

[Free Guide] How to Remove Lead From Water

Although lead has been banned as a construction material for U.S. water systems for decades, lead is not erased from our water.

Especially in buildings constructed before 1986, lead can continuously release into your water supply.

The Environmental Protection Agency (EPA) and Centers for Disease Control and Prevention (CDC) agree there are no known safe levels of lead consumption, especially for children.

Lead-contaminated water creates significant health risks to those that consume it.

So how can you find out if there is lead in your water?

Is lead-contaminated water safe for any use?

How do you remove lead to make your water drinkable?

This guide will answer all these questions, and more so you can avoid the dangers of lead exposure.

How Does Lead Get Into Water?

There are many sources of lead contamination, which can make them difficult to pin down.

If any part of a building's water system is made of lead, this will be the primary source of contamination. As lead fixtures corrode over time, lead mixes into the water they deliver.

Lead is odorless, flavorless, and invisible when dissolved in water, so contamination easily goes undetected.

Some buildings use copper pipes held together by lead solder.

Even buildings free from lead may be connected to their public water source by lead pipes called lead service lines.

Many major cities even have 100% lead pipes connecting their water plants to their service regions. This carries lead contamination into structures with no lead fixtures.

Another factor is brass and chrome-plated brass, often mixed with lead in its production.

Health Risks of Lead Exposure

Lead is particularly harmful to fetuses, infants, and children.

Exposure to even minuscule levels of lead can cause long-term harm and even disability to these groups.

Even low levels of lead in children's blood are associated with behavior and learning problems, lower IQ, atypical development, and anemia.

In pregnant women, lead exposure can cause reduced fetus growth and premature birth.

Adults are at risk of increased blood pressure, decreased kidney function, and reproductive issues when exposed to lead.

How Can I Learn if I am at Risk for Lead Contamination?

The EPA requires all community water systems to produce an annual Consumer Confidence Report (CCR). This publicly available documentation gives a detailed summary on the quality of public water.

If you use well water, you can check with your local health department for any ground contaminants you should know.

There are at-home lead testing kits you can use on a sample of your water, but don't rely on these alone.

Your local health agency can help you find an accredited water testing facility where you can bring tap water samples for analysis.

What to do if My Water Has Lead?

If you discover your water is contaminated with lead, don't fret.

This water is still safe for many uses, including bathing, cleaning, and laundry. Lead-contaminated water is safe for these uses because lead cannot be absorbed through our skin. It is only harmful when it enters the bloodstream.

However, this water is not safe for drinking or use in cooking.

Additionally, boiling water does not remove the lead.

This may actually increase the concentration because some water will evaporate while the lead remains.

Decreasing Your Exposure to Lead

For water that is safe to drink and prepare food with, you may want to consider purchasing bottled water.

If you wish to render your tap water drinkable, the first step is to flush your pipes for 2-3 minutes before drinking.

Water that remains stagnant in your pipes gains a higher lead concentration the longer it is left.

To avoid wasting water, you can flush your pipes by showering or running a load of laundry. Once you finally pour a glass, it'll have the lowest levels of lead you'll get from your tap. You can store this water for later use so you don't have to flush as frequently.

You'll also want to get in the habit of using only cold water as much as possible.

Hot water dissolves lead at a higher rate and will increase the levels in your water.

If you need hot water, it is safer to run cold water and heat it using a stove or electric water heater.

You should also check your faucets' aerators regularly. These are small filters on taps that can collect contaminants, including lead particles.

Although these are best practices, they will not remove all the lead from your water.

Reverse osmosis is one of the few methods that render lead-contaminated water drinkable. Reverse osmosis systems push water through a semipermeable filter that removes around 99% of lead.

Distillation systems are even more effective at removing lead because they involve vaporization. Since lead cannot vaporize, it is effectively removed from the water.

You can also find carbon water filters rated for lead removal, but these must be used as directed, or they will not perform at full efficiency.

You can try to remove the problem at the source and replace any lead materials in your property's water system. This solution is the most costly and will not protect you from contamination sources outside your property.

The Alternative Clean Water Solution

Atmospheric Water Generators produce naturally lead-free water because it doesn't pass through pipes, lead, brass, or otherwise.

AWGs pull humidity from the air and convert it into clean, drinkable water.

AWGs use an integrated filtration and purification system that renders all water free from heavy metals (like lead), PFAS, and contaminants that pollute groundwater.

With models that produce anywhere from 500-10,000+ liters of water per day, [REMOVED FOR PRIVACY] has options to supplement or replace your current water source.

Reach out today to secure clean water for the long run.