

Ministry of Health

Small Drinking Water Systems under the *Health Protection and Promotion Act*

Frequently Asked Questions

Working Together to Safeguard our Health

This fact sheet provides basic information. It must not take the place of medical advice, diagnosis or treatment. Talk to a health care professional about any health concerns you have, and before you make any changes to your diet, lifestyle or treatment.

Small drinking water systems in Ontario

The Ministry of Health has oversight of small drinking water systems in Ontario. This fact sheet is to help you become familiar with Ontario's small drinking water system legislation, Ontario Regulation 319/08 (Small Drinking Water Systems) made under the *Health Protection and Promotion Act*. Under this law, you are required to provide users with safe drinking water at all times.

How does drinking water become contaminated?

Water can become contaminated with:

- Biological organisms, such as bacteria, parasites and viruses;
- Chemical agents, such as nitrates and lead;
- Toxins created by algae in surface water.

Does the water source affect contamination?

If your drinking water comes from a lake, stream, reservoir or surface water, it can become contaminated in a number of ways. Rain water, melting snow and other drainage carry impurities into surface water sources.

Common examples are bacteria and chemicals from farm animal activity, sewage run-off from malfunctioning septic systems or industrial discharges.

Surface water sources are unsafe for drinking unless the water is filtered and treated to destroy harmful micro-organisms.

If you get your drinking water from a well, contaminants may enter through cracks in the casing, poorly fitted lids or other structural faults.

Private wells can become contaminated with bacteria, nitrates or other chemicals if they are close to sources of pollution.

How do I keep my drinking water safe?

PROTECT your drinking water at the source. Identify possible contaminants such as run-off from farming activities and malfunctioning septic systems. Keep these contaminants away from your water source and ensure your private well is soundly built to keep out contaminants.

MONITOR your drinking water system regularly:

- Have a licensed lab test your water regularly.
- Check regulations to see how often to test drinking water.
- Check treatment equipment, particularly if chlorine is used to disinfect water.

TREAT your water with a disinfection system if lab results show unacceptable levels of contamination. This is especially important for surface water sources.

MAINTAIN your drinking water system:

- Take good care of the pipes, pumps, valves, storage tanks, reservoirs, meters and fittings.
- Check your entire system from the water source to the tap.
- Consider a preventative maintenance program. It is always best to stop the problem before it starts.
- If you use chlorine to disinfect your water, test regularly. Kits that test the water quality are available from local suppliers.
- Check your equipment regularly to make sure it works properly.

NOTIFY the public when you have identified a problem with your small drinking water system, whether it is a poor water sample test result or equipment that is not working properly:

- Post notices to get the word out.
- Post instructions at all taps.
- Discuss the problem with your local public health inspector.

Well water may not require treatment if the well is secure and regular samples show acceptable water quality.

Consult with professional suppliers to identify and install the appropriate methods for treatment where required.

What else should I know about testing my water supply?

Commercial labs licensed by the Ministry of the Environment, Conservation and Parks are locally available for testing. Labs provide sample bottles and instructions for collecting water. Use only licensed labs for tests.

The sampling requirements for *Escherichia coli* (E. coli) and total coliforms are provided in Ontario Regulation 319/08 (Small Drinking Water Systems).

How do I understand my test results?

The lab report will provide information about the type and levels of harmful contaminants in your drinking water. It will also identify any contaminants that are higher than the acceptable levels set out in Ontario Regulation 169/03 (Ontario Drinking Water Quality Standards).

What is the Small Drinking Water Systems Program?

Since December 1, 2008, the Ministry of Health has had regulatory oversight of Ontario's small drinking water systems. Small drinking water systems in Ontario are regulated by Ontario Regulation 319/08 (Small Drinking Water Systems) under the *Health Protection and Promotion Act*.

The program is administered by local boards of health across Ontario. To implement the program, public health inspectors conduct a site-specific risk assessment of every small drinking water system in the province. Based on the assessment, they determine what owners and operators must do to keep their drinking water safe, and issue a directive outlining these requirements. The directive may include requirements for water testing, treatment options or operator training. This reflects a customized approach for each small drinking water system depending on the level of risk.

What is a small drinking water system?

If your business or premises makes drinking water available to the public and you do not get your drinking water from a municipal drinking water system, you may be an owner or operator of a small drinking water system and subject to Ontario Regulation 319/08 (Small Drinking Water Systems). If you are not sure whether your system is captured under the regulations, contact your local public health unit.

There are five categories of small drinking water systems. They are:

1. Large municipal non-residential drinking water systems that serve such facilities as municipally owned airports and industrial parks, and large sports and recreation facilities.
2. Small municipal non-residential drinking water systems that serve such facilities as small community centres, libraries, and sports and recreation facilities.
3. Non-municipal seasonal residential drinking water systems that serve such facilities as private cottages on communal drinking water systems.
4. Large non-municipal non-residential drinking water systems that serve such facilities as large motels and resorts.
5. Small non-municipal non-residential drinking water systems that serve such facilities as motels, restaurants, gas stations, churches, and bed and breakfasts.

It should be noted that systems serving designated facilities such as children's camps, health care facilities, social care facilities, schools, universities, colleges or

other degree-granting institutions are not considered small drinking water systems and are regulated under legislation administered by the Ministry of the Environment, Conservation and Parks.

What should I do to prepare for my risk assessment?

Under the small drinking water systems program, owners and operators of small drinking water systems are responsible for keeping the drinking water safe and meeting their regulatory requirements, including routine water sampling.

Before a public health inspector conducts your initial or follow-up site-specific risk assessment, owners and operators should make sure their water sampling history is up-to-date.

What do I need to know about collecting water samples?

The way water samples are collected, stored and transported is important for accurate results. When you collect water samples, remember to:

- Collect samples in bottles provided by the lab.
- Keep samples in the refrigerator, but do not freeze.
- Submit samples to the lab within 24 hours.

What should I do if my water sample test results for bacteria are “adverse” or “unacceptable”?

If your test results indicate your drinking water is unsafe, then you must:

- Stop using the water supply for drinking.
- Notify others to avoid drinking the water.
- Follow the notification requirements in Ontario Regulation 319/08 (Small Drinking Water Systems).
- Contact your local public health unit.

How do I know what type of water treatment system to install?

Treatment depends on the type of contamination. The two main treatments are filtration and disinfection. Some points to be aware of include:

- Filters installed at key points in the water system will remove particles and some parasites.
- Disinfection systems such as chlorination or ultraviolet light treatment devices will reduce harmful bacteria.
- Specialized water treatment devices are available to remove chemicals from the water. Consult with your local supplier for the best choices for your system.
- The source of your water supply and type of contamination will determine if you need to use both filtration and disinfection devices.

Get advice from a water treatment specialist to choose the best ways to make your drinking water safe.

For the best treatment, buy only devices that have been certified and meet industry standards.

Where can I find additional information?

Please remember...

This fact sheet is only a summary of your responsibilities as the owner or operator of a small drinking water system and is not a substitute for legal advice.

For a more complete understanding of your legal responsibilities as an owner or operator, refer to Ontario Regulation 319/08 (Small Drinking Water Systems) or any directives issued on your system.

In addition, you should become familiar with the procedure documents produced to help you efficiently operate a small drinking water system:

- *Procedure for Disinfection of Drinking Water in Ontario:*
www.ontario.ca/page/procedure-disinfection-drinking-water-ontario
- *Procedure for Corrective Action for Small Drinking Water Systems that are Not Currently Using Chlorine* [Consult your local public health unit for this resource.]

You may also find additional information on the following Ontario ministry websites:

- Acts and Regulations: www.e-laws.gov.on.ca/index.html
- Ontario Regulation 319/08: www.ontario.ca/laws/regulation/080319
- Ministry of Health: <http://www.health.gov.on.ca/en/>
- Current list of local public health units:
www.health.gov.on.ca/en/common/system/services/phu/locations.aspx
- Ministry of the Environment, Conservation and Parks:
www.ontario.ca/page/ministry-environment-conservation-parks
- Current list of licensed laboratories: www.ontario.ca/page/list-licensed-laboratories
- Ministry of Agriculture, Food and Rural Affairs: www.omafra.gov.on.ca/english/