Disaster Hazards
Check Lists

FIRES AND WILDFIRES:

There is a threat for fires every day and anywhere. House Fires most often occur in the Winter Months, whereas Wild Fires generally occur each summer and fall. That dry brush is waiting to burn and in a drought season, it is even more of a threat. This fact sheet is intended to help you prepare for wildfires, but it also has tips on everyday things you can do to prevent fires. Make your environment safer by conducting a fire hazard hunt to reduce risks of fire and related deaths, injury or property damage. Take the following steps to make your environment safer:

Outside your home:

- ❑ Clear dry grass, brush and leaves as required by local regulations. Use ice plants and other fire resistant plants to landscape
- ❑ Clear all debris from the roof, gutters, and spouts
- ❑ Remove dead limbs located on roofs, and all limbs within 10 feet of a chimney
- ❑ Prune the lower limbs within six feet of the ground on all trees 18 feet or higher to keep fires from spreading to the trees
- ❑ Thin out heavily wooded areas.
- ❑ Remove weak, dead, and leaning trees
- ❑ Vary the height of plants, shrubs, and trees and provide adequate spacing between them. Place rock or stone pathways where ever you can. It keeps the ground from eroding, looks good and helps fill the empty areas.
- ❑ Relocate firewood, propane, or gas containers at least 30 feet from all structures and 10 feet from vegetation.
- ❑ Keep plants, trees and shrubs away from power lines.
- ❑ Replace wood shake and other combustible roofing materials with non combustible materials
- ❑ Cover chimneys and woodstove pipes with non-flammable screens and mess ½ inches think or less, to keep out debris and animals. You should clean your stove or chimney each winter before starting a fire in it.
- ❑ Box and enclose roof eves that extend beyond the exterior walls
- ❑ Cover all attic and ridge vents with non-flammable ½" mesh screens
- ❑ Make sure the number of your house is clearly visible at the curbside.

Inside your home:

- ❑ Make sure smoke detectors are made and certified by an approved lab and installed on the ceiling inside each bedroom and every hallway on every level.
  - ✓ Test detectors at least once per month, this includes checking for heat and smoke, not just pushing the red button to see that the batteries haven't died.
  - ✓ Change the batteries every six months whether they are dead or not.
  - ✓ After a fire or smoked out house have the detector cleaned and checked by a professional.
- ❑ Ensure that fire extinguishers are approved by an independent testing lab, and place in easy accessible locations where they can do the most good in case of a fire. (Closets are not a good place. Kitchen, basement, by the bedroom, and exits of house are best locations).
- ❑ Teach responsible family member, or co-worker where they are located and how to use them. Make sure they are serviced once a year for business, every two years for

households. Remember to turn them upside down every three months to assure that the chemical does not settle and cake.

- Remember the word pass when using the extinguisher
  - ✓ **P**ull the pin
  - ✓ **A**im the nozzle
  - ✓ **S**queeze the trigger
  - ✓ **S**weep the chemical from side to side.

- Develop and practice an evacuation plan for your home. This plan should include:
  - ✓ A floor plan with all escape routes
  - ✓ Easily accessible exits for young children, seniors, and those with disabilities (AVERT has a check off list for seniors and the disabled to refer to).
  - ✓ Lists of valuables to take in an emergency
  - ✓ A place to reunite after evacuation
  - ✓ The location of animal shelters or other sites that house pets
  - ✓ Practice drills
  - ✓ Work with neighbors to assist people with special needs, or need transportation to other sites
  - ✓ Work with local emergency officials to identify routes out of your neighborhoods, and likely evacuation sites.

What to do when a fire occurs:

- Call 911, tell dispatcher where you are. STAY ON THE PHONE with 911 Center!
- Feel the top and bottom of the door with the back of your hand before opening. Cautiously open the door if it is cool. Do not open a hot door. Try an alternate exit instead. Repeat this step at all doors.
- Close doors behind you when evacuating to slow spread of flames, smoke and heat.
- Help the young, seniors and persons with disabilities evacuate
- Close the door and stay in the room if fire, smoke, or heat are blocking the escape routes
- Keep smoke and fumes out by stuffing cracks around the doors and vents with sheets or blankets
- Open windows if no smoke is entering the room, place a sheet or cloth outside to signal for help.

Lightning / Thunder Storm:

Thunderstorms can be very unpredictable and can pop up at any time. Also, remember that tornadoes can occur in severe thunderstorms. You can take a few measures during thunderstorms:

- Stay in doors and don't venture out unless absolutely necessary
- Don't use the phone unless necessary
- Turn off and unplug the computer, video games, and T.V.
- If there is a power failure, turn off all electrical appliances and switches before the power comes back on. This may help you avoid damage if there is a power surge due to lightening strikes
- Increase awareness and be watchful for high winds, hail and possible tornados
- Monitor your portable radio, including the weather station
- If out doors seek shelter, but not under a tree of other object that could attract the lightening
- Take necessary precautions for possible flooding
- Don't take showers or baths, water and copper tubing are excellent conductors of electricity

- Get out of any water you might be in (pools, hot tubs etc).
- Stay in car if you are traveling, or if outside, get into a car. Automobiles provide excellent protection because the metal bodies conduct electricity away from the occupants
- If you are driving use extreme caution, downpours may impair visibility. Inspect and replace you wiper blades regularly
- When shelter is not available, present a low profile by crouching or laying down
- Never touch downed power lines. Dial 911 or the local power company immediately to ensure that the line is turned off so repairs can be made.

If caught on a boat in bad weather, whether you have lightening equipment or not, you need to take proper precautions to protect yourself.

- Stay in the center of the cabin. If there is no cabin, stay low in the boat.
- Keep arms and legs inside the boat
- Stop all fishing, water skiing, scuba diving, swimming, or other water activities when there is lightening, or when weather conditions look threatening. Lightening can strike 10 miles, or more, in front of a storm.
- Disconnect and do not use or touch major electronic equipment, including the radio, throughout the duration or the storm. Listen to the weather channel with a portable radio.
- Lower, remove, or tie down the radio antenna and other protruding devices if they are not part of the lightening protection system
- Avoid making contact with two components connected to the same electrical system. For example the gear levers, and spotlight may both be connected to the system
- At least one person on board should be competent in CPR and First aid. Many people struck by lightening can be saved with prompt first aid.
- If a boat has been struck by lightening, check out the electrical system and compass to be sure no damage has occurred.

Windstorms and Tornadoes:

High winds are another force of nature with which we must contend. High winds cause structural and nonstructural damage, down power lines and increase the risk of wildfires. In some isolated canyon areas, gusts can reach speeds of 100 or more, miles per hour. Although tornadoes are more common in Midwestern and Southern States, no part of the country is immune. Where you live, work, or play use the check list below to help reduce your risks of death, injury and property losses from high winds and tornadoes.

Before A Windstorm or Tornado:

Take the following actions to reduce your risk of death or injury and property damage:

- ❑ Develop and emergency plan for your family, co-works or class rooms it should include
  - ✓ Name, phone and address of out of state contact (contact for classes)
  - ✓ Locations of safe spots (i.e.: Basements, storm cellars, lower level closets, hallways, desk or tables, inner rooms of structure, lowest levels).
  - ✓ Location of danger spots (i.e.: windows, doors, vents, and skylights).
  - ✓ Locations of emergency shelter or meeting place where family members can meet incase you are separated.
  - ✓ Plans for pets incase evacuation is required.
- ❑ Check and update all supplies and 72-hour kits. (minimum every 6 months).
- ❑ Locate utility shut off's such as electricity, water, gas (remember to only shut these down if told to, you smell gas, or have a water main break). Teach responsible family member, co-worker, or teacher when and how to turn off utilities.
- ❑ Take CERT, first-aid, and CPR training.

- ❑ Inventory documents and valuable possessions. Take pictures, (videos demagnetize) and document all items. Remember to document replacement price. Store these items in a safe deposit box and put a copy at an out of state contact, just incase your bank doesn't make it.
- ❑ Work with representative from local governmental and American Red Cross to identify possible shelter sites
- ❑ Check your home, roof, and building for compliance with local building codes.
- ❑ Secure antenna, satellite dishes and other roof fixtures
- ❑ Install storm shutters or have exterior plywood available to board windows
- ❑ Trim Tree branches in contact with or near the roof and other parts of your home or building as well as any power lines. Remove weak, dead, and leaning trees
- ❑ Conduct Family evacuation and CERT drills once a month
- ❑ Make sure your gas tank is full. Power outages might make fuel pumps unusable. If you have a back up generator make sure it receives routine monthly maintenance.

During a Weather Watch or Warning:

- ❑ Listen to the Emergency Alert System (EAS) on radio or television
- ❑ Prepare to weather the storm by getting supplies to safe spot
- ❑ Prepare to evacuate at a moments notice.
- ❑ Evaluate the impact of the winds on the fire hazards in your area.
- ❑ Shut down and unplug all possible electrical appliances.

During the Windstorm or Tornado:

- ❑ Go indoors, avoid going near windows and doors. Take cover under sturdy desks or tables located in the interior room of the house (safe room bathrooms, closets, hallways) Protect your head and neck with your arms.
- ❑ Avoid using elevators; high winds may cause power outages.
- ❑ If outdoors, get away from trees, walls, signs, power lines, and other objects that could fall and injure you. (DO NOT seek shelter under highway overpasses!)
- ❑ Listen to the radio, or television for information and instructions from the authorities
- ❑ Use the phone only to report life threatening emergencies or damage to the authorities
- ❑ Review emergency and evacuation plans with family members, co-works, and classmates. Include comments about shelter sites, meeting places, and out of state contacts.
- ❑ Prepare to evacuate quickly if asked to do so by local emergency managers (Remember lives are more important then material goods, you can always replace possessions)
- ❑ Drive only in a life-threatening emergency.
- ❑ Avoid disaster areas (even if your family is in there, you can't help them if your dead).
- ❑ Cooperate fully with local emergency managers

After the Windstorm or Tornado:

- ❑ Check you, family, co-works, or classmates for injuries. Treat those with minor injuries and transport (if possible) those with major injuries.
- ❑ Keep family, co-works, or classmates together
- ❑ Discuss what has happened with children to make them aware of the dangers without scaring them.
- ❑ Check and document damages and hazards
  - ✓ Broken windows,
  - ✓ Bowing or cracked ceilings, roofs or walls. These are unsafe and should be avoided at all costs.
  - ✓ Damaged utilities (shut off if leaking)
  - ✓ Downed or damaged trees and power lines

- ❑ Stay out of obviously damaged rooms and buildings, evacuate damaged buildings
- ❑ Cooperate with local emergency officials

Heat wave:

On average, some 200 people die nation wide due to heat injuries from exposure to high temperatures. Many more people with medical conditions may die because of the heat. Exposure to sunlight is a mixed blessing, although sun is necessary for life, exposure to ultraviolet radiation is potentially dangerous and can damage the skin. Severe burns result from prolonged exposure to UV rays, but some people burn from very little exposure. UV rays can significantly damage the skin, interfering with the release of excess body heat. Injuries can also result from over exposure to heat, or excessive exercise in the heat. The severity of such injuries increases with age. For example, heat cramps in a young or middle-aged person may indicate heat exhaustion, but may be heatstroke in an elderly person.

Heat conditions, Symptoms and First Aid: What you might see in a heat injury.

1. **Sunburn** is usually a first-degree burn that involves just the outer surface of the skin. Symptoms include redness and pain. Sever cases may cause swelling, blister, fever of 102 degrees or above, and headaches.
   First aid: cool the skin until it no longer differs from the rest of the body temperature, cover with ointments or compressions for less severe cases. Do not break blisters! If they do break, use a sterile dressing. **Drink plenty of water.**

2. **Heat Cramps** often are related to dehydration. Symptoms include increased sweating with painful muscle spasms of the arms, legs and occasionally the abdomen.
   First Aid: Remove victim from the hot environment. Apply pressure on, or gently massage the spastic muscles to relieve spasms

3. **Heat Exhaustion** is the inability to sweat enough to cool you. Symptoms include fatigue, weakness, dizziness, nausea or vomiting as well as cold, clammy, pale, red, or flushed skin. A marked body temperature rise will not occur.
   First Aid: remove the victim from the heat. Lay the victim down and loosen clothing, apply cool compresses and cool the body by fanning the victim or placing them in a cool environment. Consult a physician if vomiting continues.

4. **Heat Stroke** occurs when the body stops sweating but the body temperature continues to rise. Symptoms include visual disturbances, headaches, nausea, vomiting, confusion, and as the condition progresses delirium or unconsciousness. The skin will be hot, dry, red or flushed even under the armpits. This condition is a severe, life threatening, medical emergency.
   First Aid: Consult a physician immediately or call 9-1-1. Remove clothing and place victim in a cool environment, sponge the body with cool water or place the victim in a cool bath. Continue the process until temperature decrease. DO NOT PROVIDE FLUIDS TO AN UNCONSCIUOS VICTIM OR A VICTIM GOING IN AND OUT OF CONSCIOUSNESS!

Preventing Heat Injuries: Steps you can take to prevent heat injuries.

- ❑ Avoid the sun from 10:00 a.m. to 3:00 p.m. when the burning rays are strongest
- ❑ Reduce physical activities during the heat of the day.

- ❑ Wear a wide brimmed hat and light colored, lightweight, loose fitting clothes when you are outdoors. This type of clothing reflects the heat and the sunlight.
- ❑ Avoid sudden changes of temperatures, (i.e.; air out a hot car before getting in)
- ❑ Avoid hot, heavy meals that include proteins. They increase your metabolism and water loss.
- ❑ Set your air conditioning thermostat between 75 and 80 degrees. If you do not have an air conditioner, take a cool shower twice a day and visit air-conditioned public places during the hottest hours of the day.
- ❑ Drink plenty of water even if you are not thirsty. Eight to ten glasses of water a day recommended. Drink even more if you are exercising or working in hot weather.
- ❑ Do not drink alcohol or caffeine since they are diuretics (promote water loss).
- ❑ Use a sunscreen with a sun protection factor of at least 15 if you need to go out in the sun.

Earthquakes:

On average, a damaging earthquake strikes somewhere in Utah about every 7 years. However, we have small 1 to 3 point earthquakes on a daily or weekly basis. Seismologists believe that a major earthquake with a magnitude of 7 or larger is likely to occur somewhere in Utah within the next thirty years. Recent events have shown that earthquakes on smaller faults can have considerable impact. Scientists estimate that the faults in the Salt Lake County area are capable of causing an earthquake of a magnitude 6 or greater. Most everyone in the Salt Lake County area lives within 30 miles of one of these faults. No one knows when, or where, such an earthquake will occur, but everyone can reduce their risk of death, injury, and property loss by using the recommendations outlined on the focus sheet.

Before the Earthquake:

- Update or assemble your emergency supply kits, including the following supplies
  - ✓ Nonperishable food and drinking water (one gallon per day per person)
  - ✓ Foods for people with special needs (diabetics, infants etc)
  - ✓ Additional food and water for pets
  - ✓ First aid kits and special medications
  - ✓ Flashlights, radios, extra batteries
  - ✓ Sturdy shoes, extra clothing, blankets
  - ✓ Sturdy work gloves
  - ✓ Emergency cash
  - ✓ Adjustable wrench and other tools
  - ✓ Whistle
  - ✓ Manual can opener
  - ✓ Activity kits if you have kids
  - ✓ All items need for infants
  - ✓ All items needed for special needs care.
- Choose an out of state contact, make sure that contact has a copy of all important documents
- Identify the safety spots in each room
  - ✓ Sturdy desks,
  - ✓ Tables,
  - ✓ Interior walls
  - ✓ Etc.
- Identify hazards in each room
  - ✓ Windows,
  - ✓ Mirrors,
  - ✓ Hanging objects,

    - ✓ Objects on shelves,
    - ✓ Bookcase,
    - ✓ Large tall free standing furniture
    - ✓ Etc.
  - Reduce hazards
    - ✓ Check foundations and chimneys etc,
    - ✓ Bolt house to foundation
    - ✓ Strength crippling walls
    - ✓ Brace water heater and other appliances
    - ✓ Secure hazards identified in home hazards hunt
    - ✓ Place heavy and breakable objects on lower shelves
  - Hold practice drills
  - Learn CERT, first aid, CPR, and other training
  - Learn how and when to shut off utilities

During an Earthquake:

- IF you are indoors, stay inside, duck, cover and hold. Avoid windows and outside walls and power outlets
- If you are outdoors, find an open area, avoid trees, power lines, walls and buildings
- If you are driving, pull to the side of the road and stop. Avoid overpasses, signs, power lines, trees, and large buildings. Stay in the car until the shaking stops.

After the Earthquake:

- Check yourself and those around you for injuries
- Prepare for after shocks
- Check for utility problems
  - ✓ Gas leaks
  - ✓ Water leaks
  - ✓ Broken wiring and sewage pipes
- Turn off utilities if there is damage
- Check your supplies
- Use the phone only to advise your out of state contact of your condition and to report immediate, life threatening emergencies.
- Check your house or building for damage watching for cracked or bowing walls or ceiling
- Avoid unnecessary driving
- Leave a note indicating where you are headed and your condition if you evacuate

Bomb Treats, anthrax, Etc:

Every day, the threat of Terrorist attacks is increased. How well would you react if you discovered a strange object at your workplace, received a bomb threat over the phone, or received a suspicious package in the mail? Here is a checklist to help prepare you, coworkers, and friends to respond effectively if you encounter such a threat.

Before the threat:

- ❑ Review your company procedure for dealing with threats. Work with the appropriate personnel to establish a policy and procedure if one does not exist.
- ❑ Establish an emergency response team
- ❑ Identify assignments for each team member
- ❑ Canvass work areas to become more familiar with objects that are normally in work areas
- ❑ Establish a signal that others can use to indicate that they are receiving a threat.
- ❑ Develop a bomb treat checklist for documentation purposes

- Identify all evacuation routes
- Conduct practice drills to test the response of employees and team members

When you receive a phone threat:

- Remain calm and keep the caller on the line as long as possible
- Be courteous and do not interrupt the caller
- Signal a co-worker to indicate that you have received a bomb threat. The co-worker should notify your security officer and local law enforcement agency immediately
- Advise the caller that the building is occupied and innocent people could be killed or injured.
- Ask the caller to repeat the message.

After you receive a threat:

- Remain clam, go to a quiet place, and do not talk to anyone. Write down the information you remember. Use the bomb threat worksheet. Turn over all information to your security officer or supervisor.
- Consider any object that does not belong in the area as a suspicious object
- Ask employees to look for suspicious objects in their immediate area
- Check the safety of evacuation routes and evacuate.

If you locate a suspicious package:

What constitutes a suspicious package? Some of the typical characteristics that ought to trigger suspicions include:

  - ✓ Something that is unexpected or unfamiliar to you.
  - ✓ Something addressed with outdated material
  - ✓ No return address or Identification present
  - ✓ Of unusual size, weight, or dimension
  - ✓ Exhibiting protruding wires, strange odors, or stains.
  - ✓ People are getting sick around it.
- Get a good description: size, color, markings and noises made.
- Provide exact location: building, floor, room number and location in room.
- If you are at work, call your supervisor or security officer and report the location of the object.
- If you are at home, contact your local law enforcement agency.
- Do not touch, move or open the objects. Object may explode when opened or removed.
- Isolate the package
- Look for possible owners
- Evacuate the area immediately and prepare for possible evacuation of building.
- Do not use a walkie-talkie radio or a cell phone. The transmissions could detonate the device

If you receive suspicious mail:

- Avoid handling the object
- If you're at work, notify your supervisor or security officer and remind them to preserve the evidence for law enforcement agencies, they will arrange to collect letter or package and assess the threat situation.
- Double bag in a zipper type or zip lock plastic bags using latex gloves and a particulate mask if possible.
- Wash you hands with soap and water
- List all people who have touched or contacted item and give to the appropriate people

- If it is anthrax, you will need to place your clothes in a plastic bag, shower with soap and water and take medication until otherwise instructed or it runs out.

If you do not already have a bomb threat guide in your workplace, tape this checklist next to the phone.

Incase of a bomb threat remain clam, listen carefully, and obtain the following information: Report the information immediately to your supervisor, security officer and law enforcement agency.	
Date of Call:	Time of Call:
Location of bomb:	
Description:	
Kind of bomb:	
Time bomb will go off:	
Motive:	
Voice pattern:	
Background noises:	

Hazardous Materials:

Hazardous materials are not restricted to the highway or industries. Motor oil, paint, pool chemicals, and other common household products could create a mini hazardous materials (hazmat) incident, particularly in an earthquake. Strong ground shaking could topple and break bottles and cans containing hazardous materials.

Hazardous products or substances are classified into four categories based on the properties they exhibit. Corrosive substances or vapors can deteriorate or irreversibly damage body tissues that they contact. Flammable substances are capable of burning in the air at any temperature. Toxic substances may poison, injure, or be lethal when they are eaten, can be absorbed through the mouth, stomach and skin, or can be inhaled into the lungs. Reactive substances can produce toxic vapors or explode when they react with air, water or other substances.

Corrosive:

- Abrasive cleaners, scouring powders *
- Ammonia, Chlorine bleach, bleach based cleaners *
- Car batteries
- Disinfectant and oven cleaners *
- Drain openers and cleaners *
- Glass and window cleaners *
- Photographic and pool chemicals *
- Rug and upholstery cleaners **
- Toilet bowl cleaners **

Flammable:

- Air fresheners
- Coin, floor, furniture and shoe polishes *
- Enamel or oil based paints *
- Engine cleaners and degreasers*
- Furniture and paint strippers*
- Gasoline and diesel fuel *
- Hair spray and deodorants
- Kerosene *
- Motor oil and transmission fluid *
- Paints and primers *
- Rug and upholstery cleaners *
- Rust paints *
- Solvent- based glues *
- Solvent for cleaning fire arms *
- Spot removers *
- Stains and varnishes *
- Wood preservatives

Toxic:

- Antifreeze
- Artist and model paint
- Batteries
- Car wax containing solvents
- Chemical fertilizers
- Drug, medicines pharmaceuticals
- Fungicides, herbicides, weed killers
- Insecticides
- Latex, oil or water based paints
- Mothballs
- Nail polish and nail polish remover
- Pet products, flea collars, flea sprays
- Rat, mouse, snail, slug poisons
- Roach and ant killers

Hazardous waste:

Avoid any item that has a hazardous placard on it. CERT people are not trained to deal with these items. Use the rule of thumb in all hazardous waste areas.

Volcanoes:

Volcanoes are a part of our environment and although they are not as common as earthquakes in Utah, like earthquakes they have played a significant role in shaping the landscape. Seismic activity in the past two decades has us looking at our volcano (yes we do have a sleeping volcano in Utah) with renewed interest. There have been both seismic and temperature changes in the Great Salt Lake, Utah Lake and both hot springs. At this time, this volcano is not a threat to Utah, but a major quake could cause an eruption. The USGS uses a color- coded designation to describe unrest in areas. The following is a summary of what each color signifies.

- Green: signifies a weak, minor, and moderate unrest. Events in these designations range from an increase in magnitude 3 to 4 quakes with a large total of quakes in a single day. The USGS might issue this status several times a year, but the occurrences of the aforementioned events poses no immediate danger to the public.
- Yellow: signifies that one or more magnitude 5 events or the detection of deep magma movement through ground deformation indicates intense unrest. Under such circumstances, the USGS will increase monitoring and issue a watch that will notify local authorities. A watch is expected to occur about once every 10 years.
- Orange: The detection of magma movement at shallow depths triggers condition orange and indicates that an eruption is likely. The USGS will issue a Geological Hazards Warning to the Governor as well as others charged with advising the public.
- Red: indicates that an actual eruption is taking place. The USGS estimates such an alert will be issued once every few centuries.

What to do before an eruption:

- Learn the meaning of designations issued by the USGS and other agencies.
- Discuss response and evacuation plans with local officials, co-workers, and family members
- Update emergency kits, including dust masks

What to do during an eruption:

- Listen to the radio or television for instructions and information
- Cooperate fully with local officials
- Avoid the volcano site
- Stay unwind of the volcano
- Watch for flying rocks, mudflows, and fire if there is an eruption
- Unless roof collapse or lava flow is likely, stay indoors if ash is falling.

What to do after an eruption:

- Avoid driving in heavy dust
- Eliminate heavy ash and dust from rooftops and rain gutters

For more information, contact AVERT at (801) 468-2779 or visit: www.avertdisasters.org