Overview of Childhood Lead Poisoning Prevention

Lead is a naturally occurring metal that can cause negative health effects. People are exposed to lead by eating lead paint chips, ingesting contaminated food or water, and/or by breathing in lead dust. Children younger than 6 years are more likely to be exposed due to their hand-to-mouth behavior. Many children ingest lead dust by putting objects such as toys and dirt in their mouths.

No safe blood lead level (BLL) in children has been identified and even low levels of lead in blood are associated with developmental delays, difficulty learning, and behavioral issues. The effects of lead poisoning can be permanent and disabling.

There are steps that parents and healthcare providers can take to protect children from lead exposure. Healthcare providers can perform a blood lead test if a child was or may have been exposed to lead.

CDC uses a blood lead reference value (BLRV) of 3.5 micrograms per deciliter (µg/dL) to identify children with BLLs higher than most children's levels. CDC estimates that approximately 500,000 children in the United States have BLLs at or above the BLRV. For BLLs higher than the BLRV, healthcare providers can use CDC's Recommended Actions Based on Blood Lead Level to develop a plan of action for their patient. More information about sources of exposure, risk factors, testing and prevention is provided below.

Where Children Are Exposed

Children can be exposed to lead where they live, learn, and play. Sources of lead exposure can include the following:

- Chipping or peeling paint in homes or buildings built before 1978
- Water from lead pipes
- Soil near airports, highways, or factories
- Some imported candies and traditional medicines
- Some imported toys and jewelry
Risk Factors

Some children are at a greater risk for lead exposure from paint, water, soil, some imported items such as traditional medicines and herbs, industrial sources, and from certain jobs and hobbies (through their parents and caregivers). More information can be found on the Populations at Higher Risk web page.

Testing for Lead Exposure

A blood lead test is the best way to determine if a child has been exposed to lead. Parents can talk to their healthcare provider to find out if a blood lead test is needed. Healthcare providers can recommend follow-up actions and care based on the child's BLL.

To find out if a home has lead, hire a certified lead inspector to test for lead. Visit the Environmental Protection Agency's Locate Certified Inspection, Risk Assessment, and Abatement Firms web page to locate one. Renters can ask their landlord to have the home inspected or to share results of recently conducted lead inspections. Visit the Lead in Drinking Water and the Lead in Soil web pages for additional information on testing for lead in or around the home.

Prevent Childhood Lead Exposure

The goal of CDC's Childhood Lead Poisoning Prevention Program (CLPPP) is to prevent childhood lead exposure before any harm occurs. Through CLPPP, CDC supports state and local public health departments with funds for surveillance and prevention of lead exposure.

Additional Information

- HRSA-CDC Letter on Childhood Lead Poisoning Prevention and Blood Lead Testing [PDF – 213 KB]
- Lead FAQs
- Sources of Lead Exposure
- Health Effects of Lead Exposure
- Blood Lead Levels in Children
- Data and Statistics
- Publications and Resources

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