Childhood Blood Lead Case Management Guidelines for Minnesota: Reference Manual

2017 REVISION



Childhood Blood Lead Case Management Guidelines for Minnesota

Guidelines Developed 2001 Revisions: 2006, 2011, 2017

Minnesota Department of Health Health Risk Intervention Unit PO Box 64975 St. Paul, MN 55164-0975 651-201-4620 www.health.state.mn.us

As requested by Minnesota Statute 3.197: This report cost approximately \$5,000 to prepare, including staff time, printing and mailing expenses.

Upon request, this material will be made available in an alternative format such as large print, Braille or audio recording. Printed on recycled paper.

Contents

Acknowledgements	3
Executive Summary	4
Role of the Case Manager	5
Recommended Areas of Knowledge and Training:	5
Recommended Qualifications:	5
Role Definition:	5
Home Visit Protocol for Case Managers	7
Purpose:	7
Steps:	7
Referral Services	9
Childhood Blood Lead Case Management Guidelines for Minnesota	13
Environmental Risk Assessments	16
Sources of Lead	17
Case Closure	19
Suggested Methods to Contact Family	19
Commonly Used Terms	20
References	

Acknowledgements

Funding for the creation of these guidelines was provided by the Centers for Disease Control and Prevention (CDC) Childhood Lead Poisoning Prevention Grant CDC-RFA-EH14-1408PPHF14.

Childhood Blood Lead Case Management Guidelines for Minnesota Revision Workgroup:

- Luke Baertlein, MPH, Minnesota Department of Health
- Valeria Cristiani, MD, Mayo Clinic
- Megan Curran de Nieto, CLEARCorps
- David Griffin, MD, Health Partners
- Sue Gunderson, CLEARCorps
- Elisha Harris, RN, BSN, PHN, Minnesota Department of Health
- Tasha Julius, Sustainable Resources Center
- Rick Kipp, Minnesota Department of Health
- Sandy Lien, Medica
- Dan Locher, Minnesota Department of Health
- Ruth Lynfield, MD, Minnesota Department of Health
- Rachelle Mentanteau Peleska, Sustainable Resources Center
- Abby Montague, MD, Minnesota Poison Control Center
- Anna Mueller, RN, Minnesota Visiting Nurses Agency
- Larry Olson, Minnesota Department of Health
- Sherry Otto, Minnesota Department of Health
- Coral Ripplinger, Dakota County Public Health
- Todd Schaefer, Minnesota Department of Health
- Lisa Smestad, City of Minneapolis Health Department
- Amy Waller, RN, Minnesota Visiting Nurses Agency
- Stephanie Yendell, DVM, MPH, Minnesota Department of Health
- Kathryn Haugen, Minnesota Department of Health

These guidelines have been reviewed and approved by:

- Minnesota Medical Association (MMA)
- Minnesota Visiting Nurse Agency (MVNA)
- Local Public Health Association of Minnesota (LPHA)
- Minnesota Chapter of the American Academy of Pediatrics (MNAAP)
- Minnesota Chapter of the National Association of Pediatric Nurse Practitioners (MN NAPNAP)

Executive Summary

Although the toxicity of lead has been known for thousands of years, lead remains one of the most common environmental health threats to children. There are many sources of lead, such as soil contaminated from years of leaded gasoline use, lead dust accidentally brought home from parents' workplaces and hobby areas, lead in plumbing, and some imported products and traditional remedies. However, deteriorated lead paint in homes is the main source of lead exposure for U.S. children today. Elevated levels of blood lead occurring during the first years of life may not produce symptoms until the children enter school and display learning difficulties, reduction in IQ, or behavior problems.

Childhood lead exposure has decreased dramatically since the 1970's due to policy changes and the efforts of parents and professionals across many disciplines. However, lead persists as an environmental contaminant, and 737 children under 6 years of age had elevated venous blood lead levels in 2015; 537 more children had elevated capillary results without follow-up venous results.

These guidelines represent a set of best practices and recommendations for case managers working with children exposed to lead. They are based on national recommendations and input from a multi-disciplinary workgroup. These guidelines may be adapted for local use, depending on resources available.

The 2017 revision of these guidelines includes several important updates. CDC now recognizes that there is no safe level of exposure to lead, and 5 μ g/dL was set as a reference value. Minnesota Statutes also define elevated blood lead levels as 5 μ g/dL and above; the guidelines are now consistent with these levels. The guidelines were also edited to improve clarity and provide case managers with specific resources to which they can refer families.

Role of the Case Manager

Recommended Areas of Knowledge and Training:

- 1. Case management
- 2. Nutrition and hygiene
- 3. Growth and development
- 4. Physiology and adverse effects of elevated blood lead levels
- 5. Clinical standards and outcomes for elevated blood lead level prevention and treatment
- 6. Environmental sources of lead and lead hazard reduction methods
- 7. Referral services and resources in the community and state

Recommended Qualifications:

MDH recommends that the case manager be a professional with case management and lead training or experience. Recommended qualifications for a case manager are:

- If possible, the case manager should be a public health nurse (PHN) with a four-year nursing degree
- If a PHN is not available, the case manager should be a health professional (e.g., a health educator or a registered nurse (RN) without a bachelor's degree)
- If neither a PHN nor a health professional is available, the case manager can be any professional with a health-related degree (e.g., a social worker or risk assessor)

Contact MDH for training information at 651-201-4892.

Role Definition:

The role of the case manager is to work with clients by assessing, facilitating, planning, and serving as an advocate for their health needs on an individual basis.

Case management is expected to achieve measurable results in terms of decreasing exposure, decreasing blood lead levels, and improving the health of children and their families, particularly young siblings. Case management programs are expected to measure and report relevant program outcomes. Program outcomes may include reduced blood lead levels and reductions in environmental lead hazards. Lead hazard reduction may involve interventions ranging from cleaning and lead hazard control to emergency relocation.

Communication with the case management team is critical for effective case management, Team players include, but are not limited to:

- Case manager
- Family
- Medical providers
- MDH

LEAD CASE MANAGEMENT GUIDELINES

- Licensed lead risk assessors
- Paraprofessional home visitors
- Local funding sources
- Other community sources

The ability to work collaboratively with various outside groups and organizations to reach common goals is essential.

Home Visit Protocol for Case Managers

Purpose:

- 1. To stop further lead exposure to children with elevated blood lead levels and others in the home environment
- 2. To increase the knowledge of those in the home about the nature of an elevated blood lead level and how to resolve it

Steps:

HOME VISITS SHOULD BE CONDUCTED IN THE PREFERRED LANGUAGE OF THE FAMILY. USE AN INTERPRETER IF NECESSARY.

- Conduct an educational encounter using appropriate educational materials. This is best done in the home of the child with an elevated blood lead level. However, it may be completed through a telephone call for children with blood lead levels below 15 μg/dL. The following materials are suggested and can be ordered from MDH in several languages or can be accessed from MDH Fact Sheets and Brochures: Lead Poisoning Prevention (www.health.state.mn.us/divs/eh/lead/fs/index.html).
 - Cleaning Up Sources of Lead in the Homes
 - Common Sources of Lead
 - Steps to Help Lower Your Child's Blood Lead Level
 - Nutrition information
- 2. Opening statements should explain the following:
 - Case management
 - Role of the case manager
 - Tennessen statement utilized by your jurisdiction
 - Verbal or signed release of information statement to permit the case manager to discuss the case with all involved in the resolution of the lead case

Sample Role Explanation:

"Due to your child's elevated blood lead level, I will be helping you manage his/her lead level and the circumstances which have possibly contributed to the lead level. We will work together to ensure your child's blood lead level is reduced and the exposures to lead are eliminated."

The case manager may utilize an Educational Encounter & Assessment Form. Examples of an Educational Encounter & Assessment Form are available upon request. S/he will assess the family's educational needs and deliver appropriate informational brochures as well as hands-on

LEAD CASE MANAGEMENT GUIDELINES

teaching as needed. It is recommended that the case manager utilize the <u>MDH Lead Poisoning</u> Prevention: Educational Materials (www.health.state.mn.us/divs/eh/lead/edumat/index.html)

- 3. If a risk assessor is not present:
 - Conduct a cursory evaluation of the home, including the age of the home and both interior and exterior (gardens, barns, fences, neighborhood) for environmental sources of lead
 - Alert the family regarding the potential hazards of lead reduction work and provide them with information on lead-safe work practices. Encourage the family to have the work done by a lead professional, and require children and pregnant or breastfeeding women to vacate the premises during the work process
- 4. Share information for the purposes of case management and case closure with:
 - Primary care provider
 - Lead risk assessor
- 5. Develop a care plan and assess the need for more visits after the initial assessment. At least one follow-up home visit is recommended, or more if indicated. Orders from the primary care provider should be obtained if needed according to your agency policy, the level of nursing intervention provided, and the pay source utilized.
- 6. Coordinate or ensure blood lead testing of other children less than 72 months of age and pregnant women
- 7. Refer the family to needed services. See Referral Services section

Referral Services

A key aspect of the case manager's role is making referrals. The case manager is responsible for placing the family of the child with an elevated blood lead level in contact with services and resources that are available in the local community, or at the state or national level.

The case manager has a unique opportunity to enter a home, complete an assessment, and provide assistance to the family. The case manager's role is not limited to assisting with lead exposure prevention. It may also include helping families gain access to resources for addressing other issues.

A wide variety of resources are listed below. Current links are provided at MDH Lead Poisoning Prevention: Links to Resources (www.health.state.mn.us/divs/eh/lead/links.html). The case manager should become familiar with resources available locally to address the various needs of the family. It takes creativity to meet the specific needs of each family. In cases where no local contact is listed, the case manager should call other agencies or organizations on the list for help obtaining information or resources.

Medical Resources

- Medical assistance programs
 - Navigators for medical assistance enrollment can be found at <u>MNsure</u>: Find Free Help Near You (www.mnsure.org/individual-family/find-assister/)
 - Child and Teen Checkup is the name for Minnesota's Early and Periodic Screening,
 Diagnosis and Treatment (EPSDT) Program. Child and Teen Checkup visits are available to children receiving medical assistance.
- Transportation assistance to medical appointments
- Family home visiting
 - Some families may qualify for family home visiting services to help improve their health and well-being, depending on local resources

Housing Resources

- Swab team services grants
 - Grants provide interim lead hazard control before more permanent measures can be implemented
 - Current grantees can be found at <u>MDH Lead Poisoning Prevention: Swab Team Services</u>
 Grant (www.health.state.mn.us/divs/eh/lead/stsgrant/)
- Lead-Safe Work Practices Training
 - Course for homeowners or renters living in pre-1978 homes that includes step-by-step instructions and hands-on exercises for working lead-safe
 - Local partners in the National Healthy Homes Training Network can be found at <u>Healthy Housing Solutions</u>: Healthy Homes Training Center (healthyhousingsolutions.com/hhtc/training-partners/)
- Low-interest home improvement loans

- Available funding and requirements for low-interest loans vary.
- Information on available funds can be found through the <u>Minnesota Housing Finance</u>
 Agency (www.mnhousing.gov)
- Lead remediation or home improvement grants
 - Available funding varies.
 - The HUD Office of Lead Hazard Control and Healthy Homes provides grants to local jurisdictions. For information on current grantees, visit <u>HUD Office of Lead Hazard</u> <u>Control and Healthy Homes</u> (portal.hud.gov/hudportal/HUD?src=/program offices/healthy homes)
 - The Small Cities Development Program is administered through the Minnesota Department of Employment and Economic Development, and includes funds for housing grants in selected cities. More information on current projects can be found at the MN Department of Employment and Economic Development: Small Cities Development Program: (mn.gov/deed/government/financial-assistance/community-funding/small-cities.jsp)
- Weatherization programs
 - Grants to improve the energy efficiency of the homes of low-income families
 - Local providers can be found through the <u>MN Department of Commerce</u>:
 <u>Weatherization Assistance Program (mn.gov/commerce/consumers/consumerassistance/weatherization/)</u>

Rules and Legal Resources

- Legal assistance for renters
 - HOME Line provides free and low-cost legal services for tenants throughout Minnesota in English, Spanish, and Somali at HOME Line (homelinemn.org/)
 - Legal Aid helps clients with civil cases and questions to ensure each Minnesotan has access to basic rights like housing. Regional offices can be found at <u>Legal Aid Offices</u> (mylegalaid.org/about/locations/)
- Local rental ordinances
 - Some jurisdictions have protections for renters, such as requirements that painted surfaces be intact. Rental ordinances can be helpful for enforcement, particularly when an environmental risk assessment is not done
 - Rental ordinances can often be used for primary prevention, as they do not require that children have a certain blood lead level
- Renovation, Repair, and Paint Rule (RRP)
 - EPA's RRP Rule requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, child care facilities and pre-schools built before 1978 have their firm certified by EPA (or an EPA authorized state), use certified renovators, and follow lead-safe work practices.
 - More information on the RRP Rule can be found at <u>EPA: Lead: Renovation, Repair, and Painting Program (www.epa.gov/lead/renovation-repair-and-painting-program)</u>

- Real Estate Disclosure
 - Homebuyers and renters have rights to know about whether lead is present before signing contracts or leases. For example, an EPA-approved information pamphlet on identifying and controlling lead-based paint hazards must be provided
 - EPA enforces disclosure rules. More information can be found at <u>EPA: Lead: Real Estate</u>
 <u>Disclosure (www.epa.gov/lead/real-estate-disclosure)</u>

Learning and Development Resources

It is important to remember that children may not show signs of learning difficulties or developmental delays until long after their exposure to lead. Family members and professionals working with families should remain alert to signs of delays so early intervention services can be provided

- Developmental Assessments
 - It is strongly recommended that the child receive a developmental screening test. The child may be referred to a local community program that administers developmental screening tests
 - For advice on specific tests, go to MDH: Developmental and social-emotional screening of young children (0-5 years of age) in Minnesota (www.health.state.mn.us/divs/cfh/topic/devscreening/index.cfm)
- Follow Along
 - The Follow Along Program is a free service that helps track developmental milestones.
 Parents or local public health can make referrals.
 - Children can be referred at any blood lead level. More information and local contacts can be found at <u>MDH: Follow Along Program</u> (www.health.state.mn.us/divs/cfh/program/cyshn/follow.cfm)
- Help Me Grow
 - Help Me Grow is part of Minnesota's statewide intervention system under the Individuals with Disabilities Education Act
 - Children with a blood lead level ≥ 45 µg/dL are automatically eligible for Help Me Grow
 - Children with a blood lead level ≥ 15 µg/dL should be referred for an evaluation to determine eligibility for Help Me Grow
 - Children with any blood lead level who are showing signs of developmental delays may also be eligible for Help Me Grow
 - Anyone can make referrals to Help Me Grow, including public health professionals.
 Referral information can be found at <u>Help Me Grow: How to Refer</u>
 (helpmegrowmn.org/HMG/GetHelpChild/HowRefer/index.html)
- Head Start and Early Head Start
 - Head Start programs promote school readiness of children ages birth to 5 from lowincome families by supporting their development in a comprehensive way
 - More information on local programs can be found through the <u>Minnesota Department</u> of Education: Head Start (education.state.mn.us/MDE/fam/elsprog/start/)

Other Resources

- Nutritional assistance
 - Women Infants and Children Program (WIC): Families who meet income requirements may qualify for nutrition information and nutritious foods. Program eligibility requirements and referral information can be found at MDH: Women, Infants & Children (WIC) Program (www.health.state.mn.us/wic/) or at 1-800-WIC-4030 (1-800-942-4030)
 - Supplemental Nutrition Assistance Program (SNAP): Information on the food and assistance programs through the Minnesota Department of Human Services, including SNAP and emergency food services can be found at MN Department of Human Services: Supplemental Nutrition Assistance Program (SNAP) (mn.gov/dhs/people-we-serve/children-and-families/economic-assistance/food-nutrition/programs-and-services/index.jsp)
 - The Minnesota Food Helpline helps assess and provide solutions to food needs. This is a program of Hunger Solutions Minnesota, and can be reached at 1-888-711-1151 or at Minnesota Food Helpline (www.hungersolutions.org/programs/mn-food-helpline/).

Childhood Blood Lead Case Management Guidelines for Minnesota

Education should be provided in the family's preferred language.

ACTIONS BASED ON RESULTS OF CAPILLARY TESTS		
<5 μg/dL	 Provide educational materials to the family, including an overview of high risk categories 	
ACCORDING TO MINNESOTA STATE STATUTE, ALL BLOOD LEAD LEVELS ≥5µg/dL ARE CONSIDERED ELEVATED. VENOUS CONFIRMATION IS REQUIRED FOR A RISK ASSESSMENT		
5–14.9 μg/dL	 Provide educational materials to the family, including an overview of high risk categories Contact the family with the recommendation for venous confirmation VENOUS CONFIRMATION WITHIN ONE MONTH 	
15–44.9 μg/dL	 Provide educational materials to the family, including an overview of high risk categories Contact the family with the recommendation for venous confirmation If feasible, contact the medical care provider regarding venous confirmation Offer the medical care provider MDH's screening, treatment, and pregnancy guidelines VENOUS CONFIRMATION WITHIN ONE WEEK 	
45–59.9 μg/dL	 Provide educational materials to the family, including an overview of high risk categories Contact the family with the recommendation for venous confirmation If feasible, contact the medical care provider regarding venous confirmation Ensure the medical care provider is aware of MDH's screening and treatment guidelines VENOUS CONFIRMATION WITHIN TWO BUSINESS DAYS 	
≥60 μg/dL	 Provide educational materials to the family, including an overview of high risk categories Contact the family with the recommendation for venous confirmation If feasible, contact the medical care provider regarding venous confirmation Ensure the medical care provider is aware of MDH's screening and treatment guidelines VENOUS CONFIRMATION IMMEDIATELY 	

	ACTIONS BASED ON RESULTS OF VENOUS TESTS		
<5 μg/dL	 Provide educational materials to the family, including an overview of high risk categories 		
ACCORDING TO MINNESOTA STATE STATUTE, ALL BLOOD LEAD LEVELS ≥5μG/DL ARE CONSIDERED ELEVATED.			
5–14.9 μg/dL	 Within one month: Provide educational materials to the family, including an overview of high risk categories Ask questions to identify possible sources of lead Contact the family with the recommendation for a follow-up venous test within three months of the last blood draw date 		
15–44.9 μg/dL	 Within one week: Arrange for initial home visit using family's spoken language Complete an in-depth assessment of: medical, environmental, nutritional, and developmental needs Provide educational materials to the family, including an overview of high risk categories Make necessary referrals Communicate with the risk assessor assigned to the case Contact the family with the recommendation for follow-up venous test within three months of the last blood draw date. Higher levels may require more frequent monitoring Contact the medical care provider regarding the need for follow-up venous testing if venous follow-up not completed within three months 		
45–59.9 μg/dL	 Within two business days: Arrange for initial home visit using family's spoken language Complete an in-depth assessment of: medical, environmental, nutritional, and developmental needs Provide educational materials to the family, including an overview of high risk categories Make necessary referrals Attempt to facilitate alternative, lead-safe housing Communicate with the risk assessor assigned to the case Contact the medical provider to determine blood lead level, medical status, treatment, and follow-up plans At this level the medical care provider will most likely provide chelation therapy (see MDH treatment guidelines) and the child will need more frequent monitoring of their blood lead level 		

ACTIONS BASED ON RESULTS OF VENOUS TESTS

Within two business days: Arrange for initial home visit using family's spoken language

- Complete an in-depth assessment of: medical, environmental, nutritional, and developmental needs
- Provide educational materials to the family, including an overview of high risk categories

≥60 µg/dL

- Make necessary referrals
- Attempt to facilitate alternative, lead-safe housing
- Communicate with the risk assessor assigned to the case
- Contact the medical provider to determine blood lead level, medical status, treatment, and follow-up plans

At this level the medical care provider will most likely provide chelation therapy (see MDH treatment guidelines) and the child will need more frequent monitoring of their blood lead level. The child may be hospitalized at this level

VENOUS CONFIRMATION IS REQUIRED FOR A RISK ASSESSMENT. AFTER CONFIRMATION, VENOUS FOLLOW-UP TESTS ARE PREFERRED, BUT CAPILLARY RESULTS ARE ACCEPTED. BLOOD LEAD LEVELS SHOULD CONTINUE TO BE MONITORED UNTIL THEY ARE BELOW 5µg/dL

Environmental Risk Assessments

According to Minnesota Statutes 144.9504:

- An environmental risk assessment can be performed for any child under 72 months of age with a venous blood lead level of 5–14.9 μg/dL, as resources allow
- An environmental risk assessment must be performed for any child under 72 months of age with a venous blood lead level of at least 15 μg/dL
- Following a risk assessment by a licensed lead risk assessor, orders can be issued to the property owner to correct lead hazards
 - Risk assessments can be performed at the primary residence and other facilities where the child spends more than a few hours a week
 - Under some circumstances, risk assessments can also be performed at residences where the child no longer lives
- If a risk assessment is performed, it is the responsibility of the licensed risk assessor to follow the property until it passes clearance inspection

There are two key players when an environmental case is open at the child's primary residence:

- Case Manager
 - Responsible for determining when to close the case of the child, medically or administratively
- Licensed Lead Risk Assessor
 - Responsible for determining when to close the case of the property

A steady line of communication must be maintained between the licensed lead risk assessor and the case manager. Although the case manager does not have any direct responsibility for the environmental case, it is important for the case manager to be aware of the status of the property. The medical and environmental cases may be closed at different times.

Sources of Lead

Case managers should be aware of common sources of lead when interacting with families or doing educational visits when a risk assessor is not present. The following list is provided to give background information on common sources of lead. MDH can provide additional information or technical assistance when unusual or newly emerging lead sources are suspected. Educational materials on specific lead sources can be found at MDH Fact Sheets and Brochures: Lead Poisoning Prevention (www.health.state.mn.us/divs/eh/lead/fs/index.html).

Paint

- Chipping or peeling paint is the most common source of lead exposure. Homes built before
 1978 may contain lead-based paint
- Window sills and porches are common areas to find lead-based paint
- Even tiny amounts of dust from lead paint can cause a child's blood levels to rise
- Renovation creates large amounts of dust and can cause high blood lead levels
- Paint exposures can occur at home, daycare, or a relative's home

Hobbies and Occupations

- Children can be exposed to lead from dust brought home from a household member's hobby or job
- Common sources in Minnesota include:
 - Recycling materials that contain lead (e.g., batteries, electronic waste)
 - Manufacturing items that contain lead (e.g., bullets, fishing sinkers, stained glass)
 - Construction, painting, and demolition
 - Firing range work and reloading shotgun shells

Soil and Water

- Bare soil can be a source of lead, especially in areas near busy streets or old homes
- Lead can enter drinking water as it passes through household plumbing systems. Houses built before 1986 may have lead parts in their plumbing systems

Other Common Sources

- Traditional medications
 - Products from many forms of traditional medicine have been found to contain lead, including ayurdedic medications and Chinese traditional medicines
 - Bentonite clay, sometimes taken internally, can also contain lead
- Imported cosmetics. Examples include:
 - Kohl or surma used as eyeliner for cosmetic purposes or to promote health
 - Sindoor or kumkum used for bindi dots
- Imported or recalled spices
- Imported or handmade pottery or ceramics
- Mouthing on keys
- Antique furniture, toys, or other objects
- Chalk
- Imported candy
- Exposure that occurred in another country

Case Closure

The objective of the case management process is to assure that both the medical treatment of the lead-poisoned child is accomplished and the environmental exposure routes are addressed. Case managers can close cases even if the environmental risk assessor is still working on the environmental aspects of the case, based on the criteria below.

- Medical closure
 - Based on the blood lead level of the child
 - Defined as one capillary or venous blood lead level less than 5 μg/dL
- Administrative closure
 - Indicates that the child can no longer be followed
 - Circumstances when an administrative closure can be done include:
 - The blood lead level has been decreasing appropriately. Steps are being taken to address lead exposure routes. Resources do not allow active follow-up with the child
 - The child is greater than 72 months of age, the blood lead levels are still elevated but are decreasing, and any environmental lead orders are complete
 - The child is lost to follow-up after three varied attempts to locate (see below)
 - The child has moved out of the health jurisdiction. Inform MDH of new address.
 - The parent has refused services and has been given information about elevated blood lead levels and lead hazard control
 - The case manager is concerned for his/her personal safety when following up with the family. Appropriate referrals should be made

Minnesota Statutes do not allow for enforceable lead orders for children greater than 72 months of age. However, older children may still benefit from case management services. If resources allow, children older than 72 months should be followed.

Suggested Methods to Contact Family

Three varied attempts at contact in the family's preferred language should be made before closing the case for loss to follow-up. Methods may include the following:

Methods using Existing Contact Information	Methods to Verify or Update Contact Information
• Call	Inquire with the WIC contact
 Send a letter 	 Inquire with the economic assistance contact
 Send a certified letter 	 Inquire with the child protection contact
 Make a home visit 	 Inquire with the primary care provider
 Text or email (follow 	• Inquire with the US Postal Service for a forwarding address
agency policies; may	 Inquire with the contact person listed at admission
require prior consent)	Inquire with the health plan

Commonly Used Terms

Child: for lead cases, "child" typically refers to an individual up to 72 months of age

Clearance inspection: identification of deteriorated paint and bare soil and resampling and analysis of interior dust lead concentrations in a residence to ensure that an environmental case can be closed

Capillary blood sample: a quantity of blood drawn from a capillary. The sample generally is collected by finger stick. Elevated results must be confirmed with a venous blood sample

Case manager: A local public health professional who works with the families of children with elevated blood lead levels to assess needs and facilitate access to needed resources

Elevated blood lead level: a diagnostic blood lead test with a result that is equal to or greater than five micrograms of lead per deciliter of whole blood in any person

Interim controls: a set of measures intended to temporarily reduce human exposure or likely exposure to known or presumed lead hazards, including specialized cleaning, repairs, maintenance, painting, temporary encapsulation, or enclosure

Lead hazard: a condition that causes exposure to lead from dust, bare soil, drinking water, or deteriorated paint that exceeds MDH standards

Lead hazard reduction: abatement or interim controls undertaken to make a residence or other facility lead-safe

Lead order: a legal instrument to compel a property owner to address lead hazards according to the specifications given by the assessing agency.

Lead risk assessment: an investigation to determine the existence, nature, severity, and location of lead hazards

Lead risk assessor: an individual who performs lead risk assessments or lead inspections and who has been licensed by the Minnesota Department of Health

Lead-safe practices: methods for construction, renovation, remodeling, or maintenance activities that are not regulated lead work and that are performed so that they do not result in exposure to lead

Primary prevention: preventing lead exposure before blood levels become elevated

Secondary prevention: intervention to mitigate health effects on people with elevated blood lead levels

Swab team services: activities that provide protection from lead hazards primarily through the use of interim controls, such as:

- removing lead dust by washing, vacuuming with high efficiency particle accumulator (HEPA) or wet vacuum cleaners, and cleaning the interior of residential property
- removing loose paint and paint chips and repainting or installing guards to protect intact paint

Venous blood sample: a quantity of blood drawn from a vein. This is considered a confirmatory test

μg/dL: micrograms of lead per deciliter of whole blood. Also expressed as mcg/dL

References

Advisory Committee on Childhood Lead Poisoning Prevention of the Centers for Disease Control and Prevention. Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention. Atlanta: U.S. Department of Health and Human Services; 2012.

Educational Services for Children Affected by Lead Expert Panel. *Educational interventions for children affected by lead*. Atlanta: U.S. Department of Health and Human Services; 2015.

State of Minnesota. *Lead Poisoning Prevention Act, Minnesota Statutes Sections 144.9501–144.9512*. As amended through 2017.

State of Minnesota. *Lead Poisoning Prevention Rules, Minnesota Rules, Parts 4761-1000 through 4761-1220.* Effective February 1, 1999.