

## NEW CASTLE COUNTY SPORTS OFFICE

### *Lightning Policy*

#### **Safer locations during thunderstorms and locations to avoid**

\*No place is absolutely safe from the lightning threat, however, some places are safer than others.

\*Large enclosed structures (substantially constructed buildings) tend to be much safer than smaller or open structures. The risk for lightning injury depends on whether the structure incorporates lightning protection, construction materials used, and the size of the structure (see NFPA 780, Appendix E & H).

\*In general, fully enclosed metal vehicles such as cars, trucks, buses, vans, fully enclosed farm vehicles, etc. with the windows rolled up provide good shelter from lightning. Avoid contact with metal or conducting surfaces outside or inside the vehicle.

\*AVOID being in or near high places and open fields, isolated trees, unprotected gazebos, rain or picnic shelters, baseball dugouts, communications towers, flagpoles, light poles, bleachers (metal or wood), metal fences, convertibles, golf carts, water (ocean, lakes, swimming pools, rivers, etc.).

\*When inside a building AVOID use of the telephone, taking a shower, washing your hands, doing dishes, or any contact with conductive surfaces with exposure to the outside such as metal door or window frames, electrical wiring, telephone wiring, cable TV wiring, plumbing, etc.

#### **Safety guidelines for individuals**

\*Generally speaking, if an individual can see lightning and/or hear thunder he/she is already at risk. Louder or more frequent thunder indicates that lightning activity is approaching, increasing the risk for lightning injury or death. ***If the time delay between seeing the flash (lightning) and hearing the bang (thunder) is less than 30 seconds, the individual should be in, or seek a safer location*** (see Safer Locations during Thunderstorms and Locations to Avoid). Be aware that this method of ranging has severe limitations in part due to the difficulty of associating the proper thunder to the corresponding flash.

\*High winds, rainfall, and cloud cover often act as precursors to actual cloud-to-ground strikes notifying individuals to take action. Many lightning casualties occur in the beginning, as the storm approaches, because people ignore these precursors. Also, many lightning casualties occur after the perceived threat has passed. ***Generally, the lightning threat diminishes with time after the last sound of thunder, but may persist for more than 30 minutes.*** When thunderstorms are in the area but not overhead, the lightning threat can exist even when it is sunny, not raining, or when clear sky is visible.

\*When available, pay attention to weather warning devices such as NOAA weather radio and/or credible lightning detection systems, however, do not let this information override good common sense.

#### **First aid recommendations for lightning victims**

Most lightning victims can actually survive their encounter with lightning, especially with timely medical treatment. Individuals struck by lightning do not carry a charge and it is safe to touch them to render medical treatment. Follow these steps to try to save the life of a lightning victim:

1) First:

Call 911 to provide directions and information about the likely number of victims.

2) Response:

The first tenet of emergency care is "make no more casualties". If the area where the victim is located is a high risk area (mountain top, isolated tree, open field, etc.) with a continuing thunderstorm, the rescuers may be placing themselves in significant danger.

3) Evacuation:

It is relatively unusual for victims who survive a lightning strike to have major fractures that would cause paralysis or major bleeding complications unless they have suffered a fall or been thrown a distance. As a result, in an active thunderstorm, the rescuer needs to choose whether evacuation from very high risk areas to an area of lesser risk is warranted and should not be afraid to move the victim rapidly if necessary. Rescuers are cautioned to minimize their exposure to lightning as much as possible.

4) Resuscitation:

If the victim is not breathing, start mouth to mouth resuscitation. If it is decided to move the victim, give a few quick breaths prior to moving them. Determine if the victim has a pulse by checking the pulse at the carotid artery (side of the neck) or femoral artery (groin) for at least 20-30 seconds. If no pulse is detected, start cardiac compressions as well. In situations that are cold and wet, putting a protective layer between the victim and the ground may decrease the hypothermia that the victim suffers which can further complicate the resuscitation. In wilderness areas and those far from medical care, prolonged basic CPR is of little use: the victim is unlikely to recover if they do not respond within the first few minutes. If the pulse returns, the rescuer should continue ventilation with rescue breathing if needed for as long as practical in a wilderness situation. However, if a pulse does not return after twenty to thirty minutes of good effort, the rescuer should not feel guilty about stopping resuscitation.