

# WELL DISINFECTION PROCEDURES

**NOTE: CHLORINE PRODUCTS CAN CAUSE SEVERE ADVERSE REACTIONS, INCLUDING, BUT NOT LIMITED TO, SKIN BURNS, RESPIRATORY SEIZURES AND BLINDNESS. PLEASE HANDLE CAREFULLY AND READ ALL INSTRUCTIONS PRIOR TO USE.**



Before a new well water supply is analyzed for purity (potability), the entire system should be disinfected. This is necessary to destroy bacteria which are introduced during the construction of the well and distribution systems. Bacteria may also be introduced from the installation of plumbing and/or fixtures in the house, well caps that are not “bug proof”, after changing filters, or refilling water treatment tanks, if no method of disinfection is present. If “slime” appears inside the filter housings or anywhere else in the distribution system, it may indicate the presence of bacteria.

It is also necessary to disinfect water systems for existing water supplies when laboratory analysis reveals the presence of contamination. This is needed to ensure that the sample results indicate the quality of the water coming from the well, not merely the presence of bacteria in the interior plumbing of the house or fixtures.

It is recommended this procedure be done on a periodic basis to maintain the sanitation of the well and the distributions system particularly if water heater changes, bathroom remodels, or other similar changes occur in the home.

## ***PLEASE FOLLOW THE DIRECTIONS CAREFULLY TO ENSURE THE PROCEDURE IS DONE PROPERLY***

1. Plan to disinfect the well in the evening hours because you will be unable to use the water for (8) to (12) hours after disinfection. Starting the process in the afternoon or evening, will allow the water to sit unused overnight, which is recommended.
2. Obtain a supply of drinking and/or usable water for use during the disinfection period, such as bottled water.
3. Secure the necessary information and materials for disinfecting the well. These tools should include household bleach (PWF prefers solid dry pellet chlorine tablets), wrenches, and a length of garden hose sufficient to reach from the nearest hose bib to the well, and chlorine testing device if desired. Information is the **well depth & yield obtained from your county well and septic office.**
4. Open well by removing the well cap. **DO NOT TOUCH THE ELECTRICAL COMPONENTS OR POUR WATER OR BLEACH ON THEM. THESE ARE LIVE WIRES AND CAN CAUSE SERIOUS INJURY OR DEATH.** The well pump power can be temporarily disabled until it is time to run the water, by flipping the appropriate breaker in the breaker panel.
5. Pour (bleach or) 3/8" calcium hypochlorite (food grade) pellets directly into well, following the following **estimated formula:**  
**Multiply the depth of well x 1.5 (amount of gallons for each 1 ft. of 6" well casing;**  
Use one pellet for every 2 gallons of water, i.e., **divide # of gallons by 2 = number of 3/8" pellets to be used.**  
**NOTE:** Every well has a chlorine demand that cannot be absolutely known, thus, the chlorine may take longer than desired to be removed from the well. **Please be careful not to exceed the above suggested amounts,** although you may need to add even more than is suggested, as the chlorine demand from possible bacteria and oxidized constituent levels, is not a known factor.  
**If using household bleach, use approximately 1 gallon/per every hundred feet of well depth.**
6. Connect garden hose and turn on the water. Draw water through the hose until you can smell a strong odor of chlorine or test for it with either a pool test kit or some other instrument, such as strips provided by PWF. Rinse inside the well casing thoroughly with the chlorinated water from the hose.
7. Rinse the well cap and well seal/well cover thoroughly with the hose and replace tightly on well.
8. Draw water through every faucet, hose bib, laundry, dishwasher, refrigerator dispenser, or other water outlet inside and outside the house until you can smell a strong odor of chlorine. If at any outlet you cannot detect the odor of chlorine, repeat steps 3, 4, 5, 6, and 7 (adding more chlorine to well) until you smell a strong odor (or water tests at a higher chlorine level) at all outlets.
9. Let water stand without use for 8-12 hours. Once standing time has expired, run water to waste through outside hose or interior faucets until only slight or no chlorine odor is detected (if the test is 3 ppm or less, you can use the water.)  
**NOTE: It is very important not to exceed the well yield by running too many faucets at once and/or leaving them unattended during the purge. If you exceed the yield, and water stops flowing, shut off all faucets and allow well to recover for at least an hour.**

The purging process time is difficult to assess and can take from 1 to 48 hrs. Adding too much chlorine at commencement can result in longer times. Better to add more if needed, than to add too much in the beginning. **Please see Chlorination Purge Instructions on TUTORIALS page for more information.**