

This handout gives you a step-by-step procedure for disinfecting your drinking water well using common household bleach. Household bleach contains chlorine (typically 5.25% sodium hypochlorite), and is an effective, easy-to-use and generally safe disinfectant for wells.

It is not uncommon for drinking water wells to become contaminated with disease-causing bacteria, creating a serious risk to the health and wellbeing of you, your family and visitors to your home or business. It is for this reason, that you should routinely test your well at least once a year for the presence of bacteria.

You should disinfect your well if:

- a laboratory test shows bacteria to be present in your well water:
- you have carried out maintenance or repairs to your well;
- you want to use a well which has been unused for a long time or is only used on occasion (e.g., seasonally);
- you note a change in the taste or odour of the well water; or
- your well has been flooded.

It is important to remember that proper construction and maintenance of your well is the best defense against bacteria getting into your well water.

Although disinfecting your well with household bleach is straightforward, precautions should be taken to ensure you don't get hurt. For example, when handling bleach, you will need to wear rubber gloves and safety glasses to protect your skin and eyes, and avoid inhaling fumes. In addition to protecting yourself, keep children and pets away while you are working with bleach. Please ensure that you read and follow the safety instructions on the bleach bottle.

Step-by-Step Procedure for Disinfecting a Well:

- 1. Disinfecting your well will require that it not be used for 6 to 12 hours. So before you begin, be sure to save enough water in clean containers to meet your needs while your well is out of service.
- 2. Turn off the well pump by shutting off the electrical circuit breaker. *Warning* There is a risk of electrocution if you do not turn off the power. Be careful to protect against someone unknowingly turning the power back on while you are working on the well by placing a label or a piece of tape over the breaker switch.

GUIDELINES FOR DISINFECTING YOUR DRINKING WATER WELL

- 3. Depending on the type of wellhead you have, either remove the cap from your well or remove the threaded plug from the cap. *Warning* If your well head is located in a pit, DO NOT ENTER THE PIT if at any time your head will be lower than its top edge. Even a shallow pit can be extremely hazardous due to a lack of oxygen or the presence of poisonous gases. If your well cap is in a pit, we suggest that you hire a company with staff who are specialized, trained and equipped to work safely in the pit.
- 4. Pour ONE, 4 litre bottle of <u>unscented</u> household bleach into the well, letting run down and fully coat the inside of the well casing.

If you have a water softener, be sure to bypass it before you begin step 5, as the high-strength bleach mixture may damage the softener.

- 5. Once you have poured the bleach into the well, start the pump, turn on the taps in the house or building and let the water run until you can smell the bleach. Once you can smell the bleach, turn off the taps and shut off the pump. *Note:* If your well is very deep, it may take a long time for the bleach to reach the taps.
- 6. Let the bleach mixture sit in the well and pipes for at least 6 hours, or overnight if possible.

Do not drink this water.

- 7. After the waiting time has passed, turn on the electricity to the pump.
- 8. Attach a garden hose to the outside tap, then open the tap and let the water run until the smell of bleach is gone or hardly noticeable. After running water from the outside tap, open the inside taps and let the water run until the smell of bleach is gone or hardly noticeable. *Warning:* Be sure to keep the water away from the well, people, animals and water bodies (e.g., lakes, streams). As chlorine is deadly to fish, do not allow chlorinated water to drain into any place where fish might be.
- 9. After one week, have your drinking water re-tested for bacteria.

For Further Information, please contact:

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