How does lead get into drinking water?

At Denver Water, your safety is our most important responsibility. Although lead isn't present in the water Denver Water sends to your house, lead can get into water as it moves through lead-containing household fixtures, plumbing and service lines that are owned by the customer.

What is Denver Water's Lead Reduction Program?

Denver Water is committed to implementing the best method to permanently reduce lead in tap water. Our Lead Reduction Program is a holistic approach that protects current and future generations and permanently removes customers-owned lead service lines from our community. The program was approved in December 2019 by the Environmental Protection Agency and Colorado Department of Public Health and Environment.

The program has five main components:

- Increasing the pH level to reduce the risk of lead and other metals from getting into drinking water from lead service lines or household plumbing.
- Developing and maintaining a publicly accessible inventory of all customer-owned lead service lines in Denver Water's service area.
- Replacing all lead service lines (the pipes that bring water from Denver Water's pipe in the street to the plumbing in your home or building) with copper lines at no direct cost to the customer over the next 15 years.
- Providing free water filters that are certified to remove lead to all customers with lead service lines until their line is replaced, and for six months beyond.
- Ongoing communication, outreach and education.

How is Denver Water identifying lead service lines?

Because homeowners, not Denver Water, own service lines, data on what they are made of is inconsistent and scattered among a variety of sources. So, Denver Water has been developing a comprehensive inventory of known and suspected lead service lines through a combination of property records (homes built before 1951 are most likely to have lead service lines), water quality tests and visual inspection of service lines.

How and when are customers who are part of the program being notified?

By spring 2020, Denver Water will send a letter to all customers who may have a lead service line and therefore are part of the program. From March through August 2020, these customers also will receive filters capable of removing lead from drinking water.



How is Denver Water prioritizing lead service lines for replacement?

Several factors will drive when and where we replace service lines. Denver Water is prioritizing communities who are most vulnerable and at-risk from lead exposure, particularly infants and children. Areas with large numbers of facilities that serve these populations, such as schools and daycares, will be prioritized. Other determining factors are areas with the highest concentration of lead service lines, underserved neighborhoods and coordination with other known construction activity.

Who is covering the cost of the program for customers?

Denver Water will replace customer-owned lead service lines and provide filters to customers until their lead service line can be replaced at no direct cost to the customer. The cost will be covered through water rates, bonds, new service fees and hydropower generation, which is in line with other large capital improvement projects undertaken regularly by Denver Water. We'll also be looking for additional funding through loans, grants and contributions from partners.

What is the replacement process for my lead service line?

Denver Water will send you an initial letter informing you that your property has been identified for upcoming lead service line replacement. This letter will include a consent form for you to sign, allowing our crews to access your property and replace your service line.

After we receive your signed consent form, we'll schedule an in-home visit between you, Denver Water and the contractor to review the replacement process in detail and set a date and time for the work to take place. Most service lines can be replaced in less than six hours. An adult over the age of 18 must be present during the replacement work as crews will need to inspect connections inside your home.

Following replacement, we will restore landscaping exterior to a level surface and provide reseeding of grass, generally within a four-month time frame. You should continue to use your filter for six months and flush your water (run cold water from the kitchen or bathroom faucet for five minutes after not using water in the home for a few hours). Approximately four months after your replacement, you will be offered a water quality testing kit to verify that lead levels have been reduced.

If I have a lead service line, is the water in my home safe to use for drinking and cooking?

Having a lead service line means that there is potential for lead to be released into your water as it moves through your service line. If you have a lead service line, we are providing you with a filter to use for drinking water, cooking dishes where water is a base ingredient or absorbed into the food (recipes like rice, beans and soup) and preparing infant formula.

We also recommend that if water has not been used in the home for a few hours, such as first thing in the morning or when getting home from work, run cold water from the kitchen or any bathroom faucet for five minutes (you can capture the water and reuse it for gardening, washing your car, etc.). You can also run the dishwasher, take a shower, or do a load of laundry to help flush water in your internal plumbing before drinking, cooking or preparing infant formula.



Is my water safe for pets?

To be safe, check with your veterinarian and/or give your pet filtered water. Changes in pet behavior as a result of drinking leadcontaminated water are not likely to be noticeable. In general, pets are more likely to obtain lead as a result of eating an object containing much higher lead levels (such as lead paint chips, improperly glazed ceramic food or water bowl).

Is my water safe to use for a shower or bath?

Yes, bathing and showering are safe for you and your children. Human skin does not absorb lead in water at levels that cause a health concern.

How does the filter program work?

We are providing all customers with a known, possible or suspected lead service line a water pitcher and filter (certified to remove lead) and replacement filters at no direct charge until those customers' service lines can be replaced. Customers will receive their filter and replacement filters in the mail.

Certified filters should be used for drinking water, cooking dishes where water is a base ingredient or absorbed into the food (recipes like rice, beans and soup) and preparing infant formula.

Do I need to use filtered water for all my watering needs?

Certified filters should be used for drinking water, preparing infant formula or in the preparation of any food where water is a base ingredient or absorbed into the food (recipes like rice, beans and soup). It is fine to use non-filtered water for all other uses (e.g., showering, bathing, laundry, irrigation, dishwashing, etc.).

How will the pH adjustment impact the water?

Beginning in March 2020, Denver Water will raise the pH level of the water to reduce the corrosivity of the water. This won't affect the taste or odor of the water, but it will reduce the risk of lead getting into drinking water as it passes through lead-containing pipes and household plumbing.

Even though Denver Water has been adjusting the pH of the water since the mid-1990s to help minimize the risk for those with lead plumbing, it is important to closely study potential system impacts that may occur when altering the chemistry of the water. To this end, Denver Water has been extensively testing and studying the best way to increase pH from 7.8 to 8.8.



If Denver Water's water is lead-free, why is Denver Water focusing on lead reduction?

Denver Water is working with the Environmental Protection Agency and Colorado Department of Public Health and Education to reduce the risks of lead exposure as drinking water moves through homes and businesses with lead plumbing, service lines or fixtures.

In 2012, water quality sample results from homes with known lead service lines and plumbing exceeded the level the EPA requires for taking action. The action level is an indicator that additional steps may need to be taken to "optimize corrosion control treatment." That means a utility may need to adjust its water treatment to minimize the risk of lead getting into drinking water from lead pipes and plumbing. CDPHE required Denver Water to begin adding orthophosphate, a food additive, to all drinking water in March 2020.

Denver Water proposed a holistic, alternative approach to orthophosphate that removes lead at its source. The approach focuses on replacing all lead service lines in the service area and avoids the potential impacts of orthophosphate to wastewater treatment plants and downstream reservoirs, streams and rivers. This alternative approach, the Lead Reduction Program, was approved by the EPA and CDPHE in December 2019.

Where can I go to ask questions and get more information?

You can call Denver Water at 303-893-2444, visit denverwater.org/Lead or email Lead@denverwater.org.

