

# Lead In Your Environment

## 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 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 do renovations on older homes.

Soil: Soil surrounding homes may be contaminated from chipping or flaking exterior lead-based paint, leaded gasoline, or industrial contamination. 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 older homes 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 older or *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 from work 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.*

*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.*

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

## Health Effects

Lead is a toxic heavy metal. When lead is absorbed into the body, primarily by ingestion, it can cause serious damage to vital organs like the brain, kidneys, nerves, and blood cells. Lead exposure is especially harmful to children under the age of six years.

Lead interferes with the development and functioning of almost all body organs, particularly the kidneys, red blood cells, and central nervous system.

Since children's bodies are not fully developed, elevated blood levels can cause:

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

## How to Determine if You Have Elevated Blood Levels

Blood lead level (BLL) is a measure of the amount of lead in the blood performed by 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

**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, 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 should be EPA trained and certified RRP (*Renovation, Repair, and Painting*) 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](http://www.scchealth.co)

EPA LINKS TO LOCAL WATER QUALITY DATA [www.epa.gov/ccr](http://www.epa.gov/ccr)

MDHHS KEEP MICHIGAN HEALTHY – LEAD [www.michigan.gov/mdhhs](http://www.michigan.gov/mdhhs)

SCCHD FACT SHEET: LEAD POISONING [www.scchealth.co](http://www.scchealth.co)

ENVIRONMENTAL PROTECTION AGENCY [www.epa.gov/lead](http://www.epa.gov/lead) CENTERS

FOR DISEASE CONTROL AND PREVENTION [www.cdc.gov](http://www.cdc.gov)