MINISTRY OF CHILDREN AND FAMILY DEVELOPMENT
INFORMATION NOTE

DATE: June 13, 2019
CLIFF#: 241625

PREPARED FOR: Assistant Deputy Minister Christine Massey

ISSUE: The Provincial Health Officer has recommended plans be developed to address drinking water lead content in child care facilities.

BACKGROUND:
The Provincial Health Officer (PHO) released the *Clean, Safe, and Reliable Drinking Water: An Update on Drinking Water Protection in BC and the Action Plan for Safe Drinking Water in British Columbia* report on June 12, 2019. The report considers fiscal years 2012/13 – 2016/17 and offers 32 recommendations to advance the protection of drinking water across BC. Recommendation 19b applies to child care, recommending plans be developed to promote the screening and reduction of lead in the drinking water in child care facilities.

BC currently has no requirements to test for drinking water lead content in child care facilities. Children under the age of 6 are the most vulnerable to the harmful effects of lead. Older facilities with intermittent water usage[1] (such as child cares and schools) are at higher risk of having elevated lead levels in drinking water.

In October 2017, the PHO requested regional health authorities (RHAs) provide information on any actions taken to screen drinking water lead content in licensed child care facilities[2]. Results indicated that all RHAs were taking steps to share educational information and materials, but not all were ensuring child care facilities had been sampled. In June 2018, the Environmental Health and Policy Advisory Committee (EHPAC) directed a task group to explore options for implementing lead screening in child care facilities; this work informed the recommendation included in the PHO report.

Since 2016, School Districts in British Columbia have been required to work in consultation with RHAs to test for drinking water lead content in all school facilities built prior to 1990 to ensure lead levels are below the maximum allowable concentration of 10 micrograms per litre.[3] The data collected from schools to date have exceeded the allowable concentration in several school districts.[4]

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[1] Intermittent usage in these facilities means water remains in the pipes for longer periods, allowing lead to leach into the water. Older facilities primarily include those pre-dating the 1989 lead restrictions in the BC Building Code.
[2] This request was made in response to the 2017 release of the *Interim Guidelines on Evaluating and Mitigating Lead in Drinking Water Supplies, Schools, Daycares and Other Buildings*.
[3] Standard is from the *Guidelines for Canadian Drinking Water*.
[4] Overall, 26% of 13,151 fixtures tested in 2016/17 exceeded the lead content in drinking water standard.

Some other provinces[5] require testing for lead content in drinking water as part of the health and safety requirements of child care centres. Since 2007, Ontario has required all child care centres to perform a variety of flushing, sampling and testing, under the *Safe Drinking Water Act*.

DISCUSSION:

The Provincial Health Officer's report addresses drinking water lead content in child care facilities under Recommendation 19b:

> "Develop plans to promote screening for, and implement measures to effectively reduce levels of, lead in the drinking water of child care facilities, recognizing that children under the age of six are the most vulnerable to the harmful effects of lead."

The report identifies the leads for this initiative as the Ministry of Health, RHAs, the First Nations Health Authority, and the Ministry of Children and Family Development.

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[5] Manitoba, Alberta and Saskatchewan

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NEXT STEPS:

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ATTACHMENTS:

A. PHO Report Table 5.4: Regional Health Authority Plans and Activities to Address Lead in Drinking Water in Child Care Facilities, 2017

Clean, Safe, and Reliable Drinking Water: An Update on Drinking Water Protection in BC and the Action Plan for Safe Drinking Water in British Columbia:
www.health.gov.bc.ca/pho/reports/drinkingwater

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Attachment A: PHO Report Table 5.4: Regional Health Authority Plans and Activities to Address Lead in Drinking Water in Child Care Facilities, 2017

Regional Health Authority	Education/Outreach Plan	Sampling Plan	Results	Sampling Method
Island Health	Island Health has developed some materials for use through licensing but they are not yet in use.	None	None	Unknown
Northern Health	In 2016, Northern Health sent an email and letter to all licensed child care and youth care facilities. The letter recommends testing but does not require it. Any new day care applicant is given education through this letter and if needed direct communication with an environmental health officer. During routine inspections, licensing officers review concerns around drinking water safety.	Recommending voluntary sampling by child care providers. To date, no sampling in child care facilities has been shared with the health authority.	None	Letter recommends taking a sample at time zero (pre-flush) and another sample after six hours of stagnation.
Vancouver Coastal Health	Vancouver Coastal Health has been providing education and materials to child care providers about lead and the need for flushing since 2013. It is looked at during each routine inspection. All facilities must develop a plan to ensure safe water. Most recently, Vancouver Coastal Health updated their flushing advice to child care facilities based on 2016 sampling results of schools.	Operators are instructed to develop a plan to ensure the facility can meet the *Guidelines for Canadian Drinking Water Quality.* Baseline tests (pre and post flush) must inform this plan.	In 2012, 62 child care facilities were sampled. Twelve pre-flush samples exceeded the MAC. Materials were developed and education provided.	Operators are instructed to take a sample at time zero (pre-flush) and another at post flush (after five minutes or when the water turns colder).
Interior Health	In 2017, Interior Health launched an outreach/ education initiative with licensed child care facilities. This initiative includes screening all child care facilities for lead, as well as developing educational resources and materials for licensing officers and child care providers.	Pre-purchased enough lead samples to screen all child care facilities as part of initiative.	Of the 443 facilities that have been tested as of October 2017, 29 had results exceeding the maximum acceptable Concentration (MAC) for lead, which triggered follow up and further testing.	Random daytime sampling.
Fraser Health	All child care facilities have been emailed the fact sheet developed by the Ministry of Health. Fraser Health is reviewing results and recommendations of a study by	BCIT/BCCDC research project took 91 samples from various fixtures at 16	Study findings: in general lead levels were below acceptable limits and flushing decreased	Samples were taken at time zero (pre-flush), at one minute flush, at five

	the BC Institute of Technology (BCIT) and BC Centre for Disease Control (BCCDC) that sampled water from and surveyed child care operators understanding of lead in a small sample of child care facilities operators within their region. Licensing officers will provide education on lead in drinking water during routine inspections.	child care facilities. No other sampling of child care facilities has been reported to the Provincial Health Officer.	levels. Lead content was higher in institutional settings than home settings.	minute flush, and after 120 minutes of stagnation time.
First Nations Health	In 2016, First Nations Health Authority (FNHA) developed lead messaging that was provided to all First Nations communities, with information that all child care and school facilities on reserve would be tested. Additional educational materials were developed for child care and school facilities and households. The initial round of testing was completed by environmental health officers in FNHA in 2017. Facilities that had results that exceeded the *Guidelines for Canadian Drinking Water Quality* were notified and interim mitigation measures were provided. If the child care facility was licensed through another health authority, Indigenous Services Canada and the regional health authority were both notified of results exceeding the guideline.	FNHA developed a hybrid plan based on Health Canada and US Environmental Protection Agency guidelines. Samples were taken for both lead and copper.	Out of the 240 facilities/sample sites identified in 2017, 34 facilities exceeded the MAC for lead (with at least one of the samples). Results were shared with the facilities, and interim measures to bring down lead levels were provided. If a guideline was exceeded, the results were also shared with Indigenous Services Canada, and with the appropriate regional health authority if the facility was also licensed by that regional health authority.	Initial round: first draw after six to eight hours stagnancy, not exceeding 24 hours; second sample after a 30-second flush; and third sample taken after flushing until cold/ temperature change. Field notes on age of facility, time, temperature, and pH were also taken when possible.