

Advisory to the State / UTs for Thunderstorm & Lightning – 2022

Lightning in India Starts during the Pre-monsoon season (March / April) and during the South west monsoon with intense thunderstorm and lightning. It is also pertinent to mention that lightning generally takes place during second half of the day particularly in the late afternoon or evening. It is advised to take appropriate measures as below :-

Mitigation and Preparedness for Thunderstorm & Lightning

- State governments should update and customize the State Action Plan and ensure its implementation.
- Action Plan of the State may be circulated to all district Collectors & HoDs instruction may be issued to all concerned Departments and the District Collectors for implementation.
- Undertake assessment, preparedness and mitigation measures for effective response, prepare detailed departments wise SOPs.
- Identify vulnerable places and protect public property / infrastructure from Thunderstorm and Lightning.
- Review and update precautionary measures and procedures and follow COVID 19 appropriate behavior.
- Promote installation of lightning conductors / arresters or local innovative techniques in school, industries, public and private building including rural area.
- Create a network or community-based early warning system.
- Dissemination of specific early warning information to public through print / electronic / social and other mass like SMA, Whatsapp at the local level.
- Ensure installation of lightning arresters in school building and government buildings.
- Ensure installation of hooters, siren on school, community building to alert people.
- Set up alternative or emergency communication system and ensure early restoration of electricity to electronic supply at the earliest.
- Ensure quick restoration of road connectivity.
- Disseminate Do's and Dont's and conduct IEC campaign to generate public awareness through print, electronic and social media.

Awareness generation Activities

Awareness campaign should be carried out based on a well planned communication strategy. IEC activities should be planned at State and local Levels.

A. State Level:

- Mass awareness campaigns involving Print TV, radio, Social Media, etc in local languages;
- Promote lightning early warning Mobile Apps like 'Damini'.
- Special awareness campaigns to ensure people access and understand updates/advisories issued about the local weather conditions.
- Special list of Do's and don'ts and safety tips for weaker and vulnerable sections of society (e.g. Agriculture workers, women, children, poor, elderly and differently abled).
- Separate Do's and Don'ts for animal and livestock safety;
- Encourage the line departments of the State Government and local authorities to widely disseminate Do's and Don'ts.
- Develop media and communication strategies and plans considering local socio economic and behavioral factors.
- Conduct regular awareness programme in all districts.
- IEC activities on COVID 19 appropriate behavior.

B. District and local level:

The local authorities, due to their proximity to the affected population are in best position to ensure the last mile delivery of message. They may –

- Conduct regular inter-personal communication activities;
- Demonstrate safety tips to the vulnerable population in their local language.
- Use of IEC tools and materials (such as flyers, calendars, comic books, etc.) extensively.
- Strengthen and involve local communities such as RWAs, Municipal bodies, *Panchayati Raj Institution, Aganwadis*.
- Provide special awareness campaigns for promoting Covid 19 appropriate behavior.
- Carry out Out-of-Home campaigns using banners, posters, billboards, etc.
- Carry out special awareness programmes for the differently abled.
- Keeps first aid materials needs for lightning victims and make arrangements to send victims to the hospital if needed

Thunderstorm & Lightning: Do's and Don'ts

If Outdoor

Do's

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

- Check the weather forecast before participating in outdoor activities. If you see thunderstorm & Lightning stay indoor for 30 minutes.
- Do not go out of house during adverse weather especially for working in agriculture field. Grazing cattle, fishing and plying boats or general travel.
- When thunder roars, be inside safe shelter. Avoid metal structures and constructions with metal sheeting. Safe shelters include homes, offices, shopping centres and hard-top vehicles with windows rolled up.
- If you are caught outside with no safe shelter nearby, immediately get off elevated areas such as hills, mountains ridges, or peaks.
- If you are caught in an open areas act quickly to remove yourself from danger.
- Ideally, find a shelter in a low-lying area and make sure that the spot chosen is not likely to be flooded.
- Hair standing up on the back of your neck with tingling could indicate that lightning is imminent.
- Immediately get out of and away from ponds, lakes and other water bodies.
- Keep away from all utility lines and objects that conduct electricity (telephone, power, metal fences, overhead wire, rail-road tracks, wind mills, etc), trees and hilltops.
- Rubber-soled shoes and car tyres do not offer protection from lightning.
- If you are in group during thunderstorm, then keep adequate distance to reduce risk.

Don'ts

- Do not go outside during adverse weather especially for working in agriculture field, grazing cattle, fishing and plying boats
- If you are in forest area, take shelter under small and dwarf trees.
- Do not take shelter under electrical or telephone poles or trees. These attract lightning.
- Do not use metallic items and stay away from bikes, electric or telephone poles, wire fence, machines etc.
- If you are working in an open space field/outdoor and do not have enough time to take shelter in a safe place, crouch down in a ball-like position with your head tucked and hands over your eyes with minimal contact with the ground and make yourself a smaller target.
- Never use mobile phones during lightning.
- Do not use umbrellas with iron rods.

If at home or Indoor

Even though shelters like your homes, offices, shopping centres are considered safe during a lightning storm, a person may still be at risk. Here are some tips to keep yourself safe:

Do's

- Keep monitoring local media for updates and warning instructions by various modes of communication.
- Stay indoors and avoid travel if possible.
- Keep away from doors, windows, porches and concrete floors, fireplaces, stoves, bathtubs, or any other electrical conductors during a thunderstorm.
- Unplug electrical/ electronic appliances like computers, laptop, game systems, washers, dryers, stoves, or anything connected to an electrical outlet, as the main power supply may conduct a power surge during a lightning storm.
- Close windows and doors, and secure objects outside your home (e.g. furniture, bins, etc).
- Ensure that children and pet animals are inside.
- Remove tree timber or any other debris that may fly and cause an accident.

Don'ts

- Do not take a bath or a shower, wash dishes, or have any other contact with stagnant or running water. This is because lightning can travel through a building's plumbing and metal pipes.
- Do not use electric/electronic appliances including corded phone and any metal wire or bars.
- Avoid using corded phones and other electrical equipment that can conduct lightning. However, it is safe to use cordless phones during a storm.
- Avoid open vehicles such as convertibles, motorcycles and golf carts. Etc.
- Avoid open structure/spaces such as porches, support arenas (such as golf course, parks, and playgrounds), ponds, lakes, swimming pools and beaches.

Do's and don'ts on travel

- Check the weather forecast before outdoor activities. If there is a forecast or warning for thunderstorm, postpone travel or outdoor activities.
- During a thunderstorm, avoid open vehicles such as convertibles, motorcycles, and golf carts. Be sure to avoid open structures such as porches, 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 to land as quickly as possible and take away shelter in a safe place.
- 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 and the vehicle must be parked away from trees and power lines.
- Move out of forest area (especially pine forest) towards clear ground. There is possibility of forest fire due to lightning strike.

Lightning: First Aid treatment

First aid to lightning struck victims while waiting for professional medical attention can save their lives. It is safe to touch a lightning strike victim.

- Check to see if the victim is breathing and has heartbeat. The best place to check for 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 pulse beat, start cardiac compression as well (CPR).
- Check whether the person who survived from a lightning strike has broken bones that can paralysis or major bleeding complications.
- Be aware of the continuing lightning danger to both the victim and rescuer. If the area where the victim is located in a high risk area, then move the victim immediately to a safer location.
- People struck by lightning carry no electrical charge and be handles safely.
- Check for broken bones, lose of hearing and eyesight.
- A victim of a lightning strike can suffer varying degrees of burn, shock, and sometimes blunt trauma. Check the injury, if necessary move the person to hospital for treatment.
- Call helpline number 1078, and give correct directions to reach the exact location and information about the condition of the strike victim(s). Take the person who is struck by lightning to a hospital, if possible.

Note: States may customize the contents of the Do's and Don'ts for their own use depending on their local experience and best practices.