



Your Well: What to Do After a Flood

Well and Pump Inspection

Flood Conditions at the Well: Your well may be contaminated by flood water, even if there is no apparent damage or the well head is not visibly underwater.

Electrical System: After flood waters have receded and the pump and electrical system have dried, **do not turn on the equipment until the wiring system has been checked** by a qualified electrician, well contractor, or pump contractor. If the pump control box was submerged during the flood, all electrical components must be dry before electrical service can be restored. Get help from a well or pump contractor turning on your pump.

WARNING: There is a danger of electrical shock and damage to your well and pump if they have been flooded. Rubber boots and gloves **do not** provide enough protection from electric shock.

WARNING: Do not drink, cook, or wash with water from a private well that has been flooded. It can make you sick.

Pump Operation: All pumps and their electrical components can be damaged by sediment and flood water. The pump, including the valves and gears, will need to be cleaned of silt and sand. If the pump is not cleaned and properly lubricated, it can burn out. Get help from a well or pump contractor who will be able to clean, repair or maintain different types of pumps.

Emergency Disinfection of Flooded Wells

Before disinfection: Check the condition of your well. Make sure there is no exposed or damaged wiring. If you notice any damage, call a professional before the disinfection process.

The Montana State University Extension Service offers a video explanation of how to disinfect a well using “shock chlorination” at: www.youtube.com/watch?v=MZJ6FxK6cwk&feature=player_embedded

Disinfection Materials:

- Non-scented household liquid bleach
- Rubber gloves
- Eye protection
- Old clothes
- A funnel

Step 1: Turn off the electricity at the well and remove the well cap.

Step 2: To determine how much bleach to add, you need to know the depth of the well.

Shock Chlorination Table	
Total well depth in feet	Cups of bleach for treatment
0-50	5
51-100	7
101-150	10
151-200	12

Step 3: Mix the bleach with 5 gallons of water in a bucket and carefully pour the solution into the well casing.

Step 4: After adding the bleach solution, run water from an outside hose into the well casing until you smell chlorine coming from the hose. Then turn off the outside hose.

Step 5: Turn on all cold water faucets, inside and outside of your house, until you detect a chlorine odor in each faucet. Then shut them all off. If you have a water treatment system, switch it to “bypass” before turning on the indoor faucets.

Step 6: Wait 24-48 hours before turning the faucets back on. **It is important not to drink, cook, bathe, or wash with this water during this time period;** it contains high amounts of chlorine.

Step 7: Once the waiting period is over, turn on an outside spigot with a hose attached and run water into a safe area where it will not disturb plants, lakes, streams, or septic tanks. Run the water until there is no longer any chlorine odor. Turn the water off.

Step 8: The system should now be disinfected, and you can now use the water.

Step 9: Have your water tested for bacteria 7-14 days after disinfection.

Well disinfection will not provide protection from pesticides, heavy metals, and other types of non-biological contamination. If you suspect such contamination, special treatment is required.

Sampling and Testing Well Water

These laboratories in Billings test water for contamination.

- Energy Laboratories, 406.252.6325
- Pace Analytical Service, 406.254.7226

If you have questions about the safety of your well water, contact RiverStone Health Environmental Health Services 406.256.2770.

USE ONLY PROPERLY DISINFECTED WATER FOR DRINKING, COOKING, MAKING DRINKS (INCLUDING BABY FORMULA), OR BRUSHING TEETH

Use **bottled water** that has not been exposed to flood waters if it's available.

If you don't have bottled water, you should **boil water** to make it safe. Boiling will kill most types of disease-causing organisms that may be present. If the water is cloudy, filter it through clean cloths or allow it to settle, then draw off the clear water for boiling. **Boil the water for 5 minutes**, let it cool, and store it in clean containers with covers.

If you can't boil water, **disinfect it using household bleach**. Bleach will kill some, but not all, types of disease-causing organisms. If the water is cloudy, filter it through clean cloths or allow it to settle, then draw off the clear water for disinfection. **Add 5 drops** of regular, unscented, liquid household bleach **for each quart of water**, stir it well, and let it stand for 30 minutes before you use it. Store in clean containers with covers.