

WELL DISINFECTION PROCEDURE:

Problems of coliform bacteria, sulfate reducing bacteria, iron bacteria, and organic tastes and odors can often be eliminated by a complete chlorination of the well and distribution piping. For this procedure, you will need the following:

Liquid bleach - *standard household bleach, such as Clorox, unscented.* The correct quantity is 1.5 quarts for every 100' of water in a drilled well. If you do not know the depth of the well, start with one half gallon of bleach.

Garden hose

OTO - a pool chlorine detection chemical available from a pool supply store or Secondwind. This is not mandatory, but helps.

1. **Put any water treatment equipment on bypass.** Remove any cartridges from filter housings.
2. Open the cap of the well. Pour the liquid bleach into the well.
3. Attach a garden hose to the boiler drain on the well tank and run the end into the open well. Allow water to run from the hose back into the well until chlorine is detected in the water stream. You detect the chlorine using a chlorine test kit or if you do not have one you will have to rely on your nose. It will typically take 30 to 60 minutes before chlorine can be detected. The actual time it takes depends on how deep your well is and how quickly it recovers. Times will vary. If you do not have chlorine present after an hour of running and recycling the water, add an additional quart of bleach. Continue to run the hose, checking every 15 minutes for chlorine. After each test interval if no chlorine is present add an additional quart of bleach.
4. When you have chlorine at the hose, rinse the inside walls of the well with the hose for a few minutes. Then turn off the hose, reattach the cap of the well. NOTE that if you have iron in the water, the water will become yellow or rusty colored during this time. Disinfecting a well can also stir up sediment, so be prepared that aerators may become plugged. In rare occasions the stirring up of sediment can lead to problems within plumbing or the well pressure switch.

IN THE HOUSE

5. Run water at each faucet, testing for chlorine presence. Turn off each faucet once chlorine is present. For complete disinfection, run some water into the dishwasher and washing machine and flush all toilets. If you have a tank-type hot water system, it will take a while to get chlorine through the hot water.
6. Allow the chlorine to sit in the plumbing at least 24 hours. You may flush the toilet, but do not shower in the water or use it for cooking or drinking. It is a good idea to run each faucet a little bit a few times each day to keep the chlorine fresh.

AFTER 24 HOURS

7. Flush the well by once again running a hose from the boiler drain on the well tank and directing the flush water into the woods or a gravel or sandy area. Run the hose until the chlorine is gone. During this time you should stay around and check on the water stream every now and then to make sure you don't temporarily run the level of water in the well down below the pump. Should the water stream drop down to a trickle, turn off the hose for a few hours before continuing.
8. If you wish to disinfect your water filter or softener, wait until the chlorine strength has dropped to a slightly detectable level. Put your system back on line and run water through until you detect chlorine at the kitchen sink. If you have a Kinetico, be sure to run some water through both sides by moving the black dot on the top of the valve, and running water again at the sink. After you have done this, put the systems back on bypass until the disinfection flushing is complete. (This will prevent systems from becoming fouled due to a higher than normal level of sediment.)
9. When the chlorine is gone and any turbidity stirred up by the process has dissipated, you may put your water treatment equipment back on line, and replace any cartridges.



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