

Food Safety



Fact Sheet: Water Testing

The Food Safety program requires farmers to test the water that they use on milk contact surfaces because poor quality water can adversely affect milk safety.

Food Safety Requirement: farmers must test the water used for milking equipment sanitation annually for microbiological parameters determined by the provincial health authority. The test results must meet the provincial potability standards for bacteria and the farmer must keep or record the results.

Why do I need to test my water?

Since pasteurization does not kill 100% of bacteria in the milk, increasing the load of bacteria in the milk will increase the milk safety risk. The water used for cleaning milk contact surfaces can be a significant source of bacteria; therefore, testing the water is an important step in ensuring milk safety. Contaminated water is not easily detected by taste, smell or colour; therefore, you must test your water to ensure that it is safe.

Why does the Food Safety program use provincial water quality parameters?

Water quality is a provincial jurisdiction; therefore, each province sets potability standards for bacteria. Nationally, the Guidelines for Canadian Drinking Water Quality exist but provincial laboratories test water samples according to provincial standards.

Where do I take the sample from?

You should take the water sample at the point of use (e.g. in the milk house), so that you know what the quality of the water is as it enters the wash system.

When should I take a sample?

You should test your water after heavy rains or during the wet seasons. Additional testing is recommended after events such as floods, spills or heavy rainfall or if colour, taste, or odour changes.

How do I take the sample?

You should use the sterile bottles or bags provided by the local public health unit or the laboratory that will perform the testing. Carefully follow the instructions provided by the laboratory and/or your provincial producer association for collecting an appropriate sample. You must collect the water sample properly or the test results may not be valid.

General Sample Collection Guidelines:

Step 1: Collect from a tap or outlet in the water system that is the point of use for washing milk contact surfaces.

Step 2: Immediately fill the container and cap it.

- If a plastic container is used, its sides should be compressed to ensure the air is expelled.
- Make sure that you do not contaminate the inside of the container or cap with your fingers or place it on a surface.

Step 3: Keep the sample cool. Samples must be delivered to a lab within 24 hours.

Do I have to test my water if I always sanitize my milking equipment before I milk?

Yes. Sanitizing chemicals do kill bacteria, but the higher the bacteria load, the more sanitizer you need. Contaminated water will add to the bacterial load, and may make your sanitizer less effective at killing all of the bacteria.

I use city water; do I still have to test my water?

Yes, all water must be tested, regardless of the source.

What do I do if my water test states that my water is contaminated?

If the sample is contaminated, you should re-sample the water and/or treat the water until it passes the microbiological parameters of the province.

You may want to consider taking two samples for analysis, one sample from the source (e.g. a well) and one sample at the point of use. The test results may help you determine where the contamination is occurring. To ensure the water system itself is good, examine the base system first, for example, consider removing any hoses or devices guiding the water into the sink, as they may be sources of contamination.

You can contact your provincial health authority, provincial coordinator or a water specialist for help.

Who can I contact for more information?

1. Your provincial producer association
2. Visit: www.dairyfarmers.ca/proAction