

# Arsenic



## What is arsenic?

Arsenic is a natural element found in rock in some parts of Newfoundland and Labrador. Arsenic can get into drinking water sources when the rock wears down or breaks apart. The amount of arsenic in water can vary over time, and has no effect on the taste or smell of water.

## What is the guideline for arsenic in drinking water?

The province sets standards for safe drinking water based on Health Canada's Guidelines For Canadian Drinking Water Quality. In light of new testing methods, Health Canada lowered the arsenic guideline to a maximum acceptable concentration (MAC) of 0.010 milligrams per litre (10 parts per billion).

## How could arsenic affect my health?

The degree and types of health effects from arsenic depend on:

- the length of time that you are exposed to arsenic from any source
- the amount of arsenic in your drinking water
- the amount of arsenic-bearing water that you drink, and
- your current level of health.

If you are exposed to high amounts of arsenic over many years, you can have increased chances of developing certain types of cancer or other health effects, such as diarrhea, poor blood production, or abnormal heart beat.

If you are exposed to very high amounts of arsenic over days or weeks, you can have other health effects including: abdominal pain, vomiting, diarrhea, cramps, weakness, numbness, burning or tingling in the hands and feet, thickening of the skin on palms or soles, and loss of movement.

These risks are the same for everyone, including children and pregnant women. If you believe that you have been exposed to a high level of arsenic over a long time, you may wish to visit your family doctor for a medical check up.

## Is my town water high in arsenic?

The Department of Environment and Conservation (DEC) does tests for arsenic and other chemicals in every town water supply twice per year. Government officials inform community leaders and residents about the safety and quality of the water. To find out if your drinking water is high in arsenic, contact your local town council or local service district committee member and ask to see the latest drinking water quality report provided by DEC. Water quality reports can also be found on DEC's website.

## Is my private well water high in arsenic?

A map on the DEC website shows areas in NL where arsenic is more common. If you live in one of these areas, you may want to have your well water tested for arsenic and other chemicals. Please check the yellow pages under “Laboratories - Analytical & Testing” for a lab near you.

## What can I do if my drinking water is high in arsenic?

If your source of drinking water is high in arsenic, you may want to consider these options:

- **Change your source of drinking water.** This would include water used for drinking, cooking, making formula, and making ice for drinks. Other sources of water might include: an arsenic-free public supply, water from an approved and tested well, or store-bought bottled water. Do not drink water from roadside springs as the safety of this water is unknown and can change daily.

Please note that water with arsenic can still be used for cleaning, doing laundry, washing dishes, bathing, or showering.

- **Reduce the arsenic in your drinking water** with a treatment device that is able to reduce arsenic to levels below the standard. Look for devices that have been certified as meeting the appropriate NSF International (NSF)/American National Standards Institute (ANSI) standards for removing arsenic. Be sure to follow the instructions for use and care.

When arsenic levels in public water supplies are higher than the standard, local government and provincial experts work together to find a long term solution.

## Where can I find out more?

To find out more, please visit DEC’s website at [www.gov.nl.ca/env/water](http://www.gov.nl.ca/env/water). You can also contact an Environmental Health Officer at the nearest Government Service Centre, an Environmental Health Program Manager with the Regional Health Authority, or a water resources official with DEC.



Department of Health and Community Services  
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**Drinking Water Awareness**