



Get the Lead Out
Facts About
Childhood Lead Poisoning

What is lead poisoning?

Lead poisoning is the presence of too much lead in the body. The most common environmental health hazard for children in the United States today, it is caused by exposure to lead that is either eaten or breathed, in the form of dust. The body carries the lead in the blood to soft tissues and bones, where it can be stored for many years. Lead harms several organs, including the brain and kidneys. There is no safe level of lead in the body, but a level of 10mcg/dL or greater is considered lead poisoning.

Where is lead found?

The largest source of lead is paint manufactured before 1978 and the dust created when it decays. This paint was used for many purposes, including painting the interior and exterior of houses, playground equipment, farm machinery and toys. Other items also contain lead. Some imported crayons and mini blinds, calcium supplements, hair dyes, improperly glazed pottery, certain cosmetics, leaded crystal and some folk remedies have high lead contents. Certain hobbies—such as stained glass, target shooting and casting fishing weights—can expose people to lead.

Who gets lead poisoning?

People of any age, race or economic level can get lead poisoning, but children are at the greatest risk. Their small bodies absorb more lead than adult bodies do, and the lead harms them more because their bodies are still growing. Children also are more likely to absorb lead dust because they place hands and other objects in their mouths.

Adults with certain occupations that expose them to lead can get lead poisoning as well. These jobs include battery manufacturing and recycling, construction work, auto repair and lead smelting. Workers in these occupations can unknowingly carry lead dust home from the workplace and expose their families. People who remodel their own homes have a high risk of becoming lead poisoned. Lead poisoning also can be passed from a pregnant mother to her unborn child.

How many children have lead poisoning?

There is no safe level of lead. Lead is a poison and even small amounts can interfere with normal body processes and development. The average blood lead level for children in the United States aged 1 to 5 years is 1.6 mcg/dL. However, the risk of lead poisoning is much greater in Illinois. In 2010, 3,356 (1.10 percent) of Illinois children were found to have elevated blood lead levels of 10 mcg/dL or higher.

What are the symptoms of lead poisoning?

Lead poisoning has no obvious signs, and most children do not report any abnormal symptoms. Children with high levels of lead in their bodies might report stomachaches or exhibit decreased appetite, hyperactivity, sleeping problems or irritability. Because these symptoms appear to mimic other childhood problems, lead poisoning is sometimes mistaken for a cold or the flu.

What kinds of complications can lead poisoning cause?

Lead poisoning is related to a number of serious health problems. Lead can interfere with brain development and slow physical growth. Children with elevated lead levels may suffer from learning disabilities, mental retardation, behavioral problems, lowered IQ, stunted growth and hearing impairment. Convulsions, coma and death can occur at very high lead levels. Childhood lead poisoning contributes to problems later in life, such as academic failure, juvenile delinquency and high blood pressure.

How can I tell if my child has lead poisoning?

The only way to diagnose lead poisoning is by having a blood test. A doctor or nurse takes blood from a child's finger or arm. They send the blood sample to a laboratory to find out how much lead it contains. All children 6 months through 6 years of age who are entering day care, preschool or kindergarten must be assessed for lead poisoning by a health care provider.

How is lead poisoning treated?

Special drugs, called chelators, may be used to treat children with very high blood lead levels. These medications are given in the hospital either through intravenous or intramuscular injections or by mouth. The medicine attaches to the lead and pulls it out of the body in the urine. If the lead level is very high, more than one treatment session may be necessary to lower the amount of lead in the blood. Even with treatment, lead takes a very long time to be removed from the body and some of its effects may be permanent. Children with elevated blood levels will need to live in a safe environment and be monitored repeatedly for many years.

How can lead exposure and absorption be prevented?

Lead poisoning can be prevented by taking simple precautions around the house. These methods include the following steps:

- Cleaning up paint chips and peeling paint by wet washing
- Washing floors, counter tops and window sills weekly with an all-purpose detergent or a detergent specifically formulated to remove lead dust
- Feeding children a healthy diet that includes recommended amounts of iron, calcium, and Vitamin C, and has healthy (lower) amounts of fat
- Offering children healthy snacks, such as fruit or pretzels, throughout the day so they will not put non-food items into their mouths
- Using proper safety measures when renovating or remodeling your house, like not using electric sanders or open flame torches to remove paint or wallpaper
- Assuring that children and pregnant women do not enter a work area until renovations are complete and the area has been thoroughly cleaned
- Washing a child's hands, mouth and face, and toys often
- Allowing the cold water to run for several minutes in the morning before using it for drinking, cooking or mixing infant formula in case lead pipes or solder is present
- Removing shoes when coming indoors so lead dust is not tracked inside
- Laundering work clothes separately from other clothes
- Not serving or storing food in pottery made outside the United States

For more information on lead poisoning, please contact the Illinois Department of Public Health at 217-782-3517, 866-909-3572, or TTY (hearing impaired use only) 800-547-0466; or call your local health department.

Available resources published by the Illinois Lead Program, can be viewed and downloaded from the Web site at: <http://www.idph.state.il.us/illinoislead>.