



Commonwealth of Kentucky Energy and Environment Cabinet

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FOR IMMEDIATE RELEASE

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Kentucky Division of Water provides guidance on flooding and well water safety

FRANKFORT, KY – (May 4, 2010) – During a flood, there is an increased risk that drinking water wells may become contaminated with bacteria or other micro-organisms.

Well water risk factors resulting from flood conditions include the following:

- Groundwater sources are open to the surface
- Wells are located in pits or depressions where water has pooled
- Wells have unsealed casings that do not extend at least one foot or more above the ground or have rusted casings
- Wells are located near unsealed abandoned wells
- Wells are near septic tanks or fields barns, feed lots, sinkholes or quarries
- Nearby wells are contaminated with bacteria
- Water in the well changes in color, clarity or odor

The water quality in private wells and cisterns used for drinking water is not regulated by the state of Kentucky or by the U.S. Environmental Protection Agency (EPA). Households using well water for drinking water must take special precautions to ensure the protection and maintenance of their drinking water supplies – especially during flood conditions. Contact your [local health department](#) to have well water tested.

Drilled, driven or bored wells are best disinfected by a well or pump contractor, because it is difficult for the private owner to thoroughly disinfect these wells.

Unlike public drinking water systems serving many people, they do not have experts regularly checking the water's source and its quality before it is sent to the tap. These households must take special precautions to ensure the protection and maintenance of their drinking water supplies.

Well and Pump Inspection

Do not turn on the pump. There is danger of electrical shock and damage to your well or pump if they have been flooded.

Swiftly moving flood water can loosen well hardware, dislodge well construction materials or distort casing. 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.

All pumps and their electrical components, including valves and gears, need to be cleaned and properly lubricated or they may burn out.

Emergency Disinfection of Flooded Wells

Materials needed:

- One gallon unscented household liquid bleach
- Rubber gloves
- Eye protection
- Old clothes
- Funnel

Note: *Proceed with this procedure only after confirming there are no exposed or damaged wiring. Otherwise, call a professional before performing the disinfection process.*

Step 1 – If your water is muddy or cloudy, run the water from an outside spigot with a hose attached until the water becomes clear and free of sediments.

Step 2 – Determine what type of well you have and how to pour the bleach into the well. Some wells have a sanitary seal with either an air vent or a plug that can be removed. If it is a bored or dug well, the entire cover can be lifted off to provide a space for pouring bleach. If you have a water treatment system (softener, salt filter, green sand or similar unit), switch it to “bypass” before disinfecting the system.

Step 3 – Using the funnel, pour the bleach down the well casing.

Step 4 – 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 the house, until the chlorine odor is detected in each faucet, then shut them off. Repeat the process with the hot water faucets. Be sure to run your washer and dishwasher until you detect the chlorine odor. You should also flush the toilets until you smell chlorine.

Step 6 – Wait 12 to 24 hours before turning the faucets back on. It is important not to drink, cook, bathe or wash with this water during this time due to high levels of chlorine.

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

Step 8 – You may now use the water but you may want to refrain from using it for cooking and drinking until it has been tested for bacteria.

Step 9 – Have your water tested for bacteria 7 to 10 days after disinfection.

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