

Deadly Lead: Sweet to Young Tastebuds, but Toxic to Young Brains! Lead residues can threaten children's health!

How did the plumbing systems, dishes, and fine wines of Ancient Rome play a role in the empire's ruin?

Why was leaded gasoline known as "loony gas" by those acquainted with the neurological impairments that often befell gas refinery workers from 1921-1986?

What was the cause of death of an estimated 5,000 Americans per year between the 1920s and the 1980s, according to a 1995 U.S. Environmental Protection Agency report?

Why have learning and developmental disabilities advocacy groups across the nation spoken up to eliminate the commercial use of lead?

A Dangerous Taste for Lead

Because of its sweet flavor, lead acetate, "sugar of lead," was used by the Ancient Romans to enhance its finest foods and wines. Lead was also considered the best material for use in lining cooking pots and for cosmetics, coins, bullets, dishes, and paints. Historians suggest that **the host of mysterious maladies, including sterility and insanity, that befell the Romans were very likely linked to this everyday exposure to lead.**

By the mid-1900s, a host of new uses for lead had been developed, including adding lead to paint and gasoline. In 1980, the U.S. was using 1.3 million tons of lead each year, or 11 pounds per person. **That's ten times more lead than was used by the citizens of ancient Rome!**

Lead is a Potent Neurotoxicant!

The long-term effects of lead can be severe, especially for children, whose

small size and rapidly developing systems make them more vulnerable than adults. **Lead's wide range of neurotoxic effects include learning disabilities, decreased growth, hyperactivity, impaired hearing, behavioral tendencies toward violence, and even brain damage.** Fetuses can be exposed when lead that the mother is exposed to passes through the placenta. Children's bodies absorb lead far more easily than adult bodies, and lead molecules can bind to calcium, becoming part of the bone structure as a child's body grows.

Lead Poisoning Continues to be a Serious Children's Health Concern

Because of the widespread outcry against the neurotoxic effects of lead, it is no longer added to paint or gasoline in the U.S. However, lead can still be widely found in:

- peeling leaded paint chips,
- dust from pre-1978 buildings,
- contaminated dirt, water, air,
- imported painted objects and pottery,
- ink printed on plastic bags,
- industrial byproduct fertilizers,
- imported vinyl miniblinds,
- pre-1980s plumbing systems,
- makeup and hair dyes,
- coal-fired power plant emissions,
- dirt around freeways, under bridges, and near industrial sites,
- x-ray protection devices,
- computer monitors,
- batteries, and
- candle wicks with metallic cores.

You may have lead in or around your building and in your water without knowing it because you can't see, smell, or taste trace amounts of lead.

About 1 in 22 children in America have high levels of lead in their blood, according to the Centers for Disease Control and Prevention. Children can ingest lead dust on their hands and toys

during normal hand-to-mouth activity, as well as through contaminated water and air. Most affected children live in urban settings, among lower socio-economic groups, immigrants, and refugees.

YOU Can PREVENT Your Child's Exposure to Lead!

- **Avoid calcium deficiencies while you are pregnant and breastfeeding.** Lead is stored in our teeth and bones after an exposure because it binds to calcium. If the body must take calcium from the bones to compensate for a dietary deficiency, lead can be released into the blood stream, exposing the fetus as blood enters the placenta.
- **Have your home tested for lead.** Contact the National Lead Information Clearinghouse for a list of EPA-recognized laboratories who can test paint, dust, and water samples at www.epa.gov/oppinr/lead/nlic.htm). Or, do it yourself with a home test swab kit, available at hardware stores. These indicate the presence of lead, but not the quantity, on any home surfaces. Call HybridVet Systems for "Lead Check Swabs," 800-262-LEAD.
- **Have your children tested for lead.** Doctors can determine lead levels with a simple blood test. All infants between the age of 6 months and two years should be tested.
- **Feed your kids a diet rich in calcium and iron.** Spinach, broccoli, raisins, beans, and low-fat dairy products are good sources.
- **Feed your kids a diet low in animal fat.** Lead, like other toxicants, can biomagnify up the food chain and be stored in animals' fatty tissues. Choose low-fat dairy products, remove the fat from meats, and substitute grains and vegetables wherever possible.
- **Eliminate dust that may contain lead.** Frequently wipe toys, furnishings, window sills and other surfaces that

children may touch with a damp cloth. Vacuum carpets with a vacuum cleaner equipped with a HEPA filter. Wash pacifiers and bottles if they fall on the floor. Wash stuffed animals regularly.

- **Avoid drinking lead-contaminated water.** If you suspect your plumbing system to contain lead solder or pipes, run water taps for 30 seconds in the morning before drinking water. Use cold water for cooking as hot water may leach lead in pipes. Carbon water filters are also effective in removing lead.
- **Wash children's hands frequently.**
- **Keep children from walking around with food.** It could be put down in areas with lead dust and later ingested.
- **Plant grass or other plant covers** over soil that may contain high lead levels.
- **Paint over intact lead paint (except on window frames and doors)** to prevent the threat of children licking and touching lead-covered walls. Painting over window frames and doors may not solve the problem as friction may wear the safer paint away, resulting in lead dust.
- **Put contact paper or tape over peeling leaded paint** until the problem can be properly dealt with.
- **Don't remove lead paint yourself!** Scraping or sanding lead paint creates lead dust, which can poison your family. Hire someone with special training and equipment for correcting lead paint problems to do this task safely. All occupants should leave the building until all work is finished *and a thorough cleanup is done.*

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**For more information and other "Practice Prevention" columns, see [www.iceh.org](http://www.iceh.org). Also see Alliance to End Lead Poisoning at [www.aeclp.org](http://www.aeclp.org).**