# THUNDERSTORMS: Protect yourself from lightning!

### What are they?

Violent atmospheric electricity discharges which are manifested by lightning or sparks, brief glow or lightning bolt (light) and thunder (sound) emissions. They occur between May and October and they can last up to two hours

Thunderstorms accompany a severe storm with heavy rain, strong winds, hail probability, lightning, flash floods and even tornadoes

## **Lightning Damage**

• Paralysis • Burns • Severe headache •Memory and hearing loss •Death

• Power outages • Death of livestock

• Flimsy structures detachments • Fires

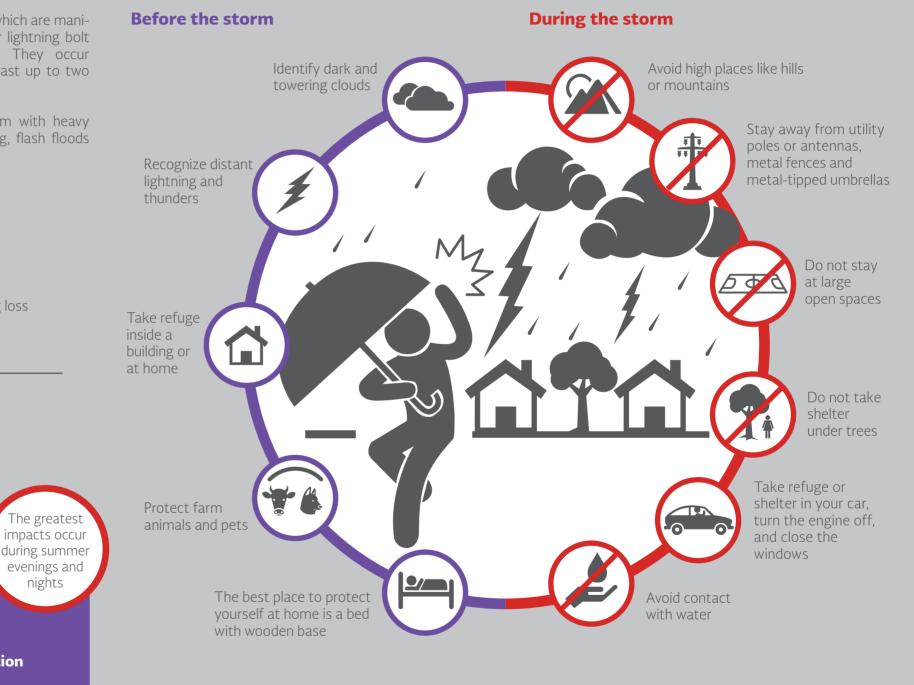
#### Learn more

**National Water Comission** www.gob.mx/conagua

**National Center for Disaster Prevention** www.gob.mx/cenapred

**Center for Atmospheric Sciences, UNAM** www.atmosfera.unam.mx





Sources: National Center for Disaster Prevention Center for Atmospheric Sciences, UNAM



nights



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# **Thunderstorms:**

one of the most dangerous meteorological phenomena

## Lightning

They are electrostatic discharges result of positive and negative charges that are accumulated within a thundercloud

The charges circulate between two clouds or between the cloud and the earth, the latter is the most dangerous because it can affect the population

The lightning reaches temperatures approaching 30,000 Celsius in fraction of seconds

## To take into account...

#### For builders...

•Use lightning rods on buildings and offices in order to prevent damage on electrical devices

#### If you are at home or office...

- •Unplug all the electrical devices
- •Close windows and curtains
- Avoid contact with water
- •Do not use phones, cell phones connected to electrical current machines, tools (n) or metal objects

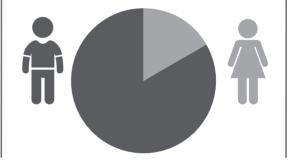
#### If you are at open space...

- •Do no run nor lie down on the floor
- •Position yourself in squat with feet together, the head between legs, close your eyes and cover your ears

## In Mexico, the statistics of accidents involving lightning strikes show that...

Children and youth people from

10–19 years old are the most vulnerable because they perform outdoor work or activities The percentage of dead boys is five times higher than that of dead girls because boys do more outdoor activities, in the countryside and the city



The maximum number of days with thunderstorms is

over the Sierras Madre Oriental and



Occidental, Madre del Sur, Madre de Chiapas, Mountains of Northern Chiapas and Transverse Volcanic System

20% of lightning occurs from cloud to earth



Mexico ranks first in the world with 223 deaths a year caused by lightning, according to the World Health Organization



The annual average of days with thunderstorms

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