



राजेश भूषण, आईएएस
सचिव

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SECRETARY



भारत सरकार
स्वास्थ्य एवं परिवार कल्याण विभाग
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Government of India
Department of Health and Family Welfare
Ministry of Health and Family Welfare

D.O.90/NCDC/CEOH&CCH/2020-21/Heatwaveadvisory
30th April 2022

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Azadi Ka
Amrit Mahotsav

Dear Colleague,

The Seasonal and Monthly Outlook from Indian Meteorological Department (IMD) for March-May 2022 predicts above normal maximum temperatures over many areas of the Country and much higher temperatures in Central, Western and Northern parts of the Country. Temperatures have already touched 46° Celsius at some places and deviation up to 6° Celsius from expected normal temperatures have also been reported.

2. I draw your attention to “National Action Plan on Heat Related Illnesses” (released in July 2021), which is available on website of Union Ministry of Health & Family Welfare (mohfw.gov.in) and the website of National Centre for Disease Control (NCDC) (<https://ncdc.gov.in/WriteReadData/linkimages/NationActionplanonHeatRelatedIllnesses.pdf>). In addition, I also draw your attention to an Advisory issued by this Ministry on 15th March 2022 for Health Facilities on heat related illnesses, symptoms, management, preparedness, record maintenance and surveillance etc. This was followed by another communication from NCDC to all States in April 2022 regarding need to escalate heat resilience measures in Health Facilities. An Inter-Sectoral meeting on this subject was also chaired by Member Secretary, NDMA in mid-April 2022 where all Principal Secretaries of Revenue Departments of States participated.

3. I would request you to disseminate the guideline document “National Action Plan on Heat Related Illnesses” to all Districts for effective management of cases of heat wave. From 1st March 2022, daily surveillances on heat related illnesses has been initiated under Integrated Disease Surveillance Programme (IDSP) in all States and Districts. Please ensure that these daily surveillance reports are shared with NCDC. The daily heat alerts which are being shared by IMD as well as NCDC with States indicate forecast of heat wave for next 3-4 days and may be disseminated promptly at District/Health Facility level.

4. Health Deptt. of the State must continue efforts on sensitization and capacity building of medical officers, health staff, grass-root level workers on heat illness, its early recognition and management. Health Facility preparedness must be reviewed for availability of adequate quantities of essential medicines, I.V. fluids, ice packs, ORS and all necessary equipment. Availability of sufficient drinking water at all Health Facilities and continued functioning of cooling appliances in critical areas must be ensured.

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5. Health Facilities need to increase resilience to extreme heat by arranging uninterrupted electricity for constant functioning of cooling appliances, installation of solar panels (wherever feasible), measures to reduce indoor heat through cool/green roof (NDMA guidelines may be referred), window shades, shade outside, etc. Rain Water Harvesting and Recycling Plants may also be explored for self-sufficiency in water.

6. States may also utilize Information, Education and Communication (IEC) as well as Community Level Awareness materials regarding the precautions to be taken by population to safeguard themselves against heat wave. A standard template of Public Health Advisory incorporating Do's and Don'ts, prepared by NCDC is being enclosed with this letter. This document could be used as a template and customized to suite local needs as well as translated in local languages for wider dissemination.

7. I am sure that with your effective leadership, the State would be able to monitor and manage the health impact of the current heat wave.

Warm Regards .

Yours sincerely,



(Rajesh Bhushan)

Encls. : A/a

To : Chief Secretary of all States/UTs.

Public Health Advisory: Extreme Heat/Heatwave

Do's

For general population

Stay hydrated:

- Drink sufficient water whenever possible, even if you are not thirsty. Thirst is not a good indicator of dehydration.
- Carry drinking water when traveling
- Use Oral Rehydration Solution (ORS), and consume homemade drinks like lemon water, butter milk/lassi, fruit juices with some added salt.
- Eat seasonal fruits and vegetables with high water content like water melon, musk melon, orange, grapes, pineapple, cucumber, lettuce or other locally available fruits and vegetables.

Stay covered:

- Wear thin loose, cotton garments preferably light coloured
- Cover your head: use umbrella, hat, cap, towel and other traditional head gears during exposure to direct sunlight
- Wear shoes or chappals while going out in sun

Stay alert:

- Listen to Radio; watch TV; read Newspaper for local weather news. Get the latest update of weather on India Meteorological Department (IMD) website at <https://mausam.india.gov.in/>

Stay indoors as much as possible:

- In well ventilated and cool places
- Block direct sunlight and heat waves: Keep windows and curtains closed during the day, especially on the sunny side of your house. Open them up at night to let cooler air in.
- If going outdoor, limit your outdoor activity to cooler times of the day i.e., morning and evening
- Reschedule or plan outdoor activities during cooler parts of the day.

For vulnerable population

Although anyone at any time can suffer from the heat stress & heat-related illness, some people are at greater risk than others and should be given additional attention.

These include:

- Infants and young children
- Pregnant women
- People working outdoors
- People who have a mental illness
- People who are physically ill, especially with heart disease or high blood pressure
- People coming from cooler climate to a hot climate: If such persons are visiting during heatwave, they should allow one week's time for their bodies to acclimatized to heat and should drink plenty of water. Acclimatization is achieved by gradual increase in exposure/physical activity in hot environment.

Other precautions

- Elderly or sick people living alone should be supervised and their health monitored on a daily basis.
- Keep your home cool, use curtains, shutters or sunshade and open windows at night.
- Try to remain on lower floors during the day.
- Use fan, damp cloths to cool down body

Don'ts

- Avoid getting out in the sun, especially between 12:00 noon and 03:00 pm
- Avoid strenuous activities when outside in the afternoon
- Do not go out barefoot
- Avoid cooking during peak summer hours. Open doors and windows to ventilate cooking area adequately
- Avoid alcohol, tea, coffee and carbonated soft drinks or drinks with large amount of sugar- as these actually, lead to loss of more body fluid or may cause stomach cramps
- Avoid high-protein food and do not eat stale food
- Do not leave children or pets in parked vehicle. Temperature inside a vehicle could get dangerous.

For Employers and workers

- Provide cool drinking water at work place and remind them to drink a cup of water every 20 minutes or more frequently to stay hydrated
- Caution workers to avoid direct sunlight
- Provide shaded work area for workers. Temporary shelter can be created at work site.
- Schedule strenuous and outdoor jobs to cooler times of the day i.e., morning and evening hours
- Increase the frequency and length of rest breaks for outdoor activities- at least every 5 minutes after 1 hour of labour work
- Listen to Radio; watch TV; read Newspaper for local weather news and act accordingly. Get the latest update of weather on India Meteorological Department (IMD) website at <https://mausam.imd.gov.in/>
- Assign additional workers or slow down the pace of work
- Make sure everyone is properly acclimatized: it takes weeks to acclimatize to a hotter climate. Do not work for more than three hours in one day for the first five days of work. Gradually increase the amount and time of work.
- Train workers to recognize factors which may increase the risk of developing a heat related illness and the signs and symptoms of heat stress and start a "buddy system" since people are not likely to notice their own symptoms
- Trained First Aid providers should be available and an emergency response plan should be in place in the event of a heat-related illness.
- Pregnant workers and workers with a medical condition or those taking certain medications should discuss with their physicians about working in the heat.
- If working outdoors wear light-coloured clothing preferably long sleeve shirt and pants, and cover the head to prevent exposure to direct sunlight.
- Organize awareness campaigns for employees
- Install temperature and forecast display at the workplace.
- Distribute informational pamphlets and organize training for employers and workers regarding health impacts of extreme heat and recommendations to protect themselves during high temperatures.



Health Impact of Heat: Heat-Related Illnesses

- Normal human body temperature ranges between 36.4°C to 37.2°C (97.5°F to 98.9°F)
- Exposure to high outdoor and/ indoor temperatures can induce heat stress, directly and indirectly, leading to heat-related illnesses
- Heat-related illnesses include (from mild to severe)—**heat rash** (prickly heat), **heat oedema** (swelling of hands, feet and ankles), **heat cramps** (muscle cramps), **heat tetany**, **heat syncope** (fainting), **heat exhaustion**, and **heat stroke**.
- Heat stress may also exacerbate chronic diseases like cardiovascular, respiratory, kidney diseases
 - Watch out for symptoms of heat stress, which include:*
 - dizziness or fainting;
 - nausea or vomiting;
 - headache
 - extreme thirst
 - decreased urination with unusually dark yellow urine
 - rapid breathing and heartbeat

Heat-related illnesses are preventable

If you or others feel unwell and experience any of above symptoms during extreme heat,

- Immediately move to a cool place and drink liquids. **Water is best.**
- Get help/medical attention
- Measure your body temperature

If you experience **painful muscular spasms** (particularly in the legs, arms or abdomen, in many cases after sustained exercise during very hot weather),

- Rest immediately in a cool place, and drink oral rehydration solutions containing electrolytes
- Medical attention is needed if heat cramps last more than one hour

Heatstroke is a medical emergency!

Be aware of **Danger signs** & seek immediate medical attention if you observe

In adults

- Altered mental sensorium with disorientation, confusion and agitation, irritability, ataxia, seizure or coma
- Hot, red and dry skin
- Core body temperature $\geq 40^{\circ}\text{C}$ or 104°F
- Throbbing headache
- Anxiety, Dizziness, fainting and light headedness
- Muscle weakness or cramps
- Nausea and vomiting
- Rapid heartbeat/Rapid, shallow breathing

In children

- Refusal to feed
- Excessive irritability
- Decreased urine output
- Dry oral mucosa & absence of tear/sunken eyes
- Lethargy/altered sensorium
- Seizures
- Bleeding from any site

Call 108/102 immediately
if you find someone with
high body temperature and is either
unconscious, confused, or
has stopped sweating

While waiting for help, **cool the person right away**
by:

- moving them to a cool place, if you can;
- applying cold water to large areas of the skin or clothing; and
- fanning the person as much as possible



National Program
on Climate Change
and Human Health