

Update from the Michigan Poison and Drug Information Center Lead Exposure and Prevention

The U.S. Centers for Disease Control and Prevention recently issued changes to recommendations for follow-up and case management for lead screening in children. Children enrolled in Medicaid are required to be screened for lead at 12 to 24 months of age. The newly recommended threshold for follow-up testing is blood lead levels of <3.5 µg/dL. Previously, follow-up testing was recommended for blood lead levels of <5 µg/dL.¹

Lead poisoning is an ongoing concern in Michigan. Improvements to infrastructure and industrial hygiene will continue to help decrease lead exposure from old water lines, older buildings and homes, and the workplace. The Michigan Poison and Drug Information Center wants Michiganders to know how to avoid lead exposure, what to do if you or others you know may be at risk for lead exposure, and where to go for help.

Background

Lead has historically been used for a variety of applications, including cosmetics, gasoline, pipes, paint, and other common items used in construction and daily life. Recognition of its toxic properties has resulted in the prohibition of its use of many of the aforementioned products. In the event that lead is used, it is closely regulated and monitored.²

Homes and other buildings constructed before 1978 are a common source for lead exposure. Children who eat paint chips or are exposed to the dust from chipping and peeling paint are at risk for lead poisoning. Other sources of pediatric lead exposure are from candy imported from other countries, toys, lead in drinking water, fishing weights, lead-containing charms and jewelry, lead containing ammunition, and secondary exposure from work clothes used by caregivers in lead-exposed occupations.³ Andrew King, MD, and toxicologist with the MiPDC states, “The cases referred to the Children’s Hospital of Michigan continue to be from lead paint chip ingestion from older houses. However, we have seen some from mugs, plates, and bowls that are brought from other countries.”

Pediatric screening for lead exposure in young children should be done early. Screening can be done at a medical provider’s office or at your local health department. Discuss the best options for screening with your medical provider. Symptoms of pediatric lead exposure can be mistaken for typical behaviors associated with young children. Symptoms may include colic, irritability, difficulty concentrating, abdominal pain, and constipation. If lead exposure is not treated early, children can develop long-term cognitive impairments and behavioral disorders.

Occupational exposures are among the most common sources of lead exposure in adults. Adults should use personal protection equipment and follow prescribed safety protocols from their employer. Adults with occupational exposure to lead who are living with children should take adequate precautions to decrease tracking lead into the home.

Ammunitions are most often produced with lead. Adults who produce ammunitions, work with lead, or go to shooting ranges are exposed to lead fumes and dust. Children who live in homes where ammunitions are produced or discharged are at greater risk for lead poisoning. Home production of ammunitions can cause lead contamination throughout the entire home. Children living in homes with firearms and/or ammunitions have eaten bullets and pellets.

Like ammunitions, fishing tackle should also be kept locked up and out of sight of children. Children who eat lead fishing sinkers, ammunitions, paint chips and other suspected sources of lead must be evaluated in a medical

¹ (National Center for Environmental Health, Division of Environmental Health Practices, 2021)

² (United States Department of Labor, 2006)

³ (U.S. Center for Disease Control and Prevention, 2021)

facility immediately to determine if treatment is needed. Every effort should be made to remove lead from homes and other buildings.

What can you do to decrease the risk of household lead exposure?

- Avoid purchasing cosmetics and food items produced outside of the United States.
- Avoid use of pottery and pottery glazes that may contain lead.
- For homes built before 1978, purchase testing kits at your local hardware store to check paint on window sills and walls.
- Adults who have occupational exposure to lead should use personal protective equipment and barriers to decrease tracking into personal vehicles and homes. PPE should be disposed of at the workplace.
- Avoid melting metals and producing ammunitions in homes.⁴

What to do if you are at increased risk:

- Lead screening resources can be discussed with your health care provider or other resources can be found below.

Where to go for help:

- If you have been exposed, you may click [here](#) for information and help from the Michigan Poison and Drug Information Center.
- To find a certified lead abatement firm in Michigan, click [here](#) for a list provided by the U.S. Environmental Protection Agency.
- For statewide programs available in Michigan visit [Mi Lead Safe](#). Information and local resources for the **Lead Safe Home Program**, **Childhood Lead Poison Prevention Program**, and **drinking water testing** can be found on the Mi Lead Safe page.
- For questions about the safety of drinking water call the **Michigan Department of Health and Human Services Drinking Water Hotline** at **1-844-934-1315**.⁵

Health care professionals, parents, caregivers and others with questions or concerns about the effects of lead exposure can call the MiPDC to speak with our specialists and board-certified toxicologists.

Michigan Poison and Drug Information Center

1-800-222-1222

Available 24/7

⁴ (Health Impact Project, 2017)

⁵ (Mi Lead Safe, 2021)