

# 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**

Below is a quick overview of advisories that should be followed 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 contractor 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.

If 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 before use. Boil the water vigorously for one minute. If you live in an altitude greater than one mile above sea level, increase boiling time to three minutes. For more information on boiling your water, see our wellcare® information sheet *What You Need to Know if You Are Told to Boil Your Drinking Water*.

Before you resume using your well, collect a water sample and have it tested for bacteria by a state certified laboratory. Contact your local or state health department for a list of state certified laboratories in your area or contact the wellcare® Hotline for assistance.

If the sample tests 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 and it is not safe to drink, cook with, or wash with.

## **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 contractor has the equipment, materials and expertise to eliminate bacteria contamination.

# wellcare® information for you about Emergencies & Disasters and Wells

Natural disasters and emergencies such as flood, fire, hurricanes, tornados, and wind storms affect thousands each year. If you are a private well owner, and a natural disaster has occurred on or near your property, there are some things you need to know about your drinking water supply.

## Concerns and Advisories

If in doubt about your water supply, follow local or state health department drinking and bathing advisories.

Remember that there is danger of electrical shock from any electrical device that has been flooded; consult a certified electrician. Rubber boots and gloves are not adequate protection from electrical shock.

Septic systems should not be used immediately after floods. Drainfields will not work until underground water has receded. Septic lines may have been broken during flooding or other storms. Contact a local plumber or septic service immediately.

For information on long-term water quality conditions in the area or information on home water treatment devices contact your local or state health department, the wellcare® Hotline at 888-395-1033, or the Water Quality Association (WQA) at 630-505-0160 for assistance.

## Conditions at the Well

Moving flood water or high winds can carry large debris that could loosen well hardware, dislodge well construction materials or distort casing. Coarse sediment in flood waters could erode pump components. If the well is not tightly capped, sediment, debris, and flood water could enter the well and contaminate it. Wells that are more than ten years old or less than 50 feet deep are likely to be contaminated, even if there is no apparent damage. Floods or heavy debris may cause some wells to collapse.

### **IMPORTANT!**

#### **DANGER OF ELECTRICAL SHOCK MAY OCCUR.**

**DO NOT** turn on the equipment until the wiring system has been checked by a qualified electrician, well or pump contractor.

## Electrical System and Pump Operation

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 or pump contractor.

**Disinfection Option 2: Chlorination**

Chlorinate the water with unscented chlorine bleach which contains the disinfecting agent sodium hypochlorite (NaClO). Use a new bottle of bleach, if possible, to ensure the potency of the chlorine. Stir 16 drops of bleach for every gallon of water and let stand for 30 minutes. You can monitor the effectiveness of treatment by smelling a slight chlorine odor from the water. If you cannot identify a slight chlorine odor after 1 or 2 doses, find a new source of water.

**Disinfection Option 3: Distillation**

Distillation is a very effective treatment option for all types of contaminants. Even if the authorities are not sure about what contaminants may be present. Distillation can be used for removing microbiologicals, metals, salts, and other contaminants of concern. It involves boiling the source water and collecting the vapor that condenses back to water. You can make one of these yourself, or purchase one from a water treatment professional. Visit [www.fema.gov](http://www.fema.gov) to learn more about how to make one yourself, or contact a water professional ([www.WQA.org](http://www.WQA.org)) to purchase a distillation system for your home.

**Disinfection Option 4: Water Treatment device certified for microbial reduction**

Many water treatment devices have been certified to the USEPA microbiological guide, NSF P231, or other standard for the reduction of microorganisms. To find a certified device, contact a water treatment professional or search product listings at [www.wqa.org](http://www.wqa.org) or [www.nsf.org](http://www.nsf.org).

If well or tap water is not accessible in the home, as a last resort, water can be collected from an outdoor surface water, strained with a clean towel or coffee filter to help remove other naturally-occurring contaminants and treated with one of the above methods.

**Emergency Disinfection of Your Well**

After the power has been restored, you will need to disinfect your well. Clear hazards away from wells before disinfecting. It is best to have your well disinfected by a well professional. During an emergency, it may not be possible to contact a well professional. In this case, refer to our wellcare® information sheet *Disinfecting Your Well* for complete instructions. It is important to note that disinfection will not remove pesticides, heavy metals, and other types of non-biological contamination.

Do not drink or cook with the water until a water test is performed and confirms there are no harmful contaminants in your water.

**Testing Your Well Water**

You should have your well water tested after disinfecting your well to confirm bacteria is gone and other contaminants are not present. For more information on testing your water, refer to our wellcare® information sheet *Well Water Testing*.

Contact your local or state health department to have your water tested or to get a referral to a state certified laboratory that can perform water testing. If you need assistance, contact the wellcare® Hotline at 888-395-1033.

**Your Septic System**

You should not use the sewage system until water in the soil absorption field is lower than the water level around the house. Have your septic tank professionally inspected and serviced if you suspect damage.

The Federal Emergency Management Agency (FEMA) provides a disaster assistance website to help with everything from your home and health to your business and replacing important documents. Visit their website at [www.fema.gov](http://www.fema.gov).

The Water Quality Association (WQA) provides water treatment resources and information for residential and commercial use. Visit their website at [www.wqa.org](http://www.wqa.org).

*This information sheet was created in collaboration with the Water Quality Association. The Water Quality Association (WQA) is a not-for-profit international trade association representing the residential, commercial and industrial water treatment industry. For more information on WQA and their programs visit their website at [www.wqa.org](http://www.wqa.org).*

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**FOR MORE INFORMATION to help maintain and protect your water well system:**



wellcare® is a program of the **Water Systems Council (WSC)**. WSC is the only national organization solely focused on protecting the health and water supply of more than 13 million households nationwide who depend on private wells.

This publication is one of more than 100 wellcare® information sheets available **FREE** at [www.watersystemscouncil.org](http://www.watersystemscouncil.org).

Well owners and others with questions about wells and well water can contact the **wellcare®** Hotline at 1-888-395-1033 or visit [www.wellcarehotline.org](http://www.wellcarehotline.org) to fill out a contact form or chat with us live!

**JOIN THE WELLCARE® WELL OWNERS NETWORK!**

By joining the **FREE wellcare®** Well Owners Network, you will receive regular information on how to maintain your well and protect your well water.

Contact us at 1-888-395-1033 or visit [www.wellcarehotline.org](http://www.wellcarehotline.org) to join!