



# Private Well Sampling Instructions

## SAVE THESE INSTRUCTIONS...WELL DISINFECTION METHOD ON BACK

- Collect Samples **ONLY** on Mondays through Thursdays
- Bring iced samples to Environmental Health the same day sampled

### Filling Sample Bottles

**1) Total Coliform bacteria – sterilized clear ½ pint plastic**

Take care to prevent germs from your hands or the outside of the faucet from getting into the sample bottle. Do not take a sample from a garden hose or an outside faucet.

Sample from a well-used kitchen faucet following the steps below.

Fresh samples are critical for the Coliform test. The bacteria tend to die off if testing is delayed or if the sample gets to warm.

**Keep the samples with ice packs or ice cubes in zip-lock bags** as soon as you collect them.

The lab is required by law to reject samples that are warm or too old.

- Remove the aerator screen from the your faucet before sampling.
- Disinfect the tap by running the hot water for two minutes.
- Run the cold water (as fast as you can, without making a mess) for three minutes.
- Carefully remove the plastic seal from the clear bacteria sample bottle. Unscrew the cap, being careful not to touch the inside of the cap or bottle with your fingers or the faucet. Keep the cap in your hand, not on the counter, while you fill the sample bottle. The powder or pill in the bottle is part of the test, so don't throw it away or rinse the bottle.
- Hold the lip of the sample bottle to the edge of the water stream so you can control the rate of fill. Carefully fill the bottle to the "100 ml" line. There must be an air space in the bottle so the lab can shake the sample before testing.

**2) All other tests – opaque plastic bottles**

Samples may be collected during the 3-minute cold-water flush for the coliform bacteria sample.

**Never sample (or drink from) a hot water line.**

### What testing is most important for your well?

If you were not assisted by a Water Supply Specialist when you picked up your sample kit you should call before you sample. The specialist will help you fill out the lab order form and decide what tests are needed in your area.

Call the Health Department at 737-2019 and ask to speak with a water program specialist.

### Water conditioners and filters

In general, it's ok to leave any water treatment equipment in service. Your sample should be typical of the water you normally use.



## Well Disinfection

After any repairs are made, or in the case of mild contamination, wells should be disinfected, or “shocked”, with chlorine bleach. Clorox® bleach (regular or ultra) is currently the only household bleach certified for use in potable water applications. For a typical residential well you will need less than a gallon. **Do not purchase “safe for color” or scented bleach because of toxic ingredients.**

Start in the evening when no more water is needed for bathing or dishwashing because the chlorine level will be too high for normal use. It’s ok to flush the toilet a few times. Water softeners should be placed on bypass and regenerated as soon as the bleach is flushed from the system. Most filters can tolerate the bleach but may rapidly plug if the large amounts of sediments are released. If that happens, bypass the filter or remove the cartridge and continue with the procedure.

1) **Disconnect power to your well pump.** Remove the well cap. Carefully pull out the pump wire slack and secure out of the way. Inspect the wire splices for worn or missing tape. Use a contractor licensed by New York State to drill wells or repair well pumps if the wires look damaged.

**-DO NOT POUR OR SPRAY WATER OR BLEACH SOLUTION DIRECTLY ON A SPLICE OR BARE WIRE-**

2) Mix 2 quarts of bleach in 10 gallons of water and pour down well. Insert a garden hose into the casing so you can recirculate chlorinated well water from the house back into the well. **Reconnect power to the pump.** Recirculate for 15-20 minutes. If the wire splices have been safely tucked away outside the casing, use the hose to rinse the inside of the casing with the strong chlorine solution. If splices or frayed wires might get wet do not try to hose down the inside of the casing.

3) While the bleach solution is circulating, flush all cold-water faucets one at a time until you can smell the strong chlorine solution. Hot water lines usually do not require disinfection unless the hot water heater is set to a low temperature. If you decide to disinfect the hot water lines turn off the heater. It may take a very long time to flush chlorine from the hot water heater tank.

4) **Disconnect power to your well pump.** Mix 1 quart of bleach with 5 gallons of water and pour the solution down the well. Carefully recoil the power line in the casing and secure the well cap. **Reconnect power to the pump.**

5) Allow the water to stand idle overnight (8-12 hours, or as long as possible). Flush the system to waste using your garden hose until the level of chlorine is tolerable. Discharge water away from grass and shrubbery to avoid damaging vegetation. Keep an eye on the discharge because you may pump the well dry if the water runs too fast or too long. **Turn the pump off** if it begins to surge and let the well recover. Resume pumping at a slower rate. Finally, flush your house taps. Chlorine odor may persist for up to a week. Re-test for coliform bacteria when you are certain all chlorine is gone.

6) If the underwater part of your well is heavily covered with iron or slime bacteria, severe discoloration of the water can occur after adding bleach. Pump to waste to clear it up. In some cases, additional bleach, contact time and flushing are needed to clear up a heavily colonized well. Iron bacteria do not cause illness, but can cause slugs of discolored water as they break off the side of the well. Heavy slime can also prevent the chlorine solution from direct contact with harmful bacteria that may have entered the well.

**Note: If coliform bacteria were detected once in your water supply it can probably happen again.**

### Simple fixes:

- **be sure the casing stands 18 inches above grade**
- **mound soil around the well to divert runoff**
- **direct gutters and ditches away from the well**
- **use a gasketed well cap with a screened vent**
- **do not use the area near the well as a dog run**

**Remember that shocking your well cannot protect you if there is a leak in the well casing or at the cap - every heavy rainfall will bring new contamination.**