

Lead in Water

How Lead Gets into Drinking Water?

Lead can enter drinking water when service pipes that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. The most common problem is with brass or chrome-plated brass faucets and fixtures with lead solder, from which significant amounts of lead can enter into the water, especially hot water. Homes built before 1986 are more likely to have lead pipes, fixtures and solder.

Is Lead Dangerous?

EPA has set the maximum contaminant level goal for lead in drinking water at zero because lead is a toxic metal that can be harmful to human health even at low exposure levels. Lead is persistent, and it can bioaccumulate in the body over time.

Young children, infants, and fetuses are particularly vulnerable to lead because the physical and behavioral effects of lead occur at lower exposure levels in children than in adults. A dose of lead that would have little effect on an adult can have a significant effect on a child. In children, low levels of exposure have been linked to damage to the central and peripheral nervous system, learning disabilities, shorter stature, impaired hearing, and impaired formation and function of blood cells. Even low levels of lead in the blood of children can result in behavior and learning problems, lower IQ and hyperactivity, slowed growth, hearing problems, anemia, and in rare cases, ingestion of lead can cause seizures, coma and even death.

Lead can accumulate in our bodies over time, where it is stored in bones along with calcium. During pregnancy, lead is released from bones as maternal calcium and is used to help form the bones of the fetus. This is particularly true if a woman does not have enough dietary calcium. Lead can also cross the placental barrier exposing the fetus to lead. This can result in serious effects to the mother and her developing fetus, including reduced growth of the fetus and premature birth. Lead can also be transmitted through breast milk.

Lead is also harmful to adults. Adults exposed to lead can suffer from cardiovascular effects, increased blood pressure, incidence of hypertension, decreased kidney function and reproductive problems (in both men and women.)

How Do I Test for Lead in Water?

Homes may have internal plumbing materials containing lead. Since you cannot see, taste, or smell lead dissolved in water, testing is the only sure way of telling whether there are harmful quantities of lead in your drinking water.

How do I remove Lead from my drinking water?

Use a water filter certified to remove lead and know when it's time to replace the filter. Understand that boiling water does not remove lead from water.