

Chemicals in Private Drinking Water Fact Sheet Florida Department of Health, Bureau of Environmental Health

This fact sheet discusses possible health risks from exposure to low levels of lead typically found in drinking water.

Lead

What is lead?

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. All parts of the environment contain lead. Much if it comes from human activities, such as burning fossil fuels, mining, and manufacturing.

How might exposure to lead in drinking water occur?

Lead rarely occurs naturally in water. It typically enters drinking water by leaching out of plumbing or equipment. Lead service lines and plumbing are primary sources. However, older homes may also have solder, brass fixtures, or well pumps with lead-containing parts.

What is the standard for lead in drinking water?

The U.S. Environmental Protection Agency (EPA) has set an action level for lead at 15 micrograms per liter of water (15 μ g/L). Public drinking water utilities that exceed this level in more than 10 percent of samples must treat the water to prevent lead from leaching into it.

There is no required sampling of private drinking water wells.

How can lead affect my health?

Lead affects the nervous system in adults and children. Long-term exposure may lead to muscle weakness, kidney damage, high blood pressure, reproductive problems in both men and women, and miscarriage.

How likely is lead to cause cancer?

The U.S. EPA has determined that lead is a probable human carcinogen. The U.S. Department of Health and Human Services (DHHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens.

How can lead affect children?

Children are more vulnerable to lead poisoning than adults. Low levels of lead may cause low birth weight, decreased mental abilities, or learning difficulties. Higher levels may lead to anemia, severe stomachache, or brain damage.

How can I tell if my water has lead in it?

The older your home is, the higher the chance that the plumbing contains lead. If your water comes from a private well, you will need to have your water tested. The Department of Environmental Protection maintains a database of state-certified laboratories here: https://fldeploc.dep.state.fl.us/aams/loc_search.asp.

Public drinking water utilities are required to test for lead on a regular basis. If your water comes from a utility, you can check with them to see what their sample results have been and what they are doing to ensure that lead does not leach into the water.

Is there a medical test for lead exposures?

A blood test is available to measure the amount of lead in your blood and to estimate the amount of your exposure to lead. Blood tests commonly screen children for lead poisoning. X-rays can measure lead in teeth and bones, but this test remains less readily available. A level of concern for blood has been set at 3.5 micrograms per decliter of blood (3.5 µg/dL) by the Centers for Disease Control and Prevention (CDC).

What can I do if my drinking water has lead in it?

You can take several steps to minimize your exposure to lead.

- For water that you drink, mix into beverages, make ice, or cook with, use a water filter certified to remove lead and replace the filter when recommended by the manufacturer.
- Only use cold water for drinking, cooking, brushing teeth, making ice, or making baby formula. Hot water is more likely to leach lead from the plumbing.
- Regularly clean the faucet aerator or screen.
- Use commercially bottled water for drinking, making ice, cooking, or brushing teeth.
- Flush your water tap and pipes for a minute prior to drinking the water. You can avoid wasting water by taking a shower or doing laundry.

For additional health information, please call the Florida Department of Health at 850-245-4240 between 8:00 a.m. and 5:00 p.m. or visit us online at www.floridahealth.gov/environmental-health/drinking-water/Chemicals-HALs.html

For more information about the health effects from exposure to lead in different situations and at higher levels than those usually found in drinking water wells, please see the ATSDR ToxFAQs for lead at www.atsdr.cdc.gov/toxfaqs/tfacts13.pdf