State of Minnesota Childhood Lead Poisoning Elimination Plan Update

September 2009

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Elimination Plan Update

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List of Acronyms

ABLES – Adult Blood Lead Epidemiology and Surveillance program
ACOG – American College of Obstetricians and Gynecologists
BLIS – MDH Blood Lead Information System
CAP – Community Action Program (locally based organizations)
CDBG – Community Development Block Grant
CDC – U.S. Centers for Disease Control and Prevention
CLPPP – Childhood Lead Poisoning Prevention Program (CDC grant to MDH)
CM Guidelines – MDH Case Management Guidelines
CPSC – Consumer Products Safety Commission
C&TC – Child and Teen Check-up (Minnesota equivalent of federal EPSDT)
DEED – Minnesota Department of Employment and Economic Development
DHS – Minnesota Department of Human Services
DNR – Minnesota Department of Natural Resources
EBLL – Elevated Blood Lead Level (defined by Minnesota statute as > 10 ug/dL)
ECHO – Emergency Community Health Outreach
EPA – U.S. Environmental Protection Agency
HEPA – High Efficiency Particulate Air vacuum
HHSC – Healthy Housing Specialist Credential
HPHH – MDH Healthy Places, Healthy Homes effort
HUD – U.S. Department of Housing and Urban Development
LHR – Lead hazard reduction
LSWP – Lead-safe work practices
MA – Medical Assistance (Minnesota equivalent of Medicaid)
MDH – Minnesota Department of Health
MEDSS – MDH Minnesota Electronic Disease Surveillance System
MHFA – Minnesota Housing Finance Agency
MPCA – Minnesota Pollution Control Agency
NCHH – National Center for Healthy Housing
RRP – EPA Renovation, Repair, and Painting rule
SRC - Sustainable Resources Center
StS – Minnesota Sentence to Serve program
TSCA – Toxic Substances Control Act
USDA – United States Department of Agriculture (Extension Service)
WIC – Women, Infants and Children (Supplemental Nutrition Programs)

Additional definitions for lead in Minnesota can be found in statute (Minn. Stat. 144.9501) and in the MDH Childhood Blood Lead Case Management Guidelines for Minnesota at http://www.health.state.mn.us/divs/eh/lead/reports/index.html#case .

Introduction

Although lead poisoning is preventable and rates are declining in Minnesota, children living in substandard, pre-1950 housing continue to be disproportionately affected by lead.

The Minnesota Department of Health (MDH) Childhood Lead Poisoning Prevention Program (CLPPP) worked with a wide range of partners from public and private organizations to develop a plan to eliminate statewide childhood lead poisoning by 2010. The "State of Minnesota Childhood Lead Poisoning Elimination Plan" (Plan) contributes to meeting the national goal established by the U.S. Centers of Disease Control and Prevention (CDC) of eliminating childhood lead poisoning as a public health problem by 2010. The Plan was released in 2004, and updated in 2006 and 2008. This report documents progress on Plan objectives from July 2008 to June 2009.

The Plan strongly advocates a collaborative, housing-based approach to primary prevention of childhood lead exposure, while still incorporating ongoing programs that are based on secondary prevention models. The vision statement for the Plan is:

> "To create a lead-safe Minnesota where all children have blood lead levels below 10 ug/dL by the year 2010."

The definition of "elimination" is:

> "Lead poisoning will be considered eliminated when zero percent of at-risk children who are less than 72 months of age have blood lead levels > 10 ug/dL."

The definition of who is "at-risk" may change over time based on 1) changes in trends in elevated blood lead levels (EBLL) determined by ongoing analyses of blood lead surveillance and related data; 2) ongoing childhood lead poisoning prevention activities by governmental and nongovernmental agencies; and 3) changes to federal or state guidelines regarding acceptable levels of childhood blood lead.

The Plan contains goals that address five broad focus areas:

Goal	Focus Area	# of tasks
I.	Strategies for Lead Education and Training	22
II.	Strategies for Identifying At-Risk Properties and Children	34
III.	Strategies to Better Incorporate Lead Paint Assessment and Control into Housing Activities and Infrastructure	14
IV.	Strategies to Identify Resources to Increase the Supply of Lead-Safe Housing in Minnesota	22
V.	Strategies to Respond to Emerging Issues, such as New Research, Legislation, Trends, Population Conditions and Other Developments	14

Task status was simplified in the 2008 Plan to only three colors: red (for scheduled for later fiscal years), yellow (for in planning or implementation), or green (for completed or ongoing). In

addition, tasks that were judged to be redundant were consolidated and several tasks that were completed or deemed too problematic to implement were removed. There are 106 individual tasks in the 2008 Plan (down from 120 in the 2006 Plan) distributed over the five primary goal areas. In the 2008 Plan 55 tasks (52 %) were classified as ongoing (green) status, 30 (28 %) were classified as in planning (yellow) status, and 21 (20 %) were considered for later years (red). Therefore, over 80 % of the tasks in the 2008 Plan were either ongoing or being actively planned/implemented. The greatest number of tasks and the highest percentage being classed as "ongoing" were in Goals I (Lead Education and Training) and II (Identifying At-Risk Properties and Children).

The 2008 Plan is not reproduced here and is available at the MDH Lead Program website at: http://www.health.state.mn.us/divs/eh/lead/reports/2010planfinal2008.pdf . Specific tasks associated with the Goals/Objectives reviewed in the remainder of this document and their implementation status can be found in the 2008 Plan. If there are questions regarding a particular Goal/Objective, it is best to review the 2008 Plan for background. Additional data generated in 2008 (e.g. number of children screened per county, pilot projects addressing high-risk populations) is in the Minnesota Blood Lead Annual Surveillance Report for 2008 (at: http://www.health.state.mn.us/divs/eh/lead/reports/index.html#surv)

Data was collected from collaborating partners in 2009 to assess progress on individual tasks in the 2008 Plan. Efforts for 2009 are documented for each objective in the 2008 Plan using a tracking table. The table compares the status of individual tasks within that objective. The number of tasks within an objective reflects the amount of statewide activity. An example table representing 7 tasks in an objective is presented below. The row titled "2008 Plan" indicates the status of the tasks as they are presented in the 2008 Plan.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	4	3	0
2009 Status	5	2	0

The row titled "2009 Status" reflects changes in the status of individual tasks that occurred during 2009. For example, in the table above, one of the "in planning" tasks has been successfully implemented and is now counted as an "ongoing" activity. Tasks were not added during 2009. Therefore the total number of tasks in a row remains constant between years. A new version of the Plan will be issued in 2010 based on feedback from this update and new activities from all statewide partners.

The overall distribution of the status of all tasks in 2009 reflects sustained efforts to institutionalize lead program efforts in to ongoing routine practice. Specifically, in 2009 there are 68 tasks (64 %) classified as ongoing (green), 23 (22 %) classified as in planning (yellow) status, and 15 (14 %) considered for later years (red). The task status distribution in 2009 documents a 12% increase in "ongoing" tasks from 2008 to 2009.

Goal I: Strategies for Lead Education and Training

The intent of Goal I is to ensure that appropriate educational materials are developed and training is provided to meet the needs of public health professionals, regulating agencies, health care providers, property owners, lead-safe work practitioners, and the general public. General concepts for lead education and training are based on established best practices and are supplemented with Minnesota-specific data whenever possible.

In 2008, tasks in Goal I were distributed as 64 % ongoing (green), 23 % in planning (yellow), and 13 % for later years (red). The emphasis on current, active program activities reflects the high importance placed on lead education and training in Minnesota. In 2009, the status of tasks in Goal I improved to 73 % ongoing, 14 % in planning, and 13 % for later years.

Objective A: Increase awareness of and compliance with the Federal Pre-Renovation Disclosure Law 406(b) and 1018 Disclosure Law among targeted audiences and the general public.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	4	3	0
2009 Status	4	3	0

If conducted improperly, renovations in housing with lead-based paint can create serious health hazards to workers and occupants by releasing large amounts of lead dust and debris. Section 406 of the federal Toxic Substances Control Act (TSCA) established requirements for renovators to distribute a lead hazard information pamphlet to housing owners and occupants before conducting renovations in pre-1978 housing. The final rule became effective in 1999 and Environmental Protection Agency (EPA) has published a number of "Interpretive Guidance" documents since.

Although there was no change in the status of tasks between 2008 and 2009, raising awareness of federal lead laws remains a priority in Minnesota. A fundamental barrier to assisting with compliance with TSCA 406(b) goals is the limitation put on data sharing by the private classification of statewide surveillance data (see MS 144.9502 Subd 9). Summary data can be (and is) shared with EPA and other enforcement agencies to assist in compliance efforts. Ultimate resolution of data privacy barriers in Minnesota will require legislative action.

Ongoing Minnesota efforts at educating the general public and contractors regarding disclosure included providing background information at a number of outreach venues, including the Minneapolis Home and Garden Show, Minnesota State Fair, Living Green Expo, and numerous regional and local events. Lead refresher workshops have also been regularly offered to help ensure awareness of and compliance with disclosure requirements. The EPA booklet "Protect Your Family from Lead in Your Home" is available on the MDH Lead Program website.

MDH also provided copies of the new EPA Renovation, Repair, and Painting (RRP) regulation pamphlet titled "Renovate Right" to general contractors, local units of government, property

owners, and housing programs in Minnesota. The Renovate Right pamphlet replaced the EPA/Housing and Urban Development (HUD) pamphlet "Protect Your Family from Lead in the Home" in December 2008 and is used for pre-renovation education with respect to TSCA 406b. A total of 650 Renovate Right pamphlets were distributed by MDH during education events and direct mailings to interested parties. The MDH lead program web site contains Pre-renovation program information, including information on the new RRP, 406b, and 1018 regulations. During the reporting period, approximately 3,000 visits and downloads occurred on the MDH lead website for information on RRP and other federal lead regulations.

The Sustainable Resources Center (SRC) continues to be very active in promoting lead education and training statewide. From September 2008 through June 2009, SRC offered 16 Lead Safe Work Practices (LSWP) courses with 283 participants. Each student received a copy of "Protect Your Family from Lead in Your Home." The requirements of 406(b)/1018 were heavily emphasized during LSWP training, with education about disclosure and the showing of a local newscast focusing on the responsibility of rental property owners.

The City of Minneapolis routinely gives out information on federal reporting requirements at all lead risk assessments (there were 118 blood lead test results > 15 ug/dL in Minneapolis in 2008). The occupants of all units enrolled in the Minneapolis/Hennepin County HUD Lead Hazard Control grants received lead education material explaining state and federal lead requirements. The Truth in Sale of Housing forms used by the City of Minneapolis also helped ensure compliance with federal regulations by providing a check off for 1018 disclosure.

In St. Paul/Ramsey County the EPA brochure "Protect Your Family From Lead In Your Home" Spanish translation was distributed at a Latino Health Fair in June 2008. Additionally, the brochure was distributed at Women, Infants and Children (WIC) clinics located in downtown St. Paul and on the East Side per a request from county WIC staff.

Objective B: Ensure that health care providers statewide know and follow current guidelines on blood lead screening, medical case management, and treatment.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	5	0	0
2009 Status	5	0	0

Lead Program progress was sustained for Objective B during 2008 as reflected by all tasks remaining in the "ongoing" category.

The Blood Lead Screening Guidelines for Minnesota (Screening Guidelines) were officially released in March 2000. They recommend physicians order blood tests for 1) children residing in specific geographic areas that have a high rate of elevated blood lead cases, and 2) children matching specific demographic groups that have a high rate of elevated blood lead. The Screening Guidelines were reviewed by a panel of partners from state and local jurisdictions in early 2008. Although EBLL rates in Minneapolis and St. Paul have decreased substantially since 2000, the group felt that given the education and outreach that has occurred over the past several

years, the benefits of maintaining a universal testing recommendation for these two cities outweighed the benefits that might be gained by recommending targeted blood lead testing for these areas. Therefore, the Screening Guidelines were not changed.

In June 2004, MDH developed Blood Lead Screening Guidelines for Pregnant Women in Minnesota. They are designed for Obstetrician/Gynecologist physicians, nurse practitioners, and midwives to assist them in screening and treating pregnant women for elevated blood lead levels. In 2008 MDH received several requests from other state lead programs for information on the guidelines.

The Childhood Blood Lead Case Management Guidelines for Minnesota (CM Guidelines) were officially released in June 2001. In 2006, the guidelines were revised to reflect current state statute, and the knowledge gained in the previous five years of implementation. The State Case Monitor works with local public health agencies and assessing agencies on a daily basis to manage elevated blood lead cases and implement the guidelines. Significant time was spent evaluating the impact of a proposed legislative initiative to add recommendations to the CM Guidelines. No bills passed in the 2009 session.

The Childhood Blood Lead Clinical Treatment Guidelines for Minnesota were officially released in July 2001. They represent the consensus opinion of eight physicians experienced in treating patients with an elevated blood lead level. The City of Minneapolis is helping to coordinate medical and environmental work by faxing a 1-2 line summary of the Risk Assessment done at the residence of a patient to their clinic. The Risk Assessment summary helps health care providers better understand the lead exposure conditions for their patients. Legislation was introduced in 2009 (not passed) to increase the recommended actions to be taken for blood lead results between 5 and 10 ug/dL.

In addition to information on responses to elevated blood lead results, both the Case Management and Clinical Treatment Guidelines have incorporated recommendations for actions related to blood lead results between 5 and 10 ug/dL. All of the guidelines are available at the MDH Lead Program website at: http://www.health.state.mn.us/divs/eh/lead/reports/index.html .

St. Paul/Ramsey County gave “Provider Packets” to each of Ramsey County’s Child & Teen Check-up participating clinics. Over 55 clinics visited. Information included in the packet:

- MDH Screening, Case Management and Treatment Guidelines
- MDH Reporting Requirements
- Treatment Support contact information
- Ramsey County incidence map
- Child and Teen Check-up Fact Sheet on lead screening
- Routine and Periodic Risk Questionnaire
- Emergency and Community Health Outreach (ECHO) DVD “Lead Safe Housing Equals Lead Free Kids”

In July of 2009 St. Paul/Ramsey County will be presenting at a local “Lunch and Learn” series addressing the importance of lead screening at the appropriate age and stage of development.

Objective C: Train property owners and contractors in lead-safe maintenance and work practices.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	1	1	1
2009 Status	2	0	1

SRC continues to offer continuing education credit hours to residential building contractors. This has significantly increased attendance at the LSWP classes.

MDH maintains a number of fact sheets and links to assist property owners and contractors in performing lead-safe work. The background fact sheets targeted to the general public are at: http://www.health.state.mn.us/divs/eh/lead/homes/ while the list of training opportunities for lead professionals is at: http://www.health.state.mn.us/divs/eh/lead/prof/index.html .

The city of Minneapolis recognized that more widespread voluntary adoption of lead safe work practices was needed in order to prevent lead poisonings. To address this issue a city ordinance was passed that requires rental property owners to provide certification that the person who completes or supervises work to repair chipping and peeling paint in any pre-1978 rental property be certified in lead safe work practices. Regular classes hosted by Minneapolis to new rental property owners provide information on the 1018 and the 406(b) requirement. Specific steps in the ordinance include:

- The city shall actively pursue grant funding and other resources to provide lead safe work practices trainings for free or at a nominal cost to contractors, homeowners and all interested parties in addition to rental property owners and their agents;

- All rental property owners and home owners issued notices of violation for chipping and peeling paint may be provided the following information as part of the notice:

  (1) Information on available lead safe work practices training programs offered by providers recognized by the director of inspections;
  (2) A regularly-updated list of local workers and firms licensed or certified in lead safe work practices;
  (3) Information on obtaining HEPA (High-Efficiency Particulate Air)-filter vacuums at discounted rates from participating community sites; and
  (4) An explanation of any available rehabilitation and grant resources to address and mitigate lead in residential properties.

For the reporting period MDH provided 30 one-hour lead presentations to Minnesota licensed general contractors throughout Minnesota. The purpose of the presentations was to educate general contractors and other construction trades on the basics of lead in paint, health effects,

lead safe practices, and an overview of EPA's RRP regulation. The presentation was approved by the Department of Labor and Industry for continuing education credits for new contractors or contractors seeking renewal. Some of these presentations were conducted in collaboration with the Minnesota Builders Association. One presentation was held in Nett Lake at the request of the Bois Forte Indian Reservation. Approximately 925 people attended these presentations.

Minnesota has provided comments to EPA for developing and implementing a lead education effort targeted at hardware stores. MDH supported a project several years ago targeting hardware stores (specifically, the "do-it-yourself" population). Experience gained from the MDH hardware store project was forwarded on to EPA. The Minneapolis LSWP training and the MDH RRP effort shifted task C.2 from "in planning" to "ongoing" status.

Objective D: Increase the supply of licensed and certified lead professionals, including lead sampling technicians.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	2	1	0
2009 Status	2	0	1

In May, 2009, SRC partnered with the Hennepin County Department of Corrections, through their "Sentence to Serve" (StS) program. This program selects offenders who have few job skills and little to no job experience and trains them in building and renovating among other activities. According to the director of StS the program has less than a 6% recidivism rate for males who complete the program and less than 1% recidivism rate for women inmates. SRC trained a crew of male inmates and several foreman in LSWP. The StS program has at least three more crews they would like to have trained in LSWP.

St. Paul/Ramsey County Public Health, using funds provided by the MDH CLPP, conducted a project to increase the capacity and expertise of contractors that can competitively bid on lead hazard control primary prevention projects managed by neighborhood housing agencies. The specific goals of the project were to:

- Provide support for four window installation contractors to attend Lead Supervisor Training.
- Conduct two sessions of lead safe work practices training to workers and staff of the four new contractors and several existing contractors. (20 individuals).
- Provide funding to two neighborhood housing agencies in targeted census tracts that would help defray labor costs and follow-up contractor training costs for primary prevention activities on 16 homes.

The semi-annual training for home inspectors and truth-in-sale evaluators was investigated by St. Paul/Ramsey County and found to be infeasible at this time due to uncertainty over the specifics of implementing the EPA RRP rule. Therefore, one task was downgraded from "in planning" to "later years." Once training requirements for the RRP rule are established, plans will be made to ensure that complimentary lead hazard reduction training is offered.

MDH continued to approve and issue training course permits and license/certify lead professionals (total = 952):

- 11 training courses permitted
- 197 certified firm certificates issued
- 744 licenses issued (includes a significant increase in lead supervisors – 379)

Objective E: Provide messages to the general public that make the connection between childhood lead poisoning and lead paint in pre-1978 housing.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	2	0	2
2009 Status	3	0	1

The MDH and Minnesota Department of Human Services (DHS) developed an online training for the lead poisoning prevention component of the Child and Teen Checkups (C&TC) Program. The training targeting public health nurses is designed as a reference to promote appropriate blood lead screening and testing for those Minnesota children and youth who are eligible for Medical Assistance (MA) and MinnesotaCare and who are enrolled in the C&TC program. The training will be available online in late 2009. Upon completion of this training, participants should be able to:

- Identify three risk factors for elevated blood lead levels in children
- State the blood lead level that is defined as elevated by CDC and MDH
- Describe three potential health effects of elevated childhood blood lead levels
- Identify the only method that can accurately determine whether a child has been exposed to lead
- List the required ages to receive blood lead testing in children who are enrolled in MA or MinnesotaCare and who are eligible to receive C&TC.

The MDH Lead Program webpage (www.health.state.mn.us/lead) is regularly updated with Hot Topics, updated information and links, and other resources to assist the general public in understanding lead risks and reducing exposures. MDH has received numerous anecdotal reports from other state lead programs and national lead partners regarding the high quality, timeliness, and usability of the MDH Lead Program webpage. In 2008 the MDH Lead Program webpage was named by "Government Computer News" as a "Great State and Local Site." For 2008 there were 85,212 hits, with the most visited pages being "Removing Lead Paint from Exterior Surfaces", "Lead Home Page" and the "Hot Topics" page. The most downloaded files were:

- 2007 Annual Blood Lead Surveillance Report
- Minnesota Childhood Lead Poisoning Elimination Plan
- Steps to Reduce Lead Poisoning (fact sheet; English and Spanish)
- Elevated Blood Lead Levels in Minnesota and the Medicaid Population

Lead education material was provided by SRC at 33 events (puppet shows, health fairs) reaching 1,204 people and 16 LSWP courses reaching 283 people. In addition, two Essentials for Healthy Homes Practitioners Courses were offered (March and June, 2009) with 55 participants. Educational outreach events were also held throughout the state including: St. Cloud, Buffalo, Sauk Rapids, St. Paul, Minneapolis, Gaylord, Chisago, Blaine, Anoka, St. Michael, Collegeville, Melrose, White Bear Lake, Lakeville, Fairfax, Brooklyn Park, Rosemount, Golden Valley, Inver Grove Heights, Milaca, Grand Rapids, Rochester, and Lake Elmo.

Goal II: Strategies for Identifying at-Risk Properties and Children

The intent of Goal II is to ensure that all available data are used to target limited resources for screening, testing, education, and compliance. This involves maintaining the current statewide surveillance system, providing data in accordance with the limits of Minnesota's strict privacy restrictions, and collaborating with state and local housing agencies to ensure that at-risk properties are managed in a way that minimizes exposure to lead.

In 2008, tasks in Goal II were distributed as 72 % ongoing (green), 25 % in planning (yellow), and 3 % for later years (red). As with Goal I, the emphasis on current, active program activities in Goal II reflects a strong commitment to finding and mitigating lead hazards. In 2009, the tasks in Goal II improved to 82 % ongoing, 15 % in planning, and 3 % for later years.

Objective A: Continue to maintain and improve the statewide blood lead surveillance system.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	6	6	0
2009 Status	8	4	0

MDH maintains a blood lead information system (BLIS) for the purpose of monitoring trends in blood lead levels in adults and children in Minnesota. Analyzing laboratories submit results to the MDH lead program, as mandated by Minnesota Statute 144.9502. The data are maintained in an Oracle software database platform that allows for high data security and is compatible with other current state agency systems for data transfer. As of the end of 2008 the blood lead database contained over 1,000,000 records of blood lead test results from almost 900,000 individual Minnesota residents dating back to 1992. In 2008 there were 117,775 total blood lead tests reported to the MDH BLIS. The tests were received from 60 separate laboratories; 39,384 (33%) received on paper through mail or fax and 78,391 (67%) received through electronic reporting (mailed disks, encrypted email, or secure website downloads). A total of 21,471 tests (18% of the total) were received from 37 clinics using ESA LeadCare analyzers. The tests received by MDH consisted of 86,534 capillary specimens (73%), 28,833 venous specimens (24%), and 2,408 tests of unknown type (2.0%).

Ongoing MDH CLPP tasks include generation of the Annual Surveillance Report (available at: www.health.state.mn.us/divs/eh/lead/reports/index.html#surv), annual data quality report (sent to all reporting analytical labs), maintenance/enhancements to the software platform, and producing

the annual "data year" to be used for research purposes. An evaluation of the surveillance system is conducted annually with a complete report being issued periodically (the most recent report was in 2004).

Within the past 6 months, the St. Paul/Ramsey County lead program began using an electronic medical record system, which allows for enhanced communication between Ramsey County Childhood Lead Poisoning Prevention staff (Medical case management) and the Ramsey County Lead Hazard Team (home investigation). Because medical case managers now have improved access to environmental information, task A.9 was changed from "in planning" to "ongoing."

Collaboration between surveillance and compliance staff at MDH was promoted by developing interoperability between data sets. Regular meetings are held to ensure all cases are managed efficiently and in coordination with local health agencies. In addition, the MDH Lead Program has begun planning for integration of BLIS in to the newly developed Minnesota Electronic Disease Surveillance System (MEDSS). Active planning for MEDSS implementation resulted in task A.7 changing from "in planning" status to "ongoing."

Objective B: Promote blood lead screening for at-risk children and pregnant women and increase compliance with existing screening, case management, treatment and pregnancy guidelines.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	10	1	1
2009 Status	11	0	1

As described in Goal I.B above, MDH maintains statewide guidelines for screening, case management, and clinical treatment of childhood lead poisoning. Statewide case management is conducted by the assessing agencies and local public health agencies and is coordinated through the State Case Monitor at MDH.

St. Paul/Ramsey County was very active in targeting educational opportunities towards high risk and underserved populations. Events where they distributed lead educational material and the number of participants include:

- Normady Park Early Childhood Family Education (ECFE) Baby Shower - 20
- Health Start - Met with Director Gloria Ferguson
- Randolf Heights ECFE Presentation - 64
- Karen Community Baby Shower - 30
- Grand Rounds Presentation to Ramsey County Public Health Nurses – 30
- Sacred Heart Health Fair (Latino) - 350
- Greater Frogtown CDC Garden Party - 100
- Project Homeless Connect - 1000

Planned future educational outreach by St. Paul/Ramsey county for summer 2009 include:

- Rondo Days – expect 1500
- Rice Street Festival – expect 400
- Healthy Heart Fair (Fire Station #4) – expect 100
- Frogtown Health Fair – expect 400. Some of these have been in conjunction with C&TC and other collaborations where increasing lead testing was an objective and one of the end results. SRC has also done live interviews in Spanish and some are intended to promote specific lead testing and education events (e.g. Lead Week, Health-o-ween).

Minneapolis is very active in promoting lead hazard reduction and screening. Efforts in Minneapolis include conducting door-to-door contacts to encourage testing of children (universal screening is recommended for Minneapolis), enrolling eligible properties in HUD grants, and providing education on lead poisoning prevention. Since September 2008 the City of Minneapolis collaborated with SRC to visit 26 clinics through the "Minneapolis Project for Lead-Safe Kids." The project goals are to increase lead testing for 1 and 2 year olds and provide incentives and lead educational materials to clinics in order to prevent lead poisoning. Clinics are encouraged to refer patients to SRC for In-Home Visits and preventative lead education information. The project is funded by the Medica Foundation.

MDH continues to link names of children in surveillance data with information from partners to assure data quality, assess trends, identify opportunities for increased screening, and promote compliance with current screening guidelines and regulations. Partners include the State Medicaid agency (Department of Human Services), and a number of health plans (UCare, Medica, HealthPartners, Blue Cross/Blue Shield, South Country Health Alliance). Reports detailing results of matching with Medicaid for 1995 – 1998 and for 1999 – 2003 can be found at: http://www.health.state.mn.us/divs/eh/lead/reports/index.html#medicaid . Yearly data are found in each Annual Report.

St. Paul/Ramsey county has taken a number of steps to educate health care providers about mandatory screening, including giving lead poisoning prevention information and Minnesota C&TC fact sheets to participating provider clinics, providing individual telephone consulting with individual providers, attending a monthly C&TC meeting with regional health plans, and merging the Ramsey county C&TC program with the lead poisoning prevention program. These steps, along with those taken by other partners, shifted the status of task B.11 from "in planning" to "ongoing" status.

Objective C: Use data about housing age, population and income to identify properties that may have lead hazards, perform risk assessments and implement primary prevention.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	8	2	0
2009 Status	9	1	0

An assessing agency has the authority and responsibility to conduct lead risk assessments in response to reports of children or pregnant women with elevated blood lead levels. All assessing

agencies in Minnesota (there are eight) continue to address lead hazards identified through risk assessments done on all eligible cases within their jurisdictions (typically venous results > 15 ug/dL). As resources allow and at the discretion of the local assessing agency, advisory assessments are done for results below the required level of 15 ug/dL.

SRC has developed an educational protocol that uses the home as an educational tool. This method allows the trained lead educator to perform a visual inspection on the home while discussing potentially dangerous areas of the home with the family. In the past year SRC Education Staff provided 192 in-home education visits for families with lead exposure risks. The in-home education visits consist of lead poisoning prevention education, lead-safe cleaning demonstrations using the two bucket system (then leaving the cleaning kit for the family), preliminary dust wipe samples, advocacy and resource referral. Many of the families qualify for the lead hazard control grant programs and are referred into SRC's housing program or another similar program.

Hennepin County continues to geo-code lead surveillance data to help characterize high-risk neighborhoods and populations. All Minnesota HUD grantees have established relationships with Section 8 housing programs within their jurisdictions to help ensure that lead risks are properly addressed. Data are gathered documenting properties that receive lead hazard reduction through HUD grants, causing task C.7 to go from "in planning" status to "ongoing."

Goal III: Strategies to Better Incorporate Lead Paint Assessment and Control into Housing Activities and Infrastructure

Goal III intends to increase collaboration between health agencies and housing agencies so that lead exposure risks are more efficiently identified and mitigated. In 2008, tasks in Goal III were distributed as 36 % ongoing (green), 21 % in planning (yellow), and 43 % for later years (red). In 2009, the tasks in Goal III improved slightly to 43 % ongoing, 21 % in planning, and 36 % for later years.

The 2000 Census indicates there are 958,985 owner-occupied units built before 1980 and 357,059 occupied rental units built before 1980. The median year built is 1969 and 1970, respectively. Federal law permitted lead-based paint to be used in residential structures before 1978, so every residential unit built before 1978 (approximately 1.3 million) potentially could contain lead-based paint and lead-based paint hazards.

Objective A: Ensure that lead paint assessment, control and compliance are integrated into housing code and policy.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	2	1	3
2009 Status	2	1	3

According to the 2007 State of Minnesota Consolidated Plan for Housing and Community Development, federally funded programs within the Department of Employment and Economic

Development (DEED) and the Minnesota Housing Finance Agency (MHFA) comply with the lead-based paint requirements of 24 CFR part 35. Lead-hazard reduction is eligible for state-funded property improvement and rehabilitation loan programs. In December 2004, the MHFA board of directors approved a lead-based paint policy which requires compliance with the HUD lead rule at 24 CFR part 35 for state-funded programs that have health and safety requirements. That policy is being implemented as funding becomes available for affected programs.

The state continues to develop the infrastructure that is required for lead-safe housing by:

- Providing Community Development Block Grant (CDBG) funds to support training of rehabilitation contractors and staffs of grantees.
- Arranging for the provision of free training on lead-safe work practices for contractors and building maintenance personnel.

In Minneapolis LSWP training was offered to Regulatory Services and Section 8 staff and annual in-house training on lead paint hazard recognition was provided to City housing inspectors. The goal was to educate inspectors on the dangers of lead and how to address lead problems in housing where painting, remodeling and renovation is being done. In addition to LSWP training, orders issued by the City of Minneapolis for Housing and Fire inspections include handouts on available Lead Hazard Reduction (LHR) funding. Efforts in Minneapolis have helped increase awareness of lead hazards in City housing/inspection staff and residents, leading to prevention of lead exposure.

Objective B: Ensure compliance with and enforcement of lead paint laws.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	3	1	2
2009 Status	4	1	1

The MDH Lead Compliance Program ensures that the public receives safe and appropriate lead hazard reduction, evaluation, and analytical services according to state regulations, and that the services are provided by trained and licensed personnel and certified firms. The program licenses lead risk assessors, lead inspectors, lead workers, lead supervisors, lead project designers, and certifies firms who conduct regulated lead work. In addition, the Lead Compliance Program approves initial and refresher lead training courses for these disciplines.

MDH has started collecting data from statewide partners on their environmental assessments to assist in evaluating high risk areas, identify areas of collaboration, and help ensure that a consistent process is used in implementing lead paint laws. Data are provided as requested and within data privacy limitations to identify locations of multiple EBLL cases for compliance follow-up. Therefore, task B.5 has changed from “red” status to “yellow.”

MDH received approval from the state legislature in May 2009 to adopt the EPA RRP and the Pre-Renovation Education Rule. MDH amended Minnesota Statutes 144.9501 to 144.9509 to include language to adopt the federal requirements set forth in TSCA 402 (b)(3) and TSCA

406(b). MDH is currently in the process of developing partnerships and collaborations in Minnesota with associations and organizations to facilitate stakeholder meetings as it relates to RRP rulemaking. Therefore task B.6 has changed from "in planning" status to "ongoing" status.

Objective C: Identify partners who inspect family housing (single and multi) and encourage them to implement lead paint assessment and lead-safe work practices policies.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	0	1	1
2009 Status	0	1	1

The projects described in Goal I.B and I.C above have worked to raise awareness of lead risks and increase the capacity to employ lead-safe work practices as part of routine maintenance and rehabilitation efforts. The Minnesota Multi-Housing Association continues to be an active partner in evaluating efficient approaches to removing lead risks and developing policy approaches to apply limited resources most effectively. No significant change has occurred with respect to tasks in Objective C.

Goal IV: Strategies to Identify Resources to Increase the Supply of Lead-Safe Housing in Minnesota

Goal IV seeks to sustain the resources needed, both financial and collaborative, to maintain lead poisoning prevention programs across the state. Minnesota has historically been successful in competing for HUD LHR and Lead Demonstration funding, which are the primary federal funding sources for addressing housing-based lead risks. There were a number of legislative proposals in recent legislative sessions that sought to increase the available resources to address lead poisoning prevention.

In 2008, tasks in Goal IV were distributed as 32 % ongoing (green), 36 % in planning (yellow), and 32 % for later years (red). In 2009, the tasks in Goal IV improved to 50 % ongoing, 27 % in planning, and 23 % for later years.

Objective A: Improve coordination among DHS, CAP, DEED, HUD, USDA, SRC, MHFA, public health and lead hazard control programs.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	2	3	5
2009 Status	4	2	4

Each HUD lead hazard control grant in Minnesota is part of a comprehensive approach to reducing lead hazards in Minnesota. This includes state agencies, Minneapolis, St. Paul, and Hennepin County (all of which currently have HUD funding for lead). Periodic meetings are

held to help ensure coordination of efforts between all grantees. All grantees in Minnesota assist each other in finding ways to resolve issues and overcome barriers to success.

The MHFA and DEED continue to implement HUD lead hazard control requirements in all state-funded housing programs with a health and safety component, consistent with the State Consolidated Plan for Housing and Community Development. A key outcome of the recently completed DEED LHR grant from HUD was increased communication between local health agencies and local housing agencies with respect to coordinating responses to lead risks in housing. The increased communication helped housing agency staff better understand and plan to avoid hazardous exposures and helped health agency staff find resources to address housing-based health threats.

In Minneapolis, properties inspected under the current Healthy Housing grant and found to have lead hazards are referred to lead hazard control grant programs within the City. Future applications for lead hazard control and healthy homes will continue to include referrals between City agencies. As mentioned in Goal II, Objective C, MDH implementation of MEDSS will result in expanded capacity for local agencies to receive and assess lead data. The work on MEDSS resulted in task A.3 moving from “later years” status to “ongoing” status.

Information on certified of lead firms, licensed individuals to perform lead work, and training and certification requirements (for Lead Worker, Supervisor, Inspector, Risk Assessor, or Project Designer) is available in a searchable format and using a linked map at the MDH Lead Program website, causing task A.7 moving from “in planning” to “ongoing” status.

Objective B: Leverage private and nonprofit funding mechanisms to identify and control lead paint hazards.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	1	2	1
2009 Status	2	2	0

The largest non-profit organization in Minnesota addressing lead hazards is SRC. According to their website, SRC's Vision is that all families with low-incomes in Minnesota are healthy and live in healthy home environments. The goal of SRC is to have families be able to identify in-home environmental hazards and have the information, skills and resources to be safe from the adverse effects. In November 2008, SRC was awarded a $10,000 grant from the Medica Foundation for lead testing in underserved communities and receives state funding to perform lead education and lead hazard reduction using “swab teams” (defined in MS 144.9503).

MDH evaluated its videos and DVD materials with respect to lead-safe practices for homeowners and property owners. The current versions of the in-house videos and DVD’s are outdated based on recent changes in the RRP and pre-renovation regulations. MDH is working with the Builders Association of Minnesota to create an up-to-date version that reflects current state and federal regulations and will focus on renovations conducted by homeowners, general contractors and related construction trades.

Recruitment for the MDH LHR grant has helped increase awareness of the DEED Small Cities Rehabilitation program and other housing resources available in Greater Minnesota to address lead hazards in housing. The housing rehabilitation work, conducted by private contractors, not only addresses risks in LHR-eligible homes, but also exposes contractors to LSWP. The success of the MDH LHR grant resulted in task B.3 changing from "later years" to "ongoing" status.

Objective C: Evaluate potential legislation that would provide sustainable funding sources for lead surveillance and lead hazard control.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	4	3	1
2009 Status	5	2	1

A number of bills introduced in recent legislative sessions addressed lead funding, resulting in task C.3 changing from "in planning" to "ongoing" status. The ideas proposed included:

- Language needed to enable use of federal Medicaid funding to pay for environmental interventions (passed);
- A window replacement revolving fund (1-time funding; not funded);
- Dedicated funding to perform lead hazard reduction and education (passed); and
- An excise tax on paint (SF836 awaiting additional action).

In addition to lead hazard control, a number of organizations in Minnesota are planning the implementation of a statewide "Healthy Places, Healthy Homes" (HPHH) effort to improve health outcomes affected by the built environment. For example, SRC has recently become a training partner with the "National Healthy Homes Training Center and Network" which is operated by the National Center for Healthy Housing (NCHH). SRC has recently been approved to provide a two-day foundational training course titled "Essentials for Healthy Homes Practitioners." The course is designed for individuals who provide health or inspection services of any type to help them understand the connection between health and housing. SRC also offers the Healthy Homes Specialist Credential (HHSC), which recognizes health and housing professionals who demonstrated knowledge and abilities in the area of healthy homes. On March 4 & 5 2009 the training was held in Minnesota with facilitation done by staff from NCHH. A total of 42 participants took the HHSC exam. On June 4 & 5, 2009, SRC staff facilitated the training and had 20 participants. The next course will be offered September 17 & 18, 2009 at the SRC offices in Minneapolis.

In February 2009, SRC started leading an effort to begin collecting basic healthy homes information to get a better understanding of the housing conditions that are affecting their customers. SRC invited other organizations to work with them including: MDH, City of Minneapolis, and Hennepin County. The survey has been developed as a tool to collect common data for future programmatic planning efforts around the topic of healthy homes.

Goal V: Strategies to Respond to Emerging Issues, such as New Research, Legislation, Trends, Population Conditions and Other Developments

Goal V was newly developed in 2006 and was intended to encompass emerging research and information, as well as new legislative requests, population shifts, trends in surveillance data, and non-housing sources of lead that are not addressed elsewhere in the plan.

In 2008, tasks in Goal V were distributed as 36 % ongoing (green), 36 % in planning (yellow), and 28 % for later years (red). In 2009, the tasks in Goal V improved to 50 % ongoing, 36 % in planning, and 14 % for later years.

Objective A: Improve blood lead screening and testing through focused educational efforts with providers and insurers.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	0	0	1
2009 Status	0	0	1

SRC has worked with clinics to educate providers, health educators and community health workers about the follow up services that SRC can provide to families, including screening and testing. SRC has set up referral systems and has open lines of communication with many clinics in Minneapolis. Local health plans have helped to identify clinics that have low screening rates and then SRC education staff works to coordinate follow up services and care for the families. SRC works with families to get them into their primary care provider for capillary lead testing and venous confirmatory testing as needed. SRC also works with the clinic nursing staff via phone and fax to help families secure appointments that include lead tests. Many of the clinics now make referrals to SRC when a child has a test result between 5 ug/dL and 9 ug/dL.

The Minnesota DHS Contract for Medical Assistance, General Assistance and MinnesotaCare Medical Care Services, outlines a number of incentives and withholds to encourage appropriate lead screening. Details can be found at the DHS website (see 4.5 Managed Care Withhold) at: http://www.dhs.state.mn.us/main/groups/healthcare/documents/pub/dhs_id_054907.pdf. This contract is for Managed Care Organizations that provide prepaid medical and remedial services and has prompted a wide range of mailings, seminars, meetings, and other outreach efforts by insurers to providers with respect to lead screening and primary prevention.

The St. Paul/Ramsey County Lead Program currently receives referrals for WIC participants reporting low hemoglobin test results. Based on those results, the family is educated about lead poisoning and encouraged to see their primary care physician for lead testing as well as to establish primary preventive care. Efforts are coordinated with parents and WIC staff to locate a clinic and schedule and arrange transportation for medical appointments if necessary.

Working with institutes of higher learning (task A.1) remains in “later years” status.

Objective B: Reduce childhood lead exposures by educating adults with EBLLs or lead-intensive occupations about "take home" lead.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	0	2	0
2009 Status	0	2	0

MDH continues to contribute data to the Adult Blood Lead Epidemiology and Surveillance (ABLES) program, sending in 10,595 reports to CDC in 2008. There were 94 adults with BLLs of 25 ug/dL or greater identified through the ABLES program in 2008 (one female) and six adults with reported levels greater than 40 ug/dL (all male). The highest number of cases (53) occurred in the Lead Smelting occupation, with the next highest (11) in Fishing Tackle Manufacturing.

In 2006 Minnesota Department of Natural Resources (DNR), Division of Fish and Wildlife formed the Nontoxic Shot Advisory Committee comprised of constituents with interests in hunting and the environment, experts in lead poisoning, and representatives from the hunting industry. This advisory committee was asked to report back to DNR with recommendations for:

- future additional restrictions on use of lead shot in Minnesota,
- a time frame for implementation,
- an education/communication plan for the public including content, approach, and methods; and
- information gaps and potential research needs.

There was unanimous agreement that there is a need to begin restrictions on the use of lead shot for hunting beyond current federal and state regulations for waterfowl and state regulations for managed dove fields. The final report from this committee can be found at: http://www.dnr.state.mn.us/hunting/nts/index.html#report . During 2008 MDH, DNR, and the Minnesota Department of Agriculture held trainings across the state for individuals handling wild game to promote meat preparation methods that can minimize the risk of lead exposure.

The two specific tasks for this objective (information to women regarding lead/pregnancy risk and fact sheet on adult lead risks developed/distributed) remain in "in planning" status.

Objective C: Develop methods to prevent children from exposure to lead-containing products.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	2	2	1
2009 Status	3	2	0

Minnesota Statute (MS 325E.385) was amended in the 2007 session to regulate the manufacture and sale of jewelry products containing lead. Specific text of the changes adopted can be found at: http://www.revisor.leg.state.mn.us/bin/bldbill.php?bill=S1262.3.html&session=ls85. Jewelry for children sold in Minnesota will be limited to 0.06% lead by weight. The statute became effective September 1, 2007. Enforcement of the bill is the responsibility of the Department of Commerce. Recalls of products containing lead are regularly posted on the MDH Lead Program website.

The Minnesota Pollution Control Agency (MPCA) routinely distributes information on how to avoid lead exposure in fishing tackle (see: http://www.pca.state.mn.us/oea/reduce/sinkers.cfm) and has been a leader in addressing lead in automotive wheel weights (see: http://www.pca.state.mn.us/oea/epp/newsletter/200807.pdf). Actions taken by MPCA resulted in task C.4 changing from "later years" to "ongoing" status.

In addition, the MDH Lead Program website contains links to the CDC lead website and the Consumer Product Safety Commission (CSPC) to allow parents and health care providers access to the most recent information on recalled products. Both CDC and CSPC regularly update information on their websites including background information on products of concern.

Objective D: Encourage technologies for accurate, effective and cost-efficient lead detection, lead hazard control, lead clearance testing and surveillance.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	0	0	1
2009 Status	0	0	1

Minnesota Lead Programs continue to work with manufacturers and distributors of rapid lead testing equipment, including NITON, ESA Biosciences (LeadCare II; there currently are 37 operating LeadCare II users in Minnesota), and Hybrivet Systems (LeadCheck Swabs) to identify ways to reduce the time needed to characterize lead risks. The LeadCheck Swabs are regularly distributed at public events (e.g. Minnesota State Fair, Minneapolis Home and Garden Show, Living Green Expo) to encourage awareness of lead and the need to limit exposure. The status of the single specific task in this objective (breaking up lead paint with light pulses) remained unchanged.

Objective E: Develop effective communication channels to reach immigrants/refugees and other populations at higher risk for lead poisoning.

Year	Number of Tasks by Status		
	Ongoing	In Planning	Later Years
2008 Plan	3	1	1
2009 Status	4	1	0

The ECHO Project produced six 20-minute television segments on the link between childhood lead poisoning and deteriorating lead paint or paint dust in pre-1978 housing. Each segment was

developed in a different language, including Cambodian, Hmong, Lao, Somali, Spanish and Vietnamese languages. Each program included a question-and-answer segment with guests, who are native speakers and was broadcast during October 2006, as part of National Lead Poisoning Prevention Week. Following the broadcast the program was placed for an indefinite period on the ECHO Web site. Public television tpt17 developed the segments. Funds provided for MDH sponsorship were matched dollar-for-dollar by partners in health care and local government. Over 2300 copies of a DVD of each of the shows have been distributed regionally and nationally. St. Paul/Ramsey County has provided a copy of the ECHO shows in DVD format to each of the C&TC providers in Ramsey County and to each family receiving a home visit as a result of a blood lead test.

SRC has been very active in working with limited-English speaking populations and faith-based organizations, including:

- Minneapolis Multicultural Services - Education materials about lead and healthy homes distributed to participants in program areas
- New Millennium Academy –Lead screening event during the school carnival. (Tested 37 Children)
- Hmong International Academy – Presentation on lead and announced the Hennepin County Minnesota Lead-Safe Housing Partnership Grant.
- Cinco De Mayo – Lead screening event at Zanewood Recreation Center, Brooklyn Park
- Blaine Human Service Center – Lead screening at the Monthly Resource Fair for People with Limited English. (Tested 207 children at monthly events February-June, 2009)
- SE Asian Ministries, St. Paul – Presentation to 55 adults about lead with a Khmer translator.
- Lead testing at: Lake Harriet United Church, Shiloh Temple, Church Olympics (through the Stair Step Church program), and New Millennium Academy.

Fliers and incentives for Medica-funded lead testing events conducted by SRC are available in English, Spanish, Somali and Hmong. Additional translation into Karen may be performed if the need arises. SRC is tracking screening events by language and has regular access to multilingual support staff. Outreach is planned with Latino populations living on the West Side of St. Paul and the City-wide Hmong population.

MDH has recently provided departmental support for use of a “language line” to assist in responding to inquiries from non-English speaking residents. The line is operated in collaboration with DHS and provides interpreters for over 180 languages. Implementation of language line capacity resulted in task E.2 changing from “later years” to “ongoing” status.