

Oct 2026

DISASTER PREPAREDNESS FOR YOU & YOUR FAMILY

Presentation to the
West Essex Amateur Radio Club (WEARC)



“Remember: when disaster strikes,
the time to prepare has passed.”

—**STEVEN CYROS**

“It wasn’t raining when Noah
built the Ark.”

—**HOWARD HUFF**



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INTRODUCTION



KEVIN WU

Emergency Management & Disaster Response

kevin.wu@guttenbergcert.org

EXPERIENCE

10+ years of emergency management & disaster experience

AMERICAN RED CROSS

Supervisor

GUTTENBERG OFFICE OF EMERGENCY MANAGEMENT

Deputy Emergency Coordinator

GUTTENBERG COMMUNITY EMERGENCY RESPONSE TEAM (CERT)

Program Manager

01 TYPES OF DISASTERS

What are the different types of disasters?





TIME

At 9:30 PM, you get a knock on the door.

Or maybe you see a news report.

Or an emergency alert on your phone.

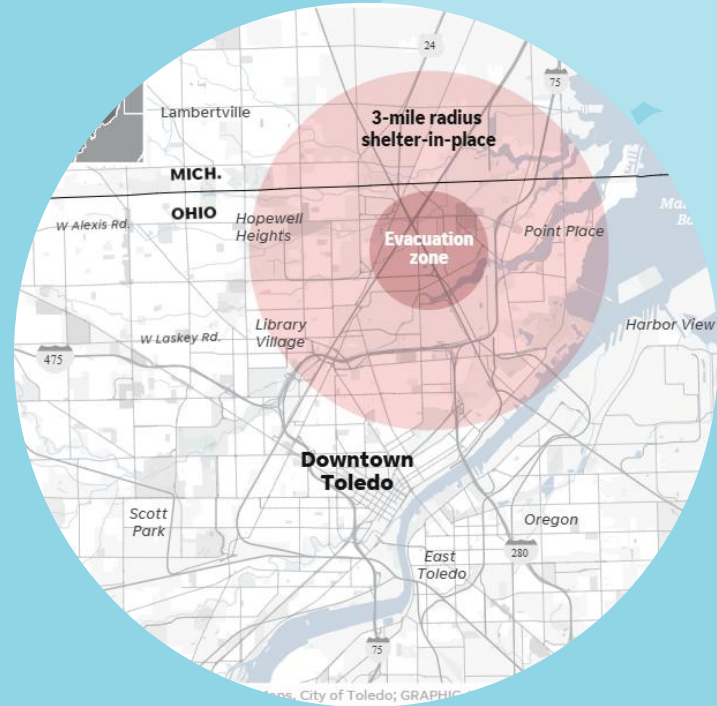
SCENARIO

Glycidyl Methacrylate, an industrial coating product normally stored as a liquid is in the air as a gas due to a tank leak. Residents within a 1-mile radius are told to evacuate, everyone within 3-mile radius are told to shelter-in-place at home.

THE SCENARIO IS REAL

- This occurred last night, October 20th, at 9:30 PM in Toledo, Ohio.
- Nearly 1,000 residents evacuated within the 1-mile radius.
- 30 people treated for chemical leak symptoms (headache, dizziness, tiredness, nausea, and vomiting).
- Explosion risk prevented hazmat teams from approaching the tank.

- Source: USA Today 10/21/26



WHAT CAN BE A DISASTER?

“A disaster is a sudden, harmful event that causes great damage, destruction, loss of life, or a serious disruption to a community.”

- The Cambridge Dictionary



Anything can feel like a disaster to single individual affected. **Losing a home is a disaster** and a life changing event, as impactful as a large scale disaster. We will discuss how to prepare yourself and your family for all potential disasters, big and small.

QUICK NUMBERS

72 HOURS

Time it takes for FEMA to respond with supplies and resources.

1 GALLON/DAY

Amount of water required per adult. A family of four need 28 gallons per week.

8-14 DAYS

Number of days without electricity during Sandy, up to several weeks.

7.5 FIRST RESPONDERS

Number of first responders per 1,000 people. However, not all on duty at one time.

7+ FEET

Height of storm surge flooding Hoboken, NJ and Staten Island, NY.

104,000 ANIMALS

Number of animals left behind during Katrina. Nearly 70,000 estimated died.

TYPES OF DISASTERS

NATURAL	● Geophysical – originating from the solid earth like earthquakes, volcanic eruptions, and tsunamis. ● Hydrological – deviations in normal water cycle or overflow like river floods and flash floods. ● Meteorological – atmospheric-driven events like tropical cyclones, hurricanes, and tornadoes. ● Climatological – atmospheric shifts like droughts, extreme heat waves, and wildfires. ● Biological – outbreaks caused by living organisms or toxins like disease epidemics, insect infestations, and animal plagues.
MAN-MADE	● Technological/Industrial - hazardous material spills, major transport accidents, nuclear power failures, and structural collapses. ● Intentional - acts of terrorism, civil conflict, war, and mass violence. ● Complex Humanitarian Emergencies - multi-faceted crises combining civil conflict, population displacement, and infrastructure breakdown leading to widespread famine or disease outbreaks.

SUPERSTORM SANDY 2012

900+ miles in diameter (largest Atlantic hurricane on record), it brought severe coastal flooding, high winds, and massive storm surge the Eastern seaboard, affecting 24 states. New Jersey had mandatory evacuations in Cape May County, and voluntary evacuations in other counties.



TRAIN DERAILMENT 2023

In East Palestine, Ohio, 38 train freight cars released six toxic chemicals, including Benzene, Butyl, and Chloride.

2,500+ residents evacuated for several days, with some displaced for months in temporary lodging.



COVID-19 PANDEMIC 2019 – 2023

Global pandemic and lockdowns in New Jersey for 2-1/2 months, with Oregon and California lasting 15 months.

Global lockdown affected over 100 countries globally, with 15-18 million deaths (directly and indirectly).



COVID-19 RESPONSE

CROWDED SUPERMARKETS SPREAD COVID; SHELVES EMPTIED



CURRENT RISKS 2026



PANDEMIC

COVID-19, Measles, Avian Flu (H5N1) Plague, Ebola

NATURAL DISASTER

4.8 NJ Earthquake in 2024, Hurricane Season

MAN-MADE

Toxic chemicals from train derailment,
Terrorism due to proximity to NYC

02

FACTORS IN PREPAREDNESS

What we need to consider when preparing?



CONSIDERATIONS IN PREPAREDNESS

WORK

What is your plan to
get home?



FAMILY

What is your plan for
family to connect?



HOME

What is your plan to
shelter in place?



PETS

What is your plan for
your pets?

PREPARED AT WORK

You're at work when a disaster occurs, what's your plan to get home? Millions on 9/11 asked themselves this.



- If you work in a commercial building, and lose power, how do you find your way out?
- You get out of the building, are you getting home by car or public transportation?
- If you're driving home, are the roads home clear, do you have an alternate route if they're blocked?
- If you're taking public transportation, are the buses, trains, or ferries running or shut down?
- Are the roads or streets safe for travel?
- Any risk of violence, crimes, or terrorism?

PREPARED AT HOME

You hear of a disaster and orders to shelter-in-place at home, maybe for a long time. Are you ready?

- Is your family all home, or are they en route?
- Do you have sufficient food to shelter in place?
- Do you have sufficient water? What if your community's water source becomes tainted?
- Do you have the necessary supplies? A toilet paper & cleaning supplies shortage occurred during Covid.
- Do you have backup power, or a power generator? Do you have fuel for your power generators?
- How will you protect your home and family?



FAMILY PREPAREDNESS

Dad is at work, mom is out shopping, the kids are at school. A large scale disaster occurs. What now?



- How will your family communicate?
- Texting uses less bandwidth than voice calls.
- **Zello** is a free walkie-talking app using data not voice.
- Do you have planned meeting locations?
- Who is an out of state contact your family can contact, in the event local lines are all down?
- Have physical contact cards of important numbers.
- Use social media to connect (ex. Facebook).
- Evacuate or shelter-in-place? You may have no choice.
- What are the potential local hazards?
- Are you signed up for local emergency alerts?
- Practice the plans, and discover potential flaws.

HAM RADIOS DURING DISASTERS



PROS

- Ham radios work when phone lines are down.
- Your family can use it to connect during a disaster.
- Radios are not expensive (about \$20 each on Amazon).
- Can coordinate with neighbors to help each other.
- Obtain info from others about road closures, locations of aid, and weather (from NOAA radio channels).
- Flexible and portable communications (good for go kits).

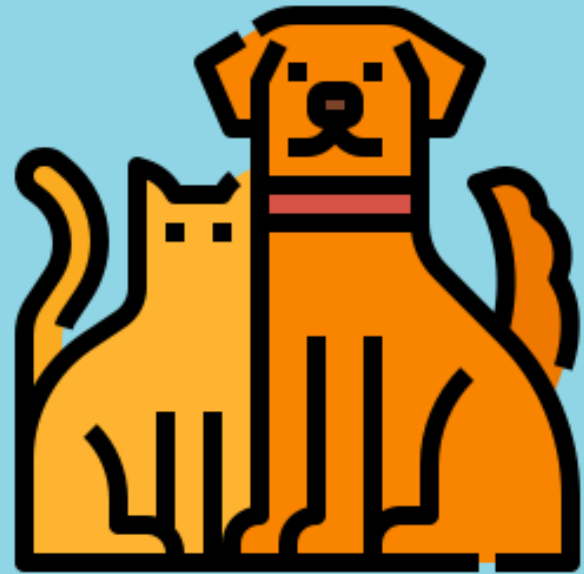
CONS

- Need to be licensed and learn how to operate ham radios.
- Ham radios have limited range (2-5 miles), but can be extended with a repeater or linked repeater system.
- Ham radios use public frequencies, so chat is not private
- Not for reporting emergencies, stay off official frequencies.

PET PREPAREDNESS

Are you home when a disaster occurs? Do you need to go home to get your pet(s)? What do you need to take for your pets? Not many people plan for their pets.

- Do you have three day's food in a waterproof container?
- Did you bring a leash for your pet(s) in case they panic, or need a walk? Even leashes for cats.
- Do you have a crate for your pet(s), for staying at a shelter?
- Do you have their medications or medical records?
- Did you bring their toys to occupy them?
- Do they have an ID collar with rabies tag? Backup collar? Are they micro-chipped?



WHAT ELSE?

We've only gone over the four most important areas to consider to prepare for a disaster, but every family is unique, so there may be more think of:

- Babies
- Young Children
- Older Adults
- Disabilities & Access & Functional Needs
- People with electrical powered or battery dependent medical devices
- English Second Language (ESL) speakers

There's a lot to think about, and during a disaster is not the time to develop a plan.



**ACT OR PROCESS OF MAKING SOMETHING LESS SEVERE,
DANGEROUS, PAINFUL, HARSH, OR DAMAGING**



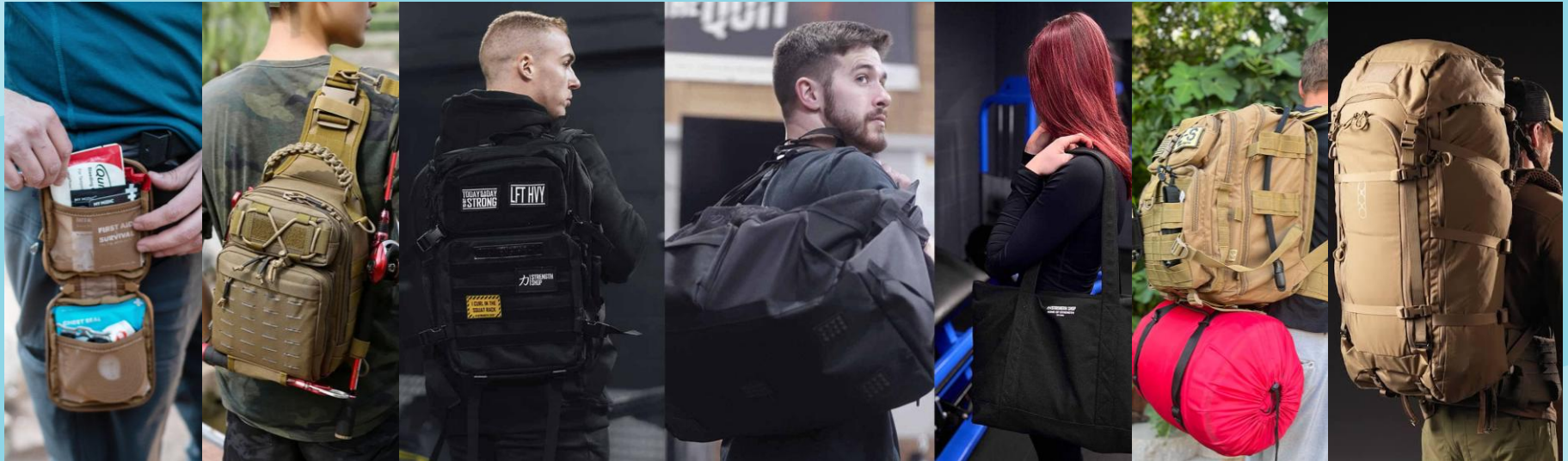
03 HOW TO PREPARE KITS

What do we need to prepare for disasters?



THERE IS A KIT FOR EVERY SITUATION

BUILD THE KIT(S) YOU NEED. YOU CAN BUILD KITS TO COMPLEMENT EACH OTHER, WITH EACH KIT CONTAINING ITEMS NOT INCLUDED IN LOWER LEVEL KITS, TO AVOID DUPLICATE RESOURCES



TYPES OF KITS

KIT TYPE	DESCRIPTION
Every Day Carry (EDC)	Portable small pouch, sling, or pocket organizer kept on your person or in your daily-use items for immediate 12-hour basic needs. Can contain a pocket knife or multitool, mini flashlight, lighter, cash, power bank, and basic first aid or trauma kit.
Get Home Bag (Work)	A small backpack kept in workplace to sustain you 24 hours while traveling home during a disruption. Can contain walking-appropriate gear, water, snacks, weather protection, glow stick or flashlight, loud whistle, and basic first aid or trauma kit (if no EDC kit).
Disaster Supplies Kit (Home)	Section of closet, tote boxes, or combination of both. Can contain non-perishable food, bottled water, water filtration devices (straw or water bottle), flash lights, AM/FM NOAA weather hand crank radio, extra batteries, cash, disposable moist towelettes or body/bath wipes when bathing is not available, portable toilet buckets, portable stove for cooking, portable solar panel & battery or gas generator, well-stocked first aid or trauma kit, plain unscented bleach for disinfecting drinking water, tarp and duct tape for sealing damage to your home, and ability to protect your home and family. If you're licensed for amateur radio, include a ham radio as backup communications.

TYPES OF KITS (Continued)

KIT TYPE	DESCRIPTION
Grab Bag (Home)	A bedside or near-door quick-grab kit for immediate evacuation during a sudden threat like a fire. Can contains wallet, keys, phone charger, essential medications, and glasses.
Go Bag (Home)	Primary 72-hour self-sufficiency backpack stored at home for unexpected evacuations. Can contain non-perishable food, snacks, water bottles, knife or multitool, flash light, power bank, charging cables, AM/FM NOAA weather hand crank radio, extra batteries, hygiene toiletries (toothbrush, toothpaste, comb, etc.) disposable moist towelettes or body/bath wipes for bathing, cash, waterproof bag with important documents and records (copies of photo IDs, driver's licenses, passports, insurance policies, birth certificates, emergency contacts, etc.), lighter or waterproof matches in case you need to start a fire to keep warm or cook, clothing changes (especially extra socks), spare eye glasses (contacts not advisable as conditions may not be sterile to prevent eye infections), Mylar emergency blankets in case you need to keep warm, rain poncho, medication (one week's worth just in case), camping toilet paper, and first aid or trauma kit (not basic). If you're licensed for amateur radio, include a ham radio.

TYPES OF KITS (Continued)

KIT TYPE	DESCRIPTION
Bug Out Bag (Home)	A heavy, long-term displacement pack for extended or permanent evacuation. It may require vehicle transport due to its heavy weight and comprehensive survival inventory. Contains everything in the Go Bag plus the below list of items, or a secondary bag that complements the Go Bag with whatever is not already in the Go Bag). Can contain electrolyte packets (to maintain hydration and salts), water bottle (a 1-liter single-wall stainless steel bottle can also be used to boil water), water filtration straw or bottle, water purification tablets, shovel, ax, hand saw, pup tent or 2 lightweight tarps can be used to set up shelter (one for floor and one for cover), 100 feet of paracord (for securing tarp or hanging tarp as shelter), compass, work gloves, fire starters, duct tape, sewing kit, whistle/signaling mirror, fishing line and hooks.
Car Emergency Kit	Bag of supplies kept in car in cases of stoppage due to roadside breakdowns or extreme weather emergencies. Can contain blankets, water, snacks, flashlight, batteries for the flashlight, power bank, phone charger cord, and basic first aid or trauma kit. If you're licensed for amateur radio, include a ham radio in case you are in an area with no cellular phone tower coverage to call for help.

BONUS: ESCAPING A CAR IN A FLOOD

Do you know how to get out of your vehicle if you get trapped in flood waters?

- Unbuckle your seatbelt immediately.
- Roll down window immediately while your car is still floating or you still have power in your vehicle.
- If unable to open, break the window using a window breaker tool, a heavy object, or pull off a headrest and use its metal rods, and smash the corner of the side window. **Do not try to break the windshield.** Get out through the window at once.
- If unable to open or break a window, and the car is filling with water, **stay calm** and let the water rise inside until the pressure equalizes. Open the door when water level inside matches the outside level.



GET TO SAFETY

After exiting the vehicle...

DO NOT ENTER THE WATER!

- If you can, avoid entering the water, and keep a hold of a part of your vehicle to hold on.
- Even water that looks calm may be moving, and can sweep you off your feet and carry you off.
- Climb on the roof of the car so rescuers can see you.
- Swim for safety using defensive swimming (feet pointed downstream) only if the car is swept away and you must reach high ground.



04

PREPARATION CONSIDERATIONS

What else do we need to think about?





What goes into each of your emergency kits or bags is entirely up to you, and based on your personal preferences and needs for each situation. There is no wrong way for assembling a kit, only what's right for you.



What matters is the weight, size, and ease of carrying the bags. Test carrying your bag to see if you need to remove items. If the bag isn't easy to carry and doesn't have what you need for its intended purpose, then it's useless.

FOOD AND WATER CONSIDERATIONS



WATER

Daily Needs

People: 1 gallon

Dogs: 1 ounce per pound

Cats: 4 ounces per 5 lbs.

Filtration devices/bottles
are lighter to carry.



CANNED FOOD

For bag kits, avoid canned goods as they are heavy, don't provide daily required calories, and you will also need to carry the additional weight of a can opener.



FOOD WEIGHT

For bag kits, consider carrying compact high-calorie food like Meals Ready To Eat (MREs) or emergency ration bars. Both last for 5-7 years.

25-YEAR SHELF LIFE FOOD

If you have space, emergency food buckets are great for home kits. But MREs and Emergency Ration Bars are still lighter for bag kits.



Most emergency foods can be bought by the bucket, have around 100+ servings per bucket, and cost \$65 to \$150.



The buckets can also be bought by the pallets, if you have the space. Costs run from \$2,400 to \$9,000 per pallet.

OTHER CONSIDERATIONS

THINGS TO KEEP IN MIND

- Test your preparedness plans and your kits to see if they work. Try getting home from work with your Get Home Bag and actually walking one of the alternate routes. What challenges do you encounter, and are you missing any items or supplies that would make it less challenging?
- Rotate food, water, medical supplies, and other items; you can use them before they expire.
- Consider taking a **Stop The Bleed** course to learn how to treat traumas and serious injuries.
- If anyone has disabilities, think about what additional items or preparation they may require.
- For those using medical devices, what else would you need to bring along to support them?
- When sheltering at home during a disaster, keep in mind that when resources run low in your community, you may need to take steps to keep your family and home safe:
 - Reduce the amount of lights to avoid attracting attention during a power outage.
 - Who would you feel comfortable giving assistance to, and who should you avoid?
 - Do you have any way of defending yourself and your home? People murdered neighbors for baby food during Katrina in Louisiana. It can get violent after 3 weeks of a disaster.

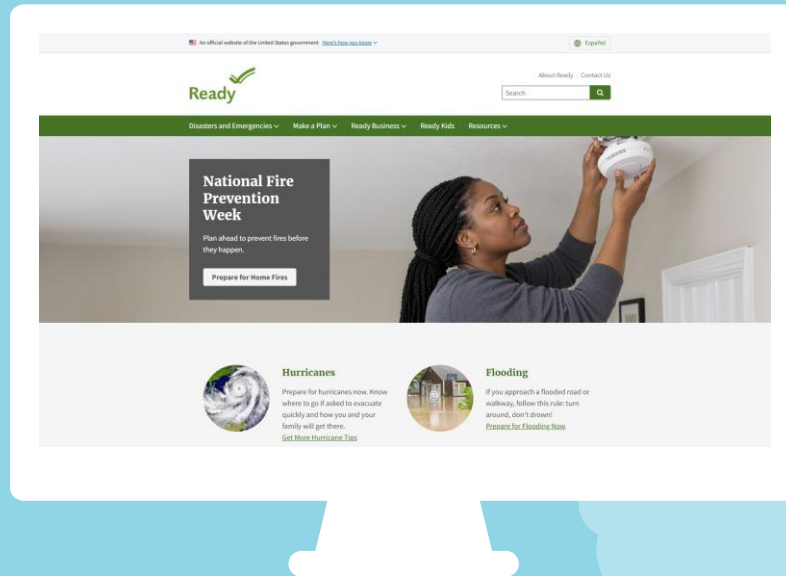
05 RESOURCES

How can I learn more about preparedness?



WE COVERED A LOT OF INFORMATION

But there is a lot more information out there, so do your own research, and learn more about how to prepare for disasters.



RESOURCES

NATIONAL RESOURCES

- Ready.gov (Department of Homeland Security)
<https://www.ready.gov/>
- Ready.gov free, downloadable checklists and guides covering family communication plans, pets, older adults, and individuals with disabilities
<https://www.ready.gov/publications>
- American Red Cross
<https://www.redcross.org/get-help/how-to-prepare-for-emergencies.html>

RESOURCES

STATE RESOURCES

- New Jersey 2-1-1 Emergency Preparedness
<https://nj211.org/emergency-preparedness>
- New Jersey Department of Health Office of Disaster Resilience
<https://www.nj.gov/health/er/>
- New Jersey Office of Emergency Management (NJOEM) Plan & Prepare
<https://njsp.njoag.gov/njoem/plan-prepare/>

RESOURCES

ADDITIONAL RESOURCES

- United Way Disaster Preparedness Resources
<https://www.unitedway.org/united-we-prepare>
- Center for Disease Control (CDC)
<https://www.cdc.gov/Emergency/index.html>
- Electrical Safety Foundation International (ESFI) Disaster Safety
<https://www.esfi.org/disaster-safety>
- Occupational Safety and Health Administration (OSHA) Emergency Preparedness and Response
<https://www.osha.gov/emergency-preparedness>

RESOURCES

AMATEUR RADIO RESOURCES

- West Essex Amateur Radio Club
<https://wearc.org/>
- National Weather Service (NWS) Station Listing
- https://www.weather.gov/nwr/station_listing
- Essex County Amateur Radio Emergency Service (ARES)
- <https://ares.osi3.net/>
- The National Association for Amateur Radio (ARRL)
- <https://www.arrl.org/>

Questions

Disaster planning shouldn't be something
that starts after a disaster happens



RECOMMENDED ITEMST

Note: Home Disaster Supplies Kit doesn't have a lot of items because it's assumed some items are already on hand.

For home sheltering situations, may want to have at least two week's supply of toilet paper, canned goods, etc.

Item	Every Day Carry (EDC)	Get Home Bag	Grab Bag	Go Bag	Bug Out Bag	Disaster Supplies Kit	Car Emergency Kit
AM/FM or NOAA Crank Radio				X	X	X	X
Ax					X		
Batteries		X		X	X	X	X
Blankets							X
Bleach						X	
Body/Bath Wipes				X	X		
Camping Toilet Paper				X	X		
Car Escape Tool							X
Cash - Small Amount		X		X	X		
Change of Clothing				X	X		
Charging Cables for Phone & Devices	X	X	X	X	X		X
Comfortable Walking Shoes		X					
Compass					X		
Crow Bar or Pry Tool					X	X	X
Duct Tape or Gorilla Tape					X	X	
Dust Mask (for Dust, Smoke, or Epidemic)		X		X	X	X	X
Extra Socks				X	X		
Fire Starter					X		
First Aid or Trauma Kit	X	X		X	X	X	X
Fishing Line & Hooks					X		
Flashlight	X	X	X	X	X	X	X
Folding Saw or Rope Saw					X		
Food					X		
Food - Emergency Ration Bars					X		X
Food - Meals Ready to Eat (MREs)					X		X
Food - Snacks		X		X	X	X	X
Glow Sticks		X					
Ham Radio				X	X		X
Hand Sanitizer				X	X		X
Hand Warmers							X
Important Documents & Records				X	X		

Item	Every Day Carry (EDC)	Get Home Bag	Grab Bag	Go Bag	Bug Out Bag	Disaster Supplies Kit	Car Emergency Kit
Jumper Cables							X
Keys			X				
Kids - Baby Formula or Baby Food				X		X	
Kids - Books, Games & Toys				X	X		
Kids - Diapers				X		X	
Knife	X			X	X		X
Machete					X		
Medical Devices				X	X	X	
Medication			X	X	X	X	
Mini Shovel					X		
Moist Towelettes				X	X		X
Multi-Tool	X			X	X		X
Mylar Emergency Blankets				X	X		X
Painkillers				X	X	X	
Paracord (100 Feet)					X		
Pets - Bed				X	X		
Pets - Crate				X	X		
Pets - Dishes				X	X		
Pets - Extra ID Tag w/ Rabies Info				X	X		
Pets - Leash				X	X		
Pets - Medical Records				X	X		
Pets - Medication				X	X		
Pets - Toys				X	X		
Pets - Treats				X	X		
Pets - Water				X	X		
Pets - Wet and Dry Food				X	X		
Plastic Sheeting					X		
Portable Large Battery						X	
Portable Power Bank	X	X	X	X	X		X
Portable Solar Charger				X	X		
Portable Solar Panels						X	
Portable Stove					X	X	
Portable Tire Inflator							X
Portable Toilet Bucket						X	

Item	Every Day Carry (EDC)	Get Home Bag	Grab Bag	Go Bag	Bug Out Bag	Disaster Supplies Kit	Car Emergency Kit
Pup Tent					X		
Rain Poncho		X		X	X		X
Reflective Triangles or Road Flares							X
Sewing Kit					X		
Signaling Mirror					X		X
Sleeping Bag					X		X
Snacks (Non-Perishable)		X		X	X	X	X
Solar Charged Camp Lamp					X		
Spare Eye Glasses				X	X		
Tarp (2) Lightweight					X	X	
Toiletries				X	X		
Ultra Lightweight Sleeping Bag					X		X
Wallet			X				
Water (Bottled) - 1 Gal. Per Person Per Day		X		X	X	X	X
Water (Bottled) - 1 Liter(s)		X		X			X
Water Filtration Straw or Bottle/Bag					X		
Water Purification Tablets					X		
Weapon (For Self Defense)				X	X	X	X
Whistle					X		X
Work Gloves					X	X	X