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Governor

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What Should I Do if My Well is Flooded?

Why should I be concerned?

Surface waters are susceptible to many sources of contamination. During a flooding, sewage runoff and overflow from lakes, rivers, and streams may be carrying bacteria such as *E. coli* and *cholera*, protozoa such as *Giardia*, and viruses such as *hepatitis*. If surface water enters your well, it may contaminate the water that you rely on for drinking, cooking, washing, and bathing.

How can I protect my family from contaminated well water?

If flood waters have *covered* your well casing, or if you notice any change in the appearance or taste of your water, or even if you are unsure about the impact of flooding on the water quality in your area, you should boil all of the water you use for drinking, making beverages, cooking, brushing your teeth, washing dishes, and washing areas of the skin that have been cut or injured.

The water should be brought to a rolling boil for at least one minute. Aerating the water by pouring it several times from one container to another will help to dispel the flat taste of boiled water. CAUTION: Prior to using on skin, be sure to cool the water first.

Boiling water is the most effective method for killing disease-causing microorganisms,

but chlorine and iodine are good alternatives. Common, liquid household bleach can be used to disinfect water. Do not use scented or color-safe bleaches or those with added cleaners. It is also the best method to disinfect your well after the flooding has subsided. Check the percentage of available chlorine on the bleach container and use the table below as a disinfecting guide:

Available Chlorine	Drops/Quart of Clear Water
1%	10
4-6%	2
7-10%	1
Unknown	10

Mix the treated water thoroughly and allow to stand for 30 minutes. The water should have a slight chlorine odor. If it does not, then repeat the disinfecting process. To reduce the chlorine taste, aerate the water by pouring it from one container to another several times. Chlorine and iodine tablets are generally sold in drug and sporting goods stores. Follow the directions on the label for water disinfecting.

Is my water safe to drink after the flooding subsides? **No!**

If standing water completely covered your well casing, you must first disinfect it before it will be safe to drink. See Below for:

- **How to Disinfect Your Well Instructions**
- **Steps to Taking a Good Bacteriological Water Sample**

Bottled water may also be used as an alternative to disinfecting. Also, none of the disinfecting methods will remove chemical contaminants. If this is a concern because of a spill or accident, drink only bottled water.

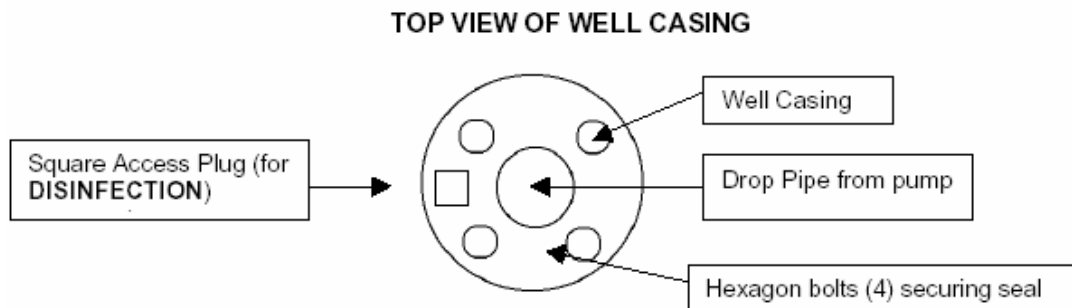
Questions?? Contact the *Manatee County Health Department*

Manatee County Health Department
Environmental Health Services

410 Sixth Avenue East • Bradenton 34208-1928
PHONE (941) 748-0747 • FAX (941) 750-9364

HOW TO DISINFECT YOUR WELL

1. Turn electricity off to well pump.
2. Remove seal or square plug on seal (it may be necessary to puncture rubber seal once plug is removed to allow disinfecting agent to enter well casing) and add one gallon of liquid chlorine (unscented household bleach) into well for each inch of well casing diameter.
3. Flush chlorine down well casing with water and replace seal or plug.
4. Turn electricity on to well pump.
5. Open all faucets in water distribution system until chlorine is detected coming out of each faucet.
6. Turn off all faucets and allow chlorine to remain within the system at least overnight.
7. Flush out entire distribution system until all chlorine is removed from the system. If you are on a septic system, use an outside hose to flush the well out so as not to flood the septic system.
8. Once the system has been flushed out, wait at least 24 hours before you resample the well water.
9. If your well does not look like the drawing below contact a well professional to assist you in the disinfection process.



STEPS TO TAKING A GOOD BACTERIOLOGICAL WATER SAMPLE

Step 1 – Preparation. Pick a sunny day with little wind. Obtain sterile sample bottles/bags from the laboratory. Complete the sample form thoroughly, including the **TIME, DATE, and LOCATION (indicate raw or distribution)** of the sample collected. Label the sample containers to coincide with the sample form. Wash your hands prior to beginning.

Step 2 – Sample Spigot. Pick a spigot that is downward facing. Avoid ones that have vacuum breakers (like some hose bibbs), aerators, or pivoting spigots (like in a kitchen). These spots are good places for bacteria to grow. If you must pick one with an attachment, remove the attachment prior to sampling if possible. Try to use a spigot with a good water stream. Avoid ones where the water flows around the rim of the spigot.

Step 3 – Disinfect! Disinfect the sample spigot with isopropyl (rubbing) alcohol or a chlorine bleach solution (laundry bleach). Use a spray bottle to spray the disinfectant in the mouth of the spigot and around the outside.

Step 4 – Flush. Vigorously flush the sample spigot for at least **FIVE** minutes. If you are sampling from the raw (source) tap, let the water run for at least one full pump cycle (pump turns on/off/on). Flushing will allow you to actually test the quality of the water from the well, not the water that has been sitting in the pipes.

Step 5 – Sample. Adjust the flow of water until the water stream is approximately the diameter of a pencil. Open the sample container. **DO NOT** touch the inside of the sample bottle/bag. Place the container under the stream and fill to the indicated line. **DO NOT** overfill. Replace cap on the sample bottle or properly seal the sample bag.

Step 6 – Transport to Lab. Place sample(s) in a clean cooler with ice packs. **DO NOT** use wet ice (ice cubes). Take sample(s) to the laboratory for analysis ASAP within **24 Hours**. If you are not taking the sample(s) directly to the laboratory, refrigerate them.

You should receive your water sample results in a few days to a week.

If you have any questions concerning your results or require further assistance, contact the *Manatee County Health Department* at ☎(941) 748-0747 ext. 1340.