Despite laws established in the 1970s to make people aware of the dangers of lead and its poisonous effects, lead poisoning in children remains a common, yet preventable, environmental health problem in the United States. By understanding, identifying, and safely removing sources of lead, we can ensure the long-term health of children and prevent its devastating and irreversible effects.

What is lead poisoning?

Lead is a toxic metal used in a variety of products and materials, including paint, vinyl mini-blinds, 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.

What are the health effects of lead poisoning in children?

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 their 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; and
- Restlessness.

Blood Testing: The only way to detect lead poisoning is by performing a simple blood test. The bodies of children six-months to two years of age absorb more lead; thus, testing is increasingly important for their health. Nevertheless, all children under the age of six should have their blood-lead levels tested at their regular pediatrician’s office or at a public health clinic, even if nothing is apparently wrong with their health.

What are the main sources of lead?

- Old Paint: Lead-based paint, most often found in homes built before 1978, is unsafe if it peels, chips, cracks, or chalks. 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 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. 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.
- 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, or track it indoors on carpets and floors where they can come into contact with it.

For more information about lead poisoning, visit EPA’s Web site at www.epa.gov/lead or call The National Lead Information Center at 1-800-424-LEAD (5323).
Drinking Water: Lead pipes placed in homes before 1930 are likely to contain lead, which is released into drinking water as it passes through the old pipes. Between 10 and 20 percent of a non-lead poisoned child’s total lead contact comes from drinking water.

Food: Lead can leech into food or drinks, which are stored in imported ceramic dishes or pottery.

Other sources of Lead:
- Workplace exposure: Parents who work in lead-related industries (namely painting, automotive, or recycling industries) or use lead for hobbies (such as for stained glass windows).
- Home remedies: Aragon, greta, or pay-loo-ah.
- Cosmetics: Kohl and kajal.

How can lead poisoning be prevented?

Since treatment options for lead poisoning are limited, it’s 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 (such as eggs, cooked beans, or red meats), calcium (such as cheese, yogurt, or cooked greens) and vitamin C (such as citrus fruits, green peppers, or tomatoes). Adequate intake of these nutrients minimizes lead absorption in children’s bodies.

- 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. Hire a certified professional to safely remove lead sources from a home. Make sure children and pregnant women do not stay inside a home when renovations are underway.

- Personal Care: Wash your hands and your children’s hands frequently, especially before eating and sleeping.

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