

81st Readiness Division

WEATHER SAFETY GUIDE



JUNE 2020

Safety Awareness

Hurricane Safety Tips

HURRICANE SAFETY TIPS

The Federal Emergency Management Agency (FEMA) has put together a list of guidelines to help you be safe and ready before, during, and after hurricanes. To learn more about FEMA hurricane guidelines, visit [ready.gov/hurricanes](https://www.ready.gov/hurricanes). Below are a few tips we wanted to highlight for your safety:

Before

To prepare for a hurricane, you should take the following measures:

- To begin preparing, you should build an emergency kit and make a family communications plan.
- Learn community hurricane evacuation routes and how to find higher ground. Determine where you would go and how you would get there if you needed to evacuate.
- Cover all of your home's windows. Permanent storm shutters offer the best protection for windows. A second option is to board up windows with 5/8" marine plywood, cut to fit and ready to install. Tape does not prevent windows from breaking.
- Install straps or additional clips to securely fasten your roof to the frame structure. This will reduce roof damage.
- Plan to bring in all outdoor furniture, decorations, garbage cans and anything else that is not tied down.
- If in a high-rise building, be prepared to take shelter on or below the 10th floor.

During

If a hurricane is likely in your area, you should:

- Listen to the radio or TV for information.
- Secure your home, close storm shutters and secure outdoor objects or bring them indoors. Turn off utilities if instructed to do so. Otherwise, turn the refrigerator thermostat to its coldest setting and keep its doors closed.
- Ensure a supply of water for sanitary purpose such as cleaning and flushing toilets. Fill the bathtub and other larger containers with water.
- Find out how to keep food safe during and after an emergency.

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HURRICANE SAFETY TIPS

You should evacuate under the following conditions:

- If you are directed by local authorities to do so. Be sure to follow their instructions.
- If you live in a mobile home or temporary structure – such shelter are particularly hazardous during hurricane no matter how well fastened to the ground.
- If you live in a high-rise building – hurricane winds are stronger at higher elevations.
- If you live on the coast, on a floodplain, near a river, or on an island waterway.
- Read more about evacuating yourself and your family. If you are unable to evacuate, go to your wind-safe room. If you do not have one, follow these guidelines:
 - Stay indoors during the hurricane and away from windows and glass doors.
 - Close all interior doors – secure and brace external doors.
 - Keep curtains and blinds closed. Do not be fooled if there is a lull; it could be the eye of the storm – winds will pick up again.
 - Take refuge in a small interior room, closet or hallway on the lowest level.
 - Lie on the floor under a table or another sturdy object.
 - Avoid elevators.

After

- Continue listening to a NOAA Weather Radio or the local news for the latest updates.
- Stay alert for extended rainfall and subsequent flooding even after the hurricane or tropical storm has ended.
- If you have become separated from your family, use your family communications plan or contact the FEMA National Emergency Family Registry and Locator System (NEFRLS) or the American Red Cross.
- If you evacuated, return home only when officials say it is safe.
- If you cannot return home and have immediate housing needs. Text **SHELTER** + your ZIP code to **43362** (4FEMA) to find the nearest shelter in your area (example: **shelter 12345**).
- Drive only if necessary and avoid flooded roads and washed out bridges. Stay off the streets. If you must go out watch for fallen objects; downed electrical wires; and weakened walls, bridges, roads, and sidewalks.

Safety Awareness

Hurricane Safety Tips

HURRICANE SAFETY TIPS

Keep away from loose or dangling power lines and report them immediately to the power company.

- Walk carefully around the outside your home and check for loose power lines, gas leaks and structural damage before entering.
- Stay out of any building if you smell gas, floodwaters remain around the building or your home was damaged by fire and the authorities have not declared it safe.
- Use the telephone only for emergency calls.

NEVER use a generator inside homes, garages, crawlspaces, sheds, or similar areas, even when using fans or opening doors and windows for ventilation. Deadly levels of carbon monoxide can quickly build up in these areas and can linger for hours, even after the generator has shut off.

Safety Awareness

Hurricane Safety Checklist

The most important thing you can do as hurricane season approaches is to get yourself and your family prepared.

You should stock six basics for your home: water, food, first aid supplies, clothing and bedding, tools and emergency supplies, and special items.

Water: Store water in plastic containers/Store one gallon of water per person per day/Keep at least a three-day supply of water per person. Replace your stored water every 6 months

Food: Store at least a three-day supply of non-perishable food/Select foods that require no refrigeration, preparation or cooking, and little or no water. Replace your stored food every 6 months

First Aid Kit: Assembled First Aid Kit

- adhesive bandages
- sterile dressing
- sterile gauze pads
- germicidal hand wipes or hand sanitizer
- antiseptic wipes
- medical grade non-latex gloves
- Anti-bacterial ointment
- Cold pack
- Scissors (small, personal).

Non-Prescription Drugs

- Aspirin or nonaspirin pain reliever
- Anti-diarrhea medication
- Antacid (for stomach upset)
- Laxative

Sanitation

- Toilet paper, towelettes*
- Soap, liquid detergent*
- Feminine supplies*
- Personal hygiene items*
- Plastic garbage bags, ties (for personal sanitation uses)
- Plastic bucket with tight lid
- Disinfectant
- Household chlorine bleach

Documents

- Keep records in a waterproof container
- Inventory of valuable household goods
- Keep important telephone numbers
- Family records (birth, marriage, death certificates)
- Keep items in airtight plastic bags.

Safety Awareness

Post Hurricane Safety Tips



Danger from a hurricane does not end when the storm passes. Preparedness is not only knowing what to do beforehand, but also knowing what to do after the storm. Having a plan and being aware of certain risks will minimize the threat of harm to you or your family.

Please, keep these tips in mind:

- Stay tuned to local news for important announcements, bulletins, and instructions concerning the storm area.
- Avoid any downed or sagging power lines. Don't attempt to move or repair them, and notify the electric company as soon as possible.
- Don't drive through standing water if power lines are in the water.
- If a line falls across your car, continue driving. Do not turn off the ignition if the car stalls and do not leave the car. Wait for emergency personnel and do not let anyone else approach your vehicle.
- Disasters can generate tons of debris, including building rubble, soil and sediments, green waste (e.g., trees and shrubs), personal property, ash, and charred wood. Burying or burning is no longer acceptable because of the side effects of smoke and fire from burning as well as potential water and soil contamination from burial.
- Debris must be collected in the proper containers for pickup. Contact your local government agency for information.
- DO NOT use matches in a storm ravaged area until all gas lines are checked for leaks.
- Consider having professionals/licensed contractors inspect your home for damage and help in repairs. These professionals could include general contractors, electricians, gas line inspectors, plumbers, and lawn care specialists for tree removal.
- The flooding rains that accompany a storm can create pest problems, such as mice, rats, insects or snakes that may have "come with the storm".
- Flooding brings with it the risk of waterborne bacterial contaminations.
- Assume the water is not safe and use properly stored water or boil your tap water.

Safety Awareness

Flooded Roadways

“Turn Around Don’t Drown”



HAZARDS of DRIVING ACROSS FLOODED ROADS:

Flooding can occur when streams and rivers flow over their banks or any time there is heavy rainfall. Floodwaters can be found on roads, bridges, and low areas. Flash floods can come rapidly and unexpectedly. They can occur within a few minutes or hours of excessive rainfall.

The reason that so many people drown during flooding is because few of them realize the incredible power of water. A mere six inches of fast-moving flood water can knock over an adult. It takes only two feet of rushing water to carry away most vehicles. This includes pickups and SUVs.

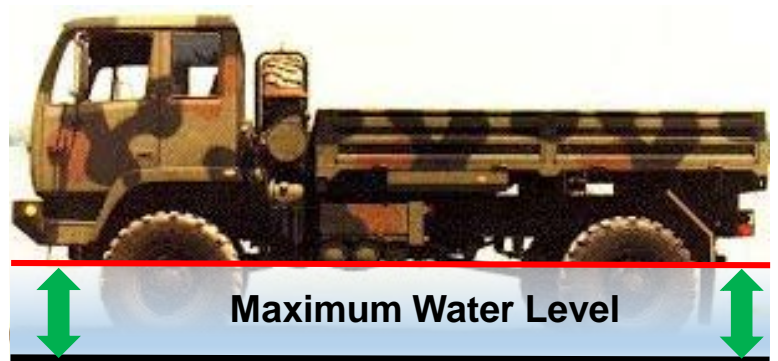
If you come to an area that is covered with water, you will not know the depth of the water or the condition of the ground under the water. This is especially true at night, when your vision is more limited.

DRIVING SAFETY TIPS:

- Do not drive through flooded areas. If you see a flooded roadway ahead, turn around and find another route to get to your destination.
- Be cautious, especially at night, when the visibility is limited.
- Six (6) inches of water will reach the bottom of most passenger cars, causing loss of control or possible stalling.
- Two (2) feet of moving water can carry away most vehicles including sport utility vehicles and pickup trucks.
- Even if the water appears shallow enough to cross, do not attempt to cross a flooded road. Water can hide dips, or worse, floodwaters can damage roadways by washing away the underlying road surface.
- If there is no other route, proceed to higher ground and wait for the waters to subside.
- Play it smart, play it safe. Whether driving or walking, any time you come to a flooded road, TURN AROUND, DON'T DROWN!

Safety Awareness

LMTV and FMTV on Flooded Roadways



*****CAPABILITIES*****

THE LMTV & FMTV CAN FORD WATER UP TO **30 in. (76 cm)** **DEEP FOR 15 MINUTES** WITHOUT DAMAGE OR REQUIRING MAINTENANCE BEFORE OPERATION CAN CONTINUE.

CHARACTERISTICS

The Light Medium Tactical Vehicles (LMTV) are a series of 4x4 and the Family of Medium Tactical Vehicles (FMTV) are a series of 6x6 tactical vehicles designed for use over all types of roads, cross-country terrain, and in all weather conditions.

DRIVING SAFETY TIPS:

- **CAUTION** driving through flooded areas.
- Be cautious, especially at night, when the visibility is limited.
- Six (6) inches of water can cause loss of control or possible stalling.
- Two (2) feet of moving water can carry away most vehicles including LMTV & FMTV tactical vehicles.
- **CAUTION** driving cross a flooded road. Water can hide dips, or worse, floodwaters can damage roadways by washing away the underlying road surface.

DRIVE IT SMART, DRIVE IT SAFE

Safety Awareness

Power Outages



Extended power outages may impact the whole community and the economy. A power outage is when the electrical power goes out unexpectedly. A power outage may:

- Disrupt communications, water, and transportation.
- Close retail businesses, grocery stores, gas stations, ATMs, banks, and other services.
- Cause food spoilage and water contamination.
- Prevent use of medical devices.

PROTECT YOURSELF DURING A POWER OUTAGE:

- Only use generators outdoors and away from windows.
- Do not use a gas stove to heat your home.
- Disconnect appliances and electronics to avoid damage from electrical surges.
- Have alternate plans for refrigerating medicines or using power-dependent medical devices.

Prepare NOW

- Take an inventory of the items you need that rely on electricity.
- Talk to your medical provider about a power outage plan for medical devices powered by electricity and refrigerated medicines.
- Plan for batteries and other alternatives to meet your needs when the power goes out.
- Sign up for local alerts and warning systems. Monitor weather reports.
- Install carbon monoxide detectors with battery backup in central locations on every level of your home.
- Have flashlights with extra batteries. Have enough nonperishable food and water.
- Keep mobile phones and other electric equipment charged and gas tanks full.

Survive DURING

- Avoid carbon monoxide poisoning. Generators, camp stoves, or charcoal grills should always be used outdoors and away from windows. Never use a gas stovetop or oven to heat your home.
- Turn off or disconnect appliances, equipment, or electronics. Power may return with momentary “surges” or “spikes” that can cause damage.

Be Safe AFTER

- If the power is out for more than a day, discard any medication that should be refrigerated, unless the drug's label says otherwise.

Safety Awareness

IDS 12-VOLT AUTOMOTIVE BATTERY BACKUP PROCEDURE

This procedure should “only” be used for emergency situations!

- **Immediately contact the IDS monitoring station prior to implementing this procedure!**
- Batteries must be a fully charged 12 volt automotive type battery only.
- The existing 12 volt batteries within the IDS cabinet must be disconnected.
- Do not attempt to connect or store the battery in or near water.
- Do not place batteries directly on the concrete floor or ground, utilize a wooden box or small pallet to place the batteries on.
- Remember positive terminal is red and the negative terminal is black.
- Most automotive batteries are acid filled and should only be used for emergency situations and disconnected as soon as possible once AC power is restored.



Safety Awareness

Safe Water

During and After Emergencies



SAFE WATER:

For drinking water, cooking, washing wounds and brushing teeth, use bottled water, boiled water or disinfected water.

Bottle Water: Use bottled water if it is available.

Boil Water: If you don't have bottled water, you should boil water to make it safe. Boiling water will kill most types of disease-causing organisms that may be present.

- If the water is cloudy, filter it through clean cloths, or allow it to settle and then draw off the clear water for boiling.
- Boil the water for one minute, let it cool, and store it in clean containers with covers.

Disinfecting Water: If you can't boil water, you can disinfect it using household bleach. Bleach will kill some, but not all, types of disease-causing organisms that may be in the water.

- If the water is cloudy, filter it through clean cloths, or allow it to settle and then draw off the clear water for disinfection.
- Add 1/8 teaspoon (or 8 drops) of regular, unscented, liquid household bleach per each gallon of water. Stir it well and let it stand for at least 30 minutes before you use it.
- Store disinfected water in clean containers with covers.

Well: The water should be **tested and disinfected** after flood waters recede. If you suspect that your well may be contaminated, contact your local or state health department or agricultural extension agent for specific advice.

CREATE & STORING AN EMERGENCY WATER SUPPLY:

- Store at least 1 gallon of water per day for each person and each pet.
- Store at least a 3-day supply of water for each person and each pet. Store a 2-week supply, if possible.
- For personal hygiene & cleaning **ONLY**, store water in home tub, toilet tank, water heater tank and containers never used for fuel or toxic chemicals.

WASH YOUR HANDS:

Use soap and Safe Water: Wash hands before eating, after using the toilet and when cleaning and handling things dirty.

Keep pen cuts or sores clean: With clean hands, apply antibiotic ointment. If redness, swelling or drainage develops, see a doctor.

Safety Awareness

Food Safety During Emergencies Before, During and After Emergencies

PLAN AHEAD

- Make sure the refrigerator temperature is at 40 °F or below and the freezer is at 0 °F or below.
- Group foods together in both the refrigerator and freezer. This helps foods stay cold longer.
- Keep the freezer full. Fill empty spaces with frozen plastic jugs of water, bags of ice, or gel packs.
- Freeze refrigerated items that you may not need immediately. This will keep them at a safe temperature longer.
- Perishable foods will stay safe in a refrigerator only 4 hours.
- Find out where dry ice and block ice can be purchased.

DURING A POWER OUTAGE

- Keep refrigerator and freezer doors closed.
- The refrigerator will keep food safe for up to 4 hours.
- A freezer will hold the temperature for approximately 48 hours (24 hours if it is half full).
- In freezers, food in the front, in the door, or in small, thin packages will defrost faster than large, thick items or food in the back or bottom of the unit.
- During a snowstorm, do not place perishable food out in the snow. Outside temperatures can vary and food can be exposed to unsanitary conditions and animals.

AFTER A POWER OUTAGE

- **Never** taste food to determine its safety. **When In Doubt, Throw It Out!**

UNSAFE FOODS (Refrigerated)

- Discard refrigerated food that has been without power for more than 4 hours.
- Discard any that may have become contaminated by juices dripping from raw meat, poultry, or fish.
- If any food has an unusual odor, color, or texture, **throw it out**.

SAFE-TO-EAT (Frozen Foods)

- Frozen foods that have thawed, but still contain ice crystals.
- Foods that have remained at refrigerator temperatures — 40 °F or below.
- Foods that don't actually need to be frozen.

Safety Awareness

Lightning

When Thunder Roars, Go Indoors!



Lightning is a dangerous natural force. Annually in the United States, cloud-to-ground lightning occurs 20 to 25 million times and over 300 people are struck by lightning.

The consequences of lightning strikes are serious. Lightning is one of the leading causes of weather-related fatalities.

The best way for you to protect yourself from lightning is to avoid the threat. You simply don't want to be caught outside in a storm. Have a lightning safety plan, and cancel or postpone activities early if thunderstorms are expected. Monitor weather conditions and get to a safe place before the weather becomes threatening. Substantial buildings and hard-topped vehicles are safe options. Rain shelters, small sheds, and open vehicles are not safe.

Safety Precautions Outdoor:

- If the weather forecast calls for thunderstorms, postpone your activity.
- Remember: **When thunder roars, go indoors.** Find a safe, enclosed shelter.
- Don't forget the 30-30 rule. After you see lightning, start counting to 30. If you hear thunder before you reach 30, go indoors. Suspend activities for at least 30 minutes after the last clap of thunder.
- Stay away from concrete floors or walls. Lightning can travel through any metal wires or bars in concrete walls or flooring. Although you should move into a non-concrete structure if possible, being indoors does not automatically protect you from lightning. In fact, about one-third of lightning-strike injuries occur indoors.

Safety Precautions Indoor :

- Avoid water during a thunderstorm. Lightning can travel through plumbing.
- Avoid electronic equipment of all types. Lightning can travel through electrical systems and radio and television reception systems.
- Avoid corded phones. However, cordless or cellular phones are safe to use during a storm.
- Avoid concrete floors and walls.

Lightning strikes may be rare, but they still happen and the risk of serious injury or death is severe. So take thunderstorms seriously.

Safety Awareness

PPE for High Raised Water Response/Recovery Operations

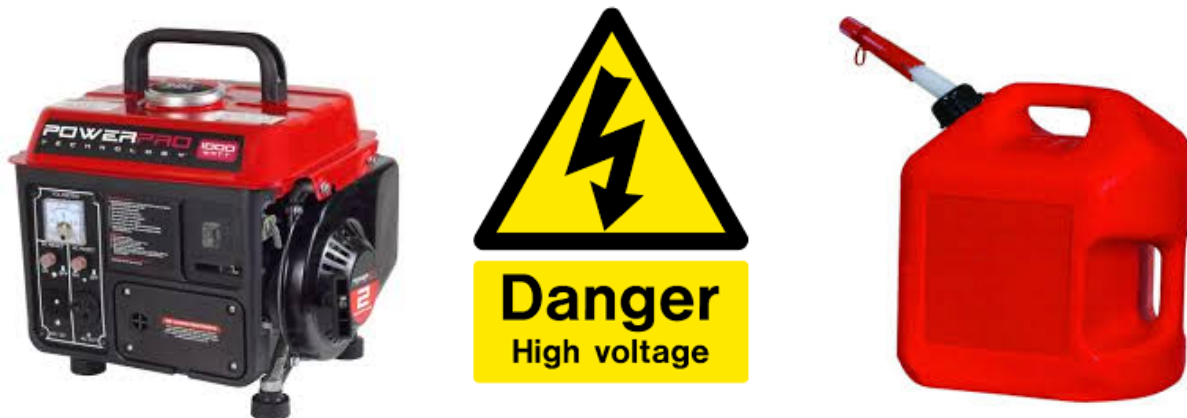


Required Personal Protective Equipment (PPE) during Response and/or Recovery activities in High Raised Standing Water



Safety Awareness

Use of Portable Power Generator During and After Power Outages



SUMMARY:

Portable generators are internal combustion engines used to generate electricity. They are useful when temporary or remote power is needed, and are commonly used during cleanup and recovery efforts following disasters such as hurricanes, tornadoes, etc. Relying on generators during power outages could be putting themselves and their families at risk of fire, explosion, electrocution and/or carbon monoxide poisoning. Some of hazards associated with the use of generators listed below provides helpful information to ensure the safe use of the equipment. Always follow manufacturer recommendations. Failure to observe the manufacturer warning, cautions and recommendations could result in severe personal injury or death.

HAZARDS ASSOCIATED:

- High voltage is produced when this generator set is in operation.
- Never attempt to start the generator set if it is not properly grounded.
- Never attempt to connect or disconnect load cables while the generator is running.
- The fuels in generator set are highly explosive. Do not smoke or use open flame when performing maintenance.
- Hot fueling of generators while they are operating presents a safety hazard and should not be attempted.
- Exhaust discharge contains deadly gases. Do not operate generator set in enclosed area unless exhaust discharge is properly vented outside. Severe personal injury or death due to carbon monoxide poisoning could result.
- Avoid contacting metal items with bare skin in extreme cold weather.
- If equipped: Battery acid will cause burns to unprotected skin. Batteries give off flammable gas and explosion.

Safety Awareness

Carbon Monoxide (CO) Poison After Disaster



FACTS:

- Carbon monoxide (CO) is an odorless, colorless gas that can cause sudden illness and death if inhaled.
- CO is found in fumes produced any time you burn fuel in cars or trucks, small engines, stoves, lanterns, grills, fireplaces, gas ranges, or furnaces. CO can build up indoors and poison people and animals who breathe it.
- When power outages occur during natural disasters and other emergencies, the use of alternative sources of fuel or electricity for heating or cooking can cause CO to build up in a home, garage, or camper and to poison the people and animals inside.

PREVENT CO POISON:

- Install a battery-operated or battery back-up CO detector in your home and check or replace the battery at least twice a year. This detector can tell you the highest level of CO concentration in addition to alarming.
- Do not use portable flameless chemical heaters indoors.
- Make sure your gas appliances are vented properly. Horizontal vent pipes for appliances, such as a water heater, should go up slightly as they go toward outdoors.
- Never use a gas range or oven for heating.
- Never burn charcoal indoors.
- Do not use gas camp stove indoors.
- Never use a portable gas camp stove indoors.
- Never use a generator inside your home, basement, or garage. Follow the manufacture's recommendations.