LEAD
poisoning

5 Things you can do
to help lower your child's lead level.

If your child has a high lead level, there are things you can do at home to help.

1 Make a plan with your doctor.

Work together with your doctor to find the best treatment for your child. Ask questions if you don't understand something.

You may need to:

- Go back for a second lead test.
- Test your child for learning and development problems. This test is called a "developmental assessment."

2 Find the lead in your home.

Most children get lead poisoning from lead paint in homes built before 1978. It is important to find and fix lead in your home as soon as possible. Have your home inspected by a licensed lead inspector.

Don't remodel or renovate until your home has been inspected for lead. Home repairs like sanding or scraping paint can make dangerous lead dust.

3 Clean up lead dust.

When old paint cracks and peels, it makes lead dust. Lead dust is so small you cannot see it. Children get lead poisoning from swallowing dust on their hands and toys.

- Use wet paper towels to clean up lead dust.
- Clean around windows, play areas, and floors.
- Wash hands and toys often with soap and water. Alwayswash hands before eating and sleeping.
- Use contact paper or duct tape to cover chipping or peeling paint.

4 Give your child healthy foods.

Feed your child healthy foods with calcium, iron, and vitamin C. These foods may help keep lead out of the body.

- Calcium is in milk, yogurt, cheese, and green leafy vegetables like spinach.
- Iron is in lean red meats, beans, peanut butter, and cereals.
- Vitamin C is in oranges, green and red peppers, and juice.

5 Learn more. Get support.

Contact your local health department. Trained staff will answer your questions and connect you to other resources in your community.

Dealing with lead poisoning can be stressful. Be sure to ask for support. You may want to talk to other parents who have children with lead poisoning.

Contact us for more information:

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

Blood Lead Levels in Children

What Do Parents Need to Know to Protect Their Children?

Protecting children from exposure to lead is important to lifelong good health. 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**.

Update on Blood Lead Levels in Children

- Children can be given a blood test to measure the level of lead in their blood.
- Until recently, 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. Experts now use a new level based on the U.S. population of children ages 1-5 years who are in the top 2.5% of children when tested for lead in their blood (when compared to children who are exposed to more lead than most children).
- 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 likely will 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 is the recommendation for when to use medical treatment for children. These new recommendations do not change the recommendation that chelation therapy be considered when a child is found with a test result of greater than or equal to 45 micrograms per deciliter of lead in blood.

Actions for Parents

Parents can take simple steps to make their homes more lead-safe.

- Talk to your local health department about testing paint and dust in your home for lead if you live in a home built before 1978.
- Common home renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips by disturbing lead-based paint. These can be harmful to adults and children.
- Renovation activities should be performed by certified renovators who are trained by EPA-approved training providers to follow lead-safe work practices.
- Learn more at EPA's Renovation, Repair, and Painting rule Web page: http://www.epa.gov/lead/pubs/renovation.htm.
- If you see paint chips or dust in windowsills or on floors because of peeling paint, clean these areas regularly with a wet mop.
- Wipe your feet on mats before entering the home, especially if you work in occupations where lead is used. Removing your shoes when you are entering the home is a good practice to control lead.
- Remove recalled toys and toy jewelry from children. Stay up-to-date on current recalls by visiting the Consumer Product Safety Commission's Web site: http://www.cpsc.gov/.

Lead can be found in a variety of sources. These include:

- **paint in homes built before 1978.**
- **water pumped through leaded pipes.**
- **imported items including clay pots.**
- **certain consumer products such as candies, make up and jewelry.**
- **certain imported home remedies.**

Background

Effect of a Different Blood Lead Level

- In the past, blood lead level tests below10 micrograms per deciliter may, or may not, have been reported to parents. Identifying a child's blood lead equal to or above 5 micrograms per deciliter means more parents should learn that their child has an elevated blood lead level.
- Even though no medical treatment is recommended for children with blood lead levels lower than 45 micrograms per deciliter, parents will know they need to learn about sources of lead exposure and find out if one or more unrecognized sources of lead are present in their home. Parents then can follow the Centers for Disease Control and Prevention (CDC)'s recommendations to control exposure to lead.
- No changes are recommended to the existing CDC guidelines for the evaluation and treatment of children requiring chelation (those with BLLs ≥ 45 micrograms per deciliter).

New Recommendations to Define Elevated Blood Lead Levels

- In January 2012, a committee of experts recommended that the CDC change its "blood lead level of concern." The recommendation was based on a growing number of scientific studies that show that even low blood lead levels can cause lifelong health effects.
- The committee recommended that CDC link lead levels to data from the National Health and Nutritional Examination Survey (NHANES) to identify children living or staying for long periods in environments that expose them to lead hazards. This new level is based on the population of children aged 1-5 years in the U.S. who are in the top 2.5% of children when tested for lead in their blood. Currently, that is 5 micrograms per deciliter of lead in blood. CDC's "blood lead level of concern" has been 10 micrograms per deciliter.
- The new value means that more children will be identified as having lead exposure earlier and parents, doctors, public health officials, and communities can take action earlier.
- The committee also said, as CDC has long said, that the best way to protect children is to prevent lead exposure in the first place.

To learn more about preventing lead exposure, visit CDC's Web site at http://www.cdc.gov/nceh/lead/

Q: How does lead get into children?

A: Young children can get lead by:

- swallowing lead dust that is picked on their hands, or toys or other objects that they put into their mouths
- swallowing lead paint chips;
- breathing lead dust in the air; eating food or drinking water that has lead in it.

Q: The biggest danger is paint chips, right?

A: No! While lead paint chips can contain a lot of lead, and be very dangerous, most children with lead poisoning never eat paint chips! The most dangerous lead is the lead you can't see. Most lead poisoning in children is due to their swallowing or breathing particles of very fine household dust or soil that have been contaminated with lead. This fine dust is very easily absorbed once it gets into the body.

Q: What age are children most at risk for lead poisoning?

A: The children that we are most concerned about at children less than six years old, particularly children between six months old (when they start to crawl around) and their third birthday. This is because:

- The time between birth and six years, and especially between birth and three years of age, is when the human brain grows the fastest, and when the critical connections in the brain and nervous system that control thought, learning, hearing, movement, behavior and emotions are formed. Anything that effects the brain at this time has lifelong effects.
- The normal behavior of children at this age - crawling, exploring, teething, putting objects in their mouth - puts them into contact with any lead is present in their environment.
- Children at this age absorb more of the lead that gets into their lungs or stomach than adults or older children.

Q: Where is the lead in the environment?

A: Lots of places!

- Lead-based oil paint on buildings. Any house built before 1978 may contain lead paint. Any house built before 1950 may be a particular risk, since paint made before then had very high (up to 50%) levels of lead pigments.

- In the soil, especially near factories that used lead, along heavily traveled roads (due to lead in gasoline), and on farms and orchards where lead arsenate pesticides were used. As New Jersey's population has grown, housing developments have been built on land that used to be factories, farms, or orchards where lead was used.
- In the water, if the building has lead pipes, or lead solder connecting the pipes.
- On the clothes of adults who work in industry that uses lead.
- In common hobbies, such as stained glass, pottery making, or home manufacture of fishing sinkers or bullets.
- On consumer products, such as pottery, toys, crayons, and vinyl mini-blinds imported from countries that do not ban the use of lead in these products. While these products are not supposed to be imported into the U.S., sometimes they are carried in by individuals who buy them in other countries, or are not detected in Customs and discovered only after they are in the hands of consumers.
- Keep children away from hobbies that use lead. Keep children out of the workshop, or clean-up carefully after using lead.
- Don't remove paint unless they know it is does not have lead in it. Any paint known or suspected to have lead should be removed only with special precautions, or by a stat e-certified Lead Abatement Contractor.

Q: What are the symptoms of lead poisoning in children?

A: Children with high levels of lead in their body may not have symptoms! Lead poisoning causes symptoms only have very high levels, and even then those symptoms -stomach aches, anemia -are similar to those of much less serious illnesses. Only when a child is very sick will they get serious symptoms, such as seizures. However, because most children with lead poisoning will not show obvious symptoms, it is important that children be screened to detect lead poisoning.

Q: When should children be screened for lead poisoning?

A: All children should be screened for lead poisoning at 12 and 24 months of age. Any child older than 12 months, but less than 6 years old, who has never previously been screened should, also be screened. In addition, any child who is six months of age or older, and is exposed to a particular lead hazard, should be screened. For example, if the child lives in a house with peeling paint, or a older house that was recently renovated without precautions to control lead dust, should be screened as soon as possible.

Q: How much lead is safe in a child? What amount of lead is considered lead poisoning?

A: So far as we know, no amount of lead in the human body is "safe" or "normal". Unlike other natural minerals, such as zinc and iron, that are necessary for our bodies to function properly, but are toxic in high doses, lead has no natural function in the human body.

Q: What can parents do to prevent their children from getting lead poisoning?

A: There are a lot of simple, low-cost things that parents can do to keep children from being exposed to lead, like:

- Have them wash their hands frequently, especially before eating or after playing outside or on the floor.
- Wash toys and other objects they handle and put in their mouths.
- Take off shoes and leave them at the door.
- Give them a nutritious diet high in iron and calcium and low in fat. Iron and calcium block lead from getting into red blood cells and being carried around the body.
- Clean floors and window sills by using a mop or sponge and detergent. Sweeping, dusting, and vacuuming only push lead dust around, and don't remove it. Recent research shows special detergents are not needed.
- If they work in a job that uses lead, shower and change clothes before leaving work. Wash work clothes separately from the other family laundry.