## GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES LOK SABHA

## UNSTARRED QUESTION NO. 1546 TO BE ANSWERED ON WEDNESDAY, 31<sup>ST</sup> JULY, 2024

### DEATHS CAUSED DUE TO HEAT WAVES

#### 1546. SMT. KANIMOZHI KARUNANIDHI:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the details regarding the number of heat waves that has occurred in different parts of the country in the past ten years;
- (b) the details regarding the number of deaths that has happened due to heatwaves in the country in the past ten years;
- (c) the details regarding the measures taken/to be taken by the Government to protect the people during such heat waves; and
- (d) whether the Government is planning/proposes to plan to give compensation to the families of Government servants who died on duty due to the heatwaves during the elections?

#### **ANSWER**

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

- (a) Number of heatwave days observed over Indian region during last 10 years is given in Annexure-1.
- (b) The details are given in Annexure-2 as provided by the National Crime Record Bureau (NCRB), Ministry of Home Affairs (MHA).
- (c) The India Meteorological Department (IMD) has taken various 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:
  - i. Issuing seasonal and monthly outlook, followed by extended range forecast of temperature and heat wave conditions
  - ii. District-wise heatwave vulnerability Atlas over India to help State Government authorities and disaster management agencies in planning and taking appropriate action
  - iii. The hot weather hazard analysis over India that includes daily temperature, winds, and humidity condition
  - iv. Heat index forecast for the entire country and impact-based forecast of heatwave conditions at district levels
  - v. Real-time heat wave information and warnings on the Web-GIS platform
  - vi. Heat Action Plans (HAPs) in 23 States that are prone to heatwave conditions jointly implemented by the national disaster management authority in collaboration with the State Governments
  - vii. Improvement of forecasts and warning dissemination services along with utilizing modern tools of dissemination systems such as YouTube, Facebook, WhatsApp, X platform, Instagram, etc. for timely public outreach

(d) The State disaster management authorities have their resources available through 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 national disaster response fund (NDRF) and national disaster mitigation fund (NDMF).

Number of heatwave days observed over Indian region during last 10 years:

Annexure-1

	2015	2016	2017	2018	2019	2020	2021	2022	202	2024
Assam &meghalaya	0	0	0	0	0	0	0	0	0	1
Nmmt	0	0	0	0	0	0	0	0	0	0
Shwb&sikkim	0	0	0	0	0	0	0	1	15	11
Gangetic west bengal	3	14	0	3	4	0	3	8	27	31
Odisha	14	20	12	4	2	0	3	11	24	37
Jharkhand	5	11	2	0	6	0	0	27	16	23
Bihar	4	6	0	3	12	0	0	13	29	30
East u.p.	12	2	9	4	10	2	0	33	11	33
West u.p.	10	3	11	6	4	2	2	28	5	32
Uttarakhand	2	0	0	0	0	0	0	5	0	10
Har. Chd&delhi	6	3	11	4	11	0	2	37	5	30
Punjab	2	2	7	0	0	0	0	22	3	27
Himachal pradesh	0	3	4	4	0	0	2	38	0	18
Jammu & Kashmir & ladakh	0	0	0	0	2	0	0	19	0	11
West rajasthan	24	28	28	29	28	5	6	58	3	29
East rajasthan	10	11	14	5	25	0	4	28	0	23
West madhyapradesh	19	18	19	8	19	4	2	42	4	24
East madhyapradesh	15	20	19	9	30	0	0	34	13	26
Gujarat region	6	4	8	2	3	0	0	13	1	14
Saurashtra &kutch	12	3	8	2	9	6	12	25	4	16
Konkan & goa	1	0	0	2	0	0	4	2	6	4
Madhya maharashtra	1	3	1	0	11	2	0	2	1	8
Marathwada	1	2	0	0	10	3	0	0	0	3
Vidarbha	15	12	22	14	54	0	2	18	11	11
Chhattisgarh	9	2	1	3	7	2	0	3	12	13
Coastal a. P.&yanam	8	6	6	2	11	0	0	0	22	11
Telangana	8	6	3	0	14	2	0	0	14	12
Rayalaseema	0	1	0	0	0	0	0	0	1	16
Tamil., pudu. &karaikal	0	0	7	0	4	0	2	0	1	13
Coastal karnataka	0	0	0	0	0	0	0	0	2	3
N. I. Karnataka	1	0	0	0	0	0	0	0	0	18
S. I. Karnataka	0	0	0	0	0	0	0	0	0	10
Kerala &mahe	0	9	0	0	0	0	0	0	0	6

Annexure-2

# State/UT wise deaths due to Heat/Sun Stroke during 2013-2022:

SL	State/UT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1	Andhra Pradesh	418	244	654	312	231	97	128	50	22	47
2	Arunachal Pradesh	0	0	0	0	0	0	0	0	0	0
3	Assam	5	0	0	6	0	0	3	0	0	1
4	Bihar	85	131	86	85	84	64	215	53	57	78
5	Chhattisgarh	3	4	2	9	11	1	16	3	2	11
6	Goa	0	0	0	0	0	0	0	0	0	0
7	Gujarat	26	45	52	32	25	31	27	12	8	5
8	Haryana	82	79	34	76	24	56	46	23	14	27
9	Himachal Pradesh	0	1	0	0	0	0	0	0	1	0
10	Jharkhand	42	50	96	45	51	42	88	23	33	47
11	Karnataka	6	2	0	17	0	0	4	1	0	2
12	Kerala	1	0	1	4	1	1	3	0	0	0
13	Madhya Pradesh	12	33	24	26	34	15	33	7	2	27
14	Maharashtra	80	58	61	96	102	128	159	56	37	90
15	Manipur	0	0	0	0	0	0	0	0	0	0
16	Meghalaya	0	2	0	0	0	4	0	0	0	0
17	Mizoram	1	0	0	0	0	0	0	0	0	0
18	Nagaland	0	0	0	0	0	0	0	0	0	0
19	Odisha	101	78	60	81	99	40	84	13	15	38
20	Punjab	144	123	99	145	60	38	90	110	91	130
21	Rajasthan	40	45	41	51	35	43	54	23	1	12
22	Sikkim	0	0	0	0	0	0	1	0	0	0
23	Tamil Nadu	0	0	0	1	0	0	0	0	2	2
24	Telangana #	-	128	182	216	180	107	156	98	43	62
25	Tripura	12	2	0	2	0	1	1	2	0	2
26	Uttar Pradesh	108	126	487	114	142	176	117	50	35	130
27	Uttarakhand	0	0	0	0	0	0	0	0	0	0
28	West Bengal	45	88	28	18	48	46	49	6	11	18
	TOTAL STATE(S)	1211	1239	1907	1336	1127	890	1274	530	374	729
29	A & N Islands	0	0	0	0	0	0	0	0	0	0
30	Chandigarh	0	0	0	0	0	0	0	0	0	0
31	D&N Haveli and Daman&Diu @ +	0	0	0	0	0	0	0	0	0	0
32	Delhi UT	2	9	0	1	0	0	0	0	0	1
33	Jammu & Kashmir @ *	3	0	1	1	0	0	0	0	0	0

34	Ladakh @	-	-	-	-	-	-	-	0	0	0
35	Lakshadweep	0	0	0	0	0	0	0	0	0	0
36	Puducherry	0	0	0	0	0	0	0	0	0	0
	TOTAL UT(S)	5	9	1	2	0	0	0	0	0	1
	TOTAL (ALL	121	124	190	133	112	890	127	530	374	730
	INDIA)	6	8	8	8	7		4			

As per data provided by States/UTs

- '+' Combined data of erstwhile D & N HAVELI AND DAMAN & DIU UT during 2013-2019
- '\*' Data of erstwhile JAMMU & KASHMIR State Including LADAKH during 2013-2019
- '#' Data of newly created State during 2014

Source: National Crime Record Bureau (NCRB), Ministry of Home Affairs (MHA)

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<sup>&#</sup>x27;@' Data of newly created Union Territory 2020