

## **SRMG HOT TOPIC: DISASTER PREPARATION**

Experiencing a natural disaster such as a violent flood, storm, or earthquake is frightening, and the damage to your personal environment (i.e., home, community, and business) can be both distressing and long term. Government resources will be on the way as soon as possible, but the efforts of individuals and neighborhoods immediately following the disaster can save lives. Being prepared and knowing how to respond appropriately in an emergency situation is key to your survival.

### ***FIRES***

The United States has one of the highest fire-related death rates in the industrialized world. Every year nearly 4,400 Americans lose their lives in fires and another 25,100 are injured. Property loss due to fires is estimated at \$8.6 billion annually.

The reality is that most of these incidents are preventable and knowing how to protect yourself and your home in the event of a fire is crucial. Here are some tips on how to increase your chances of surviving a fire.

- Have working smoke detectors. There has been an increase over the last ten years in the number of fires that occur in homes with nonfunctioning smoke detectors.
- Install a fire alarm system that is monitored by an outside agency. These systems not only serve a useful function, they also add a feeling of security to your home.
- Create an evacuation plan for your home, and practice it as a family.
- Have working fire extinguishers in your home at all times. Test and recharge your fire extinguishers according to the manufacturer's instructions.
- Install residential sprinklers. Sprinklers can prevent a fire from spreading from one room to another and limit the size of any damaged areas.
- Avoid using or keeping flammable or combustible liquids in your home.
- If you have a two-story home, make sure each bedroom has an emergency fire ladder in case the only escape route is through a window.
- In your workplace, make sure that you are familiar with the building's evacuation plan and procedures. Always follow the signs to the nearest exit or stairwell. **Never use elevators.**

**If you discover a fire, the most important thing to do is to get out of the building.** Once outside, notify the fire department immediately. Call 911 and be prepared to provide the address, the nearest cross street, and a callback telephone number.

Do not fight the fire unless it is to save a life. If the situation allows, close doors to help contain the fire.

### **WILDFIRES**

More and more people choose to live in mountain settings and wooded areas outside large cities where they can enjoy the natural environment away from the busy crowds and traffic. In these areas, wildfires can be started by lightning; careless acts of humans (discarded cigarettes, campfires, arson, etc.); and combustible debris and often go unnoticed for some time until they spread.

Knowing how to protect your home from a wildfire is key. First, you must find out if your home is indeed at risk. Contact your local fire marshal or fire department—if you are at risk, there are measures that you can take to protect your home, your property, and the lives of your family more effectively.

- Meet with your family and decide what to do and where to go in the event a wildfire strikes your neighborhood. Have a meeting place in case you are separated. Make sure all of your family members know how to call 911 and reach the authorities.
- Make sure fire vehicles can access your home.
- Clear the area around your home of shrubs, woodpiles, and combustible debris. Make sure all trees are at least thirty feet away from your home unless you are in a pine forest, in which case you should maintain a minimum of one hundred feet between your home and the tree line.
- Report any hazardous or suspicious activities that could cause a wildfire to the appropriate authorities.
- Regularly inspect your chimney, gutters, and the roof of your home. Keep these clear of debris at all times, especially in hot and dry weather.
- Keep household materials and tools that could be used in the event a fire strikes (e.g., shovels, a chain saw, rakes, axes, and buckets) handy.
- Make sure there is a water supply nearby, and always have a garden hose ready that is long enough to reach any area on the outside of your home.

These are just a few precautions you can take to protect yourself and your property from wildfires. Speak with your local fire marshal to obtain more detailed information on the specific wildfire dangers in your area, and remember—if you are ordered to evacuate, do so immediately. This can mean the difference between life and death.

## **TORNADOES**

A tornado is a violently rotating column of air that is in contact with and extending between a convective cloud and the surface of the earth. It can produce winds of one hundred to three hundred miles per hour and usually develops after a thunderstorm. It is the most destructive of all storm-scale atmospheric phenomena.

Tornadoes can occur anywhere in the world given the right conditions, but they occur most frequently in the United States in an area bounded by the Rocky Mountains in the west and the Appalachian Mountains in the east.

In the United States, an average of one thousand tornadoes occur every year, which, on average, cause sixty deaths. However, the chances that a tornado will strike the building that you are in are very small, and, by doing a few simple things, you can reduce the chance of injury.

The most important thing you can do to prevent being injured in a tornado is to be alert in case of severe weather. Listen to your local news or radio or check the [Tornado Project Online Web site](#).

- If a tornado **watch** is issued for your area, it means that a tornado is possible.
- If a tornado **warning** is issued, it means that a tornado has actually been spotted in your area. Go to a safe shelter immediately.

Look for the following environmental clues to help predict if a tornado will strike:

- A dark, often greenish sky
- A wall cloud
- Large hail
- A loud roar, similar to a freight train

Know how to protect yourself **before** a tornado strikes.

1. Contact your local National Weather Service (NWS) office; emergency management or civil defense office; and American Red Cross (ARC) chapter to learn your community's warning signals and evacuation plans. Discuss the information that you gather with your family and friends, and develop a survival plan.
  - Pick two places to meet in the event a tornado strikes: (1) a spot outside (but nearby) your home and (2) a place away from your neighborhood in case you can't return home.
  - Designate an out-of-state friend as your "check-in contact" for everyone to call if the family gets separated.
  - Discuss what you would do if advised to evacuate.
  - Have your family learn basic safety measures, such as cardiopulmonary resuscitation (CPR) and first aid; how to use a fire extinguisher; and how and when to turn off the water, gas, and electricity in your home.
  - Keep enough supplies in your home to meet your needs for at least three days, e.g., water, extra clothing, blankets, a first aid kit, emergency tools, and batteries. Store these supplies in sturdy, easy-to-carry containers, such as backpacks or duffel bags. (Replace stored water and food every six months.)
2. Maintain and practice your plan by asking questions to make sure your family remembers the meeting places and scheduling practice emergency drills.

## **EARTHQUAKES**

Earthquake is a term used to describe a sudden slip on a fault, volcanic activity, or other sudden stress changes in the earth and the resulting ground shaking and radiating seismic energy that the event causes. In some areas of the country, earthquakes are an everyday reality. For more information about the seismicity and history of earthquakes in your area, see <http://neic.usgs.gov/neis/states/states.html>.

Although national, state, and local governments and other agencies are constantly surveying and taking measures to ensure the public's safety, there are certain steps that individuals and businesses can take to provide a further degree of readiness.

- Have a family earthquake plan at home.
- Secure the inside of your home.
- Prepare a survival kit for when you are away from home.
- Have an emergency contact outside of your area.

For more information on how to complete these steps successfully, see the ARC [personal earthquake plan brochure](#). Your [local ARC chapter](#) is there to help you and your family when a natural disaster happens in your community.

## **HURRICANES**

A hurricane is a tropical storm with winds that can reach a constant 74 miles per hour or more. (Storms with winds of 39 to 73 miles per hour are called tropical storms.) Every year there are approximately ten tropical storms that develop over the Caribbean Sea, Gulf of Mexico, and Atlantic Ocean, six of which will develop into hurricanes. Many of these storms never reach land—however, the United States falls victim to approximately five hurricanes every three years. Of these five, three will be considered category 3 or higher, meaning the hurricane has sustained winds of 111 miles per hour or higher.

Timely warnings have greatly reduced hurricane fatalities. However, knowing how to protect yourself and your property in the event that one occurs is extremely important.

- If a hurricane warning is issued, listen for weather updates and stay informed.
- Have a hurricane evacuation kit containing medicine, a first aid kit, blankets, a flashlight with extra batteries, extra clothing, and important documents handy. If an evacuation is ordered, do so immediately.
- Stay informed, be prepared, and know how to react appropriately in the event a hurricane strikes—it can mean the difference between life and death.

For more information about hurricanes and hurricane preparedness, see the following sites:

- National Oceanic Atmospheric Administration (NOAA)—<http://www.noaa.gov/>
- National Hurricane Center (NHC)—<http://www.nhc.noaa.gov/index.shtml>
- Federal Emergency Management Agency (FEMA)—  
<http://www.fema.gov/hazard/hurricane/index.shtm>

## **FLOODS**

A flood is defined as a rising of a body of water due to the overflow of inland or tidal waters, the rapid accumulation or runoff of surface waters from any source, or a mudflow that causes a body of water's overflow onto normally dry land. Floods are the most common and widespread of all natural disasters except fire. Flooding causes many deaths and more than \$2 billion in property damage every year.

If you live in an area with a higher flood risk, you should consider taking steps to ensure your family's safety and protect your property.

- Always raise your furnace, water heater, and electrical panel if they are in areas that may be flooded. For more information, see <http://www.fema.gov/hazard/flood/index.shtm>.
- Have a family flood plan—this step is vital. For more information, see <http://www.redcross.org/images/pdfs/preparedness/A4600.pdf>.
- Have flood insurance for your home or business to help you recover in the event a flood occurs.

If it has been raining hard for several hours or days, be alert to the possibility of floods. Stay tuned to your local radio and television stations for flood information.

- If a flood **watch** is announced (meaning that a flood is possible in your area), move furniture and valuables to higher floors in your home and fill your car with gas.
- If there is a flood **warning** (meaning the flooding is already occurring or will occur soon in your area), listen to your local radio and television stations for up-to-date information on evacuations. Move to higher ground away from rivers, streams, creeks, and storm drains. If your car stalls in rising waters, abandon it immediately and climb to higher ground.

***A FINAL NOTE ON DISASTERS...DON'T LEAVE YOUR PET BEHIND!***

For information from the ARC on animal safety during a disaster, see <http://www.redcross.org/www-files/Documents/pdf/Preparedness/checklists/PetSafety.pdf>.