

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 ([MCL 333.5474d](#)), and (2) ensure that test results are available in minors' certificates of immunization ([MCL 333.9206](#)). 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 ([R 330.301-304](#)).

What are the law's lead testing 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 live in a home built before 1978 or 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 in [Management of Blood Lead Test Results: Guidance for Health Care Providers](#).
- All point of care (capillary) test results ≥ 3.5 $\mu\text{g/dL}$ must be repeated with a venous test to confirm the elevated level.

What should be done if a parent objects to the test?

- Universal testing requirements do not apply if the parent/guardian objects to the test. In good faith, a physician should return to the topic at future visits and continue to offer testing according to the requirements of the law.

- Physicians may want to document the parental objection to the test to meet professional standards and inform future conversations around lead risk and testing. MDHHS recommends that the objection to the test be documented in the child's medical record, but **the statute does not require this documentation.**
- Documentation strategies employed by some practices include:
 - Placing an order for a venous test to mark the offer and allow the family to decline by not completing the test.
 - Adding a sentence to the office visit note documenting the offer to test and the objection.
 - Scanning a signed declination form into the electronic medical record (EMR).

It looks like the law says ALL physicians must test, or order a test, for lead in blood for children at selected ages. 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.
- Blood lead testing is ideally ordered or conducted by a child's primary care provider according to the required testing schedule. Recognizing that not all children receive primary care, the law requires that **any physician** treating a minor must ensure that the 12-month and 24-month blood lead tests are completed.

Do non-physician clinicians need to order lead tests?

- No. The statute imposes the requirement only on physicians and does not specifically name other clinicians who are well-suited to order lead tests, such as nurse practitioners or physician assistants.
- Non-physician clinicians are encouraged to practice according to the universal testing requirements. This will ensure that the health benefits of the statute are available to young children statewide and will improve the quality of the data that will be used to understand and prevent lead poisoning in Michigan.

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 the 12-month test and 24-month test 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.

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?

- No. Given the constraints of real-life clinical practice, a reasonable interpretation of the age requirement is **around** specified months.
 - Note: For public health surveillance purposes, MDHHS categorizes lead tests in the database of laboratory-reported blood lead test results as "12-month tests" if they were completed from 9 months through 17 months and as "24-month tests" if completed from 18 months through 29 months.
- If an opportunity to perform a universal screening test at 12 months or 24 months is missed or declined by the parent/guardian, it is reasonable to continue to offer the test at the next opportunity.
- The between-test interval may not be exactly 12 months; the realities of clinical practice may cause it to be somewhat shorter or longer. If a delay in the first test could cause the interval between tests to be shortened, the clinician considering the timing of the second test will want to review individual factors to determine when the second test would be most useful. Individual factors could include the result of the prior test, the child's medical, family and social history, and evolving risk factors related to the child's environment or behavior. Lengthening the between-test interval towards a goal of 6-12 months will increase the likelihood of capturing new exposures due to a change in a child's behavior or environment.

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?

- Universal testing is a way to address the shortfalls of screening questionnaires. According to the US Preventive Services Task Force, lead risk screening questionnaires alone have been found to have low accuracy (sensitivity and specificity) in identifying children with elevated blood lead levels.¹
- Testing at 12 months and 24 months helps identify early exposure. Beginning in utero, children are susceptible to health effects from lead exposure. Blood lead levels peak around 24 months when children become more mobile, use hand-to-mouth behaviors and actively explore their environments.²

¹ Cantor AG, Hendrickson R, Blazina I, Griffin J, Grusing S, McDonagh MS. Screening for Elevated Blood Lead Levels in Childhood and Pregnancy Updated Evidence Report and Systematic Review for the US Preventive Services Task Force JAMA. 2019;321(15):1510-1526.

² Lanphear BP, Hornung R, Ho M, Howard CR, Eberly S, Knauf K. Environmental lead exposure during early childhood [published correction appears in *J Pediatr*. 2002;140(4):490]. *J Pediatr*. 2002;140(1):40-47.

The law also includes a catch-up provision to test by age 6, if not tested previously. Is compliance with the law satisfied by waiting until after age 2 to test?

- Delaying testing can result in many negative health outcomes. MDHHS does not recommend waiting to do a first test at an older age to achieve compliance with the law.

Which geographic areas have an additional testing requirement between 48 months and 60 months of age (age 4)?

- 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.
- Materials for healthcare providers are available through postings on [EH.michigan.gov/LeadForHealthCareProviders](https://eh.michigan.gov/LeadForHealthCareProviders).

In addition to the age-based testing requirements, the law requires physicians to test children who have been determined to be at high risk for lead poisoning. What does the law say about risk factors?

- The law requires that a test is ordered within three months of when a parent or physician identifies that a child has a new risk factor. That requirement applies to risk factors other than the two listed explicitly in the law (i.e., living in a house built before 1978 or with other children with lead poisoning).

What resources are available to help physicians identify children at high risk?

- There are many risk factors for lead exposure in addition to the ones stipulated in the law, including developmental delays, pica, use of products from other countries (e.g., spices, cookware, cosmetics, toys and jewelry) or living with adults with occupational or recreational exposure to lead.
- Information on identifying risk factors for lead exposure can be found on:
 - The MDHHS [Management of Blood Lead Test Results: Guidance for Health Care Providers fact sheet](#).
 - The United States Environmental Protection Agency [Lead About Lead webpage](#).
- A comprehensive review article on [lead poisoning](#) which discusses risk factors was published in 2024 in The New England Journal of Medicine.³
- 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 are available.

³ Lanphear B, Navas-Acien A, Bellinger DC. Lead poisoning. N Engl J Med. 2024; 391(17):1621-1631. DOI: 10.1056/NEJMra2402527

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?

- To reduce or eliminate administrative burden associated with this portion of the law, practices can print the immunization record from MCIR. When MCIR is used to generate the certificate of immunization, the child’s most recent test result should be on the certificate, and no additional work is required. This is because blood lead test results are reported by clinical laboratories to MDHHS (as required by law), and MDHHS links the results electronically to the child’s MCIR record.
- At times, the physician may need to manually record the lead test result on the MCIR immunization certificate. This could be because:
 - The test was recently completed and is not yet reflected in MCIR. The data linkage can take two to four weeks.
 - The child’s record in MCIR didn’t match the child’s blood lead test record because of mismatched personal identifying information.

If physicians encounter MCIR records that have not been linked to lead tests within four weeks, they are encouraged to email MDHHS-CLPPP@michigan.gov so the problem can be investigated.

- The physician will need to enter the lead test results manually if the office generates a certificate of immunization from a source other than MCIR.

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

- Since blood lead testing is a preventive health service under the federal Affordable Care Act, it must be covered without additional copayment or coinsurance charges by public and most private insurers.
- MDHHS is not aware of any insurers in Michigan that do not cover venous and point-of-care capillary blood lead tests. If physicians are aware of any insurers that deny this benefit, they are encouraged to email MDHHS-CLPPP@michigan.gov for support in advocating for coverage.

Are there penalties for not complying with the universal blood lead testing requirements?

- Physicians are trusted and expected to comply with this law.
- Although technically MDHHS has the authority under [Section 5476](#) of the Public Health Code to issue fines to persons who violate the law, MDHHS does not anticipate invoking Section 5476 unless there is an extreme situation, e.g., if there was a physician who willfully, intentionally and continuously refused to order this testing. Before contemplating this type of enforcement, MDHHS would attempt to educate a physician about legal requirements and identify pathways to compliance.

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. MDHHS is eager to hear from providers experiencing challenges or barriers to universal blood lead testing and will work with providers to address them.

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