

Chow Line

News from the College of Food, Agricultural, and Environmental Sciences

How to tell if your tap water is clean, safe

My kids drink a lot of water, but with all the news about lead in water supplies, I am concerned about its safety. Just how safe are city water supplies for children?

Generally speaking, water is still the best beverage available to quench thirst in children and adults alike. It's cheap, calorie- and sugar-free, and provides the hydration your body needs. But you're right — it is important to be certain it's safe.

Lead can get into a home's drinking water from metal water taps, interior water pipes, the pipes connecting a house to the main water pipe in the street, or the water main. Federal law prohibited the use of lead in plumbing and fixtures after June 1986, so homes built before 1987 are more likely to have a problem. According to the Centers for Disease Control and Prevention, lead in tap water usually comes from corrosion of older fixtures or solder. When water sits in leaded pipes for several hours, lead can leach into the water supply.

If you're concerned, the first place to start is with your water system's annual Consumer Confidence Report. Water systems often mail the report to customers annually with the water bill, and larger systems also put it online. You can contact your utility to request the most recent version. The report provides basic information about your drinking water, including any contaminants that have been found during testing. This includes results of monitoring conducted in homes that could be vulnerable to increased levels of lead — older homes with lead pipes, for example. Check to see what your water system's report says about lead. That might put your mind at ease.

Whether or not you are reassured, you may want to pay a private lab to test the water in your home. Authorities say this is the only way to be certain,



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because lead in water is odorless and colorless. Ohio State University Extension has a 2010 fact sheet at ohioline.osu.edu/factsheet/AEX-315 that provides a list of Ohio labs that perform water testing. Request tests for lead, copper, pH, and a corrosion index test, and be sure to follow the lab's guidelines for collecting samples. If lead is found, any water from the tap for consumption or cooking should first be flushed through the pipes for several minutes. The CDC provides guidance at www.cdc.gov/nceh/lead/tips/water.htm.

It's important to note that while most filtered water pitchers improve water's taste, they aren't designed to remove lead. However, most water filters installed at the tap — as well as whole-house water filter systems — do remove lead. It's always important to double-check.

You should know that children are much more vulnerable to the effects of ingesting lead. While the bodies of adults absorb just 10 to 15 percent of the lead they ingest, children's bodies may absorb up to 50 percent. Absorption is greatest on an empty stomach. A healthy diet can help. Consuming plenty of milk and other calcium-rich foods, for example, forces any lead in the body to compete with calcium to attach to cell receptors, making lead less likely to be absorbed.

For more information on drinking water supplies, see the CDC's Drinking Water FAQ at www.cdc.gov/healthywater/drinking/drinking-water-faq.

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