



TOWN OF FRISCO WATER DIVISION

July 2020

Public Water System ID: CO0159055

System Name: Town of Frisco

Testing found elevated levels of lead in the drinking water in five (5) homes/buildings in Frisco.

- During recent testing, Frisco's Water Division was informed by the Colorado Department of Public Health & Environment that lead levels had tested in exceedance of the maximum allowable limits, as five (5) homes/buildings out of forty (40) homes/buildings tested in Frisco were found to have lead levels in exceedance of 15 parts per billion (ppb).
- Frisco has four (4) water sources and testing in 2019 found lead levels at below detectable levels (BDL) in three (3) of Frisco's water sources and at 1 part per billion (ppb) in Frisco's fourth water source of Frisco's. The maximum allowable level is 15 ppb.
- All of Frisco's main water lines are constructed out of ductile iron, and all service lines (from the main line to homes) are either copper or galvanized.
- In early 2019, lead levels were also found in exceedance of maximum allowable levels, as six (6) homes/buildings out of 40 sampled were found in exceedance. All subsequent testing in 2019 did not indicate lead levels in exceedance of the maximum allowable limit for Frisco's water system.
- Subsequently in June 2019, Frisco Town Council approved the Start at the Tap fixture rebate program to encourage the replacement of old fixtures which might contain lead. More information on this program may be found at FriscoWater.com.

What are the maximum allowable levels of lead in drinking water?

In 1991, the maximum allowable lead levels in drinking water went from fifty (50) parts per billion (ppb) to fifteen (15) parts per billion (ppb) measured at the tap.

What is a part per billion (ppb)?

One part per billion = 1 ug/L (microgram per liter).

This amount is equal to:

- One drop of ink in a backyard swimming pool
- One grain of sand in a child's sandbox
- One second in 32 years

Where, when and how is testing done for lead?

- As of 2018 in a water service area of Frisco's size, 40 homes/buildings must be tested every six months, as opposed to the previous requirement to test in 10 homes/buildings every three years.

- Homes/buildings are selected for testing based on tiered selection criteria and must have been constructed between 1983 and 1987.
- Most home/building residents collect their own samples, after receiving instructions from the water provider. Samples must be cold water from an inside faucet that is used regularly for drinking water, but that has not been used in the previous six (6) hours at a minimum. The faucet, where samples are taken, may not be connected to any type of personal water treatment system.

What are the health effects associated with lead exposure?

Lead can cause serious health problems, especially for pregnant women and young children. Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

What are the sources of lead?

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes). Don't forget about other sources of lead such as lead paint, lead dust, and lead in soil. Wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

How does lead get into drinking water?

Lead in drinking water typically comes from the corrosion of household plumbing materials. Lead solder was used in household plumbing until 1987.

Brass faucets, fittings, and valves, including those advertised as "lead-free", may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to eight percent lead to be labeled as "lead free". However, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up two percent lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

When water is in contact with pipes or plumbing that contains lead for several hours, the lead may enter drinking water. Homes built before 1986 are more likely to have plumbing containing lead. New homes may also have lead; even "lead-free" plumbing may contain some lead. EPA estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with the lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.

Steps you can take to reduce your exposure to lead in your water

Please read this information closely to see what you can do to reduce lead in your drinking water.

- 1) Run your water to flush out lead. If it hasn't been used for several hours, run the cold water tap until the temperature is noticeably colder. This flushes lead-containing water from the pipes. To conserve water, remember to catch the flushed tap water for plants or some other household use (e.g. cleaning).
- 2) Always use cold water for drinking, cooking, and preparing baby formula. Never cook with or drink water from the hot water tap. Never use water from the hot water tap to make formula.
- 3) Do not boil water to remove lead. Boiling water will not reduce lead.

- 4) Periodically remove and clean the faucet's strainer/aerator. While removed, run the water to remove debris.
- 5) You may consider investing in a home water treatment device or alternative water source. When purchasing a water treatment device, make sure it is certified under Standard 53 by NSF International to remove lead. Contact NSF at 1-800-NSF-8010 or visit www.nsf.org. You may also visit the Water Quality Association's website at www.wqa.org.
- 6) Test your water for lead. A list of certified laboratories is listed at www.colorado.gov/cdphe/dwlab.
- 7) Get your child's blood tested. Contact your local health department (970-668-9161) or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.
- 8) Identify and replace plumbing fixtures containing lead. Identify and replace plumbing fixtures containing lead. Brass faucets, fittings and valves, including those advertised as "lead-free," may leach lead into drinking water. The NSF website at www.nsf.org has more information on lead-containing plumbing fixtures. You should use only lead-certified contractors. Check out the Town of Frisco's fixture rebate program at FriscoWater.com. From July 2019 to December 2019, 65 old fixtures were replaced with the assistance of this program.
- 9) Have a licensed electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electric code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

Town of Frisco Next Steps

- The Town of Frisco has six months to re-test the 40 homes/buildings. Residents typically collect their own samples in their homes, and sample collection scheduling is challenging due to the prevalence of second homes, the COVID-19 pandemic, and the individual schedules of residents. Residents are informed of their individual testing results within 30 days of the Town of Frisco receiving the results.
- The Town will be moving forward with the prescriptive measures that were recommended in a study performed by Alan Plummer Associates, environmental engineers and scientists. This study and the subsequent plans were required due to the exceedance of maximum allowable levels of lead in 2019 but the implementation of the plan was triggered by the current exceedance.

The Town will be installing a pH adjustment system at all of the source water locations, which will adjust pH into a more balanced and neutral range. The Town of Frisco's 2019 water quality parameter data shows a range of; pH Low 6.97, pH High 7.41 with an average of 7.14 pH. Adjusting the pH to a more neutral range (7) is intended to prevent the dissolution of lead from piping and plumbing materials in homes and buildings with older fixtures and pipes.

- The Town will continue with the Start at the Tap fixture rebate program started implemented in July 2019 to replace old fixtures in Frisco homes and buildings with WaterSense approved fixtures, which are more efficient and lead free. In 2019, Frisco's Start at the Tap rebate program assisted in the replacement of 65 old fixtures with \$6,234.43 in rebates saving 188,300 gallons of water annually and potentially removing the source of lead in Frisco homes and buildings. More information on this program may be found at FriscoWater.com.
- The Town of Frisco has embarked on a second public information and education campaign to ensure that awareness of testing outcomes and next steps are transparent, well publicized, and understood.

More information

- More information may be found at FriscoGov.com.
- Customer inquiries may be directed to Ryan Thompson, Water Foreman at 970-668-9156 or RyanT@TownofFrisco.com.

- More information on reducing lead exposure around homes and on the health effects of lead may be found at the Environmental Protection Agency's website at [EPA.gov/lead](https://www.epa.gov/lead).

Notice Provided by: Town of Frisco

Date: July 9, 2020