

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 5533
TO BE ANSWERED ON WEDNESDAY, 6TH APRIL, 2022**

DEATH DUE TO LIGHTNING STRIKES

5533. SHRI SUBBARAYAN K:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has noticed that lightning strikes has killed at least 2,000 people every year in India since 2004; and
- (b) if so, the preventive steps that have been taken/ being taken by the Government to reduce deaths due to lightning strikes in the country?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR
MINISTRY OF SCIENCE AND TECHNOLOGY
AND EARTH SCIENCES
(DR. JITENDRA SINGH)

- (a) Yes Sir.
- (b) Ministry of Earth Sciences, through India Meteorological Department (IMD), issues forecast and warnings for thunderstorms and associated weather phenomena five days in advance with regular updates.

Indian Institute of Tropical Meteorology (IITM), Pune, an autonomous research institution under the Ministry of Earth Sciences (MoES), has established a lightning location network strategically installed at 83 places in the country to detect and locate lightning strikes with utmost accuracy. Central processor of this network located at IITM, receives and processes the signal received from the network and identifies the location of lightning strikes with less than 500 m accuracy. The output from this network is shared with IMD and various State Governments and is used for nowcasting purposes.

From National Weather Forecasting Centre in IMD, these forecasts and warnings are given in meteorological sub-divisional scale whereas State Meteorological Centres issue the same in district level. In addition to that, thunderstorms and associated disastrous weather phenomena are covered by nowcast (forecast for next 3 hours issued every 3 hours) in the location/district level by State Meteorological Centres. At present this facility is extended to all the districts and for about 1084 stations across the country.

In 2020, Damini Lightning apps was developed by IITM-Pune. The App is monitoring all lightning activity which are happening over India and alert the person if lightning is happening near the person by GPS notification under 20KM and 40KM radius. Detailed description of instruction, precautions is provided in the mobile app while in lightning prone area. It also provides the lightning warning at the location valid for next 40 minutes. There are more than 5 lakhs downloads of Damini app over India.

Apart from the above, National Disaster Management authority (NDMA) has taken effective steps for mitigation action in the concerned issues. NDMA has issued Guidelines for Action Plan on Thunderstorm & Lightning/ Squall and Strong wind in 2018-2019 and sent to all State Governments/ UTs and uploaded on the website of NDMA.

Further NDMA has taken initiatives as following:

- NDMA issued specific advisories Do's and Don'ts on Thunderstorm and Lightning to State Governments/ UTs for taking necessary action.
- NDMA Reviewed the preparedness & mitigation measures on Thunderstorm and Lightning through Video Conferencing (VC) with most affected States.
- Develop a protocol for early warning dissemination on Thunderstorm and Lightning.
- NDMA produced IEC materials like TVCs, Pocket Books containing do's and don'ts, audio-visuals on thunderstorm and lightning.
- Special panel discussion (TV Debate) on 'AapdakaSaamna' show on Doordarshan.
- Doordarshan and All India Radio - NDMA has run campaign through TV (Doordarshan) and Radio (All India Radio) for awareness generation among masses on 'Thunderstorm & Lightning' during April 2021 in the States prone to the disaster including North Eastern States and West Bengal.
- Social Media campaign on thunderstorm and lightning are being conducted by NDMA. Do's and don'ts are being shared on NDMA's social media platforms and videos are being continuously posted on twitter and facebook.
