

# Annual Lead Mitigation Report

2018





## **Annual Report - Lead in Drinking Water Mitigation Strategy**

In 2011, Toronto City Council approved the [Lead in Drinking Water Mitigation Strategy](#), a comprehensive strategy comprised of corrosion control, lead service replacement, a faucet filter program and public education to reduce lead in drinking water. This report provides an annual update on the City's Lead in Drinking Water Mitigation Strategy.

### **Corrosion Control Plan**

Corrosion control was mandated and is regulated by the Ministry of the Environment, Conservation and Parks (MECP). It is the treatment, or the addition of phosphate to create a barrier between the pipes and the drinking water, and is a cost-effective strategy available to water utilities to address lead concerns in drinking water. Endorsed as a lead reduction measure by authorities such as Health Canada and the United States Environmental Protection Agency, corrosion control was implemented in Toronto in December 2014 at all four water treatment plants by adding phosphate to the drinking water.

### **Regulated Testing**

During the implementation of corrosion control, the MECP provided relief from the regulated residential and non-residential lead sampling program. In March 2017, the MECP Drinking Water License was amended to include the completion of corrosion control implementation and reinstate the regulated lead sampling program. The amended License requires the annual collection of 10 distribution samples and 55 tap water samples from homes and businesses with known or suspected lead services. The public reporting period will continue on an annual basis:

<https://www.toronto.ca/services-payments/water-environment/tap-water-in-toronto/lead-drinking-water/ontario-regulated-lead-testing-program/>

The 2018 regulated tap water test results show significantly lower lead levels compared with the lead levels measured prior to initiating corrosion control treatment. Of the 55 homes and businesses tested, 1.7 percent of samples exceeded 10 parts per billion (ppb) and none of the samples in the water distribution system exceeded 10 ppb. This contrasts with 2008 when 100 homes and businesses were tested and 52 percent of the samples exceeded 10 ppb.

In Ontario, a drinking water system is in compliance with the lead regulations when no more than 10 percent of the samples exceed the limit of 10 ppb.

## Non-Regulated Testing Program

Non-regulated drinking water testing for lead continues to be provided at no cost to property owners. TW continues to send out information packages to all residents whose lead test indicate any level of lead in an effort to encourage residents to take action when measured lead levels are above the laboratory method detection limit.

Lower lead results have been observed in the non-regulated water samples since the implementation of corrosion control.

## Lead Service Replacement

Priority Lead Water Service Replacement Program: Coordination of replacement of the City's lead pipes when homeowners replace the lead pipes on their private property.

Planned Capital Water Service Replacement: The scheduled replacement of substandard water services in coordination with programmed capital works and infrastructure renewal program such as watermain replacement, watermain structural lining, road reconstruction and sewer replacement.

Emergency Water Service Replacement: This is the replacement of City-owned water service pipe when a pipe that supplies water to a home is broken or has low flow which is under 7 L/minute.

Toronto Public Health (TPH) advises that it is desirable due to adverse health impacts to remove as much lead from the water infrastructure as possible and that both the public and private sides of the property line should be replaced at the same time wherever possible. Toronto has approximately 437,000 residential water service connections. In 2007, approximately 65,000 City-owned services were estimated to be lead. In 2014, a reassessment of the data records available provided an updated estimate of 38,000 public+ lead water services. At the end of 2018, there were approximately 25,771 public lead services remaining.

**Table 1: Lead Service Replacements**

Program Name	Activities	Budget Target*	2018	2017	2016
Planned (Capital Project) Water Service Replacement**	Watermain replacement Structural relining Road reconstruction	3,000	433	533	1060
Un-Planned Water Service Replacement	Priority Lead Program	1,500	779	629	1,021
	Emergency Replacement	500	194	206	320
Total		5,000	1406	1,368	2,401

\*Financial budget targets are set for planning purposes - there is no cap on replacements.

\*\*Service cards are received in batches. The numbers reflect service cards incorporated to date.

### **Faucet Filter Program**

Toronto Water provides free NSF-053 certified faucet filter for lead removal in the following instances to qualified homeowners: to all homes immediately following the replacement of the City-owned section of the lead pipe that supplies water to the home. And when Water Meter staff have to cut into a lead water service on private property to install a new automated water meter. Starting February 1, 2015, a faucet filter is mailed out to residents once their application to the Priority Lead Water Service Replacement Program is accepted into the program. An annual \$100 rebate for the purchase of a NSF-053 certified faucet-mounted filter is available to low income residents.

### **Public Education and Communication**

Since 2007, TW and TPH have worked jointly in the preparation and dissemination of public education material on lead in drinking water to residents through a wide range of communications resources and methods including: media releases, utility bills, City of Toronto newsletters, health fact sheets with construction notices, applications for Priority Lead Program to coordinate full replacement of lead services, information in free lead testing kits, posting non-regulated lead test sample results from 2011 to present on the City's Open Data website, posting regulated lead test sample data on the City's public website, social media, letters to residents with lead test results, direct mail (200,000 cards) to older homes where lead pipes are suspected, public education when the H2O Water Trailers are at events, and information included in the faucet filter distribution package.

In 2018, TW returned to Regulated Lead Testing, the results were posted on the City's website and a news release was issued. As well, all lead communication materials that recommend replacing both the City and private lead water service were revised to make it clearer that a full replacement minimizes the potential of lead fragments entering the pipes and eliminates the need to filter water for lead. All TW web pages for lead were updated to make them more accessible.

On request staff will organize public meetings in areas with a significant number of homes that may have lead service. At these meetings, City staff from Engineering and Construction Services (ECS), TW and TPH present information and answer questions about capital works projects in the area, lead and drinking water and the City's programs and services to reduce lead exposure, including the implementation of corrosion control and distribution of faucet filter kits. Free lead testing kits are distributed to residents at these events. No meeting requests were received in 2018.

Previous Annual Reports – Lead in Drinking Water Mitigation Strategy

<https://www.toronto.ca/legdocs/mmis/2018/pw/bgrd/backgroundfile-117624.pdf>  
<https://www.toronto.ca/legdocs/mmis/2017/pw/bgrd/backgroundfile-106572.pdf>  
<http://www.toronto.ca/legdocs/mmis/2016/pw/bgrd/backgroundfile-93973.pdf>