

Lead in Drinking Water

How can the government provide better oversight?

AN OVERVIEW OF GAO-17-424

Why is Lead a Problem?

Drinking water contaminated with lead poses a significant danger to public health.



Lead can affect almost every organ and system in adults. Some common effects:

- increased blood pressure
- decreased kidney function
- reproductive problems
- memory loss



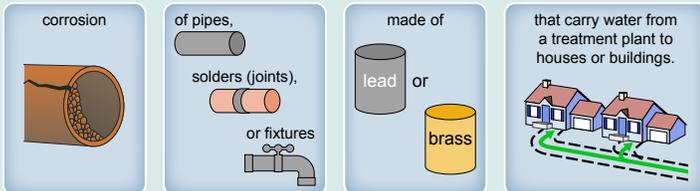
It poses the greatest risk to **infants, children under the age of 6, and pregnant women**—potentially causing:

- premature birth
- delayed growth
- lower IQ
- learning/behavioral problems

0%

The Environmental Protection Agency (EPA) and other public health agencies have determined that there is **no level of lead that is safe for consumption.**

Lead in drinking water usually comes from



Corrosion occurs when these plumbing materials come into contact with **corrosive water**—for example, water with low pH.

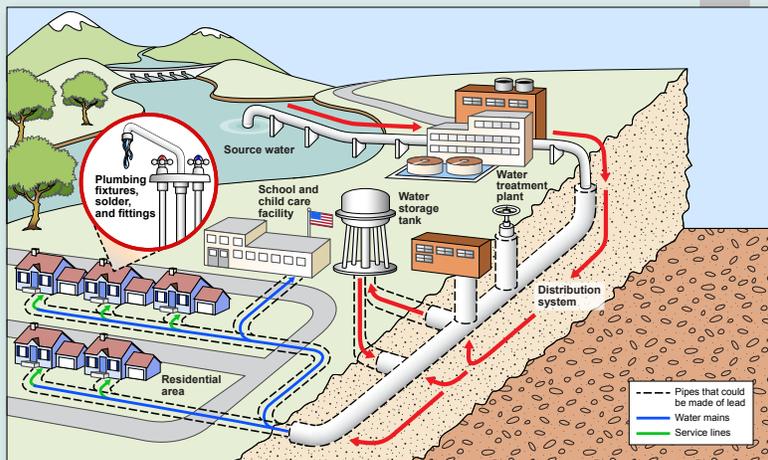
According to a recent industry estimate, there are

6.1 million lead pipes

throughout the United States that deliver drinking water to

15-22 million people.

How does water get to your home?



Regulating Lead in Drinking Water



To reduce lead in the nation's drinking water, the EPA introduced the **Lead and Copper Rule** in 1991—a complex regulation that requires collaboration among the EPA, states, water systems, and homeowners.

This rule applies to **45% of water systems** (those that serve the same customers for at least 6 months of the year),

which supply about **312 million people.**



Water systems must routinely take samples of tap water, and notify homeowners and states of the test results.



When they find lead above the lead action level*, they must, as appropriate:



Apply corrosion control treatments (such as adjusting the pH of the water).



Test water quality conditions, and test and treat the source water.



Provide educational materials to consumers (and others).



If necessary, replace lead pipes owned by the water system.



Water systems must also report information on their sampling activities to the state.



The state then reports this information to EPA's Safe Drinking Water Information System.



The EPA uses this database to oversee and monitor compliance with the rule.

* The lead action level established by the rule is 15 parts per billion in over 10 percent of the water samples. This level, when exceeded, indicates to water systems that corrosion control is needed or not working correctly.

How Can the EPA Improve Oversight of the Lead and Copper Rule?



They could collect data on, among other things, where lead pipes are located.



They could use additional statistical analysis to predict whether some water systems have a higher likelihood of having a reported violation of the rule.

What Can You Do About Lead in Your Drinking Water?

The EPA suggests the following steps to minimize lead in your drinking water.

1. Determine the quality of your water.



Contact your water utility if you'd like to receive a copy of its annual water quality report (i.e., a Consumer Confidence Report). Public water systems must also alert you if there is a problem with your system's drinking water.



Have your water tested for lead by a certified lab—Since you cannot see, taste or smell lead dissolved in water, testing is the only sure way to tell if there is lead in your drinking water. Call EPA's Safe Drinking Water Hotline at (1-800-426-4791) for more information.

2. Take action.



Let the water in your pipes run before using it for drinking or cooking. How long? Your water system has specific recommendations.



Only use water from the cold-water tap for eating and drinking. Note that boiling water will NOT get rid of lead contamination.



Use water filters or treatment devices—but verify with independent certifying organizations to make sure the device actually removes lead.



Consider replacing pipes, solders, and plumbing fixtures that contain lead.