

Hanover Emergency Management Agency

Large Outdoor Venue Severe Weather/Lightning Action Plan

The Hanover Emergency Management Agency (HEMA) provides this information to permit holders of anticipated or planned large outdoor venues. It is highly recommended that permit holders follow the guidelines set forth in this plan to ensure the safety of all participants. The Town of Hanover has been designated as a StormReady Community by the National Weather Service. StormReady Communities are better prepared to save lives from the onslaught of severe weather through advanced planning, education and awareness.

“When Thunder Roars, Go Indoors”

1. Event Permit Holders should devise a Severe Weather Contingency Plan prior to event which is reviewed and known by all event staff with key points:
 - ✓ Identifying a Weather Watcher
 - ✓ Determining “triggers” for implementing protective measures
 - ✓ Determining methods of notifying event participants of severe weather
 - ✓ Confirm ability to call 911 and ensure event staff know address of venue
 2. Weather Watcher: Designate a person or persons to monitor lightning and severe weather each day
 - Weather Watcher reviews available forecasts prior to event:
 - NWS Advisories, Watches, and Warnings: <https://www.weather.gov/box/>
 - NWS Area Forecast Discussion – Google Search via internet
 - Thunderstorm and severe weather forecasts: <http://www.spc.noaa.gov>
 - “Radar Scope” on Smart Phone (app) is a recommended application
- “*Watch*” indicates that conditions are favorable for severe weather to develop
- “*Warning*” means that severe weather has been detected and may be imminent
- Weather Watcher notifies event staff of predicted weather hazards as necessary
 - Weather Watcher and other staff use available tools to monitor weather
 - Smartphone application (minimum, required)
 - On-site lightning detector – HEMA has limited number of detectors to provide to permit holders
 - Commercial notification subscription (*optional*)

WHERE TO GO:

The safest location during a thunderstorm is inside a large enclosed structure with plumbing and electrical wiring. These include shopping centers, schools, office buildings, and private residences. If lightning strikes the building, the plumbing and wiring will conduct the electricity and eventually direct it into the ground. If no substantial buildings are available, then an enclosed metal vehicle such as an automobile, van, or school bus would be a suitable alternative.

WHERE NOT TO GO:

Not all types of buildings or vehicles are safe during thunderstorms. Buildings with exposed sides are NOT safe (even if they are “grounded”). These include beach shacks, metal sheds, picnic shelters/pavilions, carports, and baseball dugouts. Porches are dangerous as well. Convertible vehicles offer no safety from lightning, even if the top is up. Other vehicles which are NOT safe during thunderstorms are those with open cabs, such as golf carts, tractors, and construction equipment.

NOTE: Flash-to-Bang Rule: The observer begins counting once sighting a lightning flash. Counting is stopped at the sound of related thunder. The count is then divided by five (5) to determine the proximity in miles of the lightning strike. (5 seconds = 1 mile; 50 seconds = 10 miles, etc.).

3. Threat Level 1: Lightning detected within 20 miles and/or Severe Weather WATCH issued
 - Weather Watcher notifies event staff
 - If it appears the thunderstorm is moving toward the site, or if a more organized thunderstorm or cluster of thunderstorms (supercells, squall lines, bow echoes) are headed for the site, a 30-minute lead time or more should be considered for protective actions. The weather watcher should attempt to estimate or determine (using available means) the speed and direction of the storm movement to determine when it will enter a 10 mile radius of the event location.
 - Protective actions
 - Event staff formulates plan for additional actions if/when they become necessary
 - Prepare to notify the public and recommend actions
 - Prepare to leave and find shelter (identify appropriate shelter). No place outside is safe if lightning is in the vicinity. Partially enclosed vending areas and picnic shelters are not safe. If a substantial building is not available, fully-enclosed motor vehicles provide good shelter as long as occupants do not touch the metal framework during the thunderstorm.
 - Consider taking proactive precautions
 - Consider initiating predetermined evacuation plans, if necessary
 - Ensure event staff acts to protect themselves
4. Threat Level 2: Lightning detected within 15 miles and/or Severe Weather WARNING issued (Tornado, Thunderstorm, Flash Flood)
 - Weather Watcher notifies event staff
 - Protective actions
 - Event staff formulates plan and begins to take additional actions as determined necessary
 - Begin to notify the public
 - Prepare to leave and find shelter (identify appropriate shelter). No place outside is safe if lightning is in the vicinity. Partially enclosed vending areas and picnic shelters are not safe. If a substantial building is not available, fully-enclosed motor vehicles provide good shelter as long as occupants do not touch the metal framework during the thunderstorm.
 - Begin to secure/take down pop-up tents, tables, chairs, etc.
 - Begin to secure items that may become projectiles if/when severe weather occurs
 - Consider initiating predetermined evacuation plans, if necessary
 - Ensure event staff acts to protect themselves

5. Threat Level 3: Lightning detected within 10 miles and/or Severe Weather WARNING issued (Tornado, Thunderstorm, Flash Flood) – severe weather imminent
 - Weather Watcher notifies event staff
 - Protective actions
 - Close facilities that do not provide protection from lightning
 - Notify the public of imminent threat and to take recommended action:
 - Leave and find shelter (identify appropriate shelter). No place outside is safe if lightning is in the vicinity. Partially enclosed vending areas and picnic shelters are not safe. If a substantial building is not available, fully-enclosed motor vehicles can provide shelter as long as occupants do not touch the metal framework during the thunderstorm. If no protection from lightning is available, direct patrons to stay away from the tallest objects (lifeguard stands, light poles, flag poles), metal objects (fences or bleachers), standing pools of water, and open areas.
 - Take protective actions
 - Secure/take down pop-up tents, tables, chairs, etc.
 - Secure items that may become projectiles
 - Implement predetermined evacuation plans
 - Ensure staff acts to protect themselves
6. Lightning Injury Response
 - Ensure scene safety (victims do not carry an electrical charge and can be touched)
 - **CALL 911 – be prepared to notify dispatcher of your current location and specific location of the patient(s) at the venue**
 - If necessary, safe, and appropriate, move the victim to a safe place away from the threat of another lightning strike
 - CPR and/or AED may be necessary
 - Heart irregularities, shock, or sudden loss of consciousness are possible. Keep the conscious victim calm and monitor closely
7. All Clear: The Weather Watcher will continue to monitor the proximity of thunderstorms and utilize local observations to make an informed decision, determining the appropriate time to recommend reopening outdoor facilities. Management may then allow for normal activities to resume after 30 minutes of no detected lightning strikes within a 10 mile radius of the site. Notify the public that outdoor activities can resume.