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CONTACT: Deborah Weeter  
Office: 214/688-3404  
Home: 214/243-5968

**News**  
The University of Texas Health Science Center at Dallas  
5323 Harry Hines Boulevard Dallas, Texas 75235 (214) 688-3404

\*\* Part II: Lightning -- it kills more people each year than any other weather event.

## LIGHTNING

DALLAS—"Getting hit by lightning is like getting hit by a cannon shell," said Dr. James Atkins, co-director of the Department of Emergency Medicine Services at The University of Texas Health Science Center at Dallas.

Though not as common an injury as other summer emergencies, lightning is a significant problem and kills more people than any other weather phenomenon, he said. The National Climatic Center reports that two years ago, more than 250 people were struck by lightning in the U.S. and 75 of them died. However, lightning-related deaths are generally not widely reported and the incidence of death, therefore, may be even four to five times higher than that.

According to "Lightning Injury," in the Spring 1984 Current Concepts in Trauma Care, there are three main types of lightning injury. Direct strikes are most often fatal since they commonly strike the victim's head. These occur when the unsheltered victim is outside, often carrying a metal object, such as an umbrella, or wearing metal objects, such as bobby pins, in the hair.

A flash discharge, the most common cause of injury, occurs when the victim is struck as the lightning is traveling from another object through the victim in its search for the ground. Since lightning will use the path of least resistance, for example, it will jump from a tree through the victim into the ground.

Ground current occurs in open fields and can generate enough electricity to cause mass casualties.

About 72 percent of persons struck by lightning suffer loss of consciousness and although most of them regain consciousness, about 69 percent of those suffer some degree of paralysis of the upper extremities, and about 30 percent, of the lower. Total resolution usually occurs in minutes or days.

Depending upon the force and type of lightning strike, a number of injuries can occur. Burns can range from superficial to major and there commonly are entrance and exit wounds such as those found in victims of large bullet injuries, said Atkins. The internal organs are greatly affected by lightning strikes and brain damage is a common result. "There have even been cases where a victim has had his foot blown off," said Atkins.

## First Aid

Immediate resuscitation of the victim is imperative and greatly increases the chance for survival.

Check the victim's responsiveness, pulse and breathing. Start CPR immediately if there is no pulse, and mouth-to-mouth rescue breathing if the victim has a pulse but is not breathing. To check for breathing, place your cheek close to the victim's mouth and while listening and feeling for breath, watch for movement of the chest. Be sure the victim's tongue does not fall back against the throat, blocking the airways. This is accomplished by pushing up under the neck with one hand and at the same time pushing the forehead down with the other hand, said Debra Cason, paramedic training coordinator, Department of Emergency  
(over)



## Summer emergencies -- Lightning

Medical Services at UTHSCD.

If a spinal cord injury is suspected either as a result of a fall or the lightning traveling through the entire body, check for head injury or tenderness or bruising of the neck or back. Do not move the victim.

CPR should be continued until medical help arrives.

### Prevention

--Remain inside a car or in a steel-frame building away from doors and windows.

--Avoid swimming.

--In an open field, stay away from trees or other tall objects. If there is no structural shelter or ditch, either curl up on the ground in a tight ball with limbs tucked in, or if possible, crouch down on the balls of your feet in as tight a ball as you can.

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