

Flooding and well-water safety**Updated April 21, 2009**

During a flood, there is an increased risk that drinking water wells may become contaminated with bacteria or other microorganisms. Any well-water system, whether deep or shallow, can become contaminated when flooding occurs.

Risk factors for well water

There is increased risk of contamination in well-water when:

- groundwater sources are open to the surface because of shallowness and/or water permeable soils such as sand or gravel
- wells are located in pits or depressions where water has pooled
- wells have rusted or unsealed casings that do not extend at least 30 centimetres or more above the ground
- wells are located near unsealed abandoned wells
- wells are near septic tanks or fields, barns, feed lots, sink holes or quarries
- wells or groundwater sources are affected by changes in environmental conditions such as floods and heavy rains
- wells close to yours are flooded and may be contaminated
- water in the well changes in colour, clarity, taste or odour

If a large sewage spill, or other source of significant fecal contamination of the well is suspected, contact the Manitoba Office of Drinking Water at 204-945-5762 or 204-945-8913 in Winnipeg.

When boiling is necessary

If you suspect your well may be contaminated, you **should boil the water before using it or find an alternative supply of drinking water** until flooding subsides and bacteria tests show it's safe to use. Boiling kills all micro-organisms (bacteria, viruses and parasites) that may be present in your water.

Tap water from flood-affected wells cannot be used for drinking until it is properly sterilized by: bringing it to rolling boil for one minute. This includes water used for:

- drinking
- making ice
- preparing any beverages, including infant formula
- cooking
- washing fruit and vegetables
- brushing teeth

If boiling water is not an option, use an alternate, safe supply of water such as bottled water.

Using water for other domestic purposes

Tap water from flood-affected wells can be used for:

- laundry
- bathing
- washing dishes

Adults, teenagers and older children can use the water to shower but should avoid swallowing the water. Toddlers and infants should be sponge bathed instead of bathing in a tub.

Testing well-water

Well-water should be tested for bacterial contamination after flooding has subsided. You should continue to boil your drinking water until test results confirm it is safe to drink.

NOTE: The provincial government is waiving all fees for professional bacteriological testing of private drinking water wells affected by flooding, until June 30, 2009.

Steps for testing well-water

- The presence of bacteria in the water sample indicates well-water contamination. Well-water should be tested by a professional lab.
- Home owners are responsible for collecting the water samples. A special water sample collection bottle is required and certain steps must be followed for bacterial analysis. Bottles for taking water samples, instructions for use and submission forms are available from most rural municipality offices, Manitoba Water Stewardship and Conservation offices, or directly from:

ALS Laboratory Group
1329 Niakwa Road East, Unit 12,
Winnipeg R2J 3T4
Phone: 204-255-9720; toll free 1-800-607-7555
Monday to Friday: 8:00 a.m. to 4:30 p.m.

- It is very important to follow the instructions provided on the back of the laboratory sample submission form. If proper sampling procedures are not followed, the sample may be contaminated and produce false results.
- A special water sample collection bottle is required and certain steps must be followed in collecting a water sample for bacterial analysis. The laboratory will provide instructions for sampling, a special sample bottle and a submission form that must be filled out.

Submitting well-water samples

Sample bottles should be dropped off within 24 hours of collecting the water sample. To be eligible for the free testing, bottles must be clearly labelled: **'2009 Flood.'**

Sample bottles, including submission forms – **clearly indicating 2009 Flood** – should be dropped off at:

- participating rural municipality offices before noon on Tuesdays OR
- at the ALS laboratory in Winnipeg at the address listed

Well restoration after flooding subsides

NOTE: This section applies to wells that have been overtopped, completely submerged or have suffered structural damage and have major contamination (as opposed to wells that may have had a little seepage).

- Problems may arise if your well has been submerged by floodwater. The well should be professionally assessed to determine how best to bring it back to a safe, useable condition.
- More extensive well restoration may be needed if your well has been structurally damaged, completely submerged, overtopped, or if you've seen flood water draining into your well. Floodwater and sediment can damage pumps and their electrical components. All assessments, repairs and replacements should be done by qualified professionals. It may not be safe to turn on your pump until your well is cleaned out, and all sediment and floodwater are removed.
- Well owners who have experienced this type of problem should contact Groundwater Management at 204-945-3737 or 204-945-7425 in Winnipeg.

For more information

For more information on wells, well-water testing, disinfection and interpretation of water testing results, contact:

- Manitoba Office of Drinking Water at 204-945-5762 in Winnipeg
- your local drinking water officer
- Health Links-Info Santé at 204-788-8200 in Winnipeg; toll free 1-888-315-9257

Or go to:

- www.manitoba.ca/drinkingwater
- www.gov.mb.ca/health/publichealth/cmoh/water.html

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