



Training Solutions, Delivered!

**SEVERE WEATHER  
ALERT:  
*Are You Prepared?***

**Leader's Guide, Fact Sheet  
& Quiz**

Item Number: 3195  
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***This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.***

## **PREPARING FOR THE MEETING**

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes before the quiz itself, which is on the final page.

## **CONDUCTING THE PRESENTATION**

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

**3195 SEVERE WEATHER ALERT:  
*Are You Prepared?*  
FACT SHEET**

**LENGTH: 15 MINUTES**

**PROGRAM SYNOPSIS:**

Would you know what to do if a severe weather event occurred in your area? Severe weather can happen anywhere at any time. You must be prepared for severe weather because you often have to respond with little or no notice. Making the right response can often mean the difference between being a survivor or becoming a casualty.

In this program, we will discuss severe thunderstorms and tornadoes and offer some facts, tips and warnings that can help you survive these serious weather emergencies. Topics include severe weather watches and warnings, hazards posed by thunderstorms, flooding and moving water, being prepared for tornadoes, emergency response plans and precautions to take once a storm has passed.

**PROGRAM OBJECTIVES:**

After watching the program, the participant will be able to explain the following:

- The meanings of severe warnings and watches;
- How to stay safe when severe thunderstorms are approaching;
- The hazards of flooding and moving water;
- How to prepare for tornadoes in the home, automobile, at work or outside;
- Precautions to take after a storm has passed.

**INSTRUCTIONAL CONTENT:**

**BEING PREPARED FOR SEVERE WEATHER**

- One of the first things you need to know about severe weather is that it can happen any time and anywhere.
- You must be prepared for a severe weather event ahead of time, because when the storm hits, it's often too late.
- Part of being prepared means being able to receive advance notice of an approaching storm so you will have time to react. Radio and TV are the most likely places to receive this information.
- Some areas have an emergency tone that breaks into regular programming in the event of severe weather. In addition, weather radios broadcast weather broadcasts, watches and warnings.
- When you suspect changing weather conditions, it's a good idea to tune into weather radio broadcasts.
- Many facilities have a plan to notify workers, students and others when severe weather approaches. These plans may include tones, sirens or announcements.
- Make sure you understand the various warning signals that are used in the facilities you most frequently visit.
- Many facilities have emergency preparedness plans, which include how to respond to severe weather and other emergencies.
- When you receive specific training on your facility's emergency plans, pay attention! It just might save your life.
- For example, your facility may have a designated place to seek shelter from an approaching tornado. You should know where that place is and be able to find it in the dark.

**SEVERE WEATHER WATCHES AND WARNINGS**

- You need to understand the terms used to describe various weather events and how to respond to them.
- Two common terms used to give notice of weather events are the terms "watches" and "warnings." You must understand the difference in these terms.
- A watch means conditions are favorable for a particular weather event and you should stay alert. For example, a Severe Thunderstorm Watch means to "watch" for severe thunderstorms and be ready to react.
- Under watch conditions, severe weather is likely but not yet occurring in your area.
- A warning means a severe weather event is occurring in your area and you need to take action now. For example, a Tornado Warning means there is an active tornado in progress and you must seek shelter immediately.

## **SEVERE THUNDERSTORMS**

- All thunderstorms can be dangerous, but a “severe thunderstorm” especially so. A thunderstorm is considered severe if it produces  $\frac{3}{4}$  inch hail, has 58 mph or higher winds or produces a tornado.
- Severe thunderstorms can occur alone, in clusters or in lines. Sudden downbursts of wind can produce winds up to 150 mph and straight-line winds can flip automobiles, uproot trees and cause serious damage to property.
- A Severe Thunderstorm Warning is issued when a severe thunderstorm is present or imminent in the warning areas, or when Doppler radar indicates a current thunderstorm is developing severe characteristics.
- Always take Severe Thunderstorm Watches and Warnings very seriously. Keep in mind that many tornadoes occur as a byproduct of severe thunderstorms, even when no tornado warning is given.
- If you have received notification of a Severe Thunderstorm Watch, keep a close eye on the sky. Look for darkening skies and increasing wind. Stay alert for flashes of light or the sound of thunder.

## **HAZARDS OF THUNDERSTORMS**

- Lightning is a source of danger in the event of a thunderstorm. Keep in mind that a thunderstorm does not have to be severe to produce lightning.
- If you can hear thunder, you are in range to be struck by lightning and you should seek shelter immediately. Be sure to remain in a safe shelter for at least 30 minutes after the last clap of thunder is heard.
- While taking shelter, be aware that telephone lines, electrical wiring and metal piping can conduct electricity and provide a path for lightning to reach you. Avoid using the telephone, running water or any electrical appliances during a thunderstorm.

## **STAYING SAFE OUTDOORS**

- If a thunderstorm approaches and you are outdoors, you should seek indoor shelter immediately. If this is not possible, go to a low-lying, open place away from trees, poles and metal objects.
- Make yourself as small a target as possible. Squat low to the ground and place your hands on your knees with your head between them.
- Don't lie flat on the ground; this will make you a bigger target!

## **FLOODING & MOVING WATER**

- Many people are surprised to learn that most severe weather deaths are not caused by wind or lightning; the number one cause of death associated with severe weather is flooding.
- Severe thunderstorms can drop a huge amount of rain in a short time. As this water surges downhill, flash floods can quickly occur.
- Become familiar with the lay of the land in your area and be aware of dry creek beds, ravines or even roadways that will quickly become raging rivers during heavy rainfall.
- All too often, people underestimate the raw power of flowing water and a needless tragedy results. Just a few inches of moving water can knock you off your feet.
- Water flowing over a road can easily sweep away cars. As creeks and rivers leave their banks, entire houses can be swept away.
- Never attempt to drive across any flowing water as it crosses a road or a bridge; you simply have no way of knowing how deep the water is. Oftentimes the road you believe is just under the water has been washed away and by attempting to cross it, you are driving directly into a raging river.
- Avoid walking, wading or swimming in floodwaters. Not only is the flowing water itself a danger, but also there may be unseen obstacles and debris in the water that can trap and drown an unsuspecting swimmer.
- If you come upon flood waters, stop and go in the other direction. Get to higher ground as soon as possible.

## **TORNADOES**

- Thunderstorms can also spawn tornadoes, one of the most powerful and destructive forces found in nature.
- A tornado is a violently rotating column of air extending between a storm cloud and the surface of the earth.
- Strong tornadoes can attain an intense wind speed of more than 200 mph. In extreme cases, these winds may approach 300 mph.
- Tornadoes can come one at a time or in clusters. Length, wind, direction of travel and speed can vary greatly.

- Their destructive paths can range from 50 yards to over a mile in width. Some only touch down for a few seconds, while others have remained in contact with the ground for over an hour.
- Although most of us consider spring to be tornado season, tornadoes can occur any time appropriate weather conditions are present.

### **TORNADO WATCHES AND WARNINGS**

- A Tornado Watch is issued when conditions are favorable for the development of tornadoes in the watch area. A Tornado Watch indicates a tornado might occur.
- When the National Weather Service issues a Tornado Warning, a tornado has actually been sighted or indicated by radar, and is occurring or imminent in the warning area.
- Modern technology and advancements in the study of tornadoes continue to improve our ability to receive advanced warnings of tornado activity; however, be aware that tornadoes can and do occur without any watch or warning in effect.

### **BEING PREPARED FOR TORNADOES AT HOME OR OUTSIDE**

- Most families have a plan for responding to a fire, but all too often do not plan ahead for the occurrence of a tornado. As part of your family's disaster plan, decide where to go and what to do if a tornado warning is issued.
- Select a pre-designated tornado shelter so valuable time is not wasted trying to decide where to go. Choose an interior room located in the lowest level possible, such as a basement or cellar.
- Try to maintain as many walls as possible between you and the outside. This may often mean a closet, hallway or bathroom.
- Once you select your shelter room, keep it supplied with a radio, flashlight and fresh batteries so you can stay informed about the progress of the storm and determine when it is safe to leave the shelter.
- One common myth about tornadoes is that most damage to homes is caused by changing air pressure and that opening doors and windows can minimize damage. This is not the case! The force of a tornado can tear through a structure regardless of the position of windows or doors.
- Don't waste valuable time. When tornadoes are threatening, take shelter immediately.
- If you are in a mobile home when a warning is issued, evacuate immediately and go to the lowest floor of a sturdy nearby building.
- If you cannot get inside, crouch for protection beside a strong structure or lie flat in a ditch or low-lying area. Cover your head and neck with your arms.

### **EMERGENCY RESPONSE PLANS**

- In your workplace or at school, response plans have been created to deal with various emergency situations, including severe weather.
- One major downfall of these types of plans is a failure by most people to take them seriously or make the time to study them until it's too late.
- The emergency response plan developed by your employer, school or other facilities will designate a specific gathering place to be used as shelter in the event of severe weather.
- Make sure you know how to get to this area in the most efficient manner. When a tornado warning is issued, you may not have much time to respond.
- When a tornado warning is issued, calmly follow all instructions given over the facility's communication systems or by those persons responsible in a crisis situation.
- Do not leave the facility in an effort to help friends or family. The best way to help others is to make sure they are prepared in advance.
- Once the storm hits, take appropriate shelter and stay there until the danger is past.

### **RESPONDING TO A TORNADO WHILE IN AN AUTOMOBILE**

- If you are in a vehicle as a tornado approaches, stay calm and assess the situation. Do not attempt to "race" the tornado and do not seek shelter inside your vehicle.
- If possible, take shelter immediately in a nearby sturdy building. If this is not possible, get out of the automobile and lie flat in a ditch or other low-lying area that will provide protection from the wind.

## **PRECAUTIONS TO TAKE AFTER THE STORM HAS PASSED**

- Many injuries and fatalities occur after a storm has passed. Be aware of the hazardous conditions present after a severe weather event.
- Stay away from downed power lines and report them to the utility company.
- Partially damaged buildings may collapse, crushing anyone inside.
- If the power has been knocked out, use flashlights instead of candles to avoid the risk of fire.
- Broken glass, sharp metal and other hazardous materials present serious hazards. Great care should be taken to avoid areas containing storm debris.

## **SUMMARY**

- In summary, severe weather in the form of thunderstorms and tornadoes can cause serious damage and destruction when it occurs.
- Injury and loss of life can be prevented if proper actions are taken before, during and after a storm.
- Be prepared beforehand by knowing how weather and warnings are communicated at work, home or school. Know the meaning of these warnings and take appropriate shelter when they are issued.
- When emergency response training is provided by your workplace or other facilities, pay attention. Understand where to go and what to do in the event of severe weather.
- Protect yourself from lightning by seeking shelter indoors anytime thunder is heard.
- Understand the power of moving water. Avoid any floodwaters and never drive across standing or flowing water.
- In the event of severe weather, being prepared, staying calm and making the right response will help you survive the fury of the storm when it occurs.

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**ANSWERS TO THE REVIEW QUIZ**

1. a

2. b

3. a

4. a

5. b

6. b

7. a

8. c

**SEVERE WEATHER ALERT:**

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**REVIEW QUIZ**

*The following questions are provided to determine how well you understand the information presented in this program.*

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Under \_\_\_\_\_ conditions, severe weather is likely but not yet occurring in your area.
  - a. Watch
  - b. Warning
  
2. Only severe thunderstorms produce lightning.
  - a. True
  - b. False
  
3. You should never attempt to drive across flowing water as it crosses a road or a bridge.
  - a. True
  - b. False
  
4. Tornadoes can occur any time appropriate weather conditions are present.
  - a. True
  - b. False
  
5. Opening doors and windows when a tornado is approaching will minimize any structural damage.
  - a. True
  - b. False
  
6. If you are in a vehicle when a tornado approaches, you should turn the vehicle in the opposite direction of the tornado and race away from it.
  - a. True
  - b. False
  
7. If severe weather knocks the power out, you should use flashlights instead of candles for lighting.
  - a. True
  - b. False
  
8. What is the number one cause of death due to severe weather?
  - a. Strong winds
  - b. Lightning
  - c. Flooding