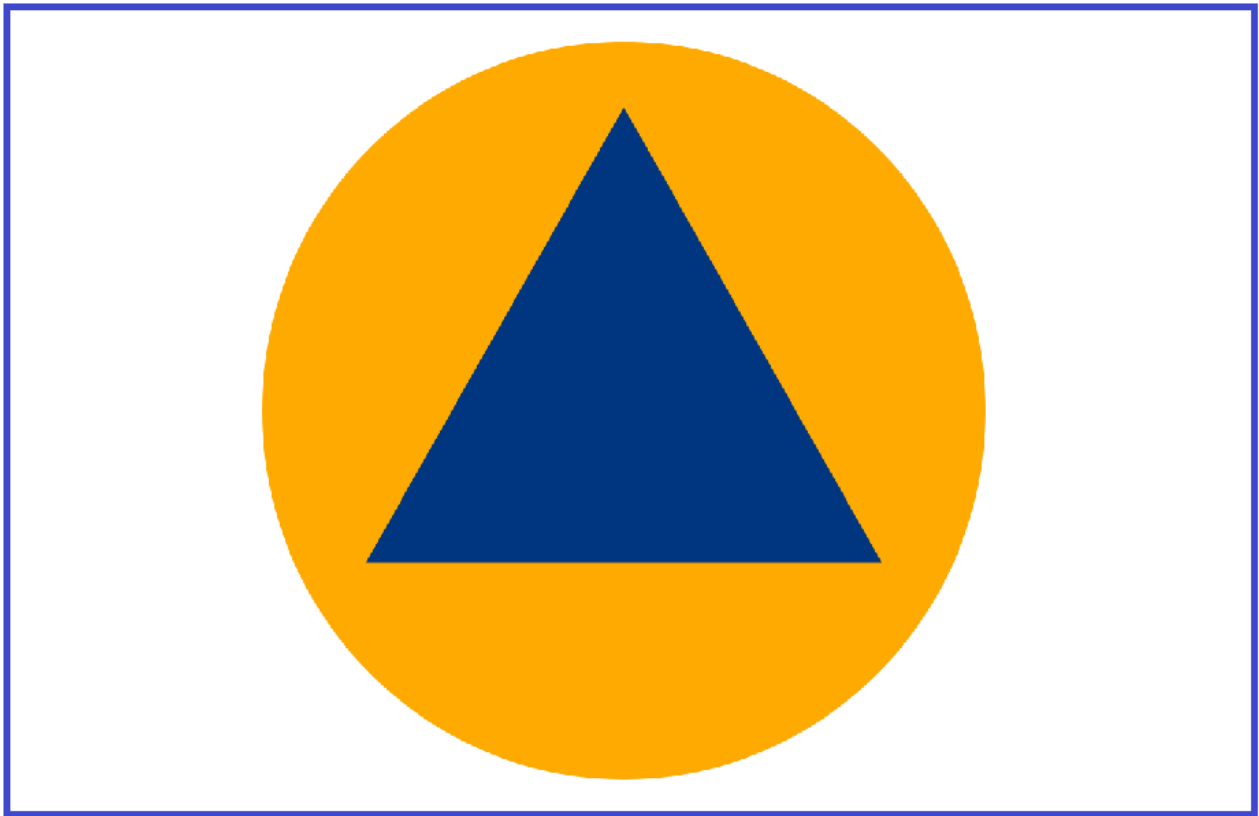


RESILIENCE ROADMAP (V2.0) *Updated*
AN EMERGENCY PREPAREDNESS GUIDE
FOR EXPATS IN TAIWAN

By John Groot



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PREFACE

The idea of an emergency preparedness guide for expatriates in Taiwan that explicitly mentions a military attack by China is something that others have probably thought about writing, but perhaps decided not to, afraid of being labeled a “prepper”—an eccentric type obsessed with the Biblical “End of Days,” the “Big One” in California triggering the Yellowstone Supervolcano, or the final collapse of the global financial system. “Don’t be paranoid!” their friends would tell them, “China is years away from being able to invade Taiwan.” But then as the years ticked by, here we are in a world where it is no longer paranoid to seriously consider what to do in such a contingency. Hence, this issue must be addressed, and our understanding of it needs to evolve as the threat evolves.

However, in order to be more practical and have a wider audience, information on how to mitigate the danger of a war is combined in this work with more commonly-discussed causes of disaster such as fires, earthquakes, and typhoons. Together, these form a continuum of possible threats for which we must be prepared.

Note on the Second Edition: This work is version 2.0, which replaced version 1.0, published in December 2023. There have been lots of small changes based on feedback, reflection, and new developments. Significantly, the sections on house fires, emergency evacuations from buildings, and analysis of factors related to war have all been updated to include new or better information. Regular updates will continue to be produced each year, so your constructive comments and suggestions are more than welcome.

- John Groot, Tamsui, January 2025

INTRODUCTION

Taiwan is no stranger to the threat of disasters, both natural—such as earthquakes and typhoons—and manmade, such as building fires. Increasingly, we now, more than ever, face the threat of war from China.

No one ever wants to have to deal with these terrifying situations. And yet, every year, millions of people around the world do face them. Those that are prepared with equipment, knowledge, planning, and the right mindset, usually do a lot better than those who are not.

Accordingly, this guide is organized into five sections:

Section 1 is a concise overview of how to create a Group Emergency Plan for disaster preparedness, including key concepts, summaries, and checklists.

Section 2 looks at the four main types of disaster threat found in Taiwan—typhoon, earthquake, fire, and war. Each of these sub-sections is further divided into four parts: background, preparations to make before the disaster, how to respond at the time, and how to cope after it. The subsection on war covers how to be ready for and react quickly to an impending military crisis.

Section 3 deals with how to integrate your planning for the various contingencies, in terms of practicalities like safe locations, communications, transportation, equipment, water, and so on.

Section 4 is a collection of useful information, such as lists, links, and contacts for relevant governmental and non-governmental resources.

Finally, **Section 5** has some appendices of extra material from Section 3 that is useful but may be too lengthy for some people to read.

The desired end result of this book is for you to use it in any way at all that helps you create your own tailor-made personal and group emergency plan. Do more research. Double-check any important information. Consult with your people. Think hard. Then make the preparations that work for you.

And don't take too much time to do so. Never forget that, although governments have their disaster plans, and dedicated first responders may come to your aid, it is you yourself who are primarily responsible for your own safety, and for that of your loved ones as well.

If disaster strikes, YOU are the first responder.

SECTION 1: MAKING YOUR GROUP EMERGENCY PLAN

CONTENTS:

A: Lexicon of Terms Related to Emergency Preparedness (page 6)

B: Professional Summary for Family Emergency Planning (pages 7-8)

C: Emergency Plan Checklist (page 9)

D: Steps to Making Your GEP (page 10)

A: LEXICON OF TERMS RELATED TO EMERGENCY PREPAREDNESS

1) Sheltering in place: Staying in your home for days, weeks, or months, hopefully with adequate supplies and systems to live comfortably during a period of emergency.

2) Evacuation: Rapidly leaving your home or your neighborhood because it has become too dangerous. “Bugging Out” is a similar term, meaning to escape to a pre-arranged safe location.

3) Go-bag: Also known as a “grab and go bag,” or “bug-out bag,” This is a pre-prepared small backpack with important supplies, documents, and equipment that you can grab in a hurry when you need to evacuate. One variation is the “everyday carry” or EDC bag, which you always have with you.

4) Escape strategy: Your plan for getting everyone to evacuate your location safely and quickly, taking into account various factors such as fires and earthquake damage.

5) Safe locations: “Safe havens” are places you have identified and prepared in advance where you can evacuate to it necessary. These include government evacuation shelters, friends’ homes, and secure, well-supplied areas away from the worst dangers of war, i.e., your “bug-out” location. Also, “rally points” where group members can meet, especially if normal communications are down. Safe havens and rally points might be at the same place.

6) Group Emergency Plan (GEP): A flexible, integrated communication and action plan for you and your group (family, friends, etc.) for dealing with emergencies. It is designed to coordinate members under difficult and unpredictable circumstances to keep them well and bring them together at a safe location where there are sufficient resources to live fairly comfortably.

7) Emergency Response Plan (ERP): An official group emergency response and evacuation plan at an institutional level, such as for a school, office, factory, or other public facility.

8) Civil defense: Also known as civil protection, it means efforts to protect the residents of a state from human-made and natural disasters. It uses the principles of emergency operations: prevention, mitigation, preparation, response, or emergency evacuation and recovery.

9) Resilience: Per Oxford: “The capacity to withstand or to recover quickly from difficulties.” In civil defense, it means being able to adapt to and overcome hardships from emergencies and disasters.

B. ISRAELI GOVERNMENT SUMMARY FOR EMERGENCY PLANNING AT THE FAMILY LEVEL

All political and human-rights issues aside, Israelis are among the most disaster-prepared people on Earth. Hence, the following edited excerpts from an Israeli guide are words to the wise.

Home Front Command - Emergency Situation Preparation Guide

Coping successfully with emergency situations is contingent on advance preparation and groundwork

Preparation within a family framework is very important and it is recommended that most of the action would be performed in this framework. The first step is to prepare a family emergency plan. The preparation of a family emergency plan starts by verifying potential dangers and identifying hazardous areas in the home, the school and the workplace, and concludes with an action plan that includes family role assignments, the purchase of vital equipment, and a family talk.

Building a family emergency plan yields positive results:

- Increasing confidence that we can contend with and control an emergency situation
- Recognizing the threat and understanding its implications to us
- Assigning roles improves the way a family can function in an emergency
- Decision-making in real time is more efficient when one has made advance preparations
- Diminishes denial when an emergency situation approaches

A family emergency plan can transform all members of the household, including the children, into an active factor in family preparation for an emergency situation. The more we assign family members clear roles and practice them, the better they will function and cope with the emergency situation. It's important to talk with the neighbors about these situations and determine ways of action, collaboration and mutual assistance.

Home Front Command - Emergency Situation Preparation Guide (cont'd)

Family Discussion

Talk with family members about preparation for emergencies. Parents conduct the initial discussion. It is very important to involve the children in the family discussion. It is recommended that you prepare in advance as follows:

- Think about the topics that you will discuss.
- Set an appropriate time for the discussion and select a place that is comfortable.
- Talk about the various emergency situations and methods of self-protection.
- Allow the children to voice their feelings.

Also prepare the children for a situation where they are separated from their parents or older relatives, or where their parents or older relatives are incapacitated. What should the children do? Have some meetings about this led by the children, to help them become accustomed to leadership in this context, and to share their concerns and ideas with the whole family.

For those suffering from medical problems

Make sure to equip yourself in advance with medical documents signed by the treating physician that note the following: Health condition, list of drugs and required dosage, a list of routine examinations that you must undergo, and an additional prescription. Make sure to list drugs that you must not use. Ascertain that you have a sufficient supply of drugs for the entire emergency period.

General principles in dealing with elderly people:

- Having elderly people perform activities by themselves is important in instilling a sense that they are in control of the situation. One should explain to them the actions that they must take so they can perform things by themselves (to the extent possible) as well as assisting other elderly people.
- Prepare a personal emergency card for every elderly person that they will wear during an emergency. The card includes: name and surname, ID number, treating physician, name of the personal care giver and a list of drugs in use, blood type, special needs, sensitivities, medical emphases, and telephone numbers of family members and relatives.

C: EMERGENCY PLAN CHECKLIST:

General Safety Preparations

Residence

- Do a walk-around check in your residence, building, and neighborhood for risk factors related to fires / earthquakes / typhoons.
- Update all safety equipment and stock emergency provisions for sheltering in place.
- Designate safe / dangerous areas in your home for during a typhoon or earthquake.
- Prepare emergency go-bags for all household members.
- Create evacuation plans and do basic group training for them.
- Designate “rally points,” “safe havens,” and other important locations outside the home.

Emergency Communications

- Imagine some possible emergency communication situations.
- Make your plan for them and get relevant tools, such as radios, satellite phones, etc.
- Test, train, and practice.
- Have trusted, designated contact person(s) both in Taiwan and in another country, who are aware of your plans and are willing to relay messages and generally act on your behalf.

Workplace / School	Public / Commercial Facilities
<ul style="list-style-type: none">• Do fire / earthquake safety walk-around.• Check site Emergency Response Plan.• Discuss safety with co-workers / kids / teachers.	<ul style="list-style-type: none">• Conduct fire / earthquake safety awareness walks with family.• Hold group discussions about how to respond to emergencies.

War-specific Preparations

- Improve situational awareness of security in region
- Stay or Go evaluation and decision making
- Go: Offshoring finances and creating Plan B outside Taiwan
- Go: Creating exit strategy + timing
- Stay: Evaluation of danger level of your residence in a military situation
- Stay: Preparations for sheltering in place and/or setting-up and getting to your Bug-out location
- Group capacity building, training, and preparations

Integrated Group Emergency Plan

- Integrate disaster contingencies into a GEP of who, what, when, where, why, and how.
- Create everyday carry and go-bag versions of the GEP in a booklet and/or small package.

D. STEPS TO MAKING YOUR GEP

Making your plan: The goal of this guide is to help you create an integrated Group Emergency Plan for you and your loved ones covering all major contingences (typhoon, earthquake, fire, and war) and all major aspects (sheltering in place, evacuation, emergency communications, preparing and getting to safe locations, provisioning, training, de-risking from war, etc.)

This plan can be as basic or intensive as you want. Some might just update their fire and earthquake safety preparations and family response plan. Others may devote more time and energy to getting ready for a possible war situation. It all depends on your needs, location, and resources.

It is recommended that preparation should happen in 4 stages:

- 1) Read this guide from start to finish.
- 2) Do your own research, thinking, and group discussions.
- 3) Make your plan.
- 4) Get everything and everyone ready.

Final Objective: For Your Group Emergency Plan, Create a Package for Everyday Carry

- You and everyone in your group should have a small paper notebook on you with a small pencil, a USB flash drive with important files, and a few maps in a watertight zip-lock bag.
- The book should contain basic Group Emergency Plan details, procedures for contingencies, emergency contact numbers, websites, rally points, and other safe locations.
- In case of accident, it should also include the person's name, ID number, home address, group contact information, blood type, and information on any medical conditions, allergies, or medication.
- This booklet should be safely zipped up in a place that is easy to find, i.e., pants or shirt pocket.
- GEP information can also be kept as a file on a smartphone or tablet.
- You can have multiple versions of this booklet, including a larger, more complete version for your go-bags.
- Do not share the information in the GEP with people outside your "survival group" unless necessary.

Of course, you can decide how much of the above is necessary in your situation, or how you might modify it to better suit your needs.

SECTION 2: COPING WITH POSSIBLE DISASTER SCENARIOS IN TAIWAN

A. STRONG TYPHOONS

- **BACKGROUND**

Taiwan is in the Northwestern Pacific Ocean region, the most active zone in the world for cyclonic storms. While intense winds can threaten security through smashed windows, flying debris, and toppled trees or poles, the greatest danger is from water: raging torrents can sweep people away, demolish bridges, undermine buildings, and flooding can inundate roads, basements, and ground floors, and cause landslides.

Typhoon Nari in 2001 caused huge destruction in northern and central Taiwan, killing at least 94 people, and causing hundreds of thousands to be without water, electricity, and telephone service for days. Nearly 10,000 people were relocated to shelters. Many others were trapped in their apartments. When they emerged, they found their neighborhoods heavily damaged.

Typhoon Morakot in 2009 killed over 673 people, 471 of whom were in Shaolin Village, Jiaxian District, Kaohsiung, which was engulfed in a huge landslide.

The “Plum Rains”—a long, stationary front off the coast of China in late spring and early summer, caused by the onset of the Southwest Monsoon—can sometimes cause flooding and landslides in Taiwan comparable to typhoons.



Former site of Shaolin Village, Destroyed by Typhoon Morakot

(Photo by: Bellenion. From Wikipedia)

- **PREPARE BEFORE A Typhoon:**

Determine if your home is at risk of flooding or landslides. You can ask local community members and government authorities, or do an internet search (also in Mandarin) for past floods nearby. Areas near slopes with layers of soil, clay, or other loose materials are in danger of landslides. Low-lying areas close to bodies of water, especially rivers in valleys that drain nearby mountain areas, are at risk of flooding. Certain spots in the mountain are also prone to torrential rain. If you live in a home at risk, consider moving—or at least find safer temporary accommodation before a typhoon hits.

Typhoons frequently cause power outages, interrupt water supply, and cause stores to be closed. So, make sure you have adequate food and water for three days: A minimum of 3 liters of water per adult per day for drinking, plus one more for hygiene. One liter per day is OK for each cat or dog. Food should be preserved (canned, dried, pickled, etc.) Have some electrical lanterns and flashlights, with extra batteries, and all electronic devices, including power-banks, fully charged. Prepare supplies several days before the typhoon hits, as stores may run out. Have a system for garbage, hygiene, and some games and activities to help everyone, especially children, stay positive.

Don't tape your windows. This may make panes more likely to shatter and send larger shards flying inside your space. Prepare a safe area of the house away from any windows in case of extreme winds. An interior hallway is ideal for this.

- **RESPOND DURING A Typhoon:**

Stay indoors. If winds are gusting severely, stay away from windows. Keep windows and exterior doors closed. Go to your safe area. If the eye of the storm passes over your location, it may become sunny and calm, but when the other side of the eye-wall passes over you, the typhoon will violently return. If flooding threatens your security, get out before water levels become dangerously high. Do not wait and hope that you will be OK. Monitor radio (ICRT 100.7FM in Taipei, Hsinchu, and Kaohsiung, 100.1FM in Taichung, and 100.8FM in Chiayi.)

- **COPE AFTER A Typhoon:**

Shelter in place until the danger of flooding is over. Floods are unpredictable: In Typhoon Nari, a bunch of shipping containers in the Keelung River valley were washed into the channel and created an accidental dam. When this burst hours later, it caused reflooding in eastern Taipei. Also, your neighborhood could be affected by mud and water for days after the typhoon.

B. MAJOR EARTHQUAKES

- **BACKGROUND**

Most of the earthquakes in Taiwan are due to the convergence of the Philippine Sea Plate on the east side of the island, and the Eurasian Plate on the west, causing thousands of scientifically detectable earthquakes and hundreds of felt ones every year. Most of these occur beneath the ocean floor off the east coast of Taiwan, causing little damage outside of Hualien or Taitung. However, quakes of lesser magnitude beneath the island of Taiwan itself have historically proven more destructive. From 1901–2000, there were 91 major earthquakes in Taiwan, 48 of them resulting in loss of life.

Dangers include being killed, injured, pinned, or entombed due to falling debris, building collapse, or landslides. There is also the risk of fire, smoke, gas leaks, explosions, and electrical shock due to damaged utilities. After-shocks can topple buildings that survived the initial quake with little apparent damage.

After an earthquake, you may need to wait for rescue; seek medical assistance; shelter in place with no running water, gas, electricity, or phone signal; or leave your building and find temporary accommodation elsewhere. Your building may be damaged so severely that it takes months of repairs before you can move back in, or it may be condemned. In an extreme quake, a large part of the country might be affected, causing chaos and delays in the recovery of basic services.



Collapsed building after 9 21 Jiji Earthquake

(Photo by: Ho. Siminn. From Wikipedia)

- **Notable recent earthquakes**

- Taiwan's most devastating earthquake was the **9 21 Jiji earthquake**, which struck on September 21, 1999, and claimed 2,415 lives. It was magnitude 7.3 (or higher) on Taiwan's seismic intensity scale (similar to other scales used worldwide.) It is still alive in the memory of millions of Taiwanese.

- In the **February 6, 2016 Southern Taiwan earthquake**, measuring 6.4 on Taiwan's earthquake scale, 117 people were killed and 550 wounded. Most of these were when the Weiguan Jinlong residential building in Tainan City collapsed. It had been constructed with substandard materials.

- In the magnitude 6.4 **February 6, 2018, Hualien Earthquake**, four buildings collapsed, including the landmark Marshal Hotel, killing 17 and injuring 277.

In the two "Feb. 6" quakes above, some of the buildings that collapsed had survived other strong earthquakes in the past without showing signs of imminent danger. This is evidence that, along with poor design and substandard materials, age-related and prior-earthquake deterioration is a major risk factor in building safety.

- The magnitude 7.4 **April 3, 2024, Hualien Earthquake** was the strongest in Taiwan since the 1999 Jiji Earthquake, and had three aftershocks above 6.0. At least 18 people were killed and over 1,100 were injured. It was notable for cascades of falling rocks that rained down on the Su-Hua Highway, Taroko Gorge, and other mountainous areas. Many buildings in Hualien were damaged or destroyed.

Although Taiwan has improved its building codes since the 9 21 Jiji Earthquake, many believe that a lot of buildings are still at risk. A recent report said that about 70% of the buildings in Taipei City were more than 30 years old, with the average age being 37 years old.

- **PREPARE BEFORE *An Earthquake***

Evaluate the risk to your residential structure

Make sure your building is not at high risk for earthquake damage, especially if you live in Hualien or Taitung. If it is, you should move to a more secure building. If you are unsure about the safety of your building, you can find a qualified person to do an assessment. You can contact the National Center for Research on Earthquake Engineering to arrange for an evaluation of your building for structural weaknesses that would make it vulnerable during an earthquake. They will also consult on possible repairs. <https://www.ncree.narl.org.tw/home>

- **Danger signs**

Here are some danger signs for a building that may be unsafe during an earthquake. The more of these present, the more at risk the building may be.

- 1) Exposed pillars (see picture below)
- 2) Cracks in walls, especially at angles close to 45 degrees.
- 3) Floors no longer level, walls tilting
- 4) 30 years old or more is worrisome, 40 years or more is worse.
- 5) Signs of general physical decay / poor maintenance / no functioning management committee
- 6) On loose or sandy soil with no bedrock or areas with a high risk of liquefaction*
- 7) Near an active fault zone
- 8) Concrete made with marine sand, the salt content corroding the rebar, causing weakness
- 9) On a government damaged list from previous earthquakes. Some info [here](#).

Low-rise detached buildings and street front houses (shop houses) are most at risk. Taller, newer buildings generally have higher standards of earthquake resistance.

*Liquefaction is when loosely packed, water-logged sediments near the ground surface lose their strength in response to strong ground shaking. It can cause structural damage to a building.

Here is a link to an interactive map of Taiwan's liquefaction-prone areas

<https://www.liquid.net.tw/cgs/Web/Map.aspx>



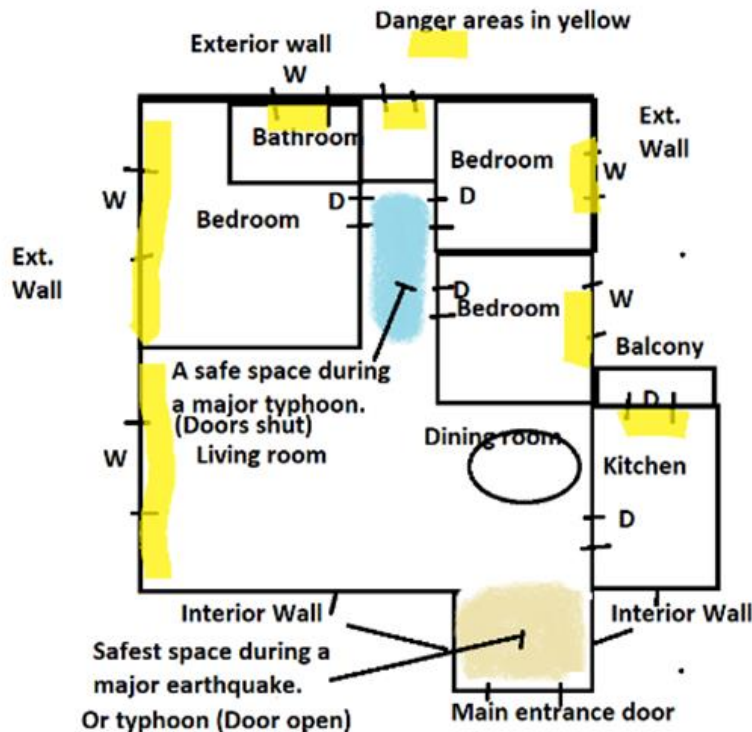
Exposed Pillar

➤ **Earthquake-prep your house**

- Secure all bookcases and shelves by screwing them to the wall.
- Do not store heavy things on high shelves.
- Replace heavy lighting fixtures with lighter ones and have them well-secured.
- Make sure your air conditioning units are securely fastened.
- Lock the casters on your refrigerator and washing machine so they don't roll.
- Remove or replace heavy wardrobe doors, especially if they are near a bed.

➤ **Prepare internal safe areas**

The safest area of your house will be one with no windows or exterior facing walls, preferably near a good exit route. But in a violent shake, you might just want to crawl under a sturdy table or desk. Areas near main load-bearing beams are also safer. Plan to get to the safe area ASAP. You might need to have more than one safe area in mind, because you should not have to travel far or use stairs during a serious earthquake. Kitchens can be very dangerous places during a quake.



Typical condo unit with safe and dangerous areas during earthquakes and typhoons

(Prepare before an earthquake, cont'd)

➤ **Get necessary supplies and equipment**

- **Shelter in place supplies:** Water, food (2000 calories per day) hygiene, etc.

- **Safety equipment:** First aid kit and manual, flashlight and batteries. To facilitate rescue: whistles, crowbars, ropes, safety helmet and goggles, N95 masks, thick clothing and sturdy shoes. Keep this next to where you sleep in case you are trapped there or need to evacuate fast.

➤ **Create and practice an evacuation plan**

You might need to evacuate your building at very short notice, so have a fast evacuation plan and make sure everyone knows it. Have “go-bags” ready. Pre-arrange “safe havens.” These include places near your home away from roads, and not under power lines, tall trees, a steep slope, or other buildings. Also on your list should be government facilities, such as evacuation shelters. Last but not least is your secure shelter, such as a friend’s home, a hotel or your country-side “bug-out” spot, if undamaged. Note that communications and transportation may be affected by the earthquake.

• **Alternative escape plans requiring technical skill**

After a strong earthquake, elevators should not be trusted. Additionally, stairwells and doorways may be blocked, due to debris and warping of the building structure. Hence, you might consider having an alternative escape system, using ropes, pipes, balconies, or other buildings’ rooftops. This would need to be planned carefully in consultation with professionals such as firefighters, disaster-response workers, climbers, engineers, soldiers, etc. You can also buy emergency evacuation self-rescue systems online. But be super careful about training and maintenance, and use at your own risk. One example of a company that provides this is Skysaver. <https://skysaver.com/shop/>

➤ **Plan on how to communicate with family after a big quake**

One scary scenario would be if you are out of the house without your family, or vice versa, and a big quake occurs. If communications cannot be established, you’ll need to cover this in your Group Emergency Plan. Your emergency communication plan would be to first attempt contact by phone or internet. If this was impossible, you would need a “blind” plan, like meeting them at the closest pre-arranged safe “rally point” to your home within a specified time period. If you move from there, there would be a secondary procedure to follow, like checking a note drop. Customize to fit your needs.

- **PREPARE BEFORE An Earthquake in a Commercial, Industrial, or Public Building**

- **Research**

In your workplace, there should be an Emergency Response Plan (ERP) dealing specifically with earthquakes and fires. Try to access this. Be aware of all fire exits and run through various scenarios in your mind. Have escape plans A, B, and C. You could also join the company safety committee, or request some safety meetings and drills. If you often visit customers at their offices or factories, you can also find out their ERP and take note of emergency exits, general layout, etc.

- **Be aware of your surroundings**

When you are in a mall, department store, or other large commercial or recreational space (Costco, sports center, etc.) take note of all the exits and plan how you would escape in case of a fire or earthquake. For example, Costco has high shelves stocked with products that could severely injure you if they fell down. In a quake, walking to an area of the store with lower shelves would be safer. Large hanging signs and dangling lights are also risk factors.

Next time you are in a large public indoor space, just look around a bit and imagine what might happen in a fire or earthquake and how you could stay safe.



Yun Men Tsui Ti building in Hualien, After Feb. 6, 2018 Quake

(Photo by: 軍事新聞通訊社. From Wikipedia.)

- **RESPOND IN THE EVENT OF A Serious Earthquake at Home**

Note: Treat every earthquake as if it might be “the Big One.”

1) Mild quake: Open exit doors. Be vigilant and ready to go if there is a stronger shock later.

2) Moderate or major quake:

- Open exit doors. Don't get trapped inside.
- Go to the safest nearby place, quickly. (Safety supplies should be nearby.)
- Drop to the floor and cover your face with your hands to avoid injury and inhaling dust.
- Stay away from outside walls, windows, aircon units, lighting fixtures, or heavy bookcases.

- **RESPOND IN THE EVENT OF A Serious Earthquake in a Commercial, Industrial, or Public Building**

At work: Go to your pre-arranged safe area nearby, such as under your desk, or near a main pillar. Crouch down and cover your head and eyes with your hands. When the shaking stops, follow the ERP and/or exit the building by your pre-arranged exit plan.

In a mall or other public space: Crouch down in a safe area under a beam, near a pillar, under a sturdy desk or table, or in a concrete or metal doorway. Stay away from glass. Cover your head and eyes. When the shaking stops, exit through a safe route.

If You Are Outdoors Stay outside. Do not try to enter any buildings to help others. Move away from buildings, streetlights, and utility wires. Once in an open, safer location, stay there until the shaking stops. Be aware that there may be aftershocks. The greatest danger exists directly outside buildings, at building entrances/exits, and alongside exterior walls where there may be falling debris.

If You Are in a Vehicle: If moving, stop as quickly as safety permits. Avoid stopping near buildings, trees, overpasses, and utility wires. Stay in the vehicle with your seatbelt fastened until the shaking stops. Proceed cautiously. Avoid roads, bridges, or ramps that might have been damaged by the earthquake. If a power line falls on your vehicle, do not get out. Wait for assistance. If you make contact with the ground, you could complete the circuit and be electrocuted. If you are in a mountainous area or near unstable slopes or cliffs, be alert for falling rocks and landslides.

- **COPE AFTER An Earthquake**

Stay or go?

Stay: If you are in your home, and the earthquake is light or moderate, you can stay in place. Be vigilant for smoke, fires, gas, and other dangers.

Go: If the earthquake was severe, get out at least for a while to make sure all is well. But first, of course, put out any small fires and give emergency first aid to the injured, if it is urgent. Stay calm. Check for damage, smell of gas, smoke etc. Then get everybody out with their go-bag as quickly and efficiently as possible. Aftershocks can be stronger than the original quake itself and cause the collapse of a building that survived the original event.

- Exit the building through a safe, pre-planned route.
- Go to your nearby safe location outside the danger zone.
- Don't clog important accessways to the site.
- Let neighbors, security guards, etc. know that you are OK.
- Follow your contact plan if not all household members are present.

NOTE: In Taiwan, if you attempt to resuscitate someone experiencing respiratory or cardiac arrest, and that person dies, you could be sued by their family—if you lack up-to-date, locally-accepted training for that procedure. This probably applies to other types of well-intended rescue actions that have fatal outcomes too. That is the current state of Taiwan's "Good Samaritan" laws. Be warned.

What to do if someone is trapped under debris

- Only attempt rescue if you really know what you are doing. Proceed carefully.
- Make sure that the debris pile is not at risk of injuring them, or you, if disturbed. The first rule of rescue work is "Do Not Become a Casualty Yourself." If you do, now there are two people who need rescuing.
- Use personal protective equipment (PPE) such as N95 masks, strong shoes, long pants and shirt sleeves. Thick gloves are very useful, as are pry bars, hacksaws and cold chisels.
- If you cannot help a trapped person, tell them you will go to get help for them, and do so.

What to do if YOU are Trapped Under Debris

If you are injured, stopping the bleeding is the first priority. Do not light a naked flame, as there may be a gas leak. Do not move about in ways that might dislodge things, or kick up dust. Cover your mouth with a handkerchief or clothing to help filter the air you breathe. Tap on a pipe or wall so rescuers can locate you. Use a whistle if you have one. Shout only as a last resort to minimize inhaling dust. Shouting will also tire you out.

At this time, what you have by your side becomes hugely important. If you have your phone and it is still working, immediately send a text message to say that you are alive, and share your approximate location before the building collapsed. If you had an EDC “everyday carry” bag with you, you would have some basic medications, including something for pain. If you have a water bottle, immediately rinse out your mouth of dust and spit it out—it could be toxic. After that, you should ration your water. If you have any snacks with you, that could also help you stay strong longer.

Rescuers *will* come for you. Taiwanese rescue workers are well-equipped, very experienced, and while they may be moving more slowly than you like, they are doing so to remain safe. They will not give up. This has been demonstrated many times in recent building collapses.

Insurance issues: If your building or unit is not insured, you could face major losses due to damage to the structure or your property within. Earthquake insurance in Taiwan for residential properties usually falls into 2 categories: 1) Basic fire and earthquake insurance, normally a condition of obtaining a mortgage; and 2) Supplemental earthquake insurance. A normal amount of coverage (at time of writing) for basic fire and earthquake insurance is 1.5 million NTD for damage to the structure or contents and up to 50% for the total write-off of the property. Ask a competent insurance agent.

Taipei City keeps a database of buildings damaged in the 9 21 1999, 3 31 2002, and 4 3 2024 earthquakes, which are considered to be at greater danger of collapse in future quakes. They are classified as “yellow”—be aware of the risk- and “red”—no longer permitted to be used. You can contact the Taipei City government to check on your building through the 1999 phone service or at this [website](#), which has the lists in Mandarin. Also, any realtor dealing with you as you search for housing is required by professional standards to divulge information about any and all drawbacks the property has. So, make sure you ask very clearly.

C. FIRES

- **BACKGROUND Fire Safety in Taiwan**

Taiwan has made real progress in terms of fire safety over the last few decades.

<u>COUNTRY</u>	<i>DEATHS / 100, 000 in 1990</i>	<i>DEATHS / 100,000 in 2019</i>
TAIWAN	2.31	0.48
CHINA	1.9	0.72
JAPAN	1.12	0.52
KOREA	2.39	0.76
THAILAND	1.16	0.83
UK	1.14	0.38
GERMANY	0.95	0.43
USA	1.99	0.82
CANADA	1.59	0.60

Fire deaths per 100,000 residents in 1990 and 2019 for selected countries

Source: <https://ourworldindata.org/grapher/fire-death-rates?tab=table>

However, there are certain “blind spots” about safety that persist in some areas of Taiwanese society. Here are two notable cases of horrible fires caused or made worse by this factor.

- **New Taipei Water Park Fire**

On 27 June 2015, staff at an outdoor "color powder party" in New Taipei City sprayed clouds of colored corn starch towards the participants, which ignited, as it was a hot day and some people were smoking cigarettes. The fire lasted 40 seconds and burned 508 people, killing 15 and leaving 199 in critical condition. The bags of powder had warnings that they could be flammable under certain conditions. This is just one example of general carelessness about safety issues that can often be found in Taiwan. Be cautious!

- **Kaohsiung Building Fire**

On October 14, 2021, a fire at the Cheng Chung Cheng Building in Kaohsiung, a 13-floor mixed-used structure built in 1981, killed 46 people and injured 41. The analysis of the fire, which was caused by arson, brought important issues to light, such as dysfunctional building management committees.

Fire safety in Taiwan (cont'd)

- **Building management committees**

Unlike some countries, Taiwan's apartment buildings usually have a condominium ownership structure. These mixed-ownership (and often mixed residential and commercial use) buildings are supposedly overseen by the building management committees, which are responsible for fire safety, and other issues. However, thousands of mixed-use buildings constructed before 1995 do not have functioning committees to ensure that fireproof doors, escape ladders, and other safety equipment is present and in good condition. Nor do they make sure that residents have working smoke alarms in their units, or do not block stairwells with possessions.

- **Other fire-danger-related issues in Taiwan**

Many apartment windows have anti-burglar cages, which usually have an escape door. These are often secured with a padlock, which may be old and rusted. It might be difficult to find the key during the panic of a fire. It is also common for people to place boxes, bikes, etc. in stairwells, which could make evacuation more problematic. Serious fires in commercial buildings like department stores, office buildings, etc., are rare in Taiwan. But factory fires are all too common, often resulting in injuries or fatalities, with foreign guest workers and firefighters being the most common casualties.



Cheng Chung Cheng Building after the fire.

(Photo by 高雄市政府. From Wikipedia.)

FIRES (cont'd)

a) Residential

- **PREPARE BEFORE A Residential Building Fire**

- **Assess your building of residence**

Does it have any special problems mentioned above, such as it being an older mixed-use building? Does it have a non-functioning management committee? Is junk stored in the stairwells? Is there only one escape route? If so, you might consider moving. Modern condominium buildings have better fire safety provisions and usually have functional management committees. You might contact yours to find out what fire safety measures they have and assess how vigilant and professional they are.

- **Understand how fires start and spread**

Most Common Causes of Fire:

- Unattended stove cooking, especially if the stove is greasy
- Other open flame in the home, such as candles, cigarettes, and barbecues
- Faulty electrical wiring or overloaded outlets
- Poorly maintained old machines, especially heaters or dryers
- Damaged lithium-ion batteries

Toxic Smoke the Worst Danger

Fires begin at a point, whether it is a kitchen fire, electrical fire, or an accident like a toppled candle. While the fire itself can spread rapidly, the greatest danger is the smoke, which can spread faster than the fire itself. This smoke is totally unlike smoke from a campfire or a grill. It is often a thick smoke from a mixture of industrial materials, including plastics and other hydrocarbons, full of toxic chemicals that could cause you to pass out. It might be hundreds of degrees in temperature, causing 2nd and 3rd degree burns on contact. At all costs, you must protect yourself and loved ones from direct exposure to hot, thick, toxic smoke. If you can't go under it, or see through it, don't go into it unless you are wearing special safety gear or there is no other choice. Of course, you may not be able to see through less-dense smoke in an unlit space, which is why you need flashlights on hand.

Here is a useful video on the topic: <https://www.youtube.com/watch?v=iOCx5ZQeLLU>

➤ **Fire-prep your own living unit**

- *Do a hazard check of your entire living unit to make sure you are as safe as possible.*

- *Make sure everyone in your home is aware of **Fire Safety Rules***

- Keep the cooking area clean. Don't leave cloths or papers near the stove. Don't leave pots on the stove unattended while cooking. Turn them off if you need to go away for a moment.
- Don't barbecue in an enclosed or cluttered space. Have water on hand to put out fires. Thoroughly drench coals after cooking.
- Don't smoke indoors. Have a wet ashtray system to make sure cigarette butts are out.
- Don't use candles. Battery-operated flashlights and emergency lamps are safer.
- Don't leave heaters unattended, or keep them on for hours at a time.
- Make sure there is plenty of space between all heat sources and anything flammable.

Other points to remember:

- If your smartphone is damaged, its lithium-ion battery may be at risk of burning explosively, giving off toxic gases. If it is unusually warm, changes shape or color, or makes odd noises, take it to a professional shop. Only use the charging cable provided at sale or a certified replacement by the phone maker. Don't over charge it, or charge it on a flammable surface.
- Old wiring and old machines, especially heaters and clothes dryers, can be a fire risk. Make sure wiring is up-to-date and machines well-maintained. If in doubt, get them checked.
- Change padlocks on window cage escape doors, and maintain them in working order. Keep the keys out of sight of potential burglars but near the window. Have a back-up key that you keep in your wallet or escape bag. Make sure everyone knows where the keys are.
- Make sure you have functioning smoke detectors and check them often. Battery-powered detectors need batteries replaced every 6 months.
- Keep a fire extinguisher in your house and know how to use it, store it, and check its readiness. Most home fires start in the kitchen, so don't store it there.
- Avoid using flammable fabrics for curtains, bed clothes, towels, clothes, etc. Flame-retardant and fire-resistant materials are available in Taiwan online or at selected retailers.
- Consider having a set of protective clothes near where people sleep, such as thick gloves, a long-sleeved shirt, pants, and a pair of shoes. Keeping a smoke hood (protective fire-resistant hood with a respirator and face mask) in your room increases your chance of surviving a fire.

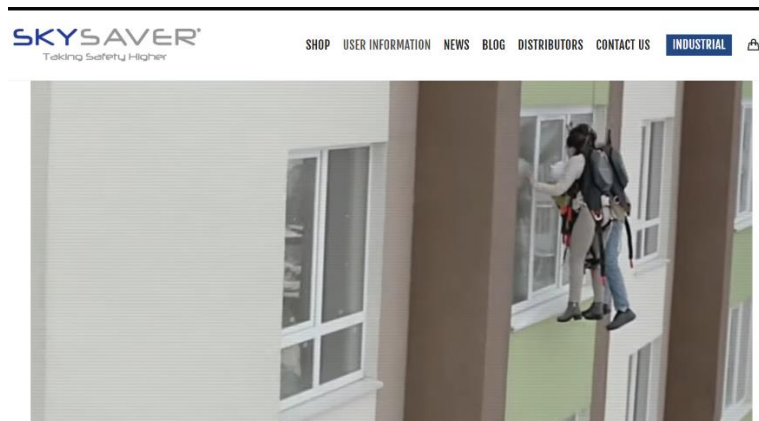
➤ **Plans A, B, and C:** Your emergency evacuation plan should have multiple levels:

Plan A is the most obvious one, such as evacuation out your front door and through the nearest stairwell.

Plan B is the alternative stairwell, if there is one and if the first one is unusable.

Plan C is to shelter in place in your apartment in the room farthest from the fire and behind shut doors, with a window facing possible rescue. Identify your position by turning on the light and/or hanging a white or brightly colored piece of fabric out the window. Call 119 and tell them where you are sheltering. You can also send messages to friends with your information.

Plan D? As mentioned in the section on earthquakes, depending on the specifics of your residence and the surrounding buildings, a creative “out-the-window / off-the balcony escape system” is also a possibility, in some cases. Commercially purchased self-rescue devices are available. However, these require maintenance and proper training. This is not an option to be taken lightly or deployed spontaneously. [Skysaver](#) is one company that sells these devices.



Parents and infant evacuating with controlled descent self-rescue device (cable not visible)

➤ **Plan and practice**

Have fire-response and evacuation plans and share with all household members. Consider that some routes may be blocked due to fire or smoke, and electricity may be off i.e., it may be dark and some electrical doors may be non-functional. Do some practice drills. Be ready to transport elderly or disabled family members, as well as young children. This could mean physically carrying them down the stairs. Plan to leave heavy wheelchairs behind. If you have pets, have a plan for them as well.

- **RESPOND IN THE EVENT OF A Residential Building Fire**

Note: These are suggestions for reference. Create your own system that works best for you.

Scenario 1: There is a general fire alarm but no other sign of a fire. Try to determine what's going on: Look out the window, open the door and look out, (always touch the door first and don't open if warm) smell the air, check exit stairwells, assess neighbors' responses, call security. If you can't verify "no fire" in 5 minutes, grab go-bags and evacuate. Better safe than sorry.

Scenario 2: There is evidence of a fire in or near your building You smell smoke, see flames, hear scared voices, notice people exiting the building in a hurry, see firefighters arriving, etc. **Take immediate action:** Get everyone up and ready to go with their smoke hoods, gloves, and go-bags ASAP. One to two minutes is a good time.

With the back of your hand, check the door temperature. Don't touch the metal handle. If the door is hot, don't open it. There might be a fire on the other side. Put a wet towel along the bottom. Call 119 and building security and tell them where you are. If they don't come soon and the situation is deteriorating, you can use your creative escape back-up plan.

If the door isn't hot, evacuate immediately. Go! Do not waste time coaxing the cat out from under the couch. Exit by the stairs, not the elevator, which, due to the effect of fire on building wiring, might become stuck or even go to the floor of the fire. Do not run or panic. Test doors as you move and close them behind you. If there is light-to-moderate smoke, crawl on the floor. If the smoke is dense and hot, avoid it at all costs. It could kill you.

Scenario 3: A fire starts in your living unit: If it is a small fire, put it out. If it is beyond your control, everyone should grab their go-bags, and get out ASAP. Do not leave your door open, as this will facilitate the spread of the fire, heat, and smoke. Call 119. Activate the building fire alarm, and warn neighbors as you exit. Make sure you have everybody, but pets are not as important as people.

- **COPE AFTER A Residential Building Fire**

Go to your nearest safe location. DO NOT go back into a burning building to retrieve property or people. Stay out until the authorities give the all clear. Get medical attention, if necessary, then go to your pre-planned safe place to stay. This should be easier for a fire than after an earthquake as it would be a local disaster, not an area-wide event, and you can probably just get a hotel room.

b) Commercial / Industrial: This includes fires in offices, factories, Costco, malls, department stores, trains, etc.

- **PREPARE BEFORE A Commercial or Industrial Building Fire**

- **Research:** Get access to and study your workplace Emergency Response Plan (ERP).

- **Be aware:** Habitually take note of the exits and how you could escape in case of fire or earthquake. Doing this kind of exercise for a few weeks could create new mental habits.

- **Plan and discuss**

- Volunteer to be on your safety committee at work, or ask for more safety meetings and drills. You can also discuss with colleagues how you would cooperate in case of a fire, or other disaster.

- Talk with family members about how to respond to a fire or earthquake in that scenario. You can play quiz games with them. For example, you can ask your kids next time you are shopping together, “Who can find the fire exit? If a fire came from over there, where should we go? Where are the safe and dangerous areas in case of an earthquake?”

NOTE: You can also contact your kids’ school about their planning for fires and earthquakes, and go over the information and best responses with your kids.



Kids getting fire response training in a smoke trailer

(Photo by Mass Communication Specialist 3rd Class Eddie Harrison, U.S. Navy)

- **RESPOND IN THE EVENT OF A Commercial or Industrial Building Fire**

At work

Follow your pre-arranged ERP. You can grab your at-work Go-bag and follow the plan out of the designated exit. Help and encourage others to stay calm, positive, and safe.

At a mall or other public building

- Get your people into a tight group and hold young children.
- Follow the escape routes you noted as you entered the building, or find the best route now.
- Take the lead in a natural way and keep everyone as calm and positive as possible.
- Exit briskly and purposefully, but do not run or push other people.
- Leave any large packages behind, but don't just drop them underfoot as they may become a tripping hazard for someone else.
- If possible, avoid narrow doorways with many people fighting to get through at the same time.
- Try to get and share correct information about what's going on.
- Avoid elevators. If you are above ground level, try to go down. If you are in a basement, try to make your way to ground level.
- Once at ground level, exit as soon as possible.

- **COPE AFTER A Commercial or Industrial Building Fire**

Get well clear of the building and out of the way of first responders. Make sure everyone in your group is present and OK. If not, inform first responders. Do not go back into the building to look for people if at all possible.

SPECIAL SECTION

D. MILITARY ATTACK BY CHINA

Military action by China against Taiwan is the most sensational of all the disaster scenarios, with many people doubting it will ever happen. But in light of the historical and geopolitical context, as well as recent and ongoing developments, it is definitely worth considering carefully.

Hence, the background section for this topic, is more extensive, and includes an analysis of various factors such as the geopolitical background, the nature of the threat, and possible outcomes.

However, for the sake of brevity, this analysis has been moved to Appendix 2 on page 65. Check if interested.

This section from here on is separated into the following sub-sections:

1: Official US State Department Advisories: *What they are and how to use them as a timing baseline.*

2: Stay or Go? *How to prepare to leave, or to stay, and what to expect if you do stay.*

1: OFFICIAL US STATE DEPARTMENT ADVISORIES

Although a surprise kinetic attack with bombs and missiles by China's People's Liberation Army (PLA) cannot be ruled out, it is likely that there would be some sort of advance warning. Both the political pre-cursors and the physical preparations for an attack would likely be apparent to US and ROC intelligence agencies days or weeks in advance. A blockade of some sort could be imposed in a few days, but a full invasion would probably be detected months in advance. Stories about rising insurance rates, and corporate "de-risking" would start to pepper the news, but might be based more on expert speculation than actual insider intelligence.

However, if matters were progressing toward an increasingly dangerous possibility of near-term military action, there would be official public communications to that effect. The best indicator would be the country travel advisories provided by the US State Department (DOS). These advisories are intended to inform US citizens about the safety level of traveling or staying in a foreign country, taking into consideration a variety of factors, such as disease, civil strife, war, etc.

1: OFFICIAL US STATE DEPARTMENT ADVISORIES (cont'd)

There are four travel advisory levels: Level 1: Exercise Normal Precautions; Level 2: Exercise Increased Caution; Level 3: Reconsider Travel; and Level 4: Do Not Travel.



Taiwan's current advisory is Level 1. If this was moved to a higher level—and not due to any other obvious explanation, such as a disease outbreak or recent natural disaster—that would indicate that the risk of war had been assessed as increasing.

A related indicator is the official Messages and Security Alerts to U.S. Citizens, also provided by the State Department, through its local embassies, the de-facto one in Taiwan being the American Institute in Taiwan (AIT). These and the travel advisories are posted on publicly available websites. They are also shared by direct message to people registered with the Smart Traveler Enrollment Program (STEP) notification service, available to American citizens.

Links for Taiwan:

DOS Travel Advisory Taiwan

<https://travel.state.gov/content/travel/en/traveladvisories/traveladvisories/taiwan-travel-advisory.html>

AIT Alerts <https://www.ait.org.tw/category/alert/>

Smart Traveler Enrollment Program <https://step.state.gov/> (***Note that the STEP program was updated on Sept. 16, 2024. If you enrolled prior to that, you need to re-enroll, if you haven't already done so.*)

1: OFFICIAL US STATE DEPARTMENT ADVISORIES (cont'd)

NOTE: Warning levels might change suddenly. Regarding Taiwan, interestingly there were no alerts or travel advisory level changes on August 2022, at the time of the massive PLA exercises around the island after the visit by House Speaker Nancy Pelosi, or during subsequent similar large-scale exercises in 2022 and 2024. However, there were special meetings held about the exercises in various institutions of the American community in Taiwan, informed by information from by the American Institute in Taiwan (AIT) which is funded and guided by the State Department.

❖ USING STATE DEPARTMENT ADVISORIES AS A TIMING BASELINE

If China was intending to militarily escalate things in the near term, there might be a lot of media coverage, but some would be click-bait or hype. The DOS travel advisories would be more reliable.

First Warning, Last Warning, and Final Deadline: A suggested timeline

First Warning If the current travel advisory for Taiwan changed to Level 2 or 3, based on the military threat, and not due to something like a recent earthquake or disease outbreak, that would be highly significant and constitute a “First Warning.” This could set off media discussion and economic impacts such as Taiwan-linked property values, stock prices, and currency exchange rates being affected. Flight tickets out of the country would probably become somewhat scarcer and more expensive.

After First Warning, there **might** be further alerts and travel advisory level changes, either down (from Level 3 to Level 2, or back to Level 1) or up (from Level 2 to Level 3). During this hypothetical interim period, people would be watching anxiously to see where things were headed, and many expats and locals would leave Taiwan, judging this to a good time to get out of the country.

Last Warning: The most important indicator would be if the travel advisory was set to Level 4, and US citizens were urged to leave the country. Call this “Last Warning.” At this point, there would be considerable fear and panic. Expect a huge spike in demand for seats on commercial flights out of the country, not only by expats, but by tens of thousands of Taiwanese wanting to get out of harm’s way. It would suddenly become incredibly hard to book a flight, and there might even be cancellations as carriers abandoned their Taiwan routes. Shipping services for goods might be overwhelmed. Property values, stock prices, and currency exchange rates, would probably be hit hard, and transferring money off-shore might become highly problematic.

***** NOTE: There Might Be Only One Warning *****

Only one warning scenario: It would be nice to think that advisory levels would go up, down, and around over a period of months, giving people time to react. But the reality is that ***First Warning and Last Warning might occur at the same time***. If there was a sudden escalation by the CCP / PLA, then the advisory might be raised from Level 1 to Level 4 in one move. Although this is probably unlikely, it is possible, especially in the case of an imminent attack.

After Last Warning, there would probably be a series of chartered evacuation flights by the US, Japan, Germany, France, Canada, and other countries, for their citizens. There would also be charters by private risk-management companies like *International SOS*.

Final Deadline: The last point in this timeline would be a “Final Deadline” for evacuation, which would be when hostile military activity was imminent, and there were no more commercial flights off the island. Unless you had your own plane or boat, the last option would be a Non-combatant Evacuation Operation (NEO), conducted by the US Defense Department. Their priority would be US citizens, dependents, and employees. Some people from other countries ***might*** be designated for eligibility, such as citizens of the “Five Eye” countries (the intelligence-sharing partnership between the US, UK, Canada, Australia, and New Zealand) as well as EU and NATO-country citizens. But getting a seat on a flight could be extremely problematic—and expensive: you would be billed for the service. (Hard to be sure here, but it might be around US \$50,000 per person.)

The State Department stresses that people should make emergency plans that do not rely on the US government. Do NOT rely on a NEO for your escape plans. NEOs generally function more smoothly than is suggested by dramatic media images like Afghans clinging onto C17s taking off from Kabul Airport in August 2021. But military evacuation on the cusp of war is inherently chaotic.



South Vietnamese refugees arrive on a U.S. Navy vessel during Operation Frequent Wind in 1975.

(Photo by U.S. Marines in Japan Homepage)

***** NOTE: There Might Be NO Warning *****

This is considered less likely by most experts at time of writing, but of course a surprise attack is a well-known tactic of war. Hypothetically, China could fire missiles at Taiwan with no warning at all, and then proceed with a blockade or other military action afterward. If that happened, you would be stuck on the island with no chance of evacuation in the short to medium term. Once the war gets kinetic, there would be no more flights out of Taiwan except for VVIPs or security personnel.

Assistance and information from your government: The French have an effective network of volunteers that proactively keeps tabs on and offers support to their citizens and their families in-country. Other governments have emergency information systems you have to sign up for. Every country has its own system. Hence, it is definitely a good idea to register yourself with your government organization here locally. Then, they know you are here and how they can contact you, and you can stay up to date with their communications and services. You can easily find their international emergency consular assistance email addresses, websites, and phone numbers online.

2. THE BIG QUESTION: GO OR STAY?

a) Will you GO in advance of a war that might or will happen? Then you need to make plans to leave and respond effectively when you decide the time has come.

b) Will you STAY despite an imminent war? Then you need to make plans to cope with this contingency.

NOTE: It is also possible to have plans for both and decide later.

a) OPTION “GO”

- **PREPARE TO GO BEFORE *Aggressive Military Action by China***

It is recommended that anyone who is definite about not wanting to be in Taiwan during a war make their exit plans well before the situation becomes tense. Preparing to leave the island would be an important and complicated process, not something to do at the last-minute. Bear in mind that those who might be special targets of retribution by the CCP / PLA, or considered high-value targets due to their social prominence, being in key leadership positions, or having insider knowledge of diplomatic or security affairs, should probably leave.

a) OPTION “GO” (continued)

One useful way to analyze your required preparations for an exit is to divide them into three phases:

- i. Due consideration***
- ii. Proactive measures***
- iii. Crisis response plan***

i. Due Consideration

The first priority in deciding (or simply considering) how to leave would be answering key questions about your situation. How liquid are your financial assets? Are all your credit cards and health insurance Taiwan-based? What could you do to off-shore them? How transferable is your profession? What alternative livelihoods might there be for you? What would things be like back in your home country, or another country? Do you have people there that could help you out in a transitional situation, perhaps at short notice? How long would it take to get visas or citizenship for family members, if needed? Do you have any possessions you would need to ship?

Do your research, contact people, and figure out a plan. You don't have to commit to it, or tell anyone about it. You are just laying the foundation for a possible exit, without burning any bridges.

ii. Proactive Measures

Once you have a solid plan, you could start doing some things in advance: applying for visas, selling assets, transferring wealth off island, contacting schools, updating your crisis response plan, and so on. At this stage you should become more tuned in to what is happening with the China threat:

It is ideal if you anticipate the update to Level 4 in advance. Be aware of the security situation. Don't get spooked by opportunistic social media influencers or disinformation trolls. But nor should you be in denial or be overly influenced by those who say that everything is fine, don't worry.

iii. Crisis Response Plan

The first scenario is that there is a First Warning where the travel advisory level goes up to Level 2 or 3 based on the threat of war, but not to Level 4. In this case, you could probably just fight for air tickets like everybody else and go when you can. However, this scenario may not happen at all, or the alert level could change upward to Level 4 very soon afterward, so planning for this scenario should be superseded by planning for second scenario, below.

iii. Crisis Response Plan (continued)

The second scenario is that First Warning and Last Warning are the same warning i.e., there is only one warning. You are suddenly warned to leave the country ASAP. In this case, there would be real panic and it would be very hard to get tickets. There's a risk you might lose your autonomy and end up with the mob at the airport hoping for a chartered evacuation flight.

Hence, a sudden shift in the DOS Travel Advisory for Taiwan to Level 4 could be one of your main planning points for evacuation. *(Be alert to other forms of warning as well.)*

How can you maximize your chances of getting a flight out under those circumstances?

Be ahead of the curve: If you monitor the information from the State Department, and have a group sharing updates from the STEP program, you would get the information within minutes of its release.

Even then, it will still take some time to book airline tickets. To deal with this, you could try to have a prearrangement with a reliable travel agency for this eventuality. Well in advance, you tell them exactly what the contingency plan is, provide the names and personal information of everyone traveling, establish a method of payment, and a prioritized list of destinations. Make it clear you are pre-arranging a flexible, rapid-response agreement. Make sure it is with people you really trust. If you are friends with the owner or manager of the travel agency, so much the better. You can also offer a fee for premium service. Be prepared to pay a lot more than the regular price.

Flights to Japan, Korea, the Philippines, and North America (north, south, and east) might be more likely to be canceled due to the threat of war, while those to Thailand or Singapore probably less so. India is another possibility. Once there, you can find flights onward to your next destination.

When you get the warning, you contact the travel agency immediately, and hopefully your flights are booked within a few minutes. *(If you had anticipated the update to Level 4, you could reconfirm your special arrangement beforehand.)* The sooner the flight is after the warning, the less likely it is to be cancelled. That is, if you take the flight the next day, it would probably go ahead as scheduled. But a flight for a week or more later is more likely to get cancelled, due to panic and disruptions.

The third scenario is a surprise attack with no warning at all. If you had not made any plans for this contingency, then it would be very difficult to cope with it at the last minute. So, it is better to have some kind of planning for this scenario. You might get some ideas from the following section for those who plan to stay.

b) OPTION STAY

- PREPARE TO STAY IN THE EVENT OF A *Military Attack by China*

Be Clear On Why: If, on the other hand, you decided to stay during an attack by China, you would need to be very clear on why. Two common reasons are: “Taiwan is my home and I’m not leaving,” and “I will stay and support Taiwan.” In any case, be aware of the risks, and have a feasible plan.

Consider the risks: The risks of staying could be immense. You could be killed or injured, or see other people—perhaps your loved ones—killed or injured. You could be heavily traumatized and changed for life. You could lose your property and possessions. If the war went badly for Taiwan, you could be captured and imprisoned for years, perhaps forced to cooperate with CCP / PLA forces.

❖ FEASIBLE OPTIONS

Fighting: It would be difficult for expats to “fight for Taiwan” in a military capacity. As of publication, Taiwan does not have a foreign legion or program that accepts foreign fighters into its armed forces, except from allied militaries (such as the US) in a training or observer / liaison role. This might change, but exactly what shape things might take is unclear. Using the *International Legion of the Defense of Ukraine* as an example, volunteers need to be no older than 60 years old, fit and healthy, have no criminal record, and preferably have military and especially combat experience. Assuming that Taiwan created similar conditions, additionally, you would need good Mandarin ability. If all these boxes were ticked, maybe you could fight for Taiwan. But at this point that seems unlikely.

Civil Defense: Another role would be supporting the war effort in a non-soldiering role. Civil defense involves caring for the civilian population, in capacities such as helping people evacuate, medical assistance, staffing shelters, fire suppression, etc. Your contribution would depend largely on your language skills, local knowledge, and training. But any assistance would be welcome. You could also simply help out at the local level, helping friends and neighbors as needed.

Note: The state of Taiwanese civil defense preparedness for a war with China is evolving but incomplete. The government’s creation of the Whole-of-Society Defense Resilience Committee in June 2024, underscores an increased official commitment to civil defense. However, leadership in this area is still held by citizen-led groups, such as Kuma Academy, Forward Alliance, Academia Formosana, and others. Overall, at the current time, Taiwan’s civil defense capacity still has many weaknesses, including a lack of training and a poor sense of mission among the city and county-level

government civil defense volunteer groups. The total number of governmental civil defense volunteers is around 400,000, who might be available to assist in a wartime situation, in addition to regular military, reservists, and police personnel. Taiwan also has many excellent first responder organizations such as the National Fire Agency, and civil society disaster-relief and medical aid organizations like the Tzu Chi Foundation and the Red Cross. But Taiwan lacks a comprehensive civil defense management plan at both local and island-wide levels, equipped to operate under harsh wartime conditions, such as a failure of the electrical grid, telecom, and computer systems.

Media: A further way to support the defense effort would be to document it through pictures, video, voice, and text. Although communication with the outside world would almost certainly be disrupted by war, it is unlikely that it would be completely blocked at all times. The Taiwan government, or foreign NGO and media organizations, would probably have their own ways of getting information off-island, and might assist you to share your content. Remember that your smartphone is still an electronic device with a camera, voice recorder, media player, and document-reader, even when it is not connected to the Internet or telecom infrastructure. Files can be transferred by Bluetooth or USB. However, please note that if discovered photographing or filming military activities, you could be suspected of intelligence gathering by either side and dealt with harshly. Make sure you are behind the front line and have permission to film by Taiwan authorities. An International Federation of Journalists International Press Card (IFJ-IPC) would be helpful.

NOTE: To be most useful in a civil defense or journalistic capacity, you would have to be organized, supplied, and prepared with your own emergency plan (GEP.) The more dependent you are on being saved or supported, the less time and energy you have to save or support others. You should also have verifiable accreditation, and appropriate clothing, such as a vest marked clearly PRESS in English and Chinese, or the orange vest of civil defense workers, to avoid war-zone misidentification.



Orange vests commonly used by civil defense workers

❖ KEY PREPARATIONS

If you have decided to stay, you will need to decide if and when to shelter in place or “bug out.”

1. Assess the safety of your home: If you are near a likely site of military activity, such as a military base, airport, harbor, major roads, bridges, infrastructure facility like a TV station, gas station, or phone company building, major train or MRT station, etc., you should probably NOT shelter in place as missile strikes or other military activity could be a serious risk. Do a neighborhood walk-around and carefully consider what things might be like in a war situation.

2. Equip yourself: If sheltering in place is a safe option for you, good! That is generally considered to be the best response. Equip yourself with the supplies, equipment, and systems to live well at your residence, bearing in mind that normal services might be shut off for days, weeks, or even months.

3. Have cash on hand: ATMs and banks will be either offline or maxed out, so have cash available, a lot of it in smaller bills. Take appropriate precautions with it. Gold might come in handy.

4. Have a good primary bug-out Location: If your home would not be safe in a hot war, you need to have a good location set up to bug out to. Even if your home is a good place to shelter in, unless you are OK with the idea of moving to a government shelter if things go sideways, consider arranging a “bug out” location anyway. The situation might change rapidly, with what is safe one day becoming dangerous the next. Your primary bug-out spot should be somewhere snug and quiet where you can hunker down and stay out of sight and harm’s way. It could be an out-of-the-way farmhouse, mountain cabin, or even an apartment in a nondescript village away from major roads and near some mountains. Choose a place you could get to fairly quickly, and escape from, if necessary, with a few different ways in and out. Stock this place with food, water, batteries, tools, sanitation arrangements, etc. for 3 months, well before any emergency. Having a local source of fresh water is a huge asset.

5. Social Capital You need to make arrangements with people you can absolutely rely on, well in advance. Use any good local connections you have, especially family. Let them know exactly what you plan to do and want them to do and agree to. Make sure it is a done deal. And while a hidden backwoods getaway might seem safer, in the long run remoteness could become an issue in terms of access to supplies, information, medical support, and social contact. It might be better to be integrated into a community with local people. Expats with a Taiwanese or indigenous branch of the family would have an advantage here. Make sure the community is OK with you being there.

6. Take surprise and confusion into consideration. If your kids are at school, and both your spouse and you are at work, how will you communicate if there is a sudden attack (or even a huge earthquake) and communication becomes impossible? You should have an agreed-upon plan to follow for various contingencies, with meeting places and a protocol for leaving messages.

7. Critical timing: If you want to avoid the worst of the chaos with roads, communications, family separation, etc., then your entire group should go directly to your bug-out spot as soon as your “danger signal” occurs, whether Level 4 or another agreed-upon event.

8. Plan for the situation where you can only walk out with a back pack from your home, your pre-arranged bug-out location, or wherever. You might have to. If you become homeless, do what many homeless people do: camp out. Make sure you have the right equipment and all-weather sports clothing.

❖ OTHER IMPORTANT CONSIDERATIONS

Mutual assistance groups: You could join or form a larger group for mutual support, based on your school, workplace, religious group, or other organization, or friends. A larger group might be more stable over the long-term, and have more individuals with useful skills, as well as a greater variety of supplies and equipment. But there would also be a greater chance of friction and disagreement.

Children, the elderly, pets, people with special needs, the sick and injured: They would obviously not be able to travel or deal with rough conditions very well. How would you transport them? Also, pets probably might not be allowed in government shelters.

Mindset: Both you and your group must be mentally prepared to deal with the challenges and horrors of a major disaster, without experiencing a breakdown in individual or team functioning.

Skills: Some skills that could help you get by in a wartime situation are: mechanical repair; carpentry, plumbing, and electrical; first aid; fire-safety; mountain rescue; navigation; wilderness camping; wild food identification; fishing, trapping, and hunting; farming; food and water safety; Mandarin and Taiwanese; team management; radio use, etc.

Physical fitness: Being in good physical condition will help you in all sorts of ways, especially in a situation where you need to carry buckets of water, a backpack, or help other people—such as kids or injured people—move around.

- **RESPOND IN THE EVENT OF A Military Attack by China**

IMPORTANT NOTE: If at all possible, it is highly recommended that you be in your bug-out spot before any attack. Don't worry about missing work or school. Be safe and avoid being part of a horde of dazed refugees at a government facility that is struggling to cope with the scale of events.

MISSILE STRIKES: The PLA has a large array of land, air, and ship-borne missiles that can target Taiwan. You do not want to be on the receiving end. That is why it is better to get to safety proactively. However, since surprise attacks cannot be ruled out, you do need to have a plan for them. Below is some official information from the Taiwan Government.

Air Raid Warning Signals and Sounds

(1) Emergency Alarm: The signal comprises one long tone followed by two short ones. The long tone persists for 15 seconds, while each short tone lasts for 5 seconds. There is a 5-second gap between each tone. This cycle repeats thrice, totaling 115 seconds in duration.

(2) All-Clear Alarm: This consists of a single, continuous tone that lasts for 90 seconds.

National-level alarm messages can be received on mobile devices.

Emergency Evacuation and Shelter

Evacuation Precautions

When the air raid warning sounds or when you receive a national-level emergency alert message, please take the following actions immediately :

1. Indoor residents should immediately enter the designated shelter or basement in their current location (such as office buildings or residences) for nearby shelter. If there is no basement nearby, please find a sturdy room within the building with fewer windows, assume a protective position, and avoid exposure to the hazards of war. Remember to turn off the gas and power switches.
2. Pedestrians, drivers, and passengers on the road can visually identify locations marked with "Air Raid Shelter" signs or use the mobile phone police service app for navigation. Alternatively, follow the guidance of military, police, and civil defense personnel for evacuation. Building security personnel or residents should proactively open the iron gate or barrier of the basement driveway to allow people to enter for shelter.
3. Vehicles traveling on elevated roads or highways should quickly exit at the nearest interchange and move to ground-level roads to prioritize the safety of pedestrians. If located in an unsecured area, seek shelter in surrounding terrain, tunnels, underground passages, or underneath bridge piers, which provide concealment and protection.

4. Passengers inside public transportation stations, please follow the guidance of station staff and evacuate to the nearest shelter.
5. Evacuation Posture : Assume a kneeling position with your back facing the window to avoid being injured by shattered glass. Lift your body slightly, with your chest about 15 centimeters off the ground. Cover your eyes and ears with your hands and slightly open your mouth to prevent injury from shockwaves.

Don't forget your go-bag on the way to the air raid shelter!

Missiles / Shells / Debris Hits Your Building: If your building is hit while you are in it, your response would be similar to a simultaneous earthquake and fire, but with little chance of first responders coming to help you. Get everyone together, grab your go-bags, and evacuate cautiously. Offer help if you can, but follow your GEP. Once secure, you can help others. More missiles might be on the way.

All clear: What next? If you are in the shelter and you get the all clear (air raid warning is lifted) you may be allowed to go home, or you might be told to go to an evacuation shelter. However, at this point, you may have the opportunity to politely (or not so politely) say “No thanks!” and follow your own Group Emergency Plan. Your priority at this point is to get your group together and safe, ASAP.

Stay calm: Your next order of business should be: ***Evaluate ---- Communicate ---- Act***

- **Evaluate:** Is everybody in your group OK? What local damage has occurred? What information is coming in about the attacks and Taiwan's response? Is it safe to go back to your home, or should you bug-out? Are routes to the primary bug-out spot still open? (Be wary of fake news, malicious rumors, and incorrect information.)
- **Communicate:** Do your best to speak with or send messages to your international contact person and members of your group who are not present, based on your GEP for this situation. Make your messages clear, complete, and concise. Avoid excessive emotion.
- **Act:** Implement your plan: Do it. Shelter in place or bug-out. Keep your group safe. Be ready for anything, as there could be chaos. Of course, in a tight spot you will act before communicating. But if you can communicate right away, do it. You might not be able to later.

OTHER TYPES OF STARTS TO WAR: If war starts with a blockade instead, you would have more time to deal with the situation. But it might escalate quickly, so communicate with your people and act on your safety plan ASAP. Don't bow to pressure to carry on normally, if your gut tells you otherwise.

❖ LIVING THROUGH A WAR

No one can say if and when military action against Taiwan by the CCP / PLA will ever take place, or how it will transpire: It could be short or long, easy or hard to deal with, affect your area or not, etc. In any case, if it does happen, you will have to adapt to a new situation. This may involve struggling to reunite with loved ones; living, eating, and traveling irregularly; and having reduced access to communications and medical services. Whatever happens, you will have to find a way to deal with it.

There are two main points that bear repeating:

- *The more prepared and organized you are, the more in control you will be, the less help you will need, and the more you can help your loved ones and members of the community.*
- *If you keep your people together, and respond to imminent events before (or immediately after) they happen, you'll have a huge advantage.*

Other points:

- Stay focused, determined, positive, and resilient.
- Do not steal, trespass on private property, or interfere with other people.
- Do not pollute or degrade your environment.
- Be wary of strangers: some may be unstable due to stress, or emboldened to commit crimes if there is a breakdown of social order. Avoid all confrontations and disputes, if possible.
- Be ready to defend yourself and your group, but observe a moral and legal continuum of force.
- Cooperate with authorities and community leaders.
- Avoid contact with enemy soldiers. If contact happens, appear weak, confused, and harmless.
- Avoid dressing in military clothing, or engaging in activities that appear military.

• **COPING AFTER A War**

Dealing with the aftermath of a war depends completely on what happened during the war, and what its outcome was. If things went well, you could pick up the pieces of your life and carry on. But if you lost loved ones, or were permanently injured, things could be very dark for you afterward. If the PLA occupied Taiwan, you might be detained for months or years. There is so much at stake that, to reiterate: You need to know why you would want to stay in a military contingency, what you could do to help the defense effort, and how feasible your plans are.

SECTION 3: INTEGRATED PLANNING AND LOGISTICS

Many of the dangers and impacts from the different types of disaster threats are similar, so preparations for them can overlap. For example, preparing a go-bag and having a fast evacuation plan will be the same thing for a fire, earthquake, or war, and stocking supplies for sheltering in place will be the same in all cases. Take this into consideration as you create your Group Emergency Plan.

This section is separated into the six following subsections:

- a) Go-bags (page 43)
- b) Identifying and Designating Key Locations (page 46)
- c) Emergency Communications (page 48)
- d) Integrating Locations and Communications into your GEP (page 51)
- e) Evacuation: Getting to your Bug-out Location (page 52)
- f) Supplying your Safe Locations (page 53)
- g) Health and Hygiene After a Disaster (page 54)

a. Go-bags

Also known as “grab and go bags” or “bug-out bags,” these are bags containing important things for normal functioning and survival, such as food, water, essential medication, power banks, first aid kit, extra clothing, a Swiss-army knife, flashlight, raincoat, etc. They are always packed and ready to go, so that in an emergency, you can just grab it and go in less than a minute. When you evacuate your residence with your go-bag, the assumption is that you may never return there, as it has become permanently unsafe. Of course, if that is not the case, great! But don’t count on it.

There are a few variations around the go-bag theme, such as a “master bag” for parents, simpler ones for kids, a camping go-bag with a tent and sleeping bag, one for the car or motorcycle, one for work, and a smaller one for everyday carry.

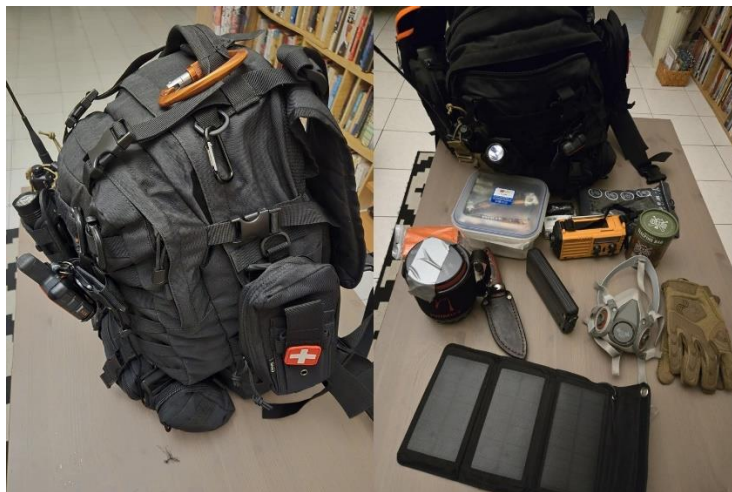
Obviously, you don’t have to do all this. Just think about it and create the version(s) best for you. But it is highly recommended you prepare some basic ones in case of fire or earthquake. Here is some edited advice from the government of British Columbia, a province of Canada where wildfires occur often, floods are possible, and there is the threat of a major earthquake happening in the future.

Make a grab-and-go bag

A grab-and-go bag is a small emergency kit that's easy to take with you, in case you need to leave right away. It's a good idea to make grab-and-go bags for your home, workplace and vehicle.

Include:

- Food (ready to eat) and water
- Phone charger and battery bank
- Small battery-powered radio
- Battery-powered flashlight + extra batteries
- First-aid kit + manual, and personal medications
- Personal toiletries and items, such as an extra pair of glasses or contact lenses
- Copy of your Group Emergency Plan + local maps
- Important documents, such as passport and bankbook
- Cash in small bills
- Seasonal clothing and an emergency blanket
- Pen and notepad
- Whistle



Grab-and-go bag: Left, packed. Right, some contents unpacked.

Items in the bag include: warm and waterproof clothing, freeze-dried and shelf-stable food, first-aid items, a camping gas stove, and shelter.

(Photo by Tobie Openshaw)

a. Go-bags (cont'd)

Additional items: The above suggestions are a good start, but you can customize your own bag. You can also leave room for a notebook computer or tablet in a rugged, shock-resistant case, inside a water-proof bag. You can also bring important documents. Some sources say bring copies, but originals are safer if you never go back. Have scans of them backed up online and on USB drives, along with all important data. Have a copy of all that in the hands of your international contact person.

Grab-and-go Camping Bag: You can have a separate bag with a tent, small camp stove and fuel, sleeping bags, nylon rope, and a fire starter, in case you need to camp out for a few days after a big earthquake or a wartime scenario. Make sure it is clear whose job it is to take it in a fast evacuation. If that is unclear, then it is your job.

Everyday Carry Bag: Some people like to have a bag with them to carry their jacket, laptop, normal daily items but also safety items. These might include:

- Pens or pencils + Small notebook with Group Emergency Plan + important personal information
- USB drive with important documents and data
- Phone charger and power bank
- Flashlight and spare batteries
- First-aid kit + basic PPE
- Tissue and handwipes
- Magnetic hand compass + paper map of the area
- Multi-tool and foldable knife
- 1L of water and some snacks
- Plastic raincoat
- Plastic bags
- Emergency blanket
- Whistle
- Alternative communications device (Satellite phone, walkie-talkie, etc.)

Conclusion There are many websites and videos covering this topic. Some are full-on “end of the world” prepper stuff, but others are more oriented to careful people living in high-risk areas. Given the very real threat of earthquakes in Taiwan, not to mention the general risk of a building fire, it is something you should look into.

b) Identifying and Designating Key Locations

Households or other groups of people, some of whom work or go to school in different locations, may find it challenging and distressing to communicate and reunite with their members if there is a sudden disaster.

Hence, it's a great idea to have some designated key locations, such as a rally point to meet family when communications are down, and safe havens such as a friend's house (arranged beforehand), or a more remote "bug-out" location well out of harm's way. It is also important to identify and memorize government facilities nearby such as air raid shelters, evacuation centers, community civil defense HQs, hospitals, police stations, etc.

Below is one possible system of designating important locations. It may not suit your particular needs, but it will give you some ideas that you can use for your system. The locations you use should be incorporated with your emergency communication system as part of your Group Emergency Plan.

❖ Sample System of Numbering Locations:

Location 0: Your residence: Home

Locations-1: Near your residence

1A: Just next to your residence. It is the nearest safe area you can go to if you are forced to evacuate your residence due to an emergency. It should be off the road, away from the risk of falling objects, and easy to access and use. It can also be used for a meeting spot or to leave messages for family members. A nearby park might be a good choice.

1B: Somewhere better than 1A but a bit farther away, but still easy to access and use. Perhaps there's a place with some sort of roof overhead, or public bathrooms, or some other amenities. But it is still close enough to Location 0 and 1A to be a meeting point and a message-leaving point.

1C: A camping place or cabin that you can walk to with kids and a backpack in a couple of hours. It would be a safe option for 24-48 hours, if things are really dysfunctional (residence damaged or in harm's way, roads closed etc.) and you don't want to stay in a government evacuation center. Of course, this might not be possible for some people.

Sample System of Numbering Locations (cont'd)

Locations-2: Government facilities

2A: This is your local emergency air raid shelter. There should be one close to your building.

2B: This is your local government evacuation shelter. In an emergency, it will probably be a bit crazy, with all kinds of frightened people and stressed-out workers.

2C, 2D, etc. Local hospitals, police stations, civil defense HQ, etc.

Locations-3: Personally arranged safe places

3A: This is a hotel or friend's house where you can stay if your building was damaged in a fire or earthquake.

3B: This is your main 'bug-out' spot. It is wherever you have arranged to stay with friends or family members in case of trouble. This should be a safe, dry, out-of-the-way, pre-equipped place with no uncertainty about getting a warm welcome.

3C: This is your more secluded and hidden alternative to Location 3B, should it become compromised. It might have its own small cache of food, water, and other supplies. This needs to be within feasible walking distance of Location 3B. If this location is not needed, supplies can be carried back to 3B.

Adapting the System

You can easily modify the above location naming system for your group. You could just have names, like "Small Park," "Big Park," "Uncle Chen's Farm," "Mountain House" etc. Or combine them: Location 1A: Small park", etc. Use your imagination. You also can add letters like Location 1D. As long as the system is clear to everyone, comprehensive, and easy to memorize, it is good.

Using the Location System for Planning

Once you have established a location system, you can make simple contingency plans. These could work if there is a disruption in phone and Internet services. So first, let's take a look at Emergency Communications.

c) Emergency Communications

After a disaster happens, communicating with friends and family, or getting important news, can be simultaneously urgent and difficult. Normal means of communication could be disabled temporarily due to a massive typhoon or earthquake, and over the longer term if there is a military attack.

However, some forms of communication are more robust and “shock-resistant” than others. Hence there is a hierarchy of communications methods and statuses, as follows.

i. Regular communications: All is fairly normal, with few glitches in cell phone and Internet service.

ii. Interrupted communications: Phone and/or internet service works intermittently, but is still there. Maybe cell service is down but some landlines are still working.

iii. Text (SMS) only: When phone and internet are down or unreliable, SMS messaging is good because it will auto-send when your phone acquires a network, even if only for a few seconds.

iv. Satellite phone: If you have a satellite phone or satellite text phone, it will probably work when public phone service and internet is totally out. In a wartime situation, there might be some interruptions, depending on military contingencies, as well as your location, plan, and service provider. But overall, this would be your best bet for reliable emergency communications, both locally and internationally. In the future, there may be more options for satellite-based internet.

v. Radios: These come in a wide variety of forms, and are widely used in post-disaster communication. They are differentiated by the frequencies they use, their power, and antenna and/or repeater use. These factors, together with the topography of the area you are in, affect their range of transmission and reception.

2-Way Radios: The most common type of hand-held 2-way radio is the simple, easy-to-use “walkie talkie.” Depending on the set, these might have a range of several hundred meters to several kilometers, if there are no buildings in the way. The key point in using walkie-talkies is line of sight. Also, make sure you test the radios in actual locations before integrating them into your planning.

Another common type of hand-held 2-way radio are professional radios, such as those used by police. These radios use repeaters to extend range, so in a case where the communications infrastructure is disabled, this capacity might disappear. However, all 2-way radios have the advantage that you are not dependent on any infrastructure at all—just planning and battery power.

c) Emergency Communications (cont'd)

Citizens' Band (CB) and Amateur (Ham) Radio. Both ham and CB radios exist in hand-held forms. CB radios have a better range than walkie-talkies—up to 30km with the right set, antenna, and terrain—but your communications can be overheard by everyone else on the same frequency band. Also, users on the band must take turns talking. CB is not widely used in Taiwan, as of time of writing, unlike the United States. Ham radios are good as you can sometimes communicate around the world: when conditions are right, especially at night, radio waves can bounce (called skip or skywave) off the ionosphere and enable communication over the horizon. Although this is unreliable, you could hypothetically be in Taiwan and talk to someone in North America or Europe. In Taiwan, standard ham radios licenses are restricted to ROC citizens. This is less of an issue to expats married to locals. (Temporary licenses are available for expat Taiwan residents who have licenses in their home countries, if those countries have a reciprocal agreement with Taiwan.)

AM / FM radios are a must for receiving information after a disaster, but cannot be used to send messages or talk to other people. ICRT (100.7FM for Taipei, Hsinchu, Kaohsiung; 100.1FM in Taichung; 100.8FM in Chiayi) would be a top source of emergency information, as long as it is on-air.

Shortwave (SW) radios: Shortwave broadcasts can be received much further away than AM/FM, as their signal can also skip off the ionosphere and propagate beyond line of sight without the use of repeaters. They are very hard to jam, and are being used in the Russia-Ukraine War. Note that most of the other radio systems can be jammed electronically by a hostile military, although it is unlikely that the PLA would be capable of continuously suppressing all forms of radio in Taiwan.

The BBC suspended its SW broadcasts from Singapore on July 15, 2023. However, in a wartime situation it is still possible that they would have special broadcasts. Voice of America (VOA) has traditionally had a robust SW broadcasting presence worldwide, but this has faded as the internet has become dominant. It is also possible that they too would have special wartime broadcasts.

The SW environment is evolving constantly, so, if interested, the best bet is to buy a shortwave radio receiver (which will also receive regular AM and FM radio stations like ICRT) and learn how to use it. Find out what's out there the way that counts most: direct personal experience. Bear in mind that broadcasts might occur at different times and frequencies. In an emergency, if local transmitters are down, you can take out the SW at night, outdoors, or with an antenna, and see what you can pick up. There are some tips at this link. <https://en.rti.org.tw/index/content/id/3>

c) Emergency Communications (cont'd)

There are other types of off-grid communication systems as well, such as the “goTenna,” a smart antenna that pairs with your cell phone and can create a peer-to-peer decentralized communication system for sharing text messages and location information up to several kilometers away. You don’t need to be connected to the standard telephone infrastructure for it to work.



Keep Calm and Carry Comms: Left: 2-way radios; Right: Satellite phone

(Photos by Tobie Openshaw)

vi. No-tech Messaging: When there is no power or machinery available, it comes down to the simplest forms of communication with someone not physically present.

Trusted messenger: You could have someone physically travel from one place to another with a message, or leave a message with a trusted person who intends to stay in one location and relay the message to any group member who comes along.

Note drop: This is where you physically write a note and leave it in a secure drop site. The site and method require prior preparation. You could use a screwable water-tight plastic container with a few small pencils and bits of paper for notes. It should easily findable by group members but not by others, and should be accessed secretly so no one else discovers it. You could also double up on messages: if one message system is disturbed, the other one might do the job. If you receive a drop site message, leave one yourself.

Note that there is no immediate way to ensure that the trusted messenger actually manages to pass on the message, or that the note at the note drop is received.

Message format: Keep messages very simple: For example, they can include person or persons in party, day and approximate time, wellness status, where your next destination is, and any other critical data or big news updates on the general situation. You can have a code system.

Assume that communication will go from bad to worse, at least in the short term, after any major emergency that affects a wide area. Take advantage of any chance to communicate. If you use multiple modes and back-up systems, make sure your messages are consistent. It will be hard to correct differing messages after the fact.

Conclusion: Different people have different needs, goals, resources, and levels of technical proficiency. Some people might be riding around in jeeps talking to each other on their hand-held ham radios. Others might just want to have some walk-talkies to aid with general security at their bug-out location. Some simple takeaways: Satellite phones are great for communication with the wider world, as are regular and SW radios for receiving news.

d) Integrating Locations and Communications into your GEP

Here are three integrated planning scenarios for your reference. You can figure out your own tailor-made plan that makes sense to you, with a bit of brain work and discussion.

1) You are at work, your wife is at home, and your two kids are at school. There is a big earthquake. When the shaking stops, your wife grabs her go-bag, and also yours and the kids'. It is a lot to carry but she can manage. She goes to Location 1A, a rally point, which is a park near your home. Cell service is down, but she sends a text message. "I'm OK and at Location 1A." As per your GEP, you go to the kids' school. They are waiting at the gate. You start walking home, and you get her SMS, 2 hours after she sent it. You send a reply: "I'm with the kids, all is well. We will be at Location 1A around 2pm." You get there and she is waiting for you. You can't go back into the building until it is assessed for safety, but you go to the nearby campsite to spend the night, having all you need in your go-bags.

2) There is an unexpected military crisis while both you and your wife are at work, and the kids are at school. Suddenly you get a message through the STEP program: the Travel Advisory for Taiwan has been updated to Level 4. People are watching the news with great anxiety: there is a tense stand-off between the US and PLA navies in the East China Sea. Cell networks are jammed, and the Internet is not working reliably. You call your travel agent on a landline and tell him to go ahead with booking flights as prearranged. He says OK, and in an hour, he sends you an SMS with the confirmed flight to

Bangkok for tomorrow—at 3 times the regular price! In the meantime, you have contacted your wife and kids by SMS and told them to go home ASAP. They all responded “OK.” You meet at home in the evening, grab your stuff, and drive straight to the airport. The roads and departure hall are a bit chaotic, and getting worse all the time. There are police and soldiers everywhere. You wait anxiously at the airport, and your flight is delayed by 5 hours, but it finally takes off and you are all OK.

3) There is an unexpected military crisis while both you and your wife are at work in downtown Taipei, and your teenage son is at school. The STEP program informs you that all US citizens are advised to leave Taiwan. Normal communications are down, so you go home as per your GEP. Your wife is there too. You get out your satellite text phone, and there is a message from your international contact person that your son has sent him an email saying he will go to the bug-out location in the hills just south of Bitan. This was pre-agreed, as your home is next to a military command center in Dazhi, and his school is in Xindian, much closer to the bug-out spot. Your son is resourceful and has done the journey on bicycle before. You satellite text back the reply: “OK, on the way to Location 3B.” You grab the 3 go-bags. Traffic is a mess so you get on motorcycles and drive to your safe location, where you meet your son.

e) Evacuation: Getting to Your Bug-out Location

You need to plan carefully how you are going to bug-out when you decide that it is time, during a military contingency. Here are some factors to consider.

▪ MODE OF TRANSPORTATION

Automobile: Driving there in your car would seem like the best way, but its reliability is based on timing. The longer you waited after a “Last Warning” scenario, the higher the chance that there would be mad traffic, or road closures due to military activity or civilian movement restrictions—not to mention actual missile attacks.

Try to get your crew together and get mobile within 2-3 hours of Last Warning (or another agreed-upon “Go signal.”) Hopefully you have planned your bug-out location very carefully so that there are multiple routes in, and make sure you memorize them. Arrange things so that you can walk in if absolutely necessary.

Motorcycles: These have a much better chance of making it around obstacles, and of going on rougher trails. They can of course be blocked from paths by fences or large obstacles and are too

heavy to hoist over them using body-power alone. They leave the passengers more exposed to the environment, and can only carry two people with limited backage. You need to make sure you have a full tank of gas before bugging out and also some extra gas in a proper container, because if Last Warning happens, there would probably also be panic at the gas stations.

Bike or walk If you are fit enough, and don't have young kids, elderly relatives, or people with physical limitations, you can have a bug-out solution based on bicycles and walking, as you can drag a bike through the woods or across a stream in a tough situation.

- **DEALING WITH CHAOTIC CONDITIONS**

Things might be really crazy on the roads. Traffic signals could be dysfunctional, main routes jammed with people evacuating, and some roads and bridges might be closed due to implementation of security zones and military movements. Make sure you plan well for this by being ahead of the curve and choosing a bug-out location with multiple routes in and out.

f) Supplying Your Safe Locations

Preparing Your Bug-Out Location in Advance: You may think: Why do I need to prepare the same supplies at both my home and my main bug-out spot? This is because you may not be able to transport supplies if your car breaks down or roads cannot be used by automobile traffic.

So, you will want to pre-stock your bug-out spot (Location 3B) with supplies and equipment such as:

- Food and water, including pet and baby food / formula.
- Cooking and eating utensils
- Insect repellent
- Comprehensive first aid kit and manual; medical supplies and extra daily-use medication
- Water purification systems
- Toothpaste, toothbrushes, hand soap, shampoo, deodorant, toilet tissue, wet wipes, hand sanitizing liquid (> 60% alcohol), skin moisturizer, sun block, feminine hygiene products, condoms, etc.
- Brooms, mops, buckets, dish soap, air freshener, etc.
- Garbage bags (lots of these), tarpaulins, duct tape, nylon rope, twist ties,
- Tools such as shears, machetes, Leatherman tools, Swiss army knives, hammers (and nails), hatchets, screwdrivers (and screws), pliers, wrenches (and nuts and bolts), clamps, car / motorcycle / bicycle repair tools, crowbars, bolt-cutters for chained-off access roads, etc. *Aim for maximized functionality with minimum equipment, but double up on essential items.*
- Clothes, rain gear, and bedding for all seasons.

Bug-out supplies list (cont'd)

- Camping equipment: tent, stove, fuel, backpacks, boots, etc.
- PPE such as work gloves, disposable gloves, face mask, safety helmets, etc.
- Flashlights and lanterns, with many batteries.
- Fire-starting equipment: lighters or matches. A ferro rod will produce hot sparks and last years.
- You can also have an extra transport option stored there, like bicycles or motorcycles.
- Extra gasoline.
- Games, books, small musical instruments etc. to help people—especially children—stay positive.

ELECTRICAL DEVICES: Flashlights, lanterns, cameras, tablets, and radios run on regular batteries. You can also buy power banks, to recharge laptops, tablets, and smartphones, but you will run out of power eventually. Generators are an option, but are noisy, create fumes, and require some technical knowledge to use. Hand-cranked, and solar-powered recharge devices for phones and laptops are another option.

Note: Make sure this is all stored securely away from pets, pests, wild animals, children, thieves or busybodies, fire, and wetness.

g) Health and Hygiene After a Disaster

The following applies whether you are sheltering in place at home, or your primary bug-out place.

A: FOOD AND WATER

It is up to you how long you want to prepare for, but you can think in terms of “3s”.

- Three days for a serious typhoon
- Three weeks for a major earthquake
- Three months+ for a military attack (Obviously this case requires far more preparation.)

Food: This should be canned, dried, preserved, etc. For longer periods, nutrition becomes increasingly important, so don't forget veggies, fruit, and fiber content. You can keep a log of best-before dates in a small notebook left in the food storage area. During normal times, you can eat the food in your emergency cache that is approaching its best-before date and replace it on a rotating basis.

Cooking: This is good for both morale and hygiene. Having a good-sized camp stove and plentiful fuel supply is recommended for both home and your main bug-out place, as well as portable camping stoves for travel. Make sure they are in good working order and everyone knows how to use them safely, to avoid carbon monoxide poisoning, fire, or burns. Have a range of fire starters like a ferro rod, refillable lighters, etc.

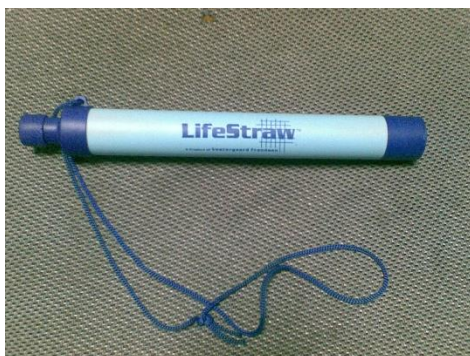
Water: Bottled water is good for emergencies. Before it is opened, it has no expiration date. Store three liters per person per day just for drinking alone. An additional one liter of water per person per day for washing, etc. is good, but this may be unnecessary if you have a fairly clean alternative water supply nearby, like a mountain river.

Methods for purifying water:

Reverse-osmosis (RO) water filtration systems remove harmful substances—salt, toxic chemicals, and pathogens (bacteria and parasites)—and produce potable water. Home-sized units are about the size of a coffee machine, and the smaller, tankless units are quite light. But most standard units require an electrical connection to power the pump, so they are not as useful for severe emergencies. Military-style units with power-source options (battery, solar, vehicle etc.) are not easy to come by.

Activated-carbon filter systems are generally lighter and don't need a power source, unless they have a UV sterilization component. Different systems boast different levels of effectiveness, so shop around. In general, they remove color- and odor-causing substances, some toxic chemicals, and many parasites. But they cannot be relied upon to filter out harmful bacteria.

Hollow fiber membrane filter systems like the highly-portable LifeStraw are used by outdoor enthusiasts and in crisis relief situations. These filter out pathogens but not salt or toxins. They have a limited life-span, but are very useful, especially if the water is uncontaminated by chemical waste.



(Photo by Badri Seshadri. From Wikipedia.)

Boiling / chemical agents: Heat water to a full rolling boil for 2 minutes (longer at higher elevations) to kill most pathogens. You can also use iodine (5 drops per liter, shake and wait 30 minutes) or other methods such as chlorine bleach or special tablets.

- *Stream or lake water: Get a clean and uncontaminated source. Filter, then treat or boil.*
- *Rain water: If clear and odorless, treat or boil. If colored or with a scent, filter first.*

In general, with water, don't take too many chances. Even clear, fresh-looking, water can harbor dangerous organisms from something like an animal carcass upstream. Try to source your water from above human communities. Rain water is good, but must be stored carefully.

B: ROUTINE HYGIENE

Group and personal hygiene become much more important in a post-disaster scenario than in normal life. Professional medical supplies and services may be very hard to access.

Toilet waste: If you have a supply of water, and your drains are working, you can function more or less normally. But prepare for a situation where your toilet can't be used. Then, you can have a twin-bucket emergency toilet system for indoor use. (Open-air toilets attract insects and vermin.)

Detailed information is easy to find online, but basic points:

- One for solid and one for liquid waste: don't mix them or the smell will be much worse.
- Use sand or a neutral mulch like sawdust or shredded paper to cover solid waste.
- Line the buckets with heavy-duty, leak-proof plastic bags. Replace when disposing of waste.
- Have a community-friendly waste disposal plan.



Twin-bucket emergency toilet system

g) Health and Hygiene After a Disaster: (cont'd)

Garbage: Try to avoid any food wastage. Most preserved food is low waste. If you have enough water to wash used food containers, that will make garbage storage easier. (You can use clean seawater for this.) Bag and isolate any food-related garbage to keep away odor, pets, and pests. Make sure you have a lot of garbage bags in different sizes.

Hand-washing: It is important to wash your hands thoroughly with soap and water after going to the toilet, changing a diaper, dealing with garbage and animal litter; before preparing food; and before and after treating a sick person, especially one with diarrhea and vomiting.

All that is needed for a hand-washing station is a jug of clean water with an on/off spigot, soap, towels and a catch bucket or basin for the used water. If possible, set up two hand-washing stations—one near the area where food is prepared and the other next to your improvised toilet.

Water collected in the bucket or basin can be used to dilute urine before dumping outside or cleaning drains used as provisional toilets. Do not attempt to treat the water from the catch basin to reuse for other purposes. Regularly sanitize the spigot handle to avoid cross-contamination. If possible, use disposable paper towels to turn the spigot off when you're done rinsing hands. Also sanitize the toilet lids and air freshener can.

Bathing: Washing your entire body twice a week is probably good enough for standard hygiene. But at a minimum, one or two wet-wipes can be used for a basic daily cleaning of face, hands, (not a substitute for handwashing) armpits, crotch, and butt, in that order. Have plenty of wet wipes on hand, as well as toilet tissues. You can brush your teeth with a bit of drinking water.

Feet: Regularly dry out shoes and socks; keep your feet as clean and dry as possible to avoid skin infections.

Doing laundry Don't wash clothes in a river: get a bucket of water and clean the clothes well away from what may be the water supply for someone else downstream.

Disposal of garbage and toilet waste would become increasingly problematic over a longer time frame. You would need to coordinate with neighbors and the local community to hopefully find a suitable place to dump toilet waste and burn garbage. Don't put waste of any sort into a water source.

Everybody should keep themselves and their environment as clean and tidy as possible.

g) Health and Hygiene After a Disaster: (cont'd)

C: MEDICAL CARE

First-aid and medication: Have a well-stocked first-aid kit and how-to manual. Take some classes to learn or refresh your skills. You will not regret it. Leverage skills of people in your group. Have a good supply of all medications, and keep them secure, well-labeled, and away from kids. You should also stocks slings, crutches, and a stretcher.

Special first aid area: Not the bathroom or kitchen. It should have an easily cleanable surface, such as a coffee table. Clean and disinfect the area and your hands before and after administering first aid.

Infectious diseases such as a cold, the flu, or Covid-19, are a risk to group effectiveness. Try to keep sick people isolated. Keep their area clean and disinfected, and use PPE as appropriate.

Keep track of medical services still functioning around you. Be ready to go for medical help or evacuate a sick / injured person to a nearby medical aid center if necessary. Also, share your medical resources with neighbors to the extent feasible. What goes around, comes around.

❖ RELATED ADVICE FOR SHELTERING IN PLACE

Be careful: Be more cautious than normal about getting injured: you can't just go to the hospital to get some stitches. Use tools such as knives methodically; avoid slippery trails and risky activities as much as possible. Wear long pants and sturdy footwear when you go out, and use protective equipment like gloves, aprons, hats, and helmets, when advisable. Keep kids under control and make sure they are well-supervised. Get enough rest and protect yourself from heat, cold, wetness, and bites from bugs, dogs, and snakes. If you need help, you will not be free to help others.

Don't forget mental health. Keep an eye on your group and watch for signs of PTSD, anxiety, or depression. Don't call people out, but have a friendly private chat with them if necessary.

Be cool: Stress and worry may erode calm and tempers in your group might erupt as nerves fray. Keep calm and positive, and facilitate resolution of conflicts. Now is not the time to take sides, settle scores, or say "I told you so." As they saying goes, there is no "I" in "Team." Go for the win-win.

SECTION 4: LISTS, RESOURCES, AND CONTACTS

Note: This list is still being compiled. Information will be updated in the next edition.

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1. Emergency Response Hotlines (page 58)
2. Taiwan Government Fact-checking / Accurate Information Sites (page 59)
3. Taiwan Government Evacuation Information and Emergency Broadcast Sites (page 60)
4. Public Broadcast TV Stations (page 60)
5. Other Useful Websites (page 60)
6. Suggestions for research and shopping. (page 61)

1. Emergency Response Hotlines

In case of various emergency situations, you can dial the dedicated emergency response hotline based on the circumstances.

- **110** - Emergency Police Hotline
- **112** - Emergency Rescue Hotline
- **119** – Ambulance and fire reporting
- **1990** International Community Service Hotline with 24-7 service in Chinese, English, Japanese; as well as Monday – Friday, 9am-5pm service in Vietnamese, Indonesian, Thai and Khmer. The original number (0800 024 111) is still active.
- **1910** - Water Supply Company Hotline
- **1911** - Taiwan Power Company Hotline
- **1912** - CPC Corporation, Taiwan Hotline
- **1998** - Financial Services Hotline
- **1999** - County and City Convenience Hotline
- **1985** - Ministry of National Defense Service Hotline
- **(02) 2871-7121** - Poison and Drug Consultation Hotline
- **(02) 2394-5900** Foreign Affairs Department of the National Police Administration
- **(02) 2831-7475** Foreign Affairs Division, Taipei Police Headquarters

2. Taiwan Government Fact-checking / Accurate Information Sites

Note: Fake news and disinformation will certainly be a feature of any military contingency, so check multiple websites below in case one of them is hacked.

- Taiwan Fact Check Center (for fake news and misinformation) In Mandarin only. Refresh and select English translation by browser. <https://tfc-taiwan.org.tw/>
- **Note from Taiwan government: Provision of Real-Time Accurate Information:** To ensure the public has immediate access to accurate information regarding national defense affairs during wartime, the Ministry of National Defense will consolidate military media resources. Information will be disseminated through press conferences, press releases, spokesperson clarifications, or truth versus rumor comparisons, broadcast through mass media channels, providing the public with correct national defense information. Additionally, the public can access official accurate information related to wartime and national defense affairs through the following websites:
 - The "Real-time News Clarification" section of the Executive Yuan website <https://www.ey.gov.tw/Page/5519E969E8931E4E>
 - Ministry of National Defense Official Website: <https://www.mnd.gov.tw/>
 - Ministry of National Defense Spokesperson's Facebook Page: <https://www.facebook.com/MilitarySpokesman>
 - Ministry of National Defense on X: <https://x.com/MoNDefense>
 - Military News Agency Website under the Ministry of National Defense <https://mna.mnd.gov.tw/>
 - Youth Daily News Official Website: <https://www.ydn.com.tw/>
 - Voice of Han Official Website: <https://www.voh.com.tw/>
 - Radio Taiwan International Official Website: <https://www.rti.org.tw/>
 - National Police Agency Police Broadcasting Service under the Ministry of the Interior: <https://www.pbs.npa.gov.tw/ch/index>

3. Government Evacuation Information and Emergency Broadcast Sites

- Public Warning Broadcast System. This is where all messages sent to your phone by the government are indexed and can be searched. <https://cbs.tw/>
- Taipei City Evacuations Centers
<https://eocen.gov.taipei/News.aspx?n=A03FBFFABBD84AFA&sms=A50D077F4C2AA039>
- Disaster response centers contact information for Taipei City, as well as for New Taipei City, Keelung City, Taoyuan City, Hsinchu City, Hsinchu County, and Yilan County.
<https://www.nfa.gov.tw/cht/index.php?code=list&ids=83>
The above site also has interesting links to maps of disaster-vulnerable areas and other useful background information.

These 5 Public TV station broadcast using radio/microwave and not Internet. They are required to relay text messages from the government in an emergency.

- TTV (Taiwan Television)
- CTV (China Television)
- CTS (Chinese Television Service)
- FTV (Formosa TV)
- PTS (Public Television Service)

5. Other useful sites

- Taiwan Disaster Preparedness/Civil Resilience - 台灣防災準備/公民韌性
<https://www.facebook.com/groups/866654223544958>
- Taipei City Construction Management Office: Lots of information related to building safety, including a database of structures deemed unsafe due to past earthquakes. Best to go to the Mandarin part of the site and auto-translate to get more information.
<https://cmo.gov.taipei/cp.aspx?n=4B7B63655A6565E9>
- National Center for Research on Earthquake Engineering
<https://www.ncree.narl.org.tw/home>
- US State Department Travel Advisory Taiwan
<https://travel.state.gov/content/travel/en/traveladvisories/traveladvisories/taiwan-travel-advisory.html>
- AIT Alerts <https://www.ait.org.tw/category/alert/>
- Smart Traveler Enrollment Program <https://step.state.gov/> (Note that the program was updated as of Sep. 16, 2024. If you were enrolled before that, and haven't re-enrolled, you need to do so to continue receiving alerts.)
- Taiwan Central Weather Bureau <https://www.cwa.gov.tw/V8/E/>

6. Suggestions for Research and Shopping

Research

You can find huge amounts of disaster-preparedness and response information online; much of it may well have been source materials for this guide. Some key search terms you might use are: US Federal Emergency Agency, and the Red Cross. Of course, you can do the same with any of the terms mentioned in this guide. Ask around on Facebook groups about local training in English for first aid and other forms of emergency preparedness; there is more of it happening all the time.

Shopping

Much of the equipment you might want to buy is commonly available from hardware/DIY, camping equipment, and outdoor life stores in major cities in Taiwan. More advanced equipment can be purchased online. Check for any import restrictions.

SECTION 5: APPENDICES OF ADDITIONAL CONTENT

CONTENTS

- 1: Less Likely Threats: Tsunamis and Volcanic Eruptions (page 63)
2. Analysis of Factors Related to War (page 65)

APPENDIX 1: LESS LIKELY THREATS: TSUNAMIS AND VOLCANIC ERUPTIONS

TSUNAMIS

- **Background**

Tsunamis are usually caused by earthquakes. Although the 21st century has seen some devastating tsunamis, Taiwan was not affected. Japan is far more prone to tsunamis than Taiwan. Using the year 1600 as a starting point, Japan has experienced 28 major tsunamis, resulting in approximately 80,000 deaths. In the same period, Taiwan has records of only 2 major tsunamis, with fewer than 300 known deaths. The most recent—and most dangerous—of these occurred on the north coast of Taiwan as a result of the magnitude 7.0 Keelung Earthquake of December 18, 1867 and killed some 281 people. There were of course no advance warnings, unlike what would be the case nowadays.

However, the Taiwan government does actively monitor for tsunamis and has a warning system, just in case. Some basic preparation may be in order.

- **PREPARE BEFORE A *Tsunami***

Identify a place near your home that you can get you and your family to within five minutes. The general advice is to find high ground, or a stout and tall building, away from the coast.

- **RESPOND IN THE EVENT OF A *Tsunami***

If there is a big earthquake nearby, monitor media for a government tsunami warning. If there is one, go to your safe area until the warning is called off. If there is a big earthquake, but for other reasons government civil defense systems are not functioning (e.g., soon after a prior earthquake, or huge typhoon) do the same until the danger has passed. If you live right next to the coast, be prepared for this contingency and make it part of your household emergency plan. But know that it is very unlikely.

- **COPE AFTER A *Tsunami***

If there really is a tsunami near where you live, you could face destruction of your property. If it is somewhere you are visiting, you might have trouble getting home.

VOLCANIC ERUPTIONS

- **Background**

Taiwan is situated on the Pacific Ring of Fire, but in contrast to nearby countries such as Japan, the Philippines and Indonesia, where volcanic eruptions occur frequently, there are no records of any volcanic eruptions in Taiwan in historical times.

Located next to the populous greater Taipei metropolitan area, the Datun (Tatun) Volcano Group of Yangmingshan National Park is of particular interest. Dating of volcanic ash suggests that its last eruption was approximately 6,000 years ago. This would normally classify them as dormant volcanoes. However, as there is still magma activity within the crust below the Datun Group, they have been reclassified as active, and the possibility of future eruptions has not been completely dismissed. This unlikely threat would almost certainly be presaged by warnings in advance.

- **PREPARE BEFORE *An Eruption***

Being ready to bug out and escape from a fire or earthquake will automatically make it possible to do so for this very unlikely scenario. Monitor the media and be generally aware of local information.

- **RESPOND TO *An Eruption***

Follow government instructions for evacuation and returning home.

(From Section 2, Page 29)

Appendix 2: Special Section

ANALYSIS OF FACTORS RELATED TO WAR

- **BACKGROUND**

Geo-political Context

As is much discussed, the People’s Republic of China (PRC) has become a global superpower, and the Chinese Communist Party (CCP) has vowed to annex (“re”-unify) Taiwan—which it sees as a rogue province—to the PRC. In their view, the absorption of Taiwan is an inevitable milestone in the “rejuvenation of the Chinese nation.”

CCP leader Xi Jinping appears to be intent on accomplishing this annexation within his lifetime, and has been making preparations to that end. Under Xi, the People’s Liberation Army (PLA) is undergoing the most rapid peacetime expansion of any military in history, intended to develop the capacity to overwhelm Taiwan’s defenses, and deny foreign militaries—specifically US forces—the ability to intervene. Its aggressive intent has been demonstrated in recent years by an increasing number of incursions by PLA air force aircraft into Taiwan’s Air Defense Identification Zone (ADIZ), massive military exercises around the island in August 2022, May 2023, and similar ones in May, October, and December of 2024, as well as other provocations. This is only part of the CCP’s “unrestricted,” “hybrid” or “gray zone” warfare concept for attempting to annex Taiwan one day. It also includes economic and diplomatic pressures, fake news and narrative warfare (cognitive warfare,) lawfare, cyber-attacks, subversion by the United Front Work Department (UFWD), and espionage conducted by the Ministry of State Security (MSS).

Factors related to war (cont'd)

In terms of military power alone, China already has the capacity to destroy Taiwan. However, its ability to occupy the island efficiently, without paying an unacceptable cost, is doubtful, especially given US commitments to Taiwan's defense.

There are many variables affecting if, when, and how China would undertake actual military operations against the Republic of China (ROC) on Taiwan, and how effective the response would be from Taiwan's military, as well as from allies such as the United States and Japan. There are dozens of scenarios, and no one can confidently predict what will happen. However, everything from a limited military engagement up to a full kinetic war is possible and must be considered.

Nature of the Threat

Let us look at three potential military scenarios and their implications.

1. BLOCKADE / QUARANTINE

- If the PLA and the China Coast Guard (CCG) place Taiwan under a naval and aerial blockade, all ships or aircraft would be prevented from entering or leaving the island, or transiting nearby, without permission from the PLA or CCG. From the point of view of those in Taiwan, an orderly evacuation once a blockade began would be very difficult—at least without the permission of the CCP. There could be shortages of food, medications, fuel, and many other items, affecting both families and institutions. Property prices, shares in publicly traded companies, and the value of the New Taiwan Dollar would all fall. Taiwan's government might impose restrictions on wealth transfers overseas to avoid capital flight.

- A protracted blockade would be intended to coerce Taiwan into making a deal to China's advantage. Another goal might be to force foreign shipping to register with the China Coast Guard for permission to transit the Taiwan Strait or to enter or leave Taiwanese ports, thus asserting sovereignty over Taiwan. Many experts consider some form of blockade to be the most likely scenario because the risk to China of a war involving the US and Japan would be lower than other options. However, resistance to the blockade could trigger escalation into a more widespread war.

- A blockade might be accompanied by the PLA taking over some smaller islands in the Taiwan Strait, such as the Kinmen, Matsu, or Penghu islands, or in the South China Sea, such as Pratas (Dongsha) Island, or Taiping (Itu Aba) Island in the Spratly chain..

- It might also be accompanied by actions by “fifth column” groups or Chinese special forces to create confusion and chaos, like sabotage of infrastructure such as internet cables, terrorism, disinformation, or similar acts of disruption.

- A “quarantine blockade” (often referred to just as a “quarantine”) is a limited form of blockade that is less overtly military in nature. In the case of Taiwan, the China Coast Guard (CCG) and the Maritime Safety Administration (MSA) might quarantine a major port such as Kaohsiung, blocking all incoming and outgoing shipping, perhaps under the pretense that it is a law enforcement operation. Or they could require all shipping to Taiwan to register online with the CCG. This would be hard to respond to as Taiwan would not want to fire the first shot in an uneven conflict. Also, the international community might see this as less problematic than a full blockade as it would not cut-off commercial traffic through the Taiwan Strait.

2. STRATEGIC STRIKES

- Ballistic and cruise missile strikes, aerial bombings, attack drones, cyber-attacks, as well as electromagnetic pulse (EMP) weapon attacks on military, government, communications, utilities, and transportation infrastructure would have a variety of impacts. If you were near a military target, you could be in harm’s way from the actual strikes. What’s more, as seen in Ukraine, debris from cruise missiles and drones intercepted by aerial defenses can damage civilian buildings. Basic services such as the internet, water, electricity, gas, radio, and cell phone service might be cut off for indeterminate periods of time. Roads could be inaccessible due to damage, defensive military activity, and air raid warnings. Strategic strike attacks would be intended to degrade Taiwan’s ability to fight back and also scare the population into submission.

- Special PLA units infiltrated into Taiwan, working with Taiwanese insiders or “fifth columnists”, could attempt decapitation strikes (assassinations) against the political leadership. This sort of action would see concentrated violent conflict in specific areas, such as the Presidential Building, the surrounding Bo-ai Special Zone, official residences and security bunkers, and Taiwan military command centers.

- Cognitive warfare: During a military attack, the enemy would use disinformation attacks, “weaponized fake news,” to sow confusion and panic. Imagine the possible effect of the widespread online circulation of a deepfake video of the president or the chief of the armed forces announcing that Taiwan had surrendered, and ordering all soldiers to put down their weapons and return home. This is just one example. Fake news might also be used to dissuade foreign intervention in the

conflict. There would also be intense cyberwarfare (hacking) to disable or take over military and civilian (hospital, utilities, transportation, etc.) computer and communication systems.

- Political manipulation: The CCP might sponsor the sudden emergence of a “pro-peace” movement that wanted the current government to start immediate negotiations with the PRC for a settlement in their favor. This could be accompanied by an international campaign to weaken support for Taiwan.

- (**Least likely**) Nuclear strikes: Although Taiwan is not under the US nuclear umbrella, the use of nuclear weapons by China against Taiwan is seen by many analysts as risking escalation toward a nuclear exchange between the two superpowers. Hence, most experts feel this is unlikely. However, the use of high-altitude nuclear detonations (approximately 40km above Taiwan, with little radiation produced at ground level) to create an electromagnetic pulse (EMP) to disable electronic circuitry controlling Taiwan’s defense and civilian infrastructure, has been war-gamed. So too has the use of smaller, tactical nuclear weapons—so-called “battlefield nukes”—as weapons of last-resort if the PLA is losing on the battlefield. These smaller nuclear weapons could be used against allied forces and result in radiation fallout in and around Taiwan. Another possibility is a conventional attack on a former nuclear power station, which might cause limited spread of radiation, causing evacuation. However, this possibility is less likely as Taiwan is decommissioning its nuclear power program.

3. FULL INVASION

- A full invasion would see conventional battles being fought around, above, and on the island of Taiwan. The attack could come in a series of waves: a blockade, strategic strikes, a campaign to achieve air and naval superiority, followed by an actual invasion involving amphibious and airborne PLA troops fighting to secure beachheads to begin transferring the hundreds of thousands of soldiers and support personnel required to occupy the island. This scenario would see fierce battles with high rates of damage to people and property. Many places on the island would be intensely unsafe. Basic services could be reduced to zero for weeks or even months.

NOTE: Of course, any actual military campaign waged by China against Taiwan could be a combination of any of the above components, such as, for example, a blockade plus some missile strikes, combined with the threat of invasion if Taiwan doesn’t surrender. It could also be something more complex, part of a larger conflict involving other parties such as Russia, or involve surprise, destabilizing political moves by pro-PRC, “Fifth Column” elements within Taiwan.

POSSIBLE OUTCOMES

How could military action end? Here are some options to consider.

1. Taiwan and the US-led allies successfully deter an attack, so it never happens.
2. Taiwan and the US-led allies fend off an attack. This scenario might involve serious damage and loss of life within Taiwan, and continued threats from China. But for the time being at least, Taiwan stays free and democratic.
3. A stalemate: a prolonged military conflict with no clear winner. Taiwan's military is degraded, but so is China's attack potential. All main parties—Taiwan, the US and the PLA—suffer serious losses, but none have been defeated. The PLA might have acquired some of Taiwan's islands, but not the main island. It might involve a long blockade combined with political campaigns both within Taiwan and globally. This stalemate could last for years, similar to what has been happening in Ukraine as of time of writing. Creating a sustainable stalemate might even be a strategic objective as a form of “hybrid warfare” designed to wear down Taiwan and its allies' will and capacity to resist.
4. CCP / PLA strategic victory: The PLA gains the upper hand over the military coalition of Taiwan, the US, and Japan. The island is under blockade, and the threat of invasion looms. Rather than have a slaughter of the population, the Taiwanese leadership resigns, and new leaders friendly to China agree to “peace talks,” i.e., surrender.
A similar scenario would be a pro-China coup within Taiwan, conducted by “pragmatist” military leaders, pro-unification elements such as the Bamboo Union Gang and other deep-blue organizations, assisted by special PLA, MSS, and United Front units. This group could have the backing of elite Taiwanese financiers and industrialists wishing to protect their wealth and status.
5. CCP / PLA military occupation: The Taiwan-US-Japan military coalition is defeated, but there is no coup or peace talks. US forces are forced to leave the area, and Taiwan fights to the end, which eventually comes as China pours more and more troops onto the island. The conflict ends in China's favor. It is a brutal defeat for Taiwan.
6. Other: The outcome may be a combined version of some of the options above.

Of course, the consequences of any military action would be negative for Taiwan, China and the world, and a full war would be horrific, in purely economic terms alone. So, we deeply hope that possible outcome 1. above—successful deterrence—is what actually happens. But wars do happen. Ask any Ukrainian. Hope for the best, but plan for the worst.

PREDICTING WHEN WAR WILL HAPPEN

The best way to avoid being negatively impacted by a hot war is to be far away when it happens. Second best is to have at least made advance preparations. Predicting when war is imminent is the key to both of these.

With regard to the above “three possible forms of attack” scenarios, the ability to institute a blockade or quarantine of Taiwan could be done with very little advance warning, especially as large-scale military exercises have become the “new normal” and the PLA could pivot from exercises to real action in as little as 24 hours. Strategic strikes could be launched with no warning. However, if the PLA were to prepare for an actual amphibious attack on Taiwan, it would likely be obvious to US and Taiwan intelligence agencies several months in advance, due to the immense logistical requirements of such an operation. Troops and supplies would need to be moved to staging areas, for example.

Precursors to an actual attack. Military action would likely be temporally related to:

- 1.** An action by Taiwan that is seen as “crossing a red line,” such as declaring formal independence, allowing US navy ships to make a port of call visit, allowing US troops in significant numbers to be stationed on the island, declaring the intent to acquire nuclear weapons, hosting more visits to the island by prominent US leaders in defiance of ever-sterner Chinese warnings, and so on.
- 2.** An internal collapse within the PRC of CCP legitimacy, most likely triggered by a cascading social or economic crisis. This might lead the CCP to focus on an external “threat,” i.e., Taiwan and the West, as an excuse to crack down on opposition within the country and mobilize CCP cadres and the PLA. Such a move might be signaled by a black-out of information coming from China, expulsion of foreign journalists and diplomats, dire warnings from Western business leaders with operations in China, reports of an exodus from China at borders such as with Vietnam, and reports of mass demonstrations and police crackdowns.
- 3.** A strong belief within the CCP that now is the best time to attack, either because they are confident they can win, or because, if they don’t try it now, they’ll have no chance in the future. Being confident

in a victory might be because the military balance of power has finally shifted decisively in China's favor. Another factor could be perceived weakness in Taiwan's ability to defend itself, or the perception that the US would not come to Taiwan's aid in an attack. Conversely, an alternative trigger would be a perception that it is now or never, that the chance to annex or "re"-unify with Taiwan was slipping away.

Overall, with Taiwan's defender's advantage, US support, and inevitable repercussions against the PRC by the global community, military action against Taiwan would be a massive risk for the CCP. They would not wish to try it unless they felt likely to succeed. However, they might be willing to risk it if the alternative was the end of CCP dominance in China.

END NOTE: Thank you for reading *Resilience Roadmap (V2.0) An Emergency Preparedness Guide for Expats in Taiwan*. I hope you have found this work to be useful and interesting. Doubtless many errors will be discovered—typos, glitches, and errors of inclusion, omission and analysis. I will endeavor to correct them in future editions, as well as improve the style of presentation, and incorporate updated information as it becomes available. Any constructive comments or suggestions are welcome. You can send them to: resilience.roadmap.tw@gmail.com Stay safe! JG
