

DISINFECT AND TEST FLOODED WELLS

Cooperative Extension Service * University of Illinois at Urbana-Champaign * Disaster Resource

If you are a private well owner, and a natural disaster has occurred on or near your property, there are some things you should know about your drinking water supply.

Once a flood or tornado (with flash flooding) has occurred it is worth checking your well for bacterial infiltration. During a flood of major proportions, bacteria has most likely infiltrated the well. At this point if you are planning to use your well for drinking and cooking purposes, steps toward disinfecting the well should begin. Shock chlorination is the preferred method for eliminating bacterial contamination in wells.

To disinfect a well contaminated with coliform bacteria (bacteria from the intestines of animals or humans), you'll need to chlorinate using a chemical disinfectant such as chlorine tablets or liquid chlorine in required proportions. For drill wells, you'll have to disassemble the top of the casing. For bored or dug wells, open the cover and then add the disinfectant. To kill the pathogens (disease causing organisms) in well water requires a chlorine concentration of at least 100 parts per million (ppm). The chlorine solution must remain in the well for a 24-hour period, preferably overnight, before it is pumped out.

In addition to disinfecting the well, you should also disinfect the plumbing system in the home and other buildings on your property which rely on the well water. To do this, turn on all water faucets after the chlorine is added to the well. When a chlorine odor is detected in the taps, turn off the faucets. Do not use the water lines for several hours (again preferably overnight). After allowing the water to stay in the pipes overnight, you can open the faucets and let the water run until the chlorine smell is no longer present.

Disinfecting the well, however, does not guarantee that the water is free from contamination. After treating the well, take water samples from the well and submit them for testing by a state-certified laboratory. Most labs charge a fee for this service.

Once you have completed shock chlorination, you can use the well water for washing and uses other than drinking. Use the water for about a week and then have the water tested for pathogens, such as Total Coliforms and Fecal Coliforms. If the tests show no contamination, the water can be used for drinking.

The New York Department of Public Health has a laboratory equipped to test for bacteria. They may ask some questions about your well, including it's age, location on the property and how recently you have had it tested before the natural disaster.