

# GLOBAL DISASTER SURVIVAL BLUEPRINT

BE PREPARED. ANYWHERE.



A Book Written By  
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# **Global Disaster Survival Blueprint**

A complete survival guide tailored to help anyone prepare for, respond to, and recover from natural disasters — regardless of location

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## Introduction: Why You Need This Guide

Disasters do not announce their arrival. In a matter of seconds, a trembling ground, a wall of water, or a sky blackened by ash can transform familiar landscapes into zones of chaos. Every year, millions of people are affected by natural hazards that disrupt homes, livelihoods, infrastructure, and ecosystems. Yet while disasters are global in reach, preparedness remains uneven. In many places, people are unaware of the risks they face, the steps they can take to mitigate them, or how to respond when the unexpected occurs. This guide was created to close that gap, not with fear, but with facts, tools, and global strategies for resilience.

Whether you live in an earthquake-prone city, a hurricane corridor, a volcanic region, or travel frequently, this eBook will teach you how to:

- Understand the science behind natural disasters
- Assess your personal exposure to risk
- Build a reliable 72-hour survival kit
- Create and rehearse an emergency plan
- React decisively and safely before, during, and after a disaster
- Use digital tools to enhance your response

This is your blueprint for survival, designed not only to protect your life, but to help you preserve your autonomy, care for others, and reduce long-term impacts.

☒ *Note: This guide is designed for educational purposes and is not a substitute for official emergency alerts or national disaster response guidelines.*

# 1. Understanding Natural Disasters

## 1.1 What Is a Natural Disaster?

A natural disaster is a sudden, extreme event caused by natural processes of the Earth that results in significant harm to people, property, and the environment. Disasters can be geophysical (e.g., earthquakes), hydrological (e.g., floods), meteorological (e.g., hurricanes), climatological (e.g., droughts), or volcanological (e.g., eruptions) (CRED & UNDRR, 2020).

A natural hazard only becomes a disaster when it intersects with human vulnerability — unprepared infrastructure, lack of early warning systems, or high population density in risk-prone areas.

## 1.2 The Global Impact of Natural Disasters

Between 2000 and 2019, the world experienced 7,348 major disaster events, claiming over 1.23 million lives and affecting more than 4 billion people (UNDRR, 2020). Economic losses exceeded \$2.97 trillion USD.

The most frequent disaster types over the past two decades include:

- Floods (most common)
- Tropical cyclones/hurricanes
- Earthquakes
- Droughts



- Wildfires

### 1.3 The Role of Climate Change and Urbanization

Two forces are accelerating global disaster risk:

- **Climate change** is intensifying weather-related disasters like storms, floods, droughts, and wildfires. Warmer oceans fuel more powerful hurricanes (IPCC, 2021).
- **Urbanization** increases population density in vulnerable areas, especially informal settlements near rivers, coasts, or unstable slopes.

Additionally, aging infrastructure and poor land-use planning exacerbate impacts. In many parts of the world, disaster events that should be survivable become catastrophic due to lack of preparedness.

### 1.4 Why 72 Hours?

Disaster relief systems typically take up to 72 hours to reach affected areas, especially if transportation routes are damaged. This is why emergency management agencies such as FEMA (U.S.) and the IFRC recommend every household have a 72-hour survival kit with water, food, first aid, power, and tools to stay self-sufficient until help arrives (FEMA, 2023).

### 1.5 The Psychology of Preparedness

People often assume that disasters won't affect them — a phenomenon known as "optimism bias." This cognitive bias leads many to delay preparation,

underestimate risk, or ignore warnings (Paton, 2003). Education, drills, and visual tools like checklists significantly improve readiness.

### **Key Takeaways from Section 1**

- Natural disasters are increasing in frequency and intensity.
- Disasters = natural hazard × human vulnerability.
- The 72-hour self-reliance window is critical.
- Preparedness is psychological as well as logistical.
- You can reduce your risk today by understanding your environment and taking action.

### **References**

- CRED & UNDRR (2020). *2020 Annual Disaster Statistical Review*. Centre for Research on the Epidemiology of Disasters and United Nations Office for Disaster Risk Reduction.
- FEMA (2023). *Are You Ready? An In-depth Guide to Citizen Preparedness*. Federal Emergency Management Agency.
- IPCC (2021). *Climate Change 2021: The Physical Science Basis*. Intergovernmental Panel on Climate Change.
- Paton, D. (2003). *Disaster Preparedness: A Social-Cognitive Perspective*. *Disaster Prevention and Management*, 12(3), 210–216.
- UNDRR (2020). *Global Assessment Report on Disaster Risk Reduction 2020*. United Nations Office for Disaster Risk Reduction.

## 2. Know Your Risk – Wherever You Live

Understanding what disasters are *likely* to occur in your region is the foundation of effective preparedness. Risk is not the same everywhere, it varies by geography, climate, land use, infrastructure, and even local policy. This section will help you assess your personal and community-level exposure to natural hazards and equip you with tools to visualize it.

### 2.1 What Is Disaster Risk?

Disaster risk is defined as the potential loss of life, injury, or destroyed assets that could occur to a system, society, or community in a specific period, determined probabilistically. It is the product of three interacting components (UNDRR, 2022):

- **Hazard:** The likelihood of a potentially damaging natural event (e.g., earthquake, flood, storm)
- **Exposure:** The people, assets, infrastructure, or resources located in hazard-prone areas
- **Vulnerability:** The characteristics that make a community more or less able to cope, such as poverty, building materials, or access to emergency services

**Risk = Hazard × Exposure × Vulnerability**

## 2.2 Global Hazard Zones: Where Disasters Happen Most

While disasters can strike anywhere, certain regions are more prone to specific hazards. The table below shows examples of regional hotspots:

<b>Hazard Type</b>	<b>High-Risk Regions</b>
<b>Earthquakes</b>	Japan, Indonesia, Chile, Turkey, Mexico, California
<b>Tropical Storms</b>	Philippines, Caribbean, Gulf of Mexico, Southeast USA
<b>Floods</b>	Bangladesh, India, Pakistan, West Africa, Central Europe
<b>Droughts</b>	Sahel Region, Australia, Central America
<b>Wildfires</b>	Western USA, Canada, Mediterranean, Australia
<b>Volcanoes</b>	Ring of Fire (Indonesia, Japan, Ecuador, Papua New Guinea)

☒ *Useful resources:*

- INFORM Risk Index: <https://drmkc.jrc.ec.europa.eu/inform-index>
- UNDRR Risk Atlas: <https://www.undrr.org>
- Global Seismic Hazard Map (GSHAP): <https://gfz-potsdam.de>

## 2.3 How to Assess Risk in Your Specific Area

To assess your personal or community risk, follow these three steps:

### 1. Identify the dominant hazards:

- Use government hazard maps, geological surveys, or civil protection websites
- Investigate historical data on past disasters in your region
- Interview local authorities, civil defense offices, or long-time residents

### 2. Map your proximity to risk factors:

- Fault zones, volcanoes, coasts, river basins, floodplains, unstable slopes
- Elevation and topography via Google Earth, NASA SRTM, or GIS tools

### 3. Evaluate building and community vulnerability:

- Building codes, materials, roof types, elevation
- Roads and bridges for evacuation
- Access to clean water, backup power, and medical aid

☒ *Tip: Use apps like MyShake (seismic alerts) or FloodFactor (U.S. flood data) to get personalized local assessments.*



## 2.4 Urban vs. Rural Risk Dynamics

**Urban environments** may benefit from infrastructure and rapid information flow, but also face:

- Higher population density
- Vertical evacuation challenges in high-rise buildings
- Limited green or buffer zones

**Rural environments** often require:

- Greater self-reliance
- Better long-term storage and water access
- Personalized plans, especially in areas with no cellular signal

## 2.5 Cascading and Compound Risks

Disasters often occur in chains, not isolation. Examples include:

- Earthquakes → Tsunamis → Fuel leaks → Fires
- Tropical storms → River flooding → Landslides → Water contamination
- Volcanic eruption → Ashfall → Crop failure → Food shortages

These cascading or compound risks are becoming more common due to climate stress, infrastructure complexity, and population growth (Pescaroli & Alexander, 2018).

## Key Takeaways from Section 2

- Risk is determined by hazard, exposure, and vulnerability
- Disaster risk varies by region and must be assessed locally
- Online tools and maps help identify and visualize risk
- Urban and rural settings demand tailored preparedness
- Compound risks require integrated, flexible planning

## References

- UNDRR (2022). *Global Assessment Report on Disaster Risk Reduction*. United Nations Office for Disaster Risk Reduction.
- INFORM (2023). *INFORM Risk Index 2023*. European Commission Joint Research Centre.
- IPCC (2021). *Sixth Assessment Report: Impacts, Adaptation and Vulnerability*.
- Pescaroli, G., & Alexander, D. (2018). *Understanding Compound and Cascading Disasters: A Holistic Framework*. *Disaster Prevention and Management*, 27(3), 300–305.
- UNEP (2021). *World Atlas of Natural Disaster Risk*. United Nations Environment Programme.

### **3. The 72-Hour Survival Kit (Expanded Version)**

When disaster strikes, there is often a critical delay between the onset of the event and the arrival of organized emergency response services. This delay, typically up to 72 hours, can be due to damaged roads, overwhelmed systems, or the sheer scale of the emergency. The 72-hour survival kit is your buffer, giving you and your family the means to survive independently during those crucial first days.

#### **3.1 Core Components of a 72-Hour Kit**

A complete survival kit should provide for the essential needs of an individual or family: hydration, nutrition, warmth, first aid, communication, lighting, and sanitation. Most emergency management agencies recommend keeping this kit in a backpack or waterproof container stored in a cool, dry, accessible place.

#### **Water**

- Minimum: 3 liters per person per day (1 for drinking, 2 for hygiene and food prep)
- Include: water purification tablets or portable filter (e.g., LifeStraw)

## **Food**

- Non-perishable, high-calorie items (3 days minimum)
  - Protein bars, canned beans/tuna, freeze-dried meals, rice cakes
- Manual can opener
- Consider food sensitivities/allergies

## **Shelter & Warmth**

- Emergency blanket (Mylar space blanket)
- Lightweight tent or tarp
- Extra clothes and sturdy shoes
- Hand warmers and ponchos

## **Light & Power**

- Flashlight (preferably LED with long battery life)
- Extra batteries or solar-powered lantern
- Power bank or solar phone charger

## **First Aid**

- Adhesive bandages, gauze, antiseptic wipes, pain relievers
- Prescribed medications for 3+ days
- Tweezers, scissors, gloves, thermometer
- CPR and wound care instructions

## **Communication & Documents**

- Whistle, signal mirror
- Printed emergency contacts
- Copies of ID, insurance, prescriptions, medical history
- Local map and compass

## Hygiene & Sanitation

- Wet wipes, soap, toothbrush, toothpaste
- Toilet paper, feminine hygiene products
- Plastic bags for waste

☒ *Pro tip: Rotate food and medication every 6 months to prevent spoilage or expiration.*

## 3.2 Customizing Your Kit

Preparedness is not one-size-fits-all. Kits should be adapted to your environment, health, family structure, and mobility.

### For Families with Children

- Child-sized masks and gloves
- Diapers, formula, wipes
- Activities: coloring books, stuffed toy, cards
- Pediatric medicine

### For Pets

- Food and water bowls
- Collar, leash, ID tag
- Medication and vaccination records
- Pet waste bags

### For People with Disabilities or Medical Conditions

- Additional medication and supplies



- Medical devices (backup batteries or chargers)
- Printed care instructions in waterproof bag
- Visual, auditory, or mobility aids

### 3.3 Where to Store Your Kit

Keep one full kit in your home and smaller versions in:

- Your car (in case of evacuation on the road)
- Your workplace
- Your child's school bag (basic items + emergency contact info)

Store the main home kit:

- Near an exit (door, garage)
- In a waterproof container or dry backpack
- Check every 6 months (set a calendar reminder)

### 3.4 Supplementary Supplies for Specific Disasters

Depending on your local risk profile (see Section 2), consider adding:

Hazard Type	Additional Kit Items
<b>Earthquake</b>	Dust mask, goggles, wrench (to shut off gas), helmet
<b>Flood</b>	Waterproof pouch, rubber boots, floating flashlight

<b>Wildfire</b>	N95 mask, fire-resistant gloves, air quality monitor
<b>Tornado/Hurricane</b>	Emergency radio, duct tape, plywood (for windows)
<b>Volcanic Ash</b>	Respirator mask, goggles, long sleeves and pants

### Key Takeaways from Section 3

- Your kit must support **72 hours of self-sufficiency**
- Tailor your kit to your location, health needs, and household
- Store kits in multiple locations, not just at home
- Include disaster-specific items to boost survival odds
- Regular updates ensure the kit remains functional and relevant

### References

- FEMA (2023). *Emergency Supply List*. Federal Emergency Management Agency.
- American Red Cross (2022). *Disaster Preparedness Guide*.
- IFRC (2021). *Community-Based Disaster Risk Reduction Toolkit*. International Federation of Red Cross and Red Crescent Societies.
- Sphere Handbook (2018). *Minimum Standards in Humanitarian Response*.

## **4. Before, During, and After – Action Plans for Survival**

Knowledge and supplies are critical, but they are only effective if paired with a plan. Natural disasters are high-stress, high-speed events, and people often revert to instinct or freeze without a clear set of pre-rehearsed actions. This section provides structured, science-based before-during-after action plans for major disaster types, allowing you to respond quickly and safely.

### **4.1 The Importance of a Family Emergency Plan**

Every household should have a disaster plan that is simple, practiced, and accessible. It should include:

- Communication methods (who calls who and when)
- Safe meeting points (one near home, one out of town)
- Evacuation routes (on foot and by car)
- Roles and responsibilities (who grabs what, who assists children or elders)
- Contacts: ICE (In Case of Emergency) list printed and stored offline

☒ *Tip: Practice the plan like a fire drill. Once a year is good – twice is better.*

## **4.2 Universal Disaster Protocols**

Across most disasters, the following baseline actions improve survival odds.

### **Before (Preparedness phase):**

- Monitor trusted sources: local authorities, weather services, geophysical institutes
- Charge phones and power banks
- Secure heavy furniture (earthquakes), clear drains (storms), or seal windows (volcanic ash)
- Refill prescriptions, water containers, and gas tanks

### **During (Response phase):**

- Stay calm; act based on hazard-specific protocol
- Keep 72-hour kit and emergency contacts accessible
- Use radio, not internet (networks often go down)
- Avoid elevators, power lines, floodwaters, bridges, and landslide zones

### **After (Recovery phase):**

- Check for injuries, then damage
- Shut off utilities if there's a leak or fire risk
- Document damage (for insurance or aid claims)
- Be wary of aftershocks, flash floods, or secondary hazards

### 4.3 Earthquake: Drop, Cover, and Hold On

Phase	Key Actions
<b>Before</b>	Anchor shelves, avoid heavy items over beds, identify safe spots (e.g., under tables)
<b>During</b>	Drop, Cover, and Hold On. Stay indoors until shaking stops.
<b>After</b>	Expect aftershocks, check for structural cracks, avoid elevators and bridges

☒ Do **not** run outdoors during shaking — falling debris is the #1 cause of earthquake death (USGS, 2023).

### 4.4 Flood: Turn Around, Don't Drown

Phase	Key Actions
<b>Before</b>	Know floodplain maps, install sump pumps, elevate electronics
<b>During</b>	Move to higher ground. Do not walk/drive through water
<b>After</b>	Avoid water due to contamination risk; disinfect surfaces



#### 4.5 Volcanic Eruption: Shelter from Ash

Phase	Key Actions
<b>Before</b>	Keep goggles, masks, plastic sheeting. Learn local warning codes (e.g., color-coded alert systems)
<b>During</b>	Shelter indoors, seal windows/doors, wear masks and long sleeves
<b>After</b>	Avoid sweeping ash dry (use damp cloth), clean roofs before collapse risk

#### 4.6 Hurricane / Cyclone: Evacuate When Ordered

Phase	Key Actions
<b>Before</b>	Install storm shutters, evacuate early if in low-lying zones
<b>During</b>	Stay away from windows, interior room or closet is safest
<b>After</b>	Watch for “calm eye” trap — the storm resumes quickly after calm period

☒ *Mobile homes and coastal zones should **always evacuate** when a major cyclone approaches (Category 3+).*

#### 4.7 Wildfire: Escape Early, Not Late

Phase	Key Actions
<b>Before</b>	Clear brush 30+ feet from home, pack go-bag during dry season
<b>During</b>	Evacuate early. Close all vents/windows. Use N95 masks for air quality
<b>After</b>	Check air advisories and monitor hotspots — wildfires can reignite unexpectedly

#### 4.8 Tsunami: Head to High Ground Immediately

Phase	Key Actions
<b>Before</b>	Know your tsunami evacuation route (posted in many coastal cities)
<b>During</b>	If you feel strong earthquake near coast: <b>don't wait for sirens</b> . Go uphill or inland immediately
<b>After</b>	Waves may arrive in multiple surges over hours — stay away from coast for 24+ hours

⊠ *Tsunamis often arrive within 15–30 minutes of a local quake. There may be no formal warning.*

## Key Takeaways from Section 4

- Every household needs a simple, practiced emergency plan
- Most disasters follow a predictable pattern: **before** — **during** — **after**
- Hazard-specific actions increase chances of survival
- Evacuate early when advised — do not wait until conditions worsen
- Secondary hazards (e.g., aftershocks, flash floods) often follow the main event

## References

- USGS (2023). *Earthquake Preparedness Guidelines*. United States Geological Survey.
- FEMA (2023). *All-Hazards Emergency Planning Guide*.
- Red Cross (2022). *Earthquake, Flood, and Wildfire Safety Manuals*.
- NOAA (2022). *Hurricane and Tsunami Action Plans*.
- IFRC (2021). *Volcanic Eruption Readiness Toolkit*.

## 5. Global Safety Infrastructure – Know What's Around You

Disaster preparedness isn't just about what's in your backpack, it's also about understanding and using the built and institutional infrastructure that already exists in your country, city, or neighborhood. Every place in the world has a varying degree of readiness, and knowing what's accessible to you can be the difference between survival and disaster.

This section will teach you how to locate, evaluate, and document the structures, services, and systems designed to protect human life during emergencies.

### 5.1 What Is Disaster Safety Infrastructure?

Disaster safety infrastructure includes any physical or organizational system intended to reduce the impacts of natural hazards and support emergency response. It typically includes:

#### **Physical Infrastructure:**

- Evacuation shelters
- Flood levees and retaining walls
- Seismic-resistant public buildings
- Emergency assembly points
- Safe rooms and community bunkers

- Tsunami evacuation towers or stairs
- Fire breaks and buffer zones (for wildfires)

### **Institutional Infrastructure:**

- Civil protection agencies
- National emergency alert systems
- First responder networks
- Meteorological and geological monitoring centers
- Disaster response protocols and drills

## **5.2 How to Find and Map Safety Infrastructure in Your Area**

Knowing where to go (and where not to go) in a disaster is just as important as having a survival kit. Here's how to locate and document local safety resources:

### **Step 1: Consult Official Sources**

- **National or municipal emergency websites** (e.g., Protección Civil in Latin America, FEMA in the U.S.)
- **OpenStreetMap** layers: search for keywords like "evacuation zone," "shelter," or "disaster refuge"
- **Local municipalities** often provide downloadable PDFs of shelters and routes

### **Step 2: Build a Personal Safety Map**

Use digital tools like:

- **Google My Maps** or **QGIS**: create a personalized map marking your home, work, schools, and nearest safe locations

- Add layers for:
  - Emergency shelters
  - Nearest hospital or clinic
  - Evacuation routes
  - Disaster sirens or towers

### Step 3: Visit and Verify

- Physically walk your evacuation route if possible
- Check signage and whether structures are maintained
- Take photos for later reference (especially if power is out)

## 5.3 National Emergency Systems: Who's in Charge?

Understanding your country's disaster management chain of command helps you know what alerts to trust and where to report emergencies.

Region	Common Agencies
North America	FEMA (USA), Public Safety Canada, NOAA, USGS
Latin America	SINAPROC (Panama), CENAPRED (Mexico), ONEMI (Chile), INETER (Nicaragua)
Asia	NDMA (India), JMA (Japan), BNPB (Indonesia), PAGASA (Philippines)
Europe	Civil Protection Department (Italy), DPC (France), Red Cross national chapters

<b>Africa</b>	NDMA (Kenya), NADMO (Ghana), DMA (South Africa)
<b>Oceania</b>	Civil Defence NZ, EMA Australia

Make sure to:

- Sign up for local SMS alert systems
- Follow verified government channels on social media
- Download official apps (e.g., MyShake, Alertas Panamá, FEMA)

#### 5.4 International Support: Who Helps When It's Big?

When a disaster overwhelms local capacity, international agencies often deploy resources. While individuals don't directly contact them, it's helpful to know who's involved:

- United Nations Office for the Coordination of Humanitarian Affairs (OCHA)
- International Federation of Red Cross and Red Crescent Societies (IFRC)
- World Food Programme (WFP)
- Doctors Without Borders (MSF)
- Global Fire Monitoring Center (GFMC)

They coordinate mass evacuations, food drops, field hospitals, and logistics hubs during large-scale disasters.

☒ *Tip: Volunteer networks like CERTs (Community Emergency Response Teams) also bridge the gap between government and public.*

## 5.5 Community-Based Infrastructure

Your neighborhood may already have:

- Designated shelter homes
- Volunteer search and rescue teams
- Radio operators (amateur/HAM)
- Neighborhood disaster drills

Get involved:

- Ask your local Red Cross or civil defense group how to participate in drills
- Share your personal safety map and create a shared group version for your block or building
- Install shared tools: fire extinguishers, water tanks, radios



## Key Takeaways from Section 5

- Safety infrastructure is more than just buildings, it includes agencies, maps, alerts, and people
- Mapping local shelters and routes gives you faster, smarter response options
- Every country has official agencies you should know and follow
- Community participation builds stronger, faster recovery
- Don't just rely on national systems, verify what's around you

## References

- UNDRR (2022). *Global Assessment Report on Disaster Risk Reduction*.
- IFRC (2021). *Preparedness for Effective Response Toolkit*.
- FEMA (2023). *Community Preparedness Manual*.
- Aldrich, D. P. (2012). *Building Resilience: Social Capital in Post-Disaster Recovery*. University of Chicago Press.
- OpenStreetMap Contributors. (2023). *Disaster Infrastructure Data Layers*.

## 6. Digital Tools for Disaster Awareness and Communication

In the age of mobile connectivity and open geospatial data, technology plays a vital role in saving lives during natural disasters. From early warning systems to offline maps and digital SOS apps, using the right tools before, during, and after an event can increase your resilience exponentially.

This section presents a curated list of the most reliable, field-tested platforms, apps, and tools both global and regional for emergency alerts, disaster mapping, and family communication.

### 6.1 Why Digital Tools Matter

- **Speed:** Alerts are often issued within minutes of detection (e.g., earthquakes, tsunamis, flash floods).
- **Precision:** GPS-based systems can target specific areas rather than large regions.
- **Coordination:** Family locator apps and messaging tools enable safe reconnection.
- **Data visualization:** Live maps and dashboards offer clearer situational awareness.

## 6.2 Best Apps for Real-Time Alerts (Global and Regional)

App Name	Function	Region
<b>MyShake</b> (UC Berkeley)	Earthquake detection, early warnings	Global, esp. U.S., Japan
<b>FEMA App</b>	Alerts, preparedness tips, shelter locations	USA
<b>Earthquake Network</b>	Real-time seismic alerts, crowd-based	Worldwide
<b>GDACS</b> (UN-OCHA)	Global disaster tracking, alerts	Worldwide
<b>Alertas SINAPROC / Alertas Panamá</b>	Localized alerts from civil defense	Panama
<b>PAGASA Mobile</b>	Typhoon tracking, flood alerts	Philippines
<b>112 BE App</b>	Emergency communication with services	EU countries
<b>Rain Alarm</b>	Real-time precipitation radar alerts	Global

<b>Windy.com</b>	Weather, cyclone tracking, air quality	Global
<b>Volcanoes &amp; Earthquakes App</b> (VolcanoDiscovery)	Monitoring + updates + hazard zones	Global

☒ *Tip: Enable “critical alerts” in your phone settings so they override silent mode.*

### 6.3 Offline Maps and Evacuation Tools

During disasters, mobile data and networks often fail. Offline navigation becomes essential.

#### Recommended Offline Map Tools

- **Maps.me:** full offline routing + bookmarks
- **Google Maps Offline Areas:** save and use routes without signal
- **Sygie:** high-detail offline navigation, supports 3D terrain
- **OpenStreetMap (OSMAnd+):** editable offline maps, ideal for rural and remote zones

### 6.4 Digital Family Communication and Coordination

In the aftermath of disasters, finding loved ones is a priority. These apps can help:

Tool	Function
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<b>Life360</b>	GPS-based family locator with check-in alerts
<b>Zello Walkie Talkie</b>	Push-to-talk even with low bandwidth
<b>Bridgefy</b>	Offline Bluetooth-based messaging (no internet needed)
<b>Facebook Safety Check</b>	"Marked safe" alerts in major crises
<b>Google Person Finder</b>	Used during large-scale humanitarian disasters
<b>Red Cross Emergency App</b>	Checklists + communication tools in one hub

☒ Choose at least one online and one offline method to communicate in case of separation.

## 6.5 Global Hazard Monitoring Dashboards

For more advanced users, these platforms offer data-rich, real-time monitoring of global disasters.

Platform	Function
<b>Global Disaster Alert and Coordination System (GDACS)</b>	UN dashboard combining satellite + ground alerts

<b>NASA FIRMS</b>	Live wildfire tracking from MODIS/VIIRS satellites
<b>USGS Earthquake Map</b>	Live seismic data, aftershocks, fault maps
<b>NOAA Hurricane Center</b>	Hurricane cones, projected paths
<b>Volcano Discovery</b>	Updated volcano activity map

These tools are especially useful for travelers, aid workers, or those in high-risk zones who want a global picture.

## 6.6 Emergency Numbers & Country-Specific Apps

It's important to know that emergency numbers vary by country. Some digital apps will auto-call the wrong number if you haven't set your location correctly.

<b>Country</b>	<b>Emergency Number</b>	<b>Recommended Local App</b>
U.S.	911	FEMA, MyShake
Panama	104, 911	SINAPROC, Alertas Panamá
Mexico	911	CENAPRED, SkyAlert
EU	112	112 App (EU)
Australia	000	SES app
Japan	110/119	NHK Alerts, Yurekuru

## Key Takeaways from Section 6

- Mobile apps are critical for receiving early warnings and staying connected
- Combine real-time alert tools with offline maps and communication apps
- Use official government apps wherever possible – they integrate directly with national alert systems
- Test your tools before an emergency: don't wait for a real event to learn how they work
- Regularly update apps and save key contacts and maps offline

## References

- UNDRR (2023). *Leveraging Technology in Disaster Preparedness*.
- GDACS (2023). *Global Disaster Alert Coordination System User Guide*.
- IFRC (2021). *Digital Tools for Emergency Preparedness*.
- USGS Earthquake Hazards Program (2023).
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## **Conclusion – Stay Ready, Stay Safe**

### **Final Thoughts**

Natural disasters are part of life in every region of the world, but the difference between tragedy and survival often comes down to preparation. Through this guide, you have gained structured, actionable knowledge to enhance your readiness no matter where you are.

By understanding the specific risks of your location, assembling a versatile 72-hour survival kit, building clear action plans, recognizing your surrounding safety infrastructure, and incorporating modern digital tools, you now hold the essential strategies to protect yourself and your loved ones.

Preparedness is not a one-time action, it is a continuous cycle of awareness, planning, and adjustment. Regularly updating your kit, refreshing your emergency contacts, reviewing evacuation routes, and staying informed on emerging threats will ensure that you are never caught unprepared.

This knowledge does not just safeguard you; it empowers you to be a source of calm and assistance within your household, your community, and potentially even among travelers and colleagues. When disasters strike, those who prepare early are able to respond faster, recover more quickly, and help others more effectively.



## **Your Next Steps**

To transform this knowledge into practical resilience, we encourage you to immediately apply the following steps:

- Download and print your 72-hour emergency checklist included with this guide. Hang a copy in your home or store it digitally on your phone.
- Assemble your personal emergency kit within the next 30 days, starting with the essentials and gradually adding hazard-specific items.
- Map out the nearest safety infrastructure, such as shelters, clinics, and safe routes using local resources or government databases.
- Install at least two trusted emergency alert applications on your mobile device to receive early warnings for the most common hazards in your region.
- Draft a family emergency plan, including designated meeting points, emergency contacts, and role assignments.

Remember: the strongest protection comes from informed action. This guide offers the framework, but the commitment to act begins with you. By taking these steps now, you significantly increase your readiness to face any emergency.

## About the Author

Tamir Chong is a geoscientist and disaster risk specialist with a background in geological engineering. With years of academic research and field experience in environmental monitoring, geochemical mapping, and hazard assessment, Tamir focuses on making complex earth science knowledge accessible to the general public.

His work combines scientific rigor with practical, real-world applications bridging the gap between technical research and actionable safety strategies for families, travelers, and communities. Through educational projects and digital resources, Tamir advocates for proactive disaster preparedness to reduce vulnerability and increase resilience in diverse environments.

## Thank You

Thank you for taking the important step of investing in your safety and preparedness by reading this guide.

Disasters can strike unexpectedly, but with knowledge and preparation, you can protect yourself and those around you. By applying the strategies in this guide, you are already ahead of most people in terms of readiness and resilience.

- If you found this guide useful, consider sharing it with friends, family members, or colleagues who would also benefit from it.
- Your feedback is invaluable — leaving a review helps others discover this resource and improves future editions.

Stay informed, stay prepared, and stay safe.

— Tamir Chong