provide high quality training and ongoing technical assistance on selected evidence based HIV/STD prevention interventions to state and community HIV/STD program staff.

The evidence based interventions included as a part of this project have been proven effective through research studies that showed positive behavioral (i.e., use of condoms; reduction in number of partners) and/or health outcomes (i.e., reduction in the number of new STD infections). Studies employed rigorous research designs, with both intervention and control groups, so that the positive outcomes could be attributed to the interventions. Interventions included in this chapter that are part of the DEBI Project are denoted by a "DEBI" in parentheses. (Note: MDH-funded organizations providing prevention services in Minnesota are not required to use interventions included in the DEBI Project.)

The DEBI Project emphasizes community and group level interventions over individual level interventions because CDC feels they have the potential to reach large numbers of the population and reach individuals at high risk who might not voluntarily seek prevention information or services. They are also more cost-effective. More information on all DEBI interventions can be found at <http://www.effectiveinterventions.org>

COMPENDIUM OF HIV PREVENTION INTERVENTIONS WITH EVIDENCE OF EFFECTIVENESS

The CDC also encourages the use of interventions included in the *Compendium of HIV Prevention Interventions with Evidence of Effectiveness* (CDC, 2001). Many of the DEBI interventions are based on those highlighted in the Compendium, although the Compendium also includes additional interventions. Interventions from the Compendium that are included in this chapter are so noted. MDH does not require funded organizations to use interventions included in the Compendium. A copy of the Compendium can be found at <http://www.cdc.gov/hiv/pubs/hivcompendium/hivcompendium.htm>

Index of Effective Interventions

This chapter provides descriptions of effective interventions for each of the priority target populations. Following is an index to assist you in finding interventions for specific target populations:

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HIV Positive Persons.....

Overview of Interventions Targeting HIV Positive Persons

We all have the collective responsibility to create the conditions in which both seropositive and seronegative people can make healthy choices (Marks et al., 1999). This means that it is essential to engage HIV positive persons, as well as those who are HIV negative, in prevention interventions. However, until recently, prevention efforts in this country have been mostly focused on people who are at risk for becoming infected. The prevention needs of HIV positive individuals have often been overlooked, as have the significant efforts on the part of many to avoid infecting others. Although one HIV positive person is involved in each case of transmission, the world of prevention has shied away from focusing on prevention with positives because of the justifiable fear of stigmatizing people who are living with HIV/AIDS and a concern about creating a divide between HIV positive and negative individuals. In addition, the federal funding streams created two separate systems; one to provide prevention to at-risk individuals and the other to provide care and support to those who are positive (Collins et al., 2000).

As HIV positive persons are living longer, they are healthier and are enjoying sexual lives. Recent evidence indicates that risk behaviors among both HIV positive and negative persons are increasing. There is more discussion about issues of intimacy and sex. In addition, many people living with HIV and AIDS face problems that may contribute to risk behavior, such as poverty, racism, homophobia, threat of violence, substance use, and mental health issues (Collins et al., 2000).

Behavioral interventions can make a significant contribution to the lasting behavior change among people living with HIV and may be enhanced with the integration of messages of personal responsibility. While the great majority of HIV positive persons take steps to protect both their partners and themselves, a recent study found that approximately 13% of HIV positive individuals do not disclose their status to sexual partners before engaging in risky behavior that could transmit the virus (Ciccarone et al., 2003).

ADVANCING HIV PREVENTION

In 2003, CDC released its Advancing HIV Prevention (AHP) strategies (CDC, 2003a). One of the key strategies of AHP is to prevent new infections by working with persons diagnosed with HIV and their partners. According to AHP, CDC will work with professional associations to disseminate guidelines regarding the incorporation of HIV prevention into the medical care of persons with HIV to primary care providers and infectious disease specialists. CDC will work closely with the Health Resources and Services Administration (HRSA) to reach persons who are HIV positive but are not in ongoing medical care or prevention services. CDC has also funded some demonstration projects to provide prevention case management to HIV positive persons. Finally, CDC will support new models of partner counseling and referral services, including offering rapid testing and using peers to conduct PCRS.

RECOMMENDATIONS REGARDING PREVENTION WITH POSITIVES PROGRAMS

The AIDS Policy and Research Center and Center for AIDS Prevention Studies at the AIDS Research Institute, University of California San Francisco, recommends that people living with HIV, and the groups that represent their interests, must provide the leadership in

designing effective prevention with positive programs. They note that not enough attention has been paid to the many efforts of HIV positive persons to change behavior and avoid infecting others. The challenge is to design prevention programs targeted at HIV positive individuals about accountability and responsibility without causing feelings of shame or encouraging stigma (CDC, 2003).

NAPWA's PRINCIPLES OF HIV PREVENTION WITH POSITIVES

The National Association of People with AIDS (NAPWA) developed 14 principles of HIV prevention with positives to help shape these efforts. The principles were developed through a series of meeting with diverse groups of HIV positive persons across the country, and represent the perspective of those who will be most directly impacted by prevention with positives interventions.

1. Prevention must be a shared responsibility.

Developing prevention programs for positive people must not become an excuse for shifting all responsibility for prevention (or blame for new infections) onto the shoulders of people living with HIV/AIDS. A culture of shared responsibility that encourages communication and equality in relationships should be a goal of our prevention programming.

2. Don't assume serostatus.

HIV prevention programs should deliver messages that are inclusive, understanding that HIV positive people are in the audience for these programs. It needs to be assumed that any HIV prevention effort will reach some people living with HIV/AIDS. Messages that are meant to apply only to uninfected people ("Stay negative," "Don't have sex with a person with AIDS," etc.) will be heard and understood differently by different people. Think about how these messages shape the way people living with HIV/AIDS think about prevention, and the way others think about us.

3. HIV positive people have unique needs and concerns that require targeted approaches to reach us.

It isn't the same for positive and people of unknown or negative status.

Prevention with Positives

Because there is so much diversity among people living with HIV, different kinds of interventions must be developed in order to effectively reach various populations. There are a number of factors that can affect risk behavior and should be taken into account in the development of programs:

- ◆ *Personal* – current health status, length of time living with disease, success of HIV treatments
- ◆ *Partner* – attractiveness, power dynamics within the couple, desire to please
- ◆ *Race* – power dynamics, assumptions about roles and HIV status
- ◆ *Community* – urban or rural setting, presence or absence of HIV positive peers, communal beliefs about the origins of HIV, the degree to which HIV infection stigmatized a person, ability to feel accepted in the community and discuss challenges with practicing safer sex
- ◆ *Substances* – physical or emotional dependence on alcohol and/or drugs
- ◆ *Economic situations* – homelessness, economic crisis, dependence on sex for money
- ◆ *History* – memory of the Tuskegee syphilis study where treatment was withheld from African American men
- ◆ *Availability of health care and prevention* – supportive education campaigns, condoms

(CDC, 2003)

4. People living with HIV/AIDS are extremely heterogeneous and programs need to address the different needs of such a diverse group.

It simply isn't the same for everyone, and we need culturally competent interventions for diverse populations: race, gender, sexual orientation, age, language, geography, addiction, etc. all impact the type of programming needed. One size does not fit all.

5. Effective programs must fully accept the right of people living with HIV/AIDS to intimacy and sexual health.

Few issues are as emotionally charged as sexual activity by people living with HIV/AIDS. Providers must learn to be truly non-judgmental and support the human right to a fulfilling sexual life, while working with people to decrease potential risk to others and themselves.

6. Behavior change is tough for everyone...including people living with HIV/AIDS.

Expecting 100% perfection from people who are HIV positive is as unrealistic as expecting it from the uninfected. Creating and sustaining behavior change is rarely instantaneous.

7. Knowledge of serostatus is important, but isn't enough.

Knowing is the first step, but it still requires support and skills. Most people who know they are HIV positive will take steps to avoid infecting others – but it is unrealistic to expect people to make and maintain change solely based on knowledge of status.

8. There is no magic bullet, no single type of intervention that will work for everyone.

Just like every other population, people living with HIV/AIDS need a variety of interventions delivered in a variety of settings, and sustained over time. While medical settings offer one important venue for interventions, there are many drawbacks to relying on them for positive prevention. A diverse range of interventions, delivered in diverse settings, is required.

9. Disclosure isn't always the answer.

Disclosure doesn't guarantee safe behavior. Disclosure may produce severe and negative consequences. Helping people assess their readiness to disclose and developing the skills to do so is different than telling people they must disclose.

10. Stigma, discrimination, shame and fear drive people underground and make prevention harder for everyone, especially positive people.

Programs must function with an acute understanding of the centrality of these issues in the experience of people living with HIV/AIDS, must help people cope with their impact, and should challenge these harmful attitudes in communities.

11. Coercion/criminalization is not the answer – and certainly shouldn't be the first answer.

It is impossible to retain the trust and honest engagement of people if our prevention strategies are predicated on the threat of criminal prosecution for engaging in consensual activities.

12. Programs must be anchored in the real needs and concerns of people living with HIV/AIDS.

If it is driven solely by a prevention agenda without considering the priorities of people living with HIV/AIDS, it will fail. Listen to what is important to your population. Addressing

relationships, housing, economic security, personal safety, etc are all important in engaging people in prevention.

13. People living with HIV/AIDS need to be involved in the planning, design, delivery and evaluation of these programs.

Things that are “done to us” won’t work as well as things that are “done with us.”

14. Resources and capacity building efforts must support the development of HIV positive-run programs to respond to this need.

There is an important role for PWA coalitions and other organizations run by and for positive people in these programs. We must invest in the capacity of organizations to do this work, creating sustainable PLWHA-led prevention efforts.

RECOMMENDATIONS FROM EMPOWERING HEROES CONFERENCE

In March 2003, MDH and DHS co-sponsored a conference for HIV positive persons, their caregivers, and providers. The purpose of the conference was to provide health education information to participants, and to gather feedback on how to design effective prevention with positives programs. Three focus group discussions were held. Twelve (12) persons participated in the group with service providers and caregivers, 7 persons in the group with HIV positive individuals, and 4 in the one with negative partners of HIV positive persons, for a total of 23 participants. Three questions were asked of participants:

1. What is a really helpful prevention message?
2. What is an unhelpful prevention message?
3. What prevention activities should be encouraged?

The comments were then analyzed and seven common themes emerged. They are presented below in the order of frequency with which they were mentioned.

Accurate information: Participants emphasized the need for accurate information to be repeatedly disseminated at different times, venues, and communities. The information should address transmission routes and levels of risk for different behaviors. Based on their experiences, the participants felt that this type of information does not appear in the community anymore.

Alternatives to penetrative sex: Prevention messages should include information about types of sexual behavior other than penetration. Examples given include masturbation, safe use of toys, physical touching, and other types of intimate contact.

Use condoms: Participants stressed the need for access to condoms (including non-latex and female condoms), education about how to use condoms. They also mentioned outreach in public sex areas, bars and other places where sex might occur or be negotiated.

Directed to a specific community: It is important that information and prevention messages are adapted for reaching specific communities. Some of the communities mentioned by participants were African Americans, deaf and hard of hearing, and youth.

Negative sexuality and disempowerment: Participants recommended not using fear, shame, shock or revulsion to educate about HIV/AIDS. Negative sexual self-image and

disempowerment occurs when these types of messages are used, and could lead to increased unsafe behavior.

Positive sexuality and empowerment: As opposed to the previous theme, participants stressed the need to emphasize sex as a positive and empowering aspect of a person's life and something to be celebrated. Positive sexuality affirms the strength and desires of the individual and builds on those strengths to reduce transmission.

Miscellaneous: Other comments provided did not fit into the other categories and included specific examples of prevention activities and advertising campaigns, and the need for outreach.

COUNSELING, TESTING AND REFERRAL

A meta-analysis of 27 published studies involving 19,957 participants was conducted to see whether HIV counseling and testing leads to a reduction in sexual risk behavior (Weinhardt et al., 1999). This analysis found that after counseling and testing, HIV positive individuals and persons in serodiscordant couples reduced unprotected intercourse and increased condom use more than people who received HIV negative results or those who did not test.

Weinhardt et al. (1999) also note that specific outcomes of HIV counseling and testing should include identifying the HIV positive individuals most at risk for transmitting the disease to others and referring them to specialized behavioral interventions and support. Asking a client at the time of testing about the number of persons he or she may have infected might identify those clients at greatest risk of transmitting HIV to others. The number of persons infected between time of infection and diagnosis significantly predicts the number of persons infected post-diagnosis.

PARTNER COUNSELING AND REFERRAL SERVICES

Partner Counseling and Referral Services (PCRS) are targeted at both HIV positive persons and their sexual and needle sharing partners. Disease Intervention Specialists (DIS) contact persons who test positive and offer to provide them with risk reduction and referral information. For those who accept PCRS services, the DIS provide information on HIV disease, risk reduction counseling, and referrals to medical care and support services. The DIS also discuss the importance of contacting sexual and needle sharing partners to let them know that they have been exposed to HIV. HIV positive persons can choose to contact their partners themselves, in which case the DIS will provide coaching on how to tell their partners that they are at risk of infection and how to refer them to counseling and testing services. The DIS also offer to contact partners on their behalf. In this case, the DIS locate partners using names, descriptions, and addresses provided by the HIV positive person. The anonymity of the index patient is always maintained. Once partners are located, the DIS provide an initial 45 – 60 minute session about HIV and risk reduction to those who accept PCRS, and offer them an OraSure test. If partners do not want to be tested by the DIS, they are referred to a counseling and testing site. The DIS also provide post-test counseling for those to whom they provide an OraSure test. Several studies have shown that PCRS strategies are cost effective (Rahman et al., 1998; Varghese et al., 1998).

GROUP LEVEL INTERVENTION

Healthy Relationships (DEBI)

This DEBI Project group session intervention is based on a study involving HIV positive gay, heterosexual and bisexual men and women. Participants in the study reported greater self-efficacy for suggesting condom use with new partners, as well as reporting less unprotected sex, more protected sex, and fewer sexual contacts at the 6-month follow-up. Participants were also significantly more likely to refuse to engage in unsafe sex at the 6-month follow-up (Kalichman et al., 2001).

PREVENTION CASE MANAGEMENT

CDC promotes prevention case management (PCM) as a priority for HIV positive persons. CDC defines PCM as being “client centered HIV prevention activities with the goal of promoting the adoption or maintenance of reduced HIV [transmission] behaviors.”

CDC has also defined the primary goals and essential components of PCM. Goals include the provision of specialized assistance to people with multiple and complex needs, offering individual multiple sessions of HIV risk reduction counseling, and assessing whether individuals have other STDs and making sure they get proper treatment, as needed. The seven essential components of PCM are: client recruitment, screening, risk reduction counseling, development of client plan, coordination of services, follow-up monitoring, and discharge.

Upon looking at PCM programs across the nation, CDC found that they are being implemented very differently. They also identified some barriers to successful PCM programs, which include a lack of interest by clients, lack of clear definition of PCM, lack of referral resources in the community, and difficulty evaluating the outcome of the program (Collins et al., 2000). CDC is funding several demonstration projects of PCM with persons living with HIV over the next couple years in order to provide better guidance on what works.

A study of prevention case management with HIV positive clients conducted in Wisconsin found that the percentage of clients reporting risk behaviors (unprotected insertive anal or vaginal sex, or needle sharing, with partners whose HIV status was negative or unknown) decreased from 41% at baseline to 29% at first follow-up (average of 4.6 months later). However, among clients who participated in a second follow-up (approximately 3 months later), self-reported behavior indicated increases in unprotected sex with both HIV negative and HIV positive partners, as well as increases in the average number of total partners (Gasiorowicz et al., 2005).

Core Elements of Healthy Relationships

Healthy Relationships is a five-session, small group intervention for HIV positive men and women. Core elements of the intervention include:

- ◆ Defining stress and coping skills in relation to disclosing to family and friends, disclosing to sexual partners, and building healthier and safer relationships
- ◆ Using modeling, role play, and feedback to teach and practice skills related to coping with stress
- ◆ Teaching decision making skills about disclosure of HIV status
- ◆ Providing personal feedback reports to motivate change of risk behaviors and maintenance of protective behaviors
- ◆ Using movie clips to set up scenarios about disclosure and risk reduction to stimulate discussions and role-play

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HIV PREVENTION IN MEDICAL CARE SETTINGS

In July 2003, CDC, the Health Resources and Services Administration (HRSA), the National Institutes of Health (NIH), and the HIV Medicine Association of the Infectious Disease Society of America released recommendations regarding the incorporation of HIV prevention into the medical care of persons living with HIV and AIDS (CDC, 2003b). The recommendations are general and apply to all HIV positive adolescents and adults, regardless of age, sex or race/ethnicity. They are intended for all professionals that provide medical care, such as physicians, nurse practitioners, nurses and physician assistants. They might also be useful to other providers such as case managers, social workers and health educators.

The recommendations state that clinicians can greatly affect their patients' risk for HIV transmission by doing the following:

- Performing a brief screening for HIV transmission risk behaviors
- Communicating prevention messages, both verbally and with literature/posters
- Providing condoms
- Discussing sexual and drug use behavior
- Positively reinforcing changes to safer behavior
- Referring patients to services such as substance abuse treatment
- Facilitating partner notification
- Counseling and testing
- Identifying and treating other STDs

HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART)

The use of highly active antiretroviral therapy (HAART) can significantly reduce the levels of virus in the blood, often to the point of being undetectable by current tests. Lower viral load in the blood tends to correlate with lower levels of the virus in genital fluids, but it is not an exact correlation (Barroso et al., 2003).

One study in Uganda found that low blood viral load resulted in decreased transmission of HIV. No transmission was observed among the 51 serodiscordant couples whose infected partner's blood viral load was under 1500 copies per ml (Quinn et al., 2000). Another study in Taiwan found that after implementing a policy of providing free access to HAART in 1997, the estimated rate of HIV transmission was reduced by 53% by the end of 2002 (Fang et al., 2004).

It must be noted, however, that even for HIV positive persons on HAART, virus remains in many tissues of the body, inside cells, and in the blood despite being undetectable to tests. Viral loads can also fluctuate over time due to changes in adherence to treatment, the development of drug resistance, or the natural history of disease progression (Center for AIDS Prevention Studies, 2003). Also, as previously noted in the Needs Assessment chapter of this plan, optimism about treatment has been associated in some studies to an increase in risky behavior.

COMPREHENSIVE PROGRAMMING

Safety Counts (DEBI)

Safety Counts is a client-centered, comprehensive intervention targeting HIV positive and HIV negative individuals who are currently using injection or non-injection drugs. The intervention is not specific to gender, race/ethnicity, or sexual orientation. The goal of the program is to reduce risk of becoming infected with or transmitting HIV and hepatitis viruses, and involves individual and group level activities over a period of 4 to 6 months. Staff discuss the importance of knowing HIV status upon program enrollment and offer CTR services at each session for HIV negative clients.

Compared to persons enrolled in the comparison condition, clients who participated in Safety Counts were about 1.5 times more likely to reduce their drug and sex-related risks, were more than 2.5 times more likely to report an increase in condom use, were significantly more likely to report a reduction in the number of times they inject, and more likely to test negative for opiates through urinalysis (Rhodes and Humfleet, 1993; Rhodes and Wood, 1999).

Core Elements of Safety Counts

The five core elements of Safety Counts are:

- ◆ **Group Sessions One and Two** involve hearing clients' HIV risks and current stage of change, hearing risk reduction success stories, setting personal goals, identifying first steps to reduce HIV risk, and making referrals to CTR and medical/social services
- ◆ **One (or more) Individual Counseling Session** involves discussing/refining risk reduction goals, assessing client's needs, and providing referrals
- ◆ **Two (or more) Social Events** are designed for socializing, participating in risk reduction activities, and receiving reinforcement for personal risk reduction
- ◆ **Two (or more) Follow-up Contacts** involve reviewing client's progress, discussing barriers encountered, identifying concrete next steps and possible barriers/solutions, and referrals
- ◆ **HIV/HCV Counseling and Testing** is offered through the service or referral to another agency

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HIV Positive Men Who Have Sex with Men

INDIVIDUAL LEVEL INTERVENTION

Richardson et al. (2004) evaluated brief provider-delivered messages in HIV primary care clinics among a sample primarily made up of MSM. The six clinics were randomly assigned to deliver risk reduction messages that emphasized the benefits of adopting safer behavior, messages that emphasized the consequences of not reducing sexual risk behaviors, or HIV treatment adherence messages (control condition). Among participants with two or more partners at baseline who received messages regarding consequences of not reducing risk, there was a 38% reduction in unprotected intercourse. The study did not find any effect among participants with one partner at baseline who received consequences messages or among participants who received messages about the benefits of adopting safer behaviors, regardless of the number of partners. The findings demonstrate that this is not a “one size fits all” intervention.

GROUP LEVEL INTERVENTION

In a study of brief (60 – 90) minute risk reduction interventions, participants were randomly assigned to one of four conditions: 1) a single, targeted counseling session that focused on condom use, negotiation, or disclosure; 2) a single-session comprehensive intervention that covered all three topic areas; 3) the same comprehensive intervention with two monthly booster sessions; or 4) an attention control exercise comparison condition. All four of the conditions, including the comparison condition, resulted in a significant decrease in total occasions of unprotected sex over 12 months. The findings suggest that a brief intervention can reduce HIV transmission risks among HIV positive MSM, but the effectiveness of one intervention over another remains unclear (Patterson et al., 2003).

HIV Positive Injection Drug Users

GROUP LEVEL INTERVENTION

Holistic Health Recovery Program (DEBI)

The Holistic Health Recovery Program (HHRP) is based on an intervention study conducted by Margolin et al. (2003). Participants were inner city HIV positive IDUs with mild to moderate cognitive impairment who were dually addicted to heroin and cocaine and had a history of unsuccessful drug treatment. HHRP has since been adapted so that it can be used with HIV positive and HIV negative IDUs. HHRP is a 12-session, manual-guided, group level intervention to promote health and improve quality of life. More specific goals include a reduction of or

Core Elements of HHRP

HHRP teaches participants the following:

- ◆ Harm reduction skills related to injection drug use and unprotected sexual activities
- ◆ Negotiation skills to reduce unsafe sexual behaviors
- ◆ Decision making and problem solving skills
- ◆ Goal setting and action plan development skills
- ◆ Stress management skills
- ◆ Skills to improve health, health care participation, and adherence to medical treatments
- ◆ Skills to increase clients' access to their self-defined spiritual beliefs to increase motivation to engage in harm reduction
- ◆ Skills to increase self awareness

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abstinence from illicit drug use and sexual risk behaviors; reduced risk for HIV transmission; and improved medical, psychological and social functioning. Participants in the study demonstrated a decrease in addiction severity, a decrease in risk behavior, and significant improvement in behavioral skills, motivation and quality of life.

HIV Positive High Risk Heterosexuals

GROUP LEVEL INTERVENTION

The Women Involved in Life Learning from Other Women (WILLOW) Program was evaluated with HIV positive women who were predominantly African American. The intervention consisted of four 4-hour meetings that were facilitated by a health educator and an HIV positive female peer. The sessions emphasized gender pride, maintaining and expanding current social networks, HIV transmission knowledge, communication and condom use skills, and healthy relationships (social and sexual). Compared to participants in the control condition focused on HIV treatment and nutrition, at 12-month follow up women who participated in the intervention reported fewer episodes of unprotected vaginal intercourse; were less likely to report never using condoms; had a lower incidence of bacterial STD infections, reported greater HIV knowledge and condom use self-efficacy, more network members, fewer beliefs that condoms interfere with sex, and fewer partner-related barriers to condom use; and demonstrated greater skill in using condoms (Wingood et al., 2004).

HIV Positive Youth

GROUP LEVEL INTERVENTION

Teens Linked to Care (DEBI)

Teens Linked to Care (TLC) is an effective intervention for young people living with HIV and is delivered in small groups using cognitive-behavioral strategies to change behavior. TLC consists of three modules, each of which consists of 8-12 sessions that are delivered in a general sequence. Each module is focused on a different behavioral outcome. Module I: *Staying Healthy* targets health care utilization and health behaviors. Module II: *Acting Safe* addresses both sexual and drug-use-related transmission acts. Module III: *Being Together* focuses on improving quality of life. Young people meet regularly to provide social support, learn and practice new skills, and socialize. This program helps young people identify ways to improve their quality of lives by setting new habits and daily social routines.

Teens Linked to Care is based on research with HIV positive youth by Rotheram-Borus et al. (2001) which found that participants reported fewer sexual partners, including fewer HIV-negative partners, and fewer unprotected behaviors. The youth also reported a decrease in

Core Elements of Teens Linked to Care

The core elements of TLC are:

- ◆ Delivery of three modules consisting of 8-12 sessions each
- ◆ Delivery of modules in interactive groups
- ◆ Exercises in each session that are designed to be meaningful personal experiences, leading to development of personal knowledge and attitudes and increased skills to support adoption of new behaviors
- ◆ Individualized homework tasks assigned following each session

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alcohol and drug use, as well as decreases in feelings of distress and anxiety, and physical symptoms of the disease, and an increase of the social support coping skill.

INDIVIDUAL LEVEL INTERVENTION

Rotheram-Borus et al. (2004) conducted a study to evaluate the whether Teens Linked to Care could be adapted for delivery on an individual level with fewer sessions and remain effective with substance using HIV positive youth. Participants (ages 16–29) were randomly assigned to in-person delivery or phone delivery of the intervention. The intervention used the same 3 modules as Teens Linked to Care, but each module consisted of only 6 sessions lasting 2 hours each. The control condition consisted of repeated risk assessments over a period of 15 months without receiving the intervention. Youth assigned to the in-person intervention demonstrated a significantly higher increase in protected sexual risk acts, especially with HIV negative partners, than participants in the telephone or control conditions. There were no differences in number of sexual partners, disclosure of serostatus, drug use, adherence to HAART, improved healthy behaviors, or emotional health across the three intervention groups.

Although more expensive than conducting Teens Linked to Care in a small group setting, the in-person individual level intervention was shown to be effective in reducing sexual risk and the authors note that it could be more easily used in rural settings. Interestingly, the study found that most participants in the control condition consisting only of repeated risk assessments reduced their sexual and drug use behaviors over time. The authors are currently evaluating the effectiveness of this type of intervention with HIV positive persons.

HIV Positive Greater Minnesotans

There have been no studies conducted of effective prevention interventions targeting HIV positive persons living in rural areas.

Men Who Have Sex with Men.....

Overview of Interventions for Men Who Have Sex with Men

In general, the evaluation of programs for gay men has been of high quality, based on sound theory and has been successful in targeting specific behaviors. However, further data are needed regarding long-term behavioral change. In addition, there is a lack of evaluated interventions that focus on men of color who have sex with men, gay and bisexual youth, men who have sex with men who do not identify themselves as gay, and non-urban men who have sex with men.

Also, some more basic research needs to be done among gay men to describe attitudes and motivations, including development of good scales to measure these constructs. The wider spectrum of sexuality needs to be considered in order to affect maintenance of safer sex over time. For example, according to the CDC, research has shown that some men make false assumptions about the HIV status of their partners, assuming that partners who do not insist on a condom must not be infected, or believing that they have communicated their status by leaving their HIV medications in visible locations. Programs must be designed to address these and other factors influencing behavior, and must ensure that messages are reinforced and adapted as needed over time.

RECOMMENDATIONS FROM MSM IN MINNESOTA

A total of 61 men participated in a series of five community forums that were held with MSM in 2001 for the purpose of gathering input on appropriate prevention interventions for the MSM target population (MDH, 2001). Overall, 93% of the participants in these forums were White. Three of the forums occurred in Minneapolis. Two were held in Greater Minnesota, and were attended by a total of 27 men. Some common themes emerged from the forums.

Access to Condoms

The men stated that there is a need for greater access to free condoms and lubricant, along with information about how to use the condoms, and HIV/STD risk reduction information. In addition to having bowls of condoms available in places like bars, restrooms, parks, and beaches, several groups talked about the importance of having outreach workers available to distribute the condoms and build up trust with the people they are reaching. It was noted that condoms are particularly difficult to access in rural areas, and that married, older or younger men may be inhibited from buying condoms in a store because of the fear of being judged or that their partner, spouse or parent may see the receipt.

Information on the Internet

Men from both the metro area and Greater Minnesota emphasized the use of the Internet as a prevention tool. Suggestions for the type of information to post included: HIV and risk reduction information, resources for testing and safer sex supplies, banner ads in MSM chat rooms, and a list of GLBT friendly health care providers.

Free and Anonymous HIV Testing

All groups except one talked about the importance of having free and anonymous testing accessible, and the need for being able to easily access test results. One group from Greater Minnesota suggested the option of having test results available over the Internet, and a

metro group discussed the possibility of providing test results and counseling over the phone.

Images of MSM

The group of married men who have sex with men (10 participants) talked about the need for images in public of men showing affection and loving each other, including married men. They talked about the lack of validation they feel as MSM, particularly being married, and that this leads to a sense of isolation. The isolation can lead to denial and mental stress, which may also lead to risky behavior such as anonymous, unprotected sex.

Peer Group Educational Opportunities

Both rural and metro groups talked about the need for small peer group events that provide the opportunity to share factual information about HIV, and to discuss issues such as coming out and drug use, which impact risk behavior. One group talked about the importance of providing the opportunity for MSM to meet people and dialogue about sexuality in a setting that does not involve drinking or drugs. Several groups also mentioned the need for a safe space for MSM to come together.

Discussing HIV and Sexuality with Doctors

Two groups talked about the need to educate health care providers about the need to be sensitive to MSM and to talk about safer sex and HIV/STDs with all patients. They also suggested educating MSM about how to talk to their doctors about HIV and risk behavior.

COMPREHENSIVE PROGRAMMING

Safety Counts (DEBI)

As previously described on page 287, Safety Counts is a client-centered, comprehensive intervention targeting HIV positive and HIV negative individuals who are currently using non-injection or injection drugs. The intervention is not specific to gender, race/ethnicity, or sexual orientation. The goal of the program is to reduce risk of becoming infected with or transmitting HIV and hepatitis viruses, and involves individual and group level activities, as well as social events over a period of 4 to 6 months. The intervention focuses on setting personal risk reduction goals, assessing progress, discussing barriers, and identifying next steps. Staff discuss the importance of knowing HIV status upon program enrollment and offer CTR services at each session for HIV negative clients (www.effectiveinterventions.org).

Men of All Races Who Have Sex with Men

COUNSELING AND TESTING

A meta-analysis of 27 published studies involving 19,957 participants, including MSM, was conducted to see whether HIV counseling and testing leads to a reduction in sexual risk behavior. The results indicate that people who receive negative test results and those who do not test are less likely to reduce risky sexual behavior than persons who test positive or are in a serodiscordant couple. HIV negative participants did not reduce risk behavior any more than participants who did not test. This study suggests that counseling and testing is not effective as a primary prevention strategy (Weinhardt et al., 1999).

INTERNET OUTREACH

Due to the popularity among MSM of using the Internet to meet sexual partners, several studies have been conducted of Internet outreach efforts, although with limited information about their impact on behavior change. One effort was undertaken by the San Francisco Department of Health in response to increases in syphilis cases among gay men. The intervention included one-on-one discussions via instant message and e-mail with persons in chat rooms, banner ads, one-hour auditorium-style chats with questions answered by an expert, an educational site allowing for questions to be posted and then answered by a physician, message boards, and promotion of syphilis testing. This intervention measured the number of persons reached and tested for syphilis, but did not assess behavior change. The banner ads and the educational site reached the greatest number of people. Of the thousands of persons who visited the syphilis testing site, only 140 completed the test. Among these, 6 (4%) new syphilis infections were identified. The researchers note the difficulty in targeting the campaign to a specific geographic area and suggested that communities across the country may want to pool resources to develop Internet-based activities (Klausner et al., 2004).

An exploratory study was conducted of a chat room intervention in which a health educator actively participated in general chat room dialogue and announced his availability to answer questions and provide referrals related to HIV/AIDS. Six major themes evolved during chat room discussions: sexual risk reduction strategies, particularly related to barebacking; questions about HIV testing, alternatives for non-sexual social support, referrals for youth, resources related to coming out, and access to risk reduction materials and supplies. Although this study did not assess behavioral change, the author notes that this type of intervention reaches MSM in the space and time that they are looking for sexual partners and that prevention messages and negotiation skills are less likely to be forgotten in the short time between hearing them and hooking up with a partner (Rhodes, 2004).

The study that did attempt to assess behavioral change experienced difficulties with follow-up. MSM were recruited through chat rooms, list serves, banner ads, flyers to health departments and social service agencies, and links from HIV prevention organizations' websites. People who agreed to participate were randomly assigned to the control group, where they received messages about HIV and STD prevention similar to those available on numerous Internet sites, or to the intervention. The intervention was based on the AIDS Community Demonstration Project and consisted of three tailored messages, generated according to information they provided in their risk assessment. The messages were

delivered using a role model story format, and were accompanied by a photo of a man similar to the participant in terms of age and race/ethnicity. The stories encouraged the participants to consider small incremental changes towards three behavioral outcomes: condom use with non-main partners, STD testing, and HIV testing. Participants were asked to return to the website in 3 months to complete a follow-up survey. Only 15% of participants completed the follow-up. However, of these, data indicated that men in the intervention group were significantly more likely to indicate they were willing to go to an STD prevention website to get information about disease prevention and showed a trend toward testing for HIV more frequently than men in the control group (Bull et al., 2004).

INDIVIDUAL LEVEL INTERVENTIONS

EXPLORE

The EXPLORE behavioral intervention assumes that different MSM will have different risk factors and that interventions need to be tailored to each individual (Chesney et al., 2003). The first three sessions of the EXPLORE model are designed to build rapport between the counselor and the individual. They focus on identifying the factors most important for the individual in relation to unsafe sex and self-protection. Based on the information gathered in the first three sessions, the counselor designs the following sessions to focus on issues that are most pertinent to the individual.

The EXPLORE model is based on 10 counseling modules. The counselor individualizes intervention by choosing the modules that best fit the needs of each person.

Module 1 – Being HIV negative and participating in EXPLORE.

Session Focus:

- Participant states why he wants to stay HIV negative.
- Mixed feelings about sex and risk are examined and normalized.

Modules 2 and 3 – Risk: What's acceptable to me? Crossing acceptable limits.

Session Focus:

- Knowledge of risk factors assessed.
- Personal meaning of risk reduction is explored through talking about recent sexual experiences and personal attitudes regarding acceptable risk.
- Discussion about pleasure of unprotected sex.

Modules 4 and 5 – Sexual Communication: HIV status, spoken and unspoken messages.

Session Focus:

- Attitudes and skills that help or impair clear communication of risk limits.
- Communication of serostatus.
- Being part of a couple that negotiates safety arrangements or risk limits.

Modules 6, 7, 8 and 9 – Sex, drinking, and drugs. Places and events as triggers. Feelings and thoughts as triggers. Partners as triggers.

Session Focus:

- Impact of substance use on risk behavior.
- How personal, social, and environmental factors may trigger either risky sex or safer behavior.
- Examination and skills training to manage risk when faced with: settings where risky sex may occur, life and social events that may encourage risk, emotions and self-talk that cue risk taking, partner characteristics that trigger risky sex.

Module 10 and Maintenance – Planning for maintenance and staying HIV negative.

Session Focus:

- Planning for how to maintain personal risk reduction efforts, including training on how to prevent relapses, applying lessons to changing life situations.

The study found that the most common factor reported by 75% of participants was enjoyment of unprotected anal sex, which presents a challenge to motivating behavior change. This model employs motivational interviewing, which is used to identify feelings of ambivalence towards reducing risk. The focus of counseling is on identifying and vocalizing pros and cons of change and reasons to engage in safer behaviors.

Compared to the control condition, consisting of two individual counseling sessions and two follow-up visits with HIV testing, the rate of acquisition of HIV infection was 16% lower among participants in the EXPLORE intervention. The effect was more favorable in the first 12–18 months of follow-up. The occurrence of unprotected receptive anal intercourse with partners of positive or unknown serostatus was 21% lower among the EXPLORE participants compared to those in the control condition (Koblin et al., 2004).

GROUP LEVEL INTERVENTIONS

Most group level interventions have been shown to be effective, particularly if sexually explicit materials were used and behavioral skills were an important part of the intervention. However, the studies did not measure long-term behavioral change. These interventions involved highly motivated men who were self-identified as gay or bisexual, and may not be as effective for other men having sex with men.

Small Group Lecture Plus Skills Training (Compendium)

A lecture-only intervention tested with mostly White gay men covered HIV transmission, HIV infection, relative risk for specific sexual practices, condom use, interpretation of HIV test results, and importance of reducing risk. A second intervention added a skills building component that incorporated role play, psychodrama, and group process. Both groups showed trends toward behavior change, and the skills building intervention was effective at increasing the use of condoms during insertive anal sex at 6- and 12-month follow-ups (Valdiserri et al., 1989). Additional studies have shown that not only is the incorporation of a skills building component into HIV prevention education effective in changing behavior, it is also cost effective (Pinkerton et al., 1997).

Man-to-Man Seminar

The Man-to-Man Seminar, developed in Minnesota, is a 2-day sexual health seminar designed to provide comprehensive sexual health education to MSM. The seminar focuses on participants' knowledge, attitudes, and behaviors as they relate to HIV prevention, risk behavior, and sexual health. The seminar provides basic information on sexual health issues including sexual identity, HIV and STD prevention techniques, relationships, intimacy and sexual behavior. The curriculum includes multi-media, multi sensory experiences with large group discussions, small group discussions, behavioral modeling, storytelling, video, music, and PowerPoint slide presentations.

Participants in the seminar participate in the following: Complete voluntary pre-and post-test surveys, small group and large group exercises, breakout groups, and discussions with other participants of the seminar. The surveys include questions about sexual and drug experience, attitudes, beliefs, mood, and any abuse experienced and related issues. An evaluation study indicated the effectiveness of the seminar in increasing condom use among participants (Rosser et al., 2002).

COMMUNITY LEVEL INTERVENTIONS

Community PROMISE (DEBI)

Community PROMISE is based on the AIDS Community Demonstration Projects, which took place over three years in Dallas, Denver, Long Beach, New York City, and Seattle. Target communities included non-gay-identified men who have sex with men, among others. Each intervention site used peer volunteers to distribute kits featuring role model stories, brochures, condoms, and bleach kits. Significantly greater achievement in consistent condom use, and maintenance of consistent condom use with non-main partners was found in the intervention communities (CDC AIDS Community Demonstration Projects Research Group, 1999).

Community PROMISE begins with a community identification process, which involves interviewing and holding focus groups with stakeholders in the community to identify why people engage in risk behaviors, what barriers exist to changing behavior, what will encourage them to change behaviors, and locations where they engage in risk behaviors. This helps with identifying target populations and appropriate tailoring of the intervention. Members of the target population who have made positive behavior change are interviewed and role model stories are written based upon their interviews. Peer advocates from the target populations are recruited and trained to distribute the role model stories and other materials.

Popular Opinion Leader (DEBI)

The Popular Opinion Leader (POL) model is based on a study conducted by Kelly et al. (1991) and targets men who frequent gay bars, male sex workers, adolescents, and

business owners who cater to gay men. POL involves the recruitment of a group of trusted, well-liked men who frequent gay bars. The “popular opinion leaders” are trained in a series of 4 sessions to endorse safer sexual behaviors in casual, one-on-one conversations with peers at the bars and other settings. During these conversations, the popular opinion leader corrects misperceptions, discusses the importance of HIV prevention, describes strategies he uses to reduce his own risk (e.g., keeping condoms nearby, avoiding sex when intoxicated, resisting coercion for

Core Elements of Community PROMISE

The core elements of Community PROMISE:

- Community identification process to collect information about the community, including HIV/STD risk behaviors and influencing factors
- Creating role model stories based on personal accounts from individuals in the target population who have made positive behavior change
- Recruiting and training peer advocates from the target population to distribute role model stories and prevention materials
- Continuous formative evaluation to capture behavior change

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Core Elements of Popular Opinion Leader

The core elements of the POL model are:

- Identifying and enlisting the support of popular and well-liked opinion leaders to take on risk reduction advocacy roles
- Training cadres of peer opinion leaders to disseminate risk-reduction endorsement messages within their own social networks
- Supporting and reinforcing successive waves of opinion leaders to help reshape social norms to encourage safer sex

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unsafe sex), and recommends that the peer adopt safer sex behaviors. Popular opinion leaders wear buttons displaying the project logo, which also is on posters around the bars, as a conversation-starting technique. Each leader agrees to have at least 14 such conversations and to recruit another popular opinion leader.

According to the CDC (2000), the use of peer opinion leaders has been found to be an effective strategy in the MSM community. Surveys of nearly 1,300 gay men in cities with and without a popular opinion leader program found that men in the intervention communities were 34% less likely to have unprotected sex compared to men from other control communities 3 to 6 months after intervention. When the intervention was first tested, results indicated that unprotected anal intercourse decreased from between 15–29%, condom use increased, and the number of sex partners decreased (Kelly et al., 1991).

Men of Color Who Have Sex with Men

GROUP LEVEL INTERVENTIONS

Many Men, Many Voices (3MV)

This group level intervention is focused on behavioral self-management and assertion skills, and is based on a study conducted with primarily White gay men. Twelve group sessions addressed HIV and prevention, improving behavioral self-management, self-identification of risk behaviors and personal risk reduction strategies, assertiveness training, relationship building and social support. The intervention was effective in improving safer sex behaviors and at maintaining this improvement over an 8-month period, and in improving assertiveness skills and HIV/AIDS knowledge (Kelly et al., 1989).

The intervention has been adapted to target gay men of color as well as those on the “down low.” Many Men, Many Voices (3MV) consists of 6 or 7 group sessions designed to influence behavior change for HIV/STD prevention. A peer facilitator leads a series of 2- to 3-hour sessions.

Sessions address behavioral influencing factors specific to gay men of color and encourage sharing of experiences. The participants build an understanding of how their life experiences relate to how they feel about themselves, their attitudes and beliefs, and their risky behaviors. It is a step-by-step process that relies on real dialogue and participant interactions. The program uses behavioral skills practice, group discussions, role plays, and group exercises. The 7 sessions address specific influencing factors in a purposeful sequence including:

- Dual identify of gay men of color
- STD/HIV prevention for gay men of color – sexual roles and risks
- STD/HIV risk assessment and prevention options
- Intentions to act and capacity to change
- Sexual relationship dynamics – partner selection, communication and negotiation
- Social support and problem solving to maintain change
- Building a healthy community (optional)

Group Sessions Targeting African American Gay and Bisexual Men

African American gay and bisexual men in the San Francisco Bay Area were recruited from bars, bathhouses, erotic bookstores, and through African American organizations, street networks, newspaper advertisements, and personal referrals. Some participants were randomly assigned to an intervention consisting of three 3-hour group sessions, and included the following components: promotion of self-identity and self-pride; HIV/AIDS risk reduction education, assertiveness training (discussion and role play), and verbal

Core Elements of Many Men, Many Voices

The core elements of 3MV are:

- ◆ Educate clients about HIV risk and sensitize to personal risk
- ◆ Develop risk reduction strategies
- ◆ Train in behavioral skills
- ◆ Train in partner communication and negotiation
- ◆ Provide social support and relapse prevention

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commitments to reduce high risk behavior. Other participants were randomly assigned to attend one 3-hour group session or to a wait-list control group. Compared to the control group, both intervention groups reported decreased unprotected anal intercourse at 12-month and 18-month follow-up. Participants in the 3-session intervention demonstrated a 50% decrease in unprotected anal intercourse at both follow-ups. Participants in the 3-session intervention reported significantly less risk behavior than those in the single session intervention at the time of both follow-ups (Peterson et al., 1996).

Hot, Healthy and Keeping It Up!

Hot, Healthy and Keeping it Up! is a 3-hour single group session targeting Asian and/or Pacific Islander gay and bisexual men. The intervention is designed to increase positive ethnic and sexual identity in order to help participants acknowledge HIV risk behaviors by discussing negative experiences of being both Asian or Pacific Islander and gay. Facilitators use interactive and group process techniques to address four intervention components: development of positive self-identity and social support, safer sex education, eroticizing safer sex, and negotiating safer sex. At the 3-month follow-up, participants in the intervention were significantly more concerned about HIV infection, had significantly fewer partners, and were significantly less likely to report unprotected anal sex than participants in the control condition (Choi et al., 1996).

Hermanos de Luna y Sol

Hermanos de Luna y Sol is a prevention intervention targeting immigrant, Spanish-speaking Latino MSM. Participants are recruited through bar outreach to participate in 6 weekly discussion workshops that address four factors that impact safer sex: low self-esteem, perceptions of low sexual control, lack of social support, and fatalism regarding the inevitability of HIV infection. Participants have access to follow-up resources and activities to support them in maintaining safer sexual behavior over time. These activities include an ongoing support group, specialized workshops and retreats, and access to individual level risk reduction counseling services. Evaluation of the program indicates that it has been successful in reducing by 52% the percentage of men who never use condoms for anal intercourse. The percentage of men who were firmly committed to condom use for anal sex increased from 22% to 34% (Center for AIDS Prevention Studies, 2001).

COMMUNITY LEVEL INTERVENTIONS

Intervention Targeting Puerto Rican Men

An intervention developed to target gay men in Puerto Rico involves several components. Peer volunteers are first trained to conduct outreach in gay venues in order to recruit participants to come to a 3-hour small group meeting. The small group meetings are facilitated by peer educators and allow participants to discuss issues related to HIV prevention. Small group participants are invited to participate in a 4-session workshop also facilitated by peers. The sessions focus on intimacy (relationships, self-concept and self-hatred), perception of risk (HIV/STDs and risk behaviors, sexuality and culture, eroticizing safer sex), benefits and barriers to behavior change (alcohol and drug use, self-efficacy, communication and negotiation), and homophobia (community support and development, living with HIV, commitment for change on a personal and community level). Workshop participants were encouraged to contact two friends and refer them to a small group meeting. This proved to be one of the best ways to access members of the community for the intervention. Although the evaluation of the intervention did not include follow-up, results

from pre- and post-test data analysis indicate that participants reduced high risk sexual behaviors and increased safer sexual behaviors over the course of the intervention (Toro Alfonso et al., 2002).

B-Boy Blues Festival

The B-Boy Blues Festival is a successful program designed to recognize that a significant portion of African American men who have sex with men may not self-identify as gay or bisexual. HIV prevention information is provided in a more acceptable setting. The festival, held in St. Louis, Missouri, does not advertise or identify as an HIV/AIDS event and includes entertainment and cultural programs that accompany HIV workshops, HIV counseling and testing, and distribution of condoms and HIV prevention literature. As reported by CDC (2000), surveys disseminated at the festival in 1996, 1997, and 1998 have shown significant improvements in attitudes about and knowledge of HIV and AIDS by attendants, illustrating that outreach activities not promoted as HIV/AIDS programs are useful in serving these usually hard to reach men.

RECOMMENDATIONS REGARDING INTERVENTIONS FOR OLDER MSM OF COLOR

In a study of risk behaviors among older MSM of color, Jimenez (2003) recommends that in order to be effective, interventions targeting this population must be sensitive and specific to the multidimensional character of older minority MSM sexuality and role identification. Although a large proportion of the participants in this study self-identify as gay, intervention messages and strategies should be developed that address a substantial portion of the population who do not identify as gay or homosexual and includes individuals who may, in fact, partake in regular bisexual activity.

Secondly, prevention efforts must consider the perceptions of gay-related and AIDS-related stigmatization held by many of the respondents in this study. Results from numerous studies indicate that stigmatization plays an important role in increasing HIV-associated risks behaviors while decreasing the use of HIV prevention services, particularly among men of color (Ramírez Valles, 2002; Stokes and Peterson, 1998). Finally, to facilitate access to prevention services for older MSM of color, interventions may need to redirect their activities to areas outside of traditional gay urban enclaves. Most participants in this study, particularly those who were non-gay-identified, resided in communities of color, most of which are highly disenfranchised and underserved.

Young Men Who Have Sex with Men

COUNSELING, TESTING AND REFERRAL

A study comparing recent risk behaviors and HIV seroconversion among young MSM based on the frequency of their utilization of CTR services found that compared to young MSM who were first time testers, young MSM who repeatedly tested were more likely to acquire HIV and to report recent high risk behaviors. The researchers state that providers must strengthen practices to identify, counsel and test young MSM and provide enhanced behavioral interventions for those with persistent risks (MacKellar et al., 2002).

INDIVIDUAL LEVEL INTERVENTION

An intervention developed in Minnesota which includes individual risk assessment, risk reduction counseling, peer education, optional HIV antibody testing and counseling, referral to medical and psychosocial services as needed, and longitudinal follow-up has contributed to short-term risk reduction in HIV transmission among gay/bisexual youth, measured by reductions in the number of sex partners and their frequency of unprotected anal intercourse among the participants (Remafedi, 1994). This intervention has also been shown to be cost effective in societal terms of averting 13 HIV infections, and saving 180 Quality Adjusted Life Years over a 10-year period, at a cost of \$1.1 million dollars (Tao and Remafedi, 1998).

SCHOOL-BASED INTERVENTION

Gay Sensitive HIV Education

A study of HIV education among high school students in Massachusetts points to the need for gay sensitive HIV health education in schools (Blake et al., 2001). The study compared risk factors for gay, lesbian and bisexual (GLB) youth in schools that did not offer gay sensitive HIV education with those in schools that did offer gay sensitive HIV education. A drawback of the study is that gay sensitive HIV education was not clearly defined. It was determined by teachers reporting the use of gay sensitive HIV education curricula and confidence that they could meet the needs of gay/bisexual students.

The study found that GLB students in schools with no or minimal levels of gay sensitive HIV education were more likely than their heterosexual classmates, and more likely than GLB or heterosexual students in schools with gay sensitive education to:

- Become or get someone pregnant
- Have a higher number of recent sex partners
- Make a plan to commit suicide
- Miss school for personal safety reasons
- Have property damaged or stolen

COMMUNITY LEVEL INTERVENTIONS

The Mpowerment Project (DEBI)

The Mpowerment Project is based on an intervention conducted over eight months to reach young gay men ages 18-29. Men who participated in the project reduced their frequency of unprotected anal intercourse significantly more than the men in the comparison community did (Kegeles et al., 1996). The intervention is run by a core group of 10-15 young gay men from the community and paid staff. The young gay men, along with other volunteers, design and carry out all project activities. Ideally, the project has its own physical space where most meetings and social events are held and than can be used a drop-in space during specified hours.

Popular Opinion Leader (DEBI)

The Popular Opinion Leader (POL) model has also been shown to be effective with young gay men. As described in more depth on page 296, the POL model involves the training of popular opinion leaders who then have one-on-one conversations promoting safer sex with their peers. The popular opinion leaders also recruit another person to go through the training.

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Core Elements of the Mpowerment Project

Mpowerment consists of four integrated activities:

- ◆ ***Formal outreach:*** Teams of young gay men go to venues frequented by the target population to discuss and promote and discuss safer sex, deliver informational literature on HIV risk reduction, and distribute condoms. Additionally, the team creates their own social events (e.g., dances, video parties, discussion groups, etc.) to attract young gay men and promote safer sex
- ◆ ***M-groups:*** Peer-led, 2-3 hour small group meetings allow young gay men to discuss factors contributing to unsafe sex. Through skills building exercises, participants practice safer sex negotiation and condom use. Participants receive free condoms and lubricant and are trained to conduct informal outreach
- ◆ ***Informal outreach:*** Young men discuss safer sex with their friends
- ◆ ***Ongoing Publicity Campaign:*** The campaign attracts young gay men to the project by word of mouth and through articles and advertisements in gay newspapers

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High Risk Heterosexuals.....

Overview of Interventions for High Risk Heterosexuals

While some prevention interventions have been developed for use with specific subpopulations of high risk heterosexuals, a number of interventions have been evaluated and found to be effective for adult high risk heterosexuals, without being racially or ethnically specific. Others have been tested and found to be effective with more than one racial/ethnic group.

INDIVIDUAL LEVEL INTERVENTIONS

Project RESPECT (Compendium)

Project RESPECT examined the efficacy of HIV/STD prevention counseling. It enrolled 5,801 primarily heterosexual STD patients (59% African American, 19% Latino, 16% White, 6% other) from five inner-city clinics into an enhanced counseling arm (four 60-minute sessions), a brief interactive counseling arm (two 20-minute sessions), and an HIV information arm (two 5-minute sessions), all of which were followed up at 3, 6 and 12 months. All three interventions were face to face, and used a structured format to encourage consistent condom use with all sex partners. A \$15 stipend was offered per intervention session.

At the 3-month and 6-month follow-up, consistent condom use was significantly higher in participants of both the enhanced and brief counseling interventions compared to those in the information intervention. After 6 months, 30% fewer participants in both counseling interventions had new STDs, and after 12 months, 20% fewer participants in both had new STDs. The STD reduction was similar for men and women. Subset analyses suggest that the counseling intervention were better for adolescents (45% fewer had new STDs) and for people who had an STD at the baseline visit (40% had new STDs) (Kamb et al., 1998).

Project Connect

Project Connect was a study of an intervention targeting primarily African American and Latino women and their heterosexual male partners. Participants were randomly assigned to one of three interventions. The first intervention consisted of 6 weekly 2-hour intervention sessions conducted with the woman only. The second intervention consisted of 6 weekly 2-hour sessions with both the male and female partners. Both of these interventions strongly emphasized the relationship, including issues of intimacy and closeness in the relationship, the meaning of monogamy and trust, and how all of these factors act as barriers to HIV/STD prevention. The two interventions focused on the importance of communication, negotiation, and problem solving skills, and highlighted how relationship dynamics may be affected by gender roles and expectations. The control condition consisted of a 1-hour HIV/STD educational session. Participants in both intervention groups reported increased protected sexual acts and decreased unprotected sexual acts than those in the control group. There was no significant difference between the two intervention groups. The intervention demonstrated that it is feasible to conduct a couple-based intervention with African American and Latina women and their partners, and that these men were willing to participate (El-Bassel et al., 2003).

GROUP LEVEL INTERVENTIONS

Condom Skills Education (Compendium)

Men and women (67% African American, 15% Latino, 19% other) received a 10 to 15 minute presentation while waiting for appointments at an STD clinic. The presentation emphasized three important points for effective condom use: condoms should be made of latex, condoms should have a reservoir tip or space left at the end, and condoms should be lubricated with a spermicide. The session included group discussion and a demonstration of how to put on a condom. Another 10 to 15 minutes were allowed for questions and answers. Men and women who participated were significantly less likely to return to the STD clinic within the next 12 months with a new STD (Cohen et al., 1991).

Group Sessions for Pregnant Women (Compendium)

One intervention, led by female psychologists and health educators, consisted of 4 sessions, for groups of 2 to 8 single, pregnant women (57% African American, 40% White, 3% other). Women learned negotiation and assertiveness skills, created health plans, reviewed videos, and role played risk scenarios. Incentives included cash, partial reimbursement for transportation, childcare, and participation in a lottery for a color TV. Women who participated in the intervention increased their use of condoms with partners significantly more than women in the comparison condition (Hobfall et al., 1994).

COMMUNITY LEVEL INTERVENTIONS

Real AIDS Prevention Project (DEBI)

The Real AIDS Prevention Project (RAPP) intervention is based on the Women and Infants Demonstration Trial, which targeted women in inner city communities.

Women in the intervention communities were more likely to initiate condom use with steady partners, negotiate condoms with steady and casual partners, and consistently use condoms (sex workers) with both steady and casual partners (Lauby et al., 2000).

The intervention objectives are to increase consistent condom use by women and their partners, to change community norms so that safer sex is seen as the norm, and to involve as many people from the community as possible. The program has two phases: 1) community assessment, which involves learning about the community and how to talk to women and their partners about HIV risk, and 2) getting the community involved in a combination of risk reduction activities.

Core Elements of RAPP

RAPP consists of the following core elements:

- ◆ Conducting community outreach using peer networkers
- ◆ Having one-on-one safer sex discussions based on client's stage of readiness to change
- ◆ Using printed stories about community members and safer sex decisions (role model stories)
- ◆ Obtaining program support from community organizations and businesses (community networking)
- ◆ Sponsoring small group activities, such as safer sex gatherings and HIV prevention presentations

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Community PROMISE (DEBI)

As described in more detail on page 296, Community PROMISE is based on the AIDS Community Demonstration Projects. This intervention has been tested with African American, White and Latino communities, including female sex workers, high risk heterosexuals and high risk youth.

Community PROMISE begins with a community identification process, which involves interviewing and holding focus groups with stakeholders in the community to identify why people engage in risk behaviors, what barriers exist to changing behavior, what will encourage them to change behaviors, and locations where they engage in risk behaviors. This helps with identifying target populations and appropriate tailoring of the intervention. Members of the target population who have made positive behavior change are interviewed and role model stories are written based upon their interviews. Peer advocates from the target populations are recruited and trained to distribute the role model stories and other materials. The final core element is formative evaluation to capture behavior change within the target population (www.effectiveinterventions.org).

COMPREHENSIVE PROGRAMMING

Safety Counts (DEBI)

As previously described on page 287, Safety Counts is a client-centered, comprehensive intervention targeting HIV positive and HIV negative individuals who are currently using non-injection or injection drugs. The intervention is not specific to gender, race/ethnicity, or sexual orientation. The goal of the program is to reduce risk of becoming infected with or transmitting HIV and hepatitis viruses, and involves individual and group level activities, as well as social events over a period of 4 to 6 months. The intervention focuses on setting personal risk reduction goals, assessing progress, discussing barriers, and identifying next steps. Staff discuss the importance of knowing HIV status upon program enrollment and offer CTR services at each session for HIV negative clients (www.effectiveinterventions.org).

African High Risk Heterosexuals

African immigrants are a relatively new population to Minnesota and to the United States in general. As a result, although they are greatly impacted by the HIV epidemic in Minnesota, very little research has been conducted with this population. The two studies available were conducted with African immigrants in Canada and Israel.

RECOMMENDATIONS FROM AFRICAN COMMUNITY LEADERS IN MINNESOTA

In 2003, MDH and DHS hosted a meeting with leaders from African communities in Minnesota to share findings from needs assessment activities that occurred during the year and to gather their recommendations for HIV prevention activities. Their recommendations were organized under several themes, as described in the side bar.

COMMUNITY LEVEL INTERVENTION

Educational Program Targeting Ethiopian Immigrants

An educational program was conducted with Ethiopian immigrants in absorption centers and hotels in Israel upon their arrival, particularly those who were HIV positive, their families and their sexual partners. The program sought to decrease the risk of further HIV transmission among Ethiopian immigrants, to provide correct information in a culturally acceptable form, to promote safer behavior, to encourage tolerance and support of people living with HIV and their families, and to reduce the negative effects of stigma on prevention efforts. Through this program, community members were trained in a 3-day workshop as health educators and cultural mediators. The health educators then provided presentations to groups of 15–30 adults and answered questions. The health educators focused on six basic messages: each person must be responsible to protect him/herself against infection; it is better to do things when you can prevent them than to cry when you are already suffering and there is nothing you can do (Amharic proverb); each and every member of the community can protect him/herself, the family, and the community; people

Recommendations from Minnesota

The following are recommendations regarding prevention efforts targeting African immigrant communities in Minnesota:

Training

- ◆ MDH should provide prevention training to community leaders. Training should be targeted by age, gender, country of origin, etc.
- ◆ Train HIV positive individuals to do prevention work in the community
- ◆ Adapt the Red Cross training for Africans

Information

- ◆ MDH should translate existing materials in a culturally appropriate manner
- ◆ Bus stop ads in appropriate languages
- ◆ Brochures and other appropriate material at community events
- ◆ Peer education programs
- ◆ Education for youth in school or other venues where youth congregate
- ◆ Sex education for individuals and community
- ◆ Information about available HIV prevention and care services

Outreach/Media

- ◆ Conduct outreach in schools and places of worship
- ◆ Use dramas and movies to provide education
- ◆ Large-scale campaigns addressing HIV testing, services, stigma
- ◆ Use community radio and newspapers to provide educational information

with HIV should not despair and perceive death as their immediate fate; there is no need to know who is infected – protection lies in behaving as if everyone may be infected; and there is no need to ostracize people with HIV. The program developed a number of culturally and linguistically appropriate educational materials, including posters, audio programs and pamphlets (Chemtov et al., 1993).

HEALTH COMMUNICATION/PUBLIC INFORMATION

Africans United to Control AIDS (UACA)

The Africans United to Control AIDS (UACA) Program was implemented in Toronto and was designed to increase awareness in African communities in order to prevent the spread of HIV, to utilize the expertise of community members to develop appropriate educational material, and to provide a support network for persons living with HIV/AIDS. Education materials were developed that were culturally appropriate for women, men, youth, and members of specific countries/tribes. UACA conducted outreach through organizations serving African immigrants, lawyers serving immigrants and social service organizations and engaged them in assisting with the distribution of educational materials, condoms and information about the program. UACA developed relationships with media (community radio stations, newspapers and theaters) and worked with them to provide information and promote the program. Educational sessions were provided to specific groups of people (e.g., men, women, youth, ESL classes, people from specific countries/tribes), and were sometimes integrated into community events. Sessions were usually held in the evening or over the weekend, and addressed the following topics: definition of HIV/AIDS, origin of the disease, transmission – both how it can and cannot be transmitted, misconceptions about the disease, preventive measures, testing options and the importance of getting tested, and treatment and community support systems (Nakyonyi, 1993).

African American High Risk Heterosexuals

COUNSELING, TESTING AND REFERRAL

HIV Education, Testing and Counseling (Compendium)

In a study conducted by Wenger et al. (1991), men and women (85% African American) at an urban STD clinic were offered HIV counseling and testing. The counseling consisted of a pamphlet discussing safer and unsafe sexual acts and how to use condoms, a 15-minute video examining risk behavior and promoting condom use, as well as discussing risk with sex partners, and a 10-minute one-on-one counseling session with a physician. Participants reported significantly fewer occurrences of unprotected intercourse than did those in the comparison condition.

INDIVIDUAL LEVEL INTERVENTION

Intervention for African American Women Using Crack Cocaine

African American heterosexual women who use crack cocaine were recruited to participate in one of two enhanced gender- and culturally-specific interventions. The control condition was a standard National Institution on Drug Abuse (NIDA) intervention. The motivational intervention consisted of 4 individual sessions. The first session emphasized sex and drug-related risk behaviors, risk reduction strategies, and impact of race and gender on HIV risk and protective behaviors. Over the remaining sessions, the client identified what she would be motivated to change, developed short- and long-term goals, and talked about experiences in implementing short-term goals. The enhanced negotiation intervention also consisted of 4 sessions, with the first session being the same as in the other intervention. In the remaining sessions, focus was on intended behavioral changes; skills related to communication and assertiveness; setting short-term goals related to communication, gaining control, and developing assertiveness; discussing experiences with short-term goals and identifying barriers; and skills for negotiation and conflict resolution. The enhanced interventions were found to be more effective in reducing the number of paying partners for vaginal sex, frequency of sex with paying partners, the use of crack in risky settings, and in increasing condom use with steady partners. There were some differences in outcomes based on the two enhanced interventions. At the 6-month follow-up, the percentage of women across reporting crack use in the past 30 days decreased from 100% to 61% across the three intervention groups. The findings suggest that combined components of the two enhanced interventions may be most effective in reducing risky behavior among this population (Sterk et al., 2003).

GROUP LEVEL INTERVENTIONS

Group Discussion and Condom Promotion (Compendium)

This single session group intervention with men and women (92% African American) waiting for appointments in an STD clinic began with a video that depicted condom use as being socially acceptable, followed by group discussion about methods of prevention STDs, promotion of condom use, and reasons why people like or don't like using condoms. Role-playing allowed the participants the opportunity to practice condom negotiation. Finally, participants were given 10 free condoms. Men who participated in this intervention had a significantly lower STD reinfection rate. There was no evidence of change for women (Cohen et al., 1992).

Cognitive-Behavioral Skills Training Group (Compendium)

This clinic-based intervention consisted of 4 weekly group sessions lasting 90 minutes with 8 to 10 women in each group (87% African American). The sessions provided detailed information about HIV risk and focused on behaviors that increase risk, common misconceptions, and how to reduce risk. Exercises emphasized cognitive-attitudinal areas, behavioral skills and social factors. Role plays were used to practice initiating conversations about HIV and condom use, and how to resist sexual pressure. Condom demonstration and practice was also included. The women also learned how to recognize, understand and manage personal triggers for risk behavior. Women participating in this intervention significantly increased condom use and decreased frequency of unprotected sex (Kelly et al., 1994).

SISTA Project (DEBI)

The SISTA Project is a social skills training intervention for African American women based on an intervention that was demonstrated to be effective in increasing consistent condom use, and in improving skills and perceived norms from partners among African American women in a low income community in San Francisco (DiClemente and Wingood, 1995). The intervention consists of a series of five 2-hour sessions facilitated by two peer health educators in a community based setting. The sessions are gender specific and include behavioral skills practice, group discussions, lectures, role playing, a prevention video, and take home exercises.

The curriculum emphasizes gender and ethnic pride and enhancement of self-worth, sexual assertion skills, proper condom use, cultural and gender triggers that may make it challenging for women to negotiate safer sex. The importance of partner involvement in safer sex is also emphasized, and the take home exercises involve the male partner.

VOICES (DEBI)

VOICES is a single-session, video-based HIV/STD prevention program designed to encourage condom use and improve condom negotiation skills among African American men and women. An evaluation of the intervention showed that VOICES is effective when delivered at a “teachable moment,” for instance

when a visit to an STD clinic may motivate a person to change behavior. Health educators convene groups of 4-8 clinic patients in a room that allows privacy for discussion. Groups

Core Elements of SISTA

The SISTA Project consists of the following core elements:

- ◆ Conduct small group sessions to discuss the session objectives, model skills development, role play women's skills acquisition and address the challenges and joy of being an African American woman
- ◆ Utilize skilled facilitators to implement the SISTA group sessions
- ◆ Utilize cultural and gender appropriate materials to acknowledge pride, enhance self worth in being an African American woman (e.g., use of poetry, artwork by African American women)
- ◆ Train women in sexual assertion skills, so that they can both demonstrate care for partners and negotiate safer behaviors
- ◆ Teach women proper condom use – SISTA is designed to foster positive attitudes and norms towards consistent condom use and provide women the appropriate instruction for placing condoms on their partner
- ◆ Discuss cultural and gender triggers that may make it challenging for women to negotiate safer sex
- ◆ Emphasize the importance of partner involvement in safer sex – the homework activities are designed to involve the male partner

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are gender-specific. Information on HIV risk behaviors and condom use is delivered by a video that is culturally specific for African Americans, facilitated group discussion, and a poster board presenting features of various condom brands. Skills in condom use and negotiation are modeled in the video, and then role played and practiced by participants during the discussion that follows. At the end of the single, 45-minute session, participants are given samples of the types of condoms they have identified as best meeting their needs. Participants of this intervention demonstrated an increased knowledge about the transmission of HIV and other STDS, a more realistic assessment of their personal risk, a greater likelihood of getting condoms and intending to use them regularly, and presented with fewer repeat STDs (O'Donnell et al., 1998).

Core Elements of VOICES

The core elements of VOICES include:

- ◆ Viewing culturally specific video portraying condom negotiation
- ◆ Conducting small group skill-building session to work on overcoming barriers to condom use
- ◆ Educating program participants about different types of condoms and their features
- ◆ Distributing samples of condoms

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Other Group Interventions for African American Heterosexual Women

An intervention consisting of six 90-minute sessions, followed by three booster sessions at 3, 6 and 9 months, combined HIV risk reduction information, skills training, role playing and modeling in an attempt to increase self-efficacy and improve positive social norms. The women had significantly increased their use of condoms at the 6-month follow-up, but by the 9-month follow-up, they had returned to the level of risky behavior that they demonstrated at the 3-month follow-up. The same pattern was found with the women's level of self-efficacy. The results indicate good short-term results, but point to the need for ongoing prevention interventions (Dancy et al., 2000).

Kalichman et al. (1996) investigated the impact of interventions that were similar in time frame, but different in content, on HIV risk behavior among African American low income women. The study involved four intervention groups: 1) one HIV education session and three sessions on sexual communication skills; 2) one HIV education sessions and three sessions on behavioral self-management skills; 3) one HIV education session, 1.5 sessions on behavioral self-management and 1.5 sessions on sexual communication skills; and 4) four sessions of HIV risk education without skills training. All groups had 4 total sessions that met twice a week. At 3-month follow-up, intentions to change risk behavior and condom use had increased among participants of all 4 groups. Participants in groups involving communication skills showed increased rates of talking to partners about sex and refusing unprotected sex. The women who received both communication skills and behavioral self-management skills building demonstrated the lowest level of risk.

Group Intervention for African American Heterosexual Men

An intervention for African American men in an inpatient drug treatment program consisted of HIV information, skills training, and explanations of the benefits of safer sex in an attempt to increase perceived susceptibility to HIV and to help identify barriers to changing high risk behavior. The intervention was conducted through 2-hour sessions provided on three consecutive days. The control group lasted the same length of time, but consisted of information only. At the 3-month follow-up, the intervention group reported an increase in their communication skills, an increase in their condom use skills, and a decrease in their risk behavior. Both groups reported a decrease in the number of sexual partners (Malow et al., 1994).

Latino/a High Risk Heterosexuals

There has been very little research done on effective interventions specifically targeting Latino/a heterosexuals. The studies that have been done have mostly focused on Latina women.

GROUP LEVEL INTERVENTIONS

VOCES (DEBI)

VOCES is a single-session, video-based HIV/STD prevention program designed to encourage condom use and improve condom negotiation skills among Latino men and women (the same intervention as VOICES for African Americans). Health educators convene groups of 4-8 clinic patients in a room that allows privacy for discussion. Groups are gender-specific. Information on HIV risk behaviors and condom use is delivered by a bilingual video that is culturally specific for Latinos, facilitated group discussion, and a poster board presenting features of various condom brands in English and Spanish. Skills in condom use and negotiation are modeled in the video, and then role played and practiced by participants during the discussion that follows. At the end of the

single, 45-minute session, participants are given samples of the types of condoms they have identified as best meeting their needs. Participants of this intervention demonstrated an increased knowledge about the transmission of HIV and other STDS, a more realistic assessment of their personal risk, a greater likelihood of getting condoms and intending to use them regularly, and presented with fewer repeat STDs (O'Donnell et al, 1998).

Core Elements of VOCES

The core elements of VOCES include:

- ◆ Viewing culturally specific video portraying condom negotiation
- ◆ Conducting small group skill-building session to work on overcoming barriers to condom use
- ◆ Educating program participants about different types of condoms and their features
- ◆ Distributing samples of condoms

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Group Level Interventions Targeting Latina Heterosexual Women

A study was conducted with Latina women, who were mostly immigrants from Puerto Rico, Dominican Republic, Central American and Mexico, and South America. The participants were divided into 3 intervention groups, all of which lasted 12 weeks and had sessions of 90 to 120 minutes in duration. The intervention group focused on HIV and related risk and incorporated elements of empowerment theory and group dynamics, included participatory education strategies (e.g., critical reflection). It also included discussions of partner violence and societal risk factors such as poverty and oppression. The comparison group provided more traditional HIV education and skills training and women's health issues, without the emphasis on empowerment and participatory education strategies. These two groups were compared to women placed in a waiting list control group. At the 3-month follow-up, women in both the intervention and comparison group were more likely to have increased condom use and their intent to use condoms than women in the control group. Only the women in the intervention group to report increased safer sex communication. Women in the comparison group were more likely than either the intervention or control group to have been tested for HIV in the past 3 months (Raj et al., 2001).

An intervention targeting low income, primarily Spanish-speaking Mexican and Puerto Rican women in Chicago consisted of 6 group sessions that included viewing and discussing videos, role playing, skill demonstration, homework to build self-efficacy, and quizzes. Each session focused on one of the following topics: 1) importance of HIV/AIDS awareness in your community and knowing your body; 2) understanding and preventing HIV and STDs; 3) myths and misconceptions about condoms and how to use condoms correctly; 4) negotiating safer sex practices; 5) preventing domestic violence; and 6) partner communication, review of previous sessions and benefits of behavior change. Compared to the control group, the intervention was found to be effective in improving HIV knowledge, communication with partner, risk reduction behavioral intentions and condom use, as well as in decreasing perceived barriers in condom use (Peragallo et al., 2005).

Women at Risk is designed to help Latina women recognize their personal susceptibility to STDs, commit to changing their sexual behaviors, and acquire the skills necessary to change behaviors. The intervention consists of 3 small group sessions that address the myths about AIDS and increase awareness of the fact that minority populations are disproportionately affected by HIV and STDs. The sessions also provide information about STD prevention, help build decision making and communication skills, and encourage participants to set risk reduction goals. Of the mostly Mexican American, English speaking women who were included in the evaluation, results indicate that women who participated in the intervention had significantly lower STD infection rates at the 6-month and 12-month follow-ups than women in the control group. Also, women in the intervention group were significantly less likely to have multiple partners or to have engaged in high risk sexual behaviors (Shain et al., 1999).

Native American High Risk Heterosexuals

Even less research has been conducted to evaluate effective prevention interventions targeting Native American heterosexuals. In fact, no randomized controlled trials appeared in response to literature searches. However, recommendations for effective prevention strategies have been developed by community leaders and studies conducted to assess risk behaviors and needs within Native American communities.

RECOMMENDATIONS FROM NATIVE AMERICAN COMMUNITY

A report developed by the National Alliance of State and Territorial AIDS Directors (NASTAD) with guidance from Native American leaders from across the country identified overarching recommendations for effective prevention efforts targeting Native American communities:

- Establish trust and support from tribal leaders.
- Conduct an assessment of need and meet communities where they are.
- Form collaborations with agencies working on other health and social issues.
- Recognize the distinctive cultural needs of different tribes and adjust programs accordingly.
- Become familiar with the appropriate terminology used by a particular Native American nation/community. Be cognizant of how Native Americans refer to themselves and their people.
- Remain aware of issues in the external environment that affect Native communities and recognize that these, as well as historical events, form the larger framework within which HIV prevention can be pursued (NASTAD, 2004).

Focus groups conducted with Native American drug users in four cities identified the following recommendations for prevention strategies targeting Native American communities in general and active drug users specifically (Baldwin et al., 1999):

HIV Prevention Strategies for Native American Communities and Active Drug Users

| COMMUNITIES | ACTIVE DRUG USERS |
|---|-----------------------------|
| Credible Sources | |
| Elders and Leaders | Ex-drug users |
| Youth | Youth |
| People living with HIV/AIDS | People living with HIV/AIDS |
| Messages | |
| Native language, as well as English | Visual/graphic |
| Visual/graphic | Fear-invoking |
| Paired with alcohol prevention | |
| Channels | |
| Chapter houses | Street outreach |
| Bingo halls | Support groups |
| Dances, powwows | Jails/prisons |
| Native corporations | Needle exchange |
| Schools | |
| Family gatherings | |
| Media (newsletters, posters, radio, TV) | |

COMMUNITY LEVEL INTERVENTION

Community Readiness Model

While the Community Readiness Model was originally developed to address community alcohol and drug abuse prevention efforts, it has been used successfully to address a number of health issues, including HIV and STDs. The Community Readiness Model is a 9-stage model that assesses a community's level of readiness to develop and implement prevention programming. It is based on the idea that interventions must be consistent with the community's awareness of a problem and their readiness to address it. The interventions must be culturally and community specific and use local resources.

The process begins by identifying the issue to be addressed, followed by identifying the community (e.g., women, youth, a neighborhood). Questions are developed and then interviews are conducted with key informants in the identified community. The interviews are scored and readiness is evaluated using the 9-stage model.

Implementation then begins by inviting members from various segments of the community to a workshop where they identify strategies specific to the readiness stage their community is in. The outcome is expected to be community change. As a community advances to a higher level of readiness, new activities can be implemented specific to the new stage of readiness (Vernon and Jumper-Thurman, 2002).

Community Readiness Model

Following are the 9 stages of community readiness and the community change goals associated with each:

1. **No awareness** - Raise awareness
2. **Denial** - Awareness that the problem is here
3. **Vague Awareness** - We can do something
4. **Pre-planning** - Assess and begin planning
5. **Preparation** - Gather information, plan and prioritize
6. **Initiation** - Focus and outreach
7. **Stabilization** - Stabilize efforts
8. **Confirmation Expansion** - Sustain and enhance
9. **Professionalization** - Maintain and expand

HEALTH COMMUNICATION/PUBLIC INFORMATION

In the Northwest Territories, a health promotion campaign was implemented focusing on healthy lifestyle choices with an emphasis on HIV. Community health workers and community members delivered information about HIV/AIDS door to door. Other approaches were also used, including broadcasts on local radio, presentations to community groups, and posters. Pamphlets were developed in 6 languages and audio cassettes were developed for the Dene, whose language is primarily oral. Also, an Inuit woman living with HIV/AIDS shared her story with many people. Band chiefs and councils were informed of the campaign and support from the elders was obtained. An evaluation of the program indicated that the program was well received, mostly because of the high level of involvement of community members. The evaluation did not assess behavioral change (Weaver, 1999).

Young High Risk Heterosexuals

Adolescence and young adulthood can be a difficult and confusing time as youth are struggling to establish their identities and values in the face of peer pressure, parents' expectations, and conflicting messages from the surrounding environment. This is a time when many begin to experiment with sex, drugs, and alcohol, without necessarily having the skills to make wise decisions about their behavior. It is important to reach youth with HIV information and risk reduction skills that they can continue to use throughout their lives.

INDIVIDUAL LEVEL INTERVENTION

Communication Between Parents and Adolescents

Studies demonstrate the positive impact of communication between parents and adolescents on teen sexual behavior. One study found that mother-adolescent discussions about condoms before first sexual intercourse greatly increased the percentage of young people who use condoms, both for their first intercourse and for subsequent acts (Miller et al., 1998). Key findings are:

- *Less Risky Sexual Behavior Among Teens:* Parental communication can influence two primary public health strategies for preventing HIV infection among adolescents. First, parent-adolescent communication can encourage delay of sexual initiation. Second, it can promote condom use among sexually active youth.
- *Less Conformity to Peer Norms By Teens:* Parental discussions about sex and condoms can impact behavior by moderating the extent to which peer norms guide sexual behavior and condom use. Conversely, teens who do not discuss sexual issues with a parent may be influenced by peer norms to guide their sexual behavior.
- *Greater Belief that Parents Provide the Most Useful Information About Sex:* Teens who discuss sexual issues with their parents see them as the most useful source of information and norms about sex (Whitaker et al., 2000).

GROUP LEVEL INTERVENTIONS

Street Smart (DEBI)

Street Smart is based on research conducted of small group sessions at a recreational/social service agency for gay/bisexual youth. Protected sex acts rose from 60% at baseline to 78% at 12-month follow-up for anal sex, and from 28% to 45% for oral sex. The intervention had no effect on those gay/bisexual youth who engaged in commercial sex; instead, their level of high risk sex increased over time (Rotheram-Borus et al., 1994).

The resulting Street Smart program is designed for runaway or homeless youth ages 11-18, but can easily be adapted for youth in other settings. It is a skills building program designed to help

Core Elements of Street Smart

The core elements of Street Smart include:

- Enhancing affective and cognitive awareness, expression and control
- Teaching HIV risk hierarchy and its personal application
- Identifying personal triggers, using peer support and small group skills building sessions
- Building participants' skills in problem solving, personal assertiveness, and HIV harm reduction

runaway youth reduce unprotected sex, number of sex partners, and substance use. The intervention consists of eight 2-hour group sessions, one individual session after the group sessions are completed, and then a group trip to a community resource. It is preferred that teens attend all sessions, but the program is designed so that each session stands alone. Each group session has a specific topic:

- Session 1: Getting the language of HIV/AIDS and STDs
- Session 2: Personalized risk
- Session 3: Condoms and dams
- Session 4: Drugs and alcohol
- Session 5: Recognizing and coping with feelings
- Session 6: Negotiating safer sex
- Session 7: Self talk
- Session 8: Staying safe over time

The program utilizes role plays to act out typical situations. Quick role plays are short and usually scripted, and are mainly used to introduce a session or topic. Longer role plays may or may not be scripted, and are videotaped so that participants can see themselves as others see them. Other participants also fill out feedback forms on the role plays.

After Street Smart was implemented with runaway and homeless youth, participants reported lower rates of substance use and unprotected sex with young women self-reporting greater reductions than young men. African American youth self-reported less substance use than youth of other racial/ethnic groups (Rotheram-Borus et al., 1997).

Be Proud! Be Responsible! (Compendium)

The study of this intervention consisted of one 5-hour small group session targeting African American male adolescents. It was led by African American men and women and included culturally and developmentally appropriate materials, including a video, and an “AIDS Basketball” activity in which participants formed into teams to earn points for correctly answering questions about HIV. A condom exercise focused on the correct use of condoms, and role play activities confronted participants with potential problems in trying to implement safer sex practices. Adolescents who participated in the intervention reported more frequent use of condoms and fewer sex partners than adolescents in a comparison condition (Jemmott et al., 1992).

Focus On Kids (Compendium)

The Focus on Kids intervention is an 8-session group intervention delivered to low-income African American pre- and early adolescents in peer groups that consisted of 3 to 10 same-gender friends within three years of age of each other. The sessions were led by two African American men or women recruited from the community, at least one of whom was gender-matched to the group.

The sessions emphasized values clarification and goal setting; presented facts about AIDS, STDs, contraception, and human development; and provided condoms. Multiple delivery formats were used include videos, games, acting, role playing, storytelling, and arts and crafts. In the seventh session, participants developed community projects with specific target audiences and intervention messages. Beginning in the first session and integrated throughout, a family genogram was used to illustrate the application of concepts to real life

situations. Sexually active youth who participated in the intervention reported significantly greater condom use than sexually active youth in the comparison condition (Stanton et al., 1996).

Becoming a Responsible Teen (Compendium)

The Becoming a Responsible Teen (BART) intervention involved 8 small group sessions delivered to African American youth at a public health clinic serving low-income families. Incentives included \$5 an hour for participating, a project T-shirt, and a personalized certificate of completion. The sessions provided HIV/AIDS information, addressed sexual decisions and values, condom use, communication skills and assertiveness, behavioral self-management and problem solving, and social support and empowerment. Videos, games, discussion, role plays, and peer education were some of the media used to deliver the educational messages. Youth who participated in the intervention reported significantly greater condom use and significantly lower frequency of unprotected intercourse than youth in the comparison condition. Abstinent youth who participated in the intervention significantly delayed sexual onset to a greater extent than abstinent youth in the comparison condition (St. Lawrence et al., 1995).

Group Level Interventions for African American Adolescents

DiClemente et al. (2004) evaluated the effectiveness of an intervention targeting sexually active African American adolescent females ages 14 to 18. All participants received four 4-hour group sessions. The intervention emphasized ethnic and gender pride, HIV knowledge, communication, condom use skills and healthy relationships. The control condition emphasized exercise and nutrition. At the 12-month follow-up, adolescents in the intervention group were more likely to use a condom at last intercourse, less likely to have a new vaginal sex partner in the last 30 days, more likely to apply condoms to sex partner, and had better condom application skills. Intervention participants also reported a higher percentage of condom-protected sex acts and less unprotected vaginal sex.

Another study evaluated the effects of abstinence and safer sex HIV risk reduction interventions on young inner-city African American male and female adolescents' HIV sexual risk behaviors (Jemmott III et al., 1998). The participants were African American adolescents recruited from 6th and 7th grade classes. Each intervention consisted of eight 1-hour modules divided equally over two consecutive Saturdays. Each intervention was highly structured and was implemented by facilitators who used intervention manuals. Designed to be educational, but entertaining and culturally sensitive, each intervention involved group discussions, videos, games, brainstorming, experiential exercises, and skill-building activities. Each intervention incorporated the "Be proud! Be responsible!" theme that encouraged the participants to be proud of themselves and their community, to behave responsibly for the sake of themselves and their community, and to consider their goals for the future and how unhealthy behavior might thwart the attainment of their goals. The abstinence intervention acknowledged that condoms can reduce risks but emphasized abstinence to eliminate the risk of pregnancy and STDs, including HIV. The safer sex intervention indicated that abstinence is the best choice but emphasized the importance of using condoms to reduce the risk of pregnancy and STDs, including HIV, if participants were to have sex. The study found that both abstinence and safer sex interventions can reduce sexual risk behaviors, but safer sex interventions may be especially effective with sexually experienced adolescents and may have longer lasting effects.

Clinic-based Intervention for African American and Latina Adolescent Girls

In this study, sexually active African American and Latina adolescent girls in an adolescent clinic were randomly assigned into three 250-minute group interventions. One was an information-based intervention that provided information about how to practice safer sex, another was skills-based and both provided information and taught skills necessary to practice safer sex, and the third was a health promotion control intervention concerned with health issues unrelated to sexual behavior. At the 12-month follow-up, participants in the skills intervention reported significantly less unprotected sexual intercourse than both the information and control groups. They also reported fewer sexual partners and were less likely to test positive for STDs than the control group (Jemmott III et al., 2005).

SCHOOL-BASED PROGRAMS

A number of sex education curricula have been designed, some of which address HIV prevention. No evidence exists that educational programs increase sexual activity, and some programs are effective in postponing onset of intercourse or increasing contraceptive usage if students are sexually active. Decision-making strategies and behavioral skills are generally not effective without the context of clear statements of norms.

These norms should be age-appropriate (i.e., younger kids get more abstinence messages, while older kids get more clear messages about safer sex). Abstinence only curricula have not been effective in postponing age of intercourse onset.

Reducing the Risk (Compendium)

Reducing the Risk was implemented in 13 high schools in California through 15 sessions in health education classes. The curriculum included instruction on developing social skills to reduce sexual risk behavior and used role play to model and practice the skills. It also emphasized decision making and assertive communication skills, encouraged students to go to stores and clinics to get relevant health information, and required students to ask their parents about their views on abstinence and birth control. Students receiving the intervention were significantly less likely to initiate sexual intercourse than those in the comparison condition. Intervention students who were already sexually active were significantly less likely to engage in unprotected sex than sexually active students in the comparison condition (Kirby et al., 1991).

Get Real About AIDS (Compendium)

Get Real About AIDS was implemented in 10 high schools in Colorado. The intervention consisted of 15 sessions covering HIV knowledge that can be used to reduce risk, teen vulnerability to HIV, normative determinants of risky behavior, condom use, and skills to help students recognize, manage, avoid, or leave risky situations. Students who participated in the intervention reported fewer sex partners and greater frequency of condom use than students in the comparison condition (Main et al., 1994).

Successful School-based Programs

Successful school-based programs have the following characteristics:

- ◆ Narrow focus only addressing sexuality
- ◆ Based on social learning theories
- ◆ Personalized information acquired via active learning methods
- ◆ Address social and media influences on sexual behavior
- ◆ Give clear statements of facts, norms, and expectations about behavior

Safer Choices

Safer Choices is a 2-year, school-based HIV/STD and pregnancy prevention program for high school students. It was tested with 20 high schools, with 10 being randomly assigned to the intervention and 10 to the comparison condition. The schools in the comparison condition implemented a standard 5-session knowledge-based curriculum.

Schools in the intervention condition implemented the five primary components as described in the side bar. The actual curriculum consisted of 10 lessons provided in 9th and 10 lessons in 10th grade. Using many interactive activities, the curriculum provided knowledge about HIV, STDs and pregnancy; taught skills related to communication, condom use, other contraceptives and refusing sex; and reinforced social norms supportive of safer behaviors.

Overall, Safer Choices did not significantly delay the onset of sexual intercourse, but it did appear to improve condom use. There was no difference by gender in the initiation of sex, but the intervention had a greater impact on condom use for males than females. Safer Choices did significantly delay the initiation of sex among Latino students, but not among Blacks, Asians or Whites. The intervention also increased condom use at last sex more among Latinos and Whites than among Blacks.

Safer Choices was found to have a positive impact on students whether they initiated sex before or after the beginning of the intervention. In terms of frequency of unprotected sex, the intervention had a significantly greater impact on students who initiated sex after baseline than on youth who were sexually experienced at baseline. In terms of condom use at last sex, Safer Choices had a greater impact on youth who were sexually experienced at baseline compared to youth who initiated sex afterwards (Kirby et al., 2004).

Components of Safer Choices

Safer Choices includes five primary components:

- ◆ **School Organization:** Schools formed a School Health Promotion Council to support and coordinate activities. The councils included teachers, students, parents, administrators and community members.
- ◆ **Curriculum and Staff Development:** The curriculum included 10 lessons in 9th grade and 10 lessons in 10th grade. Teachers received training on the curriculum and ongoing technical support. In-class peer leaders facilitated some of the activities.
- ◆ **Peer Resources and School Environment:** The school environment was saturated with activities, information, events, and services to reinforce key messages of the intervention. Peer resource groups implemented activities such as articles in school newspaper; school opinion polls; organizing public speakers; distributing posters, buttons, etc.; conducting small group discussions.
- ◆ **Parent Education:** Schools sent newsletters to parents 3 times a year and 9th and 10th grade students were asked to discuss sexuality topics with parents twice a year.
- ◆ **School-Community Linkages:** Homework assignments required students to gather information about local resources, schools distributed a resource guide, and HIV positive speakers from community gave presentations at school.

School-based Intervention Targeting Inner-city African American Youth

A study was conducted to evaluate the effectiveness of two culturally sensitive programs designed to reduce high risk behaviors among inner-city African American youth. The

program targeted students in grades 5 through 8, as well as their parents and teachers. The social development curriculum (SDC) consisted of 15 to 21 lessons per year focusing on social competence skills necessary to manage situations in which high risk behavior occurs. The school/community intervention (SCI) consisted of SDC as well as school-wide climate and parent and community components. The control group received a health enhancement curriculum focusing on nutrition, physical activity, and general health care. For boys, the SDC and SCI both significantly reduced violent behavior, provoking behavior, school delinquency, drug use, recent sexual intercourse, and improved the rate of condom use. The SCE was significantly more effective than the SDC in improving a combined behavioral measure. There were no significant effects of either the SCD or SCI for girls (Flay et al., 2004).

University/College-based Interventions

A study by Sikkema et al. (1995) involved a series of four 90-minute sessions held over one month targeting mostly White heterosexual women recruited through classes, social groups, and the health service at a Midwestern university. Only 13% of women approached participated. Topics included risk behavior education; assertiveness, decision making, problem solving, and negotiation skills; condom use; maintenance of healthy behavior; and rehearsal and role-playing. The intervention improved self-efficacy, sexual assertiveness and communication skills. There was modest reduction in sex without a condom and drug use.

A study with a racially/ethnically diverse sample of male and female university students evaluated the ability of a 20-minute self-administered intervention to increase risk reduction behaviors. Participants in the intervention group were given results from a survey of students from the university that showed that the majority of students reported using condoms most or all of the time. Data were presented in this way to emphasize that risk reduction was the prevailing social norm among their fellow students and that only a minority of students practiced high risk behavior. Participants were asked to compare their own behavior to the majority social norms and reflect on their willingness to change.

Participants were given a list of specific behavior change goals (e.g., increased condom use, fewer sexual partners, increased discussion of safer sex, and decreased use of alcohol and drugs with intercourse) and were asked to select which ones they believed they could commit to over the next 30 days. In 30 days they were asked to return for a follow-up survey. Those in the control group were given a pamphlet with brief information about how to prevent HIV and STDs. Participants in both groups received \$10 or a course credit both at the time of the intervention and at follow-up. Compared to participants in the control group, at follow-up, men in the intervention reported significantly higher condom use, while women in the intervention group reported significantly fewer sexual partners (Chernoff and Davison, 2005).

CORRECTIONS-BASED PROGRAMS

Intensive AIDS Education in Jail (Compendium)

A group intervention was delivered to male adolescent drug users in a correctional facility. It consisted of four 1-hour sessions focusing on health education issues, including general health knowledge, and HIV knowledge. Counselors were guided by a written curriculum. Counselors used techniques based on the problem-solving therapy model, where participants identified the problem, generated solutions, decided on alternatives, and used role play and rehearsal to practice alternative solutions. Participants received \$5 for each session they attended. After release from jail, youth who participated in the intervention

were significantly more likely to use condoms during sex and had fewer high risk sex partners than youth in the comparison condition (Magura et al., 1994).

Project START

Project START was designed specifically to target young men ages 18–29 who are leaving prison. The control condition consisted of 1 pre-release individual session where the person's knowledge and risk was assessed and an individual risk reduction plan was developed. Men randomly assigned to the intervention received 2 pre-release sessions and 4 individual sessions post-release. The first pre-release session was the same as the control condition. The second pre-release session focused on the participant's needs after release and included developing a post-release plan, problem solving and referrals. The 4 post-release sessions continued addressing goals identified in the post-release plan and included a review and update of the HIV/STD/hepatitis risk reduction plan developed in the very first session. Initial findings from this study indicate that men in the intervention were significantly less likely than the control group to report unprotected vaginal or anal sex with all partners since the last interview (Center for AIDS Prevention Studies, 2004).

Framework of Project START

Project START is based on the following conceptual framework:

- ◆ **Harm Reduction:** Reducing harmful consequences to self and others
- ◆ **Problem Solving:** Generating possible solutions, determining consequences, choosing best solutions, creating realistic plan of action
- ◆ **Motivational Enhancement:** Enhancing motivation for behavior change through a client-centered but directive approach
- ◆ **Enhancing Access to Service:** Facilitating referral and reducing barriers to use of existing community services

COMMUNITY LEVEL INTERVENTIONS

Intervention Targeting Latino Youth

This intervention was focused in neighborhoods where at least 20% of the residents were Latino. The intervention was implemented over 18 months and involved several components designed to provide information about HIV and risk reduction: mass media, workshops, and distribution of risk reduction materials. The intervention also used peer educators who were trained to implement several portions of this intervention, such as the workshops. In follow-up interviews, male adolescents from the intervention city were less likely than males in the comparison city to have initiated sexual activity. There was no significant increase or decrease in the initiation of sexual activity among female adolescents, although sexually active females in the intervention city were significantly less likely to have multiple partners than those in the comparison city. The intervention also increased the likelihood that both boys and girls would have a condom with them at the time of follow-up interview compared to baseline (Sellers et al., 1994).

STAND - Peer Education for Rural Teens

STAND is a peer education training program designed for rural teens. It is consistent with the developmental characteristics of teens, including perceived unique invulnerability, limited abstract reasoning ability, and focus on present rewards over long-term consequences. STAND is an “abstinence-plus curriculum,” promoting both sexual abstinence and risk reduction strategies. It is delivered in 28 one-hour sessions, held twice per week, and can be

school or community based. The training prepares teens to initiate one-on-one conversations with their peers about sexual risk reduction. Teens are taught to determine a person's stage of change, and recommend the use of appropriate change supporting processes. Peer leaders are selected by a peer- and self-nomination technique, and this process usually results in a very diverse group of teens.

After completion of the training, STAND peer educators plan and participate in whatever formal and informal educational activities are feasible in their community setting. They also participate in the STAND club, which meets once a month to provide peer educators with peer support. STAND peer educators self-reported positive changes in knowledge, condom use self-efficacy, consistent use of condoms, and incidence of unprotected intercourse, although most of these changes were more pronounced at the beginning of follow up than at the 8-month follow-up. STAND teens also reported significantly more conversations with friends about birth control or condoms (Smith and DiClemente, 2000).

Asian/Pacific Islander High Risk Heterosexuals

RECOMMENDATIONS FROM SOUTHEAST ASIAN COMMUNITY MEMBERS

There have been no studies conducted of effective prevention interventions targeting Asian and Pacific Islander heterosexual men and women. However, focus groups with Cambodian, Vietnamese and Laotian women, as well as providers serving these communities, provided some recommendations about effective strategies (Jemmott et al., 1999):

Skills building: Skills building training is needed for Asian/Pacific Islander women, men and youth. Particularly, the need for women to learn safer sex negotiation skills was noted.

Newspapers: Articles with information about HIV and risk reduction placed in community newspapers written in their own languages is a viable medium for reaching members of the communities who are literate in their languages.

Appropriate services: Prevention services need to be multilingual and culturally sensitive to HIV prevention and domestic violence issues.

Men's involvement: Men need to be involved in prevention programs. They usually consider reproductive issues as only concerning women. Men may be more receptive to messages from older male professionals than from women.

Health care providers: Health care providers that are linked to or are part of the community would be effective agents for change. They must be able to capitalize on the cultural value of respect for age and wisdom.

Mobile van: A mobile van for providing CTR and other health services to avoid stigma.

Video: Educational video in their own languages could be used to share with partners and friends, and addresses the lack of literacy that some people experience. It was suggested having an older Asian/Pacific Islander physician present basic facts instead of using a narrative story format.

Programs in the home: Women felt that members of their communities would respond positively to HIV prevention strategies offered within the privacy of their homes.

A community forum held with 13 Vietnamese participants in St. Paul yielded additional recommendations (MDH, 2005). Participants felt that a visiting Vietnamese physician specializing in HIV/AIDS would be ideal. Having a physician who speaks Vietnamese would eliminate barriers related to using interpreters to talk about HIV-related issues. They also suggested counseling services via a phone line that offers Vietnamese interpretation services. The participants felt that the concerns related to using an interpreter would be addressed through the anonymity that a phone line offers. Participants felt that face to face counseling services would be appropriate for second generation Vietnamese, but the first generation immigrants would not be comfortable with this.

Participants also noted the nonexistence of information available in Vietnamese and suggested developing HIV informational and risk reduction brochures in both Vietnamese and English. They also suggested developing more effective and accessible Vietnamese media outlets in Minnesota and have them integrate HIV/AIDS messages into their programming or print media.

Finally, the group suggested having HIV professionals train Vietnamese community leaders about HIV and risk reduction, and then having the community leaders create awareness and provide education to the community and families.

COMMUNITY LEVEL INTERVENTION

A program targeting Asian/Pacific Islanders in California was developed based on recommendations gathered through focus group participants who identified physicians as persons of authority and worthy of great respect and indicated a preference for receiving health care from an Asian or Pacific Islander provider. An intervention was developed to encourage testing and risk reduction behaviors, as well as to facilitate access to services for those who were positive. The intervention was initiated with a 1-day training for Asian/Pacific Islander health care providers that addressed recognition and treatment of HIV-related symptoms, how to conduct a risk assessment, approaches to counseling patients about risk reduction, barriers to HIV prevention, and resources available in the community. Providers also viewed a video in English that tells the real life story of an adult son who learned he was positive, how his family coped with the news, and the progression of his disease. The video dealt with issues such as death, sexuality, faith and isolation. The majority of providers felt the video would be helpful to use with English-speaking patients and they were able to get copies. The health care providers then indicated any additional training that would be useful and program developers planned trainings to address the identified concerns. Providers were also asked to indicate whether they would be willing to serve as a liaison between their particular professional community and HIV service organizations. Reactions from providers who participated in the training were positive. An evaluation of the impact of the intervention on the Asian/Pacific Islander community has not been published (Loue et al., 1996).

White High Risk Heterosexuals

Because HIV/AIDS has disproportionately impacted heterosexuals of color in the United States, studies of prevention interventions have either been conducted with racially/ethnically mixed samples or have primarily focused on African American and/or Latina women. Thus, there is a lack of information regarding effective interventions specifically targeting adult White high risk heterosexuals. In fact, only one study was found, which was conducted with mostly White heterosexual cocaine users.

Cocaine Abuse Counseling as a Prevention Intervention

The efficacy of cocaine abuse counseling alone as a strategy to reduce HIV-related sexual risk behaviors was evaluated through a study where 232 cocaine abusing or dependent individuals, mostly White heterosexuals, received up to 26 weeks of Matrix counseling, but no formal HIV prevention interventions. Matrix counseling uses a manual-driven format for teaching cognitive and behavioral skills to initiate substance use abstinence and prevent relapse. Participants who completed counseling were more likely to change to safer sex or maintain safer sex over the 6 months than those who terminated counseling prematurely. Safer sex changes included decreases in numbers of partners (Shoptaw et al., 1997).

Injection Drug Users.....

Overview of Interventions for Injection Drug Users

Specific behaviors associated with drug use that are risk factors for HIV transmission include shared use of drug injection equipment and unprotected vaginal or anal sex with sexual partners. Strategies to decrease these behaviors are therefore critical components of intervention strategies to reach IDUs and MSM/IDUs. Strategies for HIV risk reduction among drug users include substance use treatment, educational interventions, and HIV counseling and testing programs. Substance use treatment programs, to the degree that they are effective, are believed to reduce the risk of HIV transmission by increasing abstinence from drug use and/or injection. Although interventions with drug users aim primarily to protect drug users from getting infected with HIV, these interventions have an indirect benefit of also protecting their sexual and needle-sharing partners.

ACCESS TO CLEAN SYRINGES

Syringe Access Initiative

In 1998, Minnesota passed legislation allowing for voluntary pharmacy sales of up to 10 syringes without a prescription. Impact of the legislation was assessed one year after its implementation. The study found that IDUs were more likely to purchase syringes at a pharmacy after enactment of the laws. A significant decrease in the percentage of IDUs who shared syringes was observed. This decrease did not hold true, however, for IDUs who were speedball users or had a history of incarceration. The practice of reusing syringes and the safe disposal of syringes did not differ significantly after implementation of the Syringe Access Initiative (Cotton-Oldenburg et al., 2001).

Needle Exchange Programs

There have been no randomized, controlled studies of needle exchange programs; however, behavior change from these programs is mostly positive in reducing needle sharing and other behaviors. How needle exchange programs impact sexual risk behavior among IDUs is not clear. Although studies contain a preponderance of evidence demonstrating the effectiveness of needle exchange as an HIV prevention intervention among injecting drug users, state and federal governments prohibit the use of public funds to support such interventions. Thus, a prior public policy intervention is necessary before needle exchange activities can be comprehensively implemented.

Several studies have demonstrated the relationship between needle exchange programs and a decrease in drug-related risk behavior. One study examined how drug injection and needle sharing practices respond when a needle exchange program is introduced into a city. The model found that needle exchange programs were associated with decreases of 13% in drug injection and 20% in needle sharing (DeSimone, 2005). A meta-analysis of data from 47 studies evaluating the effectiveness of needle exchange programs using data collected from 1986 - 1997 found that needle sharing consistently declined among IDUs attending needle exchange programs (Ksobiech, 2003).

Holtgrave et al. (1998) found that a policy of funding syringe exchange programs, pharmacy sales, and syringe disposal to cover all illicit drug injections would cost \$34,278 per HIV infection averted, which is much less than the cost of lifetime treatment for someone with

HIV, which is estimated at \$154,402 (Holtgrave and Pinkerton, 2003). Cost effectiveness studies of specific needle exchange programs have consistently found them to be cost effective, and an efficient use of financial resources (Gold et al., 1997; Jacobs et al., 1999).

SUBSTANCE ABUSE TREATMENT PROGRAMS AS HIV PREVENTION INTERVENTIONS

A review of studies conducted over the past 20 years indicate significantly lower rates of drug use, drug-related risk behaviors and HIV infections among drug users who remain in treatment programs. However, the studies did not address reduction in sex-related risk behaviors. The authors point out that the public health impact of drug treatment programs is limited due to the fact that access to treatment services in many areas of the United States is not sufficient to meet the need (Metzger and Navaline, 2003).

Another review of studies was conducted to assess the impact of adherence to heroin dependence treatment on HIV prevention. The review found that the best adherence rates were achieved with methadone and diacetylmorphine treatment. Studies of methadone maintenance programs found that higher treatment adherence is correlated with a reduction in HIV transmission, suggesting that patients who continuously adhere to methadone treatment are less likely to continue injecting drugs and sharing dirty needles than those who interrupt treatment (De Castro and Sabaté, 2003).

USE OF PEERS IN PREVENTION EFFORTS

Based on lessons learned so far during the ongoing Urban Health Study, researchers state that IDUs can and will take responsibility for their own health and the health of their community. IDUs who provide new sterile needles to other IDUs (secondary exchange) are motivated to help prevent the spread of HIV among their peers. The researchers recommend recruiting secondary exchange providers and training them as peer educators. Based on their experience, these peer educators will help develop and pass along risk reduction messages to their friends (AIDS Research Institute, 2003).

Men Who Have Sex with Men and Inject Drugs

No studies have been conducted to evaluate the effectiveness of prevention interventions targeting MSM/IDU. However, information gathered through focus groups and individual interviews with 98 drug using (injecting and non-injecting) MSM from 6 cities provides some recommendations regarding strategies to reach MSM/IDU (Rhodes et al., 1999):

Preferred institutional sources of HIV information: Community health clinics and medical offices, STD clinics, drug treatment programs, HIV counseling and testing sites, gay and lesbian community centers, shelters, youth centers, street outreach programs and needle exchange programs. Providers perceived as bureaucratic, impersonal or lacking in respect or empathy for drug users were avoided whenever possible.

People most capable of influencing behavior change: Drug-using peers were most frequently mentioned as the people most capable of influencing behavior in relation to HIV prevention. Younger participants especially went to peers for advice, while a few of the older participants had no regard for the opinions of drug-using people they knew. In general, family members were not considered influential.

Materials: Some participants thought that brochures and written materials were not effective because many street-based drug users have limited reading skills. Pictorial materials were suggested as more effective in reaching people with low literacy skills.

Prevention interventions and program staff: There was general agreement from all sites that street outreach is the most important strategy for reaching MSM drug users, particularly outreach conducted at night and with a vehicle. They also suggested drop-in centers, rap groups, plays and skits, food (especially meals), and radio and TV advertising. Participants felt it was very important for outreach workers and intervention staff be former drug users or at least members of the local community and comfortable with people who use drugs.

Sexual orientation of staff and programs: The sexual orientation (or gender) of outreach and intervention staff did not matter; being treated with respect was most important. Participants did not see any benefit in implementing separate programs for MSM drug users. Men who did not self-identify as gay viewed separate programming as negative while men who identified as gay did not have a preference either way.

The recommendations from this study may indicate that MSM/IDU in Minnesota would be more comfortable accessing existing programs serving IDU instead of having separate interventions targeted specifically at them. However, the following program seems to have been successful in providing programming that targets MSM/IDU, although it appears to target men who identify as gay or bisexual.

COMMUNITY LEVEL INTERVENTION

Project NEON

Although the program has not been evaluated in a randomized controlled trial, Project NEON has been providing services to MSM/IDU for over 10 years in Seattle. Project NEON's services are targeted at gay and bisexual men who use crystal meth, primarily those who inject it. Project NEON offers brochures located in bars, sex clubs, and GLBT agencies in the city. A peer education team of current and former users conduct outreach and distribute

safer sex and clean injection supplies, conduct needle exchange, talk about safer partying, and provide referrals. One-on-one counseling is available and focuses on drug use, sex, relationship issues, and assistance in getting needed social/medical services. The program also offers several group level intervention options. One is a weekly drop-in chat/support group. There are also two drug abstinence based support groups, one for men who want to stop using meth and another for men who have already stopped and do not want to start again (Seattle Counseling Service, 2003).

Injecting Drug Users of All Races and Genders

COUNSELING AND TESTING

A meta-analysis of 27 published studies, which found that people who receive negative test results and those who do not test are less likely to reduce risky sexual behavior than persons who test positive or are in a serodiscordant relationship, also found that IDU participants who receive counseling and testing services in treatment centers did not demonstrate behavioral changes related to sexual risk. The study recommends focusing on sexual risk behaviors in addition to needle sharing behaviors during HIV counseling and testing delivered in treatment centers (Weinhardt et al., 1999).

OUTREACH INTERVENTIONS

A study was conducted to determine the cost-effectiveness of street outreach compared to methadone maintenance in averting HIV infections. This was done by simulating the spread of the HIV epidemic in San Francisco and New York from the mid-1980s to the mid-1990s and incorporating the behavioral effects of the two interventions. The study found that it was almost always more cost-effective to spend as many resources as possible on street outreach vs. methadone maintenance (Wilson and Kahn, 2003).

In an outreach program implemented in Denver, peer volunteers were trained to share role model stories and distribute intervention kits (including brochures, pamphlets, flyers, etc.), bleach kits, and condoms to high risk individuals over the course of 2.5 years. The intervention was effective at increasing both needle cleaning and consistent condom use over the time of the study. Consistent bleach use increased from 20% to 29%, and condom use during vaginal sex increased from 2% to 24% (Reitmeijer et al., 1996).

The NADR Project (National Institutes of Health, 1999) assessed longitudinal data from 28 sites delivering street outreach services to a total of 13,475 IDUs and 1,637 sex partners of IDUs. Participants were randomly assigned to standard and enhanced interventions. The standard outreach interventions, delivered by indigenous outreach workers, consisted of risk reduction information, referral, condom and bleach distribution, HIV testing and counseling, and demonstration and rehearsal of risk reduction skills. Enhancements to these interventions were site-specific and designed to promote the adoption of risk reduction strategies. At 6-month follow-up, statistically significant reductions in the number of IDUs engaging in the following high risk behaviors were found for both intervention assignments: frequency of injecting drugs (28% reduction), use of non-injected drugs, use of borrowed injection equipment (24% reduction), and number of sex partners (8% reduction).

INDIVIDUAL LEVEL INTERVENTION

Individual Level Intervention for African American Women

African American female heterosexual IDUs were randomly assigned to one of two enhanced gender and culturally specific interventions. The motivational enhanced intervention consisted of 4 individual sessions. The first session involved general risk reduction counseling as well as a discussion of the impact of race on gender on HIV risk and protective behaviors. Participants were asked to consider what things they would be motivated to change in their lives. During the second session, participants developed short-and long-term goals and discussed any ambivalences regarding change. In the third session, participants' experiences with short-term behavior change goals were reviewed. This discussion

continued in the fourth session, which also included risk reduction messages tailored to participants' level of readiness for change.

The negotiation enhanced intervention also involved 4 individual sessions. The first session was similar to the other intervention, although it ended with a skills training component on condom use and safe injection. In addition, participants were asked to consider which intended behavioral changes would be easier or more complicated to control. During the second session the intended behavioral changes and level of control were reviewed. General communication and assertiveness skills were discussed. Short-term goals for communication, gaining control and developing assertiveness were set. In the third session, participants' experiences with the short-term goals were discussed, as well as triggers for deviating from intended goals. Negotiation and conflict resolution skills were introduced. The fourth session built upon the previous sessions, including the development of tailored negotiation and conflict resolution styles.

In comparison to the standard informational session, those who participated in both enhanced interventions reported substantial decreases in frequency of drug use and drug injection, as well as in the sharing of injection works and water and the number of injections. Trading sex for drugs or money, having sex while high, and other sexual risk were also reduced significantly (Sterk et al., 2003).

GROUP LEVEL INTERVENTIONS

Holistic Health Recovery Program (DEBI)

The Holistic Health Recovery Program (HHRP) is based on an intervention study conducted by Margolin et al. (2003). Participants were inner city HIV positive IDUs with mild to moderate cognitive impairment who were dually addicted to heroin and cocaine and had a history of unsuccessful drug treatment. HHRP has since been adapted so that it can be used with HIV positive and HIV negative IDUs. HHRP is a 12-session, manual-guided, group level intervention to promote health and improve quality of life. More specific goals include a reduction of or abstinence from illicit drug use and sexual risk behaviors; reduced risk for HIV transmission; and improved medical, psychological and social functioning. Participants in the study demonstrated a decrease in addiction severity, a decrease in risk behavior, and significant improvement in behavioral skills, motivation and quality of life.

Core Elements of HHRP

HHRP teaches participants the following:

- ◆ Harm reduction skills related to injection drug use and unprotected sexual activities
- ◆ Negotiation skills to reduce unsafe sexual behaviors
- ◆ Decision making and problem solving skills
- ◆ Goal setting and action plan development skills
- ◆ Stress management skills
- ◆ Skills to improve health, health care participation, and adherence to medical treatments
- ◆ Skills to increase clients' access to their self-defined spiritual beliefs to increase motivation to engage in harm reduction
- ◆ Skills to increase self awareness

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Skills Building Sessions in Methadone Treatment (Compendium)

Five two-hour sessions were delivered to groups of African American and Latina women in methadone maintenance clinics. The sessions provided information on HIV transmission and prevention; condom use; assertiveness training; problem solving; and communication skills using videos, visual presentation, didactic exercises, and role playing. Participants received modest incentives for attending the sessions. Women who participated in the intervention significantly increased in frequency of condom use with their partners, as compared with women in the comparison condition (El-Bassel and Schilling, 1992).

Group Sessions Targeting Intranasal Heroin Users (Compendium)

Adult drug users (26% African American, 23% Latino, 51% White) who used heroin intranasally were recruited to a 4-session intervention to determine the effects of a small group intervention in preventing transition from sniffing heroin to injecting heroin. The intervention covered HIV information, risks of drug use and drug injection, and how to seek entry into drug abuse treatment programs. Presentations, group discussion, and role play were used. People who participated in the intervention were significantly less likely to inject drugs than those in the comparison condition (Des Jarlais et al., 1992).

Informational and Enhanced AIDS Education (Compendium)

A study was conducted to determine the effects of small group informational and enhanced education sessions on drug and sex-related HIV risk behaviors. The informational intervention consisted of two 1-hour sessions and a 30-minute individual health educational consultation. The enhanced intervention focused on personal susceptibility, situation analysis and skills building. Participants engaged in group discussion, and practiced skills. Additional strategies included role playing, peer feedback, tension-release exercises and an emphasis on experiential learning techniques to enhance self-efficacy regarding ability to initiate and maintain HIV harm reduction behaviors. After exit from the program, participants in both interventions reported significant reduction in drug and sex-related risk behaviors compared with baseline of risk. However, the enhanced education intervention had significantly greater effects than the informational intervention (McCusker et al., 1992).

Project Neighborhoods in Action

Project Neighborhoods in Action was a program conducted with 1,631 IDUs and crack users (97% African American) in several inner city neighborhoods in Washington DC. Participants were randomly assigned to an enhanced intervention or a standard intervention. The standard 2-session intervention consisted of risk assessment, voluntary counseling and testing and referral to drug treatment and medical services. In addition to the standard 2 sessions, participants in the enhanced intervention participated in a group intervention that included a video with African American actors that focused on awareness of HIV, risk of transmission through needles and other injection paraphernalia, sexual transmission of HIV, and the benefits of drug treatment. The video was shown in short segments, with participants then practicing risk reduction behavior through role plays and demonstrations and discussing the video and role plays. At 3-month follow-up, the frequency of drug use decreased. The frequency of drug injection also decreased, as did the sharing of needles and works. In addition, the number of sexual partners and having sex while high both decreased, as did trading sex for money and/or drugs. Condom use increased. These findings were found among both male and female participants. The study results indicate that the standard intervention and the enhanced intervention were about equally effective in reducing HIV-related risk behaviors among drug users (Hoffman et al., 1999).

Group Intervention in Methadone Maintenance Treatment

A 12-session harm reduction group intervention delivered in the context of a methadone maintenance treatment program was found to be effective in reducing risk behaviors. Both the control group and the intervention group received 2 hours of individual counseling/case management per month and a single session individual risk reduction intervention. Additionally, the intervention group participated in a 12-session weekly harm reduction group intervention, which covered the following topics: 1) setting and reaching treatment goals; 2) HIV transmission; 3) safer injection drug use practices; 4) condom use and eroticizing safer sex; 5) negotiating harm reduction with partners; 6) prevention drug use and HIV risk behavior relapse; 7) making healthy lifestyle choices; 8) adapting the traditional “12 steps” to include HIV prevention; 9) understanding addiction and its relationship to continued high risk behavior; 10) overcoming negative emotions, such as helplessness; 11) understanding and overcoming grief and fear; and 12) developing healthy social relationships and activities.

During methadone maintenance treatment, patients who participated in the 12-session harm reduction intervention were more likely to refrain from cocaine use and to report fewer unsafe sexual practices than participants in the control group. After treatment, the intervention group scored higher on a sexual risk quiz and reported increased self-efficacy in high risk sexual situations than the control group (Avants et al., 2004).

COMPREHENSIVE PROGRAMMING

Safety Counts (DEBI)

Safety Counts is a client-centered, comprehensive intervention targeting HIV positive and HIV negative individuals who are currently using injection or non-injection drugs. The intervention is not specific to gender, race/ethnicity, or sexual orientation. The goal of the program is to reduce risk of becoming infected with or transmitting HIV and hepatitis viruses, and involves individual and group level activities, as well as social events over a period of 4 to 6 months. The intervention focuses on setting personal risk reduction goals, assessing progress, discussing barriers, and identifying next steps. Staff discuss the importance of knowing HIV status upon program enrollment and offer CTR services at each session for HIV negative clients.

Compared to persons enrolled in the comparison condition, clients who participated in Safety Counts were about

Core Elements of Safety Counts

The five core elements of Safety Counts are:

- ◆ **Group Sessions One and Two** involve hearing clients’ HIV risks and current stage of change, hearing risk reduction success stories, setting personal goals, identifying first steps to reduce HIV risk, and making referrals to CTR and medical/social services
- ◆ **One (or more) Individual Counseling Session** involves discussing/refining risk reduction goals, assessing client’s needs, and providing referrals
- ◆ **Two (or more) Social Events** are designed for socializing, participating in risk reduction activities, and receiving reinforcement for personal risk reduction
- ◆ **Two (or more) Follow-up Contacts** involve reviewing client’s progress, discussing barriers encountered, identifying concrete next steps and possible barriers/solutions, and referrals
- ◆ **HIV/HCV Counseling and Testing** is offered through the service or referral to another agency

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1.5 times more likely to reduce their drug and sex-related risks, were more than 2.5 times more likely to report an increase in condom use, were significantly more likely to report a reduction in the number of times they inject, and more likely to test negative for opiates through urinalysis (Rhodes and Humfleet, 1993; Rhodes and Wood, 1999).

COMPREHENSIVE PROGRAMMING

Community PROMISE (DEBI)

As previously described on page 296, Community PROMISE is based on the AIDS Community Demonstration Projects. This intervention has been tested with African American, White and Latino communities, including injection drug users and their sexual partners.

Community PROMISE begins with a community identification process, which involves interviewing and holding focus groups with stakeholders in the community to identify why people engage in risk behaviors, what barriers exist to changing behavior, what will encourage them to change behaviors, and locations where they engage in risk behaviors. This helps with identifying target populations and appropriate tailoring of the intervention. Members of the target population who have made positive behavior change are interviewed and role model stories are written based upon their interviews. Peer advocates from the target populations are recruited and trained to distribute the role model stories and other materials. The final core element is formative evaluation to capture behavior change within the target population.

Chapter Five

Collaboration and Coordination.....

Coordination of HIV Prevention Activities

One of the primary responsibilities of the STD and HIV Section at MDH is to coordinate HIV prevention activities that occur among public and non-governmental agencies. Most such activities in Minnesota are funded through MDH, so that coordination occurs through grant management and management of staff that provide direct services (i.e., the disease intervention specialists). Coordination occurs through regular unit, management team, and section meetings and is directed by the goals and priorities set in the plan.

COORDINATION WITH STATE AGENCIES

For those few state agencies that provide HIV prevention services and activities beyond the jurisdiction of MDH, coordination occurs in part by maintaining voting seats on the CCCHAP for representatives from such agencies. For example, state agencies that provide HIV prevention education in some form, including the Minnesota Department of Corrections (DOC); Minnesota Department of Human Services (DHS); and Minnesota Department of Education (MDE) have historically had representatives participate as voting members on the CCCHAP, although there are currently no DOC or DHS representatives.

Coordinated School Health Approach, a collaboration between MDE and MDH, addresses school-related health policy development, instruction, counseling, support, and community education. Staff assist school districts to implement comprehensive curriculum and programs to prevent and reduce the risk of HIV/AIDS and remain in compliance with the state STD statute.

MDH and MDE are also currently working on developing an adolescent health report specifically focused on HIV, STDs and teen pregnancy. Data from the respective databases are being analyzed to identify adolescent populations that are experiencing disparities in these three health areas. The findings will be shared with a community advisory group in order to develop recommendations for how to address the disparities. The project will be completed in late fall of 2005.

Although, as a result of the state budget cuts in 2003, MDH is no longer able to provide direct financial support to state correctional facilities to implement HIV prevention interventions, MDH will still provide technical assistance as requested to the DOC as they continue to provide some health education and risk reduction activities within the prison system.

COORDINATION WITH THE OFFICE OF MINORITY AND MULTICULTURAL HEALTH

The MDH Office of Minority and Multicultural Health (OMMH) funds a number of minority organizations through the Eliminating Health Disparities Initiative (EHDI) to implement activities related to eliminating racial and ethnic disparities in STD and HIV infection rates, as well as in other health areas. Additionally, the OMMH receives funding to assess need and provide capacity building support to community based organizations providing HIV-related services in communities of color. Two representatives from the STD and HIV Section

sit on an interdepartmental EHDI Technical Assistance Team to ensure coordination between the EHDI activities and the activities of the STD and HIV Section.

In addition, staff from the STD and HIV Section meet regularly with staff from OMMH to share up-to-date epi data, share information about the activities of agencies funded through both the STD and HIV Section and OMMH to provide HIV prevention services, share information about upcoming RFPs, and coordinate capacity building activities targeting agencies providing HIV prevention services. Staff attend each other's inservices and training events and coordinate contract management activities, as well as collaborate in planning community events. For example, staff from the STD and HIV Section and OMMH closely collaborated to plan for and organize media exposure and activities for the National Latino AIDS Awareness Day in October 2004, and have started doing the same for 2005.

MDH ENGAGEMENT WITH COMMUNITY ORGANIZATIONS

There is widespread belief among Native American community members that the number of Native American HIV and AIDS cases reported to MDH's HIV/AIDS surveillance system is much lower than the actual number of cases that both occur and exist. Under-reporting of HIV/AIDS cases could occur as the result of issues related to the sovereign nation status of Minnesota's Indian tribes, lack of knowledge on the part of reservation health care providers about the need to report HIV infections to the state, racial misclassification on HIV case reports, or a combination of these factors. To address this issue, the STD and HIV Section began collaborating in 2004 with the Great Lakes Inter-Tribal Council and the Indigenous Peoples Task Force on a project designed to assess the completeness and accuracy of HIV and other infectious disease reporting from Minnesota Indian reservations. The information is being gathered in 2005 via a telephone survey of tribal health directors and reservation clinic administrators. The survey will address disease reporting issues as well as issues related to access to HIV testing. The information generated by the survey will be used as the basis for making possible improvements to the operation of the HIV surveillance system for Native American HIV cases.

In addition, staff from the STD and HIV Section engage with the following networks in the community: Community AIDS Network, African World AIDS Day, Gay/Lesbian Support Network, Community Educators Network, AIDS Substance Abuse Partnership, African American Health Workers Network, Comprehensive Adolescent School Health Planning Project, Hispanic Health Network, Latino Initiative, Peer Education Network, Minnesota Prevention Network, Men Who Have Sex With Men Outreach Worker Network and Community Syphilis Advisory Team.

COMMUNITY BASED COLLABORATIVES

African World AIDS Day

The African World AIDS Day (AWAD) group began in 2004 as a community effort to organize World AIDS Day activities specifically targeted to African communities in Minnesota. Several STD and HIV Section staff participated in this effort, which is driven by community based organizations working with African communities. AWAD has continued as an active collaborative effort and has expanded its focus to also include other health issues and immigration issues.

African American Health Workers Network

This group meets on a monthly basis and is comprised of African Americans, including HIV positive individuals, who provide HIV outreach services, and sexual health and prevention education, including risk assessments and risk reduction counseling for African Americans in the Twin Cities metro area. The group focuses on HIV/STDs and other diseases affecting the African American community, developing a proactive response to African American health care issues, and providing networking opportunities.

AIDS Substance Abuse Partnership

The AIDS Substance Abuse Partnership (ASAP) is a network of professionals and affected members of the community that focuses on HIV prevention in the context of substance abuse. They worked closely with DHS to revise and update the guidelines for HIV prevention education in chemical dependency treatment centers.

Community AIDS Network

The Community AIDS Network (CAN) is a network of over 200 professionals and community members working with youth and HIV/AIDS. Facilitated by the Youth and AIDS Projects (YAP), this group meets quarterly and invites speakers to spend time in sharing resources, etc. Invitations are extended to all areas of the HIV prevention community, however, since youth are often present at these meetings, YAP asks that adults wishing to attend be sponsored by an organization in the HIV, GLBT, health, or social service fields.

Hispanic Health Network

The Hispanic Health Network consists of Hispanics and non-Hispanics addressing HIV/STDs and other community health issues. Their mission is to promote the health and well being of Hispanics/Latinos by enhancing the effectiveness and quality of services for Hispanics/Latinos in Minnesota. This is achieved by: 1) providing a forum for networking among health educators, health and human service providers, and community members in Minnesota; 2) promoting access to support and health services for Hispanic/Latino clients and patients and advocating to ensure that these services are provided in a culturally competent manner and are also available in Spanish; and 3) providing network members with opportunities for information sharing in the areas of research, referrals, and culturally specific materials.

Latino Initiative

The Latino Initiative was started in 2004 by the Minnesota HIV Services Planning Council in an effort to increase Latino participation in the community planning process for HIV/AIDS services. The focus of the initiative to date has been to involve community people from other health related initiatives, as well as business owners, religious leaders, and community members, in efforts to promote health services, awareness and education to the Latino community. Representatives from the STD and HIV Section and OMMH participate in this initiative, as well as a number of representatives from organizations serving Latinos. The group sponsored a health tent at Mercado Central's fifth anniversary event in July 2004, providing resources and information about various health issues, including HIV. MDH staff also provided OraSure testing to 40 people at the event. Based on the interest demonstrated by attendees of the health fair, the group has continued to conduct health fairs at this locale on the third Saturday of every month. The health fairs continue to provide resources and information on a number of health issues affecting the Latino community, as well as providing OraSure testing and information about HIV.

Men Who Have Sex With Men Outreach Workers' Network

The MSM Outreach Workers' Network is a group of staff from organizations that receive HIV prevention funds from MDH to provide outreach to men who have sex with men. This group meets once each quarter to discuss issues and topics related to indoor and outdoor environmental outreach and general street outreach in various targeted communities. Members of the network have developed collaborative outreach efforts that have reduced the amount of duplicated outreach services and have increased the amount of referrals to each other's services. The members also discuss safety issues and community visibility. In 2005, the network has discussed strategies for addressing the rise in methamphetamine use in the MSM community and its impact on HIV risk. The network is planning to implement two community forums related to crystal meth, one for community members and one for providers.

Community Syphilis Advisory Team

The Community Syphilis Advisory Team is comprised of staff from organizations that receive HIV prevention funds from MDH, as well as staff from HCMC's care case management program. The team meets monthly to discuss strategies for addressing the rise in syphilis cases among MSM. The team was responsible for determining how syphilis information would be displayed and distributed at Twin Cities GLBT Pride events in June 2005, and is currently planning a community event where the organizations will provide information on syphilis as well as syphilis screening.

Minnesota AIDS Project's Public Policy Committee

The Minnesota AIDS Project (MAP), Minnesota's largest and oldest AIDS service organization, has an active public policy program through which they have assembled AIDS activists from both the public and private sectors throughout the state. Their Board of Directors has established a Public Policy Committee that currently meets three times per year. The committee is charged with developing an action agenda of policy issues to research and subsequently educate the public about. Where needed, this action plan includes the recommendation for legislative or policy action. Over the years, MAP's Public Policy Committee has recommended and worked to achieve statewide syringe access, regulation of viatical companies, establishment of regional HIV training sites and maintaining the statewide mandate for school-based HIV education.

Minnesota Organization on Adolescent Pregnancy, Prevention and Parenting

The Minnesota Organization on Adolescent Pregnancy, Prevention and Parenting (MOAPPP) works to strengthen policies and programs related to adolescent pregnancy prevention, adolescent pregnancy care and adolescent parenting in Minnesota. MOAPPP provides resources for parents, teens, educators, health care providers, youth workers, media professionals and policy makers.

MOAPPP collaborates with a number of partners in many of its efforts. For example, Sexuality for Life – Minnesota is a coalition of educational, religious, health, social service and advocacy organizations that promote lifelong healthy sexuality by advocating for legislative policies comprehensive sexuality education and access to confidential health care services. The Minnesota Sexuality Education Resource Review Panel, made up of 40 members representing community based and statewide organizations, reviews and recommends sexuality education and HIV prevention curricula and resources for use in schools and communities.

MOAPP coordinates an Adolescent Parent Network, which is a group of social service, health and education professionals who work with, or on behalf of, teen parents. The network provides the opportunity for members to share strategies, resources and support, to discuss solutions to common issues, and receive training. MOAPPP also has a Latino Outreach Project, working with organizations in the Latino community to address teen pregnancy and parenting.

Sexuality and Family Life Educators

Sexuality and Family Life Educators (SFLE) acts as an education resource for parents, schools, and the community. Sixty-eight (68) organizations throughout the metropolitan area and surrounding counties offer education on numerous topics related to sexual health: reproductive anatomy and physiology, responsible sexual decision making, sex roles and stereotyping, contraception, STDs, teen pregnancy, HIV/AIDS risk reduction and education, parents as sex educators, parenting issues, relationship/dating issues, sexual orientation, prenatal growth and development, sexual assault, and domestic violence.

Streetworks

Streetworks is a collaborative of youth-serving agencies that conduct outreach targeting homeless youth. The purpose of this effort is to enable outreach workers to team up on the streets with outreach workers in other agencies in a formal way. This enables agencies to more effectively cover the Minneapolis and St. Paul area. Bi-monthly support and supervision sessions are held for interested agencies.

Women and Families Network

The mission of the Women and Families Network is to address the needs of Minnesota women and families affected by HIV through collaboration, advocacy, training and resource sharing. The network is coordinated by West Side Community Health Services, the Ryan White CARE Act Title IV grantee, in collaboration with the Women and Families Systems Advocate from MAP. The network is comprised of consumers and providers and addresses the multiple needs of people living with HIV and their families. The network creates the opportunity for formal and informal partnerships to facilitate referrals, avoid duplication of services, and to provide cross training and support. In order to ensure that services are meeting the needs of consumers, feedback and input is gathered from consumer network members and Consumer Advisory Boards. The Women and Families Network holds an annual HIV Women's Health Retreat focused on gynecological and other health issues for women with HIV, and learning how to talk with providers and each other about these issues.

Coordination Between HIV Prevention and Care

There has been great progress made in recent years towards creating stronger linkages between the CCCHAP and the Minnesota HIV Services Planning Council (Planning Council), the body that is responsible for prioritizing the Title I and II Ryan White Comprehensive AIDS Resources Emergency (CARE) Act funds for the state of Minnesota. Additionally, there is much greater coordination and linkages between the MDH and the governmental entities responsible for administering the CARE Act Title I and II funds.

GOVERNMENTAL HIV ADMINISTRATIVE TEAM

One area of progress has been in the coordination and linkages between the MDH and the governmental entities responsible for administering the CARE Act Title I and II funds.

Effective April 1, 2002, the Minnesota Department of Human Services (DHS) took over administration of the Ryan White CARE Act Title II grant from MDH. However, DHS contracts with MDH to maintain continued participation in planning for care services for people living with HIV. This has been a priority for MDH in order to maintain the public health perspective in care planning and to ensure that linkages between prevention and care are in place. Thus, MDH maintains a seat on the Planning Council and participates as a full member in the Governmental HIV Administrative Team (GHAT). The GHAT is made up of representatives from MDH; DHS; and the Hennepin County Human Services and Public Health Department (HSPHD), the CARE Act Title I grantee. The GHAT meets every other month, and discusses issues related to grant administration, data collection, contracting, and community planning.

As a result of discussion at the GHAT, staff from the three government agencies that are responsible for managing contracts with care and prevention providers have started meeting on regular basis. The purpose of these meetings is for the contract managers to share information and learn what the various contracted programs are responsible for, avoid duplication of effort, and share strategies for addressing the various needs of contracted agencies.

LINKAGES BETWEEN PREVENTION AND CARE SERVICES

Joint Prevention and Care Outreach Pilot Project

In 2004, the MDH collaborated with the CARE Act Title I grantee to implement a joint prevention and care outreach pilot project that includes OraSure and OraQuick testing. Prevention and care funds were combined in a Title I RFP released in October 2004. Four agencies were funded for two years as a result of the competitive process and contracts began March 1, 2005. The funded agencies are expected to provide outreach activities that include the distribution of prevention literature, safer sex kits, and bleach kits; the provision of field based testing; and referral to prevention services. Persons who test positive, or people who already know they are positive but are not in care, will be assisted in accessing care and support services.

Short Term Intervention Services

CARE Act dollars are used to fund short-term intervention services, which are located at the two largest metropolitan HIV/STD counseling and testing sites. Short-term intervention services enable individuals diagnosed with HIV to access support and health care services early and to discuss transmission prevention behaviors. These programs assist newly diagnosed persons in obtaining an initial medical assessment and referral to ongoing medical care and includes CD4 counts and other lab tests, a physical examination, safer sex and needle use education, and referral to ongoing supportive services.

JOINT PREVENTION AND CARE TRAINING

Joint prevention and care training are offered at least annually. These events offer providers the opportunity to learn more about each others' programs and to meet staff from other agencies, as well as provide training opportunities related to providing referrals and increasing coordination and collaboration.

In 2005, the DHS, in conjunction with the HSPHD, the Rural AIDS Action Network (RAAN), and the Minnesota AIDS Project (MAP), delivered trainings in rotating regions of Greater Minnesota. The trainings were targeted at providers in Greater Minnesota and the purpose is to provide information about available care and support services and to provide an

opportunity for networking. In addition, the STD Screening Specialist from DHS provided an STD update as part of these trainings.

HIV PREVENTION AND CARE COMMUNITY PLANNING

Joint Co-chairs Committee

The co-chairs of the CCCHAP and the Planning Council met as the Joint Co-chairs Committee on a regular basis for the past five years. In 2004, the Joint Co-chairs Committee decided to move from quarterly to semi-annual meetings on an as needed basis. The purpose of these meetings is to share information, provide updates on the planning activities, and coordinate on specific activities that may be identified.

Continuum of Prevention and Care

The Continuum of Prevention and Care was developed in 2003 in one of the earliest activities undertaken to link prevention and care planning efforts. The Planning Council developed a Continuum of Care for HIV positive persons in 1999, and in 2003 work by both planning bodies focused on integrating prevention into the continuum. The Continuum of Prevention and Care provides a model of the ideal prevention and care service system for the general population, at risk persons and HIV positive persons in the state of Minnesota, and is used by the two planning bodies as one of many sources of information to inform their planning processes.

CARE System Assessment Demonstration Project

In 2003, the CARE Act Title I grantee received notice that the Minneapolis/St. Paul eligible metropolitan area (EMA) was one of three EMAs chosen to conduct a CARE System Assessment Demonstration (CSAD) Project. The CSAD Project began in 2004 and is focused on assessing systems barriers that prevent HIV positive African people from getting into or staying in care. The project entails an assessment of the service system in the EMA. In addition to the system assessment, the project is using the qualitative Rapid Assessment Response and Evaluation (RARE) methodology, which has been used effectively in prevention studies, to gather information from the target population.

Staff from the MDH and CCCHAP members were invited to work with Title I and II staff, Planning Council members, and the principal investigator of the project in the planning and organizational stages of the process. MDH staff participated in the planning process, and continue to be involved in the advisory committee. Many MDH staff were interviewed in 2004 and 2005 as part of the assessment of the service system. Highlights of the findings from the CSAD Project were shared with the community at a two-day meeting in July 2005, at which time recommendations were gathered for a plan of action to address the issues identified through the study. The final report will be completed in late fall of 2005 and the findings will be integrated into the needs assessment section of this plan next year.

Coordination Between HIV and Other Diseases

STD TESTING AND TREATMENT

HIV and STD prevention and services activities in Minnesota have always been combined within the same section at MDH, namely the STD and HIV Section. This has allowed collaborative efforts to occur naturally, as funding has allowed. MDH currently supports components of a comprehensive STD program, including STD surveillance activities, lab testing for some STDs, and STD outreach and testing activities. Currently, all community

based HIV prevention grantees are required to also implement STD prevention activities as feasible and appropriate, particularly those HIV prevention programs targeting youth.

As an immediate example of the need for such an integrated approach, Minnesota has experienced an increase in cases of syphilis infection since 2002, primarily among men who have sex with men. MDH has worked closely with HIV prevention programs funded to reach MSM in heightening their efforts to prevent further outbreaks of syphilis, and to refer people to syphilis testing and treatment. One of these programs, Red Door Clinic, offered syphilis screening and HIV testing at Twin Cities GLBT Pride in 2005, and has offered evening syphilis testing clinics for MSM. MDH has implemented syphilis-related partner notification via the Internet. MDH has also released an RFP seeking community based organizations to provide activities that will increase awareness of syphilis as well as increase syphilis testing in the MSM community. These activities will begin in November 2005.

Federal STD prevention dollars continue to fund 26 clinics to reach adolescents and young adults, providing chlamydia and gonorrhea testing and treatment. Clinics are located throughout the state. Eight clinics are located in the urban areas of Minneapolis and St. Paul in zip codes with the highest STD rates. At two of these clinics in Minneapolis, funding also pays for Youth Advocates to do street outreach to youth at parks, community centers, and other places in the neighborhood where youth congregate. They provide education on STDs and HIV to the youth and encourage them to come into the clinics to be tested. They also collect urine specimens to screen for chlamydia and gonorrhea from those high risk youth that refuse to come into the clinics. In addition to these efforts, one clinic just opened a walk-in clinic one evening a week that is open to males only. All clinics also provide HIV testing upon request based on clients' level of risk.

VIRAL HEPATITIS INTEGRATION

In 2004, a hepatitis coordinator position was created within the STD and HIV Section through Enhancing Laboratory Capacity (ELC) funds from the CDC. This position is responsible for promoting the integration of viral hepatitis prevention and control into the existing activities of clinical health care providers, public health agencies, and community based health promotion programs. This is done through the development and implementation of curricula and materials designed to increase viral hepatitis risk assessment, screening, vaccination, and referrals to prevention and support services.

TUBERCULOSIS

The STD and HIV Section works closely with the Tuberculosis (TB) Program at MDH. Ongoing collaborative activities include visiting HIV medical care providers to raise awareness about recommendations for screening and treatment of HIV positive persons for TB; making presentations to physician groups to inform them of the epidemiological, clinical, and prevention aspects of TB and HIV; and collaboration between the TB and Refugee Health Programs to assure that HIV-infected refugees receive appropriate TB screening, follow-up and treatment.

FAMILY PLANNING

The Family Health Division at MDH has convened two groups in which STD and HIV Section staff is involved. The Adolescent Health Team focuses on coordination of efforts to improve the health of youth. The Women's Health Team focuses on collaborative efforts to improve the health of women and girls.

SUMMARY OF CURRENT COORDINATED EFFORTS

| COORDINATED EFFORT | ENTITIES INVOLVED | PURPOSE |
|---|--|---|
| African World AIDS Day (AWAD) | African organizations, MDH, DHS, Hennepin County Human Services and Public Health Department (HSPHD) | Plan and implement World AIDS Day activities targeting African communities, and address health and immigration issues. |
| African American Health Workers Network | African American HIV professionals and HIV positive persons | Develop a proactive approach to African American health care issues and provide networking opportunities. |
| AIDS Substance Abuse Partnership | HIV and substance use professionals | Address issues related to HIV prevention in the context of substance abuse. |
| CARE System Assessment Demonstration (CSAD) Project | CSAD Team, HSPHD, DHS, Planning Council, MDH, community members | Identify system, community and personal barriers to HIV+ Africans accessing and/or staying in care |
| Case Management Services | Care and prevention case management providers, MDH, DHS | Ensure that HIV positive individuals are receiving the care and prevention services they need. |
| Community AIDS Network | Youth and AIDS Projects (YAP), professionals working with youth and HIV/AIDS | Share information and resources related to HIV and youth. |
| Continuum of Prevention and Care | CCCHAP and Planning Council | An integrated model of the continuum of prevention and care services for ongoing use in community planning. |
| Community Syphilis Advisory Team | MDH, prevention and care programs serving MSM | Develop strategies for addressing syphilis in MSM |
| Coordinated School Health Approach | MN Dept of Education (MDE), MDH | Assist school districts in implementing comprehensive HIV prevention curriculum. |
| Coordination with Office of Minority and Multicultural Health (OMMH) | STD and HIV Section staff sit on Eliminating Health Disparities Initiative (EHDI) Technical Assistance Team. STD and HIV and OMMH staff meet on a regular basis. | Ensure coordination between STD and HIV Section activities and EHDI and capacity building activities related to HIV prevention. |
| Family Planning | STD and HIV Section, Family Health Division | Develop coordinated efforts to improve the health of youth and women |

| COORDINATED EFFORT | ENTITIES INVOLVED | PURPOSE |
|--|---|---|
| <i>Governmental HIV Administrative Team (GHAT)</i> | MDH, DHS, and HSPHD staff | Ensure communication and coordination between MDH and Title I and II CARE Act grantees. |
| <i>Hispanic Health Network</i> | Latino and non-Latino professionals | Promote the health and well being of Latinos by enhancing the effectiveness and quality of services for Latinos in Minnesota. |
| <i>Joint Co-chairs Committee</i> | Co-chairs of the CCCHAP and Planning Council, MDH, DHS, and HSPHD | Ensure communication and coordination between the two planning bodies. |
| <i>Juvenile Criminal Justice System</i> | DOC, MDE, MDH, county corrections, community organizations | Promote comprehensive HIV, STD, and hepatitis prevention and control activities throughout the juvenile criminal justice system |
| <i>Latino Initiative</i> | Planning Council, Latino organizations, MDH, OMMH, HSPHD, DHS | Promote health services, awareness and education related to HIV and other health issues to the Latino community |
| <i>MDH Staff Participation in Community Networks</i> | Community AIDS Network; African World AIDS Day, Gay/Lesbian Support Network; Community Educators Network; AIDS Substance Abuse Partnership; African American Health Workers Network; Comprehensive Adolescent School Health Planning Project; Hispanic Health Network; Latino Initiative; Peer Education Network, Minnesota Prevention Network; and Men Who Have Sex With Men Outreach Worker Network | Ensure ongoing communication and interaction between MDH staff and community based networks. Provide community networks the opportunity to give feedback to MDH regarding HIV prevention efforts. |
| <i>Men Who Have Sex with Men Outreach Workers' Network</i> | MDH, MSM outreach programs | Ensure collaboration and reduce duplication of effort in outreach activities. |

| COORDINATED EFFORT | ENTITIES INVOLVED | PURPOSE |
|--|--|---|
| Minnesota AIDS Project (MAP) Public Policy Committee | MAP, interested organizations and individuals | Develop an action agenda of policy issues, educate the public, and develop recommendations for legislative or policy action. |
| Minnesota Organization on Adolescent Pregnancy, Prevention and Parenting (MOAPPP) | MOAPPP, interested organizations and professionals | Strengthen policies and programs related to adolescent pregnancy prevention, adolescent pregnancy care and adolescent parenting in Minnesota. |
| Permanent Seats on CCCHAP | Minnesota Department of Corrections (DOC), MDE and DHS | Ensure ongoing participation in the HIV prevention planning process by state agencies that provide some form of HIV education. |
| Reporting of Native American HIV/AIDS Cases to MDH | Indigenous Peoples Task Force, Great Lakes Inter-tribal Council, MDH | Assess completeness and accuracy of the reporting of HIV and other infectious disease cases from Minnesota Indian reservations, and identify possible improvements to the operation of the HIV surveillance system. |
| Sexuality and Family Life Educators | Sexual health and related organizations | Provide education resources to parents, schools and the community on subjects related to sexual health. |
| Short Term Intervention Services | Red Door Clinic, Room 111, MDH and HSPHD | Provide access to short term medical care and referral to ongoing care for newly diagnosed persons who don't have health insurance. |
| Streetworks | Youth serving organizations | Ensure collaboration and greater coverage of outreach activities. |
| STD Testing and Treatment | MDH, STD clinics, HERR grantees | Ensure that STD prevention messages are available in the community. Ensure access to STD testing and treatment for adolescents and young adults, particularly in the area with highest rates of STDs. |

| COORDINATED EFFORT | ENTITIES INVOLVED | PURPOSE |
|---|--|--|
| <i>Technical Assistance for State Corrections</i> | DOC MDH | Ensure that inmates receive effective HIV prevention education. |
| <i>Training in Greater MN</i> | DHS, HSPHD, Rural AIDS Action Network (RAAN), Minnesota AIDS Project (MAP), and MDH | Ensure that providers in Greater MN have necessary information to assist clients in accessing services. |
| <i>Tuberculosis</i> | STD and HIV Section, TB Program | Ensure medical providers have knowledge needed to screen and treat HIV/TB co-infected individuals. |
| <i>Women and Families Network</i> | West Side Community Health Services, MAP, providers serving HIV+ women and families, consumers | Ensure formal and informal partnerships to facilitate referrals and avoid duplication of effort in services for women living with HIV and their families. Provide cross training and support. |
| <i>Viral Hepatitis Integration</i> | MDH, community clinics, OMMH, tribes | Promote the integration of viral hepatitis prevention and control into the existing activities of clinical health care providers, public health agencies, and community based health promotion programs. |

Glossary.....

This glossary provides definitions for acronyms and terms that are used throughout the Minnesota Comprehensive HIV Prevention Plan.

Glossary of Acronyms

ADAP AIDS Drug Assistance Program. A program that assists people living with HIV to pay for HIV-related medications.

AIDS Acquired Immunodeficiency Syndrome. A clinical definition of illness caused by HIV, resulting from a CD4 count less than or equal to 200, or one or more diagnosed opportunistic infections.

ASO AIDS Service Organization is an organization that provides services related to preventing HIV/AIDS, and/or services to people living with HIV/AIDS.

CBO Community Based Organization (organizations that are not government agencies).

CCCHAP Community Cooperative Council on HIV/AIDS Prevention is the community planning group in Minnesota.

CDC U.S. Centers for Disease Control and Prevention is the government agency that provides funding for prevention services.

CPG Community Planning Group is a generic term for HIV prevention community planning groups across the United States.

CTR Counseling, Testing, and Referral services that consist of pre- and post-test counseling, HIV testing, and appropriate referrals.

DEBI Diffusing Effective Behavioral Interventions Project is a national-level strategy to provide high quality training and on-going technical assistance on selected evidence-based HIV/STD prevention interventions to state and community HIV/STD program staff.

DIS Disease Intervention Specialists are Minnesota Department of Health staff who contact people who have been infected with HIV and meet with those who agree to provide them with information about risk reduction and available HIV services. The DIS also elicit contact information for sexual and needle sharing partners of the HIV positive persons they meet with. The DIS contact identified partners to let them know that they are at risk (without mentioning the name of the infected person), and provide those who agree to meet with an HIV test or referral to an HIV testing site, as well as risk reduction information.

DHS Minnesota Department of Human Services is the agency that administers the Ryan White Title II and ADAP funds in Minnesota.

DOC Minnesota Department of Corrections

EIA Enzyme immunoassay. This is a standard HIV screening test and requires that blood is drawn from a vein. A reactive EIA must be used with a follow-up confirmatory test such as the Western blot to make a positive diagnosis.

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| EMA | Eligible Metropolitan Areas with populations of 500,000 or more reporting more than 2,000 AIDS cases for the past five years. EMAs are eligible to receive Ryan White CARE Act Title I funds. |
| FMPV | Female to Male Partner Violence is violence perpetrated by a girlfriend or wife against their boyfriend or husband. |
| GHAT | Governmental HIV Administrative Team, comprised of staff from MDH, DHS and Hennepin County Human Services and Public Health Department, meets bimonthly to discuss administrative issues and opportunities for linkages between prevention and care. |
| GLB | Gay, Lesbian and Bisexual persons. |
| GLBT | Gay, Lesbian, Bisexual and Transgender persons. |
| GLI | Group Level Interventions that involve risk assessment, skills building exercises, as well as education, information and support, and are provided to groups of varying sizes. |
| HAART | Highly Active Antiretroviral Treatment is the use of a combination of antiretroviral medications to treat HIV disease. |
| HAV | Hepatitis A Virus is an inflammation of the liver caused by eating or drinking something contaminated with the stool or blood of someone infected with HAV. HAV does not cause chronic liver problems. |
| HBV | Hepatitis B Virus is an inflammation of the liver caused by contact of a person's mucous membranes or blood with the blood, saliva, semen or vaginal secretions of an infected person. HBV can stay in the body for a long time – sometimes for a lifetime – and eventually cause serious liver damage. |
| HC/PI | Health Communication/Public Information involves the delivery of planned HIV prevention messages to target audiences. The focus of the messages are to build general support for safe behavior, support for personal risk reduction efforts, and/or inform persons at risk how to obtain specific services. HC/PI may be delivered through: electronic media, print media, telephone hotline, information clearinghouse, presentations, community events, and web sites and chat rooms. |
| HCV | Hepatitis C Virus is an inflammation of the liver caused by contact with the blood of an infected person. HCV can stay in the body for a long time – sometimes for a lifetime – and eventually cause serious liver damage. |
| HERR | Health Education Risk Reduction interventions provide one or more of the following components to people at risk for HIV infection or transmission: counseling, information, education, referrals, risk assessment, risk reduction tools, skills building and support. |
| HIV | Human Immunodeficiency Virus is the virus that damages the immune system and causes AIDS. |
| HRH | High Risk Heterosexual is a person who engages in high risk sexual behavior with a person of a different gender. |
| HRSA | Health Resources Services Administration is the federal agency that administers the Ryan White CARE Act. |
| HSPHD | Hennepin County Human Services and Public Health Department is the agency that administers the Ryan White Title I funds for the Minneapolis-St. Paul EMA. |

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| HPV | Human Papilloma Virus is a sexually transmitted disease that is usually harmless, but some types cause cervical cancer in women. |
| HSV | Herpes Simplex Virus is a sexually transmitted disease that can cause symptoms on the mouth or genital area. |
| IDU | Injection Drug User is someone who shoots drugs using a needle. |
| ILI | Individual Level Interventions, which assist clients in assessing risk, making plans for individual behavior change and ongoing appraisals of their own behavior, and include skills building. |
| IPV | Intimate Partner Violence is violence perpetrated by an intimate partner (spouse, boyfriend, girlfriend). |
| MDE | Minnesota Department of Education |
| MDH | Minnesota Department of Health |
| MFPV | Male to Female Partner Violence is violence perpetrated by a boyfriend or husband against their girlfriend or wife. |
| MSM | Men Who Have Sex with Men |
| MSM/W | Men Who Have Sex with Men and Women |
| OMMH | Office of Minority and Multicultural Health is the office within the MDH that administers the Eliminating Health Disparities Initiative funds targeting communities of color in Minnesota. |
| PCM | Prevention Case Management, which includes ongoing individual risk assessment and individual counseling services to reduce risk behavior, as well as support in accessing other needed services. |
| PCRS | Partner Counseling and Referral Services, which include counseling infected persons about how to prevent HIV transmission, referring patients for medical care and support services, location sexual and/or needle sharing partners identified by patient and notifying them of their risk, referring partners for testing, and counseling partners. |
| PIR | Parity, Inclusion and Representation are principles of prevention community planning regarding membership. |
| PLWH/A | People Living with HIV/AIDS |
| PSA | Public Service Announcements are free media ads places on the radio, TV, etc. |
| RFP | Request for Proposals is a document issued by funders to announce that grant funds are available and to provide specific instructions about how to apply for the funds. |
| SAMHSA | Substance Abuse Mental Health Services Administration |
| STD | Sexually Transmitted Diseases, such as gonorrhea, chlamydia, herpes, etc. |
| TA | Technical Assistance is training and information that assist people in doing their jobs or tasks better. |
| WSW | Women Who Have Sex with Women |
| WSW/M | Women Who Have Sex with Women and Men |
| YMSM | Young Men Who Have Sex with Men |

Glossary of Words

Backload A technique used to transfer part of the drug solution from one syringe to another.

Behavioral Interventions Programs that help people change or avoid behaviors that put them at risk for being infected with HIV.

Behavioral Science A science, such as psychology or sociology, that seeks to survey and predict the responses (behaviors) of individuals and groups in a given situation; i.e., “find out why people do what they do.” Behavioral science helps HIV prevention planners choose strategies that are known to help people change or avoid HIV risk behaviors.

Bisexual A person who has sexual or romantic attractions to members of both the same gender and another gender.

Co-factor Something that impacts HIV risk, including but not limited to sexual networks, socioeconomic status, level of education, stigma, immigration, population mobility, power imbalance between genders, domestic violence/sexual victimization, and perceived risk.

Community Cooperative Council on HIV/AIDS Prevention The community planning group in Minnesota that is responsible for prioritizing the target populations that are most at risk for HIV infection and co-factors that have the greatest impact on HIV risk within each target population.

Community Forum A small group method of collecting qualitative information from community members. Community forums tend to be larger and less formal than focus groups.

Community Level Interventions Community level interventions combine community organization and social marketing, and are directed at specific populations, rather than at individuals. The primary goal of these interventions is to improve health status by promoting healthy behaviors and changing those factors that negatively affect the health of a community's residents by changing group norms to improve or enhance the quality of health. Community level intervention strategies offer opportunities for peers to acquire skills in HIV risk reduction and, in turn, reinforce these abilities when they become the teachers of these same skills to others.

Co-morbidity Other diseases or conditions that indicate risky behavior or inhibit the ability to maintain safe behavior, such as substance use, mental health, sexually transmitted diseases, hepatitis B and C.

Comparison or Control Group A group to which the study or research group is compared. The control group does not receive the intervention that is being researched. The control group is compared to the group who does receive the intervention in order to measure the effectiveness of the intervention.

Contractor A person or agency funded directly by MDH (or another funding agency) to perform specific services.

Convenience Sample A form of non-probability sampling in which participants are selected because they are available. In convenience sampling, some members of the target population have a chance of being chosen, while others do not, therefore, data collected from a convenience sample may not be applicable to the target group at all.

Cultural Competence The ability of an agency or a person to work well with clients and communities of various cultures. This means more than just being sensitive or aware of a culture or cultures. It is being able to relate to people and provide interventions in a way that fits with their culture.

Cultural Group Any group of people who share a worldview, language, history or lifestyle. There are many differences within cultural groups, including factors such as gender, ethnicity, education, occupation, length of time in the United States, residence (rural, urban, suburban), and life experience.

Culture Learned behavior patterns that are shared by members of a particular group. Culture includes customs, experiences, beliefs, rituals and practices shared by a group of people. Culture can include things that are visible, like the way people look or dress. Culture also includes things like how people view their relationships with others, as well as their values and priorities.

Drop-in Center A place where members of a specific high risk population (e.g., youth, IDUs) can meet for peer support, prevention programs and other services.

Endemic A disease that occurs continuously and with predictable regularity in a specific area or population.

Environmental Outreach Doing outreach in places where the targeted population will be; for example, in bars, parks, churches/mosques/synagogues, community events, coffee shops or beauty salons.

Epidemic A disease that spreads rapidly among a large number of people in a short period of time.

Epidemiology The study of epidemics. Epidemiological information shows us which groups of people are being affected by a disease (gender, race, age, etc.)

Epi Epi is the shortened version of epidemiology or epidemiological.

Field Based Testing HIV counseling and testing that can be done anywhere – at a bar, in a park, on the street. The most commonly used tests are OraSure and OraQuick.

Focus Group A qualitative method of information collection involving a small group of people whose discussion is carefully planned and led by an experienced moderator.

Gay A person who has sexual or romantic attractions primarily to members of the same gender.

Grantee A person or group receiving funds from an outside source. The term is used to refer to health departments that receive federal funds from the CDC for HIV prevention activities, and to refer to the agencies that receive funding from MDH to provide prevention services in the community.

Group Level Interventions Health education and risk reduction counseling with groups of different sizes. GLI models can either be led by peers or by professionals. As with ILI, group interventions contain a skills building component, and assist clients in assessing their risk, making plans for behavior change and assessing their progress.

Guidance The CDC document that provides information and requirements for receiving funding for HIV prevention programs, and defines the process of HIV prevention community planning.

Harm Reduction An approach to working with clients that is respectful and non-judgmental. It recognizes the skills and power that individuals already have to make changes in their lives, but allows each person to set their own timeline for making changes. Any positive changes are acknowledged.

Health Communication/Public Information The delivery of planned HIV prevention messages through one or more mediums to target audiences. The focus of the messages are to build general support for safe behavior, support for personal risk reduction efforts, and/or inform persons at risk how to obtain specific services. HC/PI interventions may be delivered through: electronic media, print media, telephone hotline, information clearinghouse, presentations or lectures, community events, and web sites and chat rooms.

Heterosexual A person who has sexual or romantic attractions primarily to members of another gender.

Incidence The number of new infections of a disease that occur during a specified time period. Incidence can be described for the total population of Minnesota or for a specific population. For example, there were 307 new HIV infections in Minnesota from January 1, 2004 through December 31, 2004; and 90 of these cases were among women.

Incidence Rate The number of new cases of disease per population per specified time period, often expressed per 100,000 population. For example, the incidence rate among African Americans in 2004 was 34.6 per 100,000.

Individual Level Interventions Health education and risk reduction counseling provided to one individual at a time. ILI assists clients in assessing their HIV risk and making plans for individual behavior change and ongoing assessment of their behavior. ILI includes skills building components. These services can also facilitate linkages to other services that support the reduction of risk, such as substance use treatment.

Intervention An activity used to try to increase knowledge about HIV and/or support risk reduction of behaviors that could lead to being infected with HIV. The activity is usually targeted at individuals or groups of people who are at especially high risk.

Jurisdiction A geographic area that is within the responsibility of a particular government agency, such as a local public health department.

Lesbian A girl or woman who has sexual or romantic attractions primarily to members of the same gender.

Meta Analysis A method designed to increase the reliability of research by combining and analyzing the results of all known studies on the same population or intervention.

Morbidity Disease or illness, such as HIV infection or AIDS.

Mortality Deaths related to a certain condition, like AIDS.

MSM of Color Men of color (African, African American, Asian/Pacific Islander, Latino, Native American) who have sex with men.

Needs Assessment The process of collecting and analyzing information from different sources (research, articles, interviews). The information is used to identify the needs of a certain population or community.

Objective A goal that can be measured within a specific time period.

OraQuick A rapid HIV test that produces results within 20 minutes. Some OraQuick tests require a small amount of blood, and others require a swab of oral fluid.

OraSure An HIV test using a swab of oral fluid, which is sent to a lab for analysis. The results are available within 2 weeks.

Outcome Evaluation An evaluation to determine whether a specific intervention caused the expected outcomes.

Outcome Monitoring An evaluation that assesses whether the expected outcomes occur. This type of evaluation does not measure whether the intervention caused the expected outcomes.

Outreach Interventions that are designed to identify individuals who are at risk for being infected with HIV, giving them information about how they can reduce their risk, and letting them know where they can go for services that can help them change/reduce their risky behaviors. Outreach can also include field based testing.

Neovagina An artificial vagina created in male to female transsexuals who undergo gender reassignment surgery.

Pandemic An epidemic that is spread over a wide geographic area and affects a large proportion of the population.

Peer Education Peers educators are members of a target population (for example – IDU, African American males, young women) who have been trained to teach other people from the same population about HIV. Peer educators usually act as role models, demonstrating ways of thinking and acting that reduce the risk of getting HIV.

Perinatal The time period during pregnancy and birth (before, after and during delivery).

Planning Council The Minnesota HIV Services Planning Council is the community planning group responsible for prioritizing the care and service needs of people living with HIV/AIDS in Minnesota.

Prevalence The total number of people living with a specific disease at a given time. Prevalence includes both previously diagnosed and new cases of a disease. For example, at the end of 2004, there were 5,002 people known to be living with HIV/AIDS in Minnesota.

Prevalence Rate The total number of people living with a specific disease at a given time per population, often expressed per 100,000 population. For example, in 2004 the prevalence rate of HIV/AIDS among Latinos in Minnesota was 250.4 per 100,000.

Prevention Case Management Client-centered prevention activity focused on assisting clients with multiple, complex issues to adopt HIV risk reduction behaviors. PCM provides intensive, ongoing, and individualized prevention counseling, support, and assistance in accessing other needed services.

Primary Prevention Interventions designed to reduce HIV transmission from person to person or from mother to fetus.

Prioritize/Prioritization A process used to decide which populations are at highest risk and which co-factors have the greatest impact on HIV risk within each of the prioritized target populations.

Process Evaluation Evaluation designed to document whether programs were conducted according to written intervention plans. Describes content and quality of program services, who and how many were served, and client feedback.

Qualitative Data Data collected in nonnumeric form (usually narrative), such as the information collected from key informant interviews or community forums.

Quantitative Data Data that are gathered and analyzed as numbers, such as survey data and data from epidemiological reports.

Referral Giving information and assistance to a person in order to help them get a service they need (phone number, name of agency, help make a call, sometimes includes taking client to appointment).

Resource Inventory A listing or summary of information about prevention activities and related services provided by agencies to populations in a specific area, such as the state.

Risk Assessment Asking people about their life style and behaviors to determine how much risk they are at for getting HIV.

Risk Behaviors Behaviors that increase the chance of a person getting HIV; for example, having sex without using a condom, sharing needles, having sex when you're high or drunk, having a lot of sexual partners.

Risk Reduction Things that reduce a person's risk for getting HIV. For example, using a condom, cleaning needles.

Ryan White CARE Act The Ryan White Comprehensive AIDS Resources Emergency (CARE) Act is the federal legislation that provides funding for the health care and services for people living with HIV and AIDS.

Same Sex Behavior Sexual behavior that occurs between people of the same gender.

Sample A group of subjects selected from a total population with the expectation that studying this group will provide important information about the total population.

Secondary Prevention Interventions designed to help people with HIV maintain their health and slow the progression of the disease. (Interventions that help HIV+ people avoid transmission of HIV to others are considered to be primary prevention.)

Sentinel Surveillance Routine screening for a disease, such as HIV, conducted within a specific site over a period of time. The results of the surveillance provide an idea of the impact of the disease within the community.

Seroconversion The development of HIV antibodies after HIV infection, or the conversion from HIV negative from HIV positive, which usually occurs within 3 months of infection.

Serodiscordant Persons in a sexual relationship of different HIV status; one person is HIV positive and the other is not.

Seroprevalence The percentage of people living with HIV/AIDS within a specific target population during a defined period of time (e.g., a month, a year, etc.). Seroprevalence studies test blood samples from at risk populations to find the percentage of sampled persons infected, regardless of when infection occurred. (sero = blood)

Sex Worker A person who exchanges sex for money (commercial sex worker, prostitute), drugs, shelter, etc. This word may refer to persons of any gender or sexual orientation.

Street Outreach Giving people on the street information about HIV, condoms, bleach kits, and information about where they can go for services.

Surveillance Data Statistics on the number of people with HIV, AIDS, or other reportable diseases in a given area. The statistics are based on reports to public health departments.

Survey A method to collect self-reported data that may be conducted by mail or in person.

Target Population Groups of people who are the focus of HIV prevention efforts because of their high rates of HIV infection, risk behaviors, and other factors.

Technical Assistance Training and information that helps people do their jobs better.

Transgender A person who self-identifies their gender as being different from their biological sex. For example, a person who was born a man and identifies herself as a woman. Some transgender people use hormone treatments, have gender reassignment surgery (a sex change), or change their appearance; others do not.

Western Blot An HIV confirmatory test used to make positive diagnosis. The Western Blot test is usually conducted after an initial screening test indicates a positive reading.

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