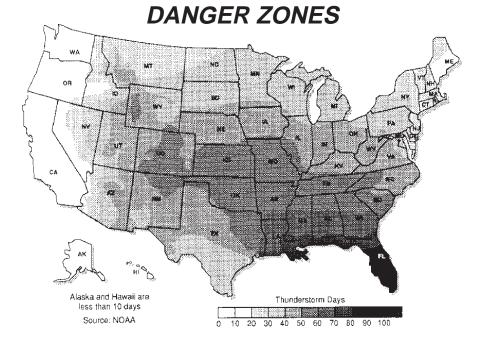
# BACKGROUNDER

### THUNDERSTORMS AND LIGHTNING EMERGENCY INFORMATION

- 1. Thunderstorms can bring heavy rain (which can cause flash flooding), strong winds, hail, lightning, and tornadoes. In a severe thunderstorm, get inside a sturdy building and stay tuned to a battery-operated radio for weather information.
- 2. Lightning is a major threat during a thunderstorm. In the United States, between 75 and 100 Americans are killed each year by lightning. If you are caught outdoors, avoid natural lightning rods such as tall, isolated trees in an open area or on the top of a hill, and metal objects such as wire fences, golf clubs, and metal tools.
- 3. It is a myth that lightning never strikes the same place twice. In fact, lightning will strike several times in the same place in the course of one discharge.



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

#### WHAT IS A THUNDERSTORM?

A thunderstorm is formed from a combination of moisture, rapidly rising warm air, and a force capable of lifting air, such as the meeting of a warm and cold front, a sea breeze, or a mountain. All thunderstorms contain lightning. Thunderstorms may occur singly, in clusters, or in lines. Thus, it is possible for several thunderstorms to affect one location in the course of a few hours. Some of the most severe weather occurs when a single thunderstorm affects one location for an extended time.

#### 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." This flash of light usually occurs between the clouds and the ground. A bolt of lightning reaches a temperature approaching 50,000 degrees Fahrenheit in a split second. The rapid *heating and cooling of air* near the lightning cause thunder.

The United States supports international efforts to raise awareness that natural risks can be managed: Federal Emergency Management Agency, American Red Cross, National Weather Service, U. S. Geological Survey, Department of Energy, Corporation for National Service, U. S. Army Corps of Engineers, Small Business Administration, National Aeronautics and Space Administration, Department of Transportation, Department of Education, and the National Interagency Fire Center.

### HELP YOUR COMMUNITY GET READY-

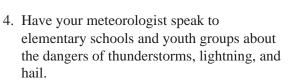
The media can raise awareness about thunderstorms and lightning by providing important information to the community. Here are some suggestions:



1. Publish a special section in your local newspaper with emergency information about thunderstorms and lightning. Place special emphasis on what people should do if they are caught outside. Localize the information by printing the phone numbers of local emergency service offices, the

American Red Cross, and the nearest hospital.

- 2. Interview officials with the U.S. Department of Agriculture about the Federal Crop Insurance Corporation.
- 3. Periodically inform your community of local public warning systems.





5. Interview a representative of the American Red Cross about giving first aid to people who have been struck by lightning.

## DID YOU KNOW ...

- At any given moment, nearly 1,800 thunderstorms are in progress over the surface of the earth.
- On average, the United States gets 100,000 thunderstorms each year. Approximately 1,000 tornadoes develop from these storms.
- Large hail results in nearly \$1 billion in damage to property and crops each year.
- The power of a lightning bolt's electrical charge and intense heat can cause electrocution on contact, split trees, ignite fires, and cause electrical failures.

- Most deaths from lightning occur on the East Coast.
  More forest fires are started in the West since the lightning season coincides with the dry season there.
- Approximately 10,000 forest fire are started each year by lightning. Approximately \$100 million in annual losses result from forest and building fires caused by lightning.
- Straight-line winds exceeding 100 mph are responsible for most thunderstorm damage.

#### HOW THE PUBLIC CAN HELP AFTER A DISASTER

When disaster strikes, people everywhere want to help those in need. To ensure that this compassion and generosity are put to good use, the media can highlight these facts:

• Financial aid is an immediate need of disaster victims. Financial contributions should be made through a recognized voluntary organization to help ensure that contributions are put to their intended use.

• Before donating food or clothing, wait for instructions from local officials. Immediately after a disaster, relief workers usually don't have the time or facilities to set up distribution channels, and too often these items go to waste.

• Volunteers should go through a recognized voluntary agency such as the American Red Cross or the Salvation Army. They know what is needed and are prepared to deal with the need. Local emergency services officials also coordinate volunteer efforts for helping in disaster.

• Organizations and community groups wishing to donate items should first contact local officials, the American Red Cross, or the Salvation Army to find out what is needed and where to send it. Be prepared to deliver the items to one place, tell officials when you'll be there, and provide for transportation, a driver, and unloading.