

# Information for Property Owners about Lead Water Service Line Replacement

## Purpose of this fact sheet

The purpose of this fact sheet is to provide information to property owners on the benefits of replacing a lead water service line on their property when municipalities replace the portion of the line located on theirs.

## How does lead in drinking water affect health?

Children six and under are more sensitive to the effects of lead because they are still developing and able to absorb ingested lead more easily than adults. Long-term exposure to elevated levels of lead may increase the risk of subtle impairment of learning capacity and intellectual development. In addition, pregnant women can pass lead in their blood to their fetus during pregnancy.

## What are lead service lines and how can they introduce lead into drinking water?

As shown in Figure 1, service lines are the underground pipes that connect to the municipal water mains and supply water into buildings. Municipalities are responsible for the portion of the service line up to the property line, and property owners are responsible for that portion of the line on their property.

Figure 1



Credit: City of London

Prior to the mid-1950s, lead was commonly used as service line material. If a building has a lead service line, lead can dissolve into the drinking water, especially if the water has been left standing in the plumbing for an extended period of time, for example, overnight.

One way of reducing exposure to lead in drinking water is by replacing lead service lines with newer materials such as copper or plastic that do not contain lead.

### **Why is it important to replace the lead service lines on both sides of the property line?**

Full replacement of both portions of the lead service lines provides the best reduction of lead levels in the water entering the building.

Moreover, research shows that replacing only a portion of the lead service line may actually make lead problems worse, especially right after the partial replacement is completed. This is because the work done while replacing the municipal portion can shake loose lead particles that can then enter the drinking water.

Also, connecting the lead line to a new copper line may result in an electrochemical process between the two metals that can cause the water to wear away and dissolve some of the lead in the lead line. This may create a serious long-term problem with lead in the water.

Lead lines, fixtures or solder used to connect pipes within buildings can still result in lead in the drinking water, although less than that which could come from lead service lines.

If a home was built between the mid-1950s and 1989, there likely won't be lead pipes or service lines, but there might be lead in some fixtures or solder used to connect the pipes. Homes built after 1989 are unlikely to have any lead in pipes, service lines, solder or joints.

If lead is suspected to be a problem in drinking water supplied within

buildings where there are no lead service lines, a plumbing evaluation can assist in assessing internal pipes, fixtures or solder for the presence of lead.

### **Who pays for service line replacement?**

Municipalities pay for replacing a service line on their side of the property line and property owners pay for the portion on their side. A municipality will normally inform property owners when they are scheduling service line replacements so that the owners can opt to replace theirs at the same time.

Municipal coordination of the full replacement can mean a reduced cost to the property owner and is also the best way to minimize overall health risks to users of water in the building.

Some municipalities offer other forms of assistance to help property owners with replacing their service lines. Ask your municipality or your public utilities commission for more information.

### **Other related sources of information:**

Ontario's Ministry of the Environment [Drinking Water Ontario](http://www.ontario.ca/drinkingwater) website for additional information about lead in drinking water, including what to do if you suspect you have lead materials in your service lines or lead in your plumbing.

[www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater)

Health Canada, *Effects of Lead on Human Health* [www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/lead-plomb-eng.php](http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/lead-plomb-eng.php)