Lightning Safety

LIGHTNING SAFETY

Information Sources.

The National Weather Service has an excellent website on lightning safety at...
http://www.lightningsafety.noaa.gov/

NOLS has a backcountry safety guidelines here...
http://www.nols.edu/resources/research/pdfs/lightningsafetyguideline.pdf

American Red Cross - Masters of Disaster Program
http://www.redcross.org/services/disaster/0,1082,0_590_,00.html

Some Points to Consider.

** SAFE SHELTER **
A safe building is one that is fully enclosed with a roof, walls and floor. Because of wiring and plumbing, lightning striking these buildings travel through wiring or plumbing into the ground. Even inside, you need to take precautions. Stay away from showers, sinks, hot tubs, etc., and electronic equipment such as TVs, radios, and computers. Basically, avoid anything that conducts electricity.

** UNSAFE SHELTER **
Unsafe include car ports, picnic shelters, tents, baseball dugouts, any partially open structure. These are NOT safe and should be avoided.

** SAFE VEHICLES **
A safe vehicle is a metal-topped car, SUV, minivan, bus, etc. Make sure doors are closed and windows rolled up. Don't touch metal surfaces. Don't use electronics like HAM radios or cell phones, a strike could cause serious injury if you are using them.

** UNSAFE VEHICLES **
Soft-topped convertibles, golf carts, open tractors, ATVs, motorcycles, are NOT SAFE. Avoid them.

** HOW FAR AWAY? **
Sound travels one mile in 5 seconds. Count the seconds from the flash to the sound, then divide by 5.

If you hear thunder 5 seconds after a flash, the lightning is 1 mile away; 10 seconds after a flash, the lightning is 2 miles away; 30 seconds after a flash, the lightning is 6 miles away, and so on.

** 30-SECOND RULE **
Get to a safe location if the time between the lightning flash and the rumble of thunder is 30

seconds or less.

** HIKING/CAMPING **
If outdoors with lightning nearby, get to a safe building or vehicle. If a safe vehicle or shelter is unavailable, follow these rules.

1. Stay away from tall isolated trees!
2. Do NOT seek shelter in partially enclosed buildings
3. Stay away from tall, isolated objects.
4. Lightning usually strikes the tallest object. That could be you in an open field or clearing.
5. Know the weather patterns of the area. In mountains, thunderstorms often develop in early afternoon, hike early, be off the mountain by noon.
6. Know the weather forecast. If there is a strong chance of thunderstorms, adjust your plans.
7. Don't place a campsite in an open field, on the top of a hill, or on a ridge top.
8. Keep campsites away from tall isolated trees or other tall objects.
9. If camping in a forest, stay near lower trees.
10. In an open area, set up camp in a valley, ravine, or other low area. Tents offers NO protection from lighting. Always be aware of flash flood danger.
11. Stay away from metal objects, like fences, poles and backpacks. Metal is a conductor. Lightning can travel long distances along fences.
12. When in the open, with no safe location nearby, get into the "Lightning Position". Crouch down and get into a ball. DO NOT lay on the ground. Bend your knees down while keeping your feet together and your head down with hands covering your neck. If

    you have a foam, stand on it for insulation between

    you and the ground.

** BICYCLING **
Someone should carry a portable weather radio.

If threatened by weather and you have a sag vehicle, stop biking and seek shelter in the vehicle.

If skies threaten and you pass a safe location, pull over and wait until the storm passes, prefereably 30 minutes after the last sound of thunder.

IF YOU CAN'T REACH A SAFE BUILDING OR VEHICLE:

Wait out the storm below an overpass. Stay away from your bike. DO NOT touch steel girders. Remain on the dry surfaces. Overpasses are engineered to be grounded. If struck by lightning, the electrical current will be channeled safely into the ground.

Look for a bridge. Stay away from water and any metal

surfaces. Be alert for rapidly rising water.

High tension wires: If high voltage electrical tension wires cross the road, seek shelter directly underneath these wires. Stay 50 ft away from the large metal towers. High tension wires are designed for lightning strikes. The current is designed to safely go deep into the ground.

IMPORTANT: YOU ARE NOT SAFE IN THESE PLACES,
JUST MARGINALLY SAFER THAN IN THE OPEN!

IF CAUGHT OUTDOORS BIKING WITH
LIGHTNING STRIKING WITHIN 6 MILES:

-STOP RIDING-
Get off your bicycle, find a ditch or other low spot and get into the Lightning Position. Lay bikes on the ground and stay away from them.

** CANOEING **
1. If thunderstorms are forecast, don't go out.
2. If you are on the water with threatening skies, get to land and find a safe building or vehicle.
3. Stay away from canoes (especially aluminum ones).
4. If no safe shelter is available, find a low area away from tall objects and get into Lightning Position.

** CLIMBING **
If thunderstorms are forecast, don't go. If you are already out and skies are threatening, stop and head down to a safe building or vehicle.

Get off the rockface before the storm arrives!

If caught on a rockface, you have a huge problem. Wet ropes make excellent conductors. This is BAD news when it comes to lightning. If you can do so safely, remove unnecessary ropes extended or attached to you. If a rope is extended across a mountain face and lightning makes contact with it, electrical current will travel along the wet rope. Prayer is appropriate.

-- SO BASICALLY, JUST -- BE PREPARED --

When thunderstorms threaten, get to a safe place, stay there longer than you think you need to, stay away from windows and doors and avoid contact with anything that conducts electricity.

Nothing we do is more important than keeping the boys safe. Abandon or adjust activities when threatening weather develops. There'll be other weekends.

YIS,
Cliff Golden, Scoutmaster Troop 33, DeKalb, Illinois