

Thunderstorm & Lightning: Dos and Don'ts

If Outdoor - Dos and Don'ts

To avoid the exposure of lightning while outdoors, some tips to keep safe and reduce the risk are:

- Check the weather forecast before participating in outdoor activities. If the forecast calls for thunderstorms, postpone your trip or activity.
- When thunder roars, go indoors – means go to a safe shelter immediately to avoid metal structures and constructions with metal sheeting. Safe shelters include pukka home, pukka building, or hard top vehicles with the windows rolled up.
- Remember the **30/30 Lightning Safety Rule**: Go indoors if, after seeing lightning, you cannot count to 30 before hearing thunder. Stay indoors for 30 minutes after hearing the last clap of thunder.
- If you are caught outside with no safe shelter nearby, immediately get off elevated areas such as hills, mountain ridges, or peaks. Never use a cliff or rocky overhang for shelter.
- Immediately get out of and away from ponds, lakes, and other bodies of water. If working in an outdoor watery area (e.g. paddy transplantation), immediately move out of the field to a dry area (at least to the field border).
- Ideally, find a shelter in a low-lying area and make sure that the spot chosen is not likely to flood.
- Do not lie flat on the ground, as this will make a bigger target.
- If no shelter is available, immediately get into the **lightning crouch**: (Squat or sit in a tight ball, arms wrapped around your legs. Keep your feet together (touching), head lowered, ears covered, and eyes closed. This makes you as small a target as possible.

- Hair standing up on the back of your neck could indicate that lightning is imminent.
- Keep away from all utility lines and objects that conduct electricity (phone, power, metal fences, wind mills, etc.). Unplug any electronic equipment well before the storm arrives.
- Equip home with whole-house surge protectors to protect your appliances.
- DO NOT take shelter under trees and particularly under isolated tree, as these conduct electricity.
- Rubber-soled shoes and car tyres do not offer protection from lightning.
- Secure outdoor objects that could blow away or cause damage.
- If you have insulation like a foam pad or dry, metal-free bag of clothes, put it underneath you.
- If you are in a group during a thunderstorm, separate from each other. This will reduce the number of injuries if lightning strikes the ground.
- Continue to listen to a local radio and television stations for updated information or instructions, as access to roads or some parts of the community may be blocked.
- Help people who may require special assistance, such as infants, children and the elderly or those with access or functional needs.
- Stay away from downed power lines and report them immediately.
- Watch your animals closely. Keep them under your direct control.

If at home or Indoor

Even though shelters like your homes, offices, shopping centers, etc. considered as safe during a lightning storm, a person may still be at risk. Here are some tips to keep safe and reduce the risk are as follows:

- Look for darkening skies and increased wind.

- If you hear thunder, you are close enough to be struck by lightning. Remember the **30/30 Lightning Safety Rule**: Go indoors if, after seeing lightning, you cannot count to 30 before hearing thunder. Stay indoors for 30 minutes after hearing the last clap of thunder.
- Keep monitoring local media for updates and warning instructions by various modes of communication.
- Stay indoors and avoid travel if possible.
- Close windows and doors, close window blinds, shades or curtains. Secure objects outside your home (e.g. furniture, bins, etc.). Remove tree timber or any other debris that may cause a flying accident.
- Ensure that children and pet animals are inside.
- Unplug electrical/ electronic appliances like computers, laptops, game systems, washers, dryers, stoves, refrigerators, Television, air conditioners or anything connected to an electrical outlet, as the main power supply which may conduct a power surge during a lightning storm.
- Avoid taking a bath or a shower, wash dishes, or have any other contact with water and stay away from running water. This is because lightning can travel through a building's plumbing and metal pipes.
- Do not use electric / electronic appliances including corded phones and any metal wires or bars in concrete walls or flooring. However, it is safe to use cordless or cellular phones during a storm.
- Keep away from doors, windows, porches, and concrete floors, fireplaces, stoves, bathtubs, or any other electrical conductors during a thunderstorm.
- Avoid open structures / spaces such as porches, gazebos, sports arenas (such as golf courses, parks, and playgrounds), ponds, lakes, swimming pools, and beaches.
- Do not lie on concrete floors and do not lean against concrete walls.

If travelling - Dos and Don'ts

- Check the weather forecast before the outdoor activities. If the forecast warning for thunderstorms, postpone your travel or trip or activity for end of thunderstorm.
- During a thunderstorm, avoid open vehicles such as convertibles, motorcycles, and golf carts. Be sure to avoid open structures such as porches, gazebos, baseball dugouts, and sports arenas. And stay away from open spaces such as golf courses, parks, playgrounds, ponds, lakes, swimming pools, and beaches.
- Get off bicycles, motorcycles or farm vehicles that may attract lightning.
- If boating or swimming, get out of the water as quickly as possible and take shelter.
- When thunder roars, go indoors – means go to a safe shelter immediately to avoid metal structures and constructions with metal sheeting. Safe shelters include pukka home, pukka building, or hard top vehicles with the windows rolled up.
- If no shelter is available, immediately get into the **lightning crouch**: (Squat or sit in a tight ball, arms wrapped around your legs. Keep your feet together (touching), head lowered, ears covered, and eyes closed. This makes you as small a target as possible.
- During a storm, remain in your vehicle until help arrives or the storm has passed (the metal roof will provide protection if you are not touching metal inside); windows should be up; park away from trees and power lines.
- Move out of forested area (especially Pine forests) towards clear ground. There is possibility of start of forest fires due to lightning strike.

Lightning: First Aid treatment

First aid to lightning strike victims while waiting for professional medical attention can save their lives. It is safe to touch a lightning strike victim. If possible, give basic First Aid.

- Check to see if the victim is breathing and has a heartbeat. The best place to check for a pulse is the carotid artery which is found on your neck directly below your jaw.
- If the victim is not breathing, immediately begin mouth-to-mouth resuscitation. If the victim does not have a pulse, start cardiac compressions as well (CPR).
- Check victim who survives a strike to have any major broken bones that would cause paralysis or major bleeding complications unless the person suffered a fall or was thrown a long distance.
- Be aware of the continuing lightning danger to both the victim and rescuer. If the area where the victim is located is high risk, move the victim immediately to a safer location.
- People struck by lightning carry no electrical charge and can be handled safely.
- Check for broken bones, loss of hearing and eyesight.
- A victim of a lightning strike can suffer varying degrees of burn, shock, and sometimes blunt trauma. Check the impact point and where the electricity left the body for injury marks.
- Call helpline number 1078, and give directions to exact location and information about the strike victim(s). Take the person who is struck by lightning to a hospital.

Dos & Don'ts for Thunderstorm and Lightening in Agriculture

Dos

- In view of thunderstorm accompanied with gusty winds, provide mechanical support to orchards, staking in vegetables.
- If farmers are in the field and can't find any shelter, avoid the tallest object in the area. If only isolated trees are nearby, best protection is to crouch in the open.
- Keep animals away from open water, pond or river.
- Keep animals away from tractors and other metal farm equipment.
- Drain out excess water from standing crops.
- Cover the harvested produce (if in the field) with polythene sheet.

Don'ts

- Avoid contact with electrical equipment or cords.
- Keep away contact with anything metal - tractors, farm equipment and bicycles. As metal or other surfaces that conduct electricity.
- Don't allow your animals to congregate under trees. Watch your animals closely and try to keep them under your direct control.

Note: States may customize the contents of the Do's and Don'ts for their own use depending on their local experiences and best practices. Further action needs to be undertaken by respective State Governments.