

Action Plan on Heat Wave West Bengal

Department of Disaster Management & Civil Defence & West Bengal State Disaster Management Authority (WBSDMA) Government of West Bengal

<u>Heat-wave Action Plan for</u> <u>West Bengal</u>

As per NDMA heat wave advisory and correspondence thereof vide memo no. D.O No. 1-17/2023-PP dated 3^{rd} March, 2023 upon which an action plan for heat wave in West Bengal is compiled.

Heat wave is a condition of atmospheric temperature that leads to physiological stress, which sometimes can claim human life. Heat wave is defined as the condition where maximum temperature at a grid point is 3°C or more than the normal temperature, consecutively for 3 days or more. World Meteorological Organization defines a heat wave as five or more during days which consecutive the daily maximum temperature exceeds the average maximum temperature by five degrees Celsius. If the maximum temperature of any place continues to be more than 45° C consecutively for two days, it is called a heat wave condition.

As the state of West Bengal is situated in the arch bend of Bay of Bengal, the weather condition of this state is moderate that is neither very hot nor too cold. Close proximity to sea helps in regular moisture inclusion in the wind, thus resist the hot air blowing from northern part of India often prevents creating Heat wave like condition in the state. However, since 2010, records of increased temperature from the normal have been observed in regularity. Hence, the Heat Wave Action Plan has been framed for immediate and longer-term actions to increase preparedness, information sharing and response coordination to reduce the health impacts of extreme heat on vulnerable populations. The NDMA guideline for Preparation of Action Plan- Prevention & Management of Heat Wave has been shared with all the Districts of the State.

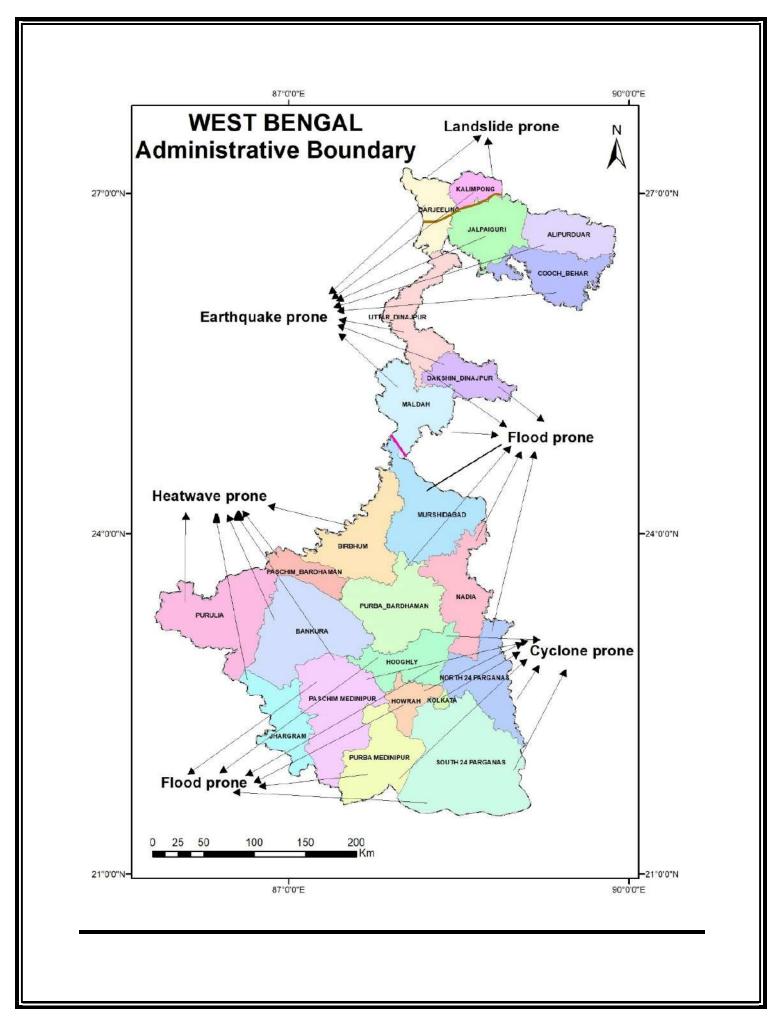
<u>Heat wave Scenario in West</u> <u>Bengal</u>

West Bengal has 6 districts (**Purulia, Bankura, Birbhum, Paschim Medinipur, Jhargram & Paschim Bardhaman**) which are prone to heat wave like conditions. These districts are situated in western parts of West Bengal and are geographically adjacent with the Chotanagpur plateau area. Chotanagpur plateau region is located away from coastal areas. This makes the region very dry and prone to high temperature during the summer months.

As per the AGROMET West Bengal Advisory Bulletin for the State of West Bengal and Andaman Islands for the period from 21st May to 25th May, 2022 by RMC, Kolkata, the distribution of minimum and maximum temperature in the month of May, 2022 is written in the table below.

Name of the District	Maximum Temperature (°C)	Minimum Temperature (°C)
Darjeeling	22-23	13-15
Kalimpong	25-25	18-19
Jalpaiguri	31-33	26-27
Alipurduar	31-33	23-25
Cooch Behar	27-33	22-24
North Dinajpur	30-33	23-26
South Dinajpur	32-34	19-28

Malda	35-36	26-26
Murshidabad	33-36	26-27
Birbhum	32-37	26-27
Nadia	37-38	27-28
North 24	35-37	27-28
Parganas		
Hooghly	35-38	25-29
Howrah	34-36	28-29
Purba Bardhaman	37-37	24-26
Paschim	37-38	24-26
Bardhaman		
Purulia	38-40	23-27
Bankura	36-38	23-27
Jhargram	33-36	25-28
Paschim	34-37	26-28
Medinipur		
Purba Medinipur	34-37	26-28
South 24	31-35	24-29
Parganas		
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<u>Forecast and Issuance of Heat</u> <u>Alert</u>

India Meteorological Department (IMD) is mandated to meteorological observations and provides current and forecast meteorological information for optimum operation of weathersensitive activities. It provides warning against severe weather phenomena like tropical cyclones, dust storms, heavy rains and snow, cold and heat waves etc. It also provides real time data and weather prediction of maximum temperature, Heat wave warning, Heat-alert for the vulnerable cities/rural area of the severity and frequency.

Prevention, Preparedness and Mitigation Measures: Prevention, preparedness and mitigation measures for various stakeholders are enumerated in the following table:

S1. No	Tasks/ Activities	State Agencies & Their Responsibilities		
		Department/ Agencies	Responsibility	
1.	Preparation of Heat Wave Action Plan	SDMA/ DDMA/ Municipal Corporation and Local Bodies	Preparing and Implementing a Heat Wave Action Plan	
2.	Early Warning	State Governments/ District Administration	To disseminate the information received from IMD to the public at large	

3.	Mitigating Heat Wave	Public Health and Engineering	To construct shelters/ sheds, bus stands and provides drinking water points in cities, worksites.
		Department of Health & Family Welfare	Stockpiling of ORS , creating Medical posts at places of mass gathering
4.	Monitoring and Response	Department of Health & Family Welfare	 Surveillance deployment of Rapid Response Teams specific care for vulnerable groups
5.	Media campaign and IEC activities	Department of Information and Cultural Affairs/ SDMAs/ Department of Health & Family Welfare	Extensive IEC campaigns to create awareness through print, electronic and social media
6.	Documentation	Department of Disaster Management & Civil Defence/ SDMAs/ DDMAs/ Department of Health & Family Welfare	Collecting Data and Information
7.	Long Term Measures	Forest Department/ SDMAs and other concerned Department	Improving the forest coverage and green areas

State Control No.: 033-2214-3526, Toll Free No.:1070

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Do's and Dont's

Heat Wave conditions can result in physiological strain, which could even result in death. To minimize the impact during the heat wave and to prevent serious ailment or death because of heat stroke, the following measures are useful:

<u>DO's</u>

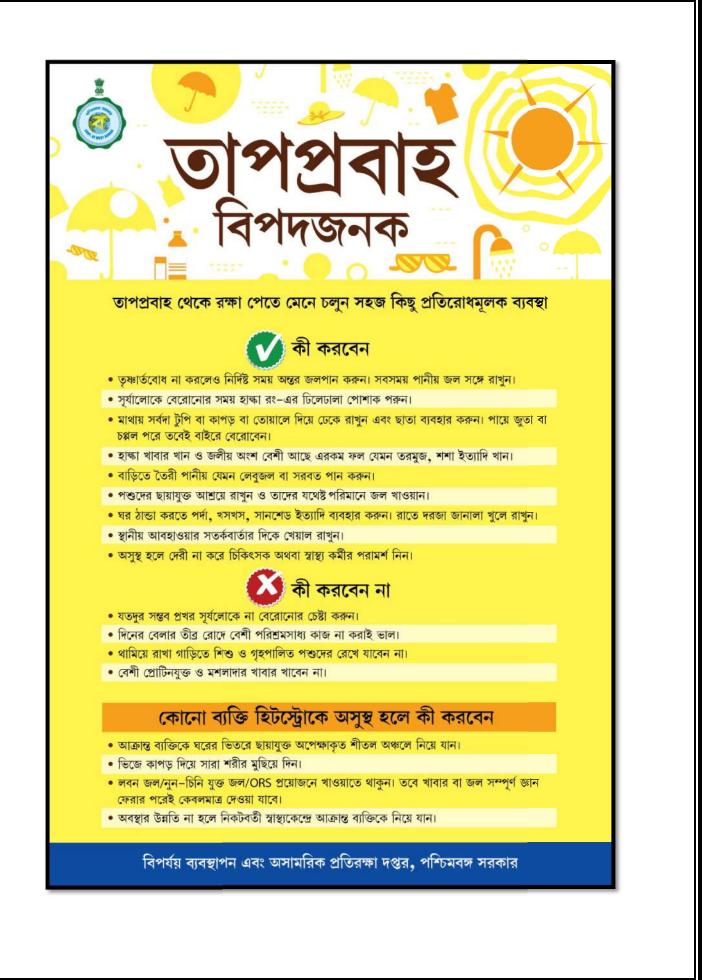
- Listen to Radio, watch TV, read News paper for local weather forecast to know if a heat wave is on the way.
- Drink sufficient water and as often as possible, even if not thirsty.
- Wear lightweight, light-coloured, loose, and porous cotton clothes. Use protective goggles, umbrella/hat, shoes or chappals while going out in sun.
- While travelling, carry water with you.
- If you work outside, use a hat or an umbrella and also use a damp cloth on your head, neck, face and limbs.
- Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. which help to re-hydrate the body.
- Recognize the signs of heat stroke, heat rash or heat cramps such as weakness, dizziness, headache, nausea, sweating and seizures. If you feel faint or ill, see a doctor immediately.
- Keep animals in shade and give them plenty of water to drink.
- Keep your home cool, use curtains, shutters or sunshade and open windows at night.
- Use fans, damp clothing and take bath in cold water frequently.
- Provide cool drinking water near work place.
- Caution workers to avoid direct sunlight.
- Schedule strenuous jobs to cooler times of the day.

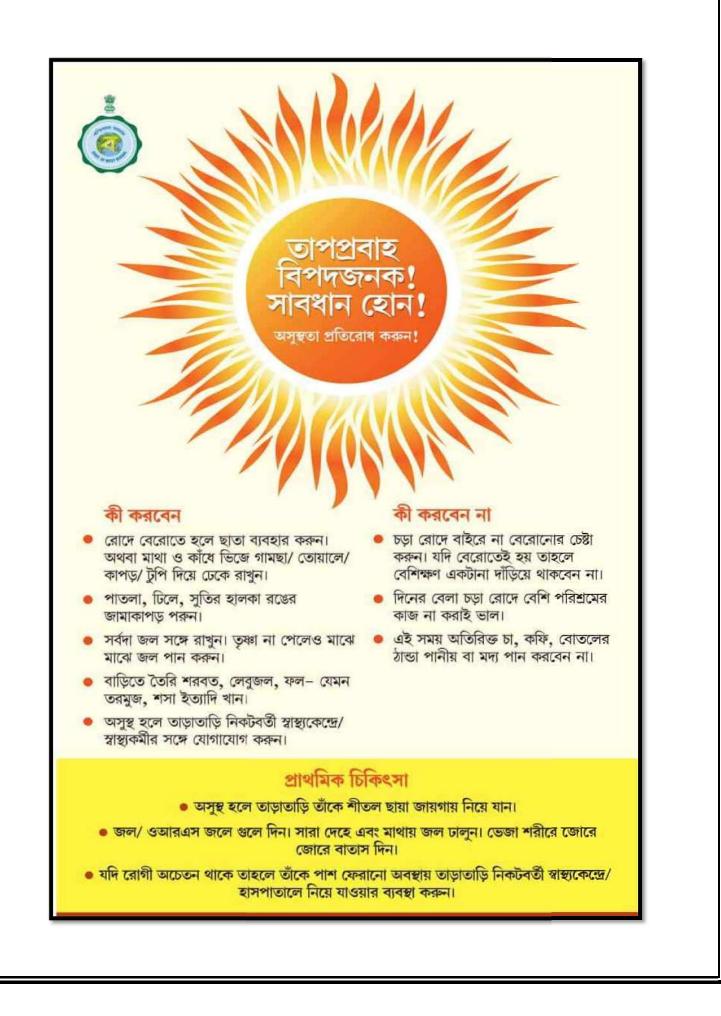
- Increasing the frequency and length of rest breaks for outdoor activities.
- Pregnant workers and workers with a medical condition should be given additional attention.

DONT's

- Do not leave children or pets in parked vehicles.
- Avoid going out in the sun, especially between 12.00 noon and 3.00 p.m.
- Avoid wearing dark, heavy or tight clothing.
- Avoid strenuous activities when the outside temperature is high. Avoid working outside between 12 noon and 3 p.m.
- Avoid cooking during peak hours. Open doors and windows to ventilate cooking area adequately.
- Avoid alcohol, tea, coffee and carbonated soft drinks, which dehydrates the body.
- Avoid high-protein food and do not eat stale food.







BEWARE! HEAT WAVES CAN BE DANGEROUS!

Prevent before it takes a toll.

Do's

- Always carry your umbrella while exposing yourself to sunlight. Or else, cover your head and shoulders with wet wipes/towels/ cloth/caps
- Wear fine, loose-fitting cotton garments of light colour
- Always carry water with you. Even if you are not feeling thirsty, drink plenty of water frequently
- Consume homemade juices, lime water and fruits like Watermelon, Cucumber etc.
- If you feel sick, reach out to your nearby health centre/ health worker

Don'ts

- Avoid going out in scorching sunlight. In case you need to go out, do not stand still in a place for long
- It is better to avoid laborious tasks in direct sunlight
- Abstain from drinking excessive tea, coffee, cold drinks and alcoholic beverages

First Aid

- If someone falls sick, immediately take that person to a cool shaded place
- Dissolve ORS in water and feed the person. Pour water on head and body. Fan rapidly on the wet person

 In case the patient loses sense, rush to the nearby health centre/hospital keeping the patient's body lying on his/her side

