

Emergency Procedures – Lightning WHEN THUNDER ROARS GO INDOORS

<https://www.weather.gov/media/safety/Analysis06-18.pdf>

People who don't alter outdoor plans when thunderstorms are forecast (or occurring) are unnecessarily putting themselves at risk of being struck by lightning. For any activity where a safe shelter is not readily available, there is NO safe alternative but to cancel or postpone the activity in advance if thunderstorms are forecast

<https://www.cdc.gov/disasters/lightning/safetytips.html>

<https://www.weather.gov/safety/lightning-tips> (with some re-wording and additions)

- NO PLACE outside is safe when thunderstorms are in the area!!
- If you hear thunder, lightning is close enough to strike you
- Thunderstorms always include lightning. Any thunder you hear is caused by lightning
- When you hear thunder, immediately move to safe shelter:
 - A substantial building with electricity or plumbing (sheds, bus-shelters etc.. are useless)
 - Metal-topped vehicle with windows up (don't touch the metal frame or wired in device)
- Stay in safe shelter at least 30 minutes after you hear the last sound of thunder.

Indoor Lightning Safety

- Stay off corded phones, computers and other electrical equipment that put you in direct contact with electricity (stove tops, kettles etc..).
- Avoid plumbing, including sinks, baths and faucets [don't do the washing up :-)]
- Avoid windows, doors, porches,
- Do not lie on concrete floors, and do not lean against concrete walls (metal re-inforcing)..

Last Resort Outdoor Risk Reduction Tips

If you are caught outside with no safe shelter anywhere nearby:

- Immediately get off elevated areas such as hills, mountain ridges or peaks
- Immediately get away from ponds, lakes and other bodies of water (water conducts electricity)
- Retreat to dense areas of smaller trees that are surrounded by larger trees, or retreat to low-lying areas (e.g., valleys, ditches) but watch for flooding.
- Never use a cliff or rocky overhang or cave entrance for shelter
- Stay away from isolated tall trees, towers or utility poles.
- Don't be the tallest object in the area
- Never lie flat on the ground (lightning causes electric currents along top of ground, hence the need to minimize ground contact – toes/balls of feet).
- Stay away from objects that conduct electricity (wire fences, power lines, wet ropes. Metal does not attract lightning, but can conduct it a long distance.

30/30 rule:

30 sec of less between flash and bang, seek shelter.
Wait 30min after last strike

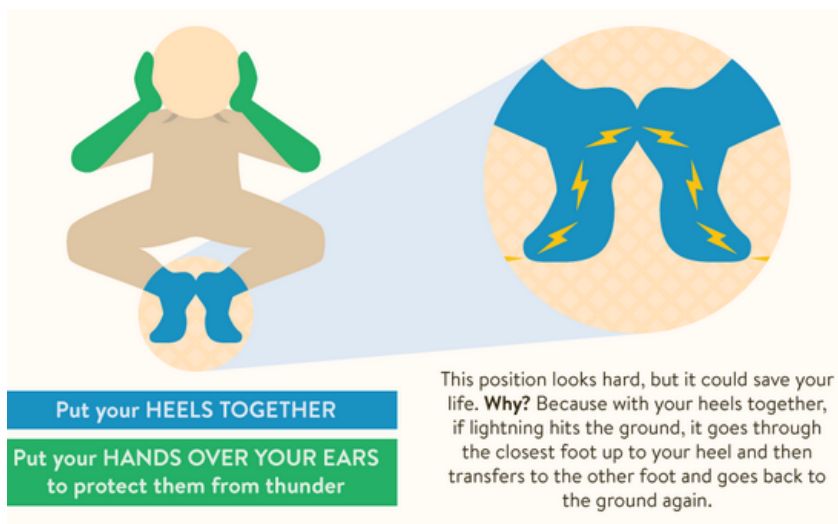
Lightning Safety Position:

<https://weareexplorers.co/hikers-guide-lightning-safety/>

Separate – 15m gap – to avoid multiple casualties.
Get rid of anything metal (including hats/helmets)
Insulate yourself from ground with PFD or similar
Crouch

Heels Together – Just toes/balls of feet on ground
Hands on ears to protect from thunder

Hair stands on end, skin tingles, strike is imminent
(but these warnings don't always happen).



If Someone is Struck

- Cardiac arrest is the immediate cause of death for those who die.
- Lightning victims do not carry an electrical charge and may need first aid immediately.
- Call for help. Call 000 (112)
- Give first aid. Begin CPR. Use an AED if one is available.
- Don't be a victim. If possible, move the victim to a safer place. Lightning CAN strike twice.