



Severe Weather Preparedness



- Each year, people are killed or seriously injured by tornadoes and other types of severe weather, despite advance warning.
- Gather information about hazards by contacting your local emergency management office, Ready.gov, American Red Cross chapter and National Weather Service weather forecast office. Knowing and understanding this information ahead of time will help you prepare by understanding what types of disasters could occur and how best to respond and protect yourself. It is also critical to learn your community's warning signals and emergency plans.
- Watches and warnings from the National Weather Service could save your life. Learn the difference between a "Watch" and a "Warning."
 - **Watch:** A watch lets you know that weather conditions are favorable for a hazard to occur. It literally means "be on guard!" During a weather watch, gather awareness of the specific threat and prepare for action - monitor the weather to find out if severe weather conditions have deteriorated and prepare to take shelter.
 - **Warning:** A warning requires immediate action. This means a weather hazard is imminent - it is either occurring (a tornado has been spotted, for example) - or it is about to occur. Find safe shelter immediately.



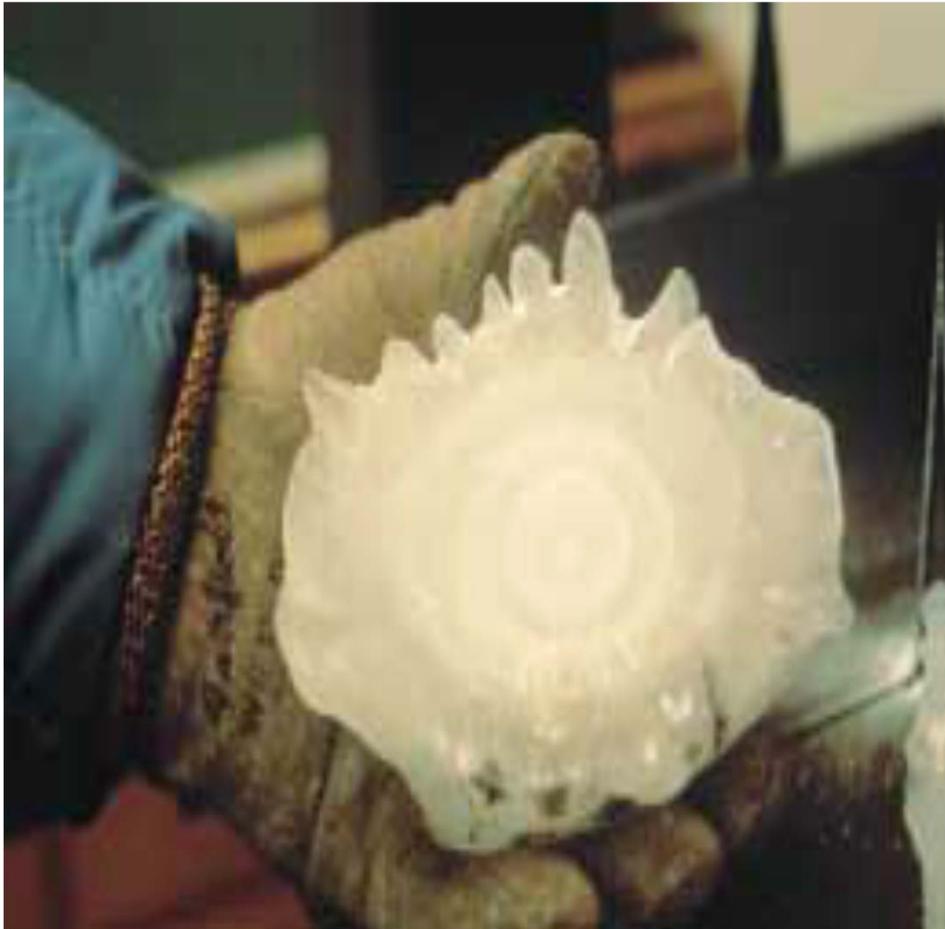
Thunderstorms



- Thunderstorms affect relatively small areas when compared with hurricanes and winter storms. The typical thunderstorm is 15 miles in diameter and lasts an average of 30 minutes. Nearly 1,800 thunderstorms are occurring at any moment around the world. That's 16 million a year!
- Despite their small size, **all** thunderstorms are dangerous. Every thunderstorm produces lightning, which kills more people each year than tornadoes. Heavy rain from thunderstorms can lead to flash flooding. Strong winds, hail, and tornadoes are also dangers associated with some thunderstorms.
- Of the estimated 100,000 thunderstorms that occur each year in the United States, only about 10 percent are classified as **severe**.
- Your National Weather Service considers a thunderstorm severe if it produces hail at least 3/4-inch in diameter, wind 58 mph or higher, or tornadoes.



Large Hail



- Causes nearly \$1 billion in damage to property and crops annually.
- Costliest United States hailstorm: Denver, Colorado, July 11, 1990. Total damage was \$625 million



Straight-line Winds



- Responsible for most thunderstorm wind damage.
- Winds can exceed 100 mph!
- July 2008 was a good example of the devastation straight-line winds can inflict.
- One type of straight-line wind, the **downburst**, can cause damage equivalent to a strong tornado and can be extremely dangerous to aviation.
- A “dry microburst” is a downburst that occurs with little or no rain. These destructive winds are most common in the western United States.



Lightning



- Lightning causes an average of 80 fatalities and 300 injuries each year.
- Lightning occurs in all thunderstorms; each year lightning strikes the Earth 20 million times.
- The energy from one lightning flash could light a 100-watt light bulb for more than 3 months.
- Most lightning fatalities and injuries occur when people are caught outdoors in the summer months during the afternoon and evening.
- Lightning can occur from cloud-to-cloud, within a cloud, cloud-to-ground, or cloud-to-air.
- Many fires in the western United States and Alaska are started by lightning.
- The air near a lightning strike is heated to 50,000°F The rapid heating and cooling of the air near the lightning channel causes a shock wave that results in . – *hotter than the surface of the sun!* **thunder**

LIGHTNING Facts and Myths

MYTH: If it is not raining, then there is no danger from lightning.

FACT: Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall. This is especially true in the western United States where thunderstorms sometimes produce very little rain.

MYTH: The rubber soles of shoes or rubber tires on a car will protect you from being struck by lightning.

FACT: Rubber-soled shoes and rubber tires provide protection from lightning. The steel frame of a hard-topped vehicle provides increased protection if you are not touching metal. Although you may be injured if lightning strikes your car, you are much safer inside a vehicle than outside.

MYTH: People struck by lightning carry an electrical charge and should not be touched.

FACT: Lightning-strike victims carry no electrical charge and should be attended to immediately. Contact your local American Red Cross chapter for information on CPR and first aid classes.

MYTH: “Heat lightning” occurs after very hot summer days and poses no threat.

TRUTH: “Heat lightning” is a term used to describe lightning from a thunderstorm too far away for thunder to be heard.

Lightning Safety Rules

- Postpone outdoor activities if thunderstorms are imminent. This is your best way to avoid being caught in a dangerous situation.
- Move to a sturdy building or car. Do not take shelter in small sheds, under isolated trees, or in convertible automobiles. Stay away from tall objects such as towers, fences, telephone poles, and power lines.
- If lightning is occurring and a sturdy shelter is not available, get inside a hard top automobile and keep the windows up. Avoid touching any metal.
- Utility lines and metal pipes can conduct electricity. Unplug appliances not necessary for obtaining weather information. Avoid using the telephone or any electrical appliances. Use phones **ONLY** in an emergency.
- Do not take a bath or shower during a thunderstorm.
- Turn off air conditioners. Power surges from lightning can cause serious damage.
- Find a low spot away from trees, fences, and poles. Make sure the place you pick is not subject to flooding.
- If you are in the woods, take shelter under the shorter trees.
- If you feel your skin tingle or your hair stand on end, squat low to the ground on the balls of your feet. Place your hands over your ears and your head between your knees. Make yourself the smallest target possible and minimize your contact with the ground. **DO NOT** lie down.
- If you are boating or swimming, get to land and find shelter immediately!



Severe Weather Preparedness



- When severe weather strikes, the difference between life and death can be summed up in as little as two words: Be prepared. Making a plan for what you and your family will do when severe weather strikes is an important step in being prepared and building a Weather-Ready Nation.
- A good source of information for developing your own plan is your local emergency management office and Ready.gov. Also see <http://readyarmy.ria.army.mil/> for RIA-specific information.
- While there are basic elements that should be a part of any plan, it's important to also tailor your plan to the individual needs of you or your family. This is especially important for the elderly or those with disabilities or special medical or dietary needs.
- As part of tailoring your plans, consider working with others to create networks of neighbors, relatives, friends and co-workers who will assist each other in an emergency. Discuss your needs and responsibilities and how people in the network can assist each other with communication, care of children, pets, or specific needs like the operation of durable medical equipment.
- Preparation is not just for grown-ups. Have your children go on a severe weather preparation adventure (www.youngmeteorologist.org/game/index.html). They can learn how to protect themselves and how they can help their family stay safe. When children complete the game, they receive a Young Meteorologist certificate.
- Your family may not be together when an emergency occurs. Ensure that your family knows where to meet and get in touch with a Family Emergency Plan.



Quad City Metro Area Outdoor Warning Sirens



- Events where Warning Sirens will be activated
 - Tornadoes
 - Tornado Warning issued by NWS and/or
 - Tornado/funnel cloud reported by trained spotter
 - Severe Thunderstorms
 - Severe Thunderstorm Warning issued by the NWS or report received from a trained spotter that includes:
 - Winds 70 mph or greater and/or
 - Golf ball sized hail or larger
 - Local Life-threatening Events
 - Non-weather emergencies (Hazmat, terrorism, etc.) that pose a threat to those outdoors and require action to protect life
- All Clear – There will be **NO** “all clear” signal from outdoor warning sirens
- Testing – First Tuesday of each month at 1000

AtHoc Self-Service: Updating your information

1 Click on the AtHoc Icon at the bottom of your screen.

2 Select Update My Info

- 3
- Select your status i.e. Civilian, Military etc.
 - Select your building
 - Identify if you are CPR certified
 - Identify if you are a member of the Threat Working Group
 - Identify if you are a Building Marshal Warden. (Not Floor Marshal Warden)
 - Identify if you are a Senior Leader.
 - Identify if you require transportation in the event of an evacuation and if you require wheel chair access.

4 Save

5 Click on Update My Device Info

- 6 Insert:
- Work Phone - Mandatory
 - Work Email – Mandatory
 - Personal Mobile, Text, and E-mail is Optional but recommended.

7 Save

The screenshot displays the AtHoc Self-Service web application. The main content area is a user profile form for Jeremiah CowGill. The form includes fields for Username, First Name, Last Name, Display Name, Created On, Status, Rock Island Arsenal, RIA Status, Bldg Number, CPR Certified, Threat Working Group Member, Building Marshal Warden, Senior Leader, and Transportation Needs. To the right, there is a 'Self Service Devices' section with expandable sections for 'Telephony Devices' and 'Data Devices', each containing input fields for mobile, work, and home phone numbers, work email, and text messaging. A 'Save' button is visible at the bottom right of the form. The Windows taskbar at the bottom shows the AtHoc icon (1) in the hidden icons area, which is open to show 'Update My Info' (2) and 'Update My Device Info' (5). A red arrow points to the hidden icons area with the text 'If you don't see the AtHoc icon it may be hidden. Open hidden icons here'. The system tray shows the time as 8:57 AM on 2/5/2013.

If you don't see the AtHoc icon it may be hidden. Open hidden icons here