

Guide for Chlorine Bleach Disinfection

This chart is a guide for the amount of chlorine bleach to use for well and plumbing system disinfection. Do not use scented bleach or bleaches containing other additives.

The bleach should be diluted with 10 parts water. For example, dilute 1 cup of bleach with 10 cups of water before pouring it into your well.

| 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 | |

Please contact your **county health department** or the **Florida Department of Health**, Bureau of Water Programs at **850.245.4240**, if you have questions regarding the information in this pamphlet.

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DH 150-989, 8/08 Stock# 5730-989-0150-6



What Should I Do if My Well is Flooded?



If flood waters have reached your well, 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 (be sure to cool the water first). The water should be brought to a rolling boil for at least one minute. Bottled water may also be used for all of these purposes.

Is my water safe to drink after the flooding subsides?

No—If your well has been flooded, you should first contact your county health department for information on how to sample your water and where to bring the sample for bacteriological testing. If the test reveals bacteria, the well and water system need to be disinfected.

How do I disinfect my well?

It is important to disinfect both the well and plumbing with chlorine bleach to ensure that all infectious agents are killed. If you have water treatment devices, remove all membranes, cartridges, and filters and replace them after the chlorination process is completed.

The amount of chlorine and the length of time you allow it to remain in your system are equally important. Common unscented laundry bleach can be used effectively as a chlorine disinfectant. See the chart for the recommended amounts of chlorine bleach to use and follow these steps:



- If the water is discolored before chlorination, run the water until it is clear. This may take up to 10 minutes or longer.
- Turn off and then drain your hot water heater—chlorine is not effective in water above 105 degrees.
- Remove and replace charcoal filters after the chlorination process is completed.
- To avoid adding contamination to the well during disinfection, first clean the work area around the top of the well. Remove grease and mineral deposits from accessible parts of the well head and flush the outside surfaces with 1/2 cup of laundry bleach in 5 gallons of water.
- Turn off 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, you should contact a licensed well driller. If you have a submersible pump, you may also want to contact a licensed well driller for advice on disinfection procedures.

- Consult the chlorine bleach chart and pour the recommended amount of bleach solution into the well. Try to coat the sides of the casing as you pour. If you get chlorine on the pump or wiring, flush it thoroughly with fresh water to prevent later corrosion. Your county health department may issue additional guidance for your area.
- Re-cap or plug the well opening and wait 30 minutes.
- Turn on and, if needed, reprime the pump. Open all of the faucets on the system one by one. Allow the water to run until there is a noticeable smell of chlorine. 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 chlorine odor, re-chlorinate the well.
- Turn off all of the faucets and allow the chlorine to remain in the system for at least eight hours.
- Backwash water softeners, sand filters, and iron removal filters with chlorinated water.
- Again open all of the faucets and run the water until there is no chlorine smell—for up to 15 minutes.

Is it safe now?

The only way to verify that the water is safe to drink is to have it tested. Although chlorine bleach is effective against microorganisms, it will not remove chemical contamination that may have gotten into your well. Contact your county health department for sampling instructions to get your water tested.