



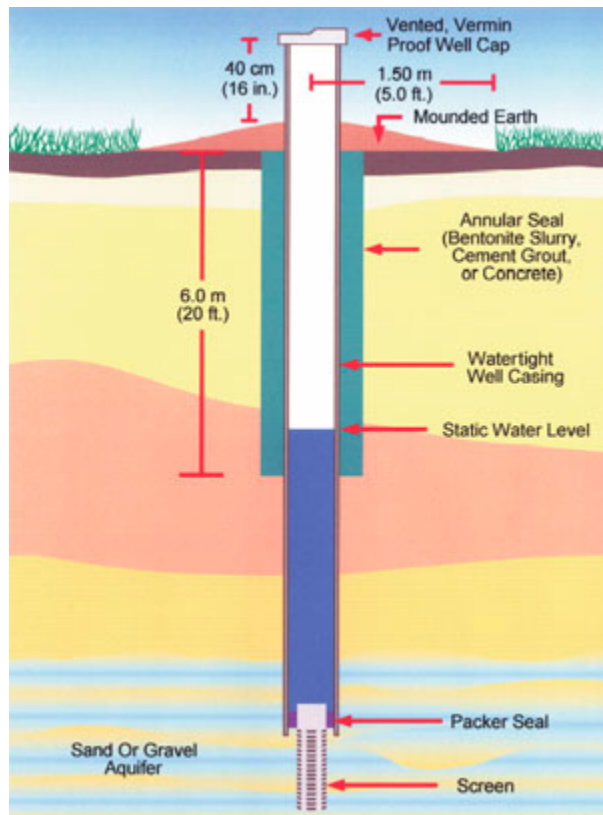
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Section

Public Information

Water Safety : Keeping Your Well Water Safe to Drink



Know Your Well – Basic Well Types

Wells are constructed by drilling, boring, digging (by backhoe or by hand) or, less commonly, by driving in a well point. One of the ways to identify the type of well you have is to look at the outer casing and cover that can be seen at ground level.

Large-Diameter (Dug or Bored)

Look for large-diameter casing of 60–120 cm (24–48 in.)

- older ones made with brick, stone or even wood cribbing should be inspected for leaks
- large-diameter wells are generally more vulnerable to contamination than drilled wells. Make sure your well is watertight

Dug wells :

- formerly dug by hand, most dug wells are created with excavation equipment
- dug wells are usually no more than 9 metres (30 feet) deep
- during dry periods, shallow dug wells can have low water levels
- because they are shallow, dug wells are vulnerable to contamination – find out about practices like sealing and grouting to reduce risk

Bored wells :

- bored wells are constructed with a boring rig that makes a hole that's easier to seal than the hole made by excavation equipment for a dug well
- the average depth of bored wells is 15 metres (50 feet), but some are 30 metres (100 feet) deep
- properly sealed and grouted, they are less vulnerable to contamination than dug wells; however, bored wells are more vulnerable than drilled wells

Drilled Wells

Look for small-diameter casing of 10–20 cm (4–8 in.)

- drilled wells are generally the least vulnerable to contamination, assuming they are properly built, sealed and maintained
- in Ontario, new wells must meet the requirements of provincial water regulations

Well screens :

- every drilled well should have an individually sized, stainless-steel well screen at the bottom of the well casing to hold back sediments, while allowing sediment-free water to flow freely into the well casing
- if you notice sediment in your water, or poor pump performance, you may have a well that is unscreened, poorly screened or poorly constructed
- your well contractor should make sure that the water is sediment-free

Well (or Sand) Points

Look for : small-diameter casing of 2.5–5 cm (1–2 in.)

- a small-diameter casing located in a shallow, sandy area may be a well (or sand) point
- well or sand points are vulnerable to near-surface contamination, and shortages during dry periods

Below Grade Wells

- buried – highly susceptible to contamination and difficult to repair
- a well pit (below the frost line) – needs careful venting, as gases can build up
- a drilled well built in an old large-diameter well – take measures to ensure that surface water isn't draining into the well

Well Safety Checklist**Outside Your Well**

- Know exactly where your well is located.
- Keep potential contamination sources and activities away from your well.
- Mound up the ground around the well casing. The ground should slope away from your well.
- Make sure that your well's casing extends at least 40 cm (16 in.) above the mounded earth.
- Keep a permanent grass buffer at least 3 metres (10 ft.) around the well.
- Watch for ground settling around the outside of the well casing. This suggests that surface water could be accessing your well.
- Plug and seal any well that is no longer in use or no longer properly maintained.

Inside Your Well

- Make sure that a commercially manufactured well cap or sanitary seal is securely in place. Inspect the cover or sanitary seal for cracks and holes.
- Inspect inside the well once every year. Early spring after snow melt is a good time.
- Look and listen for signs of surface water seeping or running freely into the well.
- Look for seepage through cracks or stains below joints on the inside of the well casing.
- Remove any debris floating in the well and prevent any more debris from entering it.
- Compare your well's construction to diagrams showing proper techniques
- Disinfect the well and plumbing with chlorine solution after doing any work inside the well, or on pumping equipment (see the Disinfection Instruction Sheet).
- Check the condition of well vents. Look for flaws such as cracks or weakness in the vent tubing. Make sure that the fine-mesh screen is in place.

Test Your Well**Your Well Water**

Watch for changes in water taste, odour and colour

Have a sample of your well water tested for indicator bacteria :

- at least three times per year, with one of those samples done in the spring
- more frequently than three times per year if you suspect problems
- more frequently than three times per year if you have a *highly vulnerable* water supply as described in [Get Acquainted with Your Well](#)
- after major plumbing work.

Test for nitrates once every year, or more often if you have concerns. (Nitrate is a form of nitrogen that is stable in ground water. Excessive levels can lead to health problems.)

Who does what?

Service	Contact if...	How to Locate
Public Health Unit	<ul style="list-style-type: none"> ● you suspect that surface water, or human or animal waste, have entered your well ● for a water sample bottle for indicator bacteria testing ● you require help in interpreting your water quality sample results 	<ul style="list-style-type: none"> ● contact your local public health unit ● call INFOline toll free at 1-866-532-3161 In Toronto, call 416-314-5518 TTY 1-800-387-5559
Public Health Lab	<ul style="list-style-type: none"> ● for a water sample bottle for indicator bacteria testing ● public health labs perform bacteriological water testing only 	<ul style="list-style-type: none"> ● call INFOline toll free at 1-866-532-3161 In Toronto, call 416-314-5518 TTY 1-800-387-5559
Private Accredited Lab	<ul style="list-style-type: none"> ● you have concerns about chemicals in your well 	<ul style="list-style-type: none"> ● for information about accredited laboratories, contact MOE at 1-800-565-4923
Licensed Well Professional	<ul style="list-style-type: none"> ● you have concerns that your well is improperly constructed, or requires upgrading or maintenance 	<ul style="list-style-type: none"> ● see the listings under the <i>Water Well Drilling & Services</i> heading in your local Yellow Pages ● ensure they are licensed to provide this service

See also :

- [Water Safety During an electrical power blackout](#)
- [Boil Water / Drinking Water Advisory](#)
- [Putting Your Well Water to the Test](#)
- [Get Acquainted with Your Well](#)
- [Pathogens and Your Well Water](#)
- [Disinfection Instruction Sheet](#)
- [Choosing a Water Treatment System](#)

FOR MORE INFORMATION

Call the ministry **INFOline** at 1-866-532-3161
(Toll-free in Ontario only)
TTY 1-800-387-5559
Hours of operation : 8:30am - 5:00pm

[Ministry of the Environment](#)
Information Centre : 1-800-565-4923
Water Well Records : 1-888-396-9355

[Ministry of Agriculture and Food](#)
OMAF Agricultural Information Contact Centre :
1-877-424-1300

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