National Centre for Disease Control
Directorate Health Services
Ministry of Health and Family Welfare
22-Sham Nath Marg, Civil Lines, New Delhi

Advisory for State Health Departments for Summer 2025

The country may observe above-normal seasonal maximum temperatures in line with the observed trend of increased global temperatures. To reduce the health impacts of extreme heat, health departments must ensure preparedness and timely response.

State Nodal Officers under the National Programme for Climate Change and Human Health (NPCCHH) to ensure the following activities:

1. Dissemination of the following guidelines to all districts:

- National Action Plan on Heat Related Illnesses, MoHFW
- Strengthening Health Systems Preparedness for Heat Related Illnesses (HRI) in India
- Emergency Cooling for Severe Heat-Related Illnesses
- Autopsy Findings in Heat Related Deaths

2. Implement Heat-Health Action Plan, a chapter of the State Action Plan on Climate Change and Human Health (SAPCCHH) at the State level

- Support implementation of District-specific and City-level heat-health action plans for focused preparedness and response.

3. Meeting with State and District Task Force on Climate Change and Human Health

- Organize a task force meeting for implementation of the heat-health action plan at State/District levels, to ensure health facility and ambulance preparedness and their strategic deployment.
- Monitor and utilize daily surveillance data for coordinated preparedness and response planning.
- Utilize local civil registration systems to understand patterns of temperature-related mortality for local early warning thresholds and for focused preparedness.
- Consider the strategic establishment of public cooling and drinking water facilities to prevent heat stress.
- The health sector heat action plan shall be updated in SAPCCHH and a copy of this may be sent to the State Disaster Management Authority (SDMA) or Relief Commissioner Department for incorporation in the State Action Plan on Heat Wave.

4. Reporting under Heat-Related Illness and Death Surveillance

- Ensure daily submission of data on heatstroke cases and deaths, emergency attendance and total deaths from **March 01, 2025,** on **the IHIP portal under the National Programme on Climate Change and Human Health** at https://ihip.mohfw.gov.in/npcchh.

- Submit data from health facilities, PHC, and above, using P-form level credentials. The updated data collection form focuses on patient-level information to create line lists with essential demographic, clinical, and exposure information.
- Ensure routine monitoring of data to ensure data quality. A 5-day correction window is provided for health facilities to correct their reports.
- Use clinical criteria to categorize heat-related deaths. A support tool, Checklist criteria to label heat stroke or HRI Deaths in clinical setting is enclosed. Undertake "**Investigation of Suspected Heat-Related Illness Death**" by a medical officer/epidemiologist for suspected heat-related illness deaths that cannot be assessed clinically (details in National Action Plan on Heat-Related Illnesses, MoHFW) to understand circumstances around the suspected HRI death.
- Ensure timely verification, investigation and response to reports of heat-related mortality clustering and provide incident reports.

5. Dissemination of early warning: of heat waves issued by the India Meteorological Department (IMD) daily after 1600 hours IST with a forecast for next four days should be disseminated to health facilities and vulnerable populations.

6. Issue health advisories and plan IEC activities to make the public aware of the precautions taken to safeguard against extreme heat by engaging frontline workers, print, and visual media. IEC material on heat health for general and vulnerable populations prepared by NCDC is available at https://ncdc.mohfw.gov.in/centre-for-environmental-occupational-health-climate-change-health/. If needed, it can be used as a template to prepare IEC at the state level after being translated into a regional language.

7. Sensitization and capacity building of medical officers and health care staff of health facilities on HRI symptoms, case identification, clinical management, emergency cooling, and surveillance reporting. Community health workers should be trained on public awareness measures, personal cooling measures, HRI identification, first aid, referral, and reporting. Training manuals for Nodal Officers, Medical Officers, Community Health Workers and Community published by NPCHH should be utilized for the training.

8. Health facility preparedness for prevention and management of severe HRI

- Procurement and supply of adequate quantities of ORS packs, essential medicines, IV fluids, ice packs, and equipment to support the management of volume depletion and electrolyte imbalance etc.
- Establish Heatstroke management units in secondary and tertiary level health care facilities. Ensure active, external cooling strategies that can be used for rapid and efficient cooling of patients at health facilities and field levels, develop internal protocols, and train health care staff.(NPCCHH PIP FY 24-25, 25-26 guidelines).
- Ambulance and primary care preparedness: Identify/procure resources at primary health facilities and for ambulances to ensure on-site emergency and rapid cooling of severe heat-related illness patients in line with Cool First, Transport Second strategy.
- Ensure the availability of sufficient drinking water at all health facilities.
- Ensure sufficient availability of general cooling appliances in waiting and patient treatment area and their functioning.

9. Fire safety in health facilities

Rising temperatures increase the risk of fire incidents in healthcare facilities. Most fire incidents result from short-circuits and electrical overloads

- Conduct regular fire risk assessments and inspections to identify vulnerable areas and to ensure functional firefighting systems.
- Fire prevention measures: Implement proper storage and handling of flammable materials. Conduct bi-annual electrical load audits, especially in high-demand areas like ICUs, to ensure power systems meet safety standards.
- Fire detection and suppression systems: Install and maintain smoke detectors, fire alarms, hydrants, and extinguishers in all hospital areas. Conduct monthly testing of alarms and detectors, ensuring batteries are replaced as needed.
- Staff training and emergency drills: Provide continuous training for staff on fire safety protocols, prevention, and evacuation procedures. Conduct bi-annual fire and evacuation drills to ensure preparedness.
- Emergency response plan: Establish and maintain an emergency response plan with SOPs for evacuating patients and staff. Ensure all staff members are familiar with emergency roles and responsibilities.

10. Health facility resiliency to extreme heat

- Coordinate with electricity distribution company/corporation for uninterrupted electricity supply to hospitals for constant functioning of cooling appliances.
- Adopt measures to reduce indoor heat and energy conservation in the health facilities like cool roof/green roof, window shading, rainwater harvesting, solarization etc.
- Provide shade outside the health facilities in heat-prone regions.

11. HRI-Focused Mass Gathering/Sporting Event Preparedness

While organizing mass gatherings or sporting events during summer, sufficient preparedness should be made to prevent and manage heat-related illnesses (HRI) by actively engaging health departments, other relevant departments, and local administration.

Event planning considerations

- **Environmental heat**
  - Check heatwave forecasts, high humidity, and active heatwave warnings, consult the local IMD center
  - Avoid days when active heatwave warnings and high humidity are expected
  - Avoid planning outdoor events at the hottest time of day (12PM-3PM)

- **Event ground amenities/infrastructure**
  - Plan assessment of event venue/ground with a medical team from local health facilities for setting up medical camps, cooling areas, water availability, and placement

- **Safe, Drinking Water Provision**
  - Adequate and safe water supply and convenient access for all attendees must be arranged.

- Suggested amount of water required per person is 20 liters/day with 4 Liters for drinking.
- For all-day events, water provision can be calculated based on following
  1. A minimum of 2 liters of free drinking water available/person or a rate calculated at 500ml/hour, whichever is the greater ***and***
  2. One water outlet per 500 people.
  3. Water outlets should be reviewed and approved for safety, water quality, and hygiene.
- Water quantity for emergency cooling/dousing/spraying should be considered separately.

➢ **Shade/shelter**: to reduce open exposure of attendees to the sun.

➢ **Cooling shelters:** Provision/ establishment of well, actively ventilated/cooled rooms/ misting areas.

➢ **Health promotion and risk communication**
Ensure adequate arrangement for frequent communication in local language for the attending population, (in advance and during the event) through social media, on-site posters, video clips/announcements about measures e.g.

- avoiding dehydration/adequate water intake
- wearing appropriate clothing, take protective measures like sunscreen, hat, umbrella
- reducing the risk of heat-related illnesses
- identifying primary symptoms of HRI, first-aid, and ways to contact first responders

<u>Health sector preparedness</u>

- Consider heat-related illnesses in health surveillance, medical management, and response planning
- Have a general understanding of possible vulnerable populations based on event type e.g. in mass sporting events exertional heatstroke may be observed, in pilgrimage-related mass gatherings classic heatstroke may be common.
- Prevent heat-related illness (HRIs) through the provision of ORS packs, essential medicines, IV fluids, icepacks, and equipments to support the management of volume depletion and electrolyte imbalance etc.
- Prioritize rapid assessment and rapid cooling of severe heat-related illnesses
- Designate a safe, accessible area for rapid whole-body cooling of heat exhaustion and heatstroke patients
- Identify suitable rapid cooling method based on access to water, shade, venue topography and access, procure equipments (rectal thermometer, ice boxes, ice cubes, cold water, tarp, ice coolers, fans, towels/sheets), and set up cooling area accordingly
- Ensure training of attending medical staff and relevant first responders in triage, rapid assessment, rapid cooling, medical record-keeping, referral, and surveillance
- Designate and inform nearest referral health facilities that can provide adequate HRI management and cooling facilities.

- Keeping ambulance with ice packs and cold water etc to transport serious patients to the nearest equipped health care facility.

During the event consideration

1. Ensure adequate air circulation, and avoid overcrowding pockets at the event site.
2. Identify and monitor the vulnerable population at the event with checkpoints at entry and within the event area; monitoring with the help of volunteers/cameras on site.
3. Uniformed medical aid teams with appropriate portable ice boxes, cold water, ORS packets should be mobilized in crowd.
4. Continue good public communication (in terms of broadcasts, posters) regarding the effects of heat and reminders to stay hydrated and cool.
5. Guide the public towards medical check posts, and nearest exits through a detailed map of event site and directions on display
6. Proper management and documentation of all patients treated for HRI and their follow-up after first aid administration.
7. Report heatstroke cases and deaths in Heat-Related Illness and Death surveillance under NPCCHH
8. Keep effective communication between the healthcare team and event stakeholders.

Resources

1. Guidelines for preparation of action plan- prevention and management of heat wave, 2019. National Disaster Management Authority, Government of India. Available at: https://ndma.gov.in/sites/default/files/PDF/Guidelines/heatwaveguidelines.pdf
2. Ahmedabad heat action plan 2019. Guide to extreme heat planning in Ahmedabad, India. Amdavad Municipal Corporation. Available at: https://www.nrdc.org/sites/default/files/ahmedabad-heat-action-plan-2018.pdf
3. World Health Organization. Public Health Advice on Heatwave Available at: https://www.who.int/health-topics/heatwaves#tab=tab_1
4. Guidelines for fire and life safety in health care facilities https://jipmer.edu.in/sites/default/files/Fire%20safety%20guidelines-Ministry%20of%20Health%20and%20Farnily%20Welfare.pdf
5. Water quality at public events | NT.GOV.AU https://nt.gov.au/industry/hospitality/public-events/water-public-events
6. World Health Organization. Public health for mass gatherings: key considerations. 180 p. https://www.who.int/publications/i/item/public-health-for-mass-gatherings-key-considerations

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