

How to Disinfect a Drilled Well



Well disinfection is completed for various reasons and under many different situations, for instance: after work is done on the well casing; when parts like a pump, pressure tank or water line is replaced; or after noticing a change in the taste or smell of the water.

Well disinfection is required if more than 4 Total Coliform bacteria colony forming units or more than 1 *E. coli* bacteria colony forming units is found in a water sample. Homeowners can effectively disinfect their own wells or private water systems by following the directions in this guide.

Follow these directions as closely as possible to properly disinfect the drilled well. Please read all of the directions before starting the disinfection procedure.

Use 1 “gallon” of 6.0% unscented laundry bleach and 3 gallons of white vinegar.



Turn off the electric power to the well. Flip the circuit breaker off or remove the fuse to the well.

Remove the well cap. This may require the use of a tool to loosen the screws or fasteners that hold the well cap in place.

Remove any debris, cobwebs, or grass that has accumulated on top of the pump wiring bundle. Pull the pump wiring out of the well casing to move it out of the way.



Pour the 1 gallon of bleach directly into the well casing. Rinse out the bottle with water and pour that water into the well casing.

Pour the 3 gallons of vinegar directly into the well casing. Rinse out each bottle with water and pour that water into the well casing.

Turn on the electric power to the well. Flip the circuit breaker on or replace the fuse to the well.

Turn on an outside faucet. Run the water until chlorine is detected in the water.

Connect a hose to the water supply at the house.

Drain the chlorinated water back into the well by running the water into the well with the hose for at least 30 minutes.

Rinse down the inside of the well casing with the hose.

After 30 minutes remove the hose, put the pump wiring back into the well casing, and replace the well cap.



Circulate the chlorinated water throughout the entire water system in the house. Run water at each hot and cold water faucet, flush the toilets, run the dishwasher and clothes washer and any other water using appliance.

Run the outside faucets, yard hydrants and the sample faucet on the pressure tank. **Be sure to run the water at each faucet or device until the odor of chlorine is detected in the water.**



Turn off all of the water faucets or devices once the odor of chlorine has been detected throughout the water system.

Change the water softener to bypass and leave it on bypass until the disinfection procedure has been completed.

Do not use the water for at least 12 hours, although toilets may be flushed if necessary.

After the 12 hour contact time, **use the water normally** and the chlorine will dissipate as fresh water mixes with the chlorinated water in the well.

Be careful doing laundry since the chlorine bleach will still be in the water. It may take several days for the odor of chlorine to disappear.

In some cases it may be necessary to clean out the aerators on each faucet if sediment or debris inside the water lines was flushed out.

Do not run the water continuously into the septic tank or sewage treatment system to flush out the chlorine. The excess water will damage the sewage treatment system.



Change the water softener back to normal operation after the odor of chlorine can no longer be detected.

Re-sample the well water for coliform bacteria to ensure that the disinfection of the well and water system was successful.

If you have any questions about the disinfection procedure, please contact health district staff at the number listed below.

The health district will collect water samples and test the water for Coliform bacteria, *E.coli* bacteria, Nitrates, Nitrites and Lead.

Additional information about Coliform bacteria and Nitrates is available on the environmental health page of the health district website. A link to the list of registered Private Water System Contractors for Greene County and the state of Ohio is also on the website. The health district's website is www.gcph.info

More information about private water systems and wells may be found on the Ohio Department of Health website at:
<https://odh.ohio.gov/know-our-programs/private-water-systems-program>



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