URANIUM

What is uranium?

Uranium is a weakly radioactive metal that occurs naturally in many different rocks and has the symbol “U”. The presence of uranium in well water depends on the rock and soil type in the area of the well.

The most common source of uranium in well water is from the erosion and weathering of soils, minerals, and ores that naturally contain uranium. It can also get into sources of drinking water from human activities.

Uranium does not have any foul odours, taste or colour in drinking water. The amount of uranium in water can vary over time.

What are the effects for uranium in drinking water?

The main health effects from exposure to natural uranium are from its chemical properties.

- Exposure to high levels of uranium in drinking water for a long time could affect the kidneys or bones.

Exposure to uranium in drinking water for a short time should not have a negative impact on your health

Uranium can be passed from a:

- pregnant woman to her fetus
- mother's breast milk to a baby

What is the guideline for uranium?

The province sets standards for safe drinking water based on Health Canada's Guidelines for Canadian Drinking Water Quality.

The maximum acceptable concentration for uranium in drinking water is 0.020 milligrams per litre (mg/L).

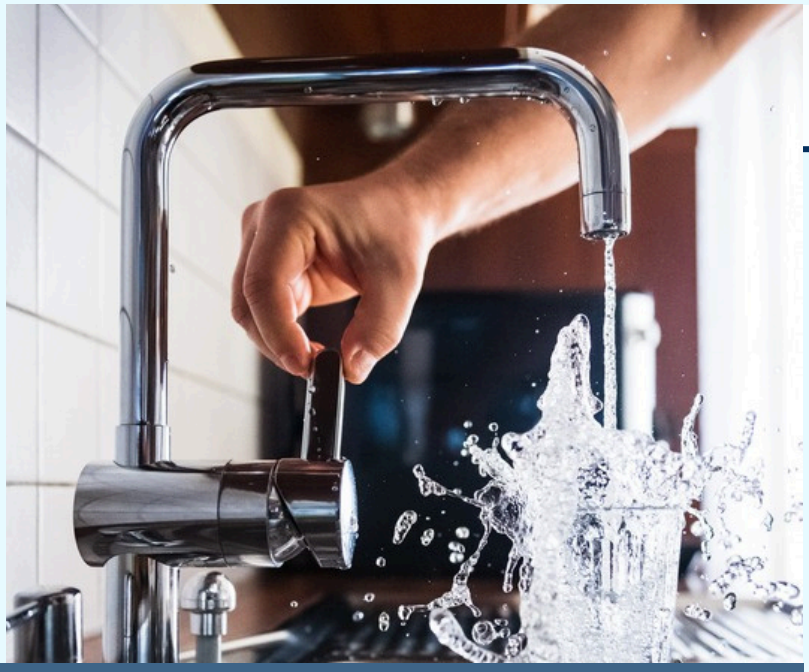
Radon – What you need to know

- Radon is a radioactive gas that comes from uranium in the ground that can get into your home undetected. You can't see it, smell it or taste it.
- The health risk from radon is long-term, not immediate. The longer you are exposed to high levels of radon, the greater your risk.
- Testing for radon is easy and inexpensive. Testing can be done by purchasing a do-it-yourself radon test kit, or by a measurement professional that is certified under the Canadian National Radon Proficiency Program.

(709) 729-2563 water@gov.nl.ca
https://www.gov.nl.ca/eccc/waterres/quality/drinkingwater/

Newfoundland Labrador

URANIUM



Reducing your exposure

If you are concerned about your exposure to high levels of uranium, or you are pregnant, breastfeeding, or preparing infant formula, safe alternate sources of water should be used.

Commercially produced bottled water or sources known to be safe would be acceptable. Bottle re-filling stations may not meet acceptable water quality guidelines.

Additionally the installation of treatment device to remove uranium from drinking water would also be acceptable.

The risk to human health from uranium is through ingestion. Ingestion includes drinking, cooking, and brushing teeth. Bathing and showering in water that contains levels of uranium at or below the guideline value are considered safe.

Removing uranium from drinking water

There are currently no certified residential treatment units for removing uranium from drinking water in your home, but the following are expected to be effective at lowering uranium concentrations to below the guideline value:

- **Point of Use:** reverse osmosis installed directly at the tap to reduce specific contaminants on one tap only. You can dispose of used filters and units in your regular garbage when you are replacing them.

- **Point of Entry:** reverse osmosis or ion exchange installed by specialists where the water supply enters the home to treat water for the whole home.

Periodic testing should be conducted on both the water entering the treatment unit and the finished water to verify that the treatment unit is effective.
Health Canada strongly recommends that you use a unit that meets the appropriate NSF International/American National Standards Institute standards for drinking water treatment units and materials.

It is important to make sure treatment units are maintained (or replaced) according to the instructions provided by the manufacturer.

Where can I find out more?

To find out more, please visit Water Resources Management's website at www.gov.nl.ca/eccc/water.
You can also contact an Environmental Health Officer or Program Manager at the nearest Government Service Centre, NL Health Services, or a water resources official with WRMD.