

# Troubleshooting Checklist for Coliform Contamination

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DOH 331-180  
(Updated)

Coliform bacteria in a water system are generally either a result of a failure to maintain a "closed" water system or a treatment failure. Visually inspect the system for "openings" and/or treatment equipment failures. Look for areas of the system where soil, leaves, insects, birds, sewage, or animal wastes could possibly get into your water system.

## Check the following:

### WELLS

- 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 (minimum 24-mesh) vent.
- There are no openings in the well cap or casing, including around the electrical wires.
- There is no standing water around the source.
- The well is at least 100 feet from sources of contamination, such as septic tanks, drain fields, sewers, manure, or garbage.
- The well has been effectively disinfected following any well or pump repairs.
- A dug well has a watertight lid with an overhanging edge and a neoprene-type seal between the lid and the well casing.

### SPRINGS

- The collection box and the hatch or lid are watertight. The hatch has an overhanging edge and a neoprene-type seal.
- Vents are covered with an insect-proof non-corroding screen (minimum 24-mesh).
- 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 spring is at least 200 feet from sources of contamination, such as septic tanks, drain fields, sewers, manure, or garbage.

### TREATMENT

- Chlorine residual is measured and levels are adequate.
- UV system is operating correctly.

## **HYDROPNEUMATIC and BLADDER TANKS**

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

## **RESERVOIRS and 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 (minimum 24-mesh).
- Overflow and drain lines are protected with screens or angle-flap valves and discharge above ground. The drainpipe should not be submerged in nonpotable water.
- 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 SYSTEM**

- Make needed repairs and improvements.
- Disinfect and flush the system according to DOH guidelines.
- Install sample taps at source and storage facilities, if needed.
- Establish or improve the preventive maintenance program (routine sanitary control area inspection, storage tank inspection, and distribution system flushing).

## **FOR MORE INFORMATION**

Contact our regional office:

**Eastern Region:** Spokane Valley 509-329-2100

**Northwest Region:** Kent 253-395-6750

**Southwest Region:** Tumwater 360-236-3030

