



What Do Parents Need to Know to Protect Their Children?

Protecting children from exposure to lead is important to lifelong good health. No safe blood lead level in children has been identified. Even low levels of lead in blood have been shown to affect IQ, ability to pay attention, and academic achievement. And effects of lead exposure cannot be corrected.

The most important step parents, doctors, and others can take is to **prevent lead exposure before it occurs.**

Blood Lead Levels in Children

Reference Level

- Experts now use a reference level of 5 micrograms per deciliter to identify children with blood lead levels that are much higher than most children's levels. This new level is based on the U.S. population of children ages 1-5 years who are in the highest 2.5% of children when tested for lead in their blood.
- This reference value is based on the 97.5th percentile of the National Health and Nutrition Examination Survey (NHANES)'s blood lead distribution in children. The current reference value is based on NHANES data from 2007-2008 and 2009-2010. CDC will assess the reference value every 4 years using the two most recent NHANES surveys.
- Once new NHANES data are released, CDC will analyze the last two sets of NHANES data to find the 97.5th percentile of blood lead distribution in children. Once we know that number we can determine whether to change the reference value.
- NHANES is a population-based survey to assess the health and nutritional status of adults and children in the United States and determine the prevalence of major diseases and risk factors for diseases.

Highlights

- In 2012, CDC updated its recommendations on children's blood lead levels.
- By shifting our focus to *primary prevention* of lead exposure, we can reduce or eliminate dangerous lead sources in children's environments **BEFORE** they are exposed.
- What has *not changed* is the recommendation for when to use medical treatment for children. Experts recommend chelation therapy when a child is found with a test result of greater than or equal to 45 micrograms per deciliter of lead in blood.

Previous Terminology

- Until 2012, children were identified as having a blood lead “level of concern” if the test result is 10 or more micrograms per deciliter of lead in blood. CDC is no longer using the term “level of concern” and is instead using the reference value to identify children who have been exposed to lead and who require case management.
- In the past, blood lead level tests below 10 micrograms per deciliter of lead in blood may, or may not, have been reported to parents. The new lower value means that more children will likely be identified as having lead exposure allowing parents, doctors, public health officials, and communities to take action earlier to reduce the child’s future exposure to lead.

What Has Not Changed

- What has *not changed* is the recommendation for when medical treatment is advised for children with high blood lead levels. The new recommendation does not change the guidance that chelation therapy be considered when a child has a blood lead test result greater than or equal to 45 micrograms per deciliter.
- Children can be given a blood test to measure the level of lead in their blood. These tests are covered by Medicaid and most private health insurance.

- Though lead can be found in many sources, lead exposure is entirely preventable. The key is stopping children from coming into contact with lead and treating children who have been poisoned by lead. Parents can take simple steps to make their homes more lead-safe.
- Children can be given a blood test to measure the level of lead in their blood. Talk to your child’s doctor if you are concerned about lead exposure.

Additional Resources

Blood Lead Levels in Children Fact Sheet [PDF - 168 KB]

Summary of Recommendations for Follow-up and Case Management of Children Based on Confirmed Blood Lead Levels

CDC Response to Advisory Committee on Childhood Lead Poisoning Prevention Recommendations in “*Low Level Lead Exposure Harms Children: A Renewed Call of Primary Prevention*” [PDF - 165 KB]

Recommendations of the Advisory Committee for Childhood Lead Poisoning Prevention [PDF - 890 KB]

Advisory Committee On Childhood Lead Poisoning Prevention (ACCLPP)

Prevention Tips

File Formats Help:

How do I view different file formats (PDF, DOC, PPT, MPEG) on this site?

(<https://www.cdc.gov/Other/plugins/>)

(<https://www.cdc.gov/Other/plugins/#pdf>)

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