

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 4381
TO BE ANSWERED ON WEDNESDAY, 20TH AUGUST, 2025**

LOSS OF LIVES AND HEALTH CRISIS DUE TO INTENSE HEAT

†4381. DR. ANAND KUMAR:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government is aware of loss of lives and health crisis caused by intense heat waves in many places of the country and if so, the details thereof;
- (b) whether the Government proposes to declare heat wave as Natural Disaster under the National Disaster Management Act so that relief and rehabilitation schemes can be brought under the ambit of the said Act and if so, the details thereof;
- (c) if not, whether any such proposal is likely to be considered in near future; and
- (d) whether the Union Government has provided any technical or financial assistance to the State Governments for implementing Heat Action Plan and if so, the details thereof, State-wise?

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

- (a) Yes. The latest data on deaths due to Heat/Sun Stroke in the State/UT-wise during 2018-2022, as available from the National Crime Records Bureau (NCRB), Ministry of Home Affairs (MHA), is given in Annexure-1.

Abnormal temperature events can impose severe physiological stress on the human body, as the body operates best within a fairly normal temperature range. There is a marked relationship between human mortality and thermal stress. During unusually hot episodes, deaths from different causes can rise significantly, with the elderly at greater risk than others.

Four Common heat health impacts resulting from excessive exposure to heat waves include dehydration, cramps, exhaustion and heatstroke. It is also learnt that there is a sharp rise in the number of cases of acute gastroenteritis and food poisoning due to the spoilage of food and the reduction of its shelf life due to high temperatures. There is also a rise in the number of cases of anxiety, palpitations, nervousness and behavioural change linked to extreme temperature rise. The occupational profile of most of the victims was ascertained as agricultural labourers, coastal community dwellers and people living below the poverty line (BPL) category, with mostly outdoor occupations.

- (b)-(c) The State disaster management authorities have their resources available through the State Disaster Response Fund (SDRF) and State Disaster Mitigation Fund (SDMF) to support it. If there is a request from the States for financial assistance, the Central Government considers it in accordance with the relevant guidelines for the National Disaster Response Fund (NDRF) and National Disaster Mitigation Fund (NDMF).

Currently, the notified list of disasters eligible for National Disaster Response Fund (NDRF)/State Disaster Response Fund (SDRF) assistance includes 12 disasters, namely cyclones, droughts, earthquakes, fires, floods, tsunamis, hailstorms, landslides, avalanches, cloud bursts, pest attacks and frost & cold wave. The issue of inclusion of more calamities in the existing notified list of calamities was considered by the 15th Finance Commission. The Commission, in para 8.143 of its report, had observed that the list of notified disasters eligible for funding from the State Disaster Response Mitigation Fund (SDRMF) and National Disaster Response Mitigation Fund (NDRMF) covers the needs of the State to a large extent and thus did not find much merit in the request to expand its scope.

However, a State Government can use up to 10% of the annual fund allocation of the SDRF, subject to the fulfillment of certain prescribed conditions and norms, to provide immediate relief to the victims of natural disasters that they consider to be 'disasters' within the local context in the State and which are not included in the centrally notified list of natural disasters.

- (d) Ministry of Earth Sciences (MoES) implements the central sector schemes uniformly throughout the country; hence, the allocation of funds is not State-wise. Funds are not directly released to the State Governments from the MoES to implement the central sector schemes.

The India Meteorological Department (IMD), in collaboration with various research centers across the country, has undertaken several initiatives to enhance monitoring and early warning systems. These efforts have significantly contributed to minimizing the loss of life and property during extreme weather events, including heat waves. These include:

- Heat Action Plans (HAPs) in 23 States that are prone to heatwave conditions were jointly implemented by the National Disaster Management Authority (NDMA) in collaboration with the State Governments.
- Issuing seasonal and monthly outlooks, followed by extended-range forecasts of temperature and heatwave conditions. The early warning and forecast information are also disseminated through various social media platforms for timely public outreach.
- District-wise heatwave vulnerability Atlas over India to help State Government authorities and disaster management agencies in planning.
- The hot weather hazard analysis map of India incorporates daily data on temperature, wind patterns and humidity levels.
- A series of National and State-level heatwave preparedness meetings are conducted much before the start of the summer season, with regular review meetings from time to time during the season.

The weather information is provided to all the stakeholders, including the ministries of the Union Government, State Governments and local Government bodies. The Common Alert Protocol (CAP), developed by the NDMA, is also being implemented to disseminate warnings and timely alerts by the IMD.

IMD has also brought out a web-based "Climate Hazard & Vulnerability Atlas of India" prepared for the thirteen most hazardous meteorological events, which cause extensive damage and economic, human and animal losses. The same can be accessed at <https://imdpune.gov.in/hazardatlas/about/hazard.html>. This atlas will help State

Government authorities and disaster management agencies identify the hotspots, including vulnerable urban and rural areas, and plan and take appropriate action to tackle extreme weather events. This product is helpful in building Climate change-resilient infrastructure. Further, the India Meteorological Department provides weather information to the public through various platforms:

- Mass Media: Radio/TV, Newspaper network (AM, FM, Community Radio, Private TV), Prasar Bharati, and private broadcasters
- Weekly & Daily Weather Video
- Internet (email), FTP
- Public Website (mausam.imd.gov.in)
- IMD Apps: Mausam/Meghdoot/DAMINI/RAIN ALARM
- Social Media: Facebook, X, Instagram, BLOG
 - i. X: <https://twitter.com/Indiametdept>
 - ii. Facebook: <https://www.facebook.com/India.Meteorological.Department/>
 - iii. Blog: <https://imdweather1875.wordpress.com/>
 - iv. Instagram: https://www.instagram.com/mausam_nwfc
 - v. YouTube:
https://www.youtube.com/channel/UC_qxTReoq07UVARm87CuyQw

State/UT-wise deaths due to Heat/Sun Stroke during 2018-2022:

SN	State/UT	2018	2019	2020	2021	2022
1	Andhra Pradesh	97	128	50	22	47
2	Arunachal Pradesh	0	0	0	0	0
3	Assam	0	3	0	0	1
4	Bihar	64	215	53	57	78
5	Chhattisgarh	1	16	3	2	11
6	Goa	0	0	0	0	0
7	Gujarat	31	27	12	8	5
8	Haryana	56	46	23	14	27
9	Himachal Pradesh	0	0	0	1	0
10	Jharkhand	42	88	23	33	47
11	Karnataka	0	4	1	0	2
12	Kerala	1	3	0	0	0
13	Madhya Pradesh	15	33	7	2	27
14	Maharashtra	128	159	56	37	90
15	Manipur	0	0	0	0	0
16	Meghalaya	4	0	0	0	0
17	Mizoram	0	0	0	0	0
18	Nagaland	0	0	0	0	0
19	Odisha	40	84	13	15	38
20	Punjab	38	90	110	91	130
21	Rajasthan	43	54	23	1	12
22	Sikkim	0	1	0	0	0
23	Tamil Nadu	0	0	0	2	2
24	Telangana	107	156	98	43	62
25	Tripura	1	1	2	0	2
26	Uttar Pradesh	176	117	50	35	130
27	Uttarakhand	0	0	0	0	0
28	West Bengal	46	49	6	11	18
	TOTAL STATE(S)	890	1274	530	374	729
29	A & N Islands	0	0	0	0	0
30	Chandigarh	0	0	0	0	0
31	D&N Haveli and Daman&Diu @ +	0	0	0	0	0
32	Delhi UT	0	0	0	0	1
33	Jammu & Kashmir @ *	0	0	0	0	0
34	Ladakh @	-	-	0	0	0
35	Lakshadweep	0	0	0	0	0
36	Puducherry	0	0	0	0	0
	TOTAL UT(S)	0	0	0	0	1
	TOTAL (ALL INDIA)	890	1274	530	374	730

Source: As per data provided by the State, Accidental Deaths & Suicides in India, National Crime Records Bureau (NCRB), Ministry of Home Affairs (MHA). '+' Combined data of erstwhile D & N HAVELI AND DAMAN & DIU UT during 2018 and 2019; '*' Data of erstwhile JAMMU & KASHMIR State Including LADAKH during 2018 and 2019; '@' Data of newly created Union territory.
