



LIGHTNING STORM SAFETY PROCEDURES

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Every second of every hour of every day, lightning strikes the earth 100 times. Throughout much of the southern United States, lightning strikes some 20 to 30 times per square mile each year. Lightning causes more fatalities than any other act of nature, except floods. Loggers are often exposed to lightning. While there is no fail-safe defense from a lightning strike, early recognition of the lightning hazard, and an awareness of defensive options, will provide a reasonably high level of safety.

Recognize (and Respect) the Lightning Hazard

If woods workers can see lightning or hear thunder, they are at risk. Many lightning casualties occur before the wind and rain of an approaching thunderstorm actually reach the logging site. When a thunderstorm is in the general area, but not overhead, a lightning threat can exist even when clear sky is visible. Recent studies show that successive lightning strikes can be as much as six to eight miles apart. Immediate defensive action is recommended when lightning is indicated within this range. By referencing the time in seconds from seeing the lightning strike to hearing the accompanying thunder, a woods worker can estimate lightning's distance. A "lightning-to-thunder" time of 5 seconds indicates that the strike was approximately 1 mile away. Ten seconds = 2 miles, etc. Thus, if the time delay between the lightning flash and the sound of thunder is less than 30 seconds (6 miles), the worker should immediately seek a safe shelter.

Take Defensive Action

The National Lightning Safety Institute recommends following defensive actions when lightning threatens a logging site.

- Seek shelter in the cab of a crew truck, log truck, or logging machine with a metal canopy. Taking shelter in the cab of a trailer-mounted knuckleboom loader is not advised, as the height of that position makes it more vulnerable to a lightning strike. Shut down the machine or truck, close the doors, sit with hands in lap, wait out the storm. Do not touch door or window handles, radio dials, CB radio, gearshift, steering wheel, or any metallic object connected to the outside of the vehicle or machine, as lightning striking the machine will be carried to ground mostly on the metal outer surface. Under no circumstances, during close-in lightning, should an operator step off his machine to the ground in an attempt to move to other shelter, as this creates a dangerous "dual pathway" for lightning to seek the ground. **IMPORTANT:** Equipment or vehicles without a metal canopy are *not* safe. *Rubber tires alone provide no safety from lightning.* Thus, a worker sitting in the back of a crew truck with a canvas roof has little protection from a lightning strike.
- If the worker is on the ground, and cannot take shelter in a vehicle or machine, he should move to a ditch or other low ground, under trees of uniform height, and assume a low crouching position. He should avoid high ground, standing water, open spaces, metallic objects, and solitary tall trees. Workers should not cluster together but should spread out 15 to 20 feet apart.

If a worker is struck by lightning, immediately administer appropriate first aid (including CPR) if the victim is not breathing, then transport to a medical facility. Contrary to common folklore,

Please follow equipment manufacturers' recommendations for safe operation and maintenance procedures.

lightning strike victims do not retain an electrical charge and are safe to touch immediately after being struck. Eighty percent of lightning strike victims survive the initial shock but often suffer burns, impaired eyesight, and loss of hearing.

Prepared by the Southwide Safety Committee of the Forest Resources Association Inc.