

York Region Community and Health Services is mandated to promote safe water practices. This fact sheet is part of a series to provide information and standards on this topic.

Questions and Answers about Lead in Drinking Water

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. The information below is provided to address questions regarding potential health risks associated with exposure to lead in drinking water.

Does Ontario have a drinking-water quality standard for lead?

Yes. The Ontario Drinking Water Quality Standard for lead is 10 micrograms per litre or 10 parts per billion. This limit is based on a conservative estimate of how much lead in drinking water can contribute to a child's total exposure to lead from all sources.

How does lead get into drinking water?

York Region's surface and groundwater generally does not contain lead. High lead levels in the drinking water of a home likely originates from the lead service pipes, lead in solder or fixtures containing high percentages of lead in the plumbing.

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

Older homes built prior to the mid-1950s are more likely to have lead pipes and service lines. If your home was built between the mid-1950s and 1989, you likely do not have lead pipes or service lines, but there might be lead in some fixtures or solder used to connect your pipes. The amount of lead leaching into drinking water from these components depends largely on the corrosivity of the water. In homes where the plumbing contains lead and the water is corrosive, extended contact time can cause the lead to be released from the pipes.

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

You can have your water tested through a private laboratory to determine whether lead levels are above the standard of 10 micrograms per litre. A list of commercial licensed laboratories in Ontario that test for lead in drinking water can be found on the Ministry of the Environment's website at <http://www.ene.gov.on.ca/en/water/tapwater/leadlabs.php>.

Run the water from the drinking water tap for at least five minutes if it has been sitting in the pipes for 6 hours or more. Use cold, flushed water for drinking and preparing food. Water from the hot water tap should not be consumed as heated water may contain higher lead levels.

How does lead in water affect health?

Lead is a concern to children 6 years of age and under as well as pregnant women.

Children age 6 and under: 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 40 – 60% of an infant’s lead intake; drinking water in older children and adults only contributes approximately 10% of total lead intake.

Pregnant women: 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.

What should households with children age 6 and under and pregnant women do if they have lead pipes / lead service lines?

If your water has lead levels **below** the standard of 10 micrograms per litre, it is recommended that you run your water for at least 5 minutes after an extended period of non-use. Filtration systems or bottled water are not needed for lead reduction.

If your water has lead levels **above** the standard of 10 micrograms per litre, children and pregnant women should use an alternate source such as bottled water or commercially treated water from an approved supply. Pour-through filters will not sufficiently reduce lead in drinking water.

What should those who have lead pipes / lead service pipes do if they have only older children and non-pregnant women in the house?

Run the water from the drinking water tap if it has been sitting in the pipes for 6 hours or more. Flush the lines for at least five minutes. Use cold, flushed water for drinking and preparing food, and hot water should not be consumed as it usually has higher lead levels.

Do breastfeeding mothers need to use filtered water or bottled water if they have lead pipes / lead service pipes?

No. The amount of lead found in the breast milk of women who drink tap water in homes served by lead service lines does not constitute a risk to their infants' health.

Do older children and non-pregnant women need to use filtered water or bottled water if they have lead pipes / lead service pipes?

Generally, no. Older children and non-pregnant women usually get only a small percentage of their lead from water. In young children, lead exposure can also come from eating dirt and dust from the environment. Levels slightly over the acceptable level of 10 micrograms per litre are very unlikely to increase blood lead levels in children or adults.

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

Yes. These activities will not cause undue exposure to lead. Lead in water is not easily absorbed through the skin or mucous membranes.

How do I get more information?

For additional information contact York Region *Health Connection* 1-800-361-5653 or TTY 1-866-252-9933.

Ministry of the Environment. “Lead and Drinking Water – Questions and Answers.” <http://www.ene.gov.on.ca/en/water/tapwater/qna.php>. Last updated July 20, 2007.