PENNSYLVANIA DEPARTMENT OF HEALTH
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Childhood Blood Lead Act

DATE:	4/10/2023
TO:	Health Alert Network
FROM:	Debra L. Bogen, MD, FAAP, Acting Secretary of Health
SUBJECT:	**Childhood Blood Lead Act**
DISTRIBUTION:	Statewide
LOCATION:	Statewide
STREET ADDRESS:	n/a
COUNTY:	n/a
MUNICIPALITY:	n/a
ZIP CODE:	n/a

This transmission is a "Health Advisory" provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, **NURSING AND LABORATORY STAFF IN YOUR HOSPITAL EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE; FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE; LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

Summary

- The Pennsylvania Childhood Blood Lead Act (Act or Act 150 of 2022) was signed into law on November 3, 2022.
- The Act took effect on January 2, 2023 providing for blood lead assessment and testing of certain children and pregnant women by healthcare providers; imposing duties on the Department of Health (DOH); and requiring certain health insurance policies to cover blood lead tests.
- The Act establishes that health care providers shall consider possible lead exposure in an individual patient and/or pregnant woman by evaluating risk factors for lead exposures.
- Blood lead testing for children should follow recommendations from the Centers for Disease Control and Prevention (CDC) and American Academy of Pediatrics (AAP).
- For blood lead testing of pregnant women, it is recommended to follow guidelines from the CDC and American College of Obstetricians and Gynecologists (ACOG).
- A blood lead test is the best way to determine if a child has been exposed to lead.
- Even low-level exposure to lead reduces intelligence, delays cognitive growth and impairs physical development.
- Children who are in utero or less than six years of age are most sensitive to lead poisoning because their brains and nervous systems are still developing.
- Health Insurance policies or government programs provide covered individuals or recipients blood lead testing as identified in accordance with the recommendations from the CDC, AAP and ACOG.
- For more information on childhood lead exposure in Pennsylvania, visit Lead (pa.gov), or contact DOH at 1-877-PA-HEALTH if you have any questions.

Overview

Lead has no known biological function in the human body; no safe blood lead level has been identified. Even low levels of lead in blood have been shown to affect learning, ability to pay attention, and academic achievement. The younger the child, the more harmful exposure to lead can be. Most lead poisoning occurs from repeated exposure to small amounts of lead and most children will not have any apparent symptoms. While the effects of lead exposure may be permanent if caught early, there are things parents and pregnant women can do to prevent further exposure and reduce damage to their child's health.

A blood lead test is the best way to find out if a child has lead poisoning. The Childhood Blood Lead Act (Act or Act 150 of 2022) was signed into law on November 3, 2022, and was effective on January 2, 2023. It imposes duties on the DOH and requires certain health insurance policies to cover blood lead tests. It also requires healthcare providers to consider possible lead exposure in an individual patient and/or pregnant woman by evaluating risk factors for lead exposure and following CDC, AAP, and ACOG's guidelines to test children and pregnant women.

The purpose of this Health Alert Network (HAN) Health Advisory is to notify healthcare providers and DOH and local health departments' lead prevention partners about the Act and to encourage testing of all children in Pennsylvania by two years of age to ensure prompt diagnosis and treatment.

Background

Lead exposure can have serious consequences for children and pregnant women's health. Lead is ubiquitous in the environment, and unfortunately, we cannot see, taste or smell lead. Children less than six years old have the greatest risk of lead exposure. The health effects of lead exposure are more harmful to younger children than to older children and adults because their bodies are still developing and growing rapidly. Exposure to lead can seriously harm the child's health, including damage to the brain and nervous system, slowed growth and development, learning and behavior problems and hearing and speech problems. Pregnant women should know the risk of lead exposure because lead can pass to their baby during pregnancy. Lead in the blood during pregnancy can increase risk for miscarriage or, stillbirths and cause the baby to be born too early or small, with damage to the baby's brain, kidneys, and nervous system.

Nationally, lead-based paint is a significant source of lead exposure in young children. According to the 2020 American Community Survey estimate, Pennsylvania ranks fifth in the nation for the percentage of housing units identified as having been built before 1950, when lead was most prevalent. Other sources of lead exposure include toys, ceramics, and other consumer products. Drinking water can also be a source of lead exposure when it flows through older lead plumbing or pipes where lead solder has been used (which can occur in newer plumbing as well).

A blood test is the best way to determine if a child or pregnant woman has been exposed to lead. Blood tests are commonly used to screen for lead poisoning and can easily be conducted in a physician's office. Health care providers may use a capillary or venous sample for initial blood lead level screening. If the capillary results are equal to or greater than the CDC's Blood Lead Reference (BLRV) of 3.5 µg/dL, providers should collect or order a follow up venous sample.

Requirements and Recommendations for Health Care Providers

- A healthcare provider shall consider possible lead exposure by evaluating lead exposure risk factors and perform blood lead testing in accordance with the recommendations of the CDC and AAP by 24 months of age.

- If a child has never been tested in accordance with the recommendations from the CDC and AAP by 24 months of age, a health care provider shall consider possible lead exposure and perform a blood lead testing between 24 months and 72 months of age.
- A health care provider shall make reasonable efforts to ensure that a patient's parent or legal guardian understands the risks and benefits of blood lead testing prior to obtaining consent.
- If the results of a capillary blood lead test indicate a blood lead level (BLL) equal to or greater than the CDC's BLRV, the health care provider shall perform a confirmatory blood lead test by venipuncture within the timeframe recommended by the CDC based on the BLL.
- For pregnant women, the health care provider shall consider possible lead exposure by evaluating risk factors for lead exposure and perform blood lead testing if a single risk factor is identified in accordance with the recommendations for the CDC and ACOG.
- After receiving results of a patient's BLL test, follow up with the patient to discuss and inform the patient of the negative health consequences of lead exposure. Health care providers are required to report all point of care testing results to the DOH for persons under 16 years of age and are encouraged to report lab results of ≥3.5 µg/dL to the DOH.
- Review following literature on blood lead testing.
    - Recommended Actions Based on Blood Lead Levels | Lead | CDC
    - Testing Children for Lead Poisoning | Lead | CDC
    - American Academy of Pediatrics
    - The American College of Obstetricians and Gynecologists

Additional resources on childhood lead exposure

- Lead Poisoning (pa.gov)
    - Elevated Blood Lead Level Resources (pa.gov)
    - Lead Poisoning FAQ (pa.gov)
- Childhood Lead Poisoning Prevention Program | CDC
- Child Blood Lead Testing and Care Management Screening Guide (paleadfree.org)
- PA DOH lead information 1-800-440-LEAD

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: provides important information for a specific incident or situation; may not require immediate action.
Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of April 10, 2023 but may be modified in the future.