DISINFECTING YOUR WELL

Chemical disinfection or chlorination of a water supply is suggested when a well has been found to be contaminated with bacteria. New wells or repaired wells and any associated plumbing should also be disinfected before being put back into service. The routine annual disinfection of a well will also help control "nuisance" levels of bacteria that may build up over time (biofilm).

Procedure to follow:

Method 1: Simple & Effective Process

1. Mix 1 litre of liquid laundry bleach (5-9% Hypochlorite) with approximately 45.5 litres (10 gallons) of water. Pour the solution into the well between the drop pipes and the outer casing. This may be done by removing the vermin-proof well cap and pouring the solution down the well or in older style wells, siphoning through the air vent or removing the well seal.
2. Go to each tap in the house (hot and cold) one at a time, run the water just long enough to smell the chlorine at the tap and then turn the tap off. Repeat at each tap.
3. Repeat step 1, but this time do not open the taps, or run the water. Replace the well cap or seal and let the system sit idle for 8 to 12 hours, preferably overnight. Minimize water use during this period.
4. After the chlorinated water has been sitting in the system for the recommended time, the water should be run to flush the chlorine from the system. It is recommended that water be run off from a hose on an outside tap to avoid overloading the septic system. When there is no longer a chlorine odour at the outside tap, run all inside taps until the chlorine odour has disappeared.
5. Wait 48 hours after the disinfection procedure is completed before re-sampling the well. It is recommended that two consecutive samples with no bacteria present be obtained before using the water again for human consumption.

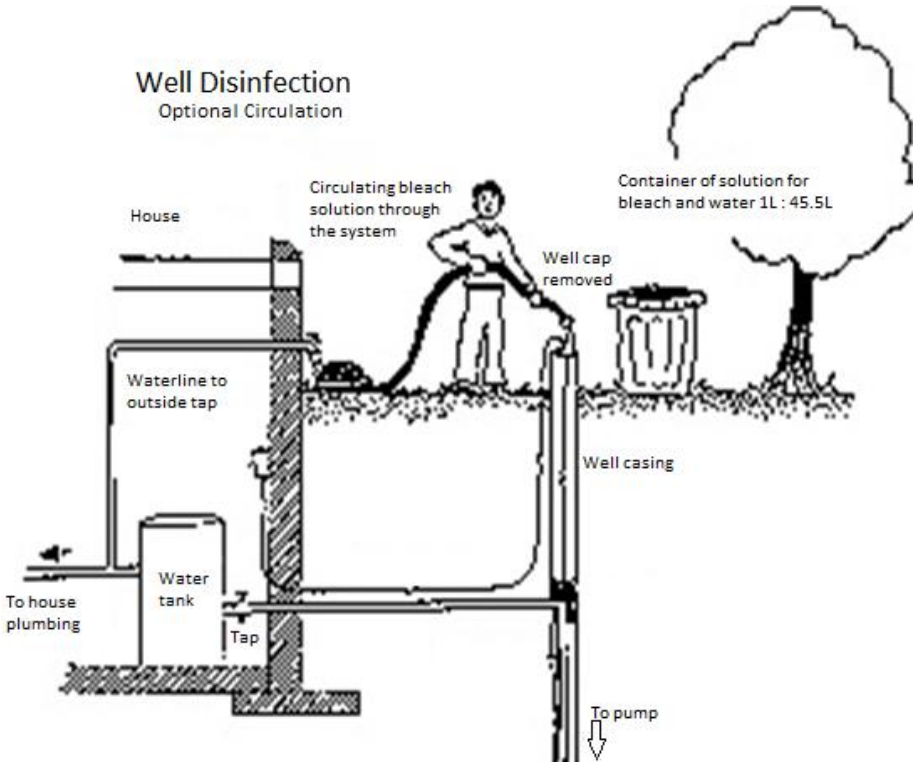
Note: Chlorine should always be used in well-ventilated places because breathing the fumes is dangerous. Do not mix chlorine solutions with other cleaning products, including ammonia, because toxic gases will be created.

Remember disinfection of an improperly located or constructed well and/or water supply will not ensure good quality drinking water. Disinfection of the well and the water system is considered to be only a temporary solution. If bacteria problems persist after disinfection, permanent corrective measures should be considered such as well reconstruction or ultraviolet light treatment.

Department Information
Department of Environment, Energy and Climate Action – Water & Wastewater Management Telephone: ..... 902.368.5044 Website: ..... www.princeedwardisland.ca/drinkingwaterquality

Method 2: Complex Process for Difficult Wells

There are more complex methods such as recirculating the disinfectant solution that could improve outcomes; it is advised to consult a plumber before attempting this method.



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2. Re-circulate the chlorinated water into the well casing with a garden hose. Attach a garden hose to an outside tap and run it into the top of the well casing, washing down the inside of the casing in the upper end of the well. Continue to circulate the water down the casing for at least ½ hour. If the water from the hose becomes discoloured, discharge the water onto the ground away from the well, until it clears.
3. Repeat step 1, go to each tap in the house (hot and cold) one at a time, run the water just long enough to smell the chlorine at the tap and then turn the tap off. Repeat at each tap. If chlorine cannot be smelled, then repeat step 1 and try again.
4. Replace the well cap or seal. Let the system sit idle for 8 to 12 hours, preferably overnight. Minimize water use during this period.
5. After the chlorinated water has been sitting in the system for the recommended time, the water should be run to flush the chlorine from the system. It is recommended that water be run off from a hose on an outside tap to avoid overloading the septic system. When there is no longer a chlorine odour at the outside tap, run all inside taps until the chlorine odour has disappeared.
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