

What is lead poisoning?

Lead is a heavy metal that has been used for thousands of years to prevent corrosion and kill mold or mildew. Lead has been used in making very common items such as: house paints, industrial paints, pottery, crystal and other glassware, gasoline, batteries, bullets and fishing weights. Although it has many uses, lead is also a poison. It gets into the body and builds up to a dangerous level. Children under the age of six are at the highest risk for poisoning due to exposure to lead.

What are the health effects of lead poisoning?

Children can be lead poisoned very easily. A child's rapidly developing brain, central nervous system and entire body can be damaged by lead. Children ages one to three are at very high risk for lead poisoning because they crawl on floors, put things in their mouths and can swallow a lot of lead dust. Children absorb up to 50% of the lead they take into their body. Lead kills brain cells and disrupts nerve signals. The effects of childhood lead poisoning can last a lifetime.

Lead poisoning can cause:

- Reduction of child's ability to learn.
- Poor muscle and bone growth.
- Poor hearing.
- Speech and language problems.
- Coordination problems.

How are children exposed to lead?

Lead paint or soil: The most common way children are exposed to lead is through lead paint. Any home built before 1978 may contain lead-based paint. Homes built before 1950 are more likely to have higher levels of lead. Lead was added to paint for better color, longer durability and faster drying time. Persons renovating older homes need be careful not to dry scrape old paint before repainting. The scraping causes lead dust to contaminate everything it settles on. Soil can be contaminated by paint chips, lead dust and by some playground equipment. When children play in the soil (or dirt), they come in contact with lead dust.

Food: Food grown in soil containing lead can also be dangerous for children. Parents need to be careful with dishes, ceramic ware or pottery that may contain lead. When food is cooked in or eaten out of these items, lead can leach (leak) into the actual food that is eaten.

Some countries use lead in the solder that holds cans together. Lead-soldered cans are no longer permitted in the United States, but are permitted in other countries that export food to the United States. Any can that contains lead must have a label which states the amount of lead in the solder.

Drinking water: Lead was used for years in the pipes and solder in household plumbing to prevent cracking during freezing weather. The Safe Drinking Water Act (1986 & 1988) made it illegal to use lead in household plumbing. However, old lead pipes and lead solder can still contaminate drinking water. Lead rarely occurs naturally in water.

Hobbies: Many people are exposed to lead through certain hobbies. Activities include: home remodeling, glazed pottery making, target shooting at firing ranges, electronics, stained glass window making, refinishing furniture and painting.

Occupational exposure: Many occupations can expose people to lead. These workers are in danger of lead poisoning themselves, but may also contaminate their cars and homes by bringing lead dust home on their clothes, shoes, hair or skin. If workers don't clean up properly before leaving a worksite, they could poison their own families. These occupations include: carpenters, renovators, steel welders and cutters, plumbers, pipe fitters, lead crystal makers, plastic manufacturers, police officers, car mechanics and printers.

How is lead poisoning treated?

Children can be exposed to lead even if no apparent exposures are identified. Therefore, all children should be tested for lead in their blood. The test is a finger stick and should be done when the child is one year old and again at two years old. The test can be done at the Guilford County Department of Public Health, 1100 E. Wendover Avenue in Greensboro or 501 E. Green Drive in High Point. Lab hours are 9:00am – 12:00 noon, and 1:00pm – 4:00pm. The test is FREE and no appointment is necessary.

Children may also be tested for lead at their private health care provider's office. Parents should check with their health care provider at their child's one year and two year check-ups.

For more information, call the Guilford County Department of Public Health at 641-7777 or visit www.guilfordhealth.org