



K A N S A S

**DEPARTMENT OF
ENVIRONMENTAL SERVICES**

DEPARTMENT OF HEALTH AND
ENVIRONMENT

City of Wichita Department of Environmental Services Recommends Precautions if Community Impacted by Flood Waters

Recent heavy rains in Wichita and portions of Sedgwick County, Kansas may result in flooding. The City of Wichita Department of Environmental Services will provide information and work with citizens to protect public health in flooded areas of the community.

Precautions need to be taken in areas where floodwaters or high ground water have impacted homes. Basements need to be well ventilated to prevent mold and accumulation of soil gas. Also, floodwaters can contaminate drinking water from wells, adulterate food items stored in homes, and leave a layer of contaminants on furnishings. Following are recommendations on ways to ensure safety:

Flooding of Private Wells:

If a private drinking water well has been flooded, the water may not be safe to drink. The Kansas Department of Health and Environment and the City of Wichita recommends the following steps be taken before drinking the water:

1. Contact the Department of Environmental Services at 268-8351 to report your flooded, private well. Follow the boil water advisory below until steps two through five are completed.
2. The Department of Environmental Services can provide instruction on how to properly shock chlorinate your well to kill any bacterial contaminants that may have entered the well through the floodwaters.
3. After you have completed shock chlorinating your well, arrangements can be made for the department water quality staff to inspect your well and collect a sample. The sample will be analyzed to determine if there are bacterial contaminants present.
4. Once the results of the sample analysis are available, the department will contact you to discuss the sample results and give you further instructions, if necessary.
5. The Department of Environmental Services can also provide instructions on proper clean up of your home if it has been flooded.

Boil Water Procedure:

1. Boiling procedure: Bring water to a vigorous rolling boil and sustain boiling for a minimum of one minute. Boiling longer than three minutes may adversely affect the quality and taste of the water.
2. Use only boiled or bottled water for drinking, diluting fruit juices, and all other food preparation.
3. Dispose of ice cubes and do not use ice from a household automatic icemaker. Remake ice cubes with water that has been boiled.
4. Disinfect dishes and other food contact surfaces by immersion for a least one minute in clean tap water that contains one teaspoon of unscented household bleach per gallon of water.
5. Water used for bathing does not generally need to be boiled. Supervision of children is necessary while bathing or using backyard pools so that water is not ingested. Persons with cuts or severe rashes may wish to consult their physicians.

Instructions for cleaning and disinfecting flooded private water wells:

1. Pump the well out thoroughly to remove all floodwater.
2. Remove all mud, silt, and sediment from the well. The walls and curbing of dug wells should be washed down to remove any mud or sediment that may have collected on the walls. Bailers may be needed to remove mud from the bottom of the wells.
3. Repair the well, if necessary, to prevent surface water from entering the well. Sediment in a drilled, cased well reaches the groundwater through rapid percolation in sandy or alluvial soils or by direct flow among the casing of improperly grouted wells.
4. Pump the well until the water runs clear.
5. Disinfect the well. For drilled wells, mix one gallon of laundry bleach containing at least 5.25% active ingredient (Clorox, Purex, etc.) with five gallons of water. For hand dug wells, use two gallons of bleach. Pour this solution into the well and mix. For shallow wells, a reinforced garden hose may be used to distribute the solution in the well vertically. Run water from each tap and faucet until the smell of chlorine is present. When the chlorine smell is present at all outlets, allow the chlorine to remain in the system for 12 hours. After this period of time, run the water until the taste and smell of chlorine is no longer present.
6. Approximately 10 to 14 days after the well has been cleaned, repaired, and disinfected, the county health department should be contacted to collect a sample for bacterial analysis.

Food Safety: Before considering a food product safe, carefully inspect it. Many products can become contaminated even if they are in a container. When in doubt, throw it out.

Don't eat or save the following foods if they have come into contact with floodwaters:

- Any food items remaining in opened containers or packages, foil or plastic-wrapped packages, unopened jars and bottles with paper seals like mayonnaise or with paraffin seals like jams and jellies, or containers with non-sealed, fitted lids like cocoa or baking powder.
- Spices, seasonings, flavorings, sugar, coffee, flour and other grains.
- Any food items in paper, cloth fiber, or cardboard boxes even if they seem dry (e.g., cereals, pasta, rice, cookies, and crackers).
- Food items stored in containers with dented seams, or which are bulging, rusty or leaking, and cans which have been tossed about and are found far from their normal storage spot.
- Commercially bottled carbonated beverages like soda if the cap is crusted with silt.
- Fresh foods including vegetables and fruits or meat, fish and poultry.

KDHE recommends against trying to salvage garden produce, but if you do, thoroughly wash and disinfect before eating it. Wash in a strong detergent solution with a scrub brush to remove silt. Follow this by immersing produce in a cold chlorine solution for 15 to 20 minutes. Rinse thoroughly with safe drinking water. Peel, if possible, and heat before eating.

Since household bleaches contain different percentages of chlorine, the following dilutions should be used:

- 2% chlorine: add 4 tablespoons per gallon water,
- 4% chlorine: add 2 tablespoons per gallon water,
- 6% chlorine: add 1 tablespoon per gallon water.

Efficient and careful cleaning after a flood helps to curb sanitation problems resulting from the contaminants carried in floodwaters. These contaminants include silt, oils, chemicals, and raw sewage. Rodents and insects often find a haven in the mess left from the floodwaters.

Basements hit by floodwaters require disinfecting and cleaning. Don't remove water from the basement too quickly or the pressure from the saturated soil surrounding the basement may cause the walls to collapse. Also, check to see if the sewers are flowing properly before pumping floodwaters out of the basement or you risk pumping wastewater into your basement. Water removal may take two to three days. Wear rubber gloves during the clean-up to avoid contact with possibly contaminated water.

Once water and mud are removed, hose or scrub the walls and floor with clear water. Clean the floor drains and restore them to operating condition. Rinsing the walls and floor with a chlorine solution will help disinfect your basement. If your basement has any metal, use a strong detergent or soap on these parts. Don't use chlorine on metal.

To help air out the basement, open windows and doors. Window exhaust fans can be helpful, but take care in selecting a place to put the fan to avoid risk of electrical shock.

Before beginning a flood clean-up, check to see if your tetanus booster shot is current. Tetanus spores may have been carried in the silt carried by a flood. If this bacillus enters a cut or scratch lockjaw can result. All cuts and scratches should be cleaned and disinfected thoroughly.

For more information:

http://www.kdheks.gov/disaster_recovery.htm