

Safe Drinking Water is Everybody's Business

Cities get their drinking water from municipal drinking water systems. Stringent regulations make sure this water is safe before people drink it.

But business located in rural or remote areas often use private wells or surface water sources such as rivers, lakes or ponds.

If your business makes drinking water available to the public, it's your responsibility to take steps to ensure that it is safe to drink.

Businesses with this responsibility include restaurants, seasonal trailer parks, summer camps, community centres and many other public facilities.

This guide provides information to help you be certain your water is safe to drink.

Why is it important to have safe drinking water?

Unsafe water can cause diarrhea, nausea, abdominal cramps, fever, kidney failure and even death.

What are the regulations that apply to small businesses using private water supplies?

Currently, Small Drinking Water Systems are regulated by O. Reg. 252 (Non-Residential and Non-Municipal Seasonal Residential Systems That Do Not Serve Designated Facilities) under the Safe Drinking Water Act.

What changes to these regulations will be made?

Small drinking water systems are being transferred from the Ministry of the Environment to the Ministry of Health and Long-Term Care.

They will be governed by new regulations under the Health Protection and Promotion Act.

This means a new program from local boards of health. It means drinking water will be sampled, tested and treated.

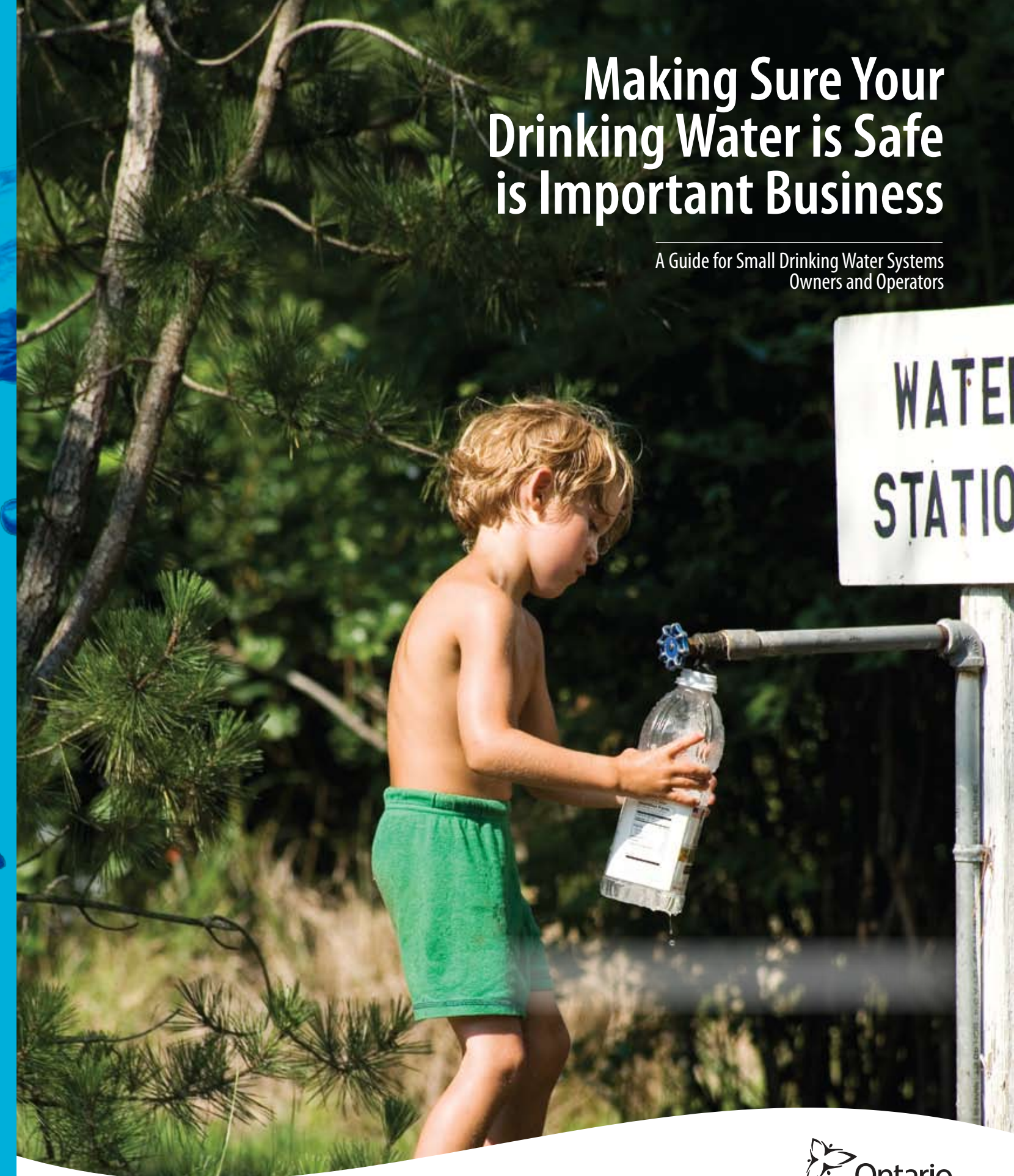
Public health inspectors will inspect every small drinking water system in the province. They will decide how often owners and operators need to test their water--and what they must do to keep their drinking water safe.

Public health units will inform owners and operators when the new regulations are in effect.



Making Sure Your Drinking Water is Safe is Important Business

A Guide for Small Drinking Water Systems
Owners and Operators



How does drinking water become contaminated?

Water can become contaminated with:

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

How does the source of water 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 carries impurities into surface water sources.

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

Surface water sources are unsafe for drinking, unless they're 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're close to sources of pollution.

How do I keep my drinking water safe?

Keeping drinking water safe is an ongoing responsibility.

These general tips will help you protect your drinking water, locate problems quickly and treat contaminated water properly:

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.
- Ensure your private well is soundly built to keep out contaminants.

MONITOR your drinking water system regularly.

- Have a professional 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.

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 of treatment.

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. Stopping the problem before it starts is always best.
- If you're using 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's working properly.

NOTIFY the public when you've identified a problem, whether from a water sample or equipment that isn't working properly.

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

What else should I know about testing my water supply?

If you serve the general public, the current regulation (O.Reg. 252/05) calls for frequent sampling for bacteria.

Private labs licensed by the Ministry of the Environment are locally available for testing.

Labs provide sample bottles and instructions for collecting water. Use only licensed labs for tests.

Understanding testing 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 the Ontario Drinking-Water Quality Standards (O. Reg. 169/03).

Should I be doing anything different to prepare for my risk assessment under the new program?

Yes, as part of the site risk assessment, you'll need a history of your water sampling.

Monthly water samples are recommended for testing of Total coliform and E. coli bacteria.

Positive test results may mean harmful bacteria are in the drinking water. Monthly sampling isn't actually required by the current regulation (O.Reg. 252/05). Regular results help identify problems with your water supply.

What do I need to know about collecting water samples?

The way water samples are collected, stored and transported is hugely 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 do I do if my test results for bacteria are "adverse" or "unacceptable"?

If your test results say 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 Regulation 252.
 - Contact your local public health unit and the MOE Spills Action Centre (SAC).
 - Take appropriate steps after consulting with your local public health inspector and MOE provincial officer.

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

Treatment depends on the type of contamination. The two main treatments are filtration and disinfection.

Points you should remember:

- 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 in choosing the best ways to make your drinking water safe.

For the best treatment, buy only devices that have been certified and meet industry standards. For information, go to the Ministry of the Environment website at: www.ene.gov.on.ca

Safe drinking water – Everybody's business

Remember, it's *your* responsibility to keep your drinking water safe.

For general information about wells and drinking water safety, ask your local health unit for the Ministry of Health and Long-Term Care's information kit. It's called "Keeping Your Well Water Safe to Drink."

What websites will help me?

The new regulations can be found on the government's E-laws website <http://www.e-laws.gov.on.ca/index.html> under the Health Protection and Promotion Act.

For further information about the regulations under the Safe Drinking Water Act and how they apply to you, contact the Ministry of the Environment at <http://www.ontario.ca/ONT/portal51/drinkingwater>

For information on the new program and regulations, contact your local public health unit or the Ministry of Health and Long Term Care at: http://www.health.gov.on.ca/english/public/contact/phu/phuloc_mn.html

To get a copy of the *Ontario Drinking-Water Quality Standards* (O. Reg. 169/03), call Publications Ontario at 416-326-5300 or toll free at 1-800-668-9938. The regulations are also available on the E-laws website at: <http://www.e-laws.gov.on.ca/index.html>

To find your local public health unit, go to the Ministry of Health and Long-Term Care website at: http://www.health.gov.on.ca/english/public/contact/phu/phuloc_mn.html or call 416-327-7623.

For a current list of licensed labs, visit the Ministry of the Environment website at <http://www.ene.gov.on.ca/en/water/sdwa/licensedlabs.php> or call the MOE's Public Information Centre at 1-800-565-4923.

The Spills Action Centre handles reports of spills and other environmental emergencies. Inquiries about other environmental issues should be directed to the:

Spills Action Centre
5775 Yonge Street
5th floor
North York ON M2M 4J1
Toll Free: 1-800-268-6060

Visit <http://www.ene.gov.on.ca/en/emergency/actioncenter.php> for more information.



Contaminants And Possible Removal Methods	
Particles (e.g. suspended solids, dirt particles)	Filtration
Biological contaminants, such as bacteria.	Disinfection
Chemicals (e.g., lead, nitrate, sodium, arsenic, uranium)	Water treatment devices such as reverse osmosis, microfiltration and ion exchange.