# Climate Action Toolkiss Emergency Prepareoness



## Hurricanes



## Staying Home or Evacuating?

The first thing you need to do in the event you are facing a hurricane is figure out whether you are going to be evacuating or sheltering in place.

If a hurricane is severe enough, there will be alerts and orders to evacuate. However, it is also important to note that hurricanes can escalate quickly, so if you are choosing initially to shelter in place, you should be as ready as you can be to leave if the hurricane gets stronger.

Climate change has an impact on hurricanes. Each

year the chance of strong hurricanes increases.
Storm records show hurricanes increasing in strength year after year, and as a result it is becoming more common to have to leave during hurricanes.

## Compounding Issues

Hurricanes can bring a host of other issues with them:

#### **Flooding**

With the intense rains and winds flooding is inevitable during a hurricane. Stay out of the water as much as you can.



#### Infrastructure Damage

Depending on the strength of the storm buildings can be destroyed. If you are inside of one you can seriously be injured or killed. Evacuate as soon as you are able to!



#### **Power Outages**

Be prepared for the power to go out entirely or becoming unreliable. Having generators, battery packs, and hand crank chargers are a good way to be prepared.



#### **Water Infrastructure Damage**

Access to water is likely to be interrupted. Having enough water on hand for all household members is vitally important because you do not know how long it will take for water access to be restored.

The Climate Initiative



## If You Are Staying Home

If you are sheltering in place, the goal is to make sure you have all the essentials you will need with you. Centralizing everything will be the first step to making sure you have everything you need.

Everyone has the same basic needs, and this guide will go over them and share a variety of ways to get those needs met. Not every suggestion or solution will be applicable across the board to all who read this. It critical that the reader to assesses which pathway is most accessible for them to meet their needs.

#### WATER

It is recommended to have a bare minimum of 1 gallon of water per day per person (and pet) for a minimum of 3 days. Keep in mind that a singular gallon accounts for drinking, cleaning and cooking, and is only the bare minimum recommendation. Additionally, consider having water filters + supplies to boil water on hand to help increase your ability to have access to clean water.

#### **FOOD**

It is recommended to have a minimum of 3 days worth of food on hand. Dried goods, dehydrated foods, canned foods and non-perishables have a long shelf life. Consider allergies, special needs, and pets. Consider the possibility that you lose electric power and/or gas. Do you have food that will be able to be eaten if it is not cooked? Do you have food that will last long term without a refrigerator?

#### **POWER**

Will you continue to have power? Critical infrastructure might be damaged and you could lose electrical power. Is it also at risk of losing power? Back up power like batteries, wind-up electronics or solar powered batteries can help you maintain power when it is lost.

#### **FIRST AID**

First aid supplies are vital to have on hand in the event that you are unable to quickly access medical attention. For your personal safety and those of your household, having an up-to-date first aid kit is highly recommended. The more comprehensive the first aid kit is, the better.

#### PERSONAL CARE

Personal care items like medications, prescriptions, personal hygiene, extra clothes, etc. Prepare Personal Documents like insurance, government documents, methods of identification. Personal information like hand written phone numbers, physical and email addresses if you do not have access to technology



## **Emergency Alert Systems**

Be aware of the Emergency Alert Systems that are available to you. Emergency Alert Systems often send time sensitive information that update you about developing situations.

## If you are in the United States, download the American Red Cross Emergency: Severe Weather App

The American Red Cross Emergency Severe Weather App is a free weather app that helps you prepare for winter weather, earthquakes, wildfires, and much more. With a dynamic to-do list, you'll know what actions to take to get ready. And if a disaster impacts your location, you can easily find open Red Cross shelters with our interactive map.

Available in English + Spanish







**Apple** 

**Android** 

## Evacuate when you are alerted to do so! Make sure you are prepared to leave

- Is your car fully charged/have a full tank of gas?
- Do you have all your important documents?
- Do you have to pick up friends or family members who can not evacuate themselves?
- Do you know various pathways to get to your evacuation site?

- Can you take your pets?
  - If you can not take your pets do you know where you can take them?





#### Centralizing What You Already Have

Sourcing items for your kit can feel like a financial burden and it is likely that there will be things that need to be purchased to build your kit up. Luckily, there are a lot of items that can be gathered that might already exist your own home, and there are plenty of items that can be sourced from dollar stores or at affordable prices.

When needing to evacuate, time is of the essence having these items already centralized can help you evacuate the area sooner, and avoid long lines, or shortages of supplies.

#### Do you have old or extra:

- Large Storage Bins
- Backpacks
- Notebooks
- Pens/Permanent markers/Chalk
- Hairbands
- Chapstick
- Personal Hygiene products
- Phone Chargers
- **Batteries**
- Matches/Lighters
- **Umbrellas**
- **Ponchos**
- **Duct Tape**
- Superglue
- **Deck of Cards**
- Can openers
- Whistles
- Baby Wipes Menstrual Products
- Masks
- **Camping Gear**
- Towels/Blankets
- Hand Sanitizer
- Gloves- Latex, Gardening, Dish
- Pet Supplies

#### **Personal Information to** Gather/Centralize

- Keep a notebook and write down:
  - Names, numbers, addresses of anyone you might need to kéep in contact with the event of
  - an emergencyAny pertinent medical information-including allergies or medical procedures or lifesaving medications that are relevant to household members
- Physical photographs of household members or other people that you are likely to look for in the event that you get separated in an emergency
- Photograph or scan copies of important personal documents, government documents, insurance and store them in a USB or email them to yourself and store them in a special folder so they are readily available.
  - Have multiple ways to access these forms in case you lose access to one.





Ensuring you have access to drinkable water is one of your top priorities in any emergency situation. Storing water in your home, whether it be cases or gallons of water to have ready on hand is the best option. If you are able to afford water filtration devices, it is highly encouraged to do make this a priority purchase.

Store at minimum 1 gallon per person (and pet) per day for a minimum of 3 days - 2 weeks

- The amount of water you save per person per day needs to be enough to cover:

  - Drinking NeedsBathing Needs
- The 1 gallon suggestion is the bare minimum suggestion and the more water you are able to store the better
- Think about the climate you live in, if you live in a hotter climate, reflect on this as you consider how much water you need to store
- If there is anyone who is pregnant or on certain medications, they may also neéd additional water stored.
- Freeze bags of water. If your home loses power, you have ice blocks in your freezer to keep everything cold longer and you have clean water to drink as it de-thaws.
- If you are purchasing store bought water, check the expiration date and cycle through as needed. Water that has been purchased from a store and is commercially stored can last longer than water you are storing yourself and pouring into containers you have at home. This is because it is sterile when it has been poured.
- If you are storing water at home make sure that the container you are using to store your water is:
  In a food grade container
  Has a lid that can be tightly screwed on

  - Has NOT previously held any toxic materials.





## Water



## UNSAFE water sources from inside your home, DO NOT USE WATER FROM:

- Toilet Flush Tanks
- Toilet Bowls
- Radiators
- Waterbeds
- Swimming Pools
- Fountains
- Hot Tubs

## EMERGENCY OUTDOOR WATER SOURCES

- Rainwater
- Ponds, Lakes
- Natural Springs
- Moving Bodies of Water like Streams and Rivers

#### **AVOID WATER THAT...**

- Has floating materials
- Has an odor
- Is dark in color
- Is flood water- flood water is not safe for consumption

#### **Directly From FEMA**

"You will need to protect the water sources already in your home from contamination if you hear reports of broken water or sewage lines, or if local officials advise you of a problem. To shut off incoming water, locate the main valve and turn it to the closed position. Be sure you and other family members know beforehand how to perform this important procedure.

To use the water in your pipes, let air into the plumbing by turning on the faucet in your home at the highest level. A small amount of water will trickle out. Then obtain water from the lowest faucet in the home.

To use the water in your hotwater tank, be sure the electricity or gas is off, and open the drain at the bottom of the tank. Start the water flowing by turning off the water intake valve at the tank and turning on a hot-water faucet. Refill the tank before turning the gas or electricity back on. If the gas is turned off, a professional will be needed to turn it back on."





## Water



#### **Emergency Storage Options**

Having a clean place to store water after it has been filtered and cleaned is important to keep it safe and drinkable. You do not NEED to purchase storage options, but they do exist if you are interested.

#### Empty Bottles like Soda, Milk, or Juice

Make sure you have a marker, tape or other identification method to be able to differentiate between filtered and unfiltered water.

#### Freeze Bags of Water

If you have the space in the freezer this solution can work two fold. It can keep your freezer colder longer and be a water source for you as it de-thaws

#### **Hot Water Tank**

You can get clean drinking water from your hot water tank. Be careful that it is not hot when you are trying to access it if you are gathering water from here.

#### Trashcans, Buckets, Laundry Hampers, Sinks and Bathtubs

You can put clean, unused, unscented trash bags in trashcans or plastic laundry hampers and use it as a water storage container. Line sinks and bathtubs with plastic bags.

#### To extend the shelf life of water stored at home:

- Store water in a dark, cool place
- Water that has been stored commercially (not poured into a container by you at home) can last for a few years, but it might not taste as good. If you stored your water be sure to rotate it yearly.
- If you live somewhere with little space, consider storing water under the bed, in crawl spaces, or in any small spaces in your closet.





## Water



#### **Emergency Supplies list**

A concise list of items that can be added to your emergency kit to help ensure your access to clean water. You do NOT need to purchase everything on this list, this is a list to pick and choose what works for you.

#### **Essentials**

- A MINIMUM three day two week supply of water that equals a MINIMUM of 1 gallon of water per person + pet per dav.
- The more water the better. This will cover drinking, cooking, bathing and cleaning needs Water Filtration Options

#### Water on Hand

- Clean Food Safe containers that can hold water poured from the tap
- 5 Gallon Water Jugs
- 1 Gallon Water Boffles
- Cases of water bottles

## **Water Filtration**

**Systems**Key words to search up when loóking up water filters

- Individual Straw Water **Filters**
- Water Filter Attachment for water bottles
- Large Scale Emergency **Wafer Filter**
- Water Purification Tablets

## Supplies for Alternative Water Filtration Methods

- Bleach (unscented, plain)
- Medicine/Liquid Droppers
- Bandanas or other fabric to filter out potential particles in water
- Pots/Pans (If evacuating, consider camping pots + pans that are smaller, lightweight and more compact that can be stored in an emergency kit ahead of time) Method to start a fire to boil water
- **Twine**
- Cups

#### **Water Storage**

- Empty reusable water bottles (If evacuating, consider collapsible/roll up water bottles that can be stored in a bug out bag ahead of time. Lighter weight + take up less room in your kit)
- Clean, unused plastic frash bags in case you need to fill up a trashcan or laundry hamper with water when sheltering in place
- Plastic lining for tubs + sinks if sheltering in place and filling up tub for water
- Bags of ice in freezer that can dethaw over time
- Empty Containers like milk/soda bottlés, jugs, etc.







#### When storing food at home consider the following:

- Shelf life
- Any special dietary neéds or restrictions
- Any infants or toddlers
- Anýone who is pregnant

What you and other household members like to eat- In the event of an emergency, you won't know where your stress levels are at. You don't want to make a potentially stressful situation worse because you don't like the food that you stored.

#### Foods that have a long shelf life

- Canned fruits. vegetables, meats and a can openerCanned juices
- Dried Fruit + Vegetables
- Peănut Butter
- Jelly/Jam/Preserves
- Granola & Cereal
- Baby FoodPowdered Formula
- Protein Bars
- Comfort/Stress Foods
- Crackers
- Instant Oatmeal
- Soups
- Drink Powders to mix with water

- Nuts
- Potatoes
- PopcornDried Pasta
- Rice + Beans
- Instant Coffee. Tea, Hot Cocoa
- · Vegetable + Cooking Oils
- Bouillon products and seasonings
- Broths/Stock
- Ramen Packets
- Frozen meats and vegetables
- Chips







Storing your emergency food properly will help make you stash last longer and save you money as you will not need to "cycle" through it as often.

#### **Storage Tips**

- Keep food in tightly sealed containers, storing food in resealable containers (and/or having resealable containers on hand) will help keep food fresher longer.
- When opening food from it's packaging make sure you are careful when opening it so that it can be closed tightly afterwards.
- Storing food in a dry, dark cool area. If you do not have somewhere dark to store food, make sure it is at least dry and cool.
- Make sure to toss out canned goods that have become swollen or corroded.
- Use food before it goes bad, make sure that you have best by dates clearly marked and labeled (Use a thick permanent marker to write the date somewhere that is easy to see) and cycle through food as it needs to be renewed. Place new foods in the back and older food in the front.
- Store food that is at higher risk of being attractive to pests in screw top containers or air tight canisters.

#### If you lose power...

- Make sure you begin by eating perishable foods from the refrigerator first. (Think fresh fruits/vegetables, bread, pastries, any left over you may have from recent meals)
- Use foods the freezer.
- Then use non-perishables foods and staples like beans, rice and pasta.

If the power goes out, you will want to limit the number of times that you open and close doors to your fridge or freezer in order to keep the cold in.

It is recommended to write a list of the food within the fridge and freezer or take a photo the inside so that you do not need to open the fridge and leave it open to figure out what is inside and you can preserve the cold for as long as possible.

If your freezer is well insulated and well filed, foods can have ice crystals in the center (this means that the food is safe to consume) for a minimum of 2 days.







It is a good idea to have a back up plan to be able to cook food and boil water in the instance that you lose access to power or need to evacuate and do not have access to a stove

#### **Some Considerations**

#### **Cooking Tips**

If you already have a charcoal or propane stove, you are good to go. However, if you do not have either, consider looking into a rocket stove. A rocket stove only requires wood, pine cones or other flammable organic material that is likely to be easier to source and acquire than charcoal or propane in the event of an emergency.

You also are more likely to be able to get sticks, wood, or pine cones for free. Rocket stoves are extremely efficient with their fuel and do not create smoke, They can be purchased or made using only cinder blocks or metal cans, even adobe clay.

Make sure you use cooking materials that are deemed food safe. Canned foods are safe enough to be eaten out of the can and can be heated in the the can. Make sure that you have an can opener with you! In the event of evacuation, it is not likely that you will remember to bring a can opener with you, so it is beneficial to purchase one to store permanently in your emergency kit.

Storing spices is another small tip, good food can help keep morale up during stressful times.

If water supply is limited, do not consume salty food as they will make you thirstier and cause you to consume more water.







#### **Emergency Supplies list**

A concise list of items that can be added to your emergency kit to help ensure your access to food. You do NOT need to purchase everything on this list, this is a list to pick and choose what works for you. You may already have some of these items at home, placing them in a central location is key to having ease of access.

#### **Essentials**

- Enough food for a minimum of three days to two weeks. With special considerations with anyone who may be pregnant, nursing, or having special dietary needs
- Ways to cook food

#### **Storing Food**

- Air tight containers
- Ziplock bags (disposable/reusable)
- Glass Jars with screw on lids for canning/dehydrated foods
- Ice Chest
- Food Clips/twists/Rubber bands to keep bags of food tightly sealed and longer lasting

#### Long Lasting Foods

- Rice/Beans/Lentils/Pasta
- **Canned Goods**
- Granola/Oats/Cereal
- Canned fruits, vegetables, meats & juices + a can opener
- Dried Fruit + Vegetables
- **Peanut Butter**
- Jelly/Jam/Preserves
- Baby Food Powdered Formula
- **Protein Bars**
- Comfort/Stress Foods
- Crackers
- Instant Oatmeal
- Soups
- Drink Powders to mix with water
- Nuts
- **Potatoes**
- Popcorn
- Instant Coffee, Tea, Hot Cocoa
- Vegetable + Cooking Oils
- Bouillon products and seasonings Broths/Stock
- Ramen Packets
- Frozen meats, vegetables and fruits
- Chips
- Pasta Sauce
- Ketchup/Hot Sauce/Soy Sauce **Packets**





#### First Aid Kits Vs. Trauma Kits

First Aid kits are usually made for minor injuries that are not life threatening and can easily be treated at home.

Trauma kits contain medical supplies for potentially life threatening injuries and are able to keep someone alive until they can receive legitimate medical attention.

Whole trauma kits are typically more expensive than first aid kits. First aid kits can be found anywhere and trauma kits are a specialized purchases.

You can purchase a first aid kit and then singular elements of a trauma kit. Some items that would be found in a trauma kit that you can purchase on your own include blood stopper to prevent bleeding out, burn gel, and even tourniquets.

While any first aid kit is better than no first aid kit, if you are purchasing a first-aid kit for specifically for an emergency kit, consider looking at first aid kits for campers instead of offices. Camper first aid kits usually have a wider variety of products that include items to help treat bites, lacerations, stings and other ailments that office first aid kits don't usually need to cover.



Keep in mind that you can also add onto your first aid kits and customize them. For example- if you purchase a first aid kit that includes a single emergency blanket, but you live in a household of 5, you may want to consider purchasing additional emergency blankets. Or if anyone in the household has particular medical needs, maybe is allergic to a key ingredient found in certain medical ointments and needs an alternative.

If you spend a lot of time from home, it is not a bad idea to keep a first aid kit in both your home and you car.





#### What you will find in a **First Aid Kit**

- A first-aid quide
- 2 absorbent compress dressings
- (5 x 9 inches) 25 adhesive bandages (assorted
- 1 adhesive cloth tape (10 yards x 1 inch)
- 5 antibiotic ointment packets

- 5 antiseptic wipe packets
  2 packets of aspirin (81 mg each)
  1 emergency blanket
  1 breathing barrier (with one-way valve)
- 1 instant cold compress
- 2 pair of nonlatex gloves (size:
- 2 hydrocortisone ointment packets
- 1 3-inch gauze roll (roller) bandage
- 1 roller bandage (4 inches wide)
- 5 3 x 3-inch sterile gauze pads 5 sterile gauze pads (4 x 4 inches)
- A thermometer (nonmercury/non-glàss)
- 2 triangular bandages
- Tweezers

#### What you will find in a **Trauma Kit**

- A tourniquet
- Splints (For either fingers, arms or leas)
- Rigid splits + Triangular badges
- Blood Clotting powder (to prevent someone from bleeding out)
- Burn Cream/Burn Gel
- Eyewash
- **Bandage Shears**
- \*Trauma Kit items can be bought as a pack or individually. Trauma kits are more expensive than First Aid Kits
- \* \* Many first aid kits that can be purchased at the store or online will have all if not most of these items.

According to the American Red Cross, a first aid kit for a family of 4 should include the minimum of the following items

Trauma kits, sometimes also known as First Responder kits come in specialized smaller kits that focus on specific types of trauma. Like a first aid kit, items that are found in trauma kits can be found and purchased individually.

There are currently no formal recommendations from any organization on what trauma kits "need" to contain at minimum. The items listed below are for educational purposes and are listed only for your consideration.





## Power



Many of us are accustomed to having internet access and having information at the tips of our fingers. In the event of a power outage, you may not have the internet to tap into for information. Power loss can happen at an inconvenient moment-like during a time where you have low battery on your electronics or during a time where your electronics may just happen to be dead and you were searching for a charger. Preparing beforehand is important!

Keep a notebook and write down important names, numbers and addresses.

Chances are, you do not have the names, numbers and addresses of the friends and family you would reach out to in the event of an emergency, keeping a notebook with this information is important in the event that you do not have access to your cellphone.

Make sure that smoke and carbon monoxide alarms are installed and functional.

Test monthly and make sure batteries are up to date.

Have a plan to help you decide when to stay and when to go if you evacuate. Have an agreed upon location that you and your household members can go to

DO NOT USE GAS GENERATOR INSIDE. IT IS NOT SAFE AND CAN BE DEADLY FOR YOU AND YOUR HOUSEHOLD MEMBERS

If you are looking for a generator to run indoors, consider a electric solar powered generator, they can safely run indoors, are silent, and can be recharged. Have a plan for personal and medical electronics.

This is where you may be interested in power banks, solar window panels, or solar/gas power generators. Some wind up flashlights also have charging portals that allow you to charge devices by hand cranking it necessary for small devices.

Have a plan to keep the lights on. Consider:

- Battery operated table lamps
- Hand crank flashlights or battery powered flashlightsparticularly useful as many hand crank flashlights today also have ports so that you can charge your phone or other small electronics
- Head lanterns- Particularly useful if you need to keep your hands free. Either battery powered or rechargeable if you have power banks and hand crank flashlights that allow you to charge devices.
- Candles. If you candles to light or heat a space, always remain vigilant when using them. Do not leave them unattended, on uneven surfaces or near flammable objects. If using a candle for light, placing a candle in front of a mirror can amplify the amount of light provided by the candle alone.

