

Fact Sheet

Lead Poisoning



What is Lead Poisoning?

Lead is a toxic metal used in a variety of products and materials, including *paint, pipes, leaded crystal, dishware, and pottery coatings*. When lead is absorbed into the body, it can cause serious damage to vital organs like the brain, kidneys, nerves, and blood cells. *Lead poisoning is especially harmful to children under the age of six years.*

Exposure

Lead hazards can be found in several places inside and outside of the home, including:



Paint: Lead-based paint, most often found on the exterior and interior of homes built *before 1978*, is the *most common source of lead poisoning in U.S. children*. The paint becomes unsafe when it peels, chips, cracks, or is damaged or disturbed by renovation. Since babies and young children often put their hands and other objects in their mouths, they are likely to swallow lead dust or chew paint chips.

Lead Dust: This harmful, invisible dust is created during renovation and when windows, doors, edges of stairs, rails, or other surfaces with lead-based paint wear down from repeated friction, such as opening or closing windows or doors. Lead dust can spread throughout a home when walls or other painted surfaces are sanded, scraped, or torn down. Ideally, trained professionals should safely

remove old paint surfaces in a home.

Soil: Soil surrounding homes may be contaminated from chipping or flaking exterior lead-based paint. While playing outside, especially on bare soil, children can accidentally swallow the contaminated soil. Soil can also be tracked indoors on carpets and floors where children can come into contact with it.

Drinking Water: Lead pipes placed in homes *before 1950* are likely to contain lead, which is released into drinking water as it passes through the old pipes and fixtures.

Food: Lead can seep into food or drinks that are stored in *imported* ceramic dishes or pottery.

Workplace Exposure: People who work in lead-related industries (*painting and coatings, welding, automotive, or recycling industries*) or use lead for hobbies (*stained glass windows*) may bring lead into the home.

Folk Medicine: Lead and other heavy metals are put into certain folk medicines because these metals are thought to be useful in treating some ailments. *Sometimes lead accidentally gets into the folk medicine during grinding, during coloring, or from the package.*

Cosmetics: Traditional cosmetics *imported* from countries that do not test for lead.

Children are most often poisoned by consuming lead dust through normal hand-to-mouth activity.

Pregnant women who breathe in high levels of lead dust can transmit lead to their unborn children, causing serious damage.

Health Effects

Lead interferes with the development and functioning of almost all body organs, particularly the kidneys, red blood cells, and central nervous system. Lead poisoning is much more serious when children are exposed to lead.

Since children's bodies are not fully developed, lead poisoning can cause:

- Brain, liver, and kidney damage
- Slowed development
- Learning or behavior problems
- Lowered intellect or (IQ)
- Hearing loss
- Restlessness

Signs and Symptoms

Most children with lead poisoning do not show any outward symptoms unless blood-lead levels become extremely high: consequently, *many cases of children with lead poisoning go undiagnosed and untreated*. However, some symptoms of poisoning include:

- Headaches
- Stomach aches
- Nausea
- Tiredness
- Irritability or change in behavior

Topic Specific Resources and Information

EPA links to local water quality data www.epa.gov/ccr

MDHHS Keep Michigan Healthy – Lead www.michigan.gov/mdhhs

SCCHD Fact Sheet: Lead Poisoning www.scchealth.co

Environmental Protection Agency www.epa.gov/lead

Centers for Disease Control and Prevention www.cdc.gov

Diagnosis

The only way to detect lead poisoning is by performing a simple blood test. All children under the age of six should have their blood-lead levels tested. Testing is available at a pediatrician's office or the health department. **Call (810) 987-5300** to schedule an appointment.

Prevention

Since treatment options for lead poisoning are limited, it is best to prevent lead poisoning before it has a chance to occur. *Lead poisoning is preventable with proper:*

Nutrition: Serve children foods with a high content of iron (*eggs, cooked beans, or red meats*), calcium (*cheese, yogurt, or cooked greens*), and vitamin C (*citrus fruits, green peppers, or tomatoes*). Adequate intake of these nutrients minimizes lead absorption in children's bodies.

Cooking and Drinking Water: If you live in an older home (*plumbing installed before 1950*), flush your water system by running the kitchen tap (*or any other tap you take drinking or cooking water from*) on **COLD** for **1–2 minutes** before using the water for cooking or drinking and/or until your water test results indicate your water is lead free or safe. **Contact the health department (810) 987-5300 or your local water treatment plant to find out how to get your water tested for lead.**

Housekeeping: Teach and practice healthy home habits, such as hand-washing before eating and sleeping, shoe removal, washing children's toys or other chewable surfaces, purchasing *lead-free* mini-blinds, and wet mopping and drying floors and surfaces.

Personal Care: Wash hands, especially before eating and sleeping.

Home Renovation/Repair/Replacement/Repainting: Hire a certified professional to safely remove lead sources from a home. Contractors are EPA trained and certified RRPC (*Renovation, Repair, and Painting Certification*) and make sure children and pregnant women do not stay inside a home when renovations are underway.



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT www.scchealth.co