

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 924
TO BE ANSWERED ON WEDNESDAY, 26TH JULY, 2023**

HEAT ACTION PLANS (HAPs)

924. SHRI KARTI P. CHIDAMBARAM:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the total number of heat related deaths in India in the last five years;
- (b) whether the Government plans to bring the Heat Action Plans (HAPs) under a comprehensive framework for better coordination between the Centre and the States;
- (c) if so, the details of such plans;
- (d) the details of plans envisaged by the Government for creation of Heat Action Plans under the concerned authority in States and cities where it is most required; and
- (e) whether institutions responsible for the implementation HAPs receive adequate funding and if so, the details of resource allocation thereof?

ANSWER

THE MINISTER OF EARTH SCIENCES
(SHRI KIREN RIJJU)

- (a) Number of heat related deaths across the country during the period 2017-2021, as provided by the National Crime Record Bureau (NCRB), Ministry of Home Affairs is given in Annexure-I. It can be noticed that in the recent years there is considerable reduction in the number of causalities due to heat wave. Better early warning services towards heatwave (alongwith guideline) is one of the reasons for reduction in the causalities.
- (b)-(d) India Meteorological Department (IMD) in collaboration with National Disaster Management Authority (NDMA) and local health departments have started Heat Action Plan in many parts of the country to forewarn about the heat waves and also advising action to be taken during such occasions. .

The Heat Action Plan which became operational in 2013 is a comprehensive early warning system and preparedness plan for extreme heat events. The Plan presents immediate as well as longer-term actions to increase preparedness, information-sharing, and response coordination to reduce the health impacts of extreme heat on vulnerable populations. NDMA and IMD are working with 23 states prone to high temperatures leading to heat-wave conditions to develop heat action plans.

1. Andhra Pradesh
2. Arunachal Pradesh
3. Bihar
4. Chhattisgarh
5. Delhi
6. Gujarat
7. Goa
8. Haryana
9. Himachal Pradesh
10. Jharkhand
11. Jammu and Kashmir
12. Karnataka
13. Kerala
14. Maharashtra
15. Madhya Pradesh
16. Odisha
17. Punjab
18. Rajasthan
19. Tamil Nadu
20. Telangana
21. Uttarakhand
22. Uttar Pradesh
23. West Bengal

The main aims of the Heat Action Plan are;

- Establish Early Warning System and Inter-Agency Coordination to alert residents on predicted high and extreme temperatures. Who will do what, when, and how is made clear to individuals and units of key departments, especially health department.
- Capacity building / training programme for health care professionals at local level to recognize and respond to heat-related illnesses, particularly during extreme heat events. These training programmes focus on medical officers, paramedical staff and community health staff so that they can effectively prevent and manage heat-related medical issues to reduce mortality and morbidity.
- Public Awareness and community outreach Disseminating public awareness messages on how to protect against the extreme heat-wave through print, electronic and social media and Information, Education and Communication (IEC) materials such as pamphlets, posters and advertisements and Television Commercials (TVCs) on Do and Don't and treatment measures for heat related illnesses.
- Collaboration with non-government and civil society: Collaboration with non-governmental organizations and civil society organizations to improve bus stands, building temporary shelters, wherever necessary, improved water delivery systems in public areas and other innovative measures to tackle Heat wave conditions.

- Identifying vulnerable populations and the health risks specific to each group.
- Developing effective strategies, agency coordination and response planning that addresses heat-health risks.
- Heat Health Information Surveillance System (HHISS) to monitor and assess the impact of heat waves on human health.
- Reducing Heat Exposure and Promoting Adaptive Measures by launching new efforts including mapping of high-risk areas, access to potable drinking water and cooling spaces during extreme heat days.
- Evaluating and updating the Heat Action Plan regularly.

As an initiative regarding protection against the heatwaves, IMD is issuing Seasonal Outlook for temperatures for the months of April, May & June in the last week of March for planning purpose, since 2016. In the recent years, IMD has started issuing seasonal outlook for temperature for March to May also in addition to the monthly outlook being issued at the end of every month for the subsequent month.

India Meteorological Department has recently launched Heat Index on experimental basis.

The heat index provides information about the impact of humidity on the high temperatures and thus provides a feel like temperature for human beings which can be used as an indication for human discomfort. It provides guidance towards additional steps to be taken by people for keeping themselves cool, to reduce discomfort.

- (e) Funds are allocated through the central sector scheme to IMD towards implementation of weather and climate related forecasts and warnings including the heat action plans.

Annexure-I**State/UT-wise Number of Accidental deaths due to Heat/Sun Stroke during
2017-2021**

SN	State/UT	2017	2018	2019	2020	2021
1	Andhra Pradesh	231	97	128	50	22
2	Arunachal Pradesh	0	0	0	0	0
3	Assam	0	0	3	0	0
4	Bihar	84	64	215	53	57
5	Chhattisgarh	11	1	16	3	2
6	Goa	0	0	0	0	0
7	Gujarat	25	31	27	12	8
8	Haryana	24	56	46	23	14
9	Himachal Pradesh	0	0	0	0	1
10	Jharkhand	51	42	88	23	33
11	Karnataka	0	0	4	1	0
12	Kerala	1	1	3	0	0
13	Madhya Pradesh	34	15	33	7	2
14	Maharashtra	102	128	159	56	37
15	Manipur	0	0	0	0	0
16	Meghalaya	0	4	0	0	0
17	Mizoram	0	0	0	0	0
18	Nagaland	0	0	0	0	0
19	Odisha	99	40	84	13	15
20	Punjab	60	38	90	110	91
21	Rajasthan	35	43	54	23	1
22	Sikkim	0	0	1	0	0
23	Tamil Nadu	0	0	0	0	2
24	Telangana	180	107	156	98	43
25	Tripura	0	1	1	2	0

26	Uttar Pradesh	142	176	117	50	35
27	Uttarakhand	0	0	0	0	0
28	West Bengal	48	46	49	6	11
	TOTAL STATE(S)	1127	890	1274	530	374
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	0
33	Jammu & Kashmir @ *	0	0	0	0	0
34	Ladakh @	-	-	-	0	0
35	Lakshadweep	0	0	0	0	0
36	Puducherry	0	0	0	0	0
	TOTAL UT(S)	0	0	0	0	0
	TOTAL (ALL INDIA)	1127	890	1274	530	374

As per data provided by states/UTs

Source: Accidental Deaths & Suicides in India

'+' Combined data of erstwhile D & N HAVELI AND DAMAN & DIU UT during 2017-2019

*** Data of erstwhile JAMMU & KASHMIR State Including LADAKH during 2017- 2019

'@' Data of newly created Union territory