Why should you sample your well?
- Owners of private drinking water wells are responsible for testing their drinking water.
- The only way to make sure that your water supply is safe to drink is to test it.
- Drinking water containing harmful bacteria can make you sick.

What should I test my water for?
Public Health recommends testing for:

<table>
<thead>
<tr>
<th>What to test</th>
<th>When to test</th>
<th>How much does it cost?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria</td>
<td>At least 3 times/year (spring, summer &amp; fall)</td>
<td>FREE through Public Health</td>
</tr>
<tr>
<td>Fluoride</td>
<td>1 time per year</td>
<td>Minimal fee</td>
</tr>
<tr>
<td>Nitrates</td>
<td>1 time per year</td>
<td>Minimal fee</td>
</tr>
</tbody>
</table>

How to sample your well for bacteria:
1. Pick up a water sample bottle from one of the regional locations.
2. Remove aerators and other attachments from your tap.
3. Let the cold water run for two to three minutes before sampling.
4. Remove the cap from the sample bottle. Do not rinse out the bottle or touch the bottle lip or the inside of the cap.
5. Fill the bottle to “fill line” directly from the tap without changing the flow of water.
6. Replace the cap tightly on the bottle.
7. Complete the form that came with the bottle. Keep the sample cold, but not frozen.
8. Return the bottle and completed form to one of the drop off locations within 24 hours of taking the sample.

How to interpret laboratory results
The chart below is a guide for what the numbers from the laboratory results mean.

<table>
<thead>
<tr>
<th>Total Coliforms</th>
<th>E.coli</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>SAFE for drinking. Maintain regular testing.</td>
</tr>
<tr>
<td>5 or less</td>
<td>0</td>
<td>No significant bacterial contamination was found and the water is SAFE to drink. Continue to test your drinking water on a regular basis to see if there are any changes in your drinking water quality. If the issue persists contact Public Health for assistance.</td>
</tr>
<tr>
<td>More than 5</td>
<td>0</td>
<td>Significant bacterial contamination was found. Water is UNSAFE to drink. Stop using your well water. Disinfect the well and plumbing lines. Resample the well water after 48 hours.</td>
</tr>
<tr>
<td>More than 5</td>
<td>1 or more</td>
<td>Indicates bacterial contamination from animal or human faeces. Water is UNSAFE to drink. Stop using your well water. Disinfect the well and plumbing lines. Resample the well water after 48 hours. If unsafe results continue, contact Public Health for assistance</td>
</tr>
</tbody>
</table>

Chart continued on next page.
### Total Coliforms | E.coli | What it means
---|---|---
NDOGN (No Data: Overgrown with Non-Target) | Sample was heavily contaminated with bacteria often found in the environment. Water is **UNSAFE** to drink. Stop using your well water and contact Public Health for assistance.

NDOGT (No Data: Overgrown with Target) | Sample was heavily contaminated with bacteria often found in the environment. Results indicated the presence of bacterial contamination, total coliforms and / or E. coli. Water is **UNSAFE** to drink. Stop using your well water and contact Public Health for assistance.

If your water is unsafe to drink, refer to “How to Disinfect Your Well” and resample afterwards.

### Water quality tests

**Total Coliforms:** These bacteria are often found in animal waste and sewage, and soil and vegetation. If they are in your drinking water, it means surface water may be entering your well.

**Escherichia coli (E.coli):** These bacteria are found in the digestive systems of people and animals. If they are present in your drinking water, it usually means that animal or human waste is entering your well from a nearby source.

### How to disinfect your well

1. Add regular 5.25 per cent household bleach to the well (not lemon scented or other types of bleach). Use the chart below as a guide for the amount of bleach to add to the well. If you don’t know how deep the water is in the well, use the well depth to estimate how much bleach to add.

2. Disconnect any filters, run water through all taps for 20 minutes or until you smell chlorine and then let sit for 12 hours.

3. Run the rest of the treated water through the outside hose away from the septic tank system.

4. Stop running the water when the smell of chlorine is gone.

5. Use the water supply as you would normally (except for drinking), then re-sample after 48 hours.

<table>
<thead>
<tr>
<th>Type of well</th>
<th>Amount of bleach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dug Wells (1 m (3 ft.) in diameter)</td>
<td>Add 1 l (1 qt.) of household bleach for every 5 ft. (1.5 m) of water depth</td>
</tr>
<tr>
<td>Drilled Wells (15 cm (6 in.) in diameter)</td>
<td>Add 142 ml (5 oz.) of household bleach for every 7.5 m (25 ft.) of water depth</td>
</tr>
<tr>
<td>Well Points (5 cm (2 in.) in diameter)</td>
<td>Add 85 ml (3 oz.) of household bleach for every 3 m (10 ft.) of depth</td>
</tr>
</tbody>
</table>

Do not drink the water until you receive satisfactory sample results.

### Emergency treatment

Remember you are disinfecting your well because the water is unsafe. If you want to continue to use your well water, bring it to a rolling boil for at least one minute and let it cool before using it for drinking, making artificial baby milk (formula), juices, ice or recipes, brushing your teeth, rinsing contact lenses, and washing food or dishes. Refrigerate your boiled water until it is used. Boiling your water is only safe for wells with high counts of bacteria. **DO NOT** boil your water if your well is high in sodium, nitrates, fluoride or if it is contaminated with chemicals.

### Need a reminder?

If you would like to receive email reminders to test your water three times per year, sign up at [www.regionofwaterloo.ca/privatewellwater](http://www.regionofwaterloo.ca/privatewellwater).

This system also sends email when there are service changes due to holidays or other laboratory or office closures.