

Drinking Water Data Release (2020-21)
Questions and Answers for Schools, Private Schools and Child Care Centres with
exceedance in flushed sample
December 2021

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

- Ontario is the only province that requires all schools and child care centres to test for lead in drinking water.
- The 2020-21 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.
- To help maintain the continued protection of Ontario’s drinking water, the ministry is evaluating our already comprehensive lead protection framework to better understand the implications of adopting the more stringent federal guideline for lead as an Ontario standard and other potential actions to strengthen the regulatory framework.

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 2020-21?

The 2020-21 data shows that the majority of schools, private schools and child care centres have found no problems with lead in their drinking water.

- 93 per cent of the test results (flushed and standing) met Ontario’s standard for lead in drinking water.
- 95.9 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.
 - 567 flushed samples were above the standard for lead.

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 certified for lead reduction
- resampling the fixture that had the exceedance
- taking any other measures as directed by the local Medical Officer of Health

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

2. Why has there been a decrease in the percent of tests results meeting the standard for lead (for both flushed and standing results) in recent years?

Prior to 2017 schools and child care centres were required to sample one fixture per year. In July 2017, regulatory requirements for lead testing were strengthened by mandating that every drinking water fixture providing water to children in facilities be tested for lead by January 1, 2020 for child care centres and 'primary' schools and January 1, 2022 for all other schools.

These regulatory amendments accelerated sampling and testing for lead in schools and child care centres to identify problem taps and water fountains to allow for faster resolution to effectively protect children.

As expected, a number of the previously untested fixtures had results that exceeded the standard for lead, so the percentage of tests meeting the standard for lead decreased.

The percentage of flushed lead test results for schools, private schools, and child care centres that met the standard in 2020-21 is 95.91%. Although the percentage of tests meeting the standard fluctuates year over year, the results still show a long-term improvement over the first year of sampling in 2007-08, when approximately 94% of flushed samples at schools and child care centres met the standard. Other reasons for year over year fluctuations may include factors such as age of the facilities where samples are collected that year and resample from fixtures that exceeded.

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

Ontario has the most comprehensive 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 confirm the issue has been resolved.

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

In addition, on April 14, 2021, the governments of Canada and Ontario announced \$656.5 million in combined federal-provincial funding 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. Under this funding, approximately \$19 million was approved for water bottle filling stations projects in schools.

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

The Ministry of Health is not aware of any reported cases of lead poisoning in children due to drinking water in the last ten 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, old paint, 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. 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.

5. 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 invested \$1.4 billion to repair and renew existing schools. This funding can be used to reduce lead in drinking water in schools such as the replacement of drinking water fixtures and related plumbing systems.

In addition, on April 14, 2021, the governments of Canada and Ontario announced \$656.5 million in combined federal-provincial funding 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. Under this funding, approximately \$19 million was approved for water bottle filling stations projects in schools.

Owners of child care centres and private schools are responsible for replacing lead pipes and/or fixtures 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 National Sanitation Foundation (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.