



Childhood Lead Poisoning Prevention

Health Effects of Lead Exposure

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 negatively affect a child's intelligence, ability to pay attention, and academic achievement. While the effects of lead poisoning may be permanent, if caught early, there are [things parents can do](#)  [\[PDF - 234 KB\]](#) to prevent further exposure and reduce damage to their child's health.

Lead exposure occurs when a child comes in contact with lead by touching, swallowing, or breathing in lead or lead dust.



Exposure to lead can seriously harm a child's health and cause well-documented adverse effects such as:

- Damage to the brain and nervous system
- Slowed growth and development
- Learning and behavior problems
- Hearing and speech problems

This can cause:

- Lower IQ
- Decreased ability to pay attention
- Underperformance in school

There is also evidence that childhood exposure to lead can cause long-term harm.

Lead exposure in children is often difficult to see. Most children have no obvious immediate symptoms. If there's suspicion that a child may have been exposed to lead, parents should talk to their child's healthcare provider about [getting a blood lead test](#). [Healthcare providers](#) and most local health departments can test for lead in the blood. Many private insurance policies cover the cost of testing for lead in the blood. The cost of blood lead testing for children enrolled in Medicaid is covered by the Centers for Medicare & Medicaid Services.

The health effects of exposure are more harmful to [children](#) less than six years of age because their bodies are still developing and growing rapidly. Young children also tend to put their hands or other objects, which may be contaminated with lead dust, into their mouths, so they are more likely to be exposed to lead than older children.

Lead in the Blood and Body

Lead quickly enters the blood and can harm a child's health. Once a child swallows lead, their blood lead level rises. Once a child's exposure to lead stops, the amount of lead in the blood decreases gradually. The child's body releases some of the lead through urine, sweat, and feces. Lead is also stored in bones. It can take decades for lead stored in the bones to decrease.

Many things affect how a child's body handles exposure to lead, including the following:

- Child's age
- Nutritional status
- [Source of lead exposure](#)
- Length of time the child was exposed
- Presence of other underlying health conditions

Although lead in blood represents only a portion of the total amount of lead present in the body, a [blood lead test](#) is the best way to assess a person's exposure to lead.

Prevent Lead Exposure

The good news is that childhood lead exposure is preventable. The most important step that [parents](#), [healthcare providers](#), and others can take is to prevent exposure.

CDC's Childhood Lead Poisoning Prevention program is working across government programs to teach healthcare providers, parents, educators, and others how to track developmental milestones in children under five who have documented lead exposure—and how to act early if there is a concern.

Additional Resources

- [CDC's developmental milestones](#) – describes milestones children generally reach at each age, from 2 months – 5 years old.
- [CDC's Milestone Tracker app](#) – available in English and Spanish, is a free tool to help you monitor your children's developmental progress.
- [CDC's "Learn the Signs. Act Early" campaign](#) – offers specific tools for families, healthcare providers, educators, home visiting programs and others.
- [HHS provides Birth to 5: Watch Me Thrive! A Compendium of Screening Measures for Young Children](#) [↗](#) – to support early childhood practitioners in the choices they make when selecting or changing their developmental screening tools.