# XREADINESS - EXTREME WEATHER & CLIMATE DISASTERS



## **HEATWAVES & DROUGHTS**

Heatwaves are becoming longer and more frequent, especially in regions unaccustomed to extreme heat.

Indoor spaces should be shaded and ventilated. Use wet cloths, fans, or improvised cooling if air conditioning is unavailable. Conserve water proactively and store extra during heat events.

Vulnerable groups (children, elderly, chronically ill) are at greatest risk. Prepare to check on and support them regularly.

- Stay indoors during peak heat hours
- Wear light clothing
  Keep yourself hydrated
  Avoid intense activity

### **FLOODING & RISING SEA LEVELS**

Flooding is one of the most common climate-related hazards and can result from heavy rainfall, dam failures, or sea level rise. Not living next to a body of water doesn't mean you won't experience flooding.

Residents in flood-prone areas should get familiar with local warning systems and evacuation routes in advance. If evacuation is recommended or ordered, leave as quickly as you can.

In long-term planning, consider whether relocation is possible as sea levels continue to rise. If you have a choice, avoid basement and ground floor homes

- Seal basements
  Store valuables
- Store valuables and electronics above ground level
- Have waterproof containers for documents and backup power for pumps or radios
- Avoid driving or walking through floodwaters (there are many unseen dangers)
- (1) If there is a risk of flooding, make sure you can access your roof. If needed, have an axe or hammer available to break through so emergency services can find and rescue you
- In apartment buildings, know how to access the roof

### **EARTHQUAKES**

Increasing rainfall and the melting of glaciers may be increasing the frequency and intensity of earthquakes. If you live in an area prone to earthquakes, you should always have your Go Bag ready. Secure heavy items in your home like bookcases and refrigerators.

- When an earthquake happens, the recommendation is Drop, Cover and Hold On: get down on all fours, (or locking wheelchair wheels), put your arms and hands over your head and neck, and if possible, crawl under a sturdy table. Hold onto the table if possible
- If you are inside, stay and do not run outside and avoid doorways
- (1) If you are in bed, turn face down and cover your head and neck with a pillow
- If in a car, pull over and stop. Set your parking brake
- (1) If you're outside, stay outside and move to an open area if possible

### **TSUNAMIS**

A tsunami is multiple sea waves triggered by a sudden and massive ocean disturbance. As tsunamis enter the shallower water near shore, their wave height increases as their frequency decreases, quickly creating a wave of dangerous height and power. Similar to floods, tsunamis can sweep away vehicles and structures. They can also submerge significant portions of land and thereby cause damage to critical infrastructure and put lives at risk.

- ② Don't delay: if you're near the shore and experience an earthquake, hear a tsunami warning, or observe a rapid change in water level (including the water suddenly receding), move immediately to higher ground and aim for areas at least 30 meters above sea level. If possible, you should move as far as 3 kilometers inland
- Stay away from the beach and avoid other waterways
- If an earthquake strikes along with the tsunami, follow the procedures for earthquakes.
- Follow Authorized Routes. If you live in or visit a coastal community, be aware of authorized evacuation routes. In the event of an emergency, stick to these routes and avoid low-lying areas most vulnerable to tsunami inundation

### **WILDFIRES & SMOKE POLLUTION**

Hotter, drier climates and land mismanagement are increasing wildfire risk across much of the world. If evacuation is advised, leave immediately. Fires can move faster than expected, and air quality deteriorates rapidly. Plan evacuation routes that avoid forested areas, and know where to find updates on fire spread and air quality.

- Create a defensible zone around your home: clear dry vegetation, store flammable items away from buildings, and keep emergency tools (shovels, water hoses) accessible
- Use masks or improvised filters (wet cloths) to reduce smoke inhalation during and after fires

#### If Trapped at Home

- Stay indoors, away from outside walls
- Stay low to the ground to avoid smoke inhalation
- Close doors, but leave them unlocked
- Fill sinks and tubs with cold water
- Contact emergency services and let them know you are trapped

#### If Trapped While Traveling in a Vehicle

- If you can't find shelter, stay in your vehicle; it will help protect you from flames and radiant heat
- Close the windows, doors, and air vents, and turn off the air conditioner and engine
- Turn on your hazard lights and headlights to make your vehicle more visible in heavy smoke
- If you can safely get away from danger, continue doing so cautiously, avoiding heavy smoke
- If you cannot safely travel away from danger, park away from trees and bushes
- Get on the vehicle's floor, cover yourself with a coat or blanket, and wait until the fire has passed and the temperature has dropped

### If Trapped by Flames While Outside

Seek an area free of vegetation and ideally a depression or ditch for cover and lie face down. Shield yourself from the heat with any available object

# **LANDSLIDES & SOIL EROSION**

Heavy rain and thawing permafrost destabilize slopes, especially in mountainous or recently burned terrain. Signs of risk include cracks in soil, leaning trees or poles, unusual sounds (rumbling or cracking), and water pooling where it didn't before. Reforestation and terracing can reduce erosion over time. Consider long-term land care as part of preparedness. Avoid building or camping on steep slopes or under rock faces.

### **COLD WAVES & POLAR VORTEX EVENTS**

Even in a warming world, cold waves can become more intense due to disrupted polar airflows. Prepare for potential power outages, frozen pipes, and limited transport during extreme cold.

- Layer clothing
- Insulate windows
- Use backup heating sources like wood stoves or gas heaters (ventilate properly to prevent carbon monoxide poisoning)
- Ensure vehicles are winter-ready with full fuel tanks, emergency supplies, and tire chains or studded tires

Check in on vulnerable individuals and animals regularly. Exposure can be fatal even in well-insulated homes if heat is lost

### **SOLAR STORMS & EMP RISKS**

Solar flares and electromagnetic pulses (EMP) can disrupt satellites, navigation systems, power grids, and communications. While rare, a strong geomagnetic storm could cause continent-wide blackouts and damage unshielded electronics. In case of GPS loss, know how to navigate using physical maps and a compass.

Store radios, flashlights, and other critical electronics in a Faraday cage (metal box or wrapped in foil) to protect them.

## STORMS HURRICANES TYPHOONS TORNADOES

Severe storms can bring destructive winds, lightning, power outages, and damage to buildings and roads. In coastal areas, prepare for storm surges and know when to evacuate.

- Have loose objects outdoors secured
- Charge devices in advance
- Stock up on emergency supplies, especially water, food, flashlights, and a battery-powered radio
- Stay indoors away from windows and protect windows depending on the severity of the storm, install shutters or cut wooden panels and seal the windows before severe storms

After the storm, avoid downed power lines and damaged structures; check on neighbors, especially the elderly or isolated.

### **EMERGENCY CONTACTS**

Name			
Contact			
Name			
Contact			_
Name			
Contact			

NOTES				

# **EVERY HOUSEHOLD NEEDS - CHECKLISTS**



### **EMERGENCY PLAN**

It will take you about 20 minutes to make a household emergency plan. Then make sure everyone understands the plan. In a crisis, you may need to leave your home quickly. Planning in advance saves time and reduces panic.

Know the evacuation plan, the safe exits

	and routes from home: by car, on foot,
	and alternative paths in case roads are
	blocked or damaged.
	Agree on a meeting point to reunite with
	family or housemates (have a location A
	and a location B if A is compromised).
	The locations should be accessible by foot
	and on high ground.
	If you live alone, make a plan with a
	friend or neighbour.
	If you have children, plan who will pick
	them up from school/daycare and a
	second option if the first person can't.
	Know the location of your fire
	extinguisher, water valve, electrical panel,
_	gas valve and floor drain.
	Each person in the family should know
	how to turn off the utilities, especially
	gas if you have it.
	Each person should have key contacts on
	their phones and at least one payment
	card on their phone in the event that you
_	cannot return home at all.
	Everyone should know where the Go Bag
	is (ideally easily accessible near a door)
	and where the Stay Shelf is.

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FIR	ST AID KIT
	Adhesive bandages in assorted
	sizes for minor cuts, scrapes, and
	injuries
	Sterile gauze pads, nonstick gauze,
	and adhesive tape
	Elastic bandage
	Moleskin to apply on blisters or
	hotspots
	Eyeshields and pads
	Aluminum finger splints
	Thermometer
	Tweezers
	Small pair of scissors
	Syringe
	Face masks
	Sterile cotton balls
	Hand sanitizer
	Latex or non-latex gloves
	Antiseptic solution or wipes, such
	as hydrogen peroxide,
	povidone-iodine, or chlorhexidine
	Antibiotic ointment
	Sterile eyewash such as saline
_	solution
	Calamine lotion
	Hydrocortisone cream
	Cold medication
	Laxatives
	Antidiarrheals

Pain relievers (acetominaphen, ibuprofen) and fever reducer (aspirin - not for children)

If needed: EpiPen, inhaler

 $\begin{array}{l} \textbf{DONATE TODAY TO} \\ \textbf{XR GLOBAL SUPPORT} & bit.ly/xractnow \end{array}$ 

NOTES

You can make your own Go Bag or buy one but make sure you go through each item in a bought bag. Make sure the bag (ideally an easy-to-carry knapsack) is sturdy and that you would actually be able to carry the bag long distances.

	vn to everyone in the household.		
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	Food: 2,000–2,500 kcal/day of non-perishable food		
	(dry, canned, energy-dense)		
	Manual can opener		
	Water purification tablets/filter (filter straws)		
	Water-carrying container (collapsible jug or bottle)		
	Electrolyte powder/salt		
	Flashlight/headlamp + extra batteries		
	First aid kit with basic meds + personal prescriptions		
	Portable radio (battery, solar-powered or		
	crank-powered; write key info stations on the radio)		
	Power bank		
	Solar phone charger		
	Knife		
	Multitool		
	Emergency whistle		
	Matches, lighters, fire starters (in a waterproof bag)		
	Local map (make sure everyone knows how to read a		
	paper map)		
	Compass		
	Duct tape		
	Notebook and pencil		
	Identification and copies of essential documents		
	(printed and digital)		
	Cash		
	Mobile phone + backup communication plan		
	Trash bags		
Ö	Toothbrush, toothpaste, soap, hand sanitizer		
	Menstrual and hygiene products		
	Wet wipes or waterless cleaning cloths		
	Spare underwear and socks		
00	Face masks		
	UV sunglasses		
	Towel or microfiber cloth		
	Essential baby food/diapers if needed		
	Deck of cards		
COL	D ENVIRONMENT ADD-ONS		
	Extra layers (wool or synthetic): base layers, thermal shirt		
	and pants		
	Insulated jacket (preferably windproof/waterproof)		
	Wool socks (2–3 pairs)		
	Hat (covers ears)		
	Neck gaiter		
	Gloves or mittens (2 pairs: thin liner + insulated outer layer)		
Ō	Blanket (wool or survival/emergency foil blanket)		
	Sleeping bag (rated for sub-zero temperatures)		
	Hand/foot warmers		
	Snow shovel (collapsible)		
	Ice grips or crampons		
	Extra tarps or insulated groundsheet		
	Thermal tent liner or bivy bag		
	Mylar tent reflectors or emergency space blanket layer		
	Candle lantern or tent-safe heater		
ō	Additional food		
HO.	FENVIRONMENT ADD-ONS		
	Wide-brim hat or head scarf		

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	Wide-brim hat or head scarf
	Sunscreen (SPF 30+)
	Cooling towel or cloth
	Shade cloth or tarp for sun shelter
	Dust mask or cloth for sand/smoke protection
	(N95/FFP2 masks or better protect against fine
	particles, smoke, and airborne diseases)
	Hand fan (manual or battery-powered)
	Additional water

### **STAY SHELF**

Your Stay Shelf should ideally be a cool, dry shelf. The focus is on food and hydration for your entire household for a minimum of 3 days and ideally a week. The food needs to be non-perishable (does not need refrigeration) and ideally can be eaten without needing to be cooked. Food that contains liquid helps hydration. Keep a manual can opener in your kit, and rotate food stocks regularly to avoid spoilage. Use the "First In, First Out" system to make sure you use the oldest stocks first. ood our

	ervation methods like dehydration, vacuur ng, fermenting, and pickling can extend fo
	without electricity. Label everything with
	hase or expiration dates, and make sure yo
	k includes some comfort food. It can be
	tionally grounding in a crisis.
	Drinking water: (minimum 3 liters/day
	per adult)
	Canned food: for example, tomatoes,
	corn, green beans, baked beans,
	chickpeas, tuna in oil, canned peaches,
	canned pineapple
	Energy bars or granola bars
	Peanut butter and other nut butters
	Crackers, chips/crisps
	Dried fruits
	Nuts
	Powdered milk (assuming water is
	available)
	UST milk and juice (swap out expired
	containers regularly)
	Oatmeal or cereal
	Jams
	Baby supplies if needed
	Pet food if needed
	Honey
	Sugar
	Chocolate
	Salt and pepper and condiments
	Additional prescription and general
	medication (acetaminophen, ibuprofen,
	anti-itch, bug repellant)
	Additional cleaning supplies assuming
	there is no water: plastic bags, wipes,
	toilet paper
	Water purification system and collection
	system (rain barrel or even a bucket)

# **CAR EMERGENCY KIT**

Food that won't spoil, such as energy
bars
Water (change every six months)
Phone charger (will work as long as car
battery has power)
Blanket
Extra clothing and shoes
First aid kit with a seatbelt cutter
Candle in a deep can and matches
Wind-up flashlight
Whistle in case you need to attract
attention
Paper roadmaps
Copy of your emergency plan and
personal documents
Antifreeze/windshield washer fluid
Tow rope
Jumper cables
Fire extinguisher
Warning light or road flares
For cold climates, carry snow chains, a
shovel, and sand for traction
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