

**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
LOK SABHA  
UNSTARRED QUESTION NO. 3028  
TO BE ANSWERED ON WEDNESDAY, 19<sup>TH</sup> MARCH, 2025**

**HEAT WAVE**

3028. SHRI ANUP SANJAY DHOTRE:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the data on heat wave-related fatalities since 2020, year-wise and State-wise;
- (b) the details of compensation schemes or support mechanisms available to victims affected by severe heat waves; and
- (c) the details and status of the proactive measures initiated by the Government to address the projected increase in severe heat waves across the country in the coming years?

**ANSWER**

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

- (a) The latest available details as per the National Crime Record Bureau(NCRB), Ministry of Home Affairs (MHA) are given in Annexure-1.
- (b) State Government can use up to 10% of the annual fund allocation of the State Disaster Response Fund (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.
- (c) Due to climate change, annual temperature is increasing globally, and the impact of the same is reflected in the rising frequency and intensity of heatwaves in various parts of the globe, including India. Intergovernmental Panel on Climate Change (IPCC)-Sixth Assessment Report also reflects the same ([https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC\\_AR6\\_SYR\\_SPM.pdf](https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf)). Addressing the root causes of global climate change is essential to mitigate the impact of heat waves. This involves international cooperation to reduce carbon emissions, transition to renewable energy sources, and implement sustainable practices across all sectors. Various initiatives have been undertaken by the Government of India with the help of States to reduce the causes of heatwaves in the coming years. The National Action Plan on Climate Change (NAPCC) and State Action Plan on Climate Change (SAPCC) is one of the major initiatives in this direction. Additionally, India has taken a proactive role in fostering international collaborations through initiatives such as the International Solar Alliance and the Coalition for Disaster-Resilient Infrastructure. India is committed to pursuing low-carbon strategies for development and is actively pursuing them, as per national circumstances.

The India Meteorological Department, in coordination with various research centers across the country, has taken multiple steps to improve monitoring and early warning systems, which helped minimize loss of life and property during extreme weather events, including heat waves. These include:

- 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 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 over India that includes daily temperature, winds, and humidity condition
- Heat Action Plans (HAPs) in 23 States that are prone to heatwave conditions jointly implemented by the National Disaster Management Authority (NDMA) in collaboration with the State Governments
- 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.

IMD has launched seven of its services (Current Weather, Nowcast, City Forecast, Rainfall Information, Tourism Forecast, Warnings, and Cyclone) with the 'UMANG' Mobile App for use by the Public. Moreover, IMD developed a mobile App, 'MAUSAM' for weather forecasting, 'Meghdoot' for Agromet advisory dissemination, and 'Damini' for lightning alerts. The common Alert Protocol (CAP) developed by the NDMA is also being implemented to disseminate warnings by the IMD.

**State/UT wise deaths due to Heat/Sun Stroke during 2020-2022:**

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

As per data provided by states/UTs

'+' 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

Source: Accidental Deaths & Suicides in India, National Crime Record Bureau (NCRB), Ministry of Home Affairs (MHA)