Drinking Water Data Release (2019-20)
Questions and Answers for Schools, Private Schools and Child Care Centres with exceedance in flushed sample
December 2020

Key Messages – lead in schools, private schools and child care centres

- Ontario has the most stringent provincial testing regime in Canada when it comes to lead in drinking water and is the only province that requires lead testing in drinking water from all schools, private schools and child care centres.
- The 2019-20 data shows that the majority of schools, private schools and child care centres have found no problems with lead in their drinking water.
- If lead exceedances occur, facility owners such as school boards and owners of private schools and child care centres must take immediate corrective action to protect children, as directed by the local medical officer of health.
- Ontario's Chief Medical Officer of Health has not received any reports of lead toxicity in Ontario children that have been linked to drinking water in the last 10 years.
- To ensure the continued protection of Ontario's drinking water, the province will be updating its current policies and consulting on further actions to reduce levels of lead in drinking water.
- For the 2020-21 school year, Ontario is investing $1.4 billion to repair and renew existing schools. This funding can also be used to address lead in schools such as the replacement of drinking water fixtures and related plumbing systems.
- In addition, on October 28th, an additional $700 million in combined federal-provincial funding was announced through the COVID-19 Resilience Infrastructure Stream (CVRIS) under the Investing in Canada Infrastructure Program (ICIP). This funding is intended to support, amongst other things, occupant health and safety and facility condition.

Lead in schools, private schools and child care centres

1. How many exceedances for lead in schools, private schools and child care centres were there in 2019-20?

The 2019-20 data shows that the majority of schools, private schools and child care centres have found no problems with lead in their drinking water.

- 95.4 per cent of the test results (flushed and standing) met Ontario's standard for lead in drinking water
- 97.5 per cent of the test results for flushed samples (where taps had been flushed before the sample was taken in accordance with the regulation) met the standard for lead in drinking water at schools, private schools and child care centres.
    - 631 flushed samples were above the standard for lead.

While Ontario has one of the most stringent lead testing regimes in Canada, we are taking steps to review our current policies and consult on further actions to reduce levels of lead in drinking water.

That's why the ministry will be consulting with Ontarians on whether and how to adopt Health Canada's reduced guideline for lead in drinking water, proposed enhancements to Ontario's already stringent lead protection framework, and increasing transparency in lead testing results. The ministry expects to begin this consultation process in early 2021.

2. How many schools and child care centres had flushed exceedances in 2019-20?

631 flushed exceedances at 318 individual facilities were identified and managed in 2019-20. This includes corrective actions being undertaken to resolve the exceedance.

When an exceedance(s) of the lead standard is identified, facilities must take immediate corrective action. The local public health unit and the Ministry of the Environment, Conservation and Parks are notified within 24 hours when a testing laboratory detects an exceedance of the standard for lead in a school, private school or child care centre's drinking water sample. Corrective actions can include:

- replacing or removing the fixture
- increasing flushing
- installing a filter
- resampling the fixture that had the exceedance
- taking any other measures as directed.

Fixtures must remain out of service until the exceedance is resolved.

3. What does Ontario do to ensure lead exceedances are resolved?

Ontario has the most stringent provincial testing regime in Canada when it comes to lead in drinking water.

If exceedances of the lead standard occur at a school, private school or child care centre, facility owners such as school boards and owners of private schools and child care centres must take immediate corrective action to protect children, including any action directed by the local medical officer of health.

Throughout the year and during inspections, water inspectors from the Ministry of the Environment, Conservation and Parks ensure corrective actions have been followed to address adverse lead test results and ensure drinking water is safe.

4. Why are there exceedances for lead in drinking water at some facilities two years in a row?

Amendments to drinking water testing requirements in July 2017 accelerated the identification of problem taps and water fountains in schools, private schools and child care centres. This initiated testing on fixtures that had never been sampled before and resulted in

an increase in the number of problematic taps and fountains. It is important to note that the number of fixtures in a school can be as high as 250. As this sampling can be undertaken over multiple years, exceedances in consecutive years can be expected.

It is important to note that when exceedances occur, facility owners must take immediate corrective action to protect children including following any instructions provided by the local medical officer of health. Fixtures must remain out of service until the exceedance is resolved.

5. **Does the Ministry of the Environment, Conservation, and Parks require schools and child care centres to inform parents of exceedances?**

   The Ministry of Environment, Conservation and Parks recommends that schools, private schools and child care centres proactively share information with parents about any corrective actions taken and be prepared to answer questions about their facility's drinking water tests. We continue to remind school boards and child care centres of the importance of notifying parents and guardians in the event of a lead exceedance.

6. **Why has there been a large increase in the number of test results for lead since July 2017?**

   Regulatory amendments to drinking water testing requirements made effective in July 2017 accelerated sampling and testing for lead in schools, private schools and child care centres to identify problem taps and water fountains. This resulted in increased numbers of results. Improved identification of problem fixtures allows for faster resolutions to effectively protect children.

   The regulatory amendments required schools, private schools and child care centres to conduct lead testing on every drinking water fixture used to prepare food or provide drinking water to children. Schools and private schools with a primary division and child care centres were required to complete this testing by 2020, schools without a primary division by 2022, provided the facility was operational as of July 1, 2017.

   Even with increased lead testing requirements, the proportion of flushed test results that exceed the standard for lead remains comparable to previous years, at around 2.5 per cent.

7. **Why was there a decrease in the number of test results for schools and child care centres between 2018-19 and 2019-20 (from 34,770 flushed test results in 2018-19 to 25,417 flushed test results in 2019-20)?**

   Regulatory amendments made in 2017 required schools with a primary division and child care centres to conduct lead testing on every fixture used to prepare food or provide drinking water to children by 2020, or by 2022 for schools without a primary division, provided the facility was operational as of July 1, 2017. This requirement caused a large increase in the number of test results for the past three years, however, as facilities complete testing of all drinking water fixtures, the number of results will begin to decrease and schools, private schools and child care centres will be required to randomly test one drinking water fixture every year.

Additionally, schools, private schools and child care centres that complete their required sampling and do not identify any lead problems are eligible for a reduced sampling schedule and may only need to sample once every three years.

8. **Are schools, private schools and child care centres required to submit inventories to the Ministry of the Environment, Conservation, and Parks?**

   Inventories are voluntarily submitted to the ministry on an annual basis. The ministry began proactively collecting information from schools, private schools and child care centres in 2017 to develop a baseline of tap and fountain inventories so that progress towards completing the sampling requirements can be tracked.

   Thanks to the efforts of the public school boards in Ontario, 100 per cent of the requested inventories were received by the ministry for public schools. The ministry continues to work with private schools and child care centres to obtain any missing baseline information. Additionally, some of the registered centres may be closed, moved or newly opened or the contact information is out of date.

9. **Does the Safe Drinking Water Act (and O. Reg 243/07) also set out requirements for home child care providers?**

   The regulation for schools, private schools and child care centres under the Safe Drinking Water Act (O. Reg. 243/07) does not apply to unlicensed home child care providers or home child care providers overseen by a licensed home child care agency.

10. **How many samples from this data set would exceed the new Health Canada guidelines?**

    In 2019-20:

    - 1,411 (5.55 per cent) of the 25,417 flushed sample results in schools, private schools and child care centres had a value greater than 5 micrograms of lead per litre
    - 3,416 (13.47 per cent) of the 25,353 standing sample results had a value greater than 5 micrograms of lead per litre

11. **Is there evidence that the current level of lead in Ontario's drinking water is putting children's health at risk?**

    Ontario's Chief Medical Officer of Health has not received any reports of lead toxicity in Ontario children that have been linked to drinking water in the last 10 years.

    Ontario Drinking Water Quality Standards are intended to protect human health. The potential effects of lead at the current standard of 10 micrograms per litre are very subtle and would not be detectable on an individual level.

    Lead is a naturally occurring element that has many industrial uses. Exposure to lead can occur by inhalation of lead-containing particulates in air (especially smoke from cigarettes), contact with soil that contains lead, certain diets relying on imported canned food, some consumer products and from drinking water in homes served by lead service lines and/or

piping containing lead components including the solder. However, drinking water generally accounts for a small fraction of total lead exposure for most people.

It is important to note that children may be exposed to other sources of lead, including in the home through residential drinking water or old paint. Efforts should be made to reduce all sources of lead exposure.

Blood lead levels of Canadians have declined by over 70 per cent in the past 40 years due to ongoing actions to reduce lead exposure from all sources. Levels in children between three and five years old dropped by 40 per cent from 2009 to 2017, showing that lead exposure is continually being reduced.

12. What is the province doing to replace lead pipes and/or faucets at schools, private schools and child care centres across the province?

For the 2020-21 school year, Ontario is investing $1.4 billion to repair and renew existing schools. This funding can also be used to address lead in schools such as the replacement of drinking water fixtures and related plumbing systems.

In addition, on October 28th, an additional $700 million in combined federal-provincial funding was announced through the COVID-19 Resilience Infrastructure Stream (CVRIS) under the Investing in Canada Infrastructure Program (ICIP). This funding is intended to support, amongst other things, occupant health and safety and facility condition.

Owners of child care centres and private schools are responsible for replacing lead pipes and/or faucets at their facilities.

In cases where the sample results exceed the Ontario drinking water standard for lead, facility owners and operators must follow corrective actions, including those directed by the local medical officer of health. These corrective actions may include replacing the fixture, increased flushing, installing a filter certified by NSF International for lead reduction, making the tap or fountain inaccessible to children by disconnecting or bagging, or any other measures as directed by the local medical officer of health.

Sampling is generally repeated until the exceedance is resolved. Alternate sources of water (e.g. bottled water) can be provided to children until the exceedance is resolved.

School boards are responsible for ensuring that each individual school is in compliance with all applicable regulations as prescribed by the Ministry of the Environment, Conservation and Parks under the Safe Drinking Water Act, as are the owners of child care centres and private schools.