

RESOURCE TOOLKIT FOR FLOODING OF A FOOD ESTABLISHMENT

This toolkit has been assembled with resources to help manage food establishments safely during flooding.

This toolkit includes:

- FEMA's Guide to Building an Emergency Supply Kit
- Be Prepared for a Flood
- How to Make a Temporary Handwashing Station with Potable Water
- DANGER: Generator Safety
- DANGER: Generator Safety, Spanish
- Food Safety After Flooding
- Employee Safety After Flooding

ADDITIONAL RESOURCES:

FEMA BE PREPARED FOR A FLOOD
<https://www.ready.gov/floods>

CDC Disinfection of Drilled or Driven Wells After a Disaster
<https://www.cdc.gov/disasters/wellsdisinfect.html>

CDC Disinfection of Bored or Dug Wells After an Emergency
<https://www.cdc.gov/healthywater/emergency/drinking/disinfection-wells-bored.html>

CO Poisoning After a Disaster- CO Safety Links
<https://www.cdc.gov/disasters/carbonmonoxide.html>

CDC Clean Up Safety After a Disaster- Safety, Mold, Hygiene and Preventing Disease, Potential Hazards
<https://www.cdc.gov/disasters/cleanup/facts.html>

CDC Cleaning and Sanitizing with Bleach after an Emergency
<https://www.cdc.gov/disasters/bleach.html>

TANEY COUNTY HEALTH DEPARTMENT
417-334-4544

Taney County Health Department is continuously creating additional resources that can be found on our website (www.taneycohealth.org), Facebook page, Twitter, and on Instagram.

Please visit these sites for resources and like and share our posts.





Additional Items to Consider Adding to an Emergency Supply Kit:

- Prescription medications and glasses
- Infant formula and diapers
- Pet food and extra water for your pet
- Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container
- Cash or traveler's checks and change
- Emergency reference material such as a first aid book or information from www.ready.gov
- Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.
- Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.
- Household chlorine bleach and medicine dropper – When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- Fire Extinguisher
- Matches in a waterproof container
- Feminine supplies and personal hygiene items
- Mess kits, paper cups, plates and plastic utensils, paper towels
- Paper and pencil
- Books, games, puzzles or other activities for children



Ready

Prepare. Plan. Stay Informed.®



Emergency Supply List



FEMA

www.ready.gov



Recommended Items to Include in a Basic Emergency Supply Kit:

Water, one gallon of water per person per day for at least three days, for drinking and sanitation

Food, at least a three-day supply of non-perishable food

Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both

Flashlight and extra batteries

First aid kit

Whistle to signal for help

Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place

Moist towelettes, garbage bags and plastic ties for personal sanitation

Wrench or pliers to turn off utilities

Can opener for food (if kit contains canned food)

Local maps

Through its *Ready Campaign*, the Federal Emergency Management Agency educates and empowers Americans to take some simple steps to prepare for and respond to potential emergencies, including natural disasters and terrorist attacks. *Ready* asks individuals to do three key things: get an emergency supply kit, make a family emergency plan, and be informed about the different types of emergencies that could occur and their appropriate responses.

All Americans should have some basic supplies on hand in order to survive for at least three days if an emergency occurs. Following is a listing of some basic items that every emergency supply kit should include. However, it is important that individuals review this list and consider where they live and the unique needs of their family in order to create an emergency supply kit that will meet these needs. Individuals should also consider having at least two emergency supply kits, one full kit at home and smaller portable kits in their workplace, vehicle or other places they spend time.

Ready 



Federal Emergency Management Agency
Washington, DC 20472

BE PREPARED FOR A FLOOD

Failing to evacuate flooded areas, entering flood waters, or remaining after a flood has passed can result in injury or death.



FEMA

FEMA V-1005/ March 2018

Flooding is a temporary overflow of water onto land that is normally dry. It is the most common natural disaster in the U.S.



Results from rain, snow, coastal storms, storm surge, and overflows of dams and other water systems



Develops slowly or quickly. Flash floods can come with no warning



Causes outages, disrupt transportation, damage buildings, create landslides

IF YOU ARE UNDER A FLOOD WARNING, FIND SAFE SHELTER RIGHT AWAY

Do not walk, swim, or drive through flood waters.



Stay off bridges over fast-moving water.



Determine your best protection based on the type of flooding.



Evacuate if told to do so.



Move to higher ground or a higher floor.



Stay where you are.

HOW TO STAY SAFE

WHEN A FLOOD THREATENS

Prepare NOW

Know your area's type of flood risk. Visit FEMA's Flood Map Service Center at <https://msc.fema.gov/> portal for information.

Sign up for your community's warning system. The Emergency Alert System (EAS) and National Oceanic and Atmospheric Administration (NOAA) Weather Radio also provide emergency alerts.

If flash flooding is a risk in your location, monitor potential signs such as heavy rain.

Learn and practice evacuation routes, shelter plans, and flash flood response.

Gather supplies in case you have to leave immediately or if services are cut off. Keep in mind each person's specific needs, including medication. Don't forget the needs of pets. Obtain extra batteries and charging devices for phones and other critical equipment.

Obtain flood insurance. Homeowner's policies do not cover flooding. Get flood coverage under the National Flood Insurance Program (NFIP).

Keep important documents in a waterproof container. Create password-protected digital copies.

Protect your property. Move valued items to higher levels. Declutter drains and gutters. Install check valves. Consider a sump pump with a battery.

Survive DURING

Depending on where you are, and the impact and the warning time of flooding, go to the safe location that you have identified.

If told to evacuate, do so immediately. Never drive around barricades. Local responders use them to safely direct traffic out of flooded areas.

Listen to EAS, NOAA Weather Radio, or local alerting systems for current emergency information and instructions.

Do not walk, swim, or drive through flood waters. Turn Around. Don't Drown.® Just six inches of fast-moving water can knock you down, and one foot of moving water can sweep your vehicle away.

Stay off of bridges over fast-moving water. Fast-moving water can wash bridges away without warning.

If your vehicle is trapped in rapidly moving water, stay inside. If water is rising inside the vehicle, seek refuge on the roof.

If trapped in a building, go to its highest level. Do not climb into a closed attic. You may become trapped by rising floodwater. Go on the roof only if necessary. Signal for help.



FEMA

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Be Safe AFTER

Listen to authorities for information and instructions.

Avoid driving, except in emergencies.

Be aware that snakes and other animals may be in your house. Wear heavy gloves and boots during clean up.

Avoid wading in floodwater, which can contain dangerous debris and be contaminated. Underground or downed power lines can also electrically charge the water.

Use a generator or other gasoline-powered machinery **ONLY** outdoors and away from windows.

Be aware of the risk of electrocution. Do not touch electrical equipment if it is wet or if you are standing in water. If it is safe to do so, turn off the electricity to prevent electric shock.

Take an Active Role in Your Safety

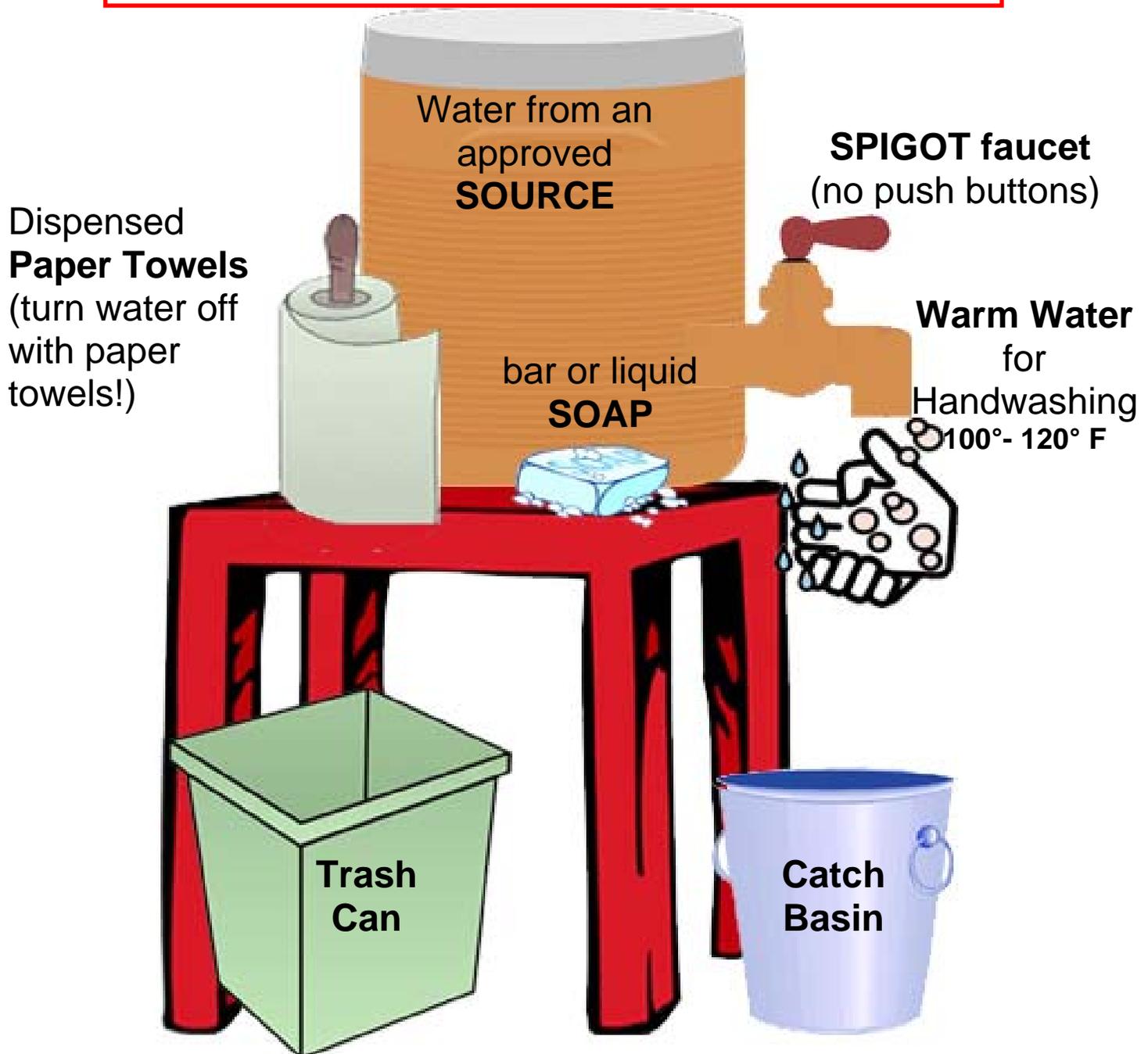
Go to **ready.gov** and search for **flood**. Download the **FEMA app** to get more information about preparing for a **flood**. Find Emergency Safety Tips under Prepare.

HANDWASHING STATION

*Use it **OFTEN!***

Use **CLEAN** water jugs:

1. **SANITIZE** with 2 tbsp unscented bleach in 1 gallon of water – **SLOSH** to cover all surfaces.
2. Let **STAND** 5 minutes and **DRAIN**. **DO NOT RINSE!**
3. **FILL** with approved drinking water



DANGER

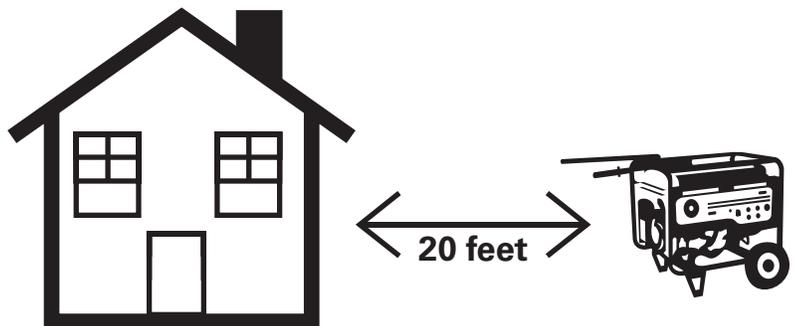
POISON GAS - POISON GAS - POISON GAS CARBON MONOXIDE HAZARD

Using a generator indoors
WILL KILL YOU IN MINUTES.
Exhaust contains a poison gas
you cannot see or smell.



Never use a generator indoors, in garages, or carports.

ALWAYS use a generator outdoors, and at least **20 feet** from windows or doors.



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

¡ADVERTENCIA!

PELIGRO DE INTOXICACIÓN POR MONÓXIDO DE CARBONO

Los vapores del monóxido de carbono pueden ser dañinos o mortales.

Este gas no puede verse ni olerse.



NUNCA use una máquina de lavado a presión adentro.



NUNCA use una máquina de lavado a presión en el garaje, la cochera, ni en otro espacio interior.



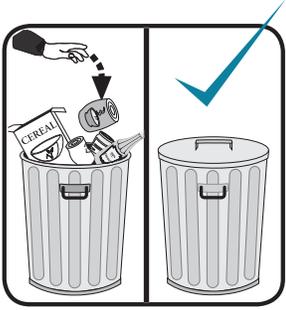
NUNCA use una máquina de lavado a presión cerca de ventanas, puertas o conductos de ventilación abiertos.



**U.S. Department of
Health and Human Services**
Centers for Disease
Control and Prevention

CS 283548

Eat Safe Food



After a flood or power outage, some food may not be safe to eat and must be thrown out.

Read and follow the directions below carefully.

Throw out perishable food (such as meat, fish, eggs, milk, and leftovers) in your refrigerator when the power has been off for 4 hours or more.

Thawed frozen food that still contains ice crystals can be refrozen or cooked. If not, throw it away.

Do the following with food and containers that may have had contact with flood or storm water.

Throw out these foods:

- Food with unusual odor, color, or texture
- Cans or food containers that are bulging, open, or dented
- Food not in waterproof containers or cans
- Food canned at home
- Food in cardboard containers (including juice, milk, and baby formula)
- Food in containers with screw caps, snap lids, crimped caps, twist caps, flip tops, and snap-tops

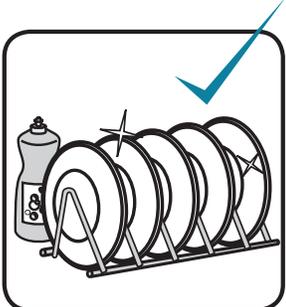
Throw out these things:

- Wooden cutting boards
- Baby bottle nipples and pacifiers

Clean and sanitize things that touch food in a four-step process:

1. Wash with soap and clean water.
2. Rinse with clean water.
3. Sanitize by immersing for 1 minute in a solution of 1 cup (8 ounces or 240 milliliters) of chlorine bleach in 5 gallons of clean water.
4. Allow to air dry.

When in doubt, throw it out.



For more information on safe food and water after a natural disaster, please visit:

www.cdc.gov/disasters/foodwater/facts.html



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



Flooding can cause the disruption of water purification and sewage disposal systems, overflowing of toxic waste sites, and dislodgement of chemicals previously stored above ground. Although most floods do not cause serious outbreaks of infectious disease or chemical poisonings, they can cause sickness in workers and others who come in contact with contaminated floodwater. In addition, flooded areas may contain electrical or fire hazards connected with downed power lines.

Floodwater

Floodwater often contains infectious organisms, including intestinal bacteria such as *E. coli*, *Salmonella*, and *Shigella*; Hepatitis A Virus; and agents of typhoid, paratyphoid and tetanus. The signs and symptoms experienced by the victims of waterborne microorganisms are similar, even though they are caused by different pathogens. These symptoms include nausea, vomiting, diarrhea, abdominal cramps, muscle aches, and fever. Most cases of sickness associated with flood conditions are brought about by ingesting contaminated food or water. Tetanus, however, can be acquired from contaminated soil or water entering broken areas of the skin, such as cuts, abrasions, or puncture wounds. Tetanus is an infectious disease that affects the nervous system and causes severe muscle spasms, known as lockjaw. The symptoms may appear weeks after exposure and may begin as a headache, but later develop into difficulty swallowing or opening the jaw.

Floodwaters also may be contaminated by agricultural or industrial chemicals or by hazardous agents present at flooded hazardous waste sites. Flood cleanup crew members who must work near flooded industrial sites also may be exposed to chemically contaminated floodwater. Although different chemicals cause different health effects, the signs and symptoms most frequently associated with chemical poisoning are headaches, skin rashes, dizziness, nausea, excitability, weakness, and fatigue.

Pools of standing or stagnant water become breeding grounds for mosquitoes, increasing the risk of encephalitis, West Nile Virus or other mosquito-borne diseases. The presence of wild animals in populated areas increases the risk of diseases caused by animal bites (e.g., rabies) as well as diseases carried by fleas and ticks.

Protect Yourself

After a major flood, it is often difficult to maintain good hygiene during cleanup operations. To avoid waterborne disease, it is important to wash your hands with soap and clean, running water, especially before work breaks, meal breaks, and at the end of the work shift. Workers should assume that any water in flooded or surrounding areas is not safe unless the local or state authorities have specifically declared it to be safe. If no safe water supply is available for washing, use bottled water, water that has been boiled for at least 10 minutes or chemically disinfected water. (To disinfect water, use 5 drops of liquid household bleach to each gallon of water and let sit for at least 30 minutes for disinfection to be completed.). Water storage containers should be rinsed periodically with a household bleach solution.

If water is suspected of being contaminated with hazardous chemicals, cleanup workers may need to wear special chemical protective outer clothing and goggles. Before entering a contaminated area that has been flooded, you should don plastic or rubber gloves, boots, and other protective clothing needed to avoid contact with floodwater.

Decrease the risk of mosquito and other insect bites by wearing long-sleeved shirts, long pants, and by using insect repellants. Wash your hands with soap and water that has been boiled or disinfected before preparing or eating foods, after using the bathroom, after participating in flood cleanup activities, and after handling articles contaminated by flood waters. In addition, children should not be allowed to play

in flood waters or with toys that have been in contact with flood waters. Toys should be disinfected.

What to do if Symptoms Develop

If a cleanup worker experiences any of the signs or symptoms listed above, appropriate first-aid treatment and medical advice should be sought. If the skin is broken, particularly with a puncture wound or a wound in contact with potentially contaminated material, a tetanus vaccination may be needed if it has been five years or more since the individual's last tetanus shot.

Tips to Remember

- Before working in flooded areas, be sure your tetanus shot is current (given within the last 10 years). Wounds that are associated with a flood should be evaluated for risk; a physician may recommend a tetanus immunization.
- Consider all water unsafe until local authorities announce that the public water supply is safe.
- Do not use contaminated water to wash and prepare food, brush your teeth, wash dishes, or make ice.
- Keep an adequate supply of safe water available for washing and potable water for drinking.
- Be alert for chemically contaminated floodwater at industrial sites.
- Use extreme caution with potential chemical and electric hazards, which have great potential for fires and explosions. Floods have the strength to move and/or bury hazardous waste and chemical containers far from their normal storage places, creating a risk for those who come into contact with them. Any chemical hazards, such as a propane tank, should be handled by the fire department or police.
- If the safety of a food or beverage is questionable, throw it out.
- Seek immediate medical care for all animal bites.

This is one in a series of informational fact sheets highlighting OSHA programs, policies, or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to *Title 29 of the Code of Federal Regulations*. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999. See also OSHA's website at www.osha.gov.