

Hurricane and Freeze Emergency Preparedness

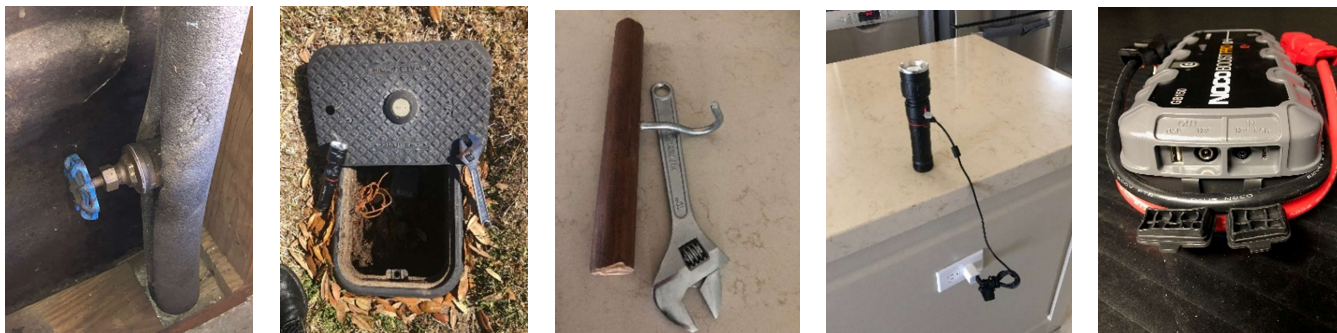
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Preparation and planning for emergency events to mitigate consequences is vital.

- Hurricanes – Loss of power and water, wind damage, broken windows, and potential water damage.
- Freeze – Burst pipes, loss of power and water, flooding from burst pipes.

Preparation for all emergencies and daily living.

- Know how to shut off the water and be prepared at a moments notice. Know where your shut off valve is located and have tools readily available **when necessary** to shut off the water.
- Keep LED flashlights charged and identify sources of external batteries to recharge with loss of power.



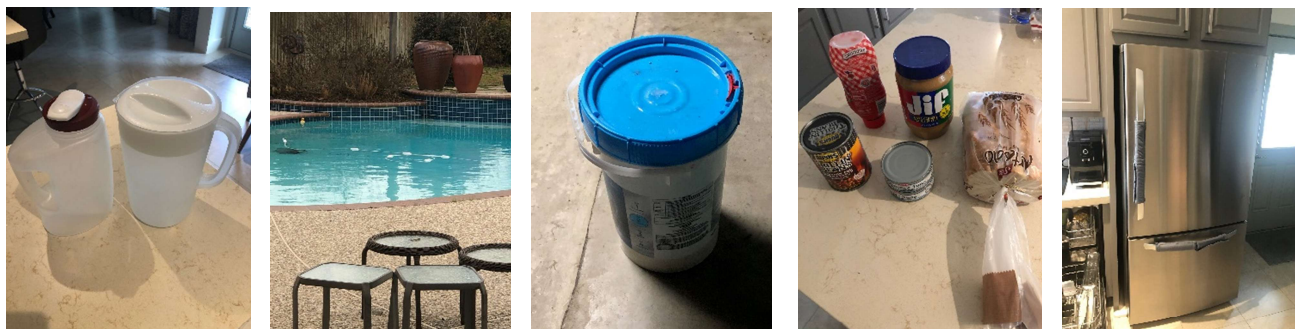
Leak detectors are very inexpensive compared to the damage of flooding from a burst pipe or supply line leaks to sinks, toilets, washing machines, dishwasher or vanities. Catching and stopping a leak early is vital to mitigating flood damage. Placing leak detectors at all vital areas is an excellent way to catch leaks quickly. Some options of leak detectors connect by Wi-Fi which sends alerts to your phone.



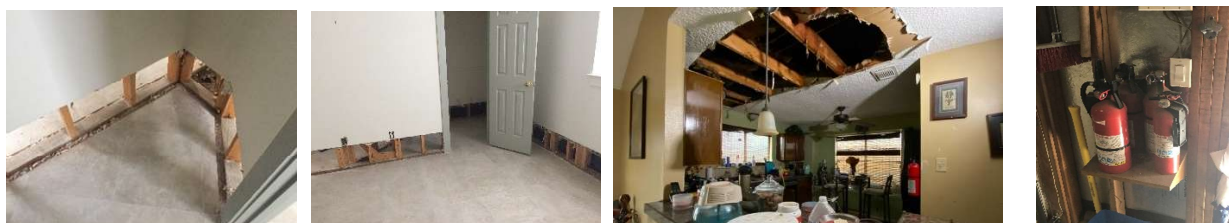
If you have a portable generator it is recommended to do any necessary maintenance prior to hurricane season and purchase fuel for use during the hurricane season or prior to any other severe weather event. It is also a good idea to have a supply of visqueen sheeting or large garbage bags and duct tape to repair any broken windows or doors. Based on the severity of the storm any window covering such as plywood sheeting is also a very good idea.



Catch and retain drinking water at the onset of any emergency situation as you never know when you may lose power and possible potable water. Purchasing bottled water is okay but not a necessity. Also identify or catch water for sanitary purposes and flushing. Purchase some non-perishable food items should you lose power. Cooking is nice if grills are available but not a necessity. It's a good idea to reduce the inventory of perishable food items in the refrigerator prior to hurricane season to avoid a huge loss if power is lost.

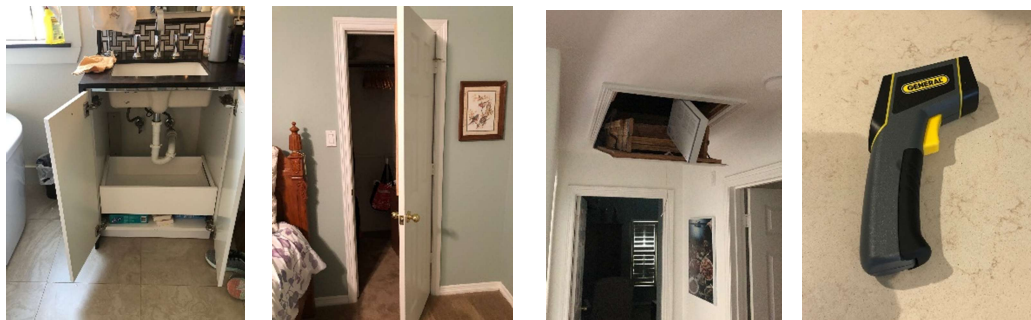


Water is essential for life. It can be both your greatest friend and your worst enemy in the wrong way. **Flooding is probably by far the greatest threat** other than fire. It is always a good idea to have a quality and accessible fire extinguisher.

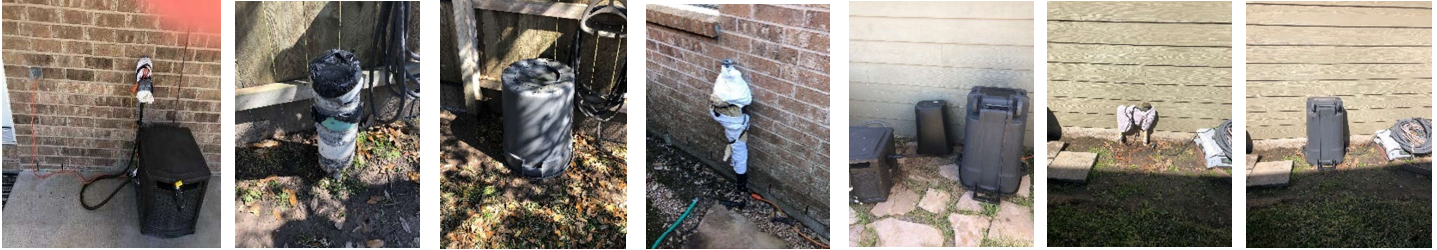


The greatest risk for cold weather conditions is frozen and burst pipes. The phase change of freezing water is a very unique and unusual physical property. The volume increases when the water turns to ice thereby inducing stress on the inside of pipe causing them to burst. This unique physical property is often seen in ice trays with the ice above the level of the top of the tray. This property is also why we must have antifreeze in our radiator of our vehicles to prevent the engine blocks from freezing and cracking.

For freeze or ice storm conditions we should try to retain as much heat as possible in the exterior walls and attics in which plumbing lines are installed to prevent them from freezing. Open cabinet doors under vanities and sinks as well as closet doors where plumbing lines are on the exterior wall. Attic doors can be propped open as necessary to maintain the temperature of the attic above freezing. Purchasing and using an infrared thermometer to check temperatures throughout the home and garages is an excellent idea and they are not very expensive.



Wrap and/or cover all of the spigots and water risers on the outside walls of the home or around the house. You should wrap or cover them with weather stripping foam as well strips of old towels, buckets, garbage cans, trash bags or other available items to retain heat. The object is to try and block the loss of heat as much as practical by keeping the wind off of the fixture and allow heat in the ground to migrate up in the inverted garbage can. Heat tracing wire can also be used to wrap around the most vulnerable outside fixtures for protection. During the day faucets (hot and cold side) at the end of a plumbing run should be turned on for few seconds throughout the day. At night those same faucets (hot and cold side) should be dripped very slowly to prevent freezing. For those with swimming pools it is best practice to run the pool pumps continuously when the temperature is below freezing.



If you have electrical power with the ability to run the furnaces it will keep the inside of our homes warm which radiates out through the exterior walls and attics to help keep the plumbing lines warm. However, if electrical power is lost our homes will continue to get colder and colder as we lose heat. If the external temperature is in the severe range of less than around 26 degrees F then it is probably best to shut off the water and bleed off the pressure in the lowest faucet available (probably a sink or vanity). **Remember, a burst pipe and flooding is the greatest risk.** It will not only flood your home like rising water but it may also trigger flooding through the roof causing it to collapse. We can survive a long time drinking water, eating peanut butter sandwiches and layering on multiple layers of clothes if necessary to keep our bodies warm, but a burst pipe is likely to cause a disaster. **It is always best to close the water shutoff valve and bleed off ALL the water fixtures on the outside walls during severe conditions. Bleeding off the water in this manner will bleed off the pipes in the attic as well as all the water in the walls above the elevation of the faucets. Nothing will happen if the water is already shut off but a disaster may happen with it on.** With the power off in very cold conditions drinking water is all that is necessary. Keeping the water on really serves no purpose. When the power is restored the shutoff valve can be slowly opened and the system can be inspected for leaks with caution. The best way to detect leaks is to open the shutoff valve and monitor the water meter with all of the water turned off inside and outside the home. It is very sensitive and will detect any movement of water through the lines. If in doubt about any leaks get professional help or assistance. If you would like to prepare for some repairs the most common items for repairs are the “push-to-fit” (Sharkbite is just one brand) pex tubing, ball valve, repair coupling, coupling, and elbow in the sizes of ½”, ¾” and 1”. Remember that when the emergency crisis occurs these items are not necessarily likely to be on the store shelves. Another handy way to temporarily repair a burst pipe is to use a radiator hose and clamps to isolate the leak which can be ordered in many sizes.



My desire is that you will use this document to help in preparing, equipping, and making strategic decisions before, during and after emergencies that we may experience. Please don't hesitate to contact me if you have any questions about the information presented. I hope that you will find this document helpful and aid in mitigating potential losses.