

Coliform Bacteria Fact Sheet

For Cottage Food Operations Using a Private Water Supply

Cottage Food Operators monitor their private water supply at least once annually for coliform bacteria.

What are Coliform Bacteria?

Coliform bacteria include a large group of bacteria that occur throughout the environment. They are common in soil and surface water and may even occur on your skin. Large numbers of certain kinds of coliform bacteria can also be found in waste from humans and animals. Most types of coliform bacteria are harmless to humans, but some can cause mild illnesses and a few can lead to serious waterborne diseases. E. coli is a type of coliform bacteria. Coliform bacteria are often referred to as “indicator organisms” because they indicate the potential presence of disease-causing bacteria in water. The presence of coliform bacteria in water does not guarantee that drinking the water will cause an illness. Rather, their presence indicates that a contamination pathway exists between a source of bacteria (surface water, septic system, animal waste, etc.) and the water supply.

How do I sample for Coliform Bacteria and Avoid Introducing Contaminants?

1. Obtain sealed bottles from a certified laboratory (always have extra bottles on hand).
2. **Wash your hands** thoroughly before handling supplies. Assemble all sampling supplies
3. Select a sampling point as close as possible to the **water source**.
4. Do not collect samples from garden hoses, dirty faucets or swing-type faucets where foreign material may contaminate the sample. Remove faucet screens, aerators or hoses.
5. Open the cold water tap for about **three minutes** before collecting the sample.
6. **Disinfect** the tap by thoroughly rinsing both the inside and outside of the tap with a mixture of 50 percent bleach and 50 percent tap water. Take extreme care with strong bleach (oxidizing) solutions. You may also flame-sterilize the tap unless the tap is plastic or if aerators are attached.
7. **Flush** the tap for an additional three minutes with cold water and reduce to a gentle flow to about the width of a pencil. Do not change the water flow once you have started sampling.
8. Grasp the cap along top edge and remove carefully. **Do not touch** the inside of the bottle or lid with your fingers. Hold the bottle in one hand and the cap in the other. Do not lay the cap down or put it in a pocket!
9. Fill bottle to the **100 ml line** or to a little above the black line. Hold the bottle so water entering the bottle will not come in contact with your hands. Samples will not be tested if there is less than one-half inch air space in the bottle. Then place the cap on the bottle and screw it down tightly.
10. Keep sample bottled chilled and deliver promptly to laboratory.

What happens if the lab reports the presence of coliform bacteria in a sample?

If the laboratory notifies you of a coliform “present” sample, please notify the Department at (209) 223-6439. Collect 2 repeat samples – one from the original sample location and one from an interior

sink. If one or more repeat samples contain coliform bacteria, use the following checklist to help you locate and correct any areas where contaminants may be entering the water system:

SOURCE

- Well casing is above the floor or ground and the area around the well is clean.
- Well has a watertight seal and a U-shaped, inverted, screened vent.
- There are no openings in the well cap or casing, including around the electrical wires.
- There is no standing water around the well head.
- The well has been effectively disinfected following any well or pump repairs.
- If a spring, the collection box and the hatch or lid are watertight.
- If a spring, the overflow and drain lines are screened or protected with an angle-flap valve.
- Surface water is directed away from the spring collection area by a diversion ditch.
- The well or spring is at least 100 feet from sources of contamination, such as septic tanks, leach fields, sewers, manure, or garbage.

HYDROPNEUMATIC and BLADDER TANKS

- Tank(s) are not waterlogged and bladders are intact and functional.
- Sediment has not accumulated in the tank.

STORAGE TANKS

- There are no openings that allow entry of surface water, debris, insects, etc.
- The access hatch has an overlapping, watertight cover and a neoprene-type seal.
- Vents are clean, directed downward, and screened.
- Overflow and drain lines are protected with screens or angle-flap valves and discharge above ground.
- There are no signs of dirt, insects, growth, sediment, or debris inside the tank.
- There are no cracks, leaks, or vegetative growth on the outside of the tank.

DISTRIBUTION SYSTEM

- There are no obvious leaks or breaks.
- The system was effectively disinfected following any construction or repair work.
- There have been no low pressure or water outage incidents.
- Non-looped, dead-end sections are regularly flushed.
- System is free of possible cross connections.

AFTER INSPECTING THE SYSTEM

- Make needed repairs and improvements.
- Disinfect and flush the system. The Department has a handout on water system disinfection.
- Resample to ensure the system is free of bacteriological contamination.

Department staff is available to assist you with troubleshooting the cause of the contamination, and advise you on what precautions you should take to protect your customers.

IMPORTANT!

If E. COLI is found in any water sample, the cottage food operations must cease until the source of the contamination is corrected, the system disinfected, and follow-up samples no longer show the presence of E. coli.