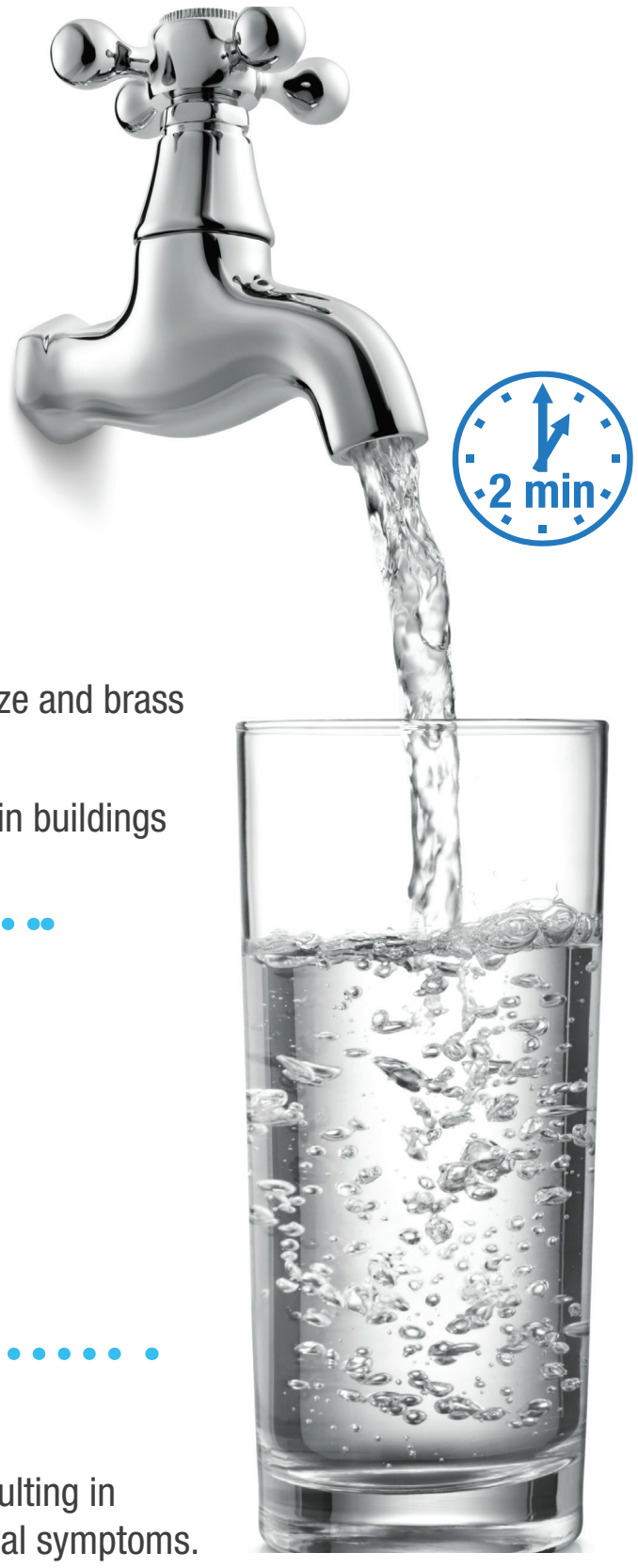
GET THE LEAD OUT!



Lead in Drinking Water

Where does lead in the environment come from?

Lead is present in drinking water due to the corrosion of plumbing systems. *Sources* typically include: • lead solder + jointing compound • lead in bronze and brass fittings • lead service lines into homes

Lead sources in plumbing are commonly present at home, school, and work in buildings older than 1990.

How are you exposed to lead in the environment?

The average Canadian is potentially exposed to lead in food, air pollution, soil and household dust in addition to drinking water.

Intake of lead from drinking water as a % of all sources

9.8%

11.3%

What are the effects of lead?

Lead is a cumulative poison. Lead can affect the central nervous system, resulting in tiredness, sleeplessness, irritability, headaches, joint pains and gastrointestinal symptoms.

Health Canada has set a Maximum Allowable Concentration (MAC) of lead in drinking water of 10 µg/L. This guideline is for *chronic effects* from water consumed for *extended* periods; short-term consumption of water containing lead at concentrations above the MAC does not necessarily pose undue risk to health!

To be chronically exposed to lead in drinking water at school you would have to be the first person to drink from a tap with high lead concentrations every day!

How can I limit my exposure to lead in drinking water?

If the building is older than 1990, lead sources may be present. Follow these *steps*:

1. The first person to use a tap in the morning should run the water for at least 2 minutes before drinking.

2. Throughout the day, run the tap water until it is cold before drinking, this ensures you are drawing fresh water.

Testing completed throughout schools in Nanaimo Ladysmith Public Schools has shown that these steps are effective in reducing the concentration of lead in drinking water below the MAC.

Actions

- ✓ Remind students, staff and visitors about how to limit exposure through flushing taps!
- ✓ Water Quality – First thing in the morning… Run the water for two minutes before drinking. Throughout the day… Let the water run until it is cold before drinking.
- ✓ Nanaimo Ladysmith Public Schools is replacing faucets and fittings where high lead concentrations were identified, and installing automated flushing systems where appropriate to prevent stagnant water in the plumbing systems – all part of our long-term monitoring awareness program.

TETRA TECH

NANAIMO LADYSMITH PUBLIC SCHOOLS

Sources:
Health Canada, "Lead", Published April 1992 (edited July 1992).
Health Canada, "Guidance on Controlling Corrosion in Drinking Water Distribution Systems", Published June 2009.
Tetra Tech Canada, "Domestic Water Testing (Lead) Inventory – Various Schools", prepared for Nanaimo Ladysmith Public Schools, March 2017.