



First Nations Health Authority
Health through wellness

Lead and Copper in Drinking Water

How does lead and copper get into drinking water?

The most common source of lead and copper in drinking water is through corrosion of plumbing materials that were made with lead and copper. Lead and copper in drinking water can be a concern with schools, particularly those built before the 1989 revision of the BC Plumbing Code restricting the use of lead in potable water lines. The potential for leaching lead and copper also increases the longer water is in contact with the plumbing. Schools may have extended periods where their water supply is not in use (for example overnight, weekends, and holidays) so this can increase the potential for leaching. Typically, water is not a significant source of lead, but in cases where lead-containing plumbing comes in contact with water that is soft or is low in pH, it can contribute substantially to total lead intake.

What are the effects of lead?

Exposure to lead can be hazardous to health, even at small amounts. While lead can be harmful to the health of people of all ages, children and infants are more susceptible to lead and copper exposure because their bodies absorb metals at higher rates than the average adult. It is important to note that the Provincial Health Officer (PHO) has stated that there is no evidence of children being adversely affected in BC. However, it is important to reduce population lead exposure and therefore the First Nations Health Authority (FNHA) will be conducting sampling as explained next.

What is being done?

FNHA conducted baseline chemical sampling on all First Nations Community Water Systems in 2015 and the results indicate that no samples were above drinking water guideline levels for lead and copper.

FNHA is currently developing a program to test the drinking water in all school and daycare facilities in community to ensure that there are no lead and copper results above drinking water guideline levels. If any elevated levels are found, FNHA will work with the community and Indigenous and Northern Affairs (INAC) to address the findings. The results of the testing will be shared with the communities.

What can you do?

If you have a concern and if your facility/home was built before 1989, you can let the water run from the cold water tap for 15-30 seconds or “flush until cold” before using it for drinking or cooking. You can also contact your Environmental Health Officer for additional information.

References

Health Canada. 2011. Proposed risk management strategy for lead. Ottawa, ON: Health Canada, Environmental and Workplace Health www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/prms_lead-psgr_plomb/index-eng.php

EPA. 2005. Lead and Copper Rule: A Quick Reference Guide for Schools and Child Care Facilities that are Regulated Under the Safe Drinking Water Act