

Taking Action to Reduce Lead Exposure

The City of Hamilton is taking steps to protect your family from the effects of lead. Lead is particularly harmful to young children and pregnant women, affecting intellectual development, behaviour and physical health.



Lead can leach into your drinking water from lead water pipes, lead-based plumbing fixtures or lead solder. There are an estimated 20,000 homes with lead water pipes in Hamilton and tens of thousands more with leaded brass fixtures and lead solder. Lead was used in water pipes until 1955 and to solder pipes together into the 1990's.

Lead Sampling Program

The City's Lead Sampling Program confirmed that more than 10 percent of samples taken from residential plumbing systems with lead water pipes, within the Woodward Avenue drinking water system, exceeded the Maximum Allowable Concentration for lead of 10 micrograms per litre. As a result, Hamilton is one of 20 communities in Ontario required by the Ministry of the Environment and Climate Change (MOECC) to develop and implement a Corrosion Control Program to reduce the amount of lead getting into tap water. The well-based communities of Lynden, Carlisle, Freelon and Greensville are not required to have a Corrosion Control Plan.



Corrosion Control Plan

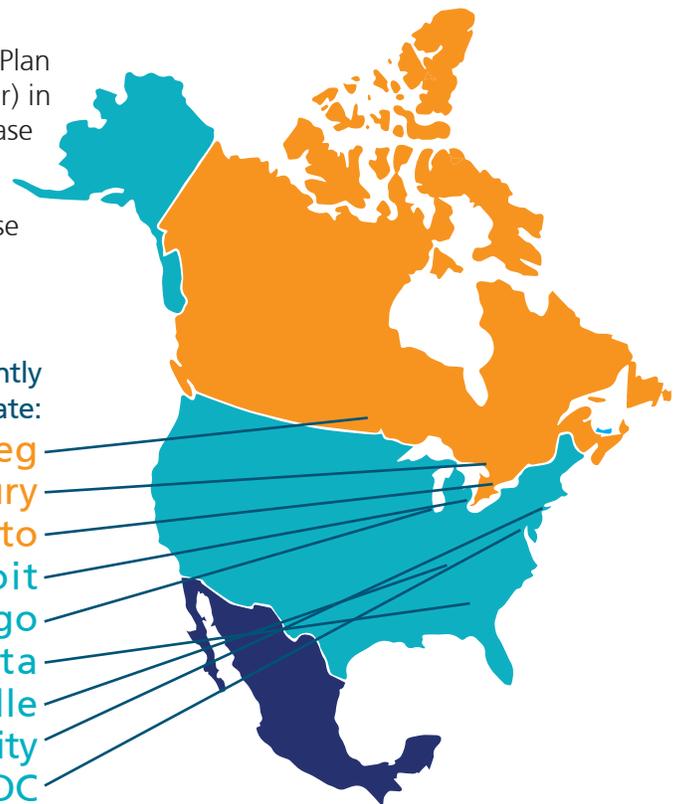
In November 2015, Council approved the Corrosion Control Plan for the use of orthophosphate (a phosphate-based inhibitor) in the drinking water process to protect residents from the release of lead into the drinking water.

Currently 95% of drinking water supply systems in the UK use orthophosphate, as well as a number of communities across Canada and the US.



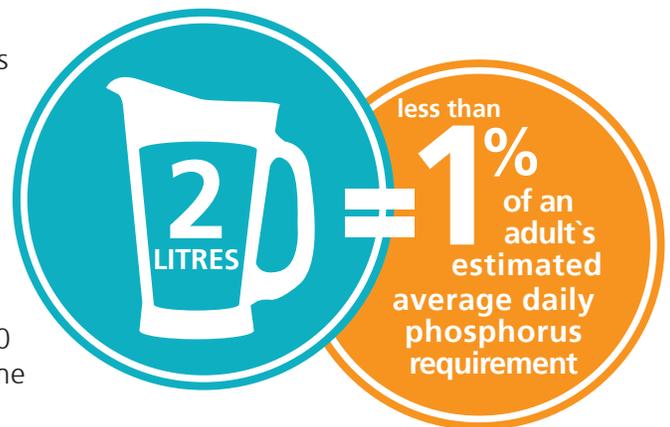
Some cities that currently use orthophosphate:

- Winnipeg
- Sudbury
- Toronto
- Detroit
- Chicago
- Atlanta
- Nashville
- New York City
- Washington DC



Understanding Orthophosphate

The use of orthophosphate will increase the level of phosphorus in the drinking water to a maximum of 1 mg/L. Phosphorus is found in high amounts in protein-rich foods such as milk products, meat, beans, lentils and nuts as well as grains, especially whole grains. Phosphorus is found in smaller amounts in vegetables and fruit. The Estimated Average Requirement (EAR) of phosphorus for adults is 580 mg per day. An average adult who drinks 2 litres of drinking water a day will take in less than 1% of an adult's estimated average requirement. You would have to drink 980 glasses of tap water to equal the amount of phosphorus in one 250 mL cup of milk.



When can we expect this change?

Implementation will begin in November 2018 at the Woodward Water Treatment Plant, which provides water to most of the City of Hamilton. It will take time for orthophosphate to build up a protective barrier throughout the entire Woodward distribution system and linked plumbing surfaces. A general estimate used by other municipalities is up to 2 years, however each system is different. A monitoring program will be in place to assess the effectiveness of orthophosphate and its performance in the system for lead control.



More information

Visit www.hamilton.ca/corrosioncontrol for more information on:



Corrosion Control Program
Information & Updates



Your Health



Your Home



Business
Processes



Understanding Corrosion
Control Video

The best way to reduce your exposure to lead remains to eliminate lead water pipes, fixtures and solder. For information on identifying and replacing lead water pipes, visit www.hamilton.ca/leadpipes.