

# Is there arsenic in your well?

PRIVATE WELLS COULD CONTAIN ARSENIC, A CARCINOGENIC CONTAMINANT



## How can you protect yourself?

If the concentration of arsenic is higher than **0,010 mg/l**, it is not recommended to use the water for:

- drinking;
- preparing beverages such as coffee, juice or baby formula;
- preparing food such as soups or rice;
- cooking food in water.

### OPTIONS

**You can use bottled water or water from a neighbouring well which is of good quality.**

However, whatever the concentration of arsenic is, the water can continue to be used for:

- washing food;
- bathing, showering since arsenic is not absorbed through the skin and it does not evaporate;
- steaming vegetables;
- brushing your teeth;
- washing the dishes;
- doing the laundry.

**IT IS NOT NECESSARY TO BOIL THE WATER. NOT ONLY ARSENIC DOES NOT EVAPORATE BUT BOILING COULD ACTUALLY INCREASE ITS CONCENTRATION IN WATER.**

## Is there a way of treating your well?

There are several water treatment devices that can reduce the level of arsenic in well water. It is best to consult a company that specializes in this field to find out the most appropriate type of treatment for your situation. Some companies can do tests to help you decide.

Be sure to install a device that has been NSF/ANSI certified and make sure you follow the manufacturer's instructions regarding their use and maintenance.

You must proceed with the analysis of the treated water once the device is installed to verify its effectiveness.

Once a year, the water should be analyzed to ensure that the system remains effective.

**FOR FURTHER INFORMATION ABOUT WATER TREATMENT, YOU CAN CONSULT THE MINISTÈRE DU DÉVELOPPEMENT DURABLE, DE L'ENVIRONNEMENT ET DE LA LUTTE CONTRE LES CHANGEMENTS CLIMATIQUES WEB PAGE :**

**« PURIFICATEUR D'EAU : PRENDRE LA BONNE DÉCISION »**

## Watch out for bacteria and nitrates!

**Reminder:** It is still recommended to test water for bacterial contamination twice a year (in spring and fall) and when a change in taste, odor or appearance of water occurs. Moreover, a water analysis is advised when work is performed on the well or nearby. Testing for nitrates is especially important if you live in an agricultural area.

**To learn more about risks related to arsenic or more informations about drinking water and health :**

**Centre intégré universitaire de santé et de services sociaux de l'Estrie – Centre hospitalier universitaire de Sherbrooke**

Direction de santé publique  
819 829-3400, ext.: 42005

### USEFUL LINKS

**Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques**

[www.mddelcc.gouv.qc.ca](http://www.mddelcc.gouv.qc.ca)

**Centre intégré universitaire de santé et de services sociaux de l'Estrie – Centre hospitalier universitaire de Sherbrooke**

[www.santeestrie.qc.ca/eau](http://www.santeestrie.qc.ca/eau)

**ARSENIC IN THE WATER :  
A COLOURLESS, ODOURLESS AND  
TASTELESS CONTAMINANT !**

**IF YOU HAVE A PRIVATE WELL,  
YOU MUST CONSIDER THAT YOU COULD HAVE  
A PROBLEM OF ARSENIC IN THE WATER.**

## What is arsenic?

It is a chemical element found naturally in the soil. Arsenic is a carcinogenic substance that affects humans.

## How does arsenic get into drinking water?

Arsenic can dissolve into groundwater and contaminate it. Where water is provided by a water system, managers watch for evidence of arsenic.

## What are the health impacts of arsenic?

Just because arsenic is a naturally occurring substance does not mean that it does not pose a threat to health! Arsenic found in drinking water is readily absorbed by the digestive system. Prolonged exposure to arsenic in drinking water increases the risk of:

- skin cancer;
- cancer of various internal organs (lungs, bladder);
- poor blood circulation (feet and hands).

Moreover, recent studies suggest a possible effect on reproduction and child development.

The risk of developing health problems increases as a person drinks a large quantity of water that contains unacceptably high levels of arsenic over a long period of time.

The current data suggest that the following groups may be more vulnerable to the effects of arsenic:

- smokers (carcinogenic effects)
- pregnant women and bottle-fed infants (effects on child development)

## What is the acceptable limit for arsenic in drinking water?

The World Health Organization and Health Canada recommend that the threshold should not exceed **0,010 mg/L**.

**AS THE OWNER OF A WELL,  
IT IS YOUR RESPONSIBILITY TO CHECK  
THE QUALITY OF YOUR WATER.**

## How do you know if the water in your well is contaminated?

Arsenic has no colour, no taste and no specific odour. The only way to know if the water in your well contains arsenic is to send a water sample for testing at a certified laboratory accredited by the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques.

MARS 2017

The cost of the test for arsenic varies from about \$30 to \$40 and the results will be ready in one to two weeks.

For a small additional charge, the laboratories have a transportation system for the bottles.

**The following laboratories are accredited  
in the region:**

- **Groupe Environex**  
1 877 977-1220  
[www.labenvironex.com](http://www.labenvironex.com)
- **Biovet (Saint-Hyacinthe)**  
450 771-7291  
[www.biovet.ca](http://www.biovet.ca)

**THE COMPLETE LIST OF ACCREDITED  
LABORATORIES IN THE PROVINCE  
IS AVAILABLE ON THE MINISTÈRE  
DU DÉVELOPPEMENT DURABLE,  
DE L'ENVIRONNEMENT ET DE LA LUTTE  
CONTRE LES CHANGEMENTS CLIMATIQUES  
WEBSITE.**

Centre intégré  
universitaire de santé  
et de services sociaux  
de l'Estrie – Centre  
hospitalier universitaire  
de Sherbrooke

Québec 