



EVERYONE SHOULD BE READY...



... ARE YOU?

AIR FORCE EMERGENCY PREPAREDNESS GUIDE



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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 Air Force 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 loved ones before, during, and after a disaster. Contact your unit emergency management representative or your installation's Office of Emergency Management for more information. Keep this guide handy for quick consultation.

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WHY SHOULD I PREPARE?

Everyone should have a plan.

Disasters come in many forms; explosions, hurricanes, tornadoes, and others. Being prepared can reduce fear, anxiety, and losses that accompany these disasters. Individuals, families, and communities should know what to do in the event of a fire and where to seek shelter during a tornado. Knowing what to expect and how to prepare makes any crisis more manageable.

START PREPARING TODAY

*Take these three simple steps to prepare —
Get a Kit, Make a Plan, Be Prepared*

Get a Kit - Assemble a collection of first aid supplies, food, water, medicines, and important papers that can sustain you and your family until the emergency passes.

Make a Plan - You and your family members may not be together when an emergency strikes. Planning ahead will improve your chances of keeping in touch, staying safe, and quickly reuniting.

Be Prepared - Anticipate emergencies most likely to affect you and your family. This guide will help you think through the basics of preparing yourself and your family for all hazards.





Chapter 1: Basic Preparedness

Section 1.1	Getting Informed	2
Section 1.2	Emergency Planning And Checklist	4
Section 1.3	Assemble An Emergency Supply Kit	6
Section 1.4	Sheltering	8

Chapter 2: Natural Disasters

Section 2.1	Thunderstorms And Lightning	10
Section 2.2	Tornadoes	12
Section 2.3	Floods	14
Section 2.4	Hurricanes / Typhoons	16
Section 2.5	Earthquakes	20
Section 2.6	Tsunamis	22
Section 2.7	Volcanoes	24
Section 2.8	Landslides And Mudflows	26
Section 2.9	Extreme Heat	28
Section 2.10	Wildfires	30
Section 2.11	Winter Storms And Extreme Cold	32

Chapter 3: Man-Made Incidents

Section 3.1	Major Accidents	36
Section 3.2	Home Fires	38
Section 3.3	Terrorism	40
Section 3.4	Active Shooter	44
Section 3.5	Hazardous Materials (HAZMAT) Incidents	48

Chapter 4: Technological Incidents

Section 4.1	Nuclear Power Plants	52
-------------	----------------------	----

Chapter 5: After A Disaster

Section 5.1	Recovering From Disaster	56
-------------	--------------------------	----

Tear Away Sheets

Numbers & Sites	59
Emergency Supply Kit	61
Family Emergency Plan	63
Emergency Notification Signals	65

CHAPTER 1

BASIC PREPAREDNESS





GETTING INFORMED

Hazards

Learn about location-specific hazards that may strike your community, the risks you face from these hazards, and your community's plans for warning and evacuation. You can obtain this information from your unit emergency management representative or your Installation's Office of Emergency Management. In addition to your community's warning and evacuation plans, it is important to know what is in place for your workplace and your children's school or daycare center.

Warning Systems and Signals

- Ask your unit emergency management representative about methods used to warn your community.
- The Emergency Alert System (EAS) can address the entire nation on very short notice in case of a grave threat or national emergency. Ask if your local radio and TV stations participate in the EAS.
- National Oceanic & Atmospheric Administration (NOAA) Weather Radio is a nationwide network of radio stations broadcasting continuous weather information directly from a nearby National Weather Service office to specially configured NOAA weather radio receivers. Determine if NWR is available where you live. If so, consider purchasing a NWR receiver.
- Wireless Emergency Alerts (WEA) send free informational text messages to WEA-enabled mobile devices within range of an imminent and dangerous local situation, severe weather event, or AMBER emergency. You do not need to register to receive WEA notifications. You will automatically receive alerts if you have a WEA-capable device and your wireless carrier participates in the program. Contact your carrier to find out if your mobile device is capable of receiving WEA alerts.

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IN THE UNITED STATES, THE MAIN AGENCIES THAT WARN OF NATURAL HAZARDS ARE THE NATIONAL WEATHER SERVICE (NWS) AND THE U.S. GEOLOGICAL SURVEY (USGS). NWS USES THE FOLLOWING TERMS FOR SPECIFIC NATURAL HAZARDS:

WATCH- Conditions are favorable for a hazard to develop or move in.
Stay Informed.

WARNING- A hazardous event is occurring or imminent.
Take immediate protective action.

SEE NOTIFICATIONS SIGNAL TEAR-AWAY SHEET ON PAGE 65.



Evacuating You and Your Family

If community evacuations become necessary, local officials provide information to the public through the media. In some circumstances other warning methods, such as sirens or telephone calls, are also used.

The amount of time you have to leave will depend on the hazard. If the event is a weather condition, such as a hurricane that can be monitored, you might have a day or two to get ready. However, many emergencies allow no time for people to gather even the most basic necessities, which is why planning ahead is essential.

ASK YOUR UNIT EMERGENCY MANAGEMENT REPRESENTATIVE ABOUT LOCAL EMERGENCY EVACUATION ROUTES.

Utility Shut-off and Safety

Contact your utility companies (natural gas, water, electrical, etc.) for shut-off requirements and be sure to keep a copy of the instructions handy.

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 purchasing 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 (888) 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 insurance policies, deeds, and property records in a safe place, such as a safety deposit box away from your home. Make copies of important documents for your emergency supply kit.
- Consider saving money in an emergency savings account that could be used in any crisis. It is advisable to keep a small amount of cash or traveler's checks at home in a safe place where you can quickly access them in case of evacuation.

The Elderly and People with Special Needs

If you or someone in your family is elderly, has a disability, or a special need, you may have to take additional steps to protect yourself and your family in an emergency (e.g., special arrangements to receive warnings, transportation to a shelter, etc.). Find out what special assistance may be available on your installation or in your community.

Safety Skills

Ensure that you and other family members know how to use a fire extinguisher and how to administer first aid and CPR.

Caring for Animals

- Animals are also affected by emergencies. Plan for your pet's needs by identifying shelter, gathering pet supplies, and ensuring your pet has proper ID and up-to-date vaccination records.
- Have a pet carrier and leash on hand for smaller animals.
- Remember pets are not allowed in most shelters.
- Make proper arrangements for livestock.





ASSEMBLE AN EMERGENCY SUPPLY 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. Ensure each kit includes enough supplies for at least three days.

Here are Some Basic Items to Consider for a Home Emergency Kit:

- Water—at least one gallon per person per day for at least three days (consider altitude, climate conditions, and any special family needs).
- Nonperishable food for at least three days (select items that require no preparation, refrigeration, or cooking such as high energy foods and ready-to-eat canned meat, vegetables, fruit).
- Manual can opener.
- A whistle (to signal for help).
- First aid kit and manual.
- Special needs items, such as prescription medications.
- Filter mask (or cotton t-shirt) to help filter the air.
- Personal sanitation supplies, such as moist towelettes, garbage bags, and plastic ties.
- Hand-crank or battery operated flashlight and All-hazards NOAA (National Oceanic and Atmospheric Administration) weather radio.
- Cell phone with chargers, inverters, or solar charger.
- Any tools needed for turning off utilities.
- Local maps and your family emergency plan.
- Your command reporting information — know the Air Force Personnel Accountability and Assessment System (AFPAAS).
- Important documents.
- If power goes out for an extended amount of time, cash might be the only form of currency accepted.



Essential Items for Those at OCONUS Installations

- Passports and birth certificates.
- Cash in local currency.
- Card with local translations of basic terms.
- An electrical current converter.

Other Items That Could Prove Helpful

- Fire extinguisher.
- Tools needed to turn off utilities.
- Matches in a waterproof container.
- Paper plates, paper cups, plastic utensils, and paper towels.
- Coats and rain gear.
- Sleeping bags or other bedding.
- A weather-appropriate change of clothes for each person.
- Books, games, puzzles, toys, and other activities for children.

Maintaining Your Emergency Supply Kit

Just as important as putting your supplies together is maintaining them so they are safe to use when needed. A couple of tips for ensuring your supplies are ready and in good shape include:

- Change stored food and water supplies every six months. Be sure to write the date you store it on all containers.
- Re-think your needs every year and update your kit as your family needs change.



SHELTERING

If advance warning and other circumstances permit, the preference for nonessential and non-emergency personnel is evacuation using specified routes and transportation methods. Installations have plans and procedures to direct evacuation of personnel and family members to a safe place or a designated shelter.

Safe and effective evacuation requires planning ahead—there may be no advance warning. You should plan primary and alternative evacuation routes in advance, with appropriate maps to take along in your emergency supply kit.

Moving to Shelter

A shelter is a publicly identified, certified, supplied, and staffed facility where people can find temporary protection for a limited time. Installations coordinate shelter needs with appropriate state, local, host-nation, and private agencies. The American Red Cross is the principal U.S. resource for development, management, and operation of certified shelters.

Sheltering-in-Place

In some instances, evacuating or moving to a shelter is more dangerous than remaining where you are. When there is a short- or no-notice emergency such as a hazardous materials incident, you may be directed to shelter-in-place. This means take temporary protection in a structure or vehicle, typically your workplace or residence. It is important to know for different emergencies which part of a building is safest and how best to keep the air safe to breathe.

- Make sure you have an emergency supply kit.
- Bring small animals inside.
- Stay tuned to radio or television for updates.



Using a Generator-

If you plan to use a generator, make sure to only operate it outside. Connect the equipment and appliances you want to power directly to the outlets on the generator.

CHAPTER 2

NATURAL DISASTERS



THUNDERSTORMS AND LIGHTNING

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.

What is a Thunderstorm?

A thunderstorm is formed by a combination of moisture, rapidly rising warm air, and a force capable of lifting the warm air. Typically these forces are warm or cold fronts, sea breeze, or air forced over mountains.

Thunderstorm Facts

- Thunderstorms may occur singularly, in clusters, or in lines.
- Thunderstorms are classified severe if they produce hail at least $\frac{3}{4}$ of an inch in diameter, have winds of at least 58 miles per hour or higher, or if they produce 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

- A bolt of lightning reaches a temperature approaching 50,000 degrees Fahrenheit in a split second.
- 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.
- Lightning kills 75-100 Americans each year and thousands more world-wide.

Danger Zones

- While thunderstorms and lightning can be found throughout the U.S., they are most likely to occur in the central and southern states.
- The state with the highest number of thunderstorms is Florida.

DID YOU KNOW?

On average, the United States gets 100,000 thunderstorms per year. Lightning kills more people each year than tornadoes or hurricanes.





Know the Terms

Severe Thunderstorm Watch -

Severe thunderstorms are possible in and near the watch area. Stay informed and be ready to act if a severe thunderstorm warning is issued.

Severe Thunderstorm Warning -

Severe weather has been reported by spotters or indicated by radar. Warnings indicate imminent danger to life and property.



Warning and Danger Signs

Look for darkening skies, flashes of light, the sound of thunder, or increasing wind.



Actions to Consider

BEFORE a Thunderstorm

- Secure objects such as lawn furniture and take light objects inside.
- Survey around your home and remove dead or rotting trees and branches that could fall and cause injury and damage.
- Bring small outdoor pets inside and ensure livestock have secure shelter.



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 your air conditioner.
- Draw blinds and shades over windows.

If Outdoors

- Find shelter immediately. Attempt to get into a building or vehicle. 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 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.

If Someone is Struck by Lightning

People struck by lightning carry no electrical charge and can be handled safely. Have someone dial 911 (or equivalent) or your local EMS number. Look for burns where lightning entered and exited the body and provide first aid. 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 (or equivalent) to report life-threatening emergencies only, not damage or power outages.
- Help your neighbors who may require special assistance — infants, elderly, and people with disabilities.
- Drive only as necessary. Debris and washed-out roads may make driving dangerous.
- Report property damage to your insurance agent immediately.

FLOODING CAN ALSO OCCUR DURING THIS INCIDENT.
PLEASE REVIEW SECTION 2.3 FOR FURTHER INFORMATION.

TORNADOES

What is a Tornado?

A tornado is a violent windstorm characterized by a twisting, tunnel-shaped cloud. It is spawned by a thunderstorm (or sometimes a result of a hurricane) and produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly.

Tornado Facts

- In the U.S., tornado season is generally March through August, although tornadoes can occur at any time of year.
- They may strike quickly with little or no warning.
- Over 80 percent of all tornadoes strike between noon and midnight. They can last as little as one minute or over an hour.
- They may appear nearly transparent until dust and debris are picked up or a cloud forms in the funnel.
- Injuries or deaths most often occur as buildings collapse, when people are hit by debris, and as people try to escape the storm.
- According to the National Weather Service, about 42 people are killed because of tornadoes each year.
- When a tornado is over water, it is called a waterspout.
- Mobile homes are particularly vulnerable to damage during a tornado. A mobile home can overturn easily even if it is tied down. When a tornado watch is issued, take shelter in a building with a strong foundation.
- Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado.

Danger Zones

Although all U.S. states are subject to tornadoes, Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Mississippi, Missouri, Nebraska, Oklahoma, South Dakota, and Texas are at the greatest risk.

Enhanced Fujita Scale for Tornado Damage



EF-0	EF-1	EF-2	EF-3	EF-4	EF-5
65-85 mph	86-110 mph	111-135 mph	136-165 mph	166-200 mph	+200 mph

DID YOU KNOW?

Tornadoes have been reported in every state in the U.S. and also in every season.



Know the Terms

Tornado Watch - Issued when conditions are favorable for the formation of tornadoes.

Tornado Warning - Issued when a tornado has been sighted by weather radar.

Warning and Danger Signs

- An approaching cloud of debris can mark the location of a tornado even if 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 could gather if a tornado is headed your way. Safe places to consider include a basement, center hallway, bathroom, or closet on the lowest floor. Above all, avoid exterior walls and windows.
- 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.

Actions to Consider DURING a Tornado

If at Home

- Go at once to a windowless, interior room, storm cellar, basement, or the lowest level of the building.
- Get under and hold onto a piece of sturdy furniture such as a workbench, heavy table, or desk and use your arms to protect your head and neck.
- Get out and find shelter elsewhere if in a mobile home.

If at Work

- Go to the basement or to an inside hallway at the lowest level.
- Avoid places with wide-span roofs such as auditoriums, cafeterias, or large hallways.
- Get under and hold onto 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 if there is not 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

- Never try to outrun a tornado. Get out of the vehicle immediately and take shelter in a nearby building.
- If there is not time to get indoors, get out of the vehicle 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 trained to do so.
- Watch out for broken glass, fallen power lines, and do not enter damaged areas until 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.
- Report property damage to your insurance agent immediately.

FLOODS

What is a Flood?

A flood is an overflow of an expanse of water that submerges land. All floods are not alike. Some can develop slowly during an extended period of rain, or in a warming trend following a heavy snow. Others, such as flash floods, can occur quickly, even without any visible signs of rain.

Flood Facts

- Floods are the most common and widespread of all natural disasters outside of fire.
- Ninety percent of all presidential-declared U.S. natural disasters involve flooding.
- Flooding caused more than \$4 billion a year in losses and 2,200 deaths in the U.S. during the 1990's.
- There is a 26 percent chance of experiencing a flood during the life of a 30 year mortgage (more than 6 times the likelihood of a fire).
- Even minor flooding can cost thousands of dollars in losses and repairs, and flood damage is virtually never covered by standard homeowners insurance.
- Florida residents and businesses hold more than 40 percent of all flood insurance policies in the nation.

Danger Zones

- Floods occur within all 50 U.S. states (they can occur anytime, anywhere).
- Communities particularly at risk are those in low lying areas, coastal areas, or downstream from large bodies of water. Even a very small stream or dry creek bed can overflow and create flooding.



*Information
about floods, risk
of financial loss
due to flooding,
and flood
insurance:*

FloodSmart.gov

DID YOU KNOW?

Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV's) and pick-ups.



Know the Terms

Flood Watch- Flooding is possible. Tune in to NOAA Weather Radio, local radio or television for information.

Flash Flood Watch - Flash flooding is possible. Be prepared to move to higher ground; listen to the NOAA Weather Radio, local radio or television for information.

Flood Warning - Flooding is occurring or will occur soon. If advised to evacuate, do so immediately.

Flash Flood Warning - A flash flood is occurring. Seek higher ground on foot immediately.

Actions to Consider BEFORE a Flood

- Stay tuned to radio or television for updates.
- Be aware of streams, drainage channels, canyons, and other areas known to flood suddenly. Flash floods can occur in these areas with or without such typical warnings as rain clouds or heavy rain.
- If your home is prone to flooding, move your furnace, water heater and electric panel to higher floors.
- Avoid building in a floodplain unless you elevate and reinforce your home.
- Install “check valves” in sewer traps to prevent flood water from backing up into home drains.
- Construct barriers (levees, beams, floodwalls) to stop floodwater from entering the building.
- Seal basement walls with waterproofing compounds to avoid seepage.
- Consider purchasing flood insurance.

Actions to Consider DURING a Flood

- Stay tuned to radio or television for updates.
- Be aware that flash flooding can occur. If there is any possibility of a flash flood, move immediately to higher ground. Do not wait for instructions to move. Do not ever walk through moving water more than six inches deep.

Actions to Consider AFTER a Flood

- Be careful in areas where floodwaters have receded.
- Watch for downed electrical lines and weakened roads and bridges.
- Stay out of flooded buildings and use caution when entering damaged structures. Their foundations may have weakened.
- Avoid coming in contact with floodwater — it may be contaminated. If available, use gloves and if not, wash your hands if they get wet.
- Discard any food that has come in contact with floodwater.
- Watch out for animals, especially poisonous snakes that may have come into buildings with the water.
- Listen for news reports to learn whether the community’s water supply is safe to drink.
- Clean and disinfect everything that got wet. Mud left from floodwater can contain sewage and chemicals.
- Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.
- Report property damage to your insurance agent immediately.

HURRICANES / TYPHOONS

? What is a Hurricane/Typhoon?

A tropical cyclone or severe tropical storm with winds that have reached a constant speed of 74 miles per hour or more.

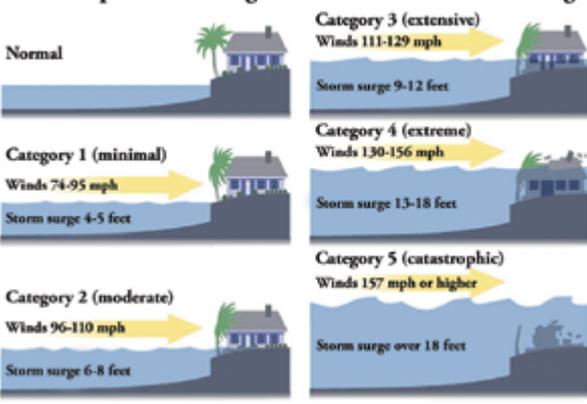
🌀 Hurricane/Typhoon Facts

- Winds blow in a large spiral around a relative calm center known as the eye. The eye is generally 20 to 30 miles wide and the storm may extend outward 400 miles.
- As it approaches, the skies will begin to darken and winds will grow in strength. As it nears land, it can bring torrential rains, high winds, and a storm surge.
- They can last for more than two weeks over open waters.
- Hurricane season is from 1 June through 30 November with the peak months being August and September.
- Typhoon season is year round, however 95 percent of typhoons occur after 1 May.

🌐 Danger Zones

- The Atlantic and Gulf coasts from Texas to Maine.
- The territories in the Caribbean.
- Tropical areas of the western Pacific, including Hawaii, Guam, American Samoa, and Saipan.

Saffir-Simpson Scale Categorizes Potential Hurricane Damage



DID YOU KNOW?

Hurricanes are named to help us identify and track them as they move across the ocean. For Atlantic Ocean hurricanes, the names may be French, Spanish, or English, since these are the major languages bordering the Atlantic Ocean where the storms occur. Sometimes names are "retired" if a hurricane has had a significant impact.

What is the Difference Between a Hurricane and a Typhoon?

Hurricanes occur in the Atlantic Ocean, Caribbean, Gulf of Mexico, and eastern Pacific Ocean. But once you go west across the International Date Line and into the western Pacific Ocean, they're called typhoons.





Know the Terms

Tropical Depression - A rotary circulation of clouds with winds up to 38 miles per hour.

Tropical Storm - A rotary circulation of clouds with winds between 39-73 miles per hour.

Hurricane/Typhoon Watch - Issued when there is a threat of hurricane conditions within 48 hours or less.

Hurricane/Typhoon Warning - Issued when hurricane conditions are expected in 36 hours or less.

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

HURCON - Hurricane Condition.

TCCOR - Tropical Cyclone Conditions of Readiness



Actions to Consider BEFORE a Hurricane/ Typhoon

- Bring in outdoor objects and anchor objects that cannot be brought inside.
- Secure your home by closing and boarding up windows and removing outside antennas.
- Turn refrigerator and freezer to coldest settings. Open only when absolutely necessary and close quickly.
- Store drinking water in disinfected bathtubs, jugs, bottles, and cooking pots.
- Review evacuation plan and assemble your emergency supply kit.
- Secure boats and/or RVs or move to a designated safe place. Use ropes or tie-down straps to secure boats to trailers. Use tie-downs to anchor boat trailers and/or RVs to the ground or structures.
- Make a record of your personal property. Take photos or video of the exterior and interior of your home, including personal belongings. Store the documents in a safe place. If directed to evacuate, take the documents with you.

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TORNADOES AND FLOODING CAN ALSO OCCUR DURING THIS INCIDENT.
PLEASE REVIEW SECTION 2.2 AND SECTION 2.3 FOR FURTHER INFORMATION.

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Actions to Consider During a Hurricane/Typhoon

- Listen to local radio or television for progress reports.
- Take refuge in a small interior room, closet or hallway in your residence. If in a multiple-story building, go to the first or second floors and stay in interior rooms away from windows.
- Stay inside and away from windows, skylights and glass doors.
- Keep curtains and blinds closed.
- Do not go outside when the eye passes over. Winds and rain will soon resume.



Actions to Consider After a Hurricane/Typhoon

- If in a safe location, stay there until directed by local authorities that it is safe to leave.
- If you evacuated your community, do not return until authorities say it is safe.
- Tune into local radio and television stations for information about caring for your household, where to find medical help and how to apply for assistance.
- Do not drink or prepare food with tap water until notified that it is safe.
- 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.
- Enter your home with caution. Beware of insects and animals driven to higher ground by the floodwaters.
- Open windows and doors to ventilate and dry your home.
- Drive only if absolutely necessary and avoid flooded roads and washed-out bridges.
- Report property damage to your insurance agent immediately.



Hurricane/Typhoon Conditions

HURCON or TCCOR	Criteria	Expected
5	General Hurricane Season General Typhoon Season	1 June until 30 November 1 May until 30 November
4	Indicates Surface Winds in Excess of 58 mph (50 knots)	Within 96 Hours
3		Within 72 Hours
2		Within 48 Hours
1		Within 24 Hours
1E		Occurring Now
1R	Damage may persist and only emergency responders and damage assessment personnel are released to move about	Life-Threatening Storm Hazards have Passed

EARTHQUAKES

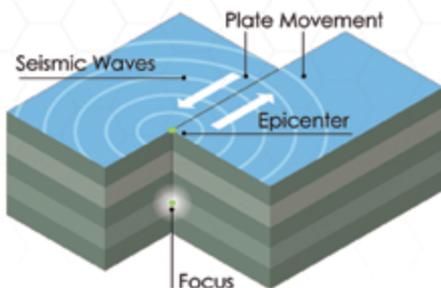
What is an Earthquake?

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

Earthquake Facts

- Earthquakes strike suddenly, without warning, and can occur 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 seldom the direct cause of death or injury. Most earthquake-related casualties result from collapsing walls, flying glass, and falling objects. Most injuries occur when people are hit by flying objects when entering into or exiting from buildings.

The formation of earthquakes is the collision or shifting of rocks along the earth's surface layer. This is caused by convergent boundaries colliding with one another and the pressure of the rocks that cannot sustain the force of the shifting, causing them to shift or crack.



Danger Zones

- 41 states/territories are at moderate risk of earthquakes. They occur most frequently west of the Rocky Mountains.
- California experiences the most frequent damaging earthquakes; however, Alaska experiences the greatest number of large earthquakes — most are located in uninhabited areas.
- The greatest danger exists directly outside buildings, at exits, and along exterior walls.

DID YOU KNOW?

From 1975-1995 there were only four states that did not have any earthquakes: Florida, Iowa, North Dakota, and Wisconsin.



I *Actions to Consider BEFORE an Earthquake*

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

I *Actions to Consider DURING an Earthquake*

If Indoors

- Drop, cover, and hold on. Move only a few steps to a nearby safe place.
- Stay indoors until the shaking stops and you are sure it is safe to exit.
- If you are in a high rise building, do not use the elevators.
- Stay away from glass, windows, outside doors and walls, and anything that could fall such as lighting 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.
- Use a doorway for shelter only if it is in close proximity to you and if you know it is strongly supported and load bearing.

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 then 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 fabric 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.

I *Actions to Consider AFTER an Earthquake*

- Provide first aid and CPR if trained to do so.
- After-shocks can occur in the first hours, days, weeks or even months after the quake. They can cause further damage to weakened buildings, so proceed with caution.
- Be aware that some earthquakes are actually foreshocks—a larger earthquake might occur.
- Open cabinets cautiously. Beware of objects that can fall off shelves.
- Be aware of possible tsunamis if you live near the coast.
- Pets' behavior 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.

TSUNAMIS

What is a Tsunami?

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

Tsunami Facts

- The North Sumatra Earthquake (December 26, 2004) triggered a tsunami that killed nearly 300,000 people from over 55 countries. It also affected five million people, leaving over one million homeless. The waves were reportedly over 80 feet high.
- As the tsunami nears the coastline, it may grow to great height and smash 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, 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 5 to 90 minutes apart. They usually occur 10 to 45 minutes apart and the wave speed in the open ocean will average 450 miles per hour.
- 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 onshore as a rapidly rising turbulent surge of water choked with debris.

Danger Zones

- Areas less than 50 feet above sea level and within one mile of the shoreline.
- Tsunamis can strike anywhere along most of the U.S. coastline.
- States most at risk within the U.S. include: Hawaii, Alaska, Washington, Oregon, and California.

DID YOU KNOW?

The enormous energy of a tsunami can lift giant boulders, flip vehicles, and demolish houses.



Know the Terms

Tsunami Advisory - An earthquake has occurred which might generate a tsunami. Hourly bulletins advising of the situation will be issued.

Tsunami Watch - A tsunami was or may have been generated, but is at least two hours away. Prepare for possible evacuation if the watch is upgrade to a warning.

Tsunami Warning - A tsunami was or may have been generated, which could cause damage. People within the warned area are strongly advised to evacuate.

Warning and Danger Signs

- Tsunamis may be caused by an underwater disturbance or an earthquake. People living along the coast should consider an earthquake or a sizable ground rumbling a warning signal.
- A noticeable 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 an emergency supply kit.
- 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

- Find protection for you and your family when an earthquake strikes. When the shaking stops, gather your family members and evacuate quickly to higher ground away from the coast. Leave everything else behind. A tsunami may be coming in minutes.
- Avoid downed power lines and stay away from buildings and bridges from which heavy objects might fall during an aftershock.
- If you hear an official tsunami warning or detect signs of a tsunami, evacuate at once to higher ground.
- 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 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 the residence.
- Shovel mud while it is still moist to give walls and floors an opportunity to dry.
- Report property damage to your insurance agent immediately.

.....
 FLOODING CAN ALSO OCCUR DURING THIS INCIDENT.
 PLEASE REVIEW SECTION 2.3 FOR FURTHER INFORMATION.

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

- Fresh volcanic ash, made of pulverized rock, can be harsh, acidic, gritty, glassy, and smelly. The ash can damage the lungs, especially those of older people, babies, and people with respiratory problems.
- Trying to watch an erupting volcano is a deadly idea.
- Unlike most mountains which 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 rock shoot up through the opening and spill over or fill the air with lava fragments.
- Volcanic eruptions can hurl hot rocks at least 20 miles. Lava flows, airborne ash, or noxious fumes can spread 100 miles or more.
- 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.
- The danger from most volcanoes is from the ash cloud and blast; however, lava flow from some volcanoes can be especially dangerous. Because of their intense heat, lava flows are extreme fire hazards. Lava flows destroy everything in their path but most move slow enough that people can get out of their way.

Danger Zones

- The U.S. states/territories with active volcanoes at greatest risk are Hawaii and Alaska. However, the active volcanoes of the Cascade Mountain Range also place California, Oregon, and Washington at risk.
- Over 75 percent of the world's active and dormant volcanoes are located in the Pacific Ring of Fire, which is an arc of intense volcanic activity stretching from the west coast of the Americas, the east coast of Siberia, Japan, the Philippines, Indonesia, and in island chains from New Guinea to New Zealand.
- The immediate danger area around a volcano covers approximately a 20 mile radius. However, it can extend as far as 100 miles or more.

DID YOU KNOW?

There are about 1500 active volcanoes in the world that have erupted in the past 10,000 years.



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 or friend that all family members could use as a central contact if separated.
- Determine a safe shelter for animals and livestock.
- Assemble an emergency supply kit. Be sure to include goggles and a disposable mask to be used during ash fall.
- Do not visit an active volcano unless it is designated a safe viewing area.

Actions to Consider **DURING an Eruption**

If Indoors

- Close all windows, doors, and ventilation during an ash fall.
- Put all machinery inside a garage or barn.
- Stay indoors until the ash has settled unless there is a danger of the roof collapsing.

If Outdoors

- Evacuate immediately if close to the volcano to avoid flying debris, hot gases, ash, lateral blast, and lava flow. If evacuation is not possible, seek shelter indoors.
- Avoid areas downwind from the volcano to avoid volcanic ash.
- Roll up into a ball to protect your head if caught in a rock fall.
- Avoid river valleys and low-lying areas where poisonous gases and lava are prone to 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 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 which is very heavy and can cause roofs to collapse.
- Do not drive through ash fall. It is easily stirred up and can clog engine filters causing your vehicle to stall.
- Help anyone nearby who may require special assistance — large families, children, elderly, and individuals with disabilities.
- Report property damage to your insurance agent immediately.

LANDSLIDES AND MUDFLOWS

What are Landslides?

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

Landslide Facts

- Landslides may be very small or very large and can move from slow to very high speeds.
- It is estimated that landslides cause between 25 and 50 deaths each year in the U.S. and thousands more in vulnerable areas all around the globe.

What is a Mudflow?

- Mudflows (or debris flows) are rivers of rock, earth, and other debris saturated with water.
- They develop when water rapidly accumulates in the ground such as during heavy rainfall or rapid snowmelt, changing the earth into a flowing river of mud or slurry.

Mudflow Facts

- Mudflows may be very small or very large; flowing rapidly down slopes or through channels, and can strike with little or no warning.
- A mudflow can travel several miles from its source, growing in size as it picks up trees, vehicles, and other materials along the way.

Danger Zones

Landslides may occur in all U.S. states/territories; California, West Virginia, Utah, Kentucky, Tennessee, Puerto Rico, Ohio, and Washington are at greatest risk.

DID YOU KNOW?

The May 1980 eruption of the Mount St. Helens volcano caused the largest landslide in history — a rock slide-debris avalanche large enough to fill 250 million dump trucks.



Landslide Warning Signs

- Doors or windows begin to stick or jam.
- New cracks appear in plaster, tile, brick, or foundations.
- 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.
- Underground utility lines break.
- 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.
- 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

- Create an evacuation plan for your family and have a backup route in mind.
- Be prepared to evacuate if instructed to do so.
- Listen for unusual sounds such as trees cracking or boulders knocking.
- Plant ground cover on slopes and build retaining walls.

Actions to Consider DURING a Landslide

If Indoors

- Stay indoors. 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 people near the slide area. Provide first aid and CPR if 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, elderly, and individuals with disabilities.
- Check the building foundation, chimney, and surrounding land for damage. Be especially careful to check for downed power lines and gas lines that may have ruptured.
- Replant damaged ground as soon as possible since erosion caused by loss of ground cover can lead to flash flooding.
- Report property damage to your insurance agent immediately.

EXTREME HEAT

What is Extreme Heat?

Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat.

Extreme Heat Facts

- Heat kills by pushing the human body beyond its limits. In extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature.
- Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. Older adults, young children, and those who are sick or overweight are more likely to succumb to extreme heat.
- Conditions that can induce heat-related illnesses include stagnant atmospheric conditions and poor air quality. Consequently, people living in urban areas may be at greater risk from the effects of a prolonged heat wave than those living in rural areas. Also, asphalt and concrete store heat longer and gradually release heat at night, which can produce higher nighttime temperatures known as the “urban heat island effect.”

Know the Terms

Heat Wave - Prolonged period of excessive heat, often combined with excessive humidity.

Heat Index - A number in degrees Fahrenheit that tells how hot it feels when relative humidity is added to the air temperature. Exposure to full sunshine can increase the heat index by 15 degrees.

Heat Cramps - Muscular pains and spasms due to heavy exertion. Although heat cramps are the least severe, they are often the first signal that the body is having trouble with the heat.

Heat Exhaustion - Typically occurs when people exercise heavily or work in a hot, humid place where body fluids are lost through heavy sweating. Blood flow to the skin increases, causing blood flow to decrease to the vital organs. This results in a form of mild shock. If not treated, the victim's condition will worsen. Body temperature will keep rising and the victim may suffer heat stroke.

DID YOU KNOW?

Because men sweat more than women, men are more susceptible to heat illness because they become more quickly dehydrated.



Know the Terms (Cont.)

Heat Stroke - A life-threatening condition. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly. Another term for heat stroke is sun stroke.

Actions to Consider BEFORE Extreme Heat

- Install window air conditioners snugly; insulate if necessary.
- Check air-conditioning ducts for proper insulation.
- Install temporary window reflectors (for use between windows and drapes), such as aluminum foil-covered cardboard, to reflect heat back outside.
- Weather-strip doors and sills 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 percent.
- Keep storm windows up all year.

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, schools, movie theaters, shopping malls, and other community facilities. Circulating air can cool the body by increasing the perspiration rate of evaporation.

- Eat well-balanced, light, and regular meals. Avoid using salt tablets unless directed to do so by a physician.
- Drink plenty of water. Persons who have epilepsy or heart, kidney, or liver disease; are on fluid-restricted diets; or have a problem with fluid retention should consult a doctor before increasing liquid intake.
- Limit intake of alcoholic beverages.
- Dress in loose-fitting, lightweight, and light-colored clothes that cover as much skin as possible.
- Protect 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 when working in extreme heat, and take frequent breaks.

Actions to Consider AFTER 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 such as large families, children, elderly and individuals with special needs.

WILDFIRES

What is a Wildfire?

A wildfire is any uncontrolled fire in combustible vegetation that occurs in the countryside or a wilderness area.

Wildfire Facts

- The threat of wildfires for people living near wild land areas or using recreational facilities in wilderness areas is real. Dry conditions at various times of the year and in various parts of the United States greatly increase the potential for wildfires.
- Advance planning and knowing how to protect buildings in these areas can lessen the devastation of a wildfire. There are several safety precautions that you can take to reduce the risk of fire losses. Protecting your home from wildfire is your responsibility.
- To reduce the risk, you'll need to consider the fire resistance of your home, the topography of your property and the nature of the vegetation close by.

Actions to Consider BEFORE a Wildfire

If you see a wildfire, call 911 (or equivalent). Don't assume that someone else has already called. Describe the location of the fire, speak slowly and clearly, and answer any questions asked by the dispatcher.

Before the Fire Approaches Your House

- Evacuate your pets and all family members who are not essential to preparing the home. Anyone with medical or physical limitations and the young and the elderly should be evacuated immediately.
- Clear items that will burn from around the house, including wood piles, lawn furniture, barbecue grills, tarp coverings, etc. Move them outside of your defensible space.
- Close outside attic, eaves and basement vents, windows, doors, pet doors, etc. Remove flammable drapes and curtains. Close all shutters, blinds, or heavy non-combustible window coverings to reduce radiant heat.
- Close all doors inside the house to prevent draft. Open the damper on your fireplace, but close the fireplace screen.
- Shut off any natural gas, propane, or fuel oil supplies at the source.
- Connect garden hoses. Fill any pools, hot tubs, garbage cans, tubs or other large containers with water.
- If you have gas-powered pumps for water, make sure they are fueled and ready.

DID YOU KNOW?

An average of 1.2 million acres of U.S. woodland burns every year.



- Place a ladder against the house in clear view.
- Back your vehicle into the driveway or garage and roll up the windows.
- Disconnect any automatic garage door openers so that doors can still be opened by hand if the power goes out
- Close all garage doors.
- Place valuable papers, mementos and anything “you can’t live without” inside the vehicle, ready for quick departure. Any pets still with you should also be put in the vehicle.

Preparing to Leave

- Turn on outside lights and leave a light on in every room to make the house more visible in heavy smoke.
- Leave doors and windows closed but unlocked. It may be necessary for firefighters to gain quick entry into your home to fight fire. The entire area will be isolated and patrolled by sheriff’s deputies or police.

Actions to Consider DURING a Wildfire

If in a Vehicle

- This is dangerous and should only be done in an emergency, but you can survive the firestorm if you stay in your vehicle. It is much less dangerous than trying to run from a fire on foot.
- Roll up windows and close air vents. Drive slowly with headlights on. Watch for other vehicles and pedestrians. Do not drive through heavy smoke.
- If you have to stop, park away from the heaviest trees and brush. Turn headlights on and ignition off. Roll up windows and close air vents.
- Get on the floor and cover up with a blanket or coat.
- Stay in the vehicle. Do not run! The engine may stall and not restart. Air currents may rock the vehicle. Some

smoke and sparks may enter the vehicle. Temperature inside will increase. Metal gas tanks and containers rarely explode.

If Trapped in Your Home

- If you do find yourself trapped by wildfire inside your home, stay inside and away from outside walls. Close doors, but leave them unlocked. Keep your entire family together and remain calm.

If Outdoors

- The best temporary shelter is in a sparse fuel area. On a steep mountainside, the back side is safer. Avoid canyons, natural “chimneys” and saddles.
- If a road is nearby, lie face down along the road cut or in the ditch on the uphill side. Cover yourself with anything that will shield you from the fire’s heat.
- If hiking in the back country, seek a depression with sparse fuel. Clear fuel away from the area while the fire is approaching and then lie face down in the depression and cover yourself. Stay down until after the fire passes!

Actions to Consider AFTER a Wildfire

- Check the roof immediately. Put out any roof fires, sparks, or embers. Check the attic for hidden burning sparks.
- If you have a fire, get your neighbors to help fight it.
- The water you put into your pool or hot tub and other containers will come in handy now. If the power is out, try connecting a hose to the outlet on your water heater.
- For several hours after the fire, maintain a “fire watch.” Re-check for smoke and sparks throughout the house.
- Report property damage to your insurance agent immediately.

WINTER STORMS AND EXTREME COLD

What is a Winter Storm?

A severe winter storm is a storm that drops four or more inches of snow during a 12-hour period, or six or more inches during a 24-hour span.

Winter Storm Facts

- All winter storms are accompanied by low temperatures and blowing snow which can severely reduce visibility.
- A winter storm can range from moderate snow over a few hours to blizzard conditions with blinding wind-driven snow that lasts several days.
- Elderly people account for the largest percentage of hypothermia victims. Many older Americans literally “freeze to death” in their own homes after being exposed to dangerously cold indoor temperatures, or are asphyxiated because of improper use of fuels such as charcoal briquettes which produce carbon monoxide.

Danger Zones

- While the worst snowstorms typically occur in the northern U.S., they can happen almost anywhere.
- Extreme cold temperatures are a concern nationwide, even in tropical climates such as Florida.

Know the Terms

Winter Storm Watch - Indicates that severe weather may affect your area.

Winter Storm Warning - Indicates that a winter storm is occurring, or will occur in your area.

Freezing Rain - Rain that freezes when it hits the ground creating a coating of ice on roads, walkways, trees, and power lines.

Sleet - Turns to ice pellets before reaching the ground. Sleet also causes moisture on roads to freeze and become slippery.

Wind Chill - Calculation of how cold it feels outside when the effects of temperature and wind speed are combined.

DID YOU KNOW?

A blanket or rug under the front of a tire will help “unstick” a vehicle by increasing traction. It can be used on walkways to prevent slipping and it provides traction under wheels of vehicles stuck in ice and snow.





Know the Terms (Cont.)

Blizzard Warning - Sustained winds or frequent gusts to 35 miles per hour or greater and considerable amounts of falling or blowing snow are expected for a period of three hours or longer.

Frost/Freeze Warning - Below freezing temperatures are expected.

Heavy Snowfalls - Snow accumulation of four inches in a 12-hour period or six inches in a 24-hour period.

Ice Storms - Occur when freezing rain falls from clouds and freezes immediately when it touches the ground.

Frostbite - A condition where localized, sometimes permanent, damage occurs to skin and other tissue due to extreme cold. Symptoms of frostbite include a loss of feeling and a white or pale appearance in extremities such as fingers, toes, tip of the nose, and ear lobes.

Hypothermia - A condition brought on when the body temperature drops to less than 90 degrees Fahrenheit. Symptoms of hypothermia include uncontrollable shivering, slow speech, memory lapses, frequent stumbling, drowsiness, and exhaustion.

- If frostbite or hypothermia is suspected, begin warming the person slowly and seek immediate medical assistance. Warm the person's trunk first and use your own body heat to help. Arms and legs should be warmed last, because stimulation of the limbs can drive cold blood toward the heart which can lead to heart failure.
- Never give a frostbite or hypothermia victim caffeine (like coffee or tea) or alcohol. Caffeine, a stimulant, can cause the heart to beat faster and hasten the effects the cold has on the body. Alcohol, a depressant, can slow the heart and also hasten the ill effects of cold body temperatures.



Actions to Consider BEFORE a Winter Storm

- Ensure your walls and attic are properly insulated.
- Caulk and weather-strip doors and windows.
- Install storm windows or cover windows with plastic from the inside.
- Keep pipes from freezing: wrap pipes in insulation or layers of old newspapers; cover the newspapers with plastic to keep out moisture; let faucets drip a little to avoid freezing; know how to shut off water valves.
- Acquire safe emergency heating equipment.
- Install and check smoke and CO₂ detectors.

Winter Driving

- Keep a windshield scraper and small broom for ice and snow removal.
- Maintain a full tank of gas during the winter season.
- Install winter tires with plenty of tread and install snow chains as necessary.
- Listen to the radio or call the state highway patrol for the latest road conditions before travelling. Always travel during daylight and, if possible, take at least one other person and keep others informed of your schedule.
- When feasible, use public transportation if you must go out during a winter storm.
- Above all, wear warm, layered clothing! Be sure to include gloves and the appropriate footwear and headwear protection.



Actions to Consider DURING a Winter Storm

If Indoors

- Stay indoors and dress warmly.
- Conserve fuel. Lower the thermostat to 65 degrees during the day and 55 degrees at night. Close off unused rooms.

- 
- If the pipes freeze, remove any insulation or layers of newspapers and wrap pipes in rags. Completely open all faucets and pour hot water over the pipes, starting where they were most exposed to the cold (or where the cold was most likely to penetrate).
 - Listen to local radio or television for the latest updates.

If Outdoors

- Dress warmly wearing loose-fitting, layered, light-weight clothing and try to stay dry. Wet clothing loses its insulating value rapidly.
- If you go out to shovel snow, do a few stretching exercises to warm up your body.
- Avoid overexertion; cold weather puts an added strain on the heart. Unaccustomed exercise such as shoveling snow or pushing a vehicle can cause a heart attack or make other medical conditions worse. Remember to take frequent breaks when performing strenuous activities.
- Cover your mouth to protect your lungs from extremely cold air.
- Be on the lookout for symptoms of frostbite and hypothermia.

If in a Vehicle

- Stay in your vehicle. Do not leave the vehicle to search for assistance unless you see a building close by where you know you can take shelter.
- Display a trouble sign. Hang a brightly colored cloth on the radio antenna.
- Occasionally run the engine (for about 10 minutes each hour) to keep warm. Beware of carbon monoxide poisoning. Keep the exhaust pipe clear of snow and open a downwind window slightly for ventilation.
- Turn on the dome light at night.
- Do minor exercises to keep circulation flowing. Clap hands and move arms and legs occasionally. Try not to stay in one position too long.
- Huddle together for warmth. Use newspapers, maps, and even removable vehicle mats for added protection.

Actions to Consider AFTER a Winter Storm

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

DID YOU KNOW?

70 percent of winter deaths related to snow and ice occur in automobiles.



CHAPTER 3

MAN-MADE INCIDENTS



MAJOR ACCIDENTS

What is Considered a Major Accident?

A major accident is any accident serious enough to warrant response by the installation disaster response force (DRF). These differ from the day-to-day emergencies handled by local emergency responders. A major accident may involve one or more of the following: aircraft accident/incident, toxic materials, hazardous substances, explosives, etc.

Three Phases of Response to a Major Accident

Notification — Emergency response operations begin with notification. Reports of incidents come from a variety of sources (i.e., telephone call; 911, crash phone, radio transmission, weather forecast warning, watch or advisory, or eyewitness). Individuals witnessing an incident must alert others in the immediate area and report it to the Emergency Communications Center (ECC), Security Forces, Fire and Emergency Services, or the Command Post (CP).

Response — Initial responders respond to the incident and establish incident command, lifesaving and rescue, suppression and containment, cordon, Tactical Priorities, determine and communicate protective measures.

Withdrawal or Evacuation — The protective action used when responders are in imminent danger or when all response actions have been completed. Withdrawal may be immediate or planned. Evacuation is a protective action to remove all personnel (military or civilian) from a threatened area to a safer location.

DID YOU KNOW?

In October of 1986 the Emergency Planning and Community Right-to-Know Act (EPCRA) was signed into law. This act was passed so individuals could obtain information about chemicals that are manufactured, stored, used, and released within their community.



1 *Actions to Consider BEFORE a Major Accident*

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

2 *Actions to Consider DURING a Major Accident*

- Listen to the local radio or television stations for detailed information and instructions.
- Evacuate immediately or shelter-in-place as directed.
- Provide first aid and CPR if you are trained to do so.
- Report the incident to local authorities.
- Stay away from the accident area unless you are involved in the recovery process.

3 *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.
- Help a neighbor who may require special assistance — large families, children, elderly, and individuals with disabilities.
- Notify friends or family of your condition.
- Use phone services 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.



HOME FIRES

Fire Facts

- Fire is the most likely emergency that you and your family may encounter. It is the fourth leading accidental killer in the U.S. behind motor vehicle accidents, falls, and drowning. Each year, more than 4,000 Americans die and more than 25,000 are injured in fires.
- 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 most people are sleeping.
- Eighty-four percent of fires are accidental, such as those caused by poor electrical wiring or careless behavior.

Fire Extinguishers, Smoke Alarms and CO₂ Detectors

- Install A-B-C type fire extinguishers in your home and teach family members how to use them.
- Smoke alarms and CO₂ 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 stairwells, or at the bottom of enclosed stairs, and near (but not in) the kitchen.
- Smoke alarms and CO₂ detectors should be replaced every 10 years.

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. Discard them outdoors in a metal container.

Matches and Smoking

- Store matches and lighters up high, away from children, and preferably in a locked cabinet.
- Never smoke in bed when drowsy or under medication.
- Douse cigarette and cigar butts with water before disposal.

DID YOU KNOW?

According to FEMA, properly working smoke alarms decrease your chances of dying in a fire by 50 percent.

Test and clean smoke alarms and CO₂ detectors once a month and replace batteries at least once a year.

A good way to remember to do this is to replace the batteries during National Preparedness Month, which occurs every September, or replace the batteries as you set your clock back when Daylight Saving Time ends.



Heating Sources

- Check with your local fire department on the legality of using kerosene heaters in your community. Fill kerosene heaters outside and ensure they are cool before filling.
- Place heaters at least three feet away from flammable materials. Make sure the floor and nearby walls are properly insulated.
- Only use designated fuels for your unit.
- Ensure there is adequate ventilation for gas/kerosene heaters used indoors.
- Always follow manufacturers' instructions.

Electrical Wiring

- Inspect extension cords for frayed or exposed wires or 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 a UL-approved unit with a built-in circuit breaker.

Other Tips

- Sleep with doors closed to reduce potential exposure to smoke and flames.
- Ask your local fire department to inspect your residence.
- If you live in a multilevel home or residence, you should purchase a collapsible ladder(s) and practice using it.

Actions to Consider BEFORE a Fire

- Develop and practice an escape plan to ensure all family members know what to do in case of a fire.
- Draw a floor plan with at least two ways of escaping each room.
- Practice alerting other household members. Keep a bell and flashlight in each bedroom for this purpose.
- Practice evacuating blindfolded. In a real fire situation, smoke will most likely make it impossible to see.

- Practice staying low to the ground when evacuating.
- Choose a safe meeting place outside your home.

Actions to Consider DURING a Fire

- If your clothes catch on fire, stop, drop, cover, 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. 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, and escape through a window instead. 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.
- Once you are safely out, call 911 (or equivalent) or your local EMS number and do not go back inside.

Actions to Consider AFTER a Fire

- Check for injuries and provide first aid and CPR if 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.
- 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.
- If you need housing or food, contact your local disaster relief service, such as the American Red Cross or Salvation Army.
- Report property damage to your insurance agent immediately.

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.

Terrorism Facts

- Terrorists often use threats to create fear among the public, to convince citizens that their government is unable to protect them, and to get immediate publicity for their causes.
- Acts of terrorism include: threats of terrorism; assassinations; kidnappings; hijackings; bomb scares and bombings; cyber attacks (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.

Chemical Threats

- Chemical agents are poisonous vapors, aerosols, liquids, and solids that have a toxic effect on people, animals, or plants.
- They can be released by bombs or sprayed from aircraft, boats, and vehicles. They can be used as a liquid to create a hazard to people and the environment.
- Some chemical agents may be odorless and tasteless.
- 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 that carry the disease to humans, and by contaminating food and water.

DID YOU KNOW?

When a biological or chemical plume passes outside, people inside a closed building can be protected by a factor of 2 more than those outside.



Radiological Dispersion Device (RDD)

- Terrorist use of an RDD (often called dirty nuke or dirty bomb) is considered far more likely than use of a nuclear explosive device. An RDD combines a conventional explosive device (such as a bomb) with radioactive material. It is designed to scatter dangerous and sub-lethal amounts of radioactive material over a general area.
- Depending on the speed at which the area of the RDD detonation was evacuated or how successful people were at safely sheltering-in-place, the number of deaths and injuries from an RDD might not be substantially greater than from a conventional bomb explosion.

Nuclear Blasts

A nuclear blast is an explosion with intense light and heat, a damaging pressure wave, and widespread radioactive material that can contaminate the air, water, and ground surfaces for miles around. A nuclear device can range from a weapon carried by an intercontinental missile launched by a hostile nation or terrorist organization, to a small portable nuclear device transported by an individual.

Actions to Consider BEFORE a Terrorist Incident

- Learn about the nature of terrorism.
- Be aware of your surroundings.
- Take precautions when traveling.
- Leave an area if you feel uncomfortable or if something does not seem right.
- Assemble an emergency supply kit.
- 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.

Actions to Consider DURING a Terrorist Incident

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

Actions to Consider AFTER a Terrorist Incident

- Stay away from the incident area; there may be danger of secondary devices.
- Check for injured and trapped people if already near the event area and provide first aid and CPR if trained to do so.
- Notify your friends and/or family of your condition.
- Use phone services sparingly.
- Listen to local radio or television stations for the latest information.
- Check the foundation, chimney, and land surrounding your home for damage. Be especially careful of downed power lines and ruptured gas lines.
- Report property damage to your insurance agent immediately.



The National Terrorism Advisory System

The National Terrorism Advisory System (NTAS) replaces the color-coded Homeland Security Advisory System. This new system will more effectively communicate information about terrorist threats by providing timely, detailed information to the public, government agencies, first responders, airports and other transportation hubs, and the private sector. The NTAS recognizes that Americans all share responsibility for the nation's security, and should always be aware of the heightened risk of terrorist attack in the U.S. and what they should do.

NTAS ALERTS

After reviewing the available information, the Secretary of Homeland Security will decide, in coordination with other Federal entities, whether an NTAS Alert should be issued. NTAS Alerts will only be issued when credible information is available.

These alerts will include a clear statement that there is an **imminent threat** or **elevated threat**. Using available information, the alerts will provide a concise summary of the potential threat, information about actions being taken to ensure public safety, and recommended steps that individuals, communities, businesses and governments can take to help prevent, mitigate or respond to the threat.

The NTAS Alerts will be based on the nature of the threat: in some cases, alerts will be sent directly to law enforcement or affected areas of the private sector, while in others, alerts will be issued more broadly to the American people through both official and media channels.

Imminent Threat Alert

Warns of a credible, specific, and impending terrorist threat against the U.S.

Elevated Threat Alert

Warns of a credible terrorist threat against the U.S.

Sunset Provision

An individual threat alert is issued for a specific time period and then automatically expires. It may be extended if new information becomes available or the threat evolves.



NTAS Alerts contain a sunset provision indicating a specific date when the alert expires - there will not be a constant NTAS Alert or blanket warning that there is an overarching threat. If threat information changes for an alert, the Secretary of Homeland Security may announce an updated NTAS Alert. All changes, including the announcement that cancels an NTAS Alert, will be distributed the same way as the original alert.

Terrorism Information

Terrorism information and intelligence is based on the collection, analysis and reporting of a range of sources and methods. While intelligence may indicate that a threat is credible, specific details may still not be known. As such, Americans should continue to stay informed and vigilant throughout the duration of an NTAS Alert.

How can you help?

Each alert provides information to the public about the threat, including, if available, the geographic region, mode of transportation, or critical infrastructure potentially affected by the threat; protective actions being taken by authorities, and steps that individuals and communities can take to protect themselves and their families, and help prevent, mitigate or respond to the threat. During an alert, stay vigilant and if you see something suspicious report it to local law enforcement or call 911 (or equivalent).

Installation Notification and Warning Systems

Installation Notification and Warning Systems (INWS) may be activated independently or in conjunction with the NTAS Alerts. INWS include: Giant Voice (outdoor speakers), indoor speaker systems, telephone alert systems, and desktop alerts to name a few. Check with your installation on the method(s) typically used to warn and notify people of potential events.

Force Protection Conditions

Force Protection Conditions (FPCONs) initiate various tasks that increasingly restrict movement and require more stringent security and identification checks throughout the installation and of individuals. FPCON-“Normal” is the least stringent within the system and is used day-to-day when no threats exist and escalates through FPCON Levels; Alpha, Beta, Charlie and Delta, with Delta being the highest FPCON Level where the base is virtually locked down with no movement other than Security Forces and emergency responders allowed. FPCONs are normally broadcast through various mass notification systems and posted at entry control points.

Alert Announcements

NTAS Alerts will be issued through state, local and tribal partners, the news media and directly to the public via the following channels:

Web

- <http://www.dhs.gov/alerts>

Email

- <http://www.dhs.gov/alerts>

Social Media

facebook

- <http://facebook.com/NTASAlerts>

twitter

- <http://www.twitter.com/NTASAlerts>

The public can also expect to see alerts in places, both public and private, such as transit hubs, airports and government buildings.

ACTIVE SHOOTER

What is an Active Shooter

An active shooter is an individual actively engaged in killing or attempting to kill people, most often in populated areas. In most cases, active shooters use firearms and there is no pattern or method to their selection of victims. In some cases, active shooters use improvised explosive devices to create additional victims and to impede first responders.

Active Shooter Facts

- Fairchild AFB: Former Airman killed four and wounded 23 with a semi-automatic rifle.
- Eglin AFB: Estranged husband confronts hospital staff with hunting rifle at spouse's work center.
- McGuire AFB: Mentally unstable retiree kills one.
- Moody AFB: NCO fires at wife's alleged boyfriend with handgun.
- Fort Bragg: NCO killed one and wounded 18 with semi-automatic rifle.
- Fort Dix: Six homegrown "radical Islamist" planned to storm base with automatic rifles.
- Fort Hood: Active Duty Major killed 14 and wounded 43 with pistol.
- Naval Sea Systems Command (NAVSEA) Headquarters: Gunman killed 12 and wounded 3 with 12 gauge shotgun.

Know the Terms

Lockdown - An announcement used on Air Force installations as a security measure to confine and restrict movement. All individuals, including military uniformed services, federal employees, contractors, dependents, or other people on an installation as a guest are required to restrict their movement when lockdown is declared. During lockdown, no person may enter or exit another area until the *all clear* is broadcasted; unless movement is required to escape from a dangerous place or situation.

DID YOU KNOW?

The first law enforcement officers to arrive to the scene will not stop to help injured persons. Expect rescue teams comprised of additional officers and emergency medical personnel to follow the initial officers. These rescue teams will treat and remove any injured persons. They may also call upon able-bodied individuals to assist in removing the wounded from the premises.



Actions to Consider BEFORE an Active Shooter Incident

- Assemble an emergency supply kit for your vehicle and workplace.
- Be aware of your surroundings and any possible dangers.
- Determine if your community has a warning system.
- Take note of the two nearest exits in any facility you visit.
- Know the evacuation plan for your workplace.
- Leave an area if you feel uncomfortable or if something does not seem right.
- Develop a family communications plan and ensure all family members know how to use it if you were to become separated.

Actions to Consider DURING an Active Shooter Incident

How you respond to an active shooter will be determined by the specific circumstances of the encounter. If you find yourself involved in an active shooter situation, remain calm, quickly determine the most reasonable way to protect your own life, and use these guidelines to help you survive.

Outside the Immediate Incident Area

- Stay away from the incident area; there may be unknown dangers at or near the scene.
- Listen to local radio, television stations, and/or the installation's warning and notification system for the latest information.
- If announced, execute lockdown procedures at your location.
- Do not allow individuals to enter or exit the area during lockdown until the *all clear* is announced and movement within the area (e.g. inside a facility) is permitted.
- Use phone services sparingly so they remain open for emergency responders.

Inside the Immediate Incident Area

Evacuate

- If an escape route is accessible, evacuate the immediate area.
- Leave your belongings behind.
- Help others evacuate, if possible.
- Evacuate even if others will not agree to follow you.
- Call 911 (or equivalent) when you are safe. Stay on the phone until the operator ends the call.
- Once evacuated, prevent others from entering the area.
- Follow any law enforcement instructions.
- If in view of or approaching law enforcement personnel, keep your hands visible.
- Do not attempt to move wounded individuals.



Barricade

- If evacuation is not possible, find a place to create a barricade between you and the active shooter.
- Your barricade location should be where you are less likely to be found by the active shooter, provide you protection, and not restrict your options for movement.
- If possible, lock the door and/or block the door with heavy furniture. Turn off any lights and cover windows.
- Remain quiet and silence any devices (e.g. a cell phone) that may give away your location.
- If safe to do so, call 911 (or equivalent to alert law enforcement). Stay on the phone until the operator ends the call.

Take Action Against the Shooter—“Fight”

- As a last resort, and **only** when your life is in imminent danger, attempt to disrupt and/or incapacitate the shooter.
- Personnel should use whatever means possible to overpower the subject to save further lives.
- Use the minimum force necessary to subdue the shooter, however, deadly force is authorized when an individual reasonably believes they or others in the area are in immediate danger of death or serious bodily harm.

Information to Provide to Law Enforcement or 911 (or equivalent)

- Number of active shooters, if more than one.
- Location of the shooter(s).
- Physical description of shooter(s).
- Time you observed the shooter(s).
- Number and type of weapons held by the shooter(s).
- Number of potential victims at the location.



When Law Enforcement Arrives

- Law enforcement's purpose is to stop the active shooter as soon as possible. Officers will proceed directly to the area in which the last shots were heard and will not stop to help injured persons until the shooter is neutralized.
- Remain calm and follow instructions.
- Place any items in your hands on the ground.
- Immediately raise your hands and spread your fingers.
- Keep hands visible at all times.
- Do not impede law enforcement officers' movements, such as holding on to them for safety.
- Provide any information that may assist them in countering the threat.
- Avoid pointing, screaming, and/or yelling.
- Do not stop to ask officers for help or directions when evacuating, just proceed in the direction they instruct you to go.

- Move quickly to the assembly point.
- Expect to stay at the assembly point until the situation is under control.
- Know that you might be interviewed by law enforcement.
- Do not leave the assembly point until instructed by law enforcement.

i *Actions to Consider AFTER an Active Shooter Incident*

- Stay away from the incident area.
- Listen to local radio, television stations, and/or the installation's warning and notification system for the latest information.
- Notify your friends and/or family of your condition.
- Use phone services sparingly so they remain open for emergency responders.
- Know and recognize the signs of incident related stress. Seek assistance as needed.

HAZARDOUS MATERIALS (HAZMAT) INCIDENTS

What are Hazardous Materials?

Hazardous materials are materials that because of 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 due to chemical accidents in industrial 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.

Danger Zones

A hazardous materials accident can occur anywhere. Communities located near chemical manufacturing plants are particularly at risk. However, hazardous materials are transported on our roadways, railways, and waterways daily so any area is vulnerable to an accident.

HOUSEHOLD CHEMICAL EMERGENCIES

- 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 (pilot light, lighted candle, fireplace, wood burning stove, etc.). Although you may not be able to see or smell them, vapor particles in the air could catch fire or explode.
- Get out of your home immediately if there is any danger of fire or an explosion. Do not waste time collecting belongings or calling the fire department. Once you are safe, call the fire department from outside the home using a cellular phone or a neighbor's phone. Stay upwind and away from the residence to avoid breathing toxic fumes.
- Call the poison control center, 911 (or equivalent), hospital emergency room, county health department, fire department, or local pharmacy to receive emergency advice if someone has been exposed to a household chemical. Have any containers of the substance readily available in order to provide requested information.

DID YOU KNOW?

Most victims of chemical accidents are injured at home.



- 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.

6 *Actions to Consider BEFORE a HAZMAT Incident*

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

7 *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 one-half mile 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.

If Directed to Shelter-in-Place

- Bring pets inside. Fill up sanitized bathtubs and/or large sanitized containers for an additional water supply and turn off the intake valve to the house.
- Close and lock all exterior doors and windows. Close vents, fireplace dampers, and as many interior doors as possible. Turn off air conditioners, furnaces, and ventilation systems.
- Find a room that is above ground and has the fewest openings to outside. If gas or vapors 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.

8 *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 other procedures.
- Seek medical treatment for unusual symptoms as soon as possible.
- Place exposed clothing and shoes in tightly sealed containers. Do not allow them to contact 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.
- Do not return to the area, if you were directed to evacuate, until authorities give the *all clear*.
- Listen to local radio or television stations for the latest updates.

Caring for Accident Victims

- You should not try to care for victims of a hazardous materials 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, place them in a plastic bag and seal.
- Cleanse victims that have come in contact with toxic substances by immediately pouring cold water over the skin or eyes for at least 15 minutes unless authorities instruct you not to use water due to the particular hazardous material involved.

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.



CHAPTER 4

TECHNOLOGICAL INCIDENTS



NUCLEAR POWER PLANTS

The potential danger from an accident at a nuclear power plant is exposure to radiation. This exposure could come from the release of radioactive material from the plant into the environment, usually characterized by a plume (cloud-like formation) of radioactive gases and particles.

 **Know the Terms: Nuclear Power Plant Incidents**
Notification of Unusual Event - A small problem has occurred at the nuclear power plant. No radiation leak is expected. No action on your part will be necessary.

Alert - A small problem has occurred and small amounts of radiation could leak inside the plant. This will not affect you and no action is required.

Site Area Emergency - A more serious problem has occurred. Small amounts of radiation could leak from the plant. Area sirens may be sounded. Listen to your local radio or television stations for safety information.

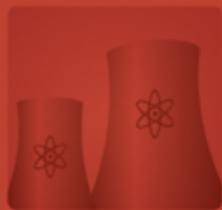
General Emergency - A very serious problem has occurred. Radiation could leak outside the plant and off the plant site. Sirens will sound. Listen to your local radio or television stations for further information and instructions.

Minimizing Exposure to Radiation

Time: The less time you spend exposed to the source of radiation, the better.

Distance: The more distance between you and the source of the radiation, the better.

Shielding: The more dense material between you and the source of the radiation, the better.



DID YOU KNOW?

Nuclear power plants operate in most states in the country and produce about 20 percent of the nation's power. Nearly 3 million Americans live within 10 miles of an operating nuclear power plant.

Actions to Consider BEFORE a Nuclear Power Plant Emergency

Things you can do to protect yourself, your family and your property from the effects of a nuclear power plant emergency:

- Build an Emergency Supply Kit
- Make a Family Emergency Plan
- Obtain public emergency information materials from the power company that operates your local nuclear power plant or your local emergency services office. If you live within 10 miles of the power plant, you should receive the materials yearly from the power company or your state or local government.

Actions to Consider DURING a Nuclear Power Plant Emergency

If an accident at a nuclear power plant were to release radiation in your area, local authorities activate warning sirens or use another alert method. Adhere to instruction through the Emergency Alert System (EAS) on local television and radio stations on how to protect yourself.

- Follow the EAS instructions carefully.
- Minimize your exposure by increasing the distance between you and the source of the radiation. This could be evacuation or remaining indoors to minimize exposure.
- If you are told to evacuate, keep car windows and vents closed; use re-circulating air.
- If you are advised to remain indoors, turn off the air conditioner, ventilation fans, furnace and other air intakes.
- Shield yourself by placing heavy, dense material between you and the radiation source. Go to a basement or other underground area, if possible.

- Do not use the telephone unless absolutely necessary.
- Stay out of the incident zone. Most radiation loses its strength fairly quickly.

Actions to Consider AFTER a Nuclear Power Plant Emergency

Guidelines for the period following a nuclear power plant emergency:

- Go to a designated public shelter if you have been told to evacuate or you feel it is unsafe to remain in your home. Text SHELTER + your ZIP code to 43362 (4FEMA) to find the nearest shelter in your area (example: shelter 12345).
- Act quickly if you have come in to contact with or have been exposed to hazardous radiation.
- Follow decontamination instructions from local authorities. You may be advised to take a thorough shower.
- Change your clothes and shoes; put exposed clothing in a plastic bag; seal it and place it out of the way.
- Seek medical treatment for unusual symptoms, such as nausea, as soon as possible.
- Listen to local radio or television stations for the latest emergency information.
- Help a neighbor who may require special assistance - infants, elderly people and people with access and functional needs may require additional assistance. People who care for them or who have large families may need additional assistance in emergency situations.
- Return home only when authorities say it is safe.
- Keep food in covered containers or in the refrigerator. Food not previously covered should be washed before being put in to containers.



If You Are Directed to Evacuate

- Close and lock doors and windows in your home. Turn off the air conditioner, ventilation fans, furnace, and other intakes.
- Keep vehicle windows and vents closed; use re-circulating air.

If You Are Advised to Shelter-In-Place

- Turn off the air conditioner, ventilation fans, furnace, and other air intakes.
- Go to a basement or other underground area if possible.
- Do not use the telephone unless absolutely necessary.
- Listen to local radio or television stations for further information and instructions.

If You Think You Have Been Exposed to Radiation

- Remove clothes and shoes.
- Put exposed clothing in a plastic bag.
- Seal the bag and place it out of the way.
- Take a thorough shower.
- Seek medical treatment for any unusual symptoms.



DID YOU KNOW?

Local and state governments, federal agencies, and the electric utilities have emergency response plans in the event of a nuclear power plant incident. The plans define two “emergency planning zones.” One zone covers an area within a 10-mile radius of the plant, where it is possible that people could be harmed by direct radiation exposure. The second zone covers a broader area, usually up to a 50-mile radius from the plant, where radioactive materials could contaminate water supplies, food crops and livestock.



CHAPTER 5

AFTER A DISASTER





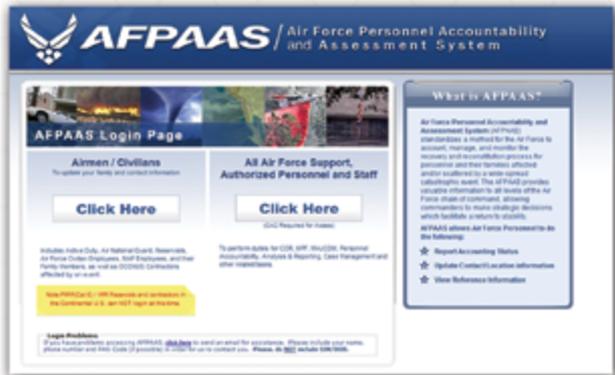
After an emergency, you may be displaced from your home and duty location, and may not have a portable computer with internet capability. However, the following are a few alternative resources that may be used:

- Contact other family members or friends, and ask them to access AFPAAS on their computer on your behalf (they will need your or your sponsor's Social Security number and date of birth).
- Use a public computer available at community centers, emergency shelters, airports, schools, libraries, and select businesses (e.g., internet cafes, copy stores, or coffee shops).
- Request assistance from local authorities or other relief agencies to relay your status to your chain of command.
- Lastly, call your command representative, the Air Force Personnel Center's Disaster Hotline, or Military OneSource.

RECOVERING FROM DISASTER

REPORTING YOUR STATUS

After an emergency, all Air Force-affiliated personnel (Active Duty, Select Reservists, DAF and NAF Civilians, OCONUS AF Contractors and their family members, including personnel on temporary duty status, on leave, or on a pass in the affected area) who are directly affected by a major natural disaster or man-made incident are to report their status to their command at the first available opportunity. In some cases, the Secretary of Defense will direct all DOD-affiliated personnel in the affected area to report their accountability status as soon as possible. When this happens, if you have access to the internet you are to report your status online through the Air Force Personnel Accountability and Assessment System (AFPAAS) at <https://afpaas.af.mil>.



- AFPAAS allows you to report your current location, to update emergency personal contact information, and to request assistance (especially if you had to evacuate far away from your home or place of work).
- Your reporting assists the Air Force to know where you are, how you are doing, and to coordinate with applicable agencies in responding to your needs.
- AFPAAS allows your commanders and supervisors to account accurately for all assigned personnel and their family members.
- Your reporting assists the Air Force leadership and authorities to make better decisions in supporting you and your family, to maintain military readiness, and to preserve National Security during a disaster.
- AFPAAS allows case managers to contact you, to provide you with important information, and to assist you in recovering from a crisis.

COPING WITH DISASTERS

Coping with the emotional toll after a disaster can be even more overwhelming than losing personal property. Everyone who sees or experiences a disaster is affected by it in some way. Even individuals who experience a disaster “second hand” through exposure to extensive media coverage can be affected. All of us have different needs and different ways of coping with a significant event. Children and older adults are of special concern in the aftermath of disasters.

Recognize Signs of Disaster Related Stress

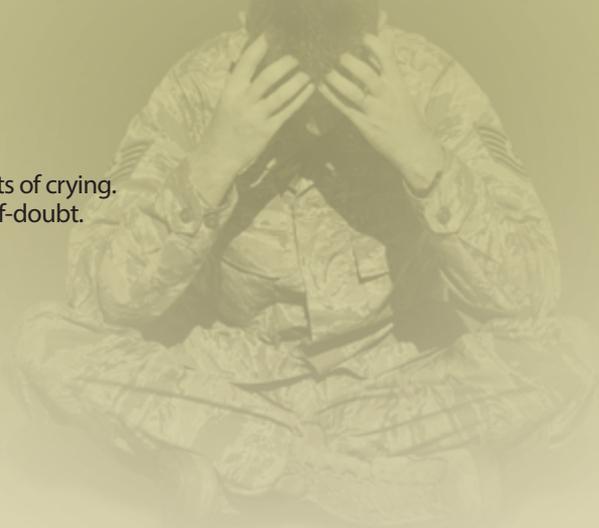
When adults have the following signs, they might need crisis counseling or stress management assistance:

- Difficulty communicating thoughts.
- Difficulty sleeping.
- Difficulty maintaining balance in their lives.
- Low threshold of frustration.
- Increased use of drugs/alcohol.
- Limited attention span.
- Poor work performance.
- Headaches/stomach problems.
- Tunnel vision/muffled hearing.
- Colds or flu-like symptoms.
- Disorientation or confusion.
- Difficulty concentrating.
- Reluctance to leave home.
- Depression, sadness.
- Feelings of hopelessness.
- Mood-swings and easy bouts of crying.
- Overwhelming guilt and self-doubt.
- Fear of crowds, strangers, or being alone.

Easing Disaster-Related Stress

The following are ways to ease disaster-related stress:

- Talk with someone about your feelings - anger, sorrow, and other emotions - even though it may be difficult.
- Seek help from professional counselors who deal with post-disaster stress.
- Do not hold yourself responsible for the disastrous event or be frustrated because you feel you cannot help directly in the rescue work.
- Take steps to promote your own physical and emotional healing by healthy eating, rest, exercise, relaxation, and meditation.
- Maintain a normal family and daily routine, limiting demanding responsibilities on yourself and your family.
- Spend time with family and friends.
- Participate in memorials.
- Use existing support groups of family, friends, and religious institutions.
- Ensure you are ready for future events by restocking your emergency supply kits and updating your family emergency plan. Doing these positive actions can be comforting.





CHILDREN AND DISASTERS

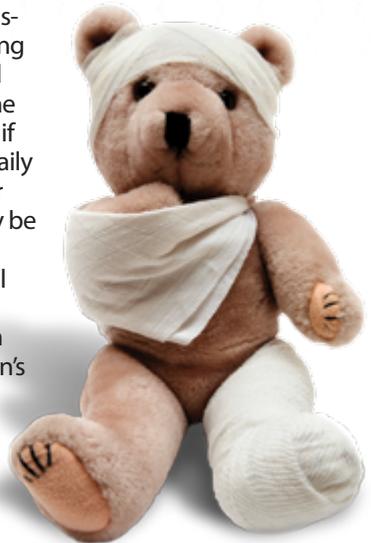
Children's reactions are influenced by the behavior, thoughts, and feelings of adults. Adults should encourage children and adolescents to share their thoughts and feelings about the incident. Clarify misunderstandings about risk and danger by listening to children's concerns and answering questions. Maintain a sense of calm by validating children's concerns and perceptions and with discussion of concrete plans for safety. Try to understand what is causing anxieties and fears. Be aware that following a disaster, children are most afraid that:

- The event will happen again.
- Someone close to them will be killed or injured.
- They will be left alone or separated from the family.

Suggestions to Help Reassure Children Include:

- Personal contact is reassuring. Hug and touch your children.
- Calmly provide factual information about the recent disaster and current plans for insuring their safety along with recovery plans.
- Encourage your children to talk about their feelings.
- Spend extra time with your children, such as at bedtime.
- Re-establish your daily routine for work, school, play, meals, and rest.
- Involve your children by giving them specific chores to help them feel they are helping to restore family and community life.
- Praise and recognize responsible behavior.
- Understand that your children will have a range of reactions to disasters.
- Encourage your children to help update your family emergency plan.

If you have tried to create a reassuring environment by following the steps above, but your child continues to exhibit stress, if the reactions worsen over time, or if they cause interference with daily behavior at school, at home, or with other relationships, it may be appropriate to talk to a professional. You can get professional help from the child's primary care physician, a mental health provider specializing in children's needs, or a member of the clergy. You may also receive assistance by contacting Military OneSource.



KEY RESOURCES NUMBERS

TELEPHONE NUMBERS

<i>Air Force Personnel Center's Disaster Hotline</i>	<i>(800) 435-9941</i>
<i>American Red Cross (Military Service)</i>	<i>(877) 272-7337</i>
<i>Centers for Disease Control and Prevention (CDC)</i>	<i>(800) 232-4636</i>
<i>Federal Emergency Management Agency (FEMA)</i>	<i>(800) 621-3362</i>
<i>Homeland Security: Citizen Line</i>	<i>(202) 282-8000</i>
<i>Military OneSource</i>	<i>(800) 342-9647</i>
<i>National Flood Insurance Program (NFIP)</i>	<i>(888) 379-9531</i>
<i>Regional Poison Control Centers</i>	<i>(800) 222-1222</i>
<i>Suspect Terrorist Activities (Rewards for Justice)</i>	<i>(800) 877-3927</i>

OTHER IMPORTANT TELEPHONE NUMBERS:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

KEY RESOURCES SITES

WEB SITES

Air Force BeReady www.BeReady.af.mil

Air Force Personnel Accountability and Assessment System (AFPAAS) <https://afpaas.af.mil>

American Red Cross www.redcross.org

ARC—Safe & Well <https://safeandwell.communityos.org/cms>

Centers for Disease Control and Prevention (CDC) www.cdc.gov

CitizenCorps www.citizen corps.gov

Department of Homeland Security www.dhs.gov

Federal Emergency Management Agency (FEMA) www.fema.gov

Military OneSource www.militaryonesource.com

National Flood Insurance Program (NFIP) www.floodsmart.gov

National Weather Service www.weather.gov

TRICARE www.tricare.mil

OTHER IMPORTANT WEB SITES:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

EMERGENCY SUPPLY KIT CHECKLIST

What to Put in Your Basic Home Kit

Necessary Items

- Water—at least one gallon per person per day for at least three days (consider altitude, climate conditions, and any special family needs).
- Nonperishable food for at least three days (select items that require no preparation, refrigeration, or cooking such as high energy foods and ready-to-eat canned meat, vegetables, fruit).
- Manual can opener.
- A whistle (to signal for help).
- First aid kit and manual.
- Special needs items, such as prescription medications.
- Filter mask (or cotton t-shirt) to help filter the air.
- Personal sanitation supplies, such as moist towelettes, garbage bags, and plastic ties.
- Hand-crank or battery operated flashlight and All-hazards NOAA (National Oceanic and Atmospheric Administration) weather radio.
- Cell phone with chargers, inverters, or solar charger.
- Any tools needed for turning off utilities.
- Local maps and your family emergency plan.
- Your command reporting information — know the Air Force Personnel Accountability and Assessment System (AFPAAS).
- Important documents.
- If power goes out for an extended amount of time, cash might be the only form of currency accepted.

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TO PREPARE YOUR FAMILY FOR AN EMERGENCY, ASSEMBLE ONE OR MORE EMERGENCY KITS THAT INCLUDE ENOUGH SUPPLIES FOR AT LEAST THREE DAYS. THINK OF ITEMS THAT HAVE MULTIPLE USES AND ARE LONG LASTING. KEEP A KIT PREPARED AT HOME AND CONSIDER ALSO HAVING KITS IN YOUR VEHICLE, AT WORK, AND A PORTABLE VERSION IN YOUR HOME READY TO TAKE WITH YOU. THESE KITS WILL ENABLE YOU AND YOUR FAMILY TO RESPOND TO AN EMERGENCY MORE QUICKLY. YOUR VARIOUS EMERGENCY KITS WILL BE USEFUL WHETHER YOU HAVE TO SHELTER IN PLACE OR EVACUATE.

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Essential Items for Those at OCONUS Installations

- Passports and birth certificates.
- Cash in local currency.
- Card with local translations of basic terms.
- An electrical current converter.

Other Items That Could Prove Helpful

- Fire extinguisher.
- Tools needed to turn off utilities.
- Matches in a waterproof container.
- Paper plates, paper cups, plastic utensils, and paper towels.
- Coats and rain gear.
- Sleeping bags or other bedding.
- A weather-appropriate change of clothes for each person.
- Books, games, puzzles, toys, and other activities for children.

Maintaining Your Emergency Supply Kit

Just as important as putting your supplies together is maintaining them so they are safe to use when needed. A couple of tips for ensuring your supplies are ready and in good shape include:

- Change stored food and water supplies every six months. Be sure to write the date you store it on all containers.
- Re-think your needs every year and update your kit as your family needs change.



FAMILY EMERGENCY PLAN

Make sure your family has a plan in case of an emergency. Before an emergency happens, sit down together and decide how you will get in contact with each other, where you will go and what you will do in an emergency. Keep a copy of this plan in your emergency supply kit or another safe place where you can access it in the event of an emergency.

Neighborhood Meeting Place: _____ Ph: _____

Out-of-Neighborhood Meeting Place: _____ Ph: _____

Out-of-Town Meeting Place: _____ Ph: _____

Fill out the following information for each family member and keep it up to date.

Name: _____

Date of Birth: _____ Social Security Number: _____

Important Medical Information: _____
.....

Name: _____

Date of Birth: _____ Social Security Number: _____

Important Medical Information: _____
.....

Name: _____

Date of Birth: _____ Social Security Number: _____

Important Medical Information: _____
.....

Name: _____

Date of Birth: _____ Social Security Number: _____

Important Medical Information: _____
.....

Name: _____

Date of Birth: _____ Social Security Number: _____

Important Medical Information: _____
.....

Local Emergency Phone Numbers

Emergency Services Number: 911 or _____

Local Emergency Management Office _____

American Red Cross: Local Chapter _____

Family Doctor _____

Local Hospital/Emergency Room _____

Local Utilities (Electrical) _____

Local Utilities (Gas) _____

Local Utilities (Phone) _____

Write down where your family spends the most time: work, school, 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.

Work Location One

Address: _____

Phone: _____

Evacuation Location: _____

Work Location Two

Address: _____

Phone: _____

Evacuation Location: _____

Work Location Three

Address: _____

Phone: _____

Evacuation Location: _____

School Location One

Address: _____

Phone: _____

Evacuation Location: _____

School Location Two

Address: _____

Phone: _____

Evacuation Location: _____

School Location Three

Address: _____

Phone: _____

Evacuation Location: _____

Other place you frequent

Address: _____

Phone: _____

Evacuation Location: _____

Other place you frequent

Address: _____

Phone: _____

Evacuation Location: _____

Insurance Policy Numbers

Medical/Dental: _____

Homeowners/Renters: _____

Automobile: _____

Life: _____

Provisions for Utilities

In various emergency situations, whether you evacuate or shelter-in-place, you may be advised to cut off ventilation systems or utilities. Write the locations of, and instructions for, these controls and any necessary tools to change them. (Like fire and evacuation plans, this is a good thing to review and practice with the whole family.)

Electricity: _____

Water: _____

Gas: _____

Ventilation: _____

EMERGENCY NOTIFICATION SIGNALS



U.S. AIR FORCE
EMERGENCY NOTIFICATION SIGNALS

IF YOU HEAR



DISASTER WARNING

3-5 Minute Steady Tone



ATTACK WARNING

3-5 Minute Wavering Tone



SHOOTER WARNING

*Lockdown
Lockdown [Location]
Lockdown*
Phrase Repeats 3 Times



ALL CLEAR

Voice Announcement

THIS INDICATES	INDIVIDUAL ACTIONS
A Disaster/Incident is Imminent or in Progress	<ul style="list-style-type: none"> Be Alert Take Cover or Evacuate to Safety Follow Instructions Account For Personnel
An Attack/Hostile Act is Imminent or in Progress	<ul style="list-style-type: none"> Be Alert Execute Security Measures Follow Instructions Account For Personnel
Active Shooter Incident is in Progress	<ul style="list-style-type: none"> Remain Calm Implement Lockdown Procedures Based on Your Location
Immediate Disaster or Threat has Ended	<ul style="list-style-type: none"> Remain Alert Account For Personnel Report Hazards, Injuries, and Damage



www.BeReady.af.mil

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Emergency Management Division**



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