

DRINKING WATER: what about lead?

Overview of risk and health effects

It is important to reduce exposure to lead as much as possible because health effects of lead may occur even at low concentrations.



Who is most at risk from exposure to lead?

- Children, infants and foetuses are most at risk because of their developing brains
- Exposure to lead poses a risk to everyone's health

What are the health effects of being exposed to lead?

- Effects on neurological development and behaviour in children, including reduction of intelligence quotient (IQ)
- Increased blood pressure or kidney problems in adults



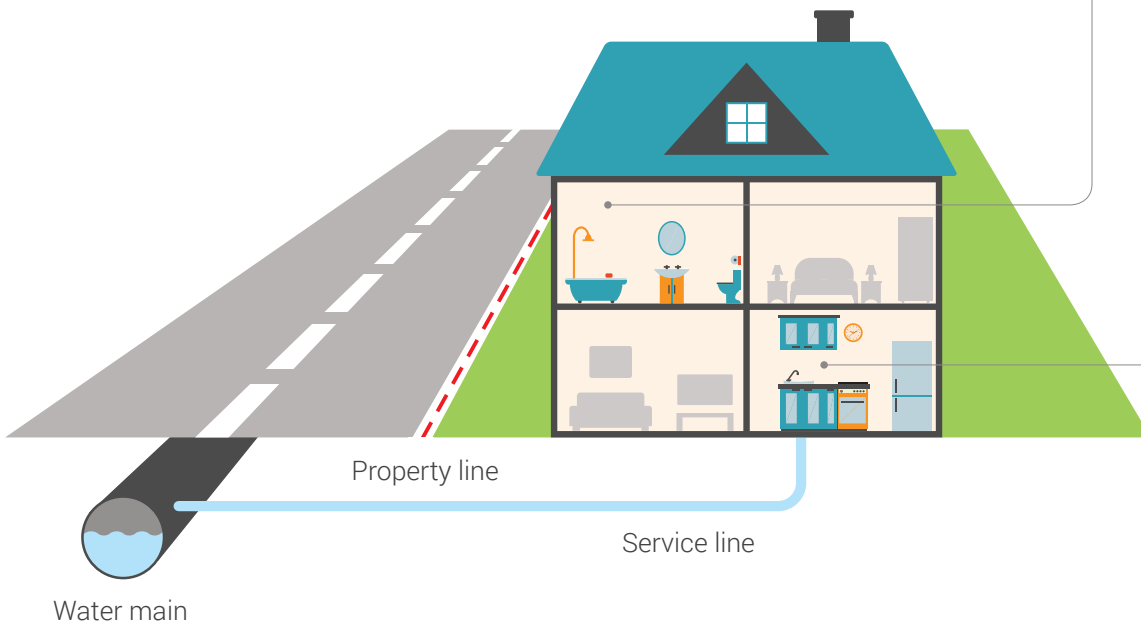
Any reduction
of exposure
TO LEAD
decreases
the risk
of negative
health
effects.



What are the sources of lead in drinking water?

Some piping, plumbing materials or fittings may contain lead:

- Some homes may have a lead service line—the pipe connecting the house plumbing to the water main—the National Plumbing Code allowed lead as a material in pipes until 1975
- Brass faucets and fittings may contain lead
- Some plumbing may contain lead solder—the National Plumbing Code allowed lead in solder until 1986



Brass fittings



Lead solder



How does lead get into drinking water?

- As water sits in pipes for several hours, lead can leach into the water
- Small particles containing lead can also break free and be carried to the tap

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

- Talk to your municipality or water utility—they probably know if your neighbourhood has lead service lines

You can also:

- Look for the pipe that brings water into your house from the water main—a lead service line would be a greyish-black, soft metal—easily dented or scraped with a knife.



Simple actions to reduce exposure to lead from drinking water

Flush out your pipes before consuming the water

- Has water been sitting in your pipes for several hours? Run the tap until it's cold (about one minute) before drinking or cooking with any of the water from that tap
- Only use cold tap water for drinking or cooking, since hot water increases the leaching of lead and other metals from your plumbing



Clean your taps monthly

- Every month, inspect the aerators or screens at the tap
- If you find debris, clean it out—this will remove any particles that may contain lead, and inspect more frequently
- If you do not find debris, continue to inspect monthly



Replace Brass fittings

- Brass faucets and valves can contain some lead— These can be replaced with fittings that are certified to the standard on low lead content



A household water filter at the tap can effectively remove lead from your water

- Recommended as a temporary solution
- The filter must be installed and maintained properly or it could become ineffective
- Test your water for lead before installation and during use to confirm the filter is working



Make sure that any device you purchase is certified to the NSF International standard for removal of lead.



How do I test my water

- Talk to your local health unit to find an accredited laboratory that can test your water



If your home has a lead service line

- The best permanent solution is to have it replaced
- In most communities, the municipality is only responsible for a portion of the service line, and you are responsible for the other portion
- Ask your municipality or water utility about any programs or incentives for replacing lead service lines

What action has the Government of Canada taken on lead?

Federal regulations and guidelines have helped to reduce or eliminate:

- Emissions of lead into the air, water or soil from industry
- The use of lead in fuels, paints and coatings, consumer products and toys
- Lead in foods, beverages and agriculture

The Guidelines for Canadian Drinking Water Quality (www.canada.ca/en/health-canada/services/environmental-workplace-health/water-quality/drinking-water/canadian-drinking-water-guidelines.html) provide technical guidance to help municipalities and utilities minimize the occurrence of lead in drinking water.



For more information on reducing your exposure to lead from drinking water, please visit: www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/water-talk-minimizing-exposure-lead-drinking-water-distribution-systems.html or contact us as at: hc.water-eau.sc@canada.ca