

Health Protection Office of the Chief Medical Health Officer 8th Floor, 601 West Broadway Vancouver, BC V5Z 4C2

Lead in Drinking Water

June 2023

Lead is harmful to human health. Health impacts include effects on neurological development and behaviour in children and increased blood pressure and kidney issues in adults. Lead exposure can impact the health of everyone, but lead is more of a risk for pregnant women and young children because infants and children absorb lead more easily than adults and are more susceptible to its harmful effects, such as effects on behaviour and intelligence. The public's overall exposure to lead has decreased over the years as some major sources of lead have been eliminated. However building plumbing systems can still be a source of lead for people consuming the water (in addition to other sources such as food, soil, paint and dust). When there is a risk of lead being present in a buildings water system, steps can be taken to reduce exposure to lead from the drinking water.

What is a Safe Level?

Health Canada has reduced the maximum acceptable concentration of lead in drinking water to 5 parts per billion while at the same stating that lead levels should be as low as reasonably achievable. There is no known safe level of lead exposure.

What can I do?

The BC Ministry of Health document titled <u>Lead in Drinking Water</u> provides details on the issue and steps that can be taken to reduce lead levels in your drinking water. Health Canada's document titled: <u>Drinking water: what about lead?</u> provides similar details as well as a good description of the sources of lead within a building's plumbing system.

Water in Daycares and Homes with Infants

Infants are vulnerable to the effects of lead exposure, and could be highly exposed if they are consuming formula made with tap water from a building plumbing system with lead. Reduction of lead levels by flushing water lines may not be enough to adequately reduce the risk to infants. Additional steps such as the use of filters capable of removing lead or an alternate water source known to be lead free may be required to adequately mitigate the risks. For licensed daycares VCH staff will work with facility operators to ensure that lead removal procedures are being employed and managed properly.

Testing in Schools

Drinking water testing for lead is required in school buildings. For more details, see the Ministry of Education & Training website.

Additional Resources

<u>Health Canada's Water Talk - The guideline for lead in drinking water</u> <u>Guidelines for Canadian Drinking Water Quality: Guideline Technical Document – Lead</u> <u>Canadian water & Wastewater Association - Fact Sheet on LEAD (Pb)</u>

Contact Information for VCH Health Protection Offices:

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