

## How To Avoid Exposure To Lead In Drinking Water

If you are concerned about lead in your drinking water, take the following preventive steps to further limit possible exposure:

- Flush standing water in pipes each morning by first flushing the toilet, washing your hands or letting the water run for five minutes or until it is cold to the touch. Flushing clears water from the plumbing and home service line to ensure the drinking water comes from the main service line.
- Use cold water for drinking and cooking. Hot water dissolves more lead from plumbing. Boiling water DOES NOT remove lead.
- Some home water treatment devices remove lead, but not all do. Before buying, check the various models and their specifications.

## Point Of Use Filter Program

If residents are interested in reducing their lead exposure, one option is to purchase a point of use filter that can be installed on the kitchen tap. At this time the Town does not offer any rebates on the purchase of these devices.

### Want more information?

Visit this Health Canada website:

<https://www.canada.ca/en/health-canada/services/environmental-workplace-health/environmental-contaminants/lead.html>

Visit Alberta Health Services:

<https://myhealth.alberta.ca/Alberta/Pages/Common-questions-about-lead-and-drinking-water.aspx>

## We're here to help

For any questions or concerns, we can help!

### Environmental Services

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## Town of Blackfalds Environmental Services



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ALBERTA



## Purpose Of Lead Management Program

The Town's Lead Management Program addresses the risk of consuming lead at the tap.

The first phase of the program will be focused on:

- Communicating with the public to educate citizens regarding lead in drinking water. This will include sources of lead in water and ways to reduce exposure to lead among other topics.
- Performing a system assessment that will involve sampling water from town residents to assess the level of risk posed by lead.

The second phase of the program will focus on:

- Mitigation of any lead levels found to be above the allowable limits.

## Purpose And Usage Of Data Collected

Data will be collected to determine if there are residents in Blackfalds who may be exposed to lead levels above the maximum allowable concentration. Testing will reveal any lead present in the water via the service line and *internal* plumbing. Previously, testing only indicated lead in water found in distribution service lines and treatment systems.

Testing will be conducted when a resident completes the informed consent form and any data collected will be shared with Alberta Environment and Parks. Due to its personal nature, individual addresses will not be shared. Test results provided to the public will be conveyed in terms of a neighborhood, postal code, or other community level.

All efforts will be made to provide test results to the owner and/or resident within 14 days of the Town receiving the consent form.

Data collected is necessary to determine if there is any exposure to lead, what the sources of the lead are, and what can be done to mitigate lead exposure.

## Who Is Responsible For The Lead Pipes?

The Municipal Government Act states that the residential property owner is responsible for the water service connection and the plumbing inside of the home. Typically, lead service connections are found in older homes built before the early 1960s.

The municipality is responsible for the *service connection pipes between the property line and the water main* in the street.

## Is There Lead In The Water?

Drinking water from the Red Deer water treatment plant enters into the distribution system in Blackfalds and is virtually lead free. However, lead may be present in household tap water due to its presence in the service connection or in-house plumbing systems containing lead, including solder and brass fittings.

## How Does Lead Get Into Our Water?

Lead enters drinking water as a result of corrosion over a long period of time. If standing water (ex. overnight) is in contact with lead materials for several hours, the water may accumulate lead levels that could become a concern.

### The most common sources are:

- Lead-based solder used to join copper pipe, faucets made of brass and chrome-plated brass, and in some

cases, pipes made of lead that connect a home to the water main (service lines).

- Lead paint and the contaminated dust and soil it generates are the leading source of lead exposure in older houses.



- Lead has historically been used as a component of paint, piping, solder, brass, and as a gasoline additive.

## How To Recognize If You Have A Lead Service Line At The Shut Off Valve

Please watch EPCOR's Instructional video on how to identify if you have a lead service:

[youtu.be/37QSPCVJTBU](https://youtu.be/37QSPCVJTBU)

Here are the steps to check if your home has lead piping:

1. Locate the water meter (usually found in the basement)
2. Look at the pipe coming up through the basement floor into the bottom of the water meter
3. Lead is grey, and
  - does not echo if you gently strike it;
  - scratches easily;
  - leaves metallic marks when you rub the scratched area against paper.

**Note:** Service line piping can also be made of polyethylene (black) or polybutylene (black or blue).

## Lead Service Line Replacement Program

If any lead service lines are found, the municipality will develop a program to remove the service line from the main to the property line and coordinate with the land owner to potentially remove the service line on private property.

## What is the Acceptable Level?

In March 2019, Health Canada updated the drinking water quality guideline. This new guideline introduced two new changes for drinking water: first, the maximum acceptable concentration (MAC) of lead was lowered from 10 micrograms per litre (parts per billion or µg/L) to 5µg/L, and, second, the point of compliance for lead is at the customer's tap, and no longer in the distribution system upstream from the service point connection or the property line.

## Health Effects And Lead-Sensitive Populations

Pregnant women and children under six years-of-age are most vulnerable to lead. Women who have been or are exposed to lead can in turn expose their fetus or infant during pregnancy and breastfeeding.

Children are more affected by exposure to lead than adults are because they absorb more ingested lead than adults do and can cause adverse effects on neurological development and behaviour in children, including reduction of intelligence quotient (IQ).

In adults, lead exposure can cause increased blood pressure or kidney problems. Exposure to lead in drinking water is a concern only if the contaminants are ingested. Inhalation and dermal absorption during bathing and showering are not significant routes of exposure.