wellcare® information for you about

Managing a Flooded Well

If you live in an area that was recently flooded, your private well may be in danger of contamination from pollutants carried by flood water or at risk of shock from water-logged well equipment.

First Steps

The U.S. Environmental Protection Agency offers the following guidance to private well owners after a flood:

- Do not drink or wash with your well water. You could get sick from contaminants washed into the well by the flood.
- Do not turn on the well pump. There is a danger of electrical shock and damage to your well or pump if they were flooded.
- Contact your well professional for help in dealing with the impacts of the flood on your water quality and well system.

Tests for Contamination

You should suspect water contamination any time your well casing becomes flooded; if your well is shallow and you are near areas that have been flooded; or if you notice taste, color or sediment changes in your water.

Flood conditions can allow bacterial, viral, parasite or chemical contamination to enter the top of your well or seep down along your well's casing. Even if flood water did not rise over the top of your well casing, your neighbor's well may have been flooded, allowing contamination to migrate underground to your well.

Once you suspect your drinking water is contaminated, find an alternative source for drinking, cooking and washing. You can get water from a neighbor's well you know is safe or from a community water supply, or you can purchase bottled water. If you can't find a convenient source of safe water, boil your well water for five minutes before use.

Before you resume using your well, collect a water sample and have it tested for bacteria by a certified laboratory. Laboratories can be found in the Yellow Pages or through your local or state health department. For help, review the wellcare® information sheet Drinking Water Testing.

If the sample tests positive for coliform bacteria, it is not safe to drink. Coliform bacteria are an easily identified class of bacteria used by health officials as a warning that other illness-causing bacteria may be present. If your well is positive for coliform bacteria, ask the laboratory to test for E. coli bacteria. The presence of E. coli usually indicates disease-causing bacteria are in your water.

Disinfecting the Well

If tests indicate your well is contaminated with E. coli bacteria, you should have the well and the entire plumbing system disinfected using a shock chlorination process. A licensed well driller or pump installer has the equipment, materials and expertise to eliminate bacterial contamination.

You may do this work yourself if you carefully follow the directions. wellcare® information sheet Drinking Water Treatments offers a step-by-step guide. Always have your water quality tested a second time after it is treated with chlorine or any other process.

Distributed by Jefferson County Public Health September 2013 303-271-5700

Check the Well and Pump

Flood water can carry large debris that can loosen well hardware, dislodge well construction materials or distort the well casing, particularly on older wells. Coarse sediment and flood water can erode pump and electrical components.

After the flood has receded and the pump and electrical system are dry, ask your well professional to check the well system. The pump, including the valves and gears, may need to be cleaned of silt and sand.

Do not turn on the equipment until the wiring system has been checked by your well professional or a qualified electrician. If the pump's control box was flooded, all electrical fittings must be dry before service can be restored. There is a risk of shock and damage to your well and pump if the system is not dry and clean.

Protecting Your Well from Flood

After a flood, ask your well professional if your well casing pipe should be raised to a height of at least two feet above the regional flood elevation for your location. This is usually the height of the water during a 100-year flood event.

For more information on managing a flooded well

U.S. Environmental Protection Agency: www.epa.gov/safewater/consumer/whatdo.htm

Wisconsin Department of Natural Resources: www.dnr.state.wi.us/org/water/dwg/flood.htm

wellcare® information sheets – *Drinking Water Testing* and *Drinking Water Treatments* – available in print by calling 888-395-1033 or online at www.watersystemcouncil.org/wellcare/infosheets.cfm

For more information on your drinking water

The following sites provide up-to-date information on efforts to protect public water supplies and steps you can take as a private well owner:

Home*A*Syst Program	**www.uwex.edu/homeasyst**
Water Quality Association	**www.wqa.org**
The Groundwater Foundation	**www.groundwater.org**
American Water Works Association	**www.awwa.org**

For more information about wells and other wellcare® publications

wellcare® is a program of the **Water Systems Council (WSC). WSC** is a national non-profit organization dedicated to promote the wider use of wells as modern and affordable safe drinking water systems and to protect ground water resources nationwide.

Contact us at 888-395-1033 or visit www.wellcarehotline.org or www.watersystemscouncil.org

This publication was developed in part under Assistance Agreement No. X-82849101-1 awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by EPA. The views expressed in this document are solely those of WSC. EPA does not endorse any products or commercial services mentioned in this publication.