

August 29, 2019

# Risks to Water Supply Due to Storms



Contact: Environmental Health 321-633-2100 or 321-615-8035

## Viera, FL — The Florida Department of Health in Brevard County (DOH – Brevard)

Heavy rainfall, especially if accompanied by a tidal surge or flooding, can contaminate your water supply. Drinking contaminated water may cause illness. Individuals should not assume that a water supply in the storm affected area is safe to drink.

A storm can also affect water from public water treatment plants. Even if they are operating, storm damage and flooding can contaminate water lines. Watch for public announcements regarding the safety of your water supply.

If your private well has been flooded, it may need to be disinfected and tested after floodwaters recede. Questions about testing should be directed to the Florida Department of Health (FDOH) in Brevard County (DOH-Brevard).

### Water for Drinking and Cooking

Safe sources of drinking water include bottled, disinfected or both boiled and cooled water. Here are some general rules on using water for drinking and cooking:

- Do not use contaminated water to wash dishes, brush your teeth, wash and prepare food or make ice. Use only safe drinking water.
- If you use bottled water, know where it came from. Drink only commercially-available bottled, boiled or disinfected water until your supply is tested and deemed safe. Otherwise, water should be disinfected or both boiled and cooled before use.
- Boiling water kills harmful bacteria and parasites. Bringing water to a rolling boil for one minute will kill infectious organisms (germs).
- Water can be disinfected by adding eight drops of plain unscented household bleach (four to six percent strength), which is about 1/8 teaspoon or a dime sized puddle, per gallon of water.
  - If a higher strength bleach is used (8.25 percent strength), only add seven drops.
  - Mix the solution and let it stand for 30 minutes. If the water is cloudy after 30 minutes, repeat the procedure once.
  - Iodine or other disinfection tablets (available at many sporting goods departments and stores) may also be used.
- Containers for water should be rinsed with a bleach solution of one tablespoon of bleach per gallon of water before reusing them. Do not rely on unverified methods for decontaminating water.
- Use water storage tanks and other types of containers with caution. For example, fire truck storage tanks or used cans or bottles may be contaminated with microbes (bacteria) or chemicals.

## How do I disinfect my well?

It is important to disinfect both well and plumbing water with unscented household bleach to ensure that all infectious agents (germs) are killed. If you have water treatment devices, remove all membranes, cartridges and filters. Replace with new ones after the disinfection process is completed.

FDOH recommends the following steps to disinfect a contaminated well:

- **If the water is discolored** before adding the bleach, run the water until it is clear for up to 10 minutes. If after a while the water does not clear up, wait until you have clear water before proceeding, as this means your well may still be affected by the flooding.
- **Turn off the pump.**
- **Turn off and then drain** your hot water heater, as bleach is not effective in water above 105 degrees.
- **Remove** all membranes, cartridges, and filters.
- **Replace the items removed** with new ones after the disinfecting process is completed.
- **To avoid adding contamination** to the well during disinfection, clean the work area around the top of the well.
  - Remove grease and mineral deposits from accessible parts of the well head.
  - Flush the outside surfaces with 1/2 cup of unscented household bleach in five gallons of water.
- **Disinfect the pump.** Remove the cap or the well plug on the rubber seal.
  - There are many types of well caps and plugs. If you have questions, contact a licensed well driller.
  - If you have a jet pump, you may also want to contact a licensed well driller for advice on disinfection procedures.
- **Consult the bleach chart** and pour the recommended amount of regular unscented bleach (four to 8.25 percent strength) solution into the well.
  - Try to coat the sides of the casing as you pour.
  - If you get bleach on the pump or wiring, flush it thoroughly with fresh water to prevent later corrosion.

Well Depth in Feet	Well Diameter in Inches			
	2 "	4"	5"	6"
20'	1 cup	1 cup	1 cup	1 cup
30'	1 cup	1 cup	1 cup	2 cups
40'	1 cup	1 cup	2 cups	2 cups
50'	1 cup	2 cups	2 cups	3 cups
80'	1 cup	2 cups	1 qt.	1 qt.
100'	1 cup	3 cups	1 qt.	1.5 qts.
150'	2 cups	1 qt.	2 qts.	2.5 qts.
200'	3 cups	1.5 qts.	2.5 qts	3 qts.

**Conversions** 8 oz = 1 cup ; 16 oz = 1 pint = 2 cups; 24 oz = 3 cups; 32 oz = 1 quart; 48 oz = 1.5 quarts; 64 oz = 2 quarts; 80 oz = 2.5 quarts; 96 oz = 3 quarts

- **Re-cap or plug** the well opening and wait 30 minutes.
- **Turn on and, if needed, re-prime the pump.**
  - Open all the faucets on the system one at a time. Start with the ones outside to limit the amount of water entering the septic system, especially if the drain field area is flooded.
  - Allow the water to run until there is a noticeable smell of bleach.
  - You may also want to flush the toilets.
  - If you have outside faucets, you may want to direct the water away from sensitive plants.
  - If you cannot detect a bleach odor, repeat the disinfecting process.
- **Turn off all the faucets** and allow the bleach to remain in the system for at least eight hours.
- **Backwash water softeners**, sand filters and iron removal filters with bleach water.
- **Again, open all the faucets** and run the water until there is no bleach smell—for up to 15 minutes.
  - Again, start with the ones outside, close to the well first. This will limit the amount of both bleach and water from entering and possibly affecting the septic tank and drain field.

### Is it safe now?

The only way to verify that water is safe to drink is to have it tested by a certified laboratory. Although chlorine bleach is effective against most microorganisms, it will not remove chemical contamination that may have gotten into your well. If chemical contamination occurs, use commercially produced bottled water until a safe water source is obtained. Contact DOH-Brevard for sampling instructions to get your water tested.

### About the Florida Department of Health

The department, nationally accredited by the [Public Health Accreditation Board](#), works to protect, promote and improve the health of all people in Florida through integrated state, county and community efforts.

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