

LEAD IN DRINKING WATER

Changes to acceptable concentrations: Effective March, 2019

Previous limit	New limit
MAC: 0.01mg/L	MAC: 0.005mg/L

Lead in drinking water

Lead is a metal that can have adverse effects on human health and can leach into a drinking water supply from building service lines and indoor plumbing fittings. Until 1975, lead was commonly used in fixtures, solders and pipes. Lead in drinking water is usually due to leaching from parts of the plumbing and distribution system in buildings built prior to 1989. Some of the known health effects of lead consumption include increased blood pressure, renal dysfunction in adults, reduced cognition, impaired hearing and adverse behavioural/neurodevelopmental effects in fetuses, infants and children. New research shows that reductions in IQ are associated with lead levels of 0.01mg/L, the previous Maximum Acceptable Concentration (MAC). As a result, the MAC has been reduced to 0.005 mg/L. Every effort must be made to ensure that lead levels are maintained as low as reasonable achievable as there is no known concentration of lead that is considered “safe.”

What the drinking water guideline changes mean for drinking water system operators

Northern Health will work with water suppliers (owners/operators) of systems that are approaching or exceeding the new limits and support the implementation of these more stringent water quality requirements. This may include developing new or modifying existing water quality monitoring programs and, if needed, establishing plans to mitigate exceedances. Timelines for improvements will be established in consultation with your Environmental Health Officer.

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Guidelines for Canadian Drinking Water Quality: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/water-quality/drinking-water/canadian-drinking-water-guidelines.html>

Safe drinking water system operations: <https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-quality/drinking-water-quality/how-drinking-water-is-protected-in-bc>

Accredited laboratories: www.cala.ca

Health Canada has created an Infographic for Lead in drinking water, available on the Health Canada Website:

https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/pubs/what-about-lead/drinking-water-lead-eng.pdf.

BC Healthlink File for Lead:

<https://www.healthlinkbc.ca/healthlinkbc-files/lead-drinking-water>