GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. - 183
ANSWERED ON – 03/02/2022

DATA ON DEATHS CAUSED DUE TO LIGHTNING STRIKES

183. DR. FAUZIA KHAN:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether Government maintains any data concerning deaths caused due to lightning strikes;
(b) if so, the details thereof for the last five years and the current year, State-wise;
(c) whether Government has undertaken any measures to increase awareness and precautionary measures; and
(d) if so, the details thereof?

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

(a) Yes Sir. National Crime Record Bureau (NCRB) maintains the data concerning deaths due to lightning strikes.

(b) The details for the last five years, as provided by the NCRB is given in Annexure-I.

(c)-(d) 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, 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 'Aapdaka Saamna' 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.

Annexure-I

State/UT wise number of accidental deaths due to Lightning during 2016-2020						
SN	**State/UT**	**2016**	**2017**	**2018**	**2019**	**2020**
1	Andhra Pradesh	53	77	74	109	93
2	Arunachal Pradesh	0	0	0	0	0
3	Assam	92	30	36	28	14
4	Bihar	282	263	177	400	436
5	Chhattisgarh	211	270	213	212	246
6	Goa	0	0	0	2	0
7	Gujarat	29	54	13	64	78
8	Haryana	12	3	6	11	3
9	Himachal Pradesh	2	3	8	1	5
10	Jharkhand	542	150	235	334	336
11	Karnataka	77	121	126	99	75
12	Kerala	17	19	25	15	8
13	Madhya Pradesh	639	452	381	400	429
14	Maharashtra	230	284	149	189	182
15	Manipur	0	0	1	0	0
16	Meghalaya	12	15	5	7	8
17	Mizoram	1	1	1	1	0
18	Nagaland	0	0	0	0	1
19	Odisha	376	446	299	271	275
20	Punjab	8	1	4	7	8
21	Rajasthan	108	121	43	88	48
22	Sikkim	1	1	0	0	0
23	Tamil Nadu	38	74	82	57	64
24	Telangana	74	79	68	96	64
25	Tripura	12	17	10	10	5
26	Uttar Pradesh	384	217	220	321	304
27	Uttarakhand	1	7	2	2	10
28	West Bengal	110	176	179	147	170
	TOTAL STATE(S)	**3311**	**2881**	**2357**	**2871**	**2862**
29	A & N Islands	0	1	0	1	0
30	Chandigarh	0	0	0	2	0

31	D&N Haveli and Daman&Diu @ +	0	2	0	1	0
32	Delhi UT	2	0	0	0	0
33	Jammu & Kashmir @ *	2	1	0	1	0
34	Ladakh @					0
35	Lakshadweep	0	0	0	0	0
36	Puducherry	0	0	0	0	0
	TOTAL UT(S)	**4**	**4**	**0**	**5**	**0**
	TOTAL (ALL INDIA)	**3315**	**2885**	**2357**	**2876**	**2862**
As per data provided by states/UTs						
'+' Combined data of erstwhile D & N HAVELI AND DAMAN & DIU UT during 2016-2019						
'*' Data of erstwhile JAMMU & KASHMIR State Including LADAKH during 2016-2019						
'@' Data of newly created Union territory						

The above data was provided by National Crimes Record Bureau (NCRB)

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