

Well Disinfection Procedure

Disinfecting your well is done by adding unscented household bleach (chlorine) directly into the well, circulating it through the plumbing, letting it sit overnight and finally flushing the system the next day.

Below are the steps for how to disinfect your well, but before proceeding please read the reverse side of this fact sheet for more information.

STEPS:

1. Measure and add the required amount of unscented bleach (from the chart below) directly into the well.
2. Inside the house, turn on **one cold water tap** and let it run until you can smell chlorine. Shut the tap off.
3. Repeat step 2 at every cold water tap in the house, one by one, including the bathtub(s) and shower(s), washing machine and toilet(s) - one flush is enough. Don't forget the outside taps as well.
4. Go back to the well and repeat step 1 (add the same amount of unscented bleach into the well again).
5. Return to the house and this time run all the **hot water taps**, one by one, and turn off again.
6. Return to the well but this time add ½ of the required amount of unscented bleach.
7. Using a garden hose, attached to an outside tap, wash down the inside of the well casing with the chlorinated water. *Caution: some hoses may not be suitable to drink from as they may contain contaminants such as lead.*
8. Let the system (well and plumbing) sit overnight to allow the unscented bleach to work.

Well	Imperial Measurement	Metric Measurement
measure or accurately estimate the depth of water in the well		
Drilled Well (casing up to 6", or 15 cm)	For every 50ft of water in the well add 10oz of unscented bleach.	For every 15m of water in the well add 280ml of unscented bleach
Dug Well (casing 36" or .9m)	For every 5ft of water in the well add 1 quart of unscented bleach.	For every 1.5m of water in the well add 1.1 litres of unscented bleach.

In the morning:

1. Run an outside tap away from the house (not into the septic system) to clear most of the chlorinated water out of the well.
2. The hot water tank should also be drained using a hose connected to the drain fitting. (Power can be turned back on after flushing).
3. The small amount of chlorine that remains in the plumbing can be drained normally by turning each tap on for a few moments to clear the lines.
4. Once the well and plumbing have been flushed, the system may be used for laundry or flushing toilets but not for consumption. Resample 2 days AFTER you no longer smell chlorine from any tap.

Wait until you have received **three** good sample results, taken 24 hours apart, before consuming your water.

Cautions

For any well that has flooded or subjected to seasonal flooding, the normal disinfection procedure may not be adequate because parasites like cryptosporidium may have been introduced as well as bacteria. Drinking this water is never safe without proper mechanical treatment. If your well is subject to seasonal flooding a permanent treatment device is recommended.

Dug wells, because of their construction, are vulnerable to surface and shallow ground water contamination. They are not safe after a flood. Dug wells should be tested regularly and may need permanent water treatment installed such as an ultra violet light.

Drilled wells may be successfully flushed and disinfected by following these instructions.

Both the well and the plumbing in the house need to be disinfected at the same time. All wells should be visually assessed for structural integrity.

- ◆ If there is dissolved iron in the water, then unscented bleach will release this into your plumbing and your water may turn orange. This will stop when the bleach is gone. Be careful of laundry during this process if you have a well with iron.
- ◆ If your well and plumbing system have a significant film of mineral and organic deposits (biofilm) inside the pipes, this may be supporting bacterial growth. The chlorine may not penetrate very far into this film, but may remove the surface layer exposing the next layer underneath. Sampling after the disinfecting process may show counts as high as or higher than before. You may need to repeat the disinfection process once or twice to get it all. Some wells may require professional cleaning to remove this biofilm.
- ◆ Any charcoal filter in the system must be disconnected first and power to the electric water heater shut off. *Gas water heaters should be shut off and turned on only by qualified people.*
- ◆ If you have a water softener or iron removal unit in your water system, contact the supplier and ask if the unit can be left on-line while disinfecting with 50–100 ppm unscented bleach (chlorine). If the unit needs to be taken off-line, then it must separately be emptied, cleaned, disinfected and refilled before going back on-line.

Call Your Health Connection 705-721-7520 (1 877 721-7520) to speak with a public health inspector for more information.