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Chapter 3
Blood Lead Testing and Reporting

Contents

Introduction

Blood lead testing is used to identify children who are lead poisoned so that appropriate measures can be taken to identify and eliminate lead hazards and minimize the length of time the child is exposed. Table 3.1 gives a summary of the goals and activities of a public health blood lead testing program:

Table 3.1 Blood lead testing program

Goal	Activities
To describe high-risk populations in the community	• Identify characteristics of children in the community known to be lead-poisoned and identify the sources of exposure. • Identify locations of children who share these risks. • Map locations of children tested, lead poisonings, and age of housing.
To assure blood lead testing is accessible and available	• Determine providers (for example, WIC projects, HealthCheck providers, Federally Qualified Health Centers, local clinics, etc.) that provide health care services to identified, at-risk populations. • Assess barriers to families in obtaining blood lead tests. • Establish collaborations to facilitate testing of at-risk children. • Identify resources for affordable venous blood lead tests for uninsured families.
To monitor local blood lead testing practices	• Assess the proportion of at-risk population, for example, Medicaid or WIC, who are tested. • Assess timeliness of venous confirmatory and follow-up tests. • Work with Wisconsin Childhood Lead Poisoning Prevention Program (CLPPP) to obtain provider or site-specific test data to determine lead testing trends.
To provide information about blood lead testing to health care providers and parents of young children	• Assess knowledge of staff at local health care facilities about lead poisoning, blood lead testing recommendations, current protocols for follow-up testing and clinical management, and the health department role. • Encourage health care providers in the community to utilize the Wisconsin Blood Lead Registry to ascertain the blood lead test histories of their pediatric patients. • Develop strategies to provide information on testing to health care staff and establish effective communication about children with lead poisoning. • Develop strategies to effectively communicate to parents of children aged 0–5 about lead exposure and blood lead testing. • Identify a desired outcome for educational interventions.

Wisconsin’s blood lead testing recommendations

Wisconsin’s blood lead testing recommendations as of 1/1/2024 are for universal testing of all children at age 1 and again at age 2, or once between 3–5 years of age if never previously tested. For more information visit the Pediatric Lead Testing and Reporting webpage or view Wisconsin Testing Recommendations, P-03557.

Lead poisoning is a major environmental health threat to young children. Early detection and follow-up of lead poisoning remains a priority in Wisconsin. The Wisconsin Blood Lead Testing Recommendations were initially developed in 1998 based on recommendations from a broad-based advisory committee and guidance from the Centers for Disease Control and Prevention (CDC, 1997). Wisconsin chose to move to universal testing because:

1. All children aged 1 and 2 are most vulnerable to lead toxicity.
2. Assessing risk for lead exposure and age-appropriate blood lead testing becomes a standard for pediatric preventive health care.
3. Although the child’s environment is considered the primary risk factor for lead exposure, there are many other sources of lead that children are exposed to.
4. Children receiving publicly funded health care services should be routinely tested and are at higher risk for lead exposure.

Requirements for reporting blood lead test results

State law (Wis. Stat. § 254.13) requires a diagnosis of lead poisoning or lead exposure on Wisconsin residents to be reported within 48 hours to Department of Health Services or the local health department (LHD). The specific requirements for reporting blood lead test results, such as timetable, content, form, etc., are described in Wis. Admin. Code ch. DHS 181. The CLPPP implements the reporting rule through a laboratory-based reporting system and works directly with laboratories to ensure all blood lead results are reported. Health care providers are responsible for sending complete demographic information as required by Wis. Admin. Code ch. DHS 181 to the analytical laboratory with each blood lead sample. This allows the laboratory to include the demographics in the blood lead report.

Health care providers that conduct on-site blood lead testing using the LeadCare II are responsible for reporting these test results to the CLPPP. These sites should report the results electronically via the electronic reportable laboratory result reporting system through the Wisconsin State Laboratory of Hygiene. If electronic reporting is not possible, use the DHS Blood Lead Lab Reporting Form (F-00017) to report by fax or mail.

The timetable for reporting is specified in Wis. Admin. Code ch. DHS 181:

- BLLs < 3.5 µg/dL within 10 days
- BLLs 5–44 µg/dL within 48 hours
- BLLs ≧45 µg/dL within 24 hours

If electronic reporting is not possible, blood lead reports can also be mailed or faxed to the CLPPP. The mailing address is:

Wisconsin Department of Health Services
Division of Public Health
WCLPPP, Rm. 145
P.O. Box 2659
Madison, WI 53701-2659

The CLPPP confidential fax number is 608-267-0402. For questions about reporting blood lead results, contact the CLPPP at DHSleadpoisoningprevention@wi.gov or 608-266-5817.

Once the data is reported to DHS, the blood lead data can be accessed through different systems.

Healthy Homes and Lead Poisoning Surveillance System (HHLPSS)
Used by the CLPPP and LHDs. All blood lead tests reported to the state are stored here. View the HHLPSS jobs aids to learn how to run blood lead data reports. For other data requests, contact the CLPPP at DHSleadpoisoningprevention@wi.gov or 608-266-5817.

Wisconsin Blood Lead Registry (WBLR)
This is a web-based system that is accessed through the Wisconsin Immunization Registry secure network. Access can be requested by primary care providers, managed care organizations, public health workers, and Wisconsin school systems who have direct authority for a child's medical and testing care. Providers are able to check if a child is due for a blood lead test or has a history of lead poisoning at the same time they check the child's immunization history. CLPPP staff upload new blood lead test results to the WBLR on a weekly basis. For more information about the WBLR and how to gain access privileges, contact the CLPPP at DHSleadpoisoningprevention@wi.gov or 608-266-5817.

WIC ROSIE
This system is used by WIC to document blood lead tests obtained at WIC.