

Drinking Water Data Release (2018-19)
Questions and Answers for Schools, Private Schools and Child Care Centres with
exceedance in flushed sample
December 17, 2019

Key Messages – general

- Ontario is taking action to protect the province's drinking water and water resources as part of our Made-in-Ontario Environment Plan to keep Ontarians safe and pass on a cleaner environment to future generations.
- Ontario's drinking water is among the best protected in the world as a result of our comprehensive protection framework that helps safeguard the province's drinking water.
- Ontario has the most stringent provincial testing regime when it comes to lead in drinking water in Canada.
- The province requires every drinking water fixture serving water to children in schools, private schools and child care centres to be sampled and tested for lead.
- If 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.

Questions and Answers

1. How many flushed exceedances for lead in schools and child care centres does the data show?

The data from April 1, 2018, to March 31, 2019, shows that about 97.55 per cent of flushed samples (where taps had been run appropriately first) had lead levels below the Ontario Drinking Water Quality Standard for lead of 10 micrograms per litre.

There were 853 flushed samples (approximately 2.45 percent of the total number of flushed samples tested) that exceeded this standard.

2. How many schools and child care centres had flushed exceedances in 2018-19?

Operators at 433 individual facilities managed 853 flushed exceedances in 2018-19, including taking corrective actions to resolve the exceedance.

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

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

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 ensure corrective actions have been followed to address adverse lead test results and ensure drinking water is safe.

4. Why are there more test results for lead than in previous years?

Amendments to drinking water testing requirements made effective in July 2017 accelerated sampling and testing for lead in 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.

As of July 1, 2017, regulatory amendments require schools with a primary division and child care centres to conduct lead testing on every drinking water 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 open on 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 two and a half (2.5) per cent.

5. Why did the number of lead test results that exceed the standard for lead increase from 2 per cent in 2017-18 to 2.5 per cent in 2018-19?

Regulatory lead testing was strengthened in July 2017 by bringing in requirements that will ensure every drinking water fixture providing water to children in schools, private schools and child care centres is sampled for lead.

These amendments mandated that every drinking water fixture serving water to children in schools, private schools and child care centres be sampled and tested for lead by January 1, 2020 (with a minimum of 1/3 of the samples to be collected each year). This initiated testing on fixtures that had previously never been sampled before, which resulted in identifying more problematic taps and fountains. This sampling has been undertaken over multiple years, so exceedances at different fixtures each year is to be expected.

The samples taken in 2017-18 were from different drinking water fixtures compared to the samples taken in 2018-19. Therefore, the results will be different, and explains

why there may be a slight increase in the percentage of lead test results that exceeded the standard.

6. Why did the number of test results decrease for schools, private schools and child care centres between the last dataset and this latest one (from 43,582 flushed test results in 2017-18 to 34,770 flushed test results in 2018-19)?

Regulations regarding lead testing were strengthened in July 2017 by bringing in requirements that will ensure every drinking water fixture providing water to children in both schools, private schools and child care centres is sampled for lead. Schools with a primary division and child care centres are required to sample at least one third of all drinking water fixtures in each of 2017, 2018 and 2019. All other schools are required to sample all drinking water fixtures by January 1, 2022.

Many facilities completed their mandatory sampling ahead of schedule. Additionally, several school boards have accelerated their sampling of high schools. This is likely why there is a decrease in the number of samples when compared to the number of results in 2018-19.

Furthermore, schools, private schools and child care centres that have completed their sampling and did not identify any lead problems can be eligible for a reduced sampling schedule and may only need to sample once every three years.

7. Are schools, private schools and child care centres required to submit inventories to the ministry?

Inventories are voluntarily submitted to the ministry on an annual basis once the sampling period closes. 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 such that progress towards the completion of the sampling requirements could be tracked.

Thanks to the efforts of the 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.

8. The soon-to-be-released Chief Drinking Water Inspector 2018-19 Annual Report will show that 94,000 individual drinking water fixtures belonging to schools, private schools and child care centres have been identified and, of those, over 29,000 fixtures were sampled. When will the remaining 65,000 fixtures be sampled?

Schools with a primary division and child care centres are required to sample at least one third of all drinking water fixtures in each of 2017, 2018 and 2019. All other schools are required to sample all drinking water fixtures by January 1, 2022. These results indicate good progress is being made towards having every drinking water fountain and tap serving drinking water sampled for lead. The ministry will

continue to work with facilities that have yet to submit their fixture inventory to do so and will track the progress of fixture sampling until the 2022 deadline.

9. Are home child care providers also covered by our legislation?

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 contracted by licensed home child care agencies.

10. Will Ontario adopt Canada's new guideline for the maximum concentration for lead in drinking water?

In March 2019, Health Canada revised the guideline for lead in treated drinking water from 10 to 5 micrograms per litre. Ontario's Advisory Council on Drinking Water Quality and Testing Standards and the ministry are currently reviewing the revised guideline and will engage with stakeholders to consider whether to adopt Health Canada's reduced lead guideline.

11. Do fixtures that do not meet the new Health Canada guideline for lead of 5 micrograms per litre put 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 primarily 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 (including smoke from cigarettes and e-cigarettes), contact with soil that contains lead, eating certain canned foods, some consumer products and from drinking water. However, drinking water generally accounts for a small fraction of total lead exposure to humans.

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 2018-19 school year, school boards were allocated \$1.4 billion in renewal funding from the Ministry of Education to renew Ontario schools and ensure that major repair and replacement work can be undertaken, which could include replacement of plumbing systems and fixtures.

For the 2019-20 school year, the Ministry of Education is allocating another \$1.4 billion in renewal funding to school boards that can be used for the same purposes.

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 as assigned by the local medical officer of health. These corrective actions may include replacing the fixture, increased flushing, installing a filter, rendering the tap or fountain inaccessible to children by disconnecting or bagging, or any other measures as directed by the Local Medical Officer of Health.

Water sampling is generally repeated until the exceedance is resolved. Alternate sources of water (i.e. bottled water) can be provided to students 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.

13. Why are some facilities exceeding limits two years in a row? Are they not taking corrective action?

Amendments to drinking water testing requirements in 2017 mandated that every drinking water fixture serving water to children within every school, private school and child care centre be sampled and tested for lead. Therefore, 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 schools can be as high as 250. As this sampling can be undertaken over multiple years, exceedances in consecutive years may 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.

14. Does the ministry require schools, private schools and child care centres to inform parents of exceedances?

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