

**IMD issuing guidelines on precautions to be taken before, during and after a thunderstorm**

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Thunderstorms and lightning poses a big threat to the life and property during the monsoon season in India. Despite their small size, all thunderstorms are dangerous. According to Bihar Chief Minister's office, on June 24, 2020, at least 83 people died due to thunderstorms in a single day in Bihar. Every thunderstorm produces lightning which has the potential to kill people through lightning electrocution while heavy rain from thunderstorms can lead to flash flooding. A thunderstorm, also known as an electrical storm or a lightning storm, is a storm characterized by the presence of lightning and its acoustic effect on the Earth's atmosphere, known as thunder. Even in the absence of rain, lightning can still reach the ground causing wildfires and killing people due to lightning electrocution. 3,696 deaths were recorded in the U.S. between 1959 and 2003 due to lightning electrocution. About 10 percent of lightning-stroke victims are killed, and 70 percent suffer serious long-term injuries.

Today, India Meteorological Department (IMD), is issuing certain safety guidelines for people living in areas prone to thunderstorm and lightning.

**What to do before a thunderstorm:**

- To begin preparing, build an emergency kit and make a family communications plan ready.
- Remove dead or rotting trees and branches that could fall and cause injury or damage during a severe thunderstorm.
- Postpone outdoor activities.
- **The 30/30 Lightning Safety Rule:** Count the seconds between the flash of a lightning strike and the next boom of thunder. If it's under 30 seconds, the storm is less than 10 kilometres away and there is an 80-percent chance the next strike will

occur within that 10-kilometre radius. 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.
- Secure outdoor objects that could blow away or cause damage.
- Get inside a home, building, or hard top automobile (not a convertible). Although you may be injured if lightning strikes your car, you are much safer inside a vehicle than outside.
- **Rubber-soled shoes and rubber tires cannot provide protection from lightning.** However, the steel frame of a hard-topped vehicle provides increased protection if we do not touch the metallic parts of a vehicle.
- Shut the windows and secure outside doors. If shutters are not available, close window blinds, shades or curtains.
- Unplug any electronic equipment well before the storm arrives.  
If you are in a forest then seek shelter in a low area under a thick growth of small trees. Go to a low place such as a ravine or valley.

### **During Thunderstorms and Lightning**

- Avoid contact with corded phones and devices including those plugged into electric for recharging. Cordless and mobile phones not connected to wall outlets are OK to use.
- Avoid contact with electrical equipment or cords. Unplug appliances and other electrical items such as computers and turn off air conditioners. Power surges from lightning can cause serious damage.
- Avoid contact with plumbing. Do not wash your hands, do not take a shower, do not wash dishes, and do not do laundry. Plumbing and bathroom fixtures can conduct electricity.
- Stay away from windows and doors, and stay off porches.
- Do not lie on concrete floors and do not lean against concrete walls.
- Avoid natural lightning rods such as a tall, isolated tree in an open area.
- Avoid hilltops, open fields, the beach or a boat on the water.
- Take shelter in a sturdy building. Avoid isolated sheds or other small structures in open areas.

- Avoid contact with anything metal-tractors, farm equipment, motorcycles, and bicycles.
- If you are driving, try to safely exit the roadway and park. Stay in the vehicle until the Strong rain ends. Avoid touching metal or other surfaces that conduct electricity in and outside the vehicle.

### **After a Thunderstorm or Lightning Strike**

If lightning strike causes injury to a person, call for immediate medical assistance and attempt to provide first aid assistance to the victim of lightning:

- Breathing – if breathing has stopped, begin mouth-to-mouth resuscitation.
- Heartbeat – if the heart has stopped, administer CPR.
- Pulse – if the victim has a pulse and is breathing, look for other possible injuries. Check for burns where the lightning entered and left the body. Also be alert for nervous system damage, broken bones and loss of hearing and eyesight.

### **After the storm passes remember to:**

- Never drive through a flooded roadway as this may lead to drowning.
- Stay away from storm-damaged areas to be safe from the effects of severe thunderstorms.
- Continue to listen to a local radio and television stations for updated information or instructions in case stranded.
- Help people who may require special assistance, such as infants, children and the elderly.
- Stay away from downed power lines and report them immediately.
- Watch your animals closely. Keep them under your direct control.