

Webinar on Lightning Risk Mitigation and Safety Awareness

Dated: 30th June, 2020

14:30-15:45 Hours



1. Objective

Children, farmers, wild animals, flora and fauna are some of the worst victim of lightening hazard. Therefore, in order to generate a sense of awareness among the stakeholders **two webinar** concerning lightening risk mitigation and safety awareness is proposed.

2. Background

As per existing records, in India lightning & thunderstorm have accounted for maximum fatalities among the total deaths caused due to natural hazards.

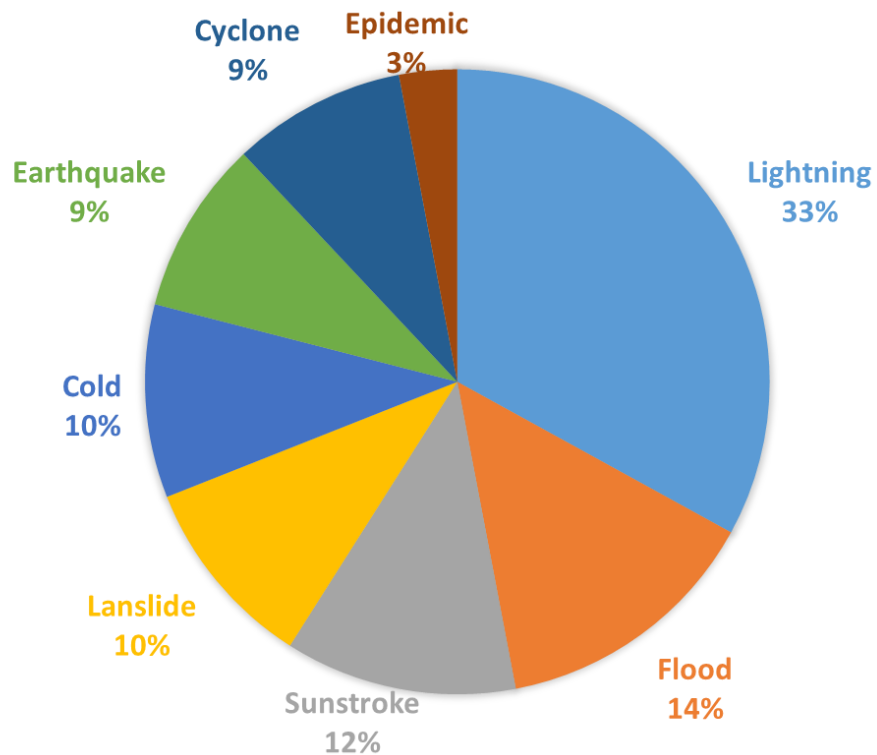


Figure 1: Fatalities due to Natural Hazards in India between 1967- 2020

(Sources: NCRB, National Statistic Board, Ministry of Home Affairs-Sitreps, MoHFW, IMS)

Lightening Risk Profile of Gujarat

Gujarat is vulnerable to lightning and thunderstorm risk. Lightning & thunderstorm occurs mostly between June - October in Gujarat. According to National Crime Record Bureau, between 2008-2018, 576 deaths were caused due to lightning & thunderstorm. Gujarat witnessed 214474

lightning counts during the period 01 April 2019 to 31 July 2019 which accounted for 32 fatalities in the state. (Source: Mid- Monsoon 2019 LIGHTNING REPORT). Gujarat has recently witnessed sudden rise in lightning and thunderstorms in many parts of the state. The recent spate of cyclones in coastal region has added to enhanced lightning. The rise in temperature and increasing pollution has catalyzed more lightning strikes, more so in the tribal dominant areas of Purvi Patti and even in urban hutments like Ahmadabad, Vadodara, Surat etc. Though lightning and thunderstorm have touched almost entire state but there are specific regions where more frequent and fatal lightning strikes are being reported. These are mainly in belt of Northern Gujarat, Central Gujrat and other regions.

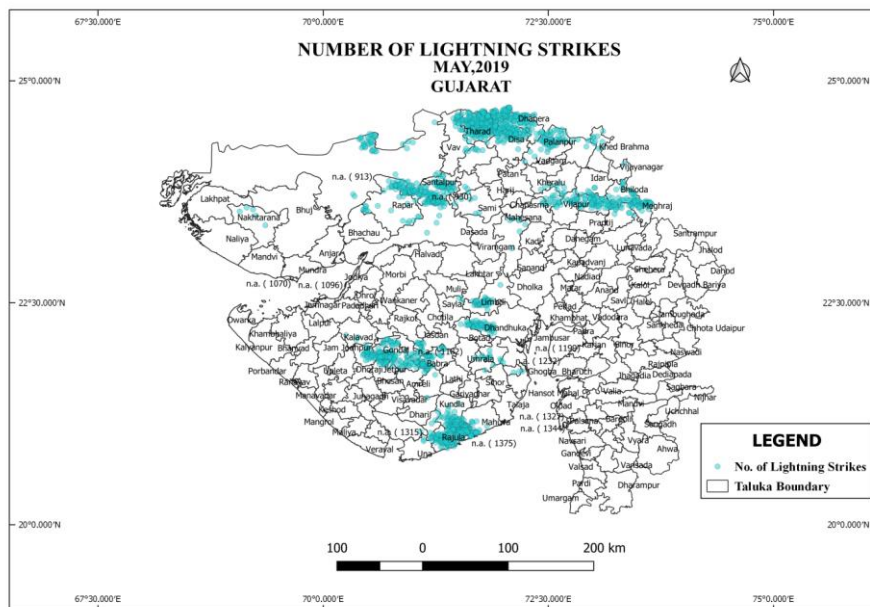


Figure 2: Number of lightning strikes in Gujarat in May 2019 at Taluka level

3. Need of Orientation Program

It is pertinent to mention that India Meteorological Department (IMD) has started state of the art Lightning forecast system with adequate early warning of firstly 48 hrs. outlook followed by second observation of hotspots lookout period of 24 hours to third and final nowcast with 2-3 hours of precise prediction.

The early warning of 2-3 hours is adequate to warn public provided its timely and promptly disseminated to target masses. It has been observed that **95% casualty is in rural areas** and

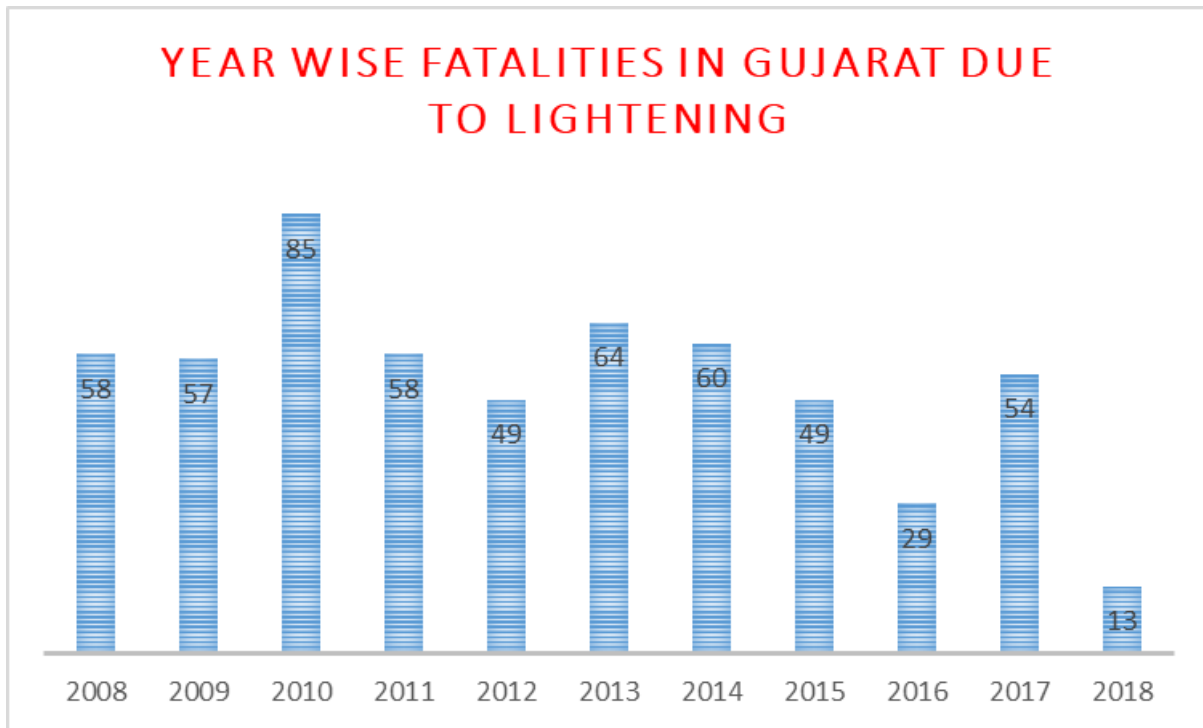


Figure 3: Year Wise fatalities recorded in Gujarat (Source: NCRB)

primary cause of death of 71% victims has been due to standing under tree during rain, thunderstorm or lightning. **Farmers in open field contribute to 66% deaths** and hence need to be educated how to save their life. Even there has been **35% deaths of children** who need to be sensitized about lightning safety (Source: CROPC). Death of animals specially cattle, goats, sheep and poultry have been rampant. Wild animals and rare breed of trees are major concern as lightning strikes on them goes un-noticed.

4. Lightning safety awareness and capacity building

The education, awareness and training on lightning and thunderstorm and Do's and Don'ts are of paramount importance. It has been observed that by awareness and training, losses can be reduced to a great extent. Most of the lightning deaths are due to absence of lightning safe infrastructures like school, hospital buildings and other ill maintained structures. The lightning protection has been prescribed as per National Building Code but the implementations of the same is found wanting both in urban and rural areas are mostly ignorant to it.

5. Expected Participants

As of now, it is evident that children, farmers and flora & fauna are some of the worst victims of lightning hazard. In this regard, relevant stakeholders have been identified. Webinar is proposed for:

- Range Forest Officer, Forester & Beat Guards **of Forest & Environment Department,**
- Agri. Assistant, Horti. Assistant, Agri. Supervisor, Block Technology Manager, Assistant Technology Manager and Farmer's Friend from Agriculture & ATMA Directorate **of Agriculture & Cooperation Department &**
- TDO, Deputy TDO, Sarpanch, Talatis cum Mantri **of Panchayat, Rural Housing and Rural Development Department**

6. Schedule

Time	Session	Topics	Facilitator
14:30 – 14:40		Welcome, About GIDM	Shri Ankur Srivastava, RAPC, GIDM
14:40 – 15:00	Session 1	Opening remarks and Orientation to Disaster Risk Management	Shri Sanjay Joshi, Director (Disaster Management), GIDM
15:00 – 15:30	Session 2	Orientation on Lightning Risk Mitigation and Safety Awareness specific to farmers & forestry	Col. Sanjay Srivastava Chairperson, CROPC
15:30 – 15:45		Question & Answer	