

April 21, 2016

Protecting yourself from Lead in Drinking Water

Lead can be harmful to human health, even in very small amounts. Lead is most serious 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 exposure to lead has decreased over the years as major sources of lead have been eliminated, and we have no reported cases of children being adversely affected by lead in drinking water in the Vancouver Coastal Health (VCH) region. Nonetheless, it is important to keep lead exposure as low as possible, particularly for pregnant women and children.

Drinking water is one possible, but not the only, source of lead. Lead-based paint in older homes is another potential source – further information is available at: <http://www.healthlinkbc.ca/healthfiles/hfile31.stm>. The current guideline for lead in drinking water is a maximum acceptable concentration of 0.010 mg/L (10 ppb). Most drinking water supply systems in B.C. have very low levels of lead. However, many water systems in the South Coast of B.C. have soft (low in hardness), and slightly acidic (low pH and alkalinity) drinking water. When this type of water sits unused in building piping, such as overnight or over weekends, lead can be released from the plumbing into the water. This is particularly true for older homes and buildings that may have lead or brass plumbing fixtures or fittings, or lead – containing solder. Some water systems have measures in place to help counter this problem. VCH is working with the operators to evaluate the effectiveness of these measures.

Water sampling results from various communities in VCH indicate that once sitting water is flushed, lead levels return to safe levels below the maximum acceptable concentration, even when the levels were elevated prior to flushing.

What Can You Do

If you are pregnant, trying to become pregnant, have young children in the home or simply wish to reduce your potential lead exposure:

- Flush the water from a tap in your home until the water is cold anytime water has not been used for a prolonged period.
- Examples of prolonged periods: Overnight, throughout the work day (if all households members are away from the home), and during vacations when the house is empty.

- Use only cold water that has been flushed for drinking, cooking and making baby formula. Hot tap water generally has higher lead levels compared to cold tap water.
- Once the lines have been flushed, water collected for drinking can be stored in a suitable container and kept refrigerated to minimize repeated unnecessary flushing.
- Also to assist conservation, the flushed water can be collected and used to water ornamental household plants.

Note: Households on water systems with corrosion control measures may not require flushing. VCH will adjust our advice as we evaluate these systems.

If you are still concerned about lead exposure from your drinking water, you can consider having your water tested. VCH Environmental Health Officers can advise you of the appropriate private laboratories that can do the testing for you at a cost.

In B.C., screening people’s blood for lead is not generally recommended. If you are concerned about your family’s current or past exposure to lead, discuss your concerns with your family physician.

For more information on lead in drinking water, visit this Health Canada web page:

<http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/lead-plomb-eng.php>

Contact information for Vancouver Coastal Health Environmental Health:

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Central Coast	604-983-6700
Powell River	604-485-3310
Sechelt	604-885-5164
Vancouver	604-675-3800
North Vancouver	604-983-6700
Richmond	604-233-3147
Squamish	604-892-2293
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