



Well Disinfection for Bacterial Contamination

If water from a well is found to be contaminated with coliform bacteria, it may be possible to eliminate the contamination by disinfecting the well. It is recommended that you 1) Boil drinking water for five minutes. 2) Use bottled water. 3) Apply 4 drops of more of liquid household bleach per gallon clear water, mix thoroughly, then let stand for 30 minutes before drinking, prior to chlorinating the water source. If the well is improperly constructed or poorly located, contamination may not be eliminated or may be only temporarily eliminated. In that case, a permanent disinfection system or a new well may be necessary. Well water systems may be disinfected by adding chlorine bleach (Clorox, Purex, etc.) to the water in the well. Use the following dosages as a guide:

Well Casing Diameter	Amount of 5.25% (Household) Chlorine Bleach Needed
4 inches	Two and one-half (2½) cups
6 inches	Five (5) cups
8 inches	Seven and one-half (7½) cups
12 inches	Twenty (20) cups OR One and one-quarter (1¼) gallons

NOTE: These quantities are for 100 feet of well depth. Adjust the quantities to fit the depth of your well. Use only unscented bleach.

- ❖ If the water is cloudy, attempt to clear as much as possible by pumping the well to waste. With the pump NOT operating, add the chlorine.
- ❖ Mix one gallon of household bleach (Clorox, Purex, White Magic, Sanichlor, Vano, etc.) containing 5.25% sodium hypochlorite to 3 gallons of water. Greater amounts or stronger chlorite solutions should be used for wells more than 100 feet deep.
- ❖ The chlorine solution is then poured into the well. It may be necessary to lift the pump but some wells have openings, which can be used for this purpose.
- ❖ Do not operate the pump for 30 minutes. After the 30-minute period with the taps, faucets, and hydrants open or closed surge the well by starting and stopping the pump several times.
- ❖ Open every tap, faucet or hydrant in the water piping system, start the pump and let water flow until clean water with a strong odor of chlorine comes out.
- ❖ Stop the pump and close all the taps, faucets and hydrants. Allow the mixture to stand in the system for 24 hours, or at least overnight. Disinfectant contact time with bacteria is important.
- ❖ After contact time is accomplished, flush the chlorine mixture from the system by hooking a garden hose to an outside tap and running until no chlorine odor is present. Do not flush the mixture into your septic system by running chlorinated water down drains!! Your septic system was not designed to handle the large continuous flow of water necessary to remove the chlorine and chlorine is harmful to the beneficial bacteria that make your septic tank function properly. Since chlorine will kill grass and plants, be careful where you run the water outside.
- ❖ When you can no longer smell chlorine in the water, close all taps and faucets and use the system normally.
- ❖ A water sample for bacteriological analyses recheck should be obtained one week or more after disinfecting the well.

NOTICE: Make sure that your well is tightly sealed to keep out rodents, insects, dirt and surface water seepage.