

McPherson County Health Department
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HEALTH AND SAFETY RECOMMENDATIONS

IN RESPONSE TO FLOODING

The Kansas Department of Health and Environment (KDHE) is providing the following recommendations to protect public health and safety, in response to flooding that has occurred.

-Storm and flood survivors should return home only when authorities indicate it is safe to do so.

-Avoid floodwaters if possible. Floodwaters may be contaminated by oil, gasoline, or raw sewage and underwater debris which could be very dangerous. Water may also be electrically charged from underground or downed power lines. Stay away from downed power lines, and report them to the power company.

-Anyone who has been affected by flooding, especially first responders, should make sure their tetanus vaccinations are up to date. Anyone who can't remember when they last got a tetanus shot should get vaccinated to be safe. Contact McPherson County Health Department (620-241-1753) or your local provider for information.

-Listen for news reports to learn whether the community's water supply is safe to drink. If there is any chance that drinking water is unsafe, boil it for at least one minute then allow it to cool before drinking.

-Avoid moving water to reduce risk of drowning.

-Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.

-Stay out of any building if it is surrounded by floodwaters, due to risk of collapse.

-Use extreme caution when entering buildings. There may be hidden damage, particularly in foundations.

-Service damaged septic tanks, cesspools, pits and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.

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, flavoring, sugar, 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 the produce in a strong detergent solution with a scrub brush to remove silt. Follow this by immersing produce in a cold chlorine solution for 15-20 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 of water
- 4% chlorine: add 2 Tablespoons per gallon of water
- 6% chlorine: add 1 Tablespoon per gallon of 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.

CLEANING YOUR HOME: 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. 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 shots are available at the McPherson County Health Department (620-241-1753) or your local provider (785-227-3341)

CARBON MONOXIDE (CO) poisoning: Generators and gasoline engines are often used when there are power outages. CO is a poisonous gas found in combustion fumes, such as those produced by small gasoline engines, stoves and generators. CO cannot be seen or smelled and can kill in minutes. Tips to avoid CO poisoning:

- Never run a generator or any gasoline-powered engine inside a basement, garage or other enclosed structure, even if the doors and or windows are open, unless the equipment is professionally installed and vented. Keep vents and flues free of debris, especially if winds are high. Flying debris can block ventilation lines.
- Never run a motor vehicle, generator or any gasoline-powered engine outside an open window, door or vent where exhaust can vent into an enclosed area.

How to Recognize CO Poisoning: Exposure to CO can cause loss of consciousness and death. The most common symptoms of CO poisoning are headache, dizziness, weakness, nausea, vomiting, chest pain and confusion. People who are sleeping or who have been drinking alcohol can die from CO poisoning before ever having symptoms. If CO poisoning is suspected, consult a health care professional right away.

MOLD CLEANUP: Take things that were wet for two or more days outside. Things that stayed wet for two days have mold growing on them even if you can't see it. Discard items that are made of cloth unless you can wash them in hot water. Remove items that can't be cleaned easily (like leather, paper, wood, and carpet). Use bleach to clean mold off hard surfaces (like floors, stoves, sinks, certain toys, countertops, flatware, plates and tools). Follow these steps:

- Never mix bleach with ammonia or other cleaners.
- Wear rubber boots, rubber gloves, goggles and a dust mask.
- Open windows and doors to get fresh air when you use bleach.
- Mix no more than 1 cup of bleach in 1 gallon of water.
- Wash the item with the bleach and water mixture.
- If the surface of the item is rough, scrub the surface with a stiff brush.
- Rinse the item with clean water.
- Dry the item or leave it out until thoroughly dry.

SEWAGE BACKUP. If a sewage backup has occurred, the following steps should be taken to clean up the area:

1. First of all, remove the remaining standing water. Materials which have been water soaked should be removed. Such items could include bedding, rugs, upholstered furniture, boxes, carpeting and padding, and papers.
2. With the electricity turned off, electrical outlets should be opened and drained and allowed to dry. Ductwork should also be drained and allowed to dry.

3. Walls and hard-surfaced floors should be cleaned with soap and water and disinfected with a solution of one-half cup of bleach to one gallon of water. Thoroughly disinfect any food service areas or areas where children play.
4. Wash all linens in hot water or have them dry cleaned. Steam clean all carpeting, if salvageable. If not discard. All carpet padding should be discarded.
5. If insulation and sheetrock have become wet, it will need to be removed. Allow plenty of time for drying before reinstalling insulation to prevent mildew.

Personal Hygiene for Cleaning Sewage Backup:

- Wear rubber boots and waterproof gloves during a cleanup of sewage.
- Wash hands with soap and water before preparing or eating food and after handling articles contaminated with sewage.
- Avoid smoking while working in the sewage-contaminated water.
- If you have any cuts or sores which will be exposed to this water, wash them thoroughly afterwards to control infection. If a wound develops redness, swelling, or drainage, seek immediate medical attention.
- Disinfect toys using a solution of 1/8 cup of unscented bleach in 2 gallons of water.
- Anyone receiving a puncture wound or a cut while cleaning up should have a doctor determine whether a tetanus booster is necessary.

Instructions for cleaning and disinfection **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 unscented laundry bleach containing at least 5.25% active ingredient (Clorox, Purex, etc.) with four gallons of water. These five gallons of chlorine solution should be sufficient to disinfect 100 gallons of well capacity. Most domestic private wells will have a volume of less than 100 gallons. For instance, a 4-inch well that is 100 feet deep will have a volume of 65 gallons. For hand-dug wells, use two gallons of bleach. Pour this solution into the well and mix. For shallow wells, 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, from each tap and faucet.
6. Approximately 10 to 14 days after the well has been cleaned, repaired, and disinfected, the McPherson County Health Department should be contacted to collect a sample for bacterial analysis.