

## Introduction

Section 48(5) of the Child Care Licensing Regulation requires a Licensee to ensure that safe drinking water is available to children. Lead may be ingested from many sources such as food, soil, paint, dust and water. Even low levels of lead may be harmful to the brain development of infants and children. Children are more vulnerable to the harmful effects of lead than adults are. Licensees must take steps to reduce children's exposure to lead from all sources, including drinking water. Health Canada set a Maximum Allowable Concentration (MAC) of lead in drinking water at 0.005mg/l; however lead levels should be kept as low as reasonably achievable (ALARA) as there is no known safe exposure level to lead.

## Testing

During the spring of 2020, Island Health participated in a project to support the directive by the Ministry of Health and Provincial Health Officer to test the lead levels in the drinking water of all licensed child care facilities. This project was completed in May 2020, and as a result, facilities with lead over the MAC are required to submit a Corrective Action Plan (CAP) to ensure the health and safety of children in care.

A Licensee must conduct initial water quality test for lead, in order to receive a License, and complete regular lead testing as directed by the Community Care Facilities Licensing Program. Some Licensees may also wish to conduct additional testing when remedial work or upgrades to the plumbing are completed at the facility. To conduct testing at your facility, please contact Bureau Veritas (BV) Labs at [customersolutionswest@bvlabs.com](mailto:customersolutionswest@bvlabs.com) to ensure that the directions for testing stagnant and flush water testing are followed closely.

## Instructions for Stagnant and Flush Testing

Testing at each location requires the submission of two separate 250 ml sample bottles, one taken after a minimum of eight hours of no use (stagnant sample) and another sample taken after a two-minute flush (flush sample). Please determine how many sink locations should be tested, as only water tested at these locations will be permitted for use as drinking water.

## BV Lab Locations & Contact Information

- **Victoria** | 851 Viewfield Rd, Victoria V9A 4V2 | 250-385-6112
- **Courtenay** | 2755-B Moray Ave, Courtenay V9N 8M9 | 250-338-7786
- **Project Manager** | [CustomerSolutionsWest@BVLabs.com](mailto:CustomerSolutionsWest@BVLabs.com)

Please contact BV labs to request Health Protection BC Child Care Project lead level water testing. This will allow the lab to assist you in obtaining the right results and provide you with pricing information. The lab can ship sample bottles or they have pickup locations around Vancouver Island.

Testing stagnant and flush samples may allow you to operate with a CAP which includes flushing water each day before operating, rather than using other alternatives such as bottled water, filters, or remedial plumbing work.

The Licensing water testing project indicated that approximately 50% of facilities in the Island Health region had elevated lead levels in their water; do not assume that your results will be under the MAC.

## Results

If your lead levels are above the MAC, you will be required to submit a CAP to Licensing to address the levels of lead in your water. This plan must address how children in care will not be exposed to harmful levels of lead

Victoria	Nanaimo	Courtenay	Campbell River
201 – 771 Vernon Avenue Victoria, BC V8X 5A7 Ph: 250.519.3401 Fax: 250.519.3402 Website: <a href="#">Community Care Facilities Licensing</a>	29 – 1925 Bowen Road Nanaimo, BC V9S 1H1 Ph: 250.739.5800 Fax: 250.740.2675	355 – 11 <sup>th</sup> Street Courtenay, BC V9N 1S4 Ph: 250.331.8620 Fax: 250.331.8596	200 – 1100 Island Highway Campbell River, BC V9W 8C6 Ph: 250.850.2110 Fax: 250.850.2455

from any source, including water used for drinking, cooking, brushing teeth, or any other activity where water may be consumed. Your Licensing Officer will assess this CAP at each routine inspection to ensure the health and safety of children in your care. You may submit an updated CAP at any time, if your plan to address the concentration of lead in the water changes.

## Corrective Action

Each facility is unique and may have multiple options to consider when submitting a corrective action plan to address contraventions to legislation. The facility should consider their unique infrastructure, population, staffing, and the feasibility of any plan submitted to Licensing. The following solutions may be helpful when submitting a plan to address unacceptable concentrations of lead in drinking water:

- Two minute flush of water after every period of six or more hours of no water use prior to operation (for facilities with lead levels below the MAC in flush samples);
- Filtration systems (carbon-based, reverse osmosis or distillation type filters that are certified to the NSF international standard for removing lead are effective) – see link below;
- Replacement of specific plumbing fixtures or components (lead may be concentrated in an old faucet for example). You may wish to consult with a water treatment company before completing any upgrades at the facility;
- Replacing lead service lines to the water supply. Contact your local government to find out if any programs exist in your community to replace service lines;
- Use of bottled water rather than tap water; and
- To ensure lead levels have been addressed, re-testing must be completed when
  - A CAP includes a longer flush period than initially tested;
  - Sampling errors are suspected or identified; and/or
  - Facility updates, such as installation and/or use of filters, has been completed.

## Questions

If you have any questions or require further assistance please contact your local Licensing Officer. A Licensing Officer can assist you in completing testing and submission of your CAP, if necessary, but will not be able to create a plan for you.

## Resources

- Government of British Columbia (2017). BC Health Files: *Lead in Drinking Water* [https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/child-day-care/fact\\_sheet\\_-\\_lead\\_in\\_drinking\\_water\\_2017.pdf](https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/child-day-care/fact_sheet_-_lead_in_drinking_water_2017.pdf)
- Government of British Columbia (2019). HealthLinkBC File Number 49e: *Lead in Drinking Water* <https://www.healthlinkbc.ca/healthlinkbc-files/lead-drinking-water>
- Government of Canada (2019). *Guidelines for Canadian Drinking Water Quality: Guideline Technical Document – Lead* <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>
- Island Health (2020). *Lead in Water* <https://www.islandhealth.ca/learn-about-health/drinking-water/lead-water>
- NSF certified lead reduction filters: <https://www.nsf.org/newsroom/concerned-about-lead-drinking-water-choose-filter-certified-to-reduce-lead>