Sources of Lead

Lead can be found in many products and locations. Some you might never have thought of, including some imported candies, toys, and traditional medicines. The most common cause of lead poisoning is dust and chips from old paint. However, some non-paint sources, though less common, can cause severe cases of lead poisoning.

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Paint

Lead was used in paint to add color, improve the ability of the paint to hide the surface it covers, and to make it last longer. In 1978 the federal government banned lead paint for use in homes. Homes built before 1978 probably contain lead-based paint. Painted toys and furniture made before 1978 may also contain lead-based paint. Lead-based paint becomes a concern when it chips, turns into dust, or gets into the soil.

Dust

Lead dust is the most common way that people are exposed to lead. Inside the home, most lead dust comes from chipping and flaking paint or when paint is scraped, sanded, or disturbed during home remodeling. Chipping and peeling paint is found mostly on surfaces that rub or bump up against another surface. These surfaces include doors and windows. Young children usually get exposed to lead when they put something with lead dust on it into their mouths. Lead dust may not be visible to the naked eye.

Soil

Starting in 1973, the federal government started a gradual phase-down of lead content in gasoline, and by 1996, banned the sale completely. However, lead from car exhausts mixed with soil near roads and is still there today. Homes near busy streets may have higher levels of lead in the soil. Today, lead still comes from metal smelting, battery manufacturing, and other factories that use lead. This lead gets into the air and then mixes with the soil near homes, especially if the home is near one of these sources. Flaking lead-based paint on the outside of buildings can also mix with the soil close to buildings. Lead-based paint mixing with soil is a problem during home remodeling if workers are not careful. Once the soil has lead in it, wind can stir up lead dust, and blow it into homes and yards.

Drinking Water

Lead seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household or building plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome plated brass faucets, and in some cases, pipes made of lead that connect houses and buildings to water mains. In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%. Older construction may still have plumbing that has the potential to contribute lead to drinking water.
Air

Lead can be present in outdoor and indoor air. Lead in outdoor air comes mainly from industrial sources (e.g., smelters, waste incinerators, utilities, and lead-acid battery manufacturers). Wind-blown soil and road dust also may contain naturally occurring lead as well as lead from industrial sources, deteriorated paint, and the combustion of leaded gasoline and aviation fuel. Sources of lead in indoor air include outdoor air, suspended dust, and some hobbies (e.g., making stained glass objects using lead solder, shooting using lead bullets at indoor firing ranges).

Folk medicines, ayurvedics and cosmetics

Some folk medicines contain lead. They often are imported from the Middle East, Southeast Asia, India, the Dominican Republic, or Mexico. Two examples are Greta and Azarcon. Azarcon is a bright orange powder also known as Maria Luisa, Rueda, Alarcon, and Coral. Greta is a yellow powder. They are used to treat an upset stomach. Pay-loo-ah also contains lead. It is a red powder used to treat a rash or a fever. Other folk medicines that contain lead include Bala (or Bala Goli), Golf, Ghasard, and Kandu. Some cosmetics such as Kohl (Alkohl) and Surma also contain lead.

Ayurveda is a traditional form of medicine practiced in India and other eastern Asian countries. Ayurvedic medications may contain herbs, minerals, metals, or animal products. These medicines may come in both standardized and non-standardized formulations. Ayurvedic medications are typically imported into the United States by both practitioners and followers of Ayurvedic medicine.

Children's jewelry and toys

Lead has been found in inexpensive children's jewelry sold in vending machines and large volume discount stores across the country. It also has been found in inexpensive metal amulets worn for good luck or protection. Some costume jewelry designed for adults has also been found to contain lead. It is important to make sure that children don't handle or mouth any jewelry.

The workplace and hobbies

People exposed to lead at work may bring lead home on their clothes, shoes, hair, or skin. Some jobs that expose people to lead include: home improvement; painting and refinishing; car or radiator repair; plumbing; construction; welding and cutting; electronics; municipal waste incineration; lead compound manufacturing; manufacturing of rubber products, batteries, and plastics; lead smelting and refining; working in brass or bronze foundries; demolition; and working with scrap metal.

Some hobbies also use lead. These hobbies include making pottery, stained glass, or refinishing furniture. Hunters who make their own bullets or anglers who make their own fishing sinkers can be exposed to lead fumes if they don't follow good practices (see www.nyhealth.gov/environmental/outdoors/fish/fish.htm). Fishing tackle (especially sinkers and jig heads) often contains lead. It important to keep all lead objects away from children. Wash hands with soap and water after holding or using lead sinkers and jig heads or reloading lead bullets or shot. Never bite down on lead sinkers.

Lead-glazed ceramics, china, leaded crystal, pewter

Lead may get into foods or liquids that have been stored in ceramics, pottery, china, or crystal with lead in it. Lead-glazed dishes usually come from other countries.

Imported candies or foods, especially from Mexico, containing chili or tamarind

Lead can be found in candy, wrappers, pottery containers, and in certain ethnic foods, such as chapulines (dried grasshoppers).

Imported food in cans that are sealed with lead solder

In 1995 the United States banned the use of lead solder on cans. But lead solder can still be found on cans made in other countries. These cans usually have wide seams, and the silver-gray solder along the seams contains the lead. Cans containing lead may be brought to the United States and sold. Over time the lead gets into the food. This happens faster after the can has been opened. Foods that are acidic cause lead to get into the food faster.

Firearms with lead bullets
People can also be exposed to lead by eating venison and small game harvested with lead shot and lead bullets. Recent research indicates that small lead fragments are often present in venison from deer harvested with lead bullets. Some bullets shatter into small pieces that can be too small to detect by sight, feel, or when chewing the meat. People can also be exposed to lead when it is released into the air when a gun is fired particularly in indoor shooting ranges. Lead particles are also formed as the lead bullet spirals through the barrel. These particles of lead can get into your body when you breathe or swallow, and lead dust can get on your food, cigarettes, or other items that you eat, drink, or put in your mouth.

**Mini-blinds**

Some non-glossy, vinyl mini-blinds from foreign countries contain lead.

**Some other common sources of lead**

Batteries, radiators for cars and trucks, and some colors of ink also contain lead.

**Consumer Products**

The Consumer Product Safety Commission (CPSC) has information about lead in other consumer products. The CPSC can be reached at 800-638-2772

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