# FREQUENTLY ASKED QUESTIONS

## **Lead in Drinking Water**

## **NOVEMBER 2019**

#### What is lead?

Lead is a naturally occurring substance present in our soil, food and air. While lead can leach into drinking water from lead service lines and plumbing, the bulk of human exposure is from other sources.

## What is the standard for levels of lead in drinking water?

The Canadian government's (Health Canada) maximum acceptable concentration of lead in drinking water is 5 micrograms per litre or 5 parts per billion. Because there is no level below which lead is not associated with neurodevelopmental effects in infants and children, levels of lead in drinking water should be kept as low as reasonably achievable. The current Ontario Drinking Water Quality Standard for lead is 10 micrograms per litre or 10 parts per billion.

## How does lead get into drinking water?

Lead is not found at detectable levels in York Region's drinking water supplies or in the water that leaves York Region storage facilities. The Region also does not have any lead service lines. Any lead found in drinking water supplies would be introduced after water leaves Regional infrastructure, most likely through in-home plumbing.

York Region doesn't provide water directly to residents; this is done by our nine local municipalities, which makes in-home sampling primarily a Town, City or Township responsibility.

Based on the many ways that lead can enter drinking water, as of December 2018, Health Canada recommends at-the-tap sampling.

#### How do I know if I have lead pipes/lead service lines in my home?

Find out if you live in a house built before the mid-1950s. If so, it likely has a lead water service pipe. If your house was built before the 1990's, it could have lead solder. If you own your house, check the purchase papers. If you rent, ask the owner.

To determine if you have lead in your plumbing system, consult a licensed plumber or consider having your tap water tested for lead.

Contact your local City or Town to find out if they offer free home lead testing.



### What should I do if I live in a house with lead pipes/lead service lines?

York Region Public Health recommends those with lead pipes take the following actions:

#### 1. Call your local City of Town

Find out if your City or Town has a lead service line replacement program.

## 2. Test your water

You can have your water tested through a private laboratory to determine lead levels. . A list of commercial licensed laboratories that test for lead in drinking water can be found on the Ministry of the Environment, Conservation and Parks' website at: <a href="https://www.ontario.ca/page/laboratories-licensed-test-lead">https://www.ontario.ca/page/laboratories-licensed-test-lead</a>. Contact Health Connection to interpret sample results at 1-800-361-5653.

## 3. Flush your pipes

Has water been sitting in your pipes for several hours? Run the tap until it is cold (about one minute) before drinking or cooking with any of the water from the tap.

## 4. Use cold, flushed water for drinking, preparing infant formula and preparing food.

Only use cold tap water for drinking, preparing infant formula or cooking, since hot water increases the leaching of lead and other metals from your plumbing. Regularly clean aerators on taps used for drinking water and food preparation.

## 5. Replace brass fittings and lead water service pipes

Brass faucets and valves can contain some lead. These can be replaced with fittings that are certified to the standard on low lead content. Replace lead water service pipes, fixtures or solder present.

## Should I boil my water to make it safe to drink?

Boiling water will not reduce the amount of lead in drinking water. To reduce the amount of lead in drinking water, follow the precautions outlined in the above section, "What should I do if I live in a house with lead pipes/lead service lines?"

As a temporary solution, a household water filter at the tap can effectively remove lead from your water. The filter should be installed and maintained properly to be effective. Ensure any device is certified to the NSF International standard for lead removal.

#### How does lead in water affect health?

- Effects on neurological development and behaviour in children, including reduction of intelligence quotient (IQ).
- Children, infants and foetuses are most at risk because of their developing brains. Children in general absorb lead more easily than adults
- Increased blood pressure or kidney problems in adults

#### What about pregnant women or children?

Younger children are still developing and are more sensitive to the neurological and blood effects of lead. Children in general absorb lead more easily than adults. Particular recommendations are made for formula-fed infants because the water used to make the formula can contribute over 50% of an infant's lead exposure; drinking water in older children and adults contributes approximately 10% of total lead intake.

Pregnant women can pass lead in their blood to their fetus during pregnancy. Lead levels for pregnant women should be kept as low as possible.

## If I have lead pipes/lead service lines, can I use the water for bathing, showering, and washing dishes and clothes?

Yes. Health Canada does not consider absorption through skin or inhalation from drinking water sources to be a significant route of exposure for lead. Lead in water is not easily absorbed through the skin or mucous membranes.

#### What about schools?

Ontario Regulation 243/07, Schools, Private Schools and Child Care Centres (O. Reg. 243/07) made under the Safe Drinking Water Act, 2002. (SDWA) is intended to reduce children's exposure to lead in drinking water. The regulation requires the flushing of plumbing in schools, private schools and child care centres. Flushing has been shown to reduce lead levels in water at drinking water fixtures. The regulation also requires sampling and testing to measure the concentration of lead in drinking water against the provincial drinking water quality standard for lead. The Ministry of Environment, Conservation and Parks and York Region Public Health follow-up on elevated lead level results for schools.

## How is the Region staying up-to-date on health regulations for lead in drinking water?

## York Region has:

- Worked with local municipal staff through committees to try to adapt to the Province's heightened focus on lead
- Advocated that the Federal government prohibit the sale of lead solder or plumbing fixtures that
  contain lead, which continue to be available for purchase at many stores, in an effort to reduce lead
  exposure

## Going forward, York Region will:

- Continue to monitor lead and lead testing requirements as regulatory and inspection criteria changes
- Stay up-to-date on provincial priorities related to lead

## How do I get more information?

For additional information, contact York Region *Health Connection* 1-800-361-5653 or TTY 1-866-252-9933. You can also refer to Health Canada's document, "Drinking water: what about lead?"