Lead Screening for Children

Of all the health problems caused by the environment, lead poisoning is the most preventable. Despite this, almost 1 million children in the United States have elevated levels of lead in their blood. Any child can be at risk for lead poisoning.

Read more to learn about the risks of lead poisoning and how to prevent it, and about lead screening and treatment for lead poisoning.

How can lead hurt my child?

Children, primarily those younger than 6 years, *can* be exposed to lead if they

- Get lead dust from old paint on their hands or toys and then put their hands in their mouths
- Breathe in lead dust from old paint
- Eat chips of old paint or dirt that contain lead
- Drink water from pipes lined or soldered with lead

Once lead enters the body, it travels through the bloodstream and is stored mainly in the bones where it can remain for a lifetime. Very high levels of lead in the body may cause many long-term problems, including

- Developmental delays
- Hearing loss
- Seizures and coma
- Kidney problems
- Anemia
- Growth problems

Most children with high lead levels in their blood show no obvious symptoms until they reach school age. At that point, some may show learning and behavioral problems. Others with high lead levels may experience symptoms such as stomach pain, headaches, vomiting, or muscle weakness.

Where can lead be found?

You may have heard that children can be harmed by the lead in pencils. This is not true. There is no actual lead in pencils and there is no lead in the paint on the outside of pencils. Lead is found in the following places:

- Dust and paint chips from old paint
- Homes built before 1950, particularly those that are in need of repair or are in deteriorating condition
- Homes built before 1978 that are being renovated
- Soil that has lead in it
- Hobby materials such as stained glass, paints, solders, fishing weights, and buckshot
- Folk remedies
- Workplace dust brought home on the clothing of people who have jobs that use lead, such as foundry workers, smelter workers, and radiator repair mechanics
- Food stored in some ceramic dishes (especially if made in another country)
- Older painted toys and antique furniture such as cribs
- Tap water in older homes that have lead pipes or lead solder in their pipes
- Automobile batteries

Should my child be screened for lead?

If you can answer "yes" to any of the following questions, especially numbers 1, 2, and 3, your child may need to be screened for lead. Talk to your pediatrician about lead screening for your child.

1. Does your child live in or regularly visit a house that was built before 1950, including a home child care center or the home of a relative?
2. Does your child live in or regularly visit a house built before 1978 that has been remodeled in the last 6 months? Are there any plans to remodel?
3. Does your child have a brother, sister, housemate, or playmate who is being treated for lead poisoning?
4. Does your child live with an adult whose job or hobby involves exposure to lead?
5. Does your child live near an active lead smelter, battery-recycling plant, or other industry likely to release lead into the environment?
6. Does your child live within 1 block of a major highway or busy street?
7. Has your child ever been given home remedies such as azarcon, greta, or pay looah?
8. Has your child ever lived outside the United States?
9. Does your family use pottery or ceramics for cooking, eating, or drinking?
10. Have you seen your child eat paint chips?
11. Have you seen your child eat soil or dirt?
12. Have you been told your child has low iron?

Adapted from the Centers for Disease Control and Prevention's *Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials.*

Prevention—what you can do

- If your home was built before 1950, ask your child's pediatrician to test your child for lead.
- If your home was built before 1978, talk with your child's pediatrician or your health department about safe ways to remodel *before* any work is done.
- When removing lead paint, be sure to use a certified contractor. Trying to remove the paint on your own can often make the condition worse. Know your state's laws regarding lead removal. Some states only allow certified contractors to remove lead. Be sure to seal off the room or area you are remodeling with heavy plastic until the job is done.

- Clean and cover any chalking, flaking, or chipping paint with a new coat of paint, duct tape, or contact paper. It is important to check for paint dust or flaking paint at window areas where children often play. Be aware that these are temporary measures only, and that lead must be completely removed for your child's best protection.
- Repair areas where paint is dusting, chipping, or peeling before placing cribs, playpens, beds, or highchairs next to them.
- Wet mop floors, damp sponge walls and horizontal surfaces, and vacuum with a high-efficiency particulate air vacuum (HEPA vac) if you are concerned about the possibility of lead dust in your home. Although good cleaning is a temporary solution, complete removal of the lead is the best protection.
- Encourage your children to wash their hands often, especially before eating.
- Have your home or apartment checked for possible lead contamination before moving in. Keep in mind that landlords are legally responsible for removing any lead found on their property.
- If you work around lead or have hobbies that involve lead, change clothes and shoes before entering your home. Keep clothes at work or wash work clothes as soon as possible.
- Check with your child's pediatrician or your health department to see if your area has a problem with lead in the water.
- If you have lead pipes, run the first morning tap water for 2 minutes before using it for drinking or cooking. Use cold tap water for mixing formula, drinking, or cooking because hot tap water can have higher amounts of lead in it.

You can also reduce the risks of lead by making sure your child eats a well-balanced diet. Give your child nutritious, low-fat foods that are high in calcium and iron, like meat, beans, spinach, and low-fat dairy products. Calcium and iron in particular reduce the amount of lead absorbed by the body.

Lead screening

The only way to know for sure if your child has been exposed to lead is to have your child's pediatrician test your child's blood. Lead screening tests use either a small amount of blood from a finger prick or a larger sample of blood from a vein in the arm. These tests measure the amount of lead in the blood.

Treatment

For children with *low* levels of lead in their blood, identify and eliminate the sources of lead to avoid future health problems. Children with *high* levels of lead in their blood usually need to take a drug that binds the lead in the blood and helps the body get rid of it. This treatment may be given as a series of shots or as oral medicine depending on the severity of the lead poisoning. Some children with lead poisoning need more than one type of treatment and several months of close follow-up. If the damage is severe, the child may need special schooling and therapy.

Remember

Most young children put things other than food into their mouths. They chew on toys, taste the sand at the park, and eat cat food if given the chance. This rarely causes any harm, as long as poisons, small items that children can choke on, and sharp objects are kept out of reach. Lead, however, can be very dangerous to children. Infants and toddlers can get lead poisoning by putting their fingers in their mouths after touching lead dust, eating lead paint chips, or breathing in lead dust. Lead poisoning can cause developmental delay, hearing loss, seizures and coma, kidney problems, anemia, and growth problems. Talk with your child's pediatrician about getting a blood test, especially if your child is younger than 3 years. Take the steps listed in this brochure to make sure your child is not exposed to lead.

From your doctor

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