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| Lightning safety: outdoor community preparednessFacility:Point of Contact:Address:Phone/E-mail: |
| “When thunder roars, go indoors!” |
| **Overview** | The National Weather Service (NWS) has implemented a voluntary recognition program for local counties and communities to create an awareness of the dangers of lightning at their outdoor recreational venues and provide the community with safety measures to protect themselves from the dangers of lightning. This campaign encourages the public to take action when they hear thunder, rather than waiting for lightning or rain. While this focuses on the community level, there are companion programs for large venues, golf courses, lifeguards, and beach patrols.The NWS recognizes the efforts of counties and communities that follow these guidelines to protect those partaking in recreational outdoor activities from the dangers of lightning. |
| Reference: | Lightning safety plan checklist |
|  | **Elements of an effective lightning safety program should include a *written* plan that 1) identifies vulnerable venues where lightning poses a significant hazard to the public and 2) demonstrates how each venue official will:** |
|  **Weather Situational Awareness** | Obtain timely thunderstorm information; designate a weather watcher; and assign an official in charge who will stop events when required. | □ |
| **Public Notification Plan** | Communicate to staff and event attendees that the threat for lightning and hazardous weather exists and outline the safety measures that will be implemented if the threat becomes imminent. | □ |
| **Public Notification Plan** | Communicate the imminent threat to staff and event attendees and explain that moving to a safe structure or evacuation actions will occur. | □ |
| **Protection Plan** | Identify substantial lightning-safe structures and have specific evacuation instructions and maps. A lightning-safe structure is a fully-enclosed building that is grounded or a fully-enclosed metal vehicle. | □ |
| **Staff Education & Plan Review** | Educate the staff so they know the lightning safety rules and are comfortable with all aspects of the written lightning safety plan. | □ |

**A review of your plan by the National Weather Service is required to complete this lightning awareness program.**

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| **Nws.bmp** | This Lightning Safety Plan Resource Guide can be used as a template to create a new lightning safety plan or the above recommended elements can be used to strengthen an existing plan. |

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| **LIGHTNING SAFETY PLAN RESOURCE GUIDE** |
| **OVERVIEW** | Thunder is an immediate warning of dangerous conditions outside. If thunder is heard, anyone outside is in danger of being struck by lightning. Other threats such as damaging winds, large hail, flash flooding, or even a tornado may also be possible. Immediate action needs to take place to safeguard the community. This plan specifies the actions that will be taken. |
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| Weather situational awareness |
| Before each community event, a weather watcher will be designated to review the forecast and monitor weather conditions. The weather watcher will be a person able to devote the attention needed to adequately monitor conditions. This person will use at least \_\_\_\_ weather information sources and keep abreast of changes to that forecast and current conditions. This person will know how to get thunderstorm forecasts from each source, especially if using the internet**.** If available, mobile technology (through web pages or mobile applications) should be used to supplement weather information (radar, warnings) during the event. The weather watcher’s main responsibility during the event is to keep their eyes and ears to the sky. **If thunderstorms are forecast, then the weather watcher will notify the official in charge of the possible threat and will review the remainder of the safety plan with staff before the event.****The designated weather watcher/ official in charge is:****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Contact information:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****The official in charge of stopping the event is:****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Contact information:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****The Weather Watcher will use the following methods to maintain situational awareness (checked):** |
| **Lightning Detection System \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | □ |
| **Commercial Lightning Detection Network \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | □ |
| **Mobile Device** | □ |
| **Internet (subscription for alerts if available) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** **National Weather Service Watches, Warnings, Hazardous Weather Outlooks, and Area Forecast Discussions: www.weather.gov/(insert local identifier)**
* **Thunderstorm Outlooks from the NWS Storm Prediction Center (information 12 to 36 hours in advance): www.spc.noaa.gov**
 | □ |
| **NOAA Weather Radio** | □ |
| **Television (local network or cable TV)** | □ |
| **NOAA Weather Wire (subscription)** | □ |
| **Radio Station (AM/FM) – EAS Reception** | □ |
| **Amateur Radio** | □ |
| **Other** (please list in detail): | □ |
| **Additional Contacts** | Additional contact information is listed below. Examples would be the Parks and Recreation Director, the county Emergency Management office, etc. |
| Name | Phone Number |
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| PUBLIC NOTIFICATION PLAN |
| Event attendees will be provided with the following information:1. Before the event begins, attendees will be informed that a lightning threat exists and that protective action may be required that day.
2. Prior to the event, instructions will be given on what protective measures will be taken if the lightning threat materializes.
3. During the event, the attendees will be notified of any imminent threat and specific directions on taking protective action.
4. After a delay, an “all clear” notice when it is safe to leave the lightning-safe structure and/or return to the event location.

Consider handing out lightning safety brochures or information sheets at the beginning of a season and/or at the day of an event. The National Weather Service can provide artwork for the “When Thunder Roars, Go Indoors” signs. This sign is an effective visual reminder of basic safety precautions to take in the event of a thunderstorm. Signs alone cannot satisfy the public notification recommendations; they can supplement your plan.**When thunderstorms are forecast for the day of the event, the staff will use the following methods to communicate the possibility of threatening weather to the attendees and the safety precautions that will take place if needed (checked):** |
| **Public Address Announcements** | □ |
| **Video Board Message Developed** | □ |
| **Outdoor Warning Siren(s)** | □ |
| **Venue TV Override** | □ |
| **Telephone Tree to Event Staff** | □ |
| **Local Alert Broadcast System** | □ |
| **Local Pager System (dissemination)** | □ |
| **Local Radio Broadcast (dissemination)** | □ |
| **Text/Email message alerts** | □ |
| **Social Media** | □ |
| **Other** (please list in detail)**:** | □ |
| PROTECTION PLAN |
| **Protective action will be taken at the first sign of thunder or lightning.** The official in charge will suspend the event and initiate protective measures for the staff and attendees. There are two protective actions to take: 1) Move staff and attendees to substantial lightning-safe structures or  2) Terminate the event and evacuate the premises. Evacuations should be considered if there are no lightning-safe structures available for everyone or if the official in charge determines that a restart of the event will likely not occur. **Outdoor activity can resume after 30 minutes of no lightning detected or thunder observed.** |
|  **Safe Structures**  |  ***There is no safe place outside when thunderstorms are in the area***. If you hear thunder you are likely within striking distance of the storm. Just remember, “**When Thunder Roars, Go Indoors!”** A **lightning-safe structure** is either a substantial building (one with plumbing and wiring such as a home, school, church, office building, indoor concourse or recreation center) or an enclosed metal vehicle. Once inside, stay away from showers, sinks, bath tubs, and electric equipment such as stoves, radios, corded telephones and computers. **Unsafe buildings** include car ports, open garages, covered patios, picnic shelters, beach pavilions, and golf shelters, tents of any kind, baseball dugouts, sheds, and partially enclosed vending areas. A **safe vehicle** is any fully enclosed metal-topped vehicle such as a hard-topped car, minivan, bus, truck, etc. While inside a vehicle, do not open any windows and do not use electronic devices such as radio communications or touch metal framework during a thunderstorm. **Unsafe vehicles** include golf carts, convertibles, motorcycles, or any other open cab vehicle.**The following structures have been identified as a safe means to protect from lightning:** |
| Attendee’s vehicles | □ |
| Nearby substantial building/s (name and location of building/s): | □ |
| Other (please list in detail): | □ |
| **Evacuation Procedures (complete evacuation of premises)** | List in detail evacuation procedures: |
| STAFF EDUCATION & plan review |
| **Staff Education** | All staff should understand this Lightning Safety Plan before an event begins.These procedures will be reviewed and drilled\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (annually, seasonally, etc.).In addition, the following facts will supplement staff knowledge on lightning and lightning safety precautions:* **Severe Thunderstorm Warnings are *not* issued based on lightning**. All thunderstorms produce thunder and lightning and are potentially deadly. A **Severe Thunderstorm Watch or a Tornado Watch** are issued when conditions are favorable for the development of severe storms (wind gusts in excess of 58 MPH, quarter size hail or larger, or tornadoes). A **Severe Thunderstorm or Tornado Warning** is issued when severe weather has been detected or may be imminent.
* Most victims survive a lightning strike; however medical attention is needed immediately. Have someone call 911. Victims do not carry an electrical charge and can be touched. In many cases, the victim’s heart and/or breathing may stop and rescue breathing and/or CPR may be needed. Monitor the victim until medical help arrives; heart and/or respiratory problems could persist, or the victim could go into shock. If possible, move the victim to a safer place away from the threat of another lightning strike.
* Lightning can strike outside of the rain area or thunderstorm cloud. In extreme cases, “bolts from the blue” can strike 10-15 miles from the thunderstorm. Don’t wait for rain to get to a safe structure and don’t leave the safe structure just because the rain has let up.
* Many lightning casualties occur because people do not seek a safe structure soon enough. Not wanting to appear overly cautious, many people wait far too long before reacting to this potentially deadly weather threat.
* Don’t hesitate to stop the event and have patrons seek a lightning-safe structure if the sky appears threatening (especially if your weather watcher knows thunderstorms are a possibility). Thunderstorms can develop directly overhead and some storms may develop lightning just as they move into your area.
* Only about 10% of people who are struck by lightning are killed, leaving 90% with various degrees of disability, including life-long debilitating injuries.

The National Weather Service may be able to provide a free lightning safety talk to your group. |