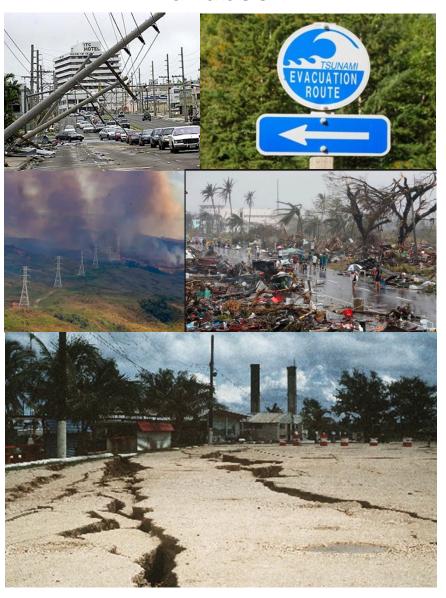
# All-Hazards Preparedness Handbook



**U.S. Naval Base Guam** Emergency Management

Hafa Adai,

Living in Guam is wonderful. We enjoy warm and temperate weather all year long. However, the geographic isolation of our island brings a unique set of challenges to our military and civilian communities alike.



# Why should I prepare?

Disasters disrupt hundreds of thousands of lives every year. Each disaster has lasting effects – people are seriously injured, some are killed. Disasters can also produce billions of dollars in property damage, loss of essential services, significant disruptions of community and business activities, serious environmental damage and mental anguish.

If a disaster occurs in our community, local government and disaster-relief organizations work hard to help you. But you need to be ready as well. Disaster preparation and response is a partnership between you, local governments and disaster-relief organizations. Local responders may not be able to reach you immediately, or they may need to focus their efforts elsewhere.

Being prepared and understanding what to do can reduce fear, anxiety and losses that accompany disasters. In many cases, you can reduce the impact of disasters or possibly avoid the danger altogether.

# Be the help, before help arrives.

Disasters disrupt hundreds of thousands of lives every year — people are seriously injured, some are killed, and property damage runs into the billions of dollars. We can minimize damage and disruption from hazards if we prepare. Being prepared and understanding what to do can reduce fear, anxiety and losses caused by hazards. You should know how to prepare for emergency situations. This guide can help. Remember, your safety depends on the actions you take before a disaster strikes.

We hope this guide proves to be a useful resource for you and your family.

Si Yu'us Må'åse' (Thank you).

Joint Region Marianas (JRM), Naval Base Guam (NBG) Offices of Emergency Management

# This document was developed by the Naval Base Guam Office of Emergency Management.

This guide is based on the most reliable emergency education and awareness information available at the time of publication. It is not intended to replace Navy and local guidance, but to provide a brief overview of emergency preparedness and to help you get started with your emergency plans for protecting yourself and your family before, during, and after a disaster. Contact your unit emergency management representative or NBG Office of Emergency Management for more information. Keep this guide handy for quick consultation.

# **HELPFUL RESOURCES**

Navy BeReady	www.ready.navy.mil
Navy Family Accountability and Assessment System (NFAAS)	https://navyfamily.navy.mil
American Red Cross Guam	https://www.redcross.org/local/ guam.html
ARC—Safe & Well	https:// safeandwell.communityos.org/cms
Military OneSource	www.militaryonesource.com
Guam Department of Health and Human Services	https://dphss.guam.gov
Guam Homeland Security Office of Civil Defense	https://ghs.guam.gov/
National Weather Service Guam Weather Forecast Office	https://www.weather.gov/gum/
Federal Emergency Management Agency	www.fema.gov
Centers for Disease Control and Prevention	www.cdc.gov
Ready Campaign	www.ready.gov
TRICARE	www.tricare.mil
Naval Base Guam Office of Emergency Management	671-339-5432 or m-gu-nbg-eoc- ops@fe.navy.mil
Poison control	800.222.1222 poisoncontrol.org

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# CHAPTER 1



# **MAKE A PLAN**

Every household needs an emergency plan. It will help you and your family know what to do in case of an emergency.

Your family may not be together when an emergency occurs. Plan how to meet or how to contact one another, and discuss what you would do in different situations.

Keep this document in an easy-to-find, easy-to-remember place (for example, with your emergency kit). Photocopy this plan and keep it in your car and/or at work, and a copy close to your phone.

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Appliances and White Goods Air Conditioners Dishwashers Freezers Refrigerators

Radios Stereos

clables

Glass

Steel

**Newspapers** 

Plastic containers

Cardboard

Aluminum

Shrubs

Bushes

Leaves

**Yard Debris** 

Palm fronds

**Dryers Water Heaters** 

**Priority 1** 

Normal Household Gar-

Bagged garbage

Discarded food

Packaging materials

Stoves

bage

Washers



# **Electronics**

Priority 2

Computers Televisions **Corded Devices** 



**Household Hazardous Waste** 

Do not leave chemicals at the curb. They can create a fire hazard

**Priority 3** Normal Household Recy-White Goods/Appliances Refrigerators Ranges Washing machines **Dryers** Water heaters Freezers Microwaves Air conditioners Construction/Demolition **Debris** Tree / grass trimmings Lumber Glass Drywall Twigs/cut tree branches Insulation Concrete block Plumbing

**Recyclable Bulk Items** 

**Electronic Equipment** 

Tires

NO PICKUP ZONE—Any debris placed from the sidewalk toward your property will not be picked up.

DEBRIS SEPARATION—Separate debris into six categories shown.

DO NOT STACK OR LEAN—Placing debris near or on trees, poles, or other structures makes removal difficult. This includes mail boxes, fire hydrants and meters.

# UNSURE WHERE TO PLACE DEBRIS?

If you don't have a sidewalk, ditch, or utility line in front of your house, place debris at the edge of your property before the curb.

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#### WATER

- Always Wash Your Hands: Use soap and water that has been boiled or disinfected.
- Boil Water Notice: If a boil water notice is in effect for your area, take
  precautions, even if you have a private well. If you are unsure if your water is safe, drink commercially bottled water.
- Boiling Water: Maintain a rolling boil for one minute to remove bacteria.
- Disinfecting Water: Mix eight drops of plain, unscented bleach per gallon of water and let stand for 30 minutes. If water is still cloudy, repeat process.
- Infection and Floodwater: Raw sewage may be present in floodwater. Keep open cuts and sores clean and apply antibiotic ointment after cleaning. See a doctor if the wound develops redness, swelling, or drainage.
- Children and Floodwater: Children should not play in floodwater. If toys have been touched by floodwater, disinfect them by using 1/4 cup bleach in one gallon of clean water. Let stand for at least 30 minutes and air dry.

# **MOSQUITOES**

Heavy rains and flooding events can lead to an increase in mosquitoes.

- Dusk and Dawn: Mosquitoes are most active during these times. Avoid being outdoors.
- Clothing: Wear long-sleeved shirts, long pants, and socks.
- DEET: Use repellants containing 30% DEET. Apply repellant directly on clothing for more protection. Follow manufacturer's directions. Do not use on children less than 2 months old. Use mosquito netting or keep infants indoors.
- Drainage: Mosquitoes lay their eggs in standing water. Clear stagnant water that has collected near your home.

# **Storm Debris Cleanup**



removal schedule



# Vegetative Debris Logs Plants Tree Branches

Leaves (do not bag)

If leaves are bagged, set those bags apart from brush piles.



# Construction and Demolition Debris Building Materials Carpet

Drywall Lumber Plumbing

# **Prepare Your Household For Emergencies**

# Prepare in a Year

It is easy to believe that disasters will never happen where we live, that our families will never be in harm's way. Unfortunately, recent disasters prove that Guam routinely experience major impacts from severe storms, floods, and earthquakes that affect hundreds of people living on our island. Protect yourself and your loved ones by preparing for the impacts of an emergency before one happens.

You and your family can follow the simple monthly steps below to prepare for disasters over the course of a year. Some of the activities in the Prepare in a Year program can be completed in just a few minutes, while others might take some time. Mark one activity on each month of your calendar. Taking these steps can provide comfort and security, and will help everyone in the event of a disaster.

Prepare In a Year - Steps to Disaster Readiness			
Month	Monthly Task	What to do	See Page (s)
January	Develop an Action Plan	Understand the hazards you face and talk to your family about what everyone needs to do.	Chap. 2
February	Create an Out-of- Area Contact Plan	Select someone at least 100 miles away that you can call and talk to if local telephone lines are jammed during an emergency.	7
March	Store Three Days of Emergency Wa- ter	Store at least three gallons per person (one gallon per person per day for three days).	19
April	Prepare an Emer- gency Prepared- ness Kit	Organize a three day supply of non- perishable food, basic tools, and a first aid kit.	19
May	Secure Important Documents	Gather copies of important insur- ance and financial papers and emer- gency contact information and add to your disaster kit.	9

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Prepare In a Year - Steps to Disaster Readiness (continued)			
Month	Monthly Task	What to do	See Page (s)
June	Gather Extended Event Supplies	Prepare for extended emergencies by purchasing things like camping stoves or items that will provide shelter like tents or sleeping bags.	19
July	Assemble Under -Bed Safety Sup- plies	In the event of an emergency you will want to be able to react quickly and reach under your bed for important things, like a pair of shoes and a flashlight.	
August	Practice Utility Safety	Take some time to learn how and when to turn off utilities after a major disaster such as an earthquake.	
September	Practice Fire Safety	Know how to escape in a fire. Also locate and learn how to use a fire extinguisher.	8
October	Practice Drop, Cover, and Hold On	Identify the safest place in a room to drop, cover, and hold on during an earthquake! If you live in a coastal area, practice your tsunami evacuation route.	39-41
November	Prepare Shelter- in-Place	In the case of a chemical airborne agent, you will need to be able to quickly and securely seal doors, windows, vents, and other cracks in your home.	15
December	Practice Response with a Home Hazard Hunt	Spend 30 minutes going through your home and finding things that could fall or break during an earthquake. Secure any items that could fall and hurt someone.	

- Use the phone only to report life-threatening emergencies.
- Stay off the streets. If you must go out, avoid fallen objects and downed electrical wires. Also beware of damaged walls, bridges, roads and sidewalks.
- Before entering your home, walk carefully around the outside and check for loose power lines, gas leaks and structural damage. If you have any doubts about safety, have your residence inspected by a qualified building inspector or structural engineer before entering.
- Do not enter if you smell gas, if floodwaters remain around the home, or if your home was damaged by fire and the authorities have not declared it safe to enter.
- Enter the home carefully and check for damage. Be aware of loose boards and slippery floors.
- Check for sparks; broken or frayed wires; roof damage; foundation cracks; basement flooding; household chemical spills; damage to your appliances, water and sewage system; and spoiled or contaminated food and supplies.
- Always be careful when opening closets and cabinets; objects may fall out of them.
- Leave immediately if it looks like your home may collapse, or if you smell gas or hear a hissing sound.

# **Health Tips AFTER Storms**

Storms can bring heavy rains that could increase the risk of diseases. Following are some tips to help you avoid becoming ill.

# **FOOD**

- Food and Dirty Water: Do not eat food that has come in contact with dirty water from floods or tidal surges.
- Commercial Cans of Food: Do not eat cans of food that are bulging or opened. Remove labels from and disinfect unopened cans. Assume home -canned foods are unsafe.
- Baby Formula: Infants should only be fed ready-to-feed formula. You also can prepare powdered or concentrated liquid formula with sterilized water. Only use sanitized bottles and nipples. Unused formula must be refrigerated. If breastfeeding, continue to do so.
- Frozen or Refrigerated Foods: If refrigerators or freezers have had no power since the storm, clean them out. Perishable foods are unsafe for eating.

# **RECOVERY FROM A DISASTER**

Recovering from a disaster is a gradual process. The first concern after a disaster is the health and safety of the families. Navy personnel should refer to Navy Family Accountability and Assessment System (NFAAS) website at <a href="https://navyfamily.navy.mil">https://navyfamily.navy.mil</a>. The NFAAS site allows Service members to report their status, complete a needs assessment, and get resources to aid in the recovery process.

Recovery can be broken into three phases:

Short-Term: Days

Intermediate: Weeks to Months

Long-Term: Months to Years

# Help the Injured

Check for injuries. If needed, administer first aid and CPR. Do not attempt to move seriously injured people unless they are in immediate danger of death or further injury. If you must move an unconscious person, first stabilize the neck and back, then call for help immediately.

# Health

- Be aware of exhaustion
- Do not do too much at once
- Set priorities and pace yourself
- Rest, drink clean water, and eat well
- Wear sturdy work boots and gloves
- Wash your hands often and thoroughly with soap and clean water when working in debris.

# Safety issues

- Be aware of new safety issues created by the disaster. Watch for washedout roads, structurally unsound buildings, contaminated water, gas leaks, broken glass, damaged electrical wiring, and slippery floors.
- Inform local authorities about health and safety issues, including chemical spills, downed power lines, washed-out roads, smoldering insulation, and dead animals.

# Returning Home – General Tips

- Keep a battery-powered radio with you so you can listen for emergency updates and news reports.
- Use a battery-powered flashlight to inspect a damaged home.

# **Quick Preparedness Checklist**

- ⇒ Know how to contact your children at their school or day care and how to pick them up after a disaster. Let the school know if someone else is authorized to pick them up. Keep your child's emergency release card current.
- ⇒ Learn first aid and CPR. Keep a first aid kit, a first aid manual, copies of medical insurance documents and extra medicine for family members handy.
- ⇒ Keep a small amount of cash available. If the power is out, ATM machines won't work.
- ⇒ During a disaster, use the telephone for emergency calls only.
- ⇒ If you are asked to evacuate, take your emergency kit and follow official directions to a safe place or temporary shelter. Do not try to carry a lot of other possessions.

# **Emergency Planning**

Before an emergency happens, sit down with your family and decide how you will get in contact with each other, where you will go, and what to do in an emergency. Write down where your family spends the most time, such as school, work, and other places you frequent. Schools, daycare providers, workplaces, and apartment buildings should all have site specific emergency plans that you and your family need to know about. Additionally, your plan should address the following:

# **Family Communications**

Complete a Contact Card for each Family Member

Have family members keep contact cards in their wallet, purse, backpack, etc. You may want to keep one on file at school for each child.

Choose an out-of-state friend or relative as your family's check-in contact for everyone to call if you get separated. Your contact card should include the following:

- Contact name and phone number
- Out-of-state contact name and phone number
- Neighborhood meeting places and phone numbers
- Other important phone numbers

# Stay In Touch With Family Members

Many organizations provide a variety of services and tools to communicate with family members during times of emergency. Here are a few:

# ⇒ American Red Cross Safe and Well Website

Register yourself as "safe and well: Let your loved ones know about your well-being. Choose from a list of standard messages that will be displayed when a family member or friend searches your name. <a href="https://safeandwell.communityos.org">https://safeandwell.communityos.org</a>

# ⇒ National Next-of-Kin Registry

Archive emergency point-of-contact information. Emergency agencies access the system when there is a need to locate next-of-kin in urgent situations. <a href="https://www.nokr.org">https://www.nokr.org</a>

# ⇒ Facebook Safety Check

If a lot of people in an area are posting about an incident on Facebook, Safety Check will be activated. Anyone in the affected area may receive a notification from Facebook to mark themselves as safe and to view friends who have marked themselves as safe. You must be a Facebook member to receive notifications. <a href="https://www.facebook.com/about/crisisresponse">https://www.facebook.com/about/crisisresponse</a>

# ⇒ Google Trusted Contacts App

In an emergency situation where you're unable to use your phone, your trusted contacts can find you — even if you're offline or your phones battery is dead. https://contacts.google.com/trusted contacts

Use text messages, email or social media to let family and friends know you're OK. Avoid making phone calls that could tie up voice networks.

# What to tell your Kids

- Tell them that a disaster is something that happens that could hurt people, cause damage or cut off utilities (water, telephones, and electricity). Explain to them that nature sometimes provides "too much of a good thing" (fire, rain, wind, snow).
- Talk about typical effects that they can relate to, such as loss of electricity, water and phone service.
- Help them recognize the warning signs of disasters. Discuss these ahead of time to reduce fear and anxiety, and to let them know how to respond.
- Be prepared to answer questions about scary things that they have heard about or seen on television. Give constructive information about how to be prepared to protect themselves and how to respond.

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# CHAPTER 4

# Recovering from Disasters



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- If warned of an imminent attack, immediately get inside the nearest building and move away from windows. This will help provide protection from the blast, heat, and radiation of the detonation.
- If you are outdoors when a detonation occurs take cover from the blast behind anything that might offer protection. Lie face down to protect exposed skin from the heat and flying debris. If you are in a vehicle, stop safely, and duck down within the vehicle.
- After the shock wave passes, get inside the nearest, best shelter location for protection from potential fallout. You will have 10 minutes or more to find an adequate shelter.
- Be inside before the fallout arrives. The highest outdoor radiation levels from fallout occur immediately after the fallout arrives and then decrease with time.
- Stay tuned for updated instructions from emergency response officials. If advised to evacuate, listen for information about routes, shelters, and procedures.

# Actions to consider After a Ballistic Missile attack

- Immediately after you are inside shelter, if you may have been outside after the fallout arrived:
- Remove your outer layer of contaminated clothing to remove fallout and radiation from your body.
- Take a shower or wash with soap and water to remove fallout from any skin or hair that was not covered. If you cannot wash or shower, use a wipe or clean wet cloth to wipe any skin or hair that was not covered.
- Clean any pets that were outside after the fallout arrived. Gently brush your pet's coat to remove any fallout particles and wash your pet with soap and water, if available.
- It is safe to eat or drink packaged food items or items that were inside a building. Do not consume food or liquids that were outdoors uncovered and may be contaminated by fallout.
- If you are sick or injured, listen for instructions on how and where to get medical attention when authorities tell you it is safe to exit

- Teach them how and when to call for help. Teach them to call 911 or your local emergency telephone number. At home, post emergency numbers by all telephones and explain when to call each number. Make an emergency telephone number chart with pictures or icons for 911, "daddy" and "mommy" that may help them identify the correct number to call.
- Tell them that, in a disaster, there are many people who can help them.
   Talk about ways that an emergency manager, American Red Cross worker, police officer, firefighter, teacher, neighbor, doctor, or utility worker might help after a disaster.
- Teach them to call the family's out-of-town contact in case they are separated from the family and cannot reach family members in an emergency.
   Tell them to leave a message if no one answers. Help them memorize the telephone numbers.
- Quiz them every few months so they will remember where to meet, what telephone numbers to call, and what safety rules to follow.
- Explain that when people know what to do and practice in advance, everyone is able to take care of themselves better in emergencies. Tell them that is why you need to create a family disaster plan.
- Calm their fears by emphasizing that, in an emergency, a parent or caregiver will be there to help.

# **Insurance and Vital Records**

- Annually review existing property, health, and life insurance policies and obtain additional coverage as needed. Remember insurance companies may not issue/change policies during storm season, so make sure you accomplish your review beforehand
- Consider flood insurance to reduce your risk of flood loss. If you live in a flood prone area, flood insurance must be purchased separately, it is not included in homeowners insurance. You can call 1-800-FLOOD29 to learn more about flood insurance.
- Document important information about your personal property for insurance purposes. This includes taking pictures of high-value items.
- Store important documents such as property deeds or leasing agreements, bank statements and paystubs, etc. in a safe place such as a safety deposit box away from your home. Make copies of important documents such as: medical information, proof of insurance, doctor's contact information, copies of SSN card, birth certificate, passport, and drivers' license for your emergency supply kit.

# **Special Needs and Situations**

If you or someone close to you has a disability or a special need, you may have to take additional steps to protect yourself and your family in an emergency.

# **Special Needs**

- Hearing impaired: Arrange to receive visual warnings.
- \* Mobility impaired: Set up assistance to get to a shelter.

# **Special Situations**

- \* Single working parent: Plan for help to organize kids in an emergency.
- \* <u>Non-English speaking people</u>: Make arrangements to receive warnings and emergency information in another language.
- \* People without vehicles: Set up alternative transportation.
- \* <u>People with special dietary needs</u>: Take special precautions to have an adequate emergency food supply.
- \* Pregnant women: If you become sick during an emergency, talk to a doctor or nurse right away. Drink plenty of clean water and follow the doctor's advice. Before you take any medication, even those without prescriptions, talk with a doctor or nurse first.
- \* Stress during pregnancy increases your risk of premature delivery or having a low birthweight baby. It is important to choose healthy ways to deal with your stress.
- \* <u>Caring for infants</u>: Breastfed infants should continue breastfeeding. For formula-fed infants, use ready-to-feed formula if possible; if that's not possible, use bottled water to prepare powdered or concentrated formula. If bottled water is not available, use boiled water. Use treated water to prepare formula only if you do not have bottled or boiled water. Clean bottles and nipples with bottled, boiled or treated water before each use.

# **Create a Plan for your Pets**

- Take your pets with you if you evacuate, If it is not safe for you, it is not safe for them. Leaving them may endanger you, your pets and emergency responders.
- Plan in advance where you will go if you evacuate, as pets (other than service animals) are usually not allowed in public shelters. Some communities have established sheltering options for pets. Contact your local emergency management agency to see if there are any emergency animal shelters in your community or along your evacuation route.

- No matter where you are, the safest action to take is to: GET INSIDE. STAY INSIDE. STAY TUNED. We recommend seeking refuge in any interior hallway, restroom, offices in central corridors (with no windows or exterior walls), or basement areas (if available). If these options are not present in your building, and you have enough time to move to another building, then do so immediately. If you do not have time to move, close and lock all windows and doors, and try to stay away from entrances, exits, exterior walls and windows. Be sure to turn off all air conditioners and fans. If you are in your car and cannot get to a building, pull to the side of the road and lay down on the floor. If you are walking outside, seek refuge in the nearest building.
- Identify shelter locations. Identify the best shelter location near where you spend a lot of time, such as home, work, and school. The best locations are underground and in the middle of larger buildings.
- While commuting, identify appropriate shelters to seek in the event of a detonation.
- Outdoor areas and vehicles do NOT provide adequate shelter. Look for basements or the center of large multi-story buildings.
- Make sure you have an Emergency Supply Kit for places you frequent and might have to stay for 24 hours. It should include bottled water, packaged foods, emergency medicines, a hand-crank or battery powered radio to get information in case power is out, a flashlight, and extra batteries for essential items. If possible, store supplies for three or more days.

# Actions to consider During a Ballistic Missile attack

- Remain sheltered in place until the "All Clear" is given, this could last as little as a few hours or as long as 14 days.
- Debris including soil, fragments of destroyed buildings and other material
  will be drawn into the cloud of a nuclear detonation and propelled into
  the sky. This debris will begin to settle back to earth within hours. This
  debris includes residual radiation that poses a significant health risk to
  humans and animals. Radiation from nuclear detonation in the form of
  fallout decays very rapidly; this is usually a period of days to weeks.
- When a nuclear weapon detonates, one of the direct effects produced is called an Electromagnetic Pulse (or EMP). EMP has the potential of destroying electrical devices and telecommunications systems. It may also disrupt electrical power and other essential utilities. Broadcast stations many miles distant from the explosion (such as on another island) will survive EMP effects. The current plans are to utilize AM and FM broadcast radio stations on unaffected islands to provide essential information to the public. This means you should include a battery-powered AM/FM radio in your 7-day survival kit.

# **BALLISTIC MISSILE**

What is a Ballistic Missile? Ballistic missiles are powered initially by a rocket or series of rockets in stages, but then follow an unpowered trajectory that arches upwards before descending to reach its intended target. Ballistic missiles can carry either nuclear or conventional warheads.

# **Ballistic Missile Facts**

There are four general classifications of ballistic missiles based on their range, or the maximum distance the missile can travel:

- <u>Short-range</u>: less than 1,000 kilometers (approximately 620 miles), also known as "tactical" ballistic missiles.
- Medium-range: between 1,000 and 3,000 kilometers (approximately 620-1,860 miles), also known as "theater" ballistic missiles.
- <u>Intermediate-range</u>: between 3,000 and 5,500 kilometers (approximately 1,860-3,410 miles)
- Long-range: more than 5,500 kilometers (approximately 3,410 miles), also known as intercontinental or strategic ballistic missiles.

Current estimates based on the size (yield) of North Korean nuclear weapon technology strongly suggests an explosion less than 6 miles in diameter.

Planning and preparedness are essential to protecting those survivors from delayed residual radiation (fallout) and other effects of the attack such as the loss of utilities and communication systems, structural fires, etc.

#### Actions to consider BEFORE a Ballistic Missile attack

- Approximately 5 minutes into the launch sequence, the U.S. Pacific Command will notify the Guam Warning Point (SWP) and Joint Region Marianas Region Operations Center (ROC) that a missile is en route from North Korea. The SWP and the ROC are staffed 24-hours a day, 7 days a week. Upon receipt of the notification, the SWP and ROC will activate the 'Attack-Warning' signal on all outdoor sirens statewide (wailing sound) and transmit a warning advisory on radio, television and cellular telephones within 2 minutes.
- All residents, must immediately seek shelter in a building or other substantial structure. Once the sirens sound, you will have between 12 and 15 minutes before missile impact.
- There are currently no designated shelters in Guam at this time. The short warning time (12 to 15 minutes) would not allow for residents or visitors to locate such a shelter in advance of missile impact.

# Pet Plan cont.

 Contact hotels and motels outside your immediate area to check their policies on accepting pets and restrictions on the number, size and species. Ask if no-pet policies could be waived in an emergency.



- Ask friends, relatives, or others if they could shelter your animals. If you
  have two or more pets, they may be more comfortable if kept together
  but be prepared to house them separately.
- Prepare a list of boarding facilities and veterinarians who could shelter
  animals in an emergency; include 24-hour telephone numbers. Ask local
  animal shelters if they provide emergency shelter or foster care for pets
  in a disaster situation. Animal shelters may be overburdened, so this
  should be your last resort unless you make such arrangements well in
  advance.
- Keep a list of pet-friendly places, including their telephone numbers, with other disaster information and supplies. If you have notice of an impending disaster, call ahead for reservations.
- Carry pets in a sturdy carrier. Animals may feel threatened by some disasters, become frightened and try to run. Being in its own carrier helps reassure a pet.
- Have identification, a collar, a leash and proof of vaccinations for all pets.
   At some locations, you may need to provide veterinary records before boarding your pets. If your pet is lost, identification will help officials return it to you.
- Assemble a portable pet disaster supply kit. Keep food, water and any special pet needs in an easy-to-carry container.
- Create a plan to ensure that someone takes care of your pets in case you are not at home during an emergency. The plan should include:
  - Give a trusted neighbor the key to your home and instructions for caring for your pets, as well as your contact information.
  - Make sure the neighbor is familiar with your pets and knows the location of your pet emergency kit.
  - Have a plan to communicate with your neighbor after the event. You
    will want to arrange a meeting place in a safe area so you can be
    reunited with your pets.
- Learn pet first aid and keep your pet first aid kit up to date.



# **Sheltering**

Be informed about different shelter options before an emergency. Consider the hazard and then choose a place in your home or other building that is safe from that hazard.

Sheltering outside the hazard area might include staying with friends and relatives, seeking commercial lodging or staying in a mass

care facility operated by disaster relief groups and local authorities.

NBG has limited facilities available to use as safe havens. The NBG population is strongly encouraged to either shelter in place (SIP) or seek shelter within one of the Guam's designated shelters.

# Safe Havens

NBG may open a temporary Safe Haven at the following location if situations dictate:

- Charles King Fitness Center
- Santa Rita Office Complex Gym
- ♦ McCool Elementary School Gym
- ♦ Guam High School Gym

If a severe typhoon threatens NBG,

safe havens may open at Tropical Cyclone Condition of Readiness 2 (TCCOR 2) or 24 hours before typhoon landfall.

NBG has a limited capacity for special needs, so personnel with special medical needs should report to Charles King Fitness Center as early as possible (if open).

# **NBG Safe Haven Priority**

NBG Safe Haven space is prioritized as follows:

- **1.** Command designated Mission Essential Personnel and Emergency Responder personnel assigned to "ride out" a typhoon and work as relief support after the all clear is given
- **2.** Internally displaced families (personnel and family members who are under mandatory evacuation from NBG housing areas)
- 3. NBG family members residing in housing within the NBG fence line
- 4. NBG personnel living in civilian housing in communities around the island

- Keep cash in a secure place so that you are able to access it in case of an emergency and Automatic Teller Machines (ATMs) are not available.
- Contact a qualified financial counselor or coach. Contact local organizations and non-profits that employ qualified and nationally certified counselors or coaches to receive guidance on how to organize your finances before and after an emergency.

# **Actions to consider DURING a Financial Emergency**

- Use emergency savings for purchasing essentials like food, gas, and temporary lodging.
- Contact credit card companies and lenders to learn about payment options to avoid late penalties, interest charges, and damages to your credit.
- List current expenses and negotiate with lenders for extensions.
- Reach out for assistance by logging on to DisasterAssistance.gov, visiting
  a Disaster Recovery Center in your community, or dialing 211 for a referral for community-based resources.
- Contact community organizations, like food banks and faith-based organizations, for assistance to help cover daily essentials and to connect you with additional resources.

# **Actions to consider AFTER a Financial Emergency**

- Log onto DisasterAssistance.gov to find out if you qualify for financial disaster relief. Visit a Disaster Recovery Center in your community for important resources for relief by FEMA and community and faith-based organizations.
- Make a list of all property damage and contact your insurance company as soon as you can.
- File a flood insurance claim and work with your insurance adjuster and insurance agent to receive guidance through the process.
- Be cautious of scams after disasters. Don't give out your personal identification numbers.
- Prioritize your spending and take inventory of your credit cards. Create a list to get all of your information in one place, understand your spending needs, and protect your credit.
- Research tax breaks you might qualify for based on your situation.
- Turn off utilities to save on expenses if you are unable to live in your home.

# FINANCIAL EMERGENCY

What is a Financial Emergency? Financial emergencies may include car damage, unemployment, medical treatment, property damage, or family emergencies. 6 out of 10 households in America experience at least one financial emergency in a year.



# Danger signs

- ♦ About 1/3 of American families do not have any savings.
- Almost half of Americans would struggle to come up with \$400 to help cover an emergency.

# Actions to protect yourself in the event of a Financial Emergency

- Start an emergency savings account to prepare for unexpected financial emergencies or disasters
- Protect important records and document your possessions.
- Create and update your emergency plan.
- Review insurance policies regularly. Ensure you have the right types and amounts of coverage. After a disaster, contact your insurance company as soon as possible
- Look into assistance options after the disaster by logging on to DisasterAssistance.gov, visiting a Disaster Recovery Center in your community, or dialing 211 for a referral for community-based resources.

# Actions to consider BEFORE a Financial Emergency

- Start an emergency savings account. Saving even small amounts like \$5 or \$10 a week is a good place to start. Make a budget to estimate monthly income and expenses. Reduce debt by making regular payments of at least the minimum due and pay your bills on time to maintain a good credit rating.
- Review your insurance coverage including flood, health, and homeowners or renters insurance. Remember, flood insurance typically takes 30 days to go into effect. You'll want to renew your insurance every year.
- Create and update your emergency plan. Consider using the Emergency
  Financial First Aid Kit (EFFAK) <a href="https://ready.gov/financial-preparedness">https://ready.gov/financial-preparedness</a> as a
  guide. By having a plan in place, you will be better prepared in case of an
  emergency.
- Keep important records safe and save important receipts. Store them digitally and in a waterproof, fireproof container.
- Protect your property by taking photos and videos of household items in case you need to repair, replace, or rebuild after a disaster.

**Note:** NBG personnel living in civilian housing in communities around the island are strongly encouraged to seek shelter in one of the Guam School shelters. Under no circumstances should Service members place themselves or family members in danger by bypassing open shelters in an effort to reach a military installation during a disaster.

# **Personnel Responsibilities**

Personnel reporting to a safe haven must comply with the following:

- ♦ All personnel must bring a disaster supply kit capable of sustaining them for at least 72 hours, but seven to 10 days is preferable.
- Personnel who do not have a disaster supply kit may receive assistance from Navy Marine Corps Relief Society Lending Closet. They will be provided with an opportunity to pick up supplies before reporting.
- Personnel with household pets must not bring them into the safe haven registration site. Pets are to be transported in a cage or hard-sided carrier.
- ♦ All personnel must park their vehicles at a designated parking lot.

# **Territory of Guam Public Emergency Shelters**

- During an emergency or disaster threat, civil defense/emergency management information is broadcast over local radio and television stations.
   When an evacuation is necessary, these broadcasts may include information on the location of public emergency shelters in affected areas.
- Because public emergency shelters do not stock supplies, bring provisions from your emergency supply kit at home. You need at least a sevento 10-day supply of food, water and supplies for yourself, your family and your household pets.
- Review the island-wide list of public emergency shelters, and note the two or three closest to your home.

Caution: Though all schools are designated as shelters, not all are open at any given time. Island shelters are staffed and operated by Guam Department of Education employees and volunteers from the American Red Cross.

# More Information about Public Emergency Shelters

- Guam Homeland Security Office of Civil Defense (GHS/OCD) will post announcements with shelter locations when a typhoon or tsunami warning is posted, or during other emergencies.
- Review the shelters in your area and pick two or three shelters near you.
- Practice the routes to each shelter.

For your own safety and that of your family, do not bypass a shelter in an attempt to reach a military installation.

# **Shelters** — **How They Work**

# **General Population Shelters**

- A shelter is a safe place to be during an emergency. However, it offers only the basic life-sustaining necessities. The shelter may not have electricity for the majority of your stay. It will be noisy, crowded, and somewhat uncomfortable.
- Limited food and water will be available; bring three five days' worth of your own food and water. Cots may be provided. Bring other items, as well: snacks, special dietary needs, clothing, and medications.
- Arrivals: Register with shelter staff and check out if you leave. Be considerate of others and consider volunteering to help.

# Persons with Disabilities

- During emergencies, persons with disabilities may seek safety in general population shelters.
- Here are some important guidelines:
  - ♦ Many times a disability is not obvious.
  - Be sensitive to personal space and physical contact. People consider their equipment a part of their person.
  - Think before you speak. Speak to the person, not the companion or aide.
  - ♦ Do not approach or touch a service animal without permission.
- ♦ The location of designated shelters for people with special health needs and of facilities for household pets may be broadcast as well along with other information, such as when volunteers will be available to open shelters and to direct evacuees to the appropriate areas.

# **Caring for Animals**

Animals are also affected by disasters. Plan for your pets disaster needs by identifying shelters that accept animals, gathering pet supplies and ensuring that your pet has proper ID and up to date veterinary records.

Pets at pet-friendly shelters and safe havens must have the following:

- Leash and muzzle (for dogs)
- ♦ 7-day supply of food and water
- ◆ Cage with owner documentation on the side in case you and your pet are separated

Warning: Pets under stress may not behave normally. They may become aggressive or try to flee.

# Actions to consider DURING a Cyberattack

- Check your credit card and bank statements for unrecognizable charges.
- Check your credit reports for any new accounts or loans you didn't open.
- Be alert for emails and social media users that ask for private information.
- If you notice strange activity, limit the damage by changing all of your internet account passwords immediately.
- Consider turning off the device that has been affected. Take it to a professional
  to scan for potential viruses and remove any that they find. Remember: A company will not call you and ask for control of your computer to fix it. This is a
  common scam.
- Let work, school or other system owners know what happened.
- Run a security scan on your device to make sure your system is not infected or acting more slowly or inefficiently.
- If you find a problem, disconnect your device from the Internet and perform a full system restore.

# Actions to consider AFTER a Cyberattack

- Let the proper federal, state and local authorities know if you believe you have been a victim of a cyberattack.
- Contact banks, credit card companies and other financial services companies
  where you hold accounts. You may need to place holds on accounts that have
  been attacked. Close any unauthorized credit or charge accounts. Report that
  someone may be using your identity.
- File a report with the Office of the Inspector General (OIG) if you think someone is using your Social Security number illegally.
- File a complaint with the FBI Internet Crime Complaint Center (IC3). They will
  review the complaint and refer it to the appropriate agency.
- File a report with the local police so there is an official record of the incident.
- Report identity theft to the Federal Trade Commission.
- Contact the Federal Trade Commission (FTC) at ftc.gov/complaint if you receive messages from anyone claiming to be a government agent.
- Contact additional agencies depending on what information was stolen. Examples include contacting:
- The Social Security Administration (800-269-0271) if your Social Security number was compromised, or
- The Department of Motor Vehicles if your driver's license or car registration has been stolen.
- Report online crime or fraud to your local United States Secret Service (USSS)
   Electronic Crimes Task Force or the Internet Crime Complaint Center.

# **CYBERATTACK**

What is a Cyberattack? Cyberattacks are malicious attempts to access or damage a computer or network system. Cyberattacks can lead to the loss of money or the theft of personal, financial and medical information. These attacks can damage your reputation and safety.

Cyberattacks can occur in many ways, including:

- Accessing your personal computers, mobile phones, gaming systems and other internet- and Bluetooth-connected devices.
- Damaging your financial security, including identity theft.
- Blocking your access or deleting your personal information and accounts.
- Complicating your employment or business services.
- Impacting transportation and the power grid.

# Actions to consider BEFORE a Cyberattack

- Limit the personal information you share online. Change privacy settings and do not use location features.
- Keep software applications and operating systems up-to-date.
- Create strong passwords by using upper and lower case letters, numbers and special characters. Use a password manager and two methods of verification.
- Watch for suspicious activity that asks you to do something right away, offers something that sounds too good to be true, or needs your personal information. Think before you click. When in doubt, do NOT click.
- Protect your home and/or business using a secure Internet connection and Wi-Fi
  network, and change passwords regularly.
- Don't share PINs or passwords. Use devices that use biometric scans when possible (e.g. fingerprint scanner or facial recognition).
- Check your account statements and credit reports regularly.
- Be cautious about sharing personal financial information, such as your bank account number, Social Security number or credit card number. Only share personal information on secure sites that begin with https://. Do not use sites with invalid certificates. Use a Virtual Private Network (VPN) that creates a more secure connection.
- Use antivirus and anti-malware solutions, and firewalls to block threats.
- Back up your files regularly in an encrypted file or encrypted file storage device.
- Do not click on links in texts or emails from people you don't know. Scammers can create fake links to websites.
- Remember that the government will not call, text or contact you via social media about owing money.
- Keep in mind that scammers may try to take advantage of financial fears by calling with work-from-home-opportunities, debt consolidation offers and student loan repayment plans.

# **Shelter In Place procedures**

Whether you are at home, work or anywhere else you frequent regularly, there may be situations when it's best to stay where you are and avoid any uncertainty outside.

Here are some indicators and steps to take if the situation arises:

- Use common sense and available information to assess the situation and determine if there is immediate danger.
- If you see large amounts of debris in the air, or if local authorities say the air is badly contaminated you may want to take this kind of action.

Here are some tips for sheltering in place:

- Pay attention to local media outlets for official news and instructions as they become available.
- Bring your family and pets inside.
- Lock doors, close windows, and air vents.
- Turn off fans, air conditioning and forced air heating systems. That draw in outside air
- Take your emergency supply kit unless you have reason to believe it has been contaminated.
- Go into an interior room with few windows if possible.
- Seal all windows, doors and air vents with thick plastic sheeting and duct tape. Consider measuring and cutting the sheeting in advance to save time.
- Cut the plastic sheeting several inches wider than the openings and label each sheet.
- Duct tape plastic at corners first and then tape down all edges.
- Be prepared to improvise and use what you have on hand to seal gaps so that you create a barrier between yourself and any contamination.
- "Sealing a room" is considered a temporary protective measure to create a barrier between you and potentially contaminated air outside.

# **STAY INFORMED**

Learn about the hazards that may strike your community, the risks you face from these hazards and your community's plans for warning and evacuation.

You can get more information at the NBG website at <a href="https://">https://</a>
<a href="mailto:jrm.cnic.navy.mil/Installations/NAVBASE-Guam/Operations-and-Management/Emergency-Management/">https://</a>
<a href="mailto:jrm.cnic.navy.mil/Installations/NAVBASE-Guam/Operations-and-Management/Emergency-Management/</a>

Guam Homeland Security Office of Civil Defense: https://www.ghs.guam.gov

# **Mass Warning and Notification**

NBG uses a verity of methods to inform the base population of potential threats and hazards, some of these methods include:

- Outdoor loudspeakers called Giant Voice, which uses tone and voice alerts.
- Indoor Voice (IV) systems that connect to the building intercom system and uses tone and voice alerts.
- Computer/Telephone Notification System, including alerts through:
  - Email, Phone, Short Message Service (SMS) or text messages

# Naval Base Guam Outdoor Loudspeaker (Giant Voice) Pre-announcement Siren Sounds

CONDITION	IF YOU HEAR	THIS INDICATES	INDIVIDUAL ACTIONS
GENERAL ANNOUNCEMENT	westminster chime  (a) (a) 1	A GENERAL ANNOUNCEMENT FOLLOWS EXAMPLES: NBG TRAINING EVENT, TCCOR ANNOUNCEMENT	BE AWARE, ENSURE ALL PERSONNEL ARE WARNED     FOLLOW INSTRUCTIONS
ATTACK WARNING BALLISTIC MISSLE IS INBOUND	FAST FALL TONE	AN ATTACK/HOSTILE ACT IS IMMINENT OR IN PROGRESS  EXAMPLES: INBOUND BALLISTIC	BE AWARE, ENSURE ALL PERSONNEL ARE WARNED  IF INDOORS STAY INDOORS, IF OUTDOORS IMMEDIATELY TAKE SHELTER INDOORS  FOLLOW INSTRUCTIONS TO TAKE COVER, EVACUATE TO A SAFE LOCATION, OR SHELTER  EVACUATE TO A SAFE LOCATION, OR SHELTER  OF THE PROPERTY OF
		MISSILE, TERRORIST ATTACK	CONDUCT PERSONNEL ACCOUNTABILITY
SHELTER-IN-PLACE (HAZARDOUS MATERIAL)	SLOW TWO TONE	AN AIRBORN HAZARDOUS MATERIAL SPILL IS IMMINENT OR IN PROGRESS EXAMPLES: CHLORINE GAS SPILL, TOXIC SMOKE	BE AWARE, ENSURE ALL PERSONNEL ARE WARNED     IF INDOORS STAY INDOORS, IF OUTDOORS IMMEDIATELY TAKE SHELTER INDOORS     FOLLOW INSTRUCTIONS TO TAKE COVER, EVACUATE TO A SAFE LOCATION, OR SHELTER
TSUNAMI ALERT	THREE TONE  (1) 111	A DESTRUCTIVE TSUNAMI WAVE IS IMMINENT OR IN PROGRESS	BE AWARE, ENSURE ALL PERSONNEL ARE WARNED     IMMEDIATELY MOVE TO HIGHER GROUND     FOLLOW INSTRUCTIONS TO EVACUATE TO A SAFE LOCATION     CONDUCT PERSONNEL ACCOUNTABILITY
LOCKDOWN/ACTIVE SHOOTER	FAST TWO TONE	AN ACTIVE SHOOTER INCIDENT IS IN PROGRESS	BE AWARE, ENSURE ALL PERSONNEL ARE WARNED     IF INDOORS STAY INDOORS, IF OUTDOORS IMMEDIATELY TAKE SHELTER INDOORS

# **Actions to Consider DURING a Major Accident**

- Listen to local radio or television stations for detailed information and instructions:
- Check the NBG Emergency Information: 671-339-4636
- Check the CJRM and NBG Facebook pages (as applicable) for emergency information.
- Evacuate immediately, if directed to do so.
- If directed to shelter in place, perform the following tasks:
- Bring pets inside.
- Close and lock all exterior doors and windows.
- Close vents, fireplace dampers and as many interior doors as possible.
- Turn off air conditioners and ventilation systems that draw in fresh outside air.
- Go into the preselected room. This room should be above ground and have the fewest openings to the outside.
- Seal the room by covering each window, door and vent, using plastic sheeting and duct tape.
- Provide first aid and CPR if you are trained to do so.
- Report the incident to local authorities.
- Stay away from the disaster area unless you are involved in the recovery process.

# **Actions to Consider AFTER a Major Accident**

- Stay away from the accident area; there may be unknown dangers at or near the scene.
- Listen to local radio or television stations for the latest emergency information:
- Check the NBG Emergency Information Line: 671-339-4636
- Check the CJRM and NBG Facebook pages (as applicable) for emergency information.
- Help a neighbor who may require special assistance large families, children, the elderly and individuals with access and functional needs.
- Notify friends or family of your condition.
- Use the Phone sparingly.
- If you were directed to evacuate, do not return home until local authorities give the all clear.
- If gas or vapors could have entered the building, take shallow breaths through a cloth or a towel. Avoid eating or drinking food or water that may be contaminated.

# Phases of Response to a Major Accident

# Notification.

- The installation is notified of an actual or potential major accident.
- Installation emergency response personnel are alerted.
- Higher headquarters and local civilian authorities are notified.
- The Emergency Operations Center is activated.
- Evacuation or shelter-in-place (SIP) notifications may be broadcast through the Mass Warning Notification System (MWNS).

# Response.

- Fire, Security and Emergency Medical Services (EMS) respond to the scene to establish Command and Control as well as begin life-saving, rescue, mitigation and recovery actions.
- Evacuation or SIP notifications may continue to be broadcast through the MWNS.
- All nonemergency responders yield to emergency vehicles and stay clear of the site.

# Recovery.

The area and operations are restored to normal pre-accident conditions.
 All-clear notifications may be broadcast through MWNS.

# Withdrawal.

• Immediate withdrawal occurs if the emergency responders are in imminent danger. Planned withdrawal occurs if further action is futile.

# **Actions to Consider BEFORE a Major Accident**

- Research the most common major accident threats in your area.
- Understand the threats in your area and how best to react in time of crisis.
- Create an evacuation plan for your family, and have a backup route in mind.
- Determine an out-of-town relative whom family members can use as a contact if separated.
- Determine a safe shelter for animals and livestock.
- Assemble a disaster supply kit.

# **NOAA** Weather Radio

National Oceanic & Atmospheric Administration (NOAA) weather radio is a nationwide network of radio stations broadcasting continuous weather information directly from a local National Weather Service office to specifically configured NOAA weather radios. NWS Guam call letters are:

WXM85 transmitting on a frequency of 162.400MHz

# **Emergency Alert System (EAS)**

EAS is used to address the entire island on short notice through TV and Radio in case of a grave threat or island emergency:

# **Emergency Public Information**

In an emergency, the NBG Emergency Operations Center releases emergency public information (EPI) through the following:

- ♦ Mass Warning and Notification
- NBG Emergency Information Line at 671-339-4636 (prerecorded message with instructions)

CJRM Public website:

www.cnic.navy.mil/jrm

CJRM Facebook Page:

www.facebook.com/

**JointRegionMarianas** 

NBG Public website:

www.cnic.navy.mil/regions/jrm/

installations/navbase guam.html

**NBG Facebook Page:** 

www.facebook.com/navalbaseguam

# Wireless Emergency Alerts (WEA)

WEA sends free informational text messages to WEA-enabled mobile devices within range of an imminent and dangerous situation, sever weather event, or AMBER emergency. You do not need to register to receive alerts if you have a WEA-capable device. To turn on WEA alerts, go to your device settings under "Notifications" and look for "Government Alerts".

Television		
KUAM-TV	Channel 8	
KGTF-TV	Channel 12	
KTGM-TV	Channel 14	
AM Radio		
KTWG	801 AM	
KUAM	630 AM	
KUSG	1350 AM	
KVOG	1530 AM	
KGUM	567 AM	
FM Radio		
KGCA	106.9 FM	
KGUM-FM	105.1 FM	
KHMG	88.1 FM	
KIJI	104.3 FM	
KISH	102.9 FM	
KKGU	90.1 FM	
KMOY	92.7 FM	
KNUT	101.1 FM	
KOKU	100.3 FM	
KOLG	90.9 FM	
KPRG	89.3 FM	
KSDA-FM	91.9 FM	
KSTO	95.5 FM	
KTKB-FM	101.9 FM	
KUAM-FM	93.9 FM	
KZGU	99.5 FM	
KZGZ	97.5 FM	

# Make a Kit

When an emergency strikes, response personnel address the most critical needs and may not even be able to get to an area until it is deemed safe. It is your responsibility to ensure your family's well-being during times of crisis. Emergency kits are an essential tool for meeting that challenge. Keep a kit prepared at home and consider having kits in your vehicle and at work, Since you don't know where you'll be when an emergency occurs. You should customize your kit to suit you and your family member's needs.

#### Home

- This kit should contain essential food, water and supplies for at least 3-5 days.
- Keep this kit in a designated place and have it ready in case you have to leave your home quickly.
- Make sure all family members know where the kit is kept.
- You may also want to consider having supplies for sheltering for up to two weeks.

# Work

- This kit should be in one container and ready to grab in case you are evacuated from your workplace.
- Make sure you have food and water in the kit.
- Be sure to have comfortable walking shoes at your workplace in case an evacuation requires walking long distances.

# Car

- In case you are stranded, keep a kit of emergency supplies in your car.
- This kit should contain food, water, first aid supplies, flares, jumper cables.



## Actions to Consider BEFORE a Terrorist Event

- Be aware of your surroundings.
- Take precautions when traveling.
- Leave an area if you feel uncomfortable or if something does not seem right.
- Assemble a disaster supply kit.
- Create an evacuation plan for your family and have a backup route in mind.
- Determine an out-of-town relative whom all family members can use as a contact if separated.

# Actions to Consider DURING a Terrorist Event

- Take cover immediately.
- Stay low to the floor or ground.
- Listen to local radio and television stations for updates.
- Evacuate immediately if you are directed to do so.

# **Actions to consider AFTER a Terrorist Event**

- Stay away from the event area; there may be danger of secondary devices.
- Listen to local radio or television stations for the latest emergency information.
- Notify friends or family of your condition.
- Use the phone sparingly.

# **MAJOR ACCIDENTS**

# What Is Considered a Major Accident?

A major accident differs from the day-to-day emergencies handled by local emergency responders. A major accident may involve one or more of the following:

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- 1. aircraft accident/incident,
- 2. toxic materials,
- 3. hazardous substances,
- 4. explosions, etc.

# **Chemical Threats**

- Chemical agents are poisonous gases, liquids and solids that have toxic effects on people, animals or plants.
- Some chemical agents may be odorless and tasteless.
- They can be released by bombs or sprayed from aircraft, boats and vehicles. They can be used in a liquid form to create a hazard to people and the environment.
- They can have an immediate effect (a few seconds to a few minutes) or a delayed effect (two to 48 hours).

# **Biological Threats**

- Biological agents are organisms or toxins that can kill or incapacitate people, livestock and crops.
- The three basic groups of biological agents that would likely be used as weapons are bacteria, viruses and toxins.
- Biological agents can be dispersed by spraying them into the air, by infecting animals or insects that carry the disease to humans and by contaminating food and water.

# **Dirty Bomb**

- A dirty bomb is not a nuclear bomb; it uses conventional explosives (e.g., dynamite) to spread limited amounts of radioactive material to the surrounding area. It does not produce the tremendous force and destruction of a nuclear blast.
- The main dangers of a dirty bomb are injuries caused by the explosion itself (e.g., burns or bleeding).
- Some people in the immediate area of the blast may have minor radiation sickness. A dirty bomb is unlikely to cause severe radiation sickness.

# The National Terrorism Advisory System

- The National Terrorism Advisory System (NTAS) communicates information about terrorist threats by providing detailed information to the public, government agencies, first responders, airports and other transportation hubs, and the private sector.
- The advisory will clearly indicate whether the threat is Imminent, if it believes the threat is impending or coming very soon, or Elevated, if there is no specific information about the timing or location.

To get NTAS Alerts, go to: www.dhs.gov/alerts
(Click on "Action Center")

# What to Put in Your Home Disaster Kit

**Food:** Nonperishable food for at least • 10 days

- <u>Grains</u>: crackers, dry bread sticks, pretzels, rice cakes, breakfast cereals, nutritional bars, etc.
- <u>Fruits and vegetables</u>: canned fruit/vegetables, applesauce, dried fruit, juice, etc.
- Milk and dairy items: shelf-stable milk, powdered milk, etc.
- Meat and beans: canned tuna/ chicken/turkey, soup with beans or meat canned beans, peanut butter, nuts, etc.
- Quick energy snacks: trail mix, granola, fruit bars, etc.

**Water**: At least 1 gallon per person per day for 10 days

# **Tools and Supplies**

- Toilet paper, moist towelettes
- Soap, liquid detergent
- Personal hygiene items and feminine supplies
- Plastic garbage bags, ties (for personal sanitation uses)
- Cash (\$200) or traveler's checks, change
- Blankets, pillows, towels
- Flashlight with extra batteries
- Plastic/paper cups and plates, plastic utensils
- First aid kit
- Prescription and Nonprescription drugs
- Eyeglasses, contact lenses and supplies

- Manual can opener
- Dust masks
- Battery-powered or hand-crank radio
- Extra batteries
- Wrench or pliers for turning off utilities
- Disinfectant
- Matches in a waterproof container
- Fire extinguisher
- Paper and Pencils

# **Baby Needs**

- Bottles and formula (liquid or powdered)
- Diapers and baby wipes
- Medications

# **Pet Supplies**

- Proper identification, including a picture of your pet
- Immunization records
- Ample supply of food and water
- A carrier, crate or cage, collar, muzzle and leash
- Comfort items (chew toys, etc.)
- Muzzle, collar and leash
- Litter box, litter and scooper
- First aid kit for pets, including medications
- Toys
- Blanket
- Cleaning supplies (newspaper, plastic bags with ties, etc.)

# What to Put in Your Home Disaster Kit (continued)

# **Important Family Documents**

- Will, insurance policies, contracts, deeds, stocks and bonds
- Passports, Social Security cards
- Immunization records
- Bank account numbers, credit card account numbers
- Inventory of valuable household goods, important telephone numbers
- Family records (birth, marriage, death certificates)

# **Activities for Kids**

- Prepare some toys and belongings so your kids will have things to do.
   Place them in a small backpack or duffel bag.
- A few of their favorite books
- Crayons, pencils or markers and plenty of paper
- Scissors and glue
- A favorite toy (doll, action figure, stuffed animal, etc.)
- A board game, deck of cards or puzzles
- A favorite blanket or pillow
- Pictures of the family and pet

# **Maintaining Your Disaster Supply Kit**

Once your supplies are put together, you must maintain them so they are safe to use when needed.

- Keep canned foods in a dry place where the temperature is cool.
- Store boxed foods in tightly closed plastic or metal containers to protect them from pests and to extend their shelf life.
- Throw out canned goods that are swollen, dented or corroded.
- Use foods before they go bad, and replace them with fresh supplies.
   Place new items at the back of the storage area and older ones in the front.
- Change stored food and water supplies every six months. Be sure to write the date you store it on each container.
- Rethink your needs every year and update your kit as your family's needs change.
- Keep items in airtight plastic bags and put your entire kit in one or two easy-to-carry containers, such as an unused trashcan, camping backpack or duffle bag.

# Fight/Defend

If there are no other options to safely escape, and you are confronted by the
assailant/intruder, attempt to disrupt or and/or incapacitate the assailant/
intruder using all available resources (acting aggressively, yelling, throwing
items, improvising weapons).

# What to Expect from Law Enforcement

- Police will be in tactical or patrol uniforms with bulletproof vests and armed with rifles or shotguns.
- They will not help the wounded until the shooter is down and they may push you to the ground for your own safety.
- Follow all instructions; you will be detained as a witness until the event is over.
- Do not speak to the media; you may endanger people who have not escaped.

# **Active Assailant/Armed Intruder Response for Building Occupants**

If an Armed Intruder Alert is issued

- Secure inside a classroom/office (ideally behind a locked door with limited glass exposure).
- Close blinds and turn off the lights
- Keep occupants low to the ground until the situation has ended.
- Keep all occupants indoors and wait for the "All Clear" before resuming normal activity.

# **TERRORISM**

#### What is Terrorism?

Terrorism is the use of force or violence against people or property in violation of the criminal laws of the U.S. for purposes of intimidation, coercion or ransom, or to influence government policy.

# **Terrorism Facts**

- Terrorists often use threats to create fear among the public, to try to convince citizens that their government is powerless in preventing terrorism and to get immediate publicity for their causes.
- Acts of terrorism include threats of terrorism; assassinations; kidnappings; hijackings; bomb scares and bombings; cyberattacks (computer-based); and the use of chemical, biological, radiological and nuclear weapons.
- High-risk targets for acts of terrorism include military and civilian government facilities, international airports, large cities and high-profile landmarks. Terrorists might also target large public gatherings, water and food supplies, utilities and corporate centers.

# **ACTIVE ASSAILANT (GUN OR KNIFE**

What is an Active Assailant? An active assailant/armed intruder is an individual (s) actively engaged in killing or attempting to use deadly physical force on other people in a confined and/or populated area.

# **Active Assailant Facts**

Active assailant/armed intruder situations are unpredictable and dynamic and evolve quickly. Given these incidents are often over within minutes, before law enforcement arrives, it is essential to be prepared mentally and physically to do whatever necessary to protect yourself. Your actions during that time could be the difference of life and death.

# **Prepare for an Active Shooter**

- Have an emergency escape plan; know the exits.
- Train yourself to get up and move if you hear loud voices or gunshots.
- Take note of the two nearest exits in any facility you visit.

# How to respond when an Active Assailant/Armed Intruder is in your vicinity

 Quickly determine the most reasonable way to protect your own life. Others are likely to follow the lead of decisive action during an active shooter situation.

## Run

 Exit the building as quickly and safely as possible, distancing yourself from the threat.

# Hide

- If you can't safely evacuate your building or are unsure of the location of the
  threat, secure in a room, classroom or office, creating as many barriers between you and the threat. If you are caught outside, seek shelter inside the
  nearest building, and secure in an interior space. Additionally, take the following actions:
  - Secure doors
  - Turn off lights
  - Move into concealed areas of the room, away from doors and windows.
  - Remain calm and quiet

To prevent an active shooter from entering your hiding place:

- Lock and barricade the door with heavy furniture.
- Get on the floor behind heavy furniture
- Don't respond to unfamiliar voices of people who don't identify themselves as law enforcement; it may be the shooter trying to lure you out of hiding.

# Preparing your boat for a typhoon

Each boat owner needs a plan for their type of boat, local environment, severe weather, and available safe havens.

# • • • • •

# When the storm is approaching and quick action is needed

- Listen to your local Emergency Management office for specific boat evacuation instructions.
- \* Do not stay aboard remove your vessel from the water if possible.
- \* Remove all moveable equipment: canvas, sails, dinghies, radios, Biminis, roller furling sails.
- \* Lash down everything you cannot remove: tillers, wheels, booms.
- \* Make sure the electrical system is turned off unless you plan to leave the boat in the water.
- Remove battery and portable fuel.

# **Preparation Tips**

- Practice how to secure your boat in the marina.
- \* Check your lease or boat storage agreement.
- Know your responsibilities and liabilities.
- \* Gather your records and insurance policies.
- \* Have a boat photo and the Hull ID Number (HIN#).
- \* Know how to contact the harbor master and Coast Guard.
- Write your phone number on paddle boards, kayaks, and life jackets.

# **Storing Your Boat**

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# Find boating safety information on the U.S. Coast Guard's site — **www.uscqboating.org.**

- Ensure your tow vehicle is capable of moving the boat. Check trailer, tire bearings, and axle are in good condition.
- Once at a "safe place," lash your boat and trailer and place blocks between the frame members and axle inside each wheel.
- Secure your boat with heavy nylon lines to fixed objects.

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# **Storing Your Boat** (continued)

If possible, find a location that will allow you to secure it from all four sides. It can be tied to screw anchors. Do not secure your boat to a tree.

# **Boats Remaining in Marina Berth**

- Double all lines. Rig crossing spring lines fore and aft. Attach lines high on pilings to allow for tidal rise or surge. Make sure lines will not slip off pilings. Inspect pilings and choose those that seem strongest, tallest, and are properly installed. The longer the dock lines, the better a boat will be at coping with high tides. It is also essential to double up on all lines and use chafe protectors at any potential chafe points. Cover all lines at rough points to prevent chafing.
- Install fenders to protect the boat from rubbing against the pier, pilings, and other boats.
- Assess the attachment of primary cleats, winches, and chocks. These should have substantial backing plates and adequate stainless steel bolt sizes.
- Batteries should be fully charged and checked to ensure their capability to run automatic bilge pumps for the duration of the storm. Consider backup batteries. Cut off all devices consuming electricity except bilge pumps.

# **Generators**

When the power goes off, many residents turn to emergency generators to run freezers, refrigerators, lights, fans, and other appliances. If you use a generator, extreme caution is required.



While convenient and useful, generators can create hazards for homeowners and electric utility workers. Always read and follow the manufacturer's safety and operating instructions.

# Safety Tips.



Operate your generator outdoors in an area with plenty of ventilation. Never run a generator inside a home or garage. Remember generators produce deadly carbon monoxide gas.

# Actions to consider DURING a HAZMAT incident (continued)

- Close vents and as many interior doors as possible.
- Turn off air conditioners and ventilation systems that draw in outside air.
- Find a room that is above ground and has the fewest openings to the outside. Seal the room by covering each window, door and vent with plastic sheeting. Use material to fill cracks and holes in the room, such as those around pipes.
- If gas or vapors could have entered the building, take shallow breaths through a cloth or a towel.
- Avoid eating or drinking any food or water that may be contaminated.

# Actions to consider AFTER a HAZMAT incident

- Act quickly if you have come into contact with or have been exposed to hazardous chemicals. Follow decontamination instructions from local authorities. You may be advised to take a thorough shower or you may be advised to stay away from water and follow another procedure.
- Seek medical treatment for unusual symptoms as soon as possible.
- Place exposed clothing and shoes in tightly sealed containers. Do not allow them to come into contact with other materials. Call local authorities to determine proper disposal.
- Advise everyone who comes in contact with you that you may have been exposed to a toxic substance.
- Report any lingering vapors or other hazards to your local emergency services office.
- If you were directed to evacuate, do not return to the area until local authorities give the all clear.
- Listen to local radio and television stations for the latest updates.

# **Accident Victims**

- You should not try to care for victims of a HAZMAT accident until the substance has been identified and authorities indicate it is safe to go near victims.
- Once it is safe to do so, move the victim (s) to fresh air and call for emergency medical care. Remove contaminated clothing and shoes and place them in a plastic bag.
- Clean victims who have come into contact with chemicals by immediately pouring cold water over their skin or eyes for at least 15 minutes, unless authorities instruct you not to use water on the particular chemical involved.

# Learn to Recognize the Symptoms of Toxic Poisoning

Be prepared to seek medical assistance if you have any of the following symptoms: difficulty breathing; irritation of the eyes, skin, throat or respiratory tract; changes in skin color; headache or blurred vision; dizziness, clumsiness or lack of coordination; cramps or diarrhea.



# **Danger Zones**

A HAZMAT accident can occur anywhere. Communities located near chemicalmanufacturing plants are particularly at risk. However, HAZMAT is transported on our roadways daily so any area is considered vulnerable to an accident.

# Actions to consider BEFORE a HAZMAT incident

- Determine evacuation routes and be ready to evacuate should an incident occur.
- Find out if your community has a warning system.
- Assemble a disaster supply kit.
- Know the best place in your home to shelter if you are directed to shelter in place.
- Develop an emergency communications plan and ensure all family members know how to use it, should you be separated.
- Keep fire extinguishers in your home and car.
- Post emergency contact numbers. (e.g., poison control, hospital emergency room, local pharmacy) by the telephone.

# Actions to consider DURING a HAZMAT incident

- Listen to local radio or television stations for detailed information and instructions.
- Stay away from the area to minimize the risk of contamination.
- Stay upstream, uphill and upwind. In general, try to go at least half a mile away from the danger area.
- Stop and seek shelter in a permanent building if you are in a vehicle. If you must remain in your vehicle, keep windows and vents closed and shut off the air conditioner or heater.
- Bring pets inside if you are directed to shelter in place.
- Fill up sanitized bathtubs and/or large sanitized containers for an additional water supply.
- Close all exterior doors and windows.



Turn the generator on before plugging appliances to it. After the generator is running, turn on your appliances and lights one at a time to avoid overloading the unit. Generators are recommended for temporary use; prioritize your needs.



Do not connect a generator to a home electrical outlet or to a circuit breaker panel to avoid back feed. Use heavy- duty extension cords when you connect your appliances to the generator outlets.



Be sure the generator is turned off and cool before fueling it. Do not store fuel indoors. Flammable liquids should be properly labeled in nonglass safety containers.



Keep children and pets away from portable generators. Many generator parts are hot enough to burn you during operation.



Make sure your hands are dry before touching the generator.



Generators pose electrical safety risks, particularly when operated under wet conditions. Use your generator only if necessary when wet conditions exist. Protect the generator by operating it under an open structure on a dry surface where water cannot form puddles or drain under it.

# Carbon Monoxide Exposure

Carbon Monoxide (CO) is a colorless, odorless, and tasteless poison gas. It is a component of the exhaust from the generator engine. The symptoms of exposure are subtle but deadly. Do not use generators, charcoal grills, or gas grills indoors.

Inexpensive CO detectors, similar to smoke alarms, are readily available and recommended as an added safety precaution.

Call 911 or the Poison Information Center at 800-222-1222 if you think you have been poisoned.

# Mild Exposure

- Headache
- Nausea/Vomiting
- Dizziness
- Blurred Vision

#### Medium Exposure

- Severe headache
- Drowsiness
- Confusion
- Rapid heart rate

#### Severe Exposure

- Unconsciousness
- Convulsions
- Cardiac or respiratory failure
- Death

# Prevention

# HOMELAND SECURITY BEGINS WITH HOMETOWN SECURITY

Suspect it. REPORT IT.

If you see something suspicious taking place, re-

port that behavior or activity to local law enforcement. Factors such as race, ethnicity, national origin or religious affiliation alone are not suspicious. For that reason, the public should report only suspicious behavior and situations (e.g., an unattended backpack in a public place or someone trying to break into a restricted area) rather than beliefs, thoughts, ideas, expressions, associations or speech unrelated to terrorism or other criminal activity. Only reports that indicate relevant criminal activity will be shared with Federal partners.

Fusion Centers manage the flow of information and intelligence across local, Territory, and Federal agencies. In Guam, the Fusion Center is coordinated by Guam Police Department (GPD) through The Guam Homeland Security and Office of Civil Defense (GHS/OCD) and consists of a number of law enforcement, public safety and governmental partners. The public plays a vital role in providing information about potential acts of terrorism and terrorist organizations to these centers.

# **GUAM'S PRIMARY DOMESTIC + INTERNATIONAL CONCERNS**

- Cyber crime
- Drug trafficking organizations
- \* Immigration smuggling
- \* Sexual predators
- \* Suspicious activity
- \* Transnational + national criminal organizations

# WAYS TO REPORT SUSPICIOUS OR CRIMINAL ACTIVITY

Report suspicious or criminal activity:

- Contact Guam Police Department (GPD) Suspicious Activity Hotline: 671-475-0400 or visit the Mariana Regional Fusion Center. <a href="https://mlrin.org/">https://mlrin.org/</a>
- Report any suspicious activity on U.S. Naval Base Guam (NBG) to (671)
   333-2989
- You can also submit a tip to Naval Criminal Investigative Service (NCIS)
   TIPS Link:
  - \* www.ncis.navy.mil or
  - Text "NCIS" plus your information to 274637.
- You can also download the "NCIS TIPS" App on your mobile device.

# HAZARDOUS MATERIALS (HAZMAT) INCIDENT

#### What Is HAZMAT?

Hazardous material (HAZMAT) is any material that is flammable, corrosive, an oxidizing agent, explosive, toxic, poisonous, disease-causing, radioactive, nuclear, and unduly magnetic, a chemical agent, biological research material, compressed gas, or any other material that, because of its quantity, properties or packaging, may endanger life or property.

#### **Hazmat Facts**

- Hazardous chemicals are used in industry, agriculture, medicine, research and consumer goods.
- They are most often released as a result of transportation accidents or because of chemical accidents in plants.
- Varying quantities of HAZMAT are manufactured, used or stored at an estimated 4.5 million facilities in the U.S.
- As many as 500,000 products pose physical or health hazards and can be defined as hazardous chemicals.
- Most victims of chemical accidents are injured at home.
- Never mix household hazardous chemicals or waste with other products.
   Incompatible chemicals, such as chlorine bleach and ammonia, may adversely react, ignite or explode
- Never use hair spray, cleaning solutions, paint products or pesticides near an open flame (e.g., pilot light, lit candle). Although you may not be able to see or smell them, vapor particles in the air could catch fire or explode.

# **Household Chemical Emergency**

- Get out of the residence immediately if there is a danger of fire or explosion.
  Do not waste time collecting items or calling the fire department when you
  are in danger. Once you are safe, call the fire department from outside the
  home (using a cell phone or your neighbor's phone). Stay upwind and away
  from the residence to avoid breathing fumes.
- Call the poison control center, 911, hospital emergency room, health department, fire department, or local pharmacy to receive emergency advice if someone has been exposed to a household chemical. Have containers of the substance readily available in order to provide requested information.
- Take immediate action if the chemical gets into the eyes. Delaying first aid can greatly increase the likelihood of injury. Flush the eyes with clear water for a minimum of 15 minutes unless authorities instruct otherwise.
- Discard clothing that may have been contaminated. Some chemicals may not wash out completely

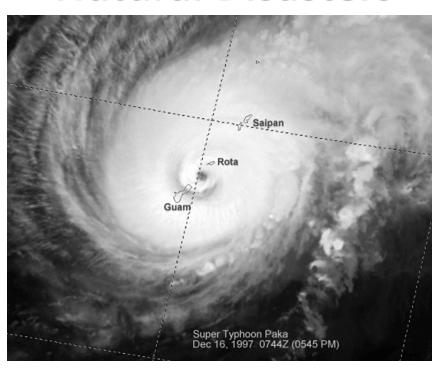
# CHAPTER 3

# Human Caused & Technological Disasters



# CHAPTER 2

# **Natural Disasters**



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# TROPICAL CYCLONES

# What is a Tropical Cyclone?

Hurricanes and typhoons are the same weather phenomenon: tropical cyclones. A tropical cyclone is a generic term used by meteorologists to describe a rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has closed, low-level circulation.

# **Tropical Cyclone Facts**

- ⇒ Due to where Guam is in the western north pacific, and that typhoons have impacted Guam every month of the year we are always in TCCOR 4. Typhoon "season" is between June 1st and November 30th, this means it is the most likely time for a typhoon to occur.
- ⇒ Tropical Cyclones draw their energy from the sea surface and maintains its strength as long as it remains over warm water
- ⇒ A tropical cyclone generates winds that exceed 119 km (74 miles) per hour. In extreme cases winds may exceed 240 km (150 miles) per hour, and gusts may surpass 320 km (200 miles) per hour.
- ⇒ Accompanying these strong winds are torrential rains and a devastating phenomenon known as the storm surge, an elevation of the sea surface that can reach 6 meters (20 feet) above normal levels

# **Know the Terms**

<u>Tropical Depression:</u> A system of persistent low-level clouds and thunder-storms circulating about a well-defined center with sustained surface winds of 38 mph or less.

<u>Tropical Storm:</u> A system of heavy thunderstorms circulating about a well-defined center with sustained surface winds between 39 mph and 73 mph.

<u>Typhoon:</u> A system of intense thunderstorms circulating about a well-defined center with sustained winds exceeding 74 mph.

CAT 1: 74-95 mph (64-82 kt)

CAT 2: 96-110 mph (83-95 kt)

CAT 3: 111-129 mph (96-112 kt)

CAT 4: 130-156 mph (113-136 kt)

CAT 5: 157 mph or higher (137 kt or higher)

# First Aid for Heat Related Illnesses

Symptoms	First Aid
Sunburn	
Painful, red and warm skin; blisters	<ul> <li>Stay out of the sun until your sunburn heals.</li> <li>Take a cool bath; put cool cloths or moisturizing lotion on sunburned areas.</li> <li>Do not break blisters.</li> </ul>
Heat Cramps	
Heavy sweating during intense exercise; muscle pain or spasms	<ul> <li>Stop physical activity and move to a cool place.</li> <li>Drink water or a sports drink.</li> <li>Wait for cramps to go away before you do any more physical activity.</li> <li>Get medical help right away if cramps last longer than one hour or you have heart problems.</li> </ul>
Heat Exhaustion	
Heavy sweating; cold, pale, and clam- my skin; fast, weak pulse; muscle cramps; tiredness or weakness; headache; dizziness or fainting	<ul> <li>Move to a cool place and loosen your clothes.</li> <li>Put cool, wet clothes on your body or take a cool bath.</li> <li>Sip water.</li> <li>Get medical help right away if you are throwing up or if your symptoms get worse or last longer than one hour.</li> </ul>
Heat Stroke	
High body temperature (103°F or higher); hot, red, dry or damp skin; fast, strong pulse; headache, dizziness, nausea; confusion or losing consciousness	<ul> <li>Call 911 right away - this is a medical emergency.</li> <li>Move the Person to a cooler place and help lower his or her temperature with cool cloths or a cool bath.</li> <li>Do not give the Person anything to drink.</li> </ul>

# **Actions to Consider DURING Extreme Heat**

- Stay indoors as much as possible and limit exposure to the sun. Stay on the lowest floor out of the sunshine if air-conditioning is not available.
- Consider spending the warmest part of the day in public buildings, such as libraries, movie theaters, shopping malls and other community facilities.
- Eat well-balanced, light and regular meals. Avoid using salt tablets unless you are directed to do so by a physician.
- Drink plenty of water. Consult a doctor before increasing your intake if you have epilepsy or heart, liver or kidney disease; are on a fluidrestricted diet; or have a problem with fluid retention. Limit your intake of alcoholic beverages.
- When going outdoors, dress in loose-fitting, lightweight and light-colored clothes that cover as much skin as possible.
- Protect your face and head by wearing a wide-brimmed hat.
- Check on family, friends and neighbors who do not have air-conditioning and who spend much of their time alone.
- Never leave children or pets alone in closed vehicles.
- Avoid strenuous work during the warmest part of the day.
- Use a buddy system and take frequent breaks.

# **Actions to Consider ATTER Extreme Heat**

Notify friends or family of your condition. Monitor local radio and television stations for the latest information. Help a neighbor who may require special assistance - large families, children, the elderly and individuals with disabilities.

Damaging Winds: Winds of 35 knots or 40 mph

Destructive Winds: Winds of 50 knots or 58 mph or greater

<u>Storm Surge</u> - A huge dome of water pushed on shore by a typhoon. When coupled with high tide, the storm surge will be the tide and surge combined.

<u>Tropical Storm Watch:</u> Tropical storm conditions are possible in your area, usually within 48 hours. During a watch, prepare your home and review your plan for evacuation in case a warning is issued.

<u>Tropical Storm Warning:</u> Tropical storm conditions are expected in your area, usually within 36 hours. Complete storm preparations and leave the threatened area if directed to do so by local officials.

<u>Short-Term Watches and Warnings:</u> Specific typhoon hazards (e.g., floods, tornadoes) are possible. Listen to alerts for detailed information about the threat and respond accordingly.

<u>Flood/Flash Flood Watch:</u> A flood/flash flood is possible. If you are in a watch area, check flood action plans, keep informed and be ready to act if a warning is issued or if you see flooding.

<u>Flood/Flash Flood Warning:</u> A flood/flash flood is imminent or in progress. Take precautions immediately.



# **Danger Zones**

- \* <u>Tornadoes</u>. Typhoons and tropical storms can produce tornadoes. These tornadoes most often occur in thunderstorms. Usually, tornadoes produced by tropical cyclones are relatively weak and short-lived, but they still pose a threat.
- \* <u>Winds</u>. Typhoon-force winds, 74mph or more, can destroy buildings and mobile homes. Debris (e.g., signs, roofing material, siding, small items left outside) become flying missiles in hurricanes. Winds can stay above hurricane strength well inland.
- \* Flooding. All tropical cyclones can produce widespread torrential rains often in excess of 6 inches. This rain can produce deadly and destructive floods. Heavy rain can trigger landslides and debris flows, especially in mountainous regions. Flooding is the major threat from tropical cyclones to people well inland.
- \* Flash flooding. (rapid rise in water levels) can occur quickly due to intense rainfall. Longer term flooding on rivers and streams can last for several days after the storm.

# **Tropical Cyclone Conditions Of Readiness (TCCOR)**

The method used by NBG to prepare the base population and Tenant Commands/Activities of an approaching typhoon.

TCCOR 4- Winds of 50 knots sustained or greater are possible within 72 hours

Obtain emergency supplies. Have 72 hours of food and water on hand.
 Review all TCCOR checklists and actions.

**TCCOR 3**- Winds of 50 knots sustained or greater are possible within 48 hours.

Remove or secure all outdoor/balcony items. Fill vehicle gas tanks. Keep
important documents safe/accessible. Clean debris from gutters, storm
drains, sidewalks, and ditches near your quarters. Low lying area residents relocate vehicles to higher ground.

**TCCOR 2**- Winds of 50 knots sustained or greater are <u>anticipated</u> within 24 hours.

Continue securing outside items. Be prepared to cover broken windows.
 Sandbag door sills

**TCCOR 1**- Winds of 50 knots sustained or greater are <u>anticipated</u> within 12 hours.

 Move sensitive items away from windows or cover with plastic. Fill bathtub with water, turn refrigerator/freezer to coldest settings, and keep children home from DODEA schools if called prior to 0500.

Note: As TCCOR 1 progresses, NBG may execute internal TCCOR 1 sub-phases.

**TCCOR 1 Caution**- Winds of 35-49 knots sustained are occurring.

 All non-essential travel is suspended. Non-essential personnel should return to place of residence and remain indoors. Pick up children from CDC's/SAP within 1 hour. Monitor NBG Facebook for changes in TCCOR.

TCCOR 1 Emergency- Winds of 50 knots sustained or greater are occurring.

 All personnel will remain indoors and stay away from windows. Monitor NBG Facebook for emergency actions or changes in TCCOR.

**TCCOR 1 Recovery**- Winds of 50 knots sustained or greater are <u>no longer occurring</u>. Strong winds may still exist.

- Personnel should not leave their residence/shelter unless called into work by Unit Commander.
- Report all damage to Housing Maintenance at Guam Pacific Design Builders 24 hours Service desk numbers 671-473-2615 or 671-649-9572
- Report all facility damage to DZSP-21 Service Support Center at 333-2011.

# **EXTREME HEAT**

## What is Extreme Heat?

Extreme heat is defined as temperatures that are much hotter and/or humid than average for the region.

## **Extreme Heat Facts**

- In a normal year, approximately 600 Americans die from extreme heat.
   Young children, the elderly and those who are sick or overweight are more likely to become victims.
- People living in urban areas may be at a greater-risk from the effects of a prolonged heat wave than people living in rural regions. An increased health problem can occur when stagnant atmospheric conditions trap pollutants in urban areas, thus adding contaminated air to excessively hot temperatures.

# **Know the Terms**

<u>Heat Index</u>: A measure of how hot it feels when relative humidity is factored into the actual air temperature.

<u>Excessive Heat Outlook</u>: An excessive heat event is possible in the next three to seven days. If any advance preparations are necessary, do them now.

Excessive Heat Watch: Excessive heat could occur within the next 24 to 72 hours.

<u>Heat Advisory</u>: Excessive heat is imminent or Very likely within 12 hours. Take precautions to avoid heat illness.

<u>Excessive Heat Warning</u>: Excessive heat is imminent or very likely within 12 hours. The heat index will be high enough to be life-threatening - take precautions immediately.

### **Actions to Consider BEFORE Extreme Heat**

- Install window air conditioners snugly. Insulate if necessary, and check air -conditioning ducts for proper insulation.
- Install temporary window reflectors, such as aluminum foil-covered cardboard, to reflect heat back outside.
- Weather-strip doors and windows to keep cool air in.
- Cover windows that receive morning or afternoon sun with drapes, shades, awnings or louvers. Outdoor awnings or louvers can reduce the heat that enters a home by up to 80%.
- Keep storm windows installed all year.

- Create a 30-foot to 100-foot safety zone around your home. If your home sits on a steep slope, standard protective measures may not be enough.
- Remove dead branches that extend over the roof and remove vines from the walls of the home.
- Ask the power company to clear branches from power lines.
- Arrange temporary housing at a friend's or relative's home outside the threatened area.

# Actions to consider DURING a Wildfire

- If time allows, close windows, vents, doors, blinds or noncombustible
  window coverings and heavy drapes. Remove lightweight curtains. Shut
  off gas at the meter. Turn off pilot lights. Open the fireplace damper.
  Close the fireplace screen. Move flammable furniture into the center of
  the home away from windows and sliding glass doors. Fill tubs, sinks and
  other clean containers with water.
- Turn off propane tanks and place combustible patio furniture inside. Connect a garden hose to outside taps. Place lawn sprinklers on the roof and near aboveground fuel tank and turn them on. Place valuables that will not be damaged by water in a pool or pond.
- Back your car into the garage or park it in an open space facing the direction of escape. Shut doors and roll up windows. Leave the key in the ignition. Close garage windows and doors, but leave them unlocked. Disconnect automatic garage door openers.
- Confine pets to one room. Make plans to take your pets with you in case you must evacuate.
- If you are caught outside during a wildfire, crouch in a pond or river. Cover your head and upper body with wet clothing. If water is not around, look for shelter in a cleared area or among a bed of rocks. Lie flat and cover your body with wet clothing or soil. Breathe the air close to the ground through a wet cloth to avoid scorching your lungs or inhaling smoke.

#### Actions to consider AFTER a Wildfire

- Take care when reentering a burned area. Hot spots can flare up without warning.
- Check the roof immediately and extinguish any sparks or embers.
- Check the attic for hidden burning sparks.
- Continue checking areas in and around the home for smoke and sparks several hours after the fire is extinguished.

**TCCOR 4 All Clear**-The storm is over and not forecast to return and all life safety hazards have been mitigated and initial damage assessment completed

**Storm Watch**- Winds are not forecast to exceed 50 knots sustained but there still exists a probability of high winds due to the proximity of the storm. It is also close enough that a heightened alert status is necessary should the storm deviate from the forecast track.

Remain alert and monitor the radio. Exercise caution while outdoors.

# Saffir-Simpson Scale

Category	Sustained Winds	Damage	
1		Minimal Minor damage to exterior of homes Toppled tree branches, uprooting of smaller trees	
2	96-110 mph	Extensive Major damage to exterior of homes Uprooting of small trees and many roads blocked	
3	111-129 mph	<b>Devastating</b> Extensive damage to exterior of homes Many trees uprooted and many roads blocked	
4	130-156 mph	Catastrophic Loss of roof and/or some exterior walls Homes isolated due to debris pileup Power outages lasting for weeks to months	
5		Catastrophic Many homes destroyed Fallen trees and power lines isolate residential areas Power outages lasting for weeks to months	

# **Actions to Consider BEFORE a Typhoon**

- Bring in outdoor objects such as lawn furniture and toys. Anchor objects that cannot be brought inside.
- Secure your home by closing and boarding up the windows.
- Store drinking water in disinfected bathtubs, jugs, bottles and cooking pots.
- Review the evacuation plan and update or replenish your disaster supply kit. Do not wait until you are under a typhoon watch or warning to assemble your disaster supply kit.
- Make record of your personal property. Take photos or video of the exterior and interior of your home, including your personal belongings. Store these documents in a safe place. If you are directed to evacuate take the documents with you.

# **Actions to Consider DURING a Typhoon**

- Listen to local radio or television stations for progress reports
- Check the NBG Emergency Information Line: 671-339-6245
- Check the CJRM and NBG Facebook pages (as applicable) for emergency information.
- Turn the refrigerator and freezer to the coldest settings. Open them only when absolutely necessary and close them quickly.
- Take refuge in a small interior room, closet or hallway in your residence.
   If you are in a multiple-story building, go to the first or second floor, and stay in an interior room away from windows.
- Stay inside, away from windows, skylights and glass doors.
- Keep the curtains and blinds closed.
- Do not go outside when the eye passes over. Winds and rain will soon resume.

# **Actions to Consider AFTER a Typhoon**

- If you are in a safe location, stay there until it is announced that it is safe to leave.
- If you evacuated the community, do not return until authorities say it is safe to do so.
- Tune in to local radio and television stations for information about caring for your household, where to find medical help, how to apply for assistance, etc.
- Do not drink or prepare food with tap water until you are notified by officials that it is safe to do so.
- Talk to your children about what happened and what they can do to help.
- Stay away from downed power lines and report them to the power company.
- Open windows and doors to ventilate and dry your home.
- Drive only if it is absolutely necessary, and avoid flooded roads and washed-out bridges.
- Be aware that there may be glass, debris, power lines, fires, and potentially harmful items displaced from the typhoon. Check the area around your quarters, and help your neighbors as well, especially families of deployed members. Be sure to check common areas where children play. Base recovery crews check these areas, but it is always a good idea to double check just in case something was overlooked.

- If you have a safe or strong box, do not try to open it. It can hold intense heat for several hours. If the door is opened before the box has cooled, the contents could burst into flames.
- Call your insurance agent.
- If you need housing or food, contact your local disaster relief service, such as the American Red Cross or Salvation Army.

# **WILDFIRES**

What is a wildfire? A wildfire is an uncontrolled fire that burns in wildland vegetation, often in rural areas.

## Wildfire Facts

- Wildfires are usually indicated by dense smoke that fills the area for miles around.
- ♦ There are three different classes of wildfires:
- ♦ A *surface fire* is the most common type and burns along the floor of a forest, moving slowly and killing or damaging trees.
- A ground fire is usually started by lightning and burns on or below the forest floor.
- Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees.

As many as 90% of wildland fires are started by people.

Negligent human behavior, such as smoking in forested areas or improperly extinguishing campfires, is the cause of many fires. The other cause of forest fires is lightning.



# **Danger Zones**

- All wooded, brush and grassy areas.
- The central and southern areas of Guam experience wildfires in dry conditions annually.

# **Actions to Consider BEFORE a Wildfire**

- Consider installing protective shutters or heavy fire-resistant drapes.
- Keep on hand household items that can be used as fire tools: rake, axe, hand or chainsaw, bucket and shovel.
- Avoid using combustible building materials, such as wooden shakes and shingles. Use tile stucco, metal siding, brick, concrete block, rock or other fire-resistant materials.

# **Electrical Wiring**

- Inspect extension cords for frayed or exposed wires and loose plugs.
- Make sure outlets have cover plates and no wires are exposed.
- Do not overload extension cords or outlets. If you need to plug in two or more appliances, get an Underwriters Laboratories approved unit with a built-in circuit breaker.

#### Actions to Consider BEFORE a Fire

- Sleep with the doors closed to reduce potential exposure to smoke and flames.
- Ask your local fire department to inspect your residence.
- Develop and practice an escape plan. Ensure all family members know what to do in case of a fire, and choose a safe meeting place outside the house.
- Draw a floor plan with at least two ways of escaping every room. If you
  live in a multilevel home or residence, purchase a collapsible ladder and
  practice using it.
- Practice alerting other household members. It is a good idea to keep a bell and a flashlight in each bedroom for this purpose.
- Practice evacuating blindfolded and staying low to the ground. In a real fire situation, the smoke generated by a fire will most likely make it impossible to see.

## **Actions to Consider DURING a Fire**

- If your clothes catch on fire, stop, drop and roll until the fire is extinguished. Never run; this only makes the fire burn faster.
- If you must escape through a closed door, check for heat before opening
  it. Use the back of your hand to feel the top of the door, the doorknob
  and the crack between the door and door frame before you open it. If it is
  hot, do not open it; escape through a window. If you cannot escape, hang
  a white or light-colored sheet outside the window, alerting firefighters to
  your presence.
- Crawl low under any smoke to your exit heavy smoke and poisonous gases collect first along the ceiling.

# **Actions to Consider AFTER a Fire**

- Check for injuries and provide first aid and CPR if you are trained to do so.
- Do not enter a fire-damaged structure unless authorities say it is safe.
- Beware of structural damage; roofs and floors may have been weakened.

# **US Naval Hospital Guam Considerations**

During TCCOR 1 routine admissions to the US Naval Hospital and outpatient visits to the Branch Medical Clinic are suspended until the return to All Clear. Emergency care is still available at the Naval Hospital Emergency Room.

All expectant mothers who are within 39 to 40 weeks gestation are advised to report to the Naval Hospital. Please check in at the Information Desk. You will be residing in the hospital during the emergency phase of the storm. Bring all prescription medications, personal toilet articles, a pillow, a change of clothing, not more than \$20 for meals.

# **TORNADOES**

# What is a tornado?

A tornado is a violently rotating column of air that extends from the base of a thunderstorm to the ground. Characterized by a twisting, funnel-shaped cloud, a tornado is the most severe of all atmospheric storms.

# **Tornado Facts**

- Tornadoes may strike quickly with little or no warning.
- Tornadoes may appear nearly transparent until dust and debris are picked up or a cloud forms in the funnel.
- When a tornado is over water, it is called a waterspout.
- Tornadoes may also spawn as the eye of the typhoon moves away from the area.

#### **Know the Terms**

Tornado Watch: Issued when tornadoes are possible in your area.

<u>Tornado Warning:</u> Issued when a tornado has been sighted or indicated by weather radar.



# 👫 Warning and Danger Signs

- An approaching cloud of debris can mark the location of a tornado when a funnel is not visible.
- Before a tornado hits, the wind may die down and the air may become very still.
- You may hear the sound of a loud roar, similar to a freight train, or see large hail.

# **Actions to Consider BEFORE a Tornado**

- Pick a place where family members can gather if a tornado is headed your way. It might be your basement or, if there is no basement, a center hallway, bathroom or closet on the lowest floor.
- If you are in a high-rise building, you may not have enough time to go to the lowest floor. Find a place in a hallway near the center of the building.
- Above all, avoid exterior walls and windows.

# Actions to Consider DURING a Tornado

# If at Home

- Go at once to a windowless interior room, or the lowest level of the building.
- Get under and hold on to a piece of sturdy furniture such as a workbench, heavy table or desk.
- Use your arms to protect your head and neck.

# If at Work

- Go to an inside hallway at the lowest level.
- Avoid places with wide-span roofs, such as auditoriums, cafeterias or large hallways.
- Get under a piece of sturdy furniture and use your arms to protect your head and neck.

# If Outdoors

- Get inside a building or shelter, if possible.
- If shelter is not available or there is no time to get indoors, lie in a ditch or low-lying area and use your arms to protect your head and neck.

# If in a Vehicle

- Get out of the car immediately and take shelter in a nearby building.
- If there is no time to take shelter indoors, get out of the car and lie in a ditch or low-lying area away from the vehicle.

# Be aware of the potential for flooding

# **Actions to Consider AFTER a Tornado**

- Check for injuries and provide first aid and CPR if you are trained to do so.
- Watch out for broken glass and fallen power lines. Do not entered damaged areas until you are told it is safe to do so.
- Do not use candles or an open flame; combustibles may be present.
- Use caution when entering a damaged building

# STRUCTURE FIRES

What is a structure fire? A structure fire is a fire involving the structural components of various types of residential, commercial or industrial buildings.

## Fire Facts

- Fire is the most likely disaster that you and your family may encounter. In 2016, U.S. fire departments responded to an estimated 1,342,000 fires. These fires caused over 3,000 deaths and almost 15,000 injuries.
- ♦ The heat from a fire can melt clothes and scorch the lungs in a single breath. At floor level, temperatures average about 90 degrees Fahrenheit, but at eye level rise to 600 degrees.
- ♦ Most fires occur between midnight and the early morning hours when people are sleeping.
- ♦ Most fires are accidental, such as those caused by poor electrical wiring or careless behavior.

# Fire Extinguishers, Smoke Alarms and CO Detectors

- Install A-B-C type fire extinguishers in your home and teach family members how to use them.
- Smoke alarms and carbon monoxide (CO) detectors should be installed on every level of your residence, outside bedrooms on the ceiling or high on the wall, at the top of open stairways, or at the bottom of enclosed stairs, and near (but not in) the kitchen.
- Smoke alarms and CO detectors should be tested and cleaned once a month and the batteries should be replaced once a year.
- Smoke alarms and CO detectors should be replaced every 10 years.



# Warning and Danger signs

# Flammable Items

- Never use gasoline, kerosene or similar flammable liquids indoors. Store them in approved containers in well ventilated storage areas.
- Discard all rags or materials that have been soaked in flammable liquids outdoors in a metal container.

# Matches and Smoking

- Store matches and lighters in a locked cabinet, away from children.
- Never smoke in bed or when you are drowsy or medicated.
- Douse cigarette and cigar butts with water before disposal.

 Because of their intense heat, lava flows are extreme fire hazards. Lava flows destroy everything in their path, but most move slowly enough that people can get out of the way.



# **Danger Zones**

♦ The immediate danger area around a volcano covers approximately a 20-mile radius. However it can extend as far as 100 miles or more.

# **Actions to Consider BEFORE an Eruption**

- Create an evacuation plan for your family and have a backup route in mind.
- Determine an out-of-town relative that all family members can use as a contact if separated.
- Determine a safe shelter for animals and livestock.
- Assemble a disaster supply kit.
- Purchase goggles and a disposable mask to be used during ash fall.

# **Actions to Consider DURING an Eruption**

# If Indoors

- Close all windows, doors and ventilation in the house during an ash fall.
- Stay indoors until the ash has settled, unless there is a danger of the roof collapsing.

# If Outdoors

- Evacuate immediately if you are close to the volcano to avoid flying debris, hot gases, ash, a lateral blast and lava flow. If evacuation is not possible, seek shelter indoors.
- Avoid areas downwind from the volcano to avoid volcanic ash.
- Avoid river valleys and low-lying areas where poisonous gases and lava flows can collect.

# **Actions to Consider AFTER an Eruption**

- Stay away from volcanic ash fall areas if possible. If you are in an ash fall area, cover your mouth and nose with a mask, keep your skin covered and wear goggles to protect your eyes.
- Avoid contact with any amount of ash if you have respiratory ailments.
- Clear roofs of ash fall. Ash fall is very heavy and can cause the roof to collapse.
- Do not drive through ash fall. It is easily stirred up and can clog automotive filters, causing your vehicle to stall.

# THUNDERSTORMS and LIGHTNING

# What is a Thunderstorm?

A thunderstorm is formed from a combination of moisture, rapidly rising warm air and a force capable of lifting air, such as a warm or cold front, a sea breeze or a mountain.

# **Thunderstorm Facts**

- Thunderstorms may occur singly, in clusters or in lines.
- A thunderstorm is classified as severe if it produces hail at least one inch in diameter, has winds of 58 mph higher or produces a tornado.
- All thunderstorms contain lightning. The rapid heating and cooling of air near the lightning causes thunder.

# What is lightning?

Lightning is an electrical discharge that results from the buildup of positive and negative charges within a thunderstorm. When the buildup becomes strong enough, lightning appears as a bolt. If you can hear thunder, you are close enough to the storm to be struck by lightning

# **Lightning Facts**

- Energy from a lightning bolt heats the air to around 18,000 degrees Fahrenheit.
- It is a myth that lightning never strikes twice in the same place. In fact, lightning will strike several times in the same place in the course of one discharge.
- Remember the 30/30 lightning safety rule: Go indoors if, after seeing lightning, you cannot count to 30 before hearing thunder. Stay indoors for at least 30 minutes after hearing the last clap of thunder.
- Rubber-soled shoes and rubber tires do not provide protection from lightning. However, the steel frame of a hard-topped vehicle provides increased protection if you are not touching metal.

#### Know the terms

<u>Severe Thunderstorm Watch</u>: Issued when conditions are favorable for the formation of severe thunderstorms.

<u>Severe Thunderstorm Warning:</u> Issued when a severe thunderstorm has been sighted or indicated by weather radar.



# **Warning and Danger Signs**

- Thunderstorms and lightning can occur throughout the island
- Look for darkening skies, flashes of light, the sound of thunder or increasing wind.

# **Actions to Consider BEFORE a Thunderstorm**

- Secure outdoor objects, such as lawn furniture, and take light objects inside.
- Look around your home and remove dead or rotting trees and branches that could fall and cause injury or damage.

# **Actions to Consider DURING a Thunderstorm**

# If Indoors

- Do not handle any electrical equipment or corded telephones because lightning could follow the wire.
- Television sets are particularly dangerous at this time.
- Avoid bathtubs, water faucets and sinks because metal pipes can transmit electricity.
- Turn off the air-conditioning system.
- Draw the blinds and shades over all the windows.

# If Outdoors

- If you are boating or swimming, get to land and find shelter immediately. Attempt to get into a building or car. If no structure is available, get to an open space and squat low to the ground as quickly as possible.
- If you are in the woods, find an area protected by a low clump of trees
   never stand underneath a single large tree in the open.
- Avoid tall structures, such as towers, fences, telephone lines or power lines.
- Stay away from natural lightning rods, such as golf clubs, tractors, fishing rods, bicycles, etc.
- If you feel your hair stand on end (which may indicate that lightning is about to strike you), bend forward, putting your hands on your knees. Crouch with feet together and remove all metal objects. Do not lie flat on the ground.

- If you hear an official tsunami warning or detect signs of a tsunami, evacuate at once to high ground.
- If you are in or near a high-rise building, vertically evacuate to a level above the second floor.
- Stay away from the beach. If you can see the wave, you are too close to escape. Do not assume that when the first wave passes, the danger is over. Additional waves may follow.

# **Actions to Consider AFTER a Tsunami**

- Provide first aid and CPR if you are trained to do so.
- Return home only after authorities advise it is safe to do so.
- Stay out of your residence if water remains around it. Tsunami waters, like flood waters, can undermine foundations, causing buildings to sink, floors to crack or walls to collapse.
- Watch out for animals, especially poisonous snakes that may have come into buildings with the water.
- Open the windows and doors to help dry your home.
- Shovel out mud while it is still moist to give walls and floors an opportunity to dry.

# **VOLCANOES**

## What is a Volcano?

A volcano is a mountain that opens downward to a reservoir of molten rock below the surface of the earth.

#### **Volcano Facts**

- Unlike most mountains that are pushed up from below, volcanoes are built up by an accumulation of their own eruptive products, such as lava, ash flows, airborne ash, and dust.
- An eruption occurs when pressure from gases and the molten lava rock becomes strong enough to cause an explosion. Gases and rocks shoot up through the opening and spill over or fill the air with lava fragments.
- Volcanic eruptions can hurl hot rocks over 20 miles. Lava flows, airborne ash and noxious fumes can spread 100 miles.
- Sideways directed volcanic explosions, known as lateral blasts, can shoot large pieces of rock at very high speeds for several miles. These explosions can kill by impact, burial or heat. They have been known to knock down entire forests

#### **Know the Terms**

<u>Tsunami Information Statement:</u> An earthquake or tsunami of interest to people in the area has occurred. Usually there is no threat of a destructive tsunami, so no action is necessary at this time.

<u>Tsunami watch:</u> A tsunami may later impact the watch area. Prepare for possible evacuation if the watch is upgraded to a warning.

<u>Tsunami Advisory</u>: A tsunami with the potential to generate strong currents or waves dangerous to those in or very near the water is imminent, expected or occurring. Significant inundation is not expected for areas under an advisory, but stay away from beaches.

<u>Tsunami Warning:</u> A tsunami with the potential to generate widespread inundation is imminent, expected or occurring. Dangerous coastal flooding with powerful currents is possible and may continue for several hours after initial arrival. Evacuate to high ground or inland.



# **Warning and Danger signs**

- Tsunamis can be caused by an underwater disturbance or an earthquake.
   People living along the coast should consider an earthquake or a sizable ground rumbling as a warning signal.
- Find protection for you and your family when an earthquake strikes. When the shaking stops, gather your family members and evacuate quickly to high ground away from the coast. Leave everything else behind. A tsunami may be coming within minutes.
- Watch for a noticeable rapid rise or fall in coastal waters

# Actions to Consider BEFORE a Tsunami

- Avoid living within several hundred feet of the coastline.
- Make a list of items to bring inside in the event of a tsunami advisory.
- Assemble a disaster supply kit.
- Learn evacuation routes. For more information about tsunami evacuation zones, go to: <a href="https://www.ghs.guam.gov">https://www.ghs.guam.gov</a>
- Follow flood preparedness precautions.
- Have an engineer check your residence and advise on ways to make it more resistant to tsunami water.

# **Actions to Consider DURING a Tsunami**

Avoid downed power lines and stay away from buildings and bridges;
 heavy objects might fall during an aftershock.

# If in a Vehicle

 Pull safely onto the shoulder of the road away from any trees that could possibly fall on your vehicle; turn on your emergency flashers and stay in your vehicle.

# Struck by Lightning

- People struck by lightning do not carry an electrical charge and can be handled safely. Have someone dial 911 or your local EMS number. If the victim is burned, provide first aid and call emergency medical assistance immediately. Look for burns where lightning entered and exited the body.
- If the strike caused the victim's heart and breathing to stop, provide CPR until medical professionals arrive and take over.

# Actions to Consider AFTER a Thunderstorm

- Call 911 to report life-threatening emergencies only, not damage or power outages.
- Help your neighbors who may require special assistance infants, the elderly and people with access and functional needs.
- Drive only as necessary. Debris and washed-out roads may make driving dangerous.
- Report property damage to your insurance agent immediately.

# **FLOODING**

# What is a Flood?

A flood is an overflow or deluge of water that causes or threatens loss of life and property and damages the environment.

#### Flood Facts

- Flood effects can be local, affecting a neighborhood or community, or very large, affecting entire river basins and huge areas.
- Overland flooding occurs outside a defined river or stream, such as when a levee is breached, but can still be destructive.
- Flooding can also occur when a dam breaks, producing effects similar to flash floods.
- Two feet of rushing water can carry away most vehicles, including SUVs and pickups.
- Typhoons, tsunamis and tropical storms are common causes of flooding.

## **Know the Terms**

Flood Watch: Flooding is possible.

<u>Flash Flood Watch:</u> Flash flooding is possible. Be prepared to move to high ground.

<u>Flood warning:</u> Flooding is occurring or will occur soon; if advised to evacuate, do so immediately'

<u>Flash flood warning</u>: A flash flood is occurring; seek high ground on foot immediately



# **Danger Zones**

• Be aware of flood hazards no matter where you live, but especially if you live in a low-lying area, near water or downstream from a dam.

# **Actions to Consider BEFORE a Flood**

- Avoid building in a flood-prone area unless you elevate and reinforce your home. Elevate the washer, dryer, furnace, water heater, and electrical panel 12 inches above projected flood levels.
- Install "check valves" in sewer traps to prevent floodwater from backing up into the drains of your home.
- Construct barriers (e.g. levees, berms, floodwalls) to stop floodwater from entering the building.
- Seal walls in basements with waterproofing compounds to avoid seepage.

# **Actions to Consider DURING a Flood**

• If there is any possibility of a flash flood, move immediately to high ground. Do not wait for instructions to move.

#### If You Are Directed to Evacuate

- Secure your home. If you have time, bring in outdoor furniture. Move essential items to an upper floor.
- Turn off utilities if you are instructed to do so.
- Disconnect electrical appliances. Do not touch electrical equipment if you are wet or standing in water.
- Do not walk through moving water. Six inches of moving water can make you fall. If you must, walk where it is not moving and use a stick to check the firmness of the ground in front of you.
- Do not drive into flooded areas. If floodwaters rise around your car, abandon the car and move to high ground, if you can do so safely.

- Be aware that some earthquakes are actually foreshocks a larger earthquake may occur'
- Open cabinets cautiously; objects can fall off shelves.
- Be aware of possible tsunamis if you live near the coast.
- Understand that pets' behaviors may change dramatically after an earthquake. Normally quiet and friendly cats and dogs may become aggressive or defensive. Leash dogs and place them in a fenced yard.

# **TSUNAMI**

# What is a Tsunami?

A tsunami is a series of waves generated by an undersea disturbance, such as an earthquake or seaquake.

## **Tsunami Facts**

- On 12 March 2011, an earthquake and tsunami caused severe and extensive structural damage in northeastern Japan, including heavy damage to roads and railways, fires in many areas and a dam collapse. A Japanese national police agency report confirmed 15,861 deaths, 6,107 injured and 3,018 missing people across twenty prefectures. Also, 129,225 buildings were reported to have totally collapsed with a further 254,204 buildings having "half collapsed" and another 691,766 buildings being partially damaged.
- ◆ As a tsunami nears the coastline, it may grow to a great height and smashes into the shore, causing great destruction.
- ◆ Tsunamis can originate hundreds or even thousands of miles away from coastal areas. Local geography may intensify the effect of a tsunami.
- ♦ Although most tsunami waves are less than 10 feet high, tsunamis reaching heights greater than 100 feet have been recorded.
- Tsunamis arrive as a series of successive crests (high water levels) and troughs (low water levels). These successive crests and troughs can occur anywhere from five to 90 minutes apart. They usually occur I0 to 45 minutes apart and the wave speed in the open ocean will average 450 mph.
- Since 1945, more people have been killed as a result of tsunamis than as a direct result of an earthquake's ground-shaking. Most deaths during a tsunami are a result of drowning.
- ◆ Tsunamis most frequently come on shore as a rapidly rising, turbulent surge of water choked with debris.

# Actions to Consider DURING an Earthquake

# If Indoors

- Drop, cover and hold on! Move only a few steps to a nearby safe place, under a sturdy table or desk, or standing in a corner. Do not stand under a doorway.
- Stay indoors until the shaking stops and you are sure it is safe to exit.
- Do not use the elevators or expect the fire alarms and sprinklers to go off
  if you are in a high-rise building.
- Stay away from glass, windows, outside doors and walls, and anything that could fall, such as light fixtures or furniture.
- If you are in bed, stay there. Hold on and protect your head with a pillow.
   If there is a heavy light fixture that could fall on you, move to the nearest safe place.

# If Outdoors

- Move into the open, away from buildings, streetlights and utility wires.
- Once in the open, stay there until the shaking stops.

# If in a Vehicle

- Stop as quickly and safely as possible, and remain in your vehicle.
- Avoid stopping near or under buildings, trees, overpasses and utility wires.
- Proceed cautiously once the earthquake has stopped, watching for road and bridge damage.

# *If trapped under Debris*

- Do not light a match or lighter.
- Do not move about or kick up dust.
- Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so rescuers can locate you or use a whistle if one is available.
- Shout only as a last resort shouting can cause you to inhale dangerous amounts of dust.

# Actions to consider AFTER an Earthquake

- Provide first aid and CPR if you are trained to do so
- Be prepared for aftershocks, which can occur in the first hours, days, weeks, and even months after the quake.
- Aftershocks can cause further damage to weakened buildings

#### Actions to Consider AFTER a Flood

- Listen for news reports to learn whether your community's water supply is safe to drink.
- Avoid floodwaters; water may be contaminated by oil, gasoline or raw sewage. Water may also be electrically charged from underground or downed power lines. Play it smart, play it safe. Whether driving or walking, any time you come to a flooded road, turn around immediately.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse.
- Return home only when authorities indicate it is safe.
- Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.
- Damaged sewage systems are serious health hazards. Service septic tanks, etc., as soon as possible.
- Clean and disinfect everything that got wet. Mud left from floodwaters can contain sewage and chemicals.

# **LANDSLIDES**

## What Is a Landslide?

A landslide is a mass of rock, earth or debris moving down a slope. Landslides are activated by rainstorms, earthquakes, volcanic eruptions, fires and human modification of the land.

# **Landslide Facts**

- Landslides may be very small or very large and can move at slow to very high speeds.
- Landslide problems can be caused by land mismanagement, particularly in mountain, canyon, and coastal regions.



# **Danger Zones**

- Landslides may occur in all U.S. states/territories.
- Outside walls, walks or stairs begin pulling away from the building.
- Slowly developing, widening cracks appear on the ground or on paved areas, such as streets or driveways.
- Bulging ground appears at the base of a slope.
- Fences, retaining walls, utility poles or trees tilt or move.
- The ground slopes downward in one specific direction and may begin shifting in that direction under your feet.



# **Danger Zones** (continued)

• Be alert for sudden increases or decreases in water flow and a change from clear to muddy water if you are near a stream or channel.

# **Actions to Consider BEFORE a Landslide**

- Plant ground cover on slopes and build retaining walls.
- Listen to local radio or television stations for warnings of intense rainfall.
- Be prepared to evacuate in case you are instructed to do so.
- Listen for unusual sounds, such as trees cracking or boulders knocking.

# Actions to consider DURING a Landslide

# If Indoors

- Stay inside. Move to a second story if possible.
- Take cover under a desk, table or other piece of sturdy furniture.

# If Outdoors

- Get out of the path of the landslide or mudflow. Run to the nearest high ground in a direction away from the path. Do not delay! Save yourself, not your belongings.
- Run for the nearest shelter, such as a group of trees or a building, if rocks and other debris are approaching.
- Curl into a tight ball and protect your head if escape is not possible.

# Actions to Consider AFTER a Landslide

- Stay away from the slide area; there may be danger of additional slides.
- Check for injured or trapped persons near the slide area. Provide first aid and CPR if you are trained to do so.
- Listen to local radio or television stations for the latest emergency information.
- Help a neighbor who may require special assistance large families, children, the elderly, and individuals with access and functional needs.
- Check the building foundation, chimney and surrounding land for damage. Be especially careful of downed power lines and gas lines that may have ruptured.
- Replant the damaged ground as soon as possible since the erosion caused by loss of ground cover can lead to flash flooding.

# **EARTHQUAKES**

# What is an Earthquake?

An earthquake is a sudden, rapid shaking of the ground caused by the breaking and shifting of rock beneath the Earth's surface.

# **Earthquake Facts**

- Earthquakes strike suddenly, without warning and can occur at any time of the year, day or night.
- On a yearly basis, 70 to 75 damaging earthquakes occur throughout the world.
- Ground movement during an earthquake is rarely the direct cause of death or injury. Most earthquake-related deaths result from collapsing walls, flying glass and falling objects.
- Most injuries during earthquakes occur when people are hit by falling objects when entering or exiting buildings.



# **Danger Zones**

- Guam rises out of the Western Pacific ocean along the Marianas Trench.
- In Guam there is only one type of earthquake: tectonic
- Earthquakes happen often; however, the majority of them are too small to be felt.

# Actions to consider BEFORE an Earthquake

- Fasten shelves securely to walls. Store breakable items (e.g., bottled foods, glass, and china) in low closed cabinets with latches.
- Hang heavy items (e.g., pictures, mirrors) away from beds, couches and anywhere else people sit.
- Brace overhead light fixtures.
- Secure your water heater by strapping it to the wall studs and bolting it to the floor.
- Store flammable products securely on the bottom shelves of closed cabinets with latches.
- Choose a safe place in every room (e.g., under a sturdy table or against an inside wall) where nothing can fall on you (e.g., mirrors, pictures, heavy bookcases).