

LEAD AND DRINKING WATER

Frequently Asked Questions

What is lead & what are the sources of lead exposure?

Lead is a naturally occurring bluish-grey metal. Lead also comes from industrial activities including burning fossil fuels, mining and manufacturing. Humans can be exposed to lead both indoors and outdoors. It is found in air, soil, dust, drinking water, food, paint and various consumer products.

How does lead get into drinking water?

When water leaves the municipal treatment plant the lead concentration is well below the Ontario Drinking Water Standard. However, in older parts of the City lead was sometimes used for service connections to supply water from the municipal watermain to homes and businesses. In St. Catharines, lead pipe has never been used in internal plumbing within homes. The concern relates to homes with lead service lines. As water flows through a lead service line, trace amounts of lead can be picked up from the pipes interior surface. The service line is the piping that is located between your water meter and the City's watermain in the street.

What is the exposure limit for lead in drinking water?

The Ontario Drinking Water Standard for lead in drinking water is 0.010 mg/L or 10 parts per billion (ppb). One ppb is equivalent to one drop of water in an Olympic sized swimming pool.

This level is based on long-term effects and is therefore applied for average concentrations in water consumed over long periods of time. Short-term consumption of concentrations above the Standard does not necessarily pose risks to human health. When the Standard was set, drinking water was considered to account for approximately 10% of all exposure to lead. The remaining 90% of lead exposure came from air, food, dust and other sources like gasoline, paints and solder. In Ontario, the amount of lead people are exposed to has decreased significantly over the past decade due to reductions in the use of lead as an additive in gasoline, paints and solder.

Who is most at risk?

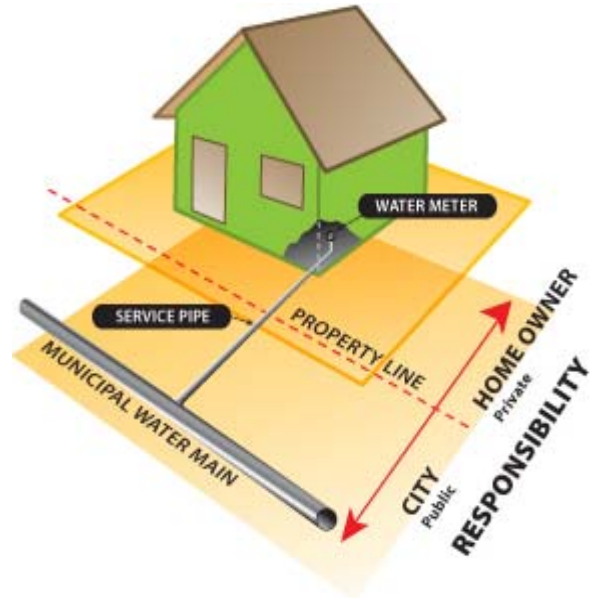
Young children under the age of six and nursing or pregnant women are the most vulnerable when exposed to lead. This is a result of smaller body mass and higher metabolism. The guidelines in place for lead in drinking water are based on the response of this most vulnerable group.

How do I know if my home has a lead water service connection?

In St. Catharines lead piping has not been used for water service lines since at least 1955. If your home was built after 1955 it should not have a lead water service line. If your home was built prior to 1955 it may or may not have a lead service line. Lead was one of a number of different pipe materials used in the past. To check for yourself, locate your water meter, typically found in the basement, and look at the pipe coming into the bottom of the water meter. Lead is soft, grey and scratches easily. Once scratched the lead pipe will have a silver shine to it.

Can I have my lead water service line replaced?

Some homeowners may be interested in replacing their lead service line. Water services run across both private property and public property. The City of St. Catharines will replace the portion of the water service on public property at the City's expense, any time a lead service is found, for example, during a new watermain construction job or when repairing a water service leak. The City will also replace the public property side when a lead exceedance is found and whenever the property owner first replaces the private portion of the lead service line.



What should I do if my home has a lead water service line?

- Run the water if it has been sitting in the pipes for more than 6 hours. Water should be flushed from the cold water tap for at least five minutes ensuring you are getting fresh water from the larger watermains. This flushed water can be used to water your plants or for household cleaning.
- Install a NSF-53 certified filter on your tap.
- Replace the lead service line to your home.

If I do not have a lead service line in my home do I need to be concerned?

No. The City of St. Catharines drinking water has very low levels of lead, well below the acceptable standards. The City's water has never had an exceedance of lead in the municipal system. Concerns have only been raised for homes with lead service lines, built before 1955.



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How much will daily flushing cost?

A typical household running the water for five minutes, three times a day would spend less than \$2.50 per month.

Will boiling the water remove lead?

No. Boiling the water will not remove the lead; in fact due to evaporation during the boiling process, the lead concentration can actually increase. Only the cold water should be used for cooking or drinking.

Can bottled water contain lead?

Yes. Bottled water is not necessarily lead-free. Check the label to see if it says whether the water is lead-free. Also, bottled water can cost as much as 100 times more than your tap water.

Who do I contact if I have any questions or concerns regarding water quality?

You may contact Stephanie Wybrew, Senior Water Quality Technician, City of St. Catharines, Transportation and Environmental Services Department at (905) 688-5600 ext. 2197 or the Niagara Regional Public Health Department at (905) 688-3762.



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