

# Management of Blood Lead Test Results

## Guidance for Health Care Providers

Michigan law requires blood lead testing of all young children at 12 months and 24 months and at other ages depending on certain risk factors. See reverse side for more information on the requirements.

Providers may use a capillary or venous sample for initial blood lead screening. False positive results may occur with capillary sample contamination. **If capillary test results are equal to or greater than 3.5 micrograms per deciliter, a venous sample must be used to confirm the result without delay.** If unable to obtain a timely venous sample, proceed with follow-up actions and continue attempts to confirm.

	Follow-up Testing	Follow-up Actions
<b>BLL &lt; 3.5 µg/dL</b>	As required by universal lead testing law.	<ul style="list-style-type: none"> <li>• Provide education about nutrition with a focus on iron and calcium intake.</li> <li>• Discuss common sources of lead exposure and lead exposure prevention.</li> </ul>
<b>BLL 3.5 – 9 µg/dL</b>	Re-test every 3 months until BLL has declined for 2 – 4 tests. <hr/> Once BLL is declining, venous sample every 6 – 9 months.	<ul style="list-style-type: none"> <li>• Follow above guidance.</li> <li>• Obtain an exposure history to identify potential sources of lead.</li> <li>• Assess for iron deficiency with laboratory testing.</li> <li>• Perform developmental screening.</li> <li>• For children &lt; 3 years, refer to Early On.</li> <li>• Consider other children who may be exposed.</li> </ul>
<b>BLL 10 – 19 µg/dL</b>	Re-test every 1 – 3 months until BLL has declined for 2 – 4 tests. <hr/> Once BLL is declining, venous sample every 3 – 6 months.	<ul style="list-style-type: none"> <li>• Encourage family to:               <ul style="list-style-type: none"> <li>• Accept nursing case management services offered by the local health department.</li> <li>• Apply to the Lead Safe Home Program (URL: <a href="https://bit.ly/ApplyLeadServices">bit.ly/ApplyLeadServices</a>) to determine eligibility for environmental investigation and abatement.</li> </ul> </li> </ul>
<b>BLL 20 – 44 µg/dL</b>	Re-test every 2 – 4-weeks until BLL has declined for 2 – 4 tests. <hr/> Once BLL is declining, venous sample every 1 – 3 months.	<ul style="list-style-type: none"> <li>• Follow above guidance.</li> <li>• Perform a complete history and physical exam, assessing the child for signs and symptoms related to lead exposure.</li> <li>• Consider abdominal x-ray if ingested lead is suspected.</li> <li>• Contact Michigan Poison Control (800-222-1222) for guidance.</li> </ul>
<b>BLL &gt; 45 µg/dL</b>	Obtain confirmatory venous sample urgently, within 48 hours.	<ul style="list-style-type: none"> <li>• Follow above guidance.</li> <li>• Contact local health department or the Michigan Department of Health and Human Services' Childhood Lead Poisoning Prevention Program with result.</li> <li>• Perform a complete history and physical exam including a detailed neurological exam.</li> <li>• Family should NOT return to lead-contaminated home.</li> <li>• Contact Michigan Poison Control (800-222-1222) for guidance regarding chelation treatment.</li> </ul>

### QUESTIONS?

Contact us at 517-335-8885  
Michigan.gov/MiLeadSafe



Childhood Lead  
Poisoning Prevention

# Blood Lead Risk Assessment

## Michigan's New Blood Lead Testing Requirements

Children must be tested at 12 months and 24 months of age or by 72 months of age (age 6) if there is no record of a previous test.

### Children must also be tested:

- At age 4 if they live in one of the 82 cities and townships designated by MDHHS as high risk. The list of high risk jurisdictions can be viewed at [bit.ly/LeadHighRisk](https://bit.ly/LeadHighRisk).
- At least once between their most recent test and age 72 months if they are at high risk because they live in a home:
  - Built before 1978.
  - Where other children with elevated blood lead levels live.
- Within three months of when a physician or parent determines that they are at high risk.

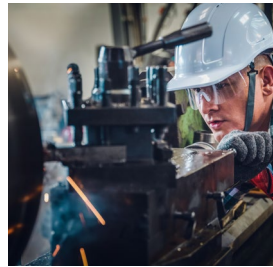
### The law states:

- It is the physician's responsibility to test or order the test.
- All elevated blood lead tests ( $\geq 3.5 \mu\text{g/dL}$ ) from capillary blood must be confirmed with a venous test.
- Testing requirements do not apply if the parent/guardian objects to the test.

## The following is a guide to identifying risk factors of lead exposure.



Does the child **live in or regularly visit a home built before 1978?** (Note: renovations can greatly increase risk of lead exposure in homes built before 1978.)



Does the child come in contact with an adult whose **job or hobby involves exposure to lead** (battery manufacturing/recycling, brass/bronze foundries, abrasive blasting outdoor metal structures, renovation of pre-1978 buildings, regular use of firing ranges, bullet reloading or casting, stained glass)?



Does the child live in or regularly visit a home that had a **water test with high lead levels?**



Does the child's caregiver use **home remedies** (e.g., *ba-baw-san*, *daw tway*, *greta*, *azarcon*, *balguti kesaria*, *ghasard*) or **imported spices** that may contain lead?



Does the child have a **sibling or friend who has an elevated blood lead level?**



Does the child have behaviors suggesting **high risk for lead exposure**, including pica and developmental delays?

To learn more about lead poisoning prevention and blood lead testing, contact the Childhood Lead Poisoning Prevention Program: 517-335-8885 or [Michigan.gov/MiLeadSafe](https://Michigan.gov/MiLeadSafe).

# Universal Blood Lead Testing: Questions and Answers for Physicians

In October 2023, two laws were passed that require physicians to: (1) test, or order a test, for lead in blood of minors at selected ages and with certain risk factors, and (2) ensure that test results are available in minors' certificates of immunization. This age-based approach to blood lead testing requirements for all children is commonly called "universal testing." The Michigan Department of Health and Human Services (MDHHS) was required by law to develop administrative rules for implementation of the law. These rules went into effect April 30, 2025.

The following questions and answers provide information for physicians about the requirements.

## What are the requirements?

- It is the physician's responsibility to test or order the test.
- Children must be tested at 12 months and 24 months of age or by 72 months of age (age 6) if there is no record of a previous test.
- Children must also be tested as follows:
  - Between 48 months and 60 months of age (age 4) if they live in one of the 82 cities and townships designated by MDHHS as high risk. Visit [Additional Blood Lead Testing for High-Risk Jurisdictions](#) to view the list of cities and townships.
  - At least once between their most recent test and age 72 months if they are at high risk because they live in a home:
    - Built before 1978.
    - Where other children with elevated blood lead levels live.
  - Within three months of when a physician or parent determines that they are at high risk. Risk factors to consider are described at [MDHHS Quick Reference Guide for Providers](#).
- Testing requirements do not apply if the parent/guardian objects to the test. MDHHS recommends that the objection to the test be documented in the child's medical record.
- All tests that are elevated ( $\geq 3.5$   $\mu\text{g}/\text{dL}$ ) based on capillary blood must be repeated with a venous test to confirm the elevated level.

**It looks like the law says ALL physicians must test, or order a test, for lead in blood for children at selected aged. Does this include specialty physicians who are not a child's primary care provider?**

- Yes, the statute imposes the requirement on any physician treating a minor patient regardless of the physician's specialty.

**Does the law require a physician to order duplicative tests for any child that is tested at the prescribed ages?**

- No. The statute establishes minimum mandatory blood lead testing for each child residing in Michigan; a 12-month test and a 24-month test.
  - This means that a physician treating a minor patient must ensure that the child is tested at 12 months and 24 months of age, either by testing or ordering the test for a child that has not yet had the test, or by verifying that 12-month and 24-month tests have occurred.
  - To make this determination, a physician could review their patient's medical records, review the blood lead testing data available in the child's record in the Michigan Care Improvement Registry (MCIR), discuss with the child's parent or caregiver, or consult with the child's primary care provider.
- As the American Academy of Physicians (AAP) recommends, blood lead testing should be a routine part of a child's primary care, and compliance with Michigan's testing requirements should ensure that all children who have been exposed to lead will be identified so that appropriate interventions can take place.
- It is best that blood lead testing be ordered or performed in the office of a child's primary care physician, according to the testing schedule identified in the administrative rules. Recognizing that not all children are able to be seen by primary care physicians as recommended, the statute and rules require that any physician treating a minor patient must ensure these crucial 12-month and 24-month tests occur.

**The law specifies the required ages for testing in months of age. Does testing have to take place at exactly these months to comply with the law?**

- While the law specifies exact months for testing, given the constraints of real-life clinical practice MDHHS believes that a reasonable interpretation of the age requirement is **around** specified months.

**What is the rationale for testing all children at 12 months and 24 months, rather than just testing those determined to be at risk of lead exposure based on a risk screening questionnaire?**

- Children and fetuses are most at risk of health effects from lead exposure. There is no known safe level of lead in a child's blood. Lead risk screening questionnaires by themselves do not accurately identify children with elevated blood lead levels, according to research.

- Testing at 12 months and 24 months helps identify early exposure. Blood lead levels peak around 24 months when children become more mobile, use hand-to-mouth movements and explore their environments, all of which put them at a greater risk of lead exposure.
  - Testing at these ages allows for early detection of lead exposure and intervention.
  - The catch-up provision of testing by age 6, if not tested previously, helps ensure that children with elevated blood lead levels can be identified.

**How do physicians access information regarding the requirement that children be tested between 48 months and 60 months of age (age 4) if they live in certain geographic areas identified as high risk by MDHHS?**

- The list of 82 cities and townships identified by MDHHS as high risk can be viewed by visiting [Additional Blood Lead Testing for High-Risk Jurisdictions](#). These communities were identified using data from blood lead test results and population-based data on housing, income level and other demographic factors known to be associated with increased lead exposure risks.
- MDHHS will communicate with physicians and medical professional organizations about this requirement.

**In addition to the age-based testing requirements, the new law requires physicians to test children who have been determined to be at high risk for lead poisoning. Will MDHHS provide training and information that physicians can use to identify high-risk children?**

- As noted above, the rules specify how often children should be tested based on the two high-risk factors specified in the law. In addition, if a parent or physician identifies a child they believe is at high risk, the law requires the physician to respond in a timely manner by ordering a blood lead test. Physicians can view MDHHS's free physician-oriented lead training video that includes modules on risk factors by registering in the [Learning Management System](#) and searching for "Childhood Lead Exposure: Even a Little is Too Much" in the course catalog. Continuing Medical Education credits (CMEs) are available.

**The law states that the immunization certificate must have a space to indicate 'whether the minor has been tested for lead poisoning' and 'if the physician performs the test described in subdivision (a), [the physician shall] make an entry of the testing on the minor's immunization certificate.' How are these requirements going to be met without burdening physicians and their office staff?**

- If the physician uses MCIR to generate the certificate of immunization, in most cases the child's most recent test result is already on the certificate. This is because all blood lead test results are reported by clinical laboratory to MDHHS, as required by law, and then the results are linked electronically to the child's record in MCIR.
- Because it takes two to four weeks for a laboratory's report of a blood lead test to get uploaded into MDHHS's database, the physician's office may need to manually write the most recent test result on the child's certificate of immunization generated by MCIR, especially a test result performed on a LeadCare® II analyzer at the time of the child's office visit.

**Will health insurers cover the costs of the blood lead tests under these new mandates?**

- Blood lead testing is a preventive health service under the federal Affordable Care Act (ACA), meaning it must be covered without additional copayment or coinsurance charges. Most private insurers are covered by the ACA.

**What are the penalties for not complying with the universal blood lead testing requirements?**

- Physicians are legally required to comply with the universal blood lead testing requirements under MCL 333.5474d and the administrative rules. MDHHS trusts and expects that all physicians will comply with this law. Physicians who fail to carry out their testing duties may be subject to penalties, including fines of up to \$10,000, under [MCL 333.5476](#). MDHHS does not anticipate pursuing citations against physicians who make a good-faith effort to comply with these duties.

**Where can physicians read the two laws related to universal blood lead testing of children and the administrative rules?**

- [Public Act 146 of 2023](#) amends Part 54A of the Public Health Code by adding a new subsection, [MCL 333.5474d](#), that requires a physician to test or order a blood lead test at age 12 months and 24 months and under several other circumstances and to make an entry of the testing on the minor's certificate of immunization.
- [Public Act 145 of 2023](#) amends MCL 333.9206 by adding a requirement for the entry of the blood lead test on a minor's certificate of immunization in subsection [9206\(1\)](#).
- Administrative rules are posted at [R 330-301-304](#).

For more information about the universal blood lead testing requirements, contact the MDHHS Childhood Lead Poisoning Prevention Program at 517-335-8885 or [MDHHS-CLPPP@michigan.gov](mailto:MDHHS-CLPPP@michigan.gov).

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