

Lead in Drinking Water

This fact sheet provides answers to most commonly asked questions about lead in drinking water. If you have a question that is not addressed in the fact sheet, please call 613-432-8166.

Should I be concerned about exposure to lead?

Infants, children and unborn children are most at risk to health effects from exposure to lead. Lead is present in many sources including food, dust, soil, some paint products and drinking water. Drinking water's contribution to total lead exposure is very low.

What is the safe limit for lead in drinking water?

Health Canada has established a maximum acceptable concentration for lead in drinking water of 10 ppb (parts per billion) in a free flowing sample of water. This drinking water guideline has been developed to protect the population most at risk, namely infants and young children.

Note: One ppb is comparable to one second in 32 years, or 1¢ in \$10,000,000.

Why is the safe limit for lead based on a flowing sample of water?

Flowing water samples better reflect the overall quality of household drinking water, and are indicative of normal lead exposure from drinking water.

What are lead levels in Renfrew's drinking water supply?

The lead concentration in Renfrew's water supply and distribution system is very low. In fact, it is usually non-detectable (below 0.5 parts per billion) and therefore well within safe drinking water levels.

How could lead get into my drinking water?

Drinking water supplied by the Town is essentially lead-free. Lead enters the drinking water from either lead service lines or from solder containing lead. Most homes constructed before 1955 had lead water service lines. Both lead and copper piping were used up until 1958 when copper water service lines became the standard in the plumbing industry. Lead-based solder was also used for plumbing until the late 1980's when changes to the Plumbing Code prohibited its use. Even when today's standards some bronze fixtures may contain low amounts of lead.

Lead can dissolve into drinking water when it sits for lengthy periods (longer than six hours) in household plumbing that contains lead.

How do I know if I have lead water service lines?

Most homes constructed prior to 1955 have lead water service lines. Both lead and copper piping were used up until 1958 when copper water service lines became the standard in the plumbing industry. Lead-based solder was used for plumbing until the mid to late 1980's when changes to the Plumbing Code prohibited its use. The connection of the water service line to the water meter will be the best indication of the service line material.

I live in an older home. Is my drinking water safe?

Over the years the Town has conducted extensive testing of free flowing water samples taken from the Renfrew system. Tests consistently indicate that samples are within the safe drinking water standard. Residents in older homes who are concerned about lead levels can contact the Town of Renfrew to have their tap water tested. Call Development and Works at 613-432-4147 for more details.

How can I minimize exposure to lead in my older home?

While Renfrew's drinking water meets or is better than Health Canada's standard, residents in older homes can reduce the amount of lead they drink even further by following a few simple practices:

- Always use cold water, fresh water for drinking, cooking, making baby formula and preparing beverages.
- Do not drink water that has been standing in your household water pipes for more than six hours. To rid your plumbing system of standing water, let the water run for approximately one to five minutes or until it feels cold to touch. You can also use the flushed water for other purposes such as plant watering or household cleaning.
- Flushing the toilet and washing your hands, or taking a shower is more than sufficient to flush standing water from your pipes each morning.
- Every three months or so, remove the aerator from the faucet of any taps from which drinking water is frequently taken for drinking or food preparation purposes. Clean the aerator by removing any visible particles and rinsing water through it. Take a moment to immerse the aerator in a bleach solution, and then re-install.
- If you are making plumbing changes, be sure to select low-lead or no-lead fixtures.

What else can I do to reduce the risk of exposure to lead?

- Do not use ceramic cookware from foreign countries to heat water or store food unless you're sure that they are lead-free.
- Do not store beverages in lead crystal containers.
- If you work around lead, shower and change clothing and shoes at work, and wash work clothes separately.
- Be aware that some hobby activities like furniture refinishing, model building and working with metals or stained glass can be sources of lead.
- Exterior paints should not be used indoors since they many contain lead.

Can in-home water treatment systems reduce lead levels?

Some in-home water treatment equipment such as lead removing filters, reverse osmosis systems, and distillation units do remove lead dissolved in water. These systems can be very costly and require maintenance to function properly. If not properly maintained, they can promote the growth of bacteria and cause other water quality problems.

Can bottled water contain lead?

Yes. Bottled water is not necessarily lead-free. Check the label to see if it says whether the water is lead-free. Also, bottled water may cost as much as 100 times more than your tap water.

What is the Town doing to reduce the risk of exposure to lead?

Renfrew's water purification process includes pH adjustment that reduces corrosion of water pipes and minimizes the amount of lead that can dissolve into drinking water.

The Town of Renfrew is committed to continuously improving Renfrew's watermain distribution system and has been implementing a Watermain Rehabilitation Program by replacing old and/or lead portions of the water service located under the Town's right-of-way. If the water service on private property is made from lead, the Town can coordinate this replacement by replacing the portion of lead service on the street at the same time as the owner is having the line replaced from the house to the property line.

Extensive testing of Renfrew drinking water is also carried out to ensure that water delivered to resident's property is well within drinking water quality guidelines and standards.

Who do I call if I have questions or concerns about water quality?

Our water quality staff will be pleased to respond to your questions or concerns. You can also visit Health Canada's web site for more information on lead and human health.

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