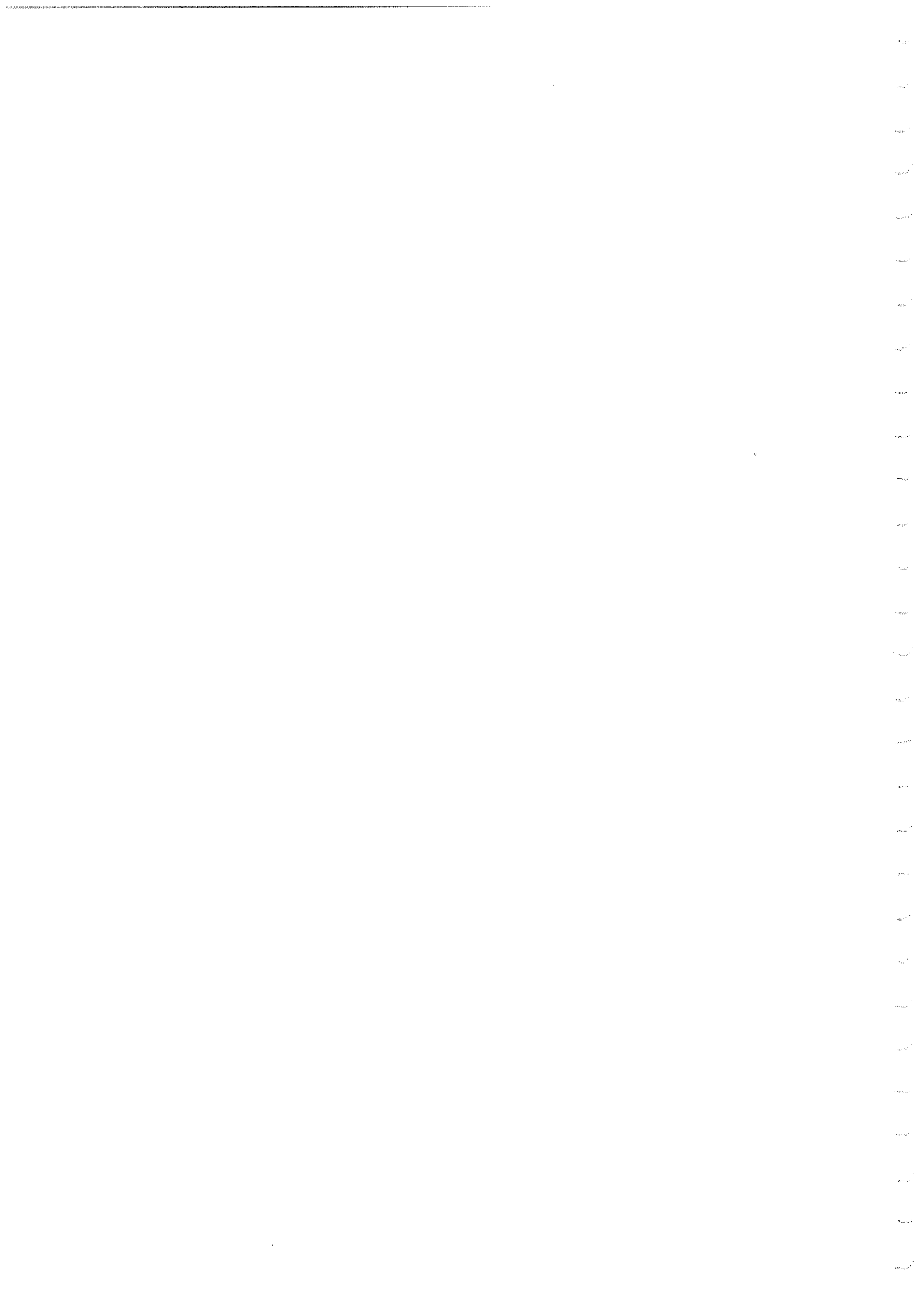




GOVERNMENT OF TELANGANA

**THE TELANGANA STATE HEATWAVE
ACTION PLAN – 2016**

REVENUE (DISASTER MANAGEMENT) DEPARTMENT



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PART- I

NECESSITY OF HEAT WAVE ACTION PLAN

INTRODUCTION:

Heat Wave Plan is a Plan intended to protect the population from heat related harm to health. It aims to prepare for, alert people to, and prevent, the major avoidable effects on health during periods of severe heat, while the days are sunny in summer, it should not be forgotten that the temperature can get too high, that it can become uncomfortably hot, and for some, it can become dangerously hot putting their life at risk.

A. HEAT WAVES

Spells of abnormally high temperatures that occur in different parts of the country during April to June are referred to as heat waves. The term heat wave is a description of prevailing temperature conditions relative to daily normal value. The IMD (India Meteorological Department) has laid down the following criteria for describing a heat wave or a severe heat Wave or a Warm Night.

Heat wave is considered only after the maximum temperature of a station reaches atleast 40°C for plains and atleast 30°C for hilly regions.

- When actual maximum temperature of a station is more than or equal to 40°C.
 - Heat wave - Departure from normal temperature is 5°C - 6°C
 - Severe Heat wave - Departure from normal temperature is 7°C or more
- When actual maximum temperature is 45°C or more, irrespective of normal maximum temperature, heat wave is declared.
- When actual maximum temperature is 47°C or more, irrespective of normal maximum temperature, Severe Heat Wave is declared.

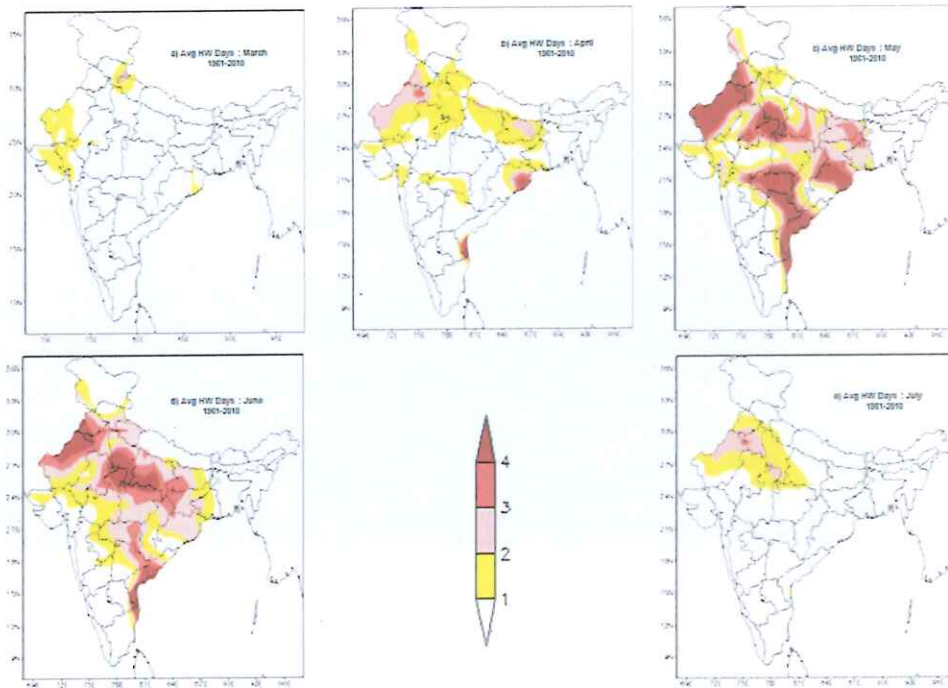
Warm Night is declared if actual maximum temperature of a station is more than or equal to 40°C and minimum temperature departure is more than or equal to 5°C.

Very Warm Night is declared if actual maximum temperature of a station is more than or equal to 40°C and minimum temperature departure is more than or equal to 7°C.

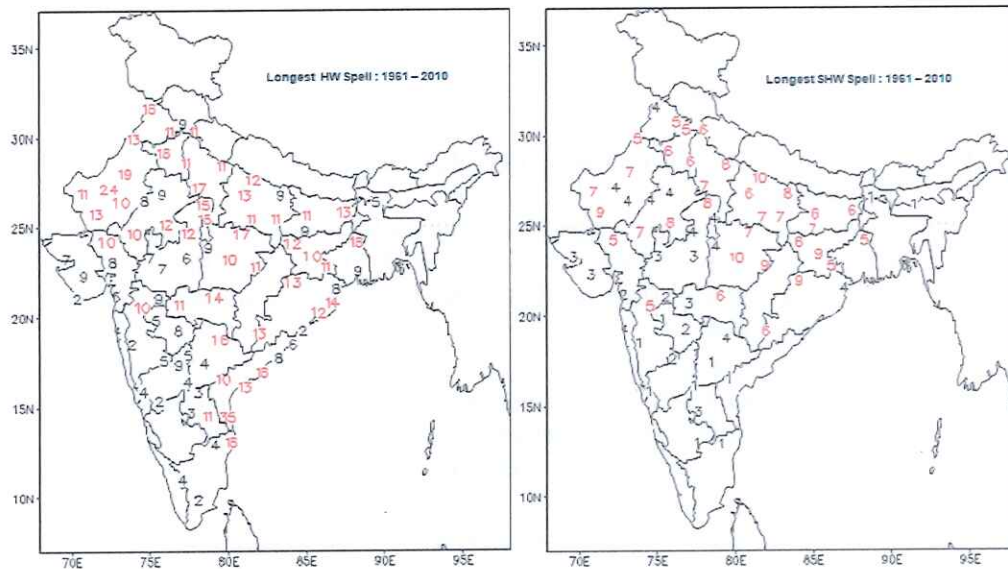
Coordinated action is needed among government agencies at the State level to reduce the devastating health effects of heat stress on local residents. A practical plan of targeted interventions can increase information-sharing, communication, preparedness, and response coordination to improve the most vulnerable populations' resilience to rising temperatures and consequently minimize heat wave fatalities.

B. HISTORICAL DATA ON HEAT WAVES IN TELANGANA

Following shows the Monthly climatology maps of number of Heat Wave days for the 5 months of (a) March, (b) April, (c) May, (d) June and (e) July over India. The climatology was computed by averaging the number of HW days for the period (1961-2010)



Following Map shows the duration of the longest Heat Wave spell over each of the stations used in the study during the analysis period of 1961-2010. The duration of (a) HW spells ≥ 10 days and (b) SHW spells ≥ 5 days are shown using red colour.



EVER RECORDED EXTREME MAXIMUM TEMPERATURE VALUES IN TELANGANA			
S.NO.	STATION	TEMPERATURE (°C)	DATE
1	ADILABAD	46.8	05-06-1995
2	BHADRACHALAM	48.6	09-05-1973
3	HANNAMKONDA	47.8	03-06-2003
4	HYDERABAD	45.5	02-06-1966
5	KHAMMAM	47.6	22-05-2015
6	MAHABUBNAGAR	45.3	30-04-1973
			21-05-2015
7	MEDAK	46.3	18-05-2006
8	NALGONDA	46.8	22-05-2015
9	NIZAMABAD	47.3	22-05-2005
10	RAMAGUNDAM	47.3	24-05-1984

Year	No. of Heat wave days in a month.			Total	Year wise Deaths
	April	May	June		
2015	NIL	13	_	13	541
2014	NIL	4	15	19	31
2013	NIL	13	NIL	13	516
2012	NIL	15	8	23	144
2011	NIL	4	2	6	0
2010	21	16	9	46	11
2009	5	17	11	33	7
2008	NIL	1	NIL	1	17

- In 1984 Heat Waves prevailed for 16 days from 14 May to 29 May in Ramagundam.
- In Telangana, during 1986-1993, the heat waves were mainly of moderate in nature with maximum duration of 7-13 days (April 1987). The highest maximum temperature of 47°C was recorded at Nalgonda, and Ramagundam on 11 May 1988.
- In 1984 Heat Waves prevailed for 16 days from 14 May to 29 May in Ramagundam
- From 1994 onwards, the frequency of severe heat waves and the duration of heat wave spells have increased significantly. In 1997 (18 May to 5 June) and 1998 (23 May to 10 June) the duration of moderate to severe heat wave spells had extended up to 19 days.
- Since Heat wave conditions prevail in several parts of the state during the summer, deaths due to sunstroke occur every year.

A State Level Committee was constituted headed by Dr.R.K.Pachauri, D.G.TERI, New Delhi on Heat Wave Conditions in erstwhile State of Andhra Pradesh after a severe heat wave caused several fatalities across the State in 2003. The committee in it's report has concluded the following on the basis of field visits, discussions with the families of the victims and study of data relating to the socio-economic and personal details of the deceased persons.

- Most of the victims were from Below Poverty Line (BPL) families
- Most victims were engaged in out-door occupations
- Age-related vulnerability among working members is indicated from the fact that maximum deaths occurred in the age group 40-60
- No significant difference in risk factors affecting men and women was indicated.

The Committee recommended preparedness at the community level & precaution measures for taking up at Heat Wave conditions and the symptoms of Heat Waves related ailments. Some of the recommendations include putting in place an Early Warning System, establishing Observatories at field level, Issue of Short-term warnings, Rapid dissemination of heat wave warnings, Developing public awareness, Stocking of medicines, oral rehydration salts, etc., Telephone links to primary health centres and hospitals, Training of village-level functionaries, Preparedness the community level, initiating Response and Relief Measures, Improving connectivity, Providing Stable electricity supply and others including measures to protect horticulture crops, poultry, housing etc.

Despite adopting these recommendations deaths due to heat waves continued to be reported. This could be due to lack of a Comprehensive Plan to tackle the heat waves.

C. After a severe heat wave affected the State of Telangana in May 2015, causing several deaths Government of Telangana has taken the initiative to develop a comprehensive heat wave action plan for extreme heat events.

In Telangana State, the period from April to June are Summer months. During this period the temperatures rise considerably, some times touching 47° C in May in Districts like Khammam, Nizamabad, Nalgonda, Karimnagar and Warangal. To protect and prepare Telangana for extreme heat events, State Government formed a Committee to prepare a comprehensive plan on the lines of Heat Wave Action Plans of other states such as Gujarat, Odisha, etc., to avoid sunstroke fatalities in the future.

D. COMMITTEE :

The following are the members of the Committee:

- | | |
|---|----------------------|
| 1. The Prl. Secretary, Health, Medical & Family welfare Dept. | - Member |
| 2. The Prl. Secretary, School Education Dept. | - Member |
| 3. The Prl. Secretary, PR & Rural Development Dept. | - Member |
| 4. The Prl. Secretary, Municipal Admin. & Urban Development Dept. | - Member |
| 5. The Prl. Secretary, Animal Husbandry & Fisheries Dept. | - Member |
| 6. The Prl. Secretary, IT, Electronics & Communications Dept. | - Member |
| 7. The Director, Public Health & Family Welfare Dept. | - Member |
| 8. The Director, Institute of Preventive Medicine Dept. | - Member |
| 9. The Commissioner, Information & Public Relations Dept. | - Member |
| 10. The Director, Indian Meteorological Dept. (IMD) | - Member |
| 11. The Director General of Fire Services Dept., | - Member |
| 12. The CDM & E.O.P.S. to Govt., Rev.(DM) Dept., | - Member & Convener. |

The Committee met several times and after perusal of Heat Wave Action Plans of Ahmedabad and Odisha and after discussions with Departments prepared the Telangana Heave Wave Action Plan.

The Telangana Heat Wave Action Plan is divided into two parts.

- Part - I - Purpose of Heat Wave Action Plan
- Part - II - Implementation of Heat Wave Action Plan

PART - I

E. PURPOSE

The Telangana Heat Wave Action Plan aims to provide guidelines on the steps to be taken by the administration for minimising the impact of Heat Waves. The Plan's primary objective is to help the population most at risk of Heat related illness to avoid the effects of the heat waves.

Extreme heat planning includes:

- Identifying vulnerable populations and the health risks specific to each group;
- Developing effective strategies, agency coordination, and response planning to shape a Heat wave Action Plan that addresses heat-health risks;
- Implementing the Heat Action Plan and activating heat alerts; and
- Evaluating and updating the Heat Action Plan regularly.

Successful implementation of the Heat Action Plan in Telangana requires co-ordination between Government Departments; health care professionals including emergency medical personnel, health center staff, and hospital staff; and community groups.

PART - II

F. IMPLEMENTATION :

The plan is to be implemented in three phases:

- Phase - I **Pre-Heat Season** (January through March)
- Phase - II **During the Heat Season** (March through July)
- Phase - III **Post-Heat Season** (July through September)

The Commissioner for Disaster Management & Ex-Officio Principal Secretary to Government (CDM & EOPS) as Nodal Officer to head the Heat Wave Action Plan at State Level, District Collector is the Nodal Officer at District Level and Commissioner Greater Hyderabad Municipal Corporation (GHMC) is the Nodal Officer for GHMC area Municipal Corporation and Commissioner, Municipal Corporations/Municipalities in their respective Municipalities.

The Nodal Officer is responsible for coordinating and communicating ahead of, and during, extreme heat events. The Nodal Officer should adopt the steps given in three Phases.

PART - II

IMPLEMENTATION OF HEAT WAVE ACTION PLAN

PHASE 1: PRE-HEAT SEASON

(FROM JANUARY THROUGH MARCH)

<i>CDM & EOPS</i>	<i>- Nodal Officer for State</i>
<i>District Collector</i>	<i>- Nodal Officer) for District</i>
<i>Commissioner, GHMC</i>	<i>- Nodal Officer for GHMC</i>
<i>Commissioner</i>	<i>- Nodal Officers for Municipal Corporation/Municipalities</i>

1. Convene Meeting with Departments/Organisations/ NGOs involved in rehab /Agencies to review mechanism to respond to extreme heat events.
2. Interact regularly with concerned Departments for review and feedback.
3. Identify high-risk areas of the State/District vulnerable to heat waves and focus on such areas and initiate focused activities on prevention of heat related illness.
4. Organize training for health workers, link workers, school children, and the local community with the Health Department in preventive measures and treatment protocol.
5. Distribute pamphlets and posters in local language with tips to prevent heat stress to hospitals, schools, and professional associations.

INDIA METEOROLOGICAL DEPARTMENT (IMD)

1. Issue Prior Warnings with details of temperature and districts.
2. Conduct awareness workshops for media and Departments.

INFORMATION & PUBLIC RELATIONS (I & PR) DEPARTMENT

- Identifying high-risk areas through survey by Dist Officers of I & PR Dept as to be made focus of attention.
- Developing and designing information materials in local languages on heat stress prevention and tips for health protection during extreme heat events:
 - posters
 - pamphlets
 - booklets
 - CM Open letters to the public to be read in the Gram Sabhas
- Developing spots to be shown in cinema theatres.
- Developing themes for widespread communications through ‘Sanskritika Saradhi’ artists.

MEDICAL & HEALTH DEPARTMENT AND MEDICAL PROFESSIONALS:

- Initiate targeted training programs, capacity building efforts and communication on heat illness for medical staff at local PHCs/hospitals and Urban Health Centres (UHCs), nursing staff and also VROs, VRAs, paramedics, field staff and link workers, (ASHA Workers ANMS etc.). Identify the susceptibility of particular wards for special attention.
- Ensure hospitals update their admissions and emergency case records to track heat-related cases. Train hospitals to improve expedience of

- recording the cause of death certificates. The training could also include recording Information Education & Communication (IEC) efforts.
- Adopt heat-focused examination procedures at local hospitals and urban health centers.
 - Promote use of reusable soft plastic ice packs for the state wide UHCs, 108 emergency centres, ambulances and hospitals.
 - Explore creation of ice pack dispensaries to increase access to vulnerable communities.
 - One day workshops in 18 hospitals with the medical students may be organized before commencement of summer - Director Medical Education (DME).
 - Separate beds for the Sunstroke victims may be provided - Director Medical Education (DME) and Telangana State Vaidya Vidhana Parishat (TSVVP).
 - Help desk with Toll free 104 may be established for further information on Heat Wave - S.O-104.
 - Development of separate web portal for getting daily data on heat stroke cases from both private and public health Institutions.

108/104 EMERGENCY SERVICE:

- Create displays on ambulances during local events to build public awareness
- Identify at-risk areas of vulnerable populations, in part by utilizing the list of high-risk areas.

LABOUR & EMPLOYMENT DEPARTMENT

- Organize awareness camps for employers, factory managers outdoor labourers and workers regarding health impacts of extreme heat and recommendations to protect themselves during high temperatures.
- Utilize maps of construction sites and outdoor work spots to identify more high-risk outdoor workers. Potentially overlay with irradiation map from IMD or heat island map. Conduct publicity campaigns during high-risk days to these specific areas.
- All construction/work site contactors to provide drinking water, ORS and shelter to worker's laborers.
- Factory Management also to provide cool drinking water, ORS and shelter to worker's laborers.

ANIMAL HUSBANDRY DEPARTMENT

- Review and discuss implementation of Heatwave Action Plan for safeguarding cattle and poultry district heads and also Farmers Training Centres.
- Prepare material like Posters & pamphlets separately for tips to take care of cattle and poultry during heatwaves
- Review availability of necessary medicines for treatment of cattle / poultry affected by heatwave
- Prepare plan for drinking water for cattle with RWS Dept.

TRANSPORT DEPARTMENT

- Review plan with cab operator / auto / transport associations and also Highway patrol
- Explain importance of proper shade, availability of drinking water and other facilities for passengers
- Distribute pamphlets / posters on heat related illness prevention; Do's and don'ts for display & further distribution to passengers at Bus stations, bus shelters, cab and auto stands etc
- Ensure availability of proper shade, drinking water for passengers
- Ensure availability with of ORS, Ice pack, and Cool drinking water,

TSRTC

- Review plan with Depot Managers/ Zonal Managers.
- Organize heat wave risk awareness programmes for Bus crew, staff at bus stands.
- Explain importance of proper shade, availability of drinking water and other facilities for passengers in bus stations.
- Distribute pamphlets/posters on heat related illness prevention; Do's and Don'ts for display & further distribution to passengers at Bus Stations, Bus Shelters.
- Ensure availability of proper shade, drinking water for passengers at bus stands.
- Ensure availability with of ORS, Ice pack, and Cool drinking water, in long distance buses.

EDUCATION DEPARTMENTS

- Review plan with Education Department officials (School/Colleges, etc) organise awareness camps classes on heatwave related illness/sunstrokes for teachers and also students
- Explain importance of proper shade, availability of drinking water and other facilities for Students
- Distribute pamphlets/posters on heat related illness prevention; Do's and Don't for display & further distribution to students in Schools & Colleges.
- Ensure availability of ceiling fans in class rooms proper shade, drinking water for students.
- Ensure availability with of ORS, Ice pack, and Cool drinking water.

INFORMATION TECHNOLOGY (IT) DEPARTMENT

- Arrange with Planning Department to collect real time information through sensors in Automatic Weather Stations (AWS) for monitoring the temperatures and also for disseminating the same.
- Prepare Dash board with a login to monitor heat wave scenario and its impact constantly.
- Prepare map on web interface with color coding system.

- Develop an Android app for Hyderabad EWS and Telangana State separately for pushing the heat wave or weather warnings to public located in affected areas.
- Request all telecom service providers to send Heatwave messages to subscribers at no cost.

NGOs, COMMUNITY GROUPS AND INDIVIDUALS

- Initiate educational preventative trainings aimed at children and distribute heat protection materials at local schools. A workshop for teachers to equip them with knowledge of heat protection tips and materials that they can teach in classrooms. Students can be assigned activities and projects on health dangers of extreme heat.
- Conduct Training workshops and outreach sessions with community groups and mobilizers such as ASHA workers, *aanganwadis*, Self Help Groups and municipal councils to help inform and also actively involve vulnerable communities. Other sectors such as higher education, NGOs and community leaders may also be involved to increase reach to communities.
- Encourage individuals' discussion of the early signs of heat exhaustion with their local doctor or Urban Health Centre.
- Inform fellow community members about measures and tips to keep cool and protect oneself from heat.
- Distribute pamphlets & paste, posters in vulnerable areas.

PHASE 2: DURING THE HEAT SEASON

(ANNUALLY FROM MARCH THROUGH JULY)

<i>CDM & EOPS</i>	<i>- Nodal Officer for State</i>
<i>District Collector</i>	<i>- Nodal Officer) for District</i>
<i>Commissioner, GHMC</i>	<i>- Nodal Officer for GHMC</i>
<i>Commissioner -</i>	<i>-Nodal Officers for Municipal Corporation/Municipalities</i>

- Issue a **heat alert** state District wide when extreme heat events are forecast. The key agency leaders, IMD, SDMA in accordance with the Communication Plan above may be notified.
- When necessary Monitor and increase the **heat alert** level to match the severity of the forecast and threshold established. Special meetings with key agency leaders may be convened.
- Activate “cooling centers,” such as temples, public buildings, malls, during a **heat alert** and/or State Government - run temporary night shelters for those without access to water and/or electricity.
- Provide access to shaded areas for outdoor workers, slum communities, and other vulnerable populations on a large scale. For example, confirm that night shelters stay open all day for migratory populations during a **heat alert**.
- Hold regular (daily, if necessary) conference to discuss reports and fresh breaking developments during a **heat alert**, and ensure that communication channels are functional and operating.
- Monitor temperature data and forecasts.
- All non-essential uses of water (other than drinking, keeping cool) may be suspended.
- Increase efforts to distribute fresh drinking water to the public by opening ‘Chalivendrams’ at people congregation points. For example, expand potable water access during a **heat alert** at religious spaces including temples and mosques, Bus stations, pouch handouts to the poor and high-risk areas (identified by the mapping of high-risk areas).
- Inform power supply Companies to prioritize maintaining power to critical facilities (such as hospitals and UHCs).
- Notify when the **heat alert** is over.

INDIA METEOROLOGICAL DEPARTMENT (IMD)

- Communicate Heatwave alerts/warnings promptly.
- Communicate Max temperatures district-wise periodically.
- Update heatwave details regularly.

INFORMATION & PUBLIC RELATIONS (I & PR) DEPARTMENT

- Creating awareness among public through advertisements in regional languages
- Displaying hoardings at important places
- Creating awareness through TV and Radio spots and jingles

- Conducting regular press conferences at the State level and District level through concerned Ministers, Secretaries and Collectors on the risks and dangers of heat related illness.
- Circulating heat wave warnings i.e. text alerts or whatsapp messages in collaboration with private sector telecom companies in addition to traditional media.
- Sending warnings in bulk to the public via centralized email databases during heat waves.
- Developing SMS alert system from time to time on treatment systems to send messages to private doctors and medical professionals at Government hospitals including PHCs and UHCs.
- Utilizing local radio FM broadcast through special programmes and during popular programmes to alert the public.
- Exploring other means of communication like Facebook, Twitter and WhatsApp.
- Collect all news items/reports on Heatwaves daily and report to Government.

MEDICAL & HEALTH DEPARTMENT AND MEDICAL PROFESSIONALS:

- Display heat-related illness prevention tips and how to stay cool around hospitals PHCs and UHCs.
- Keep adequate stocks and Ensure availability of medical supplies like ORS in all hospitals/ PHCS/ UHCs, hospitals.
- Generate reports of the public health impact for Nodal Officer, every week/ month during a **heat alert**.
- Deploy additional staff at hospitals and PHCs/UHCs to attend to the influx of patients during a **heat alert**, if feasible.
- Increase link worker and community health worker outreach in at-risk neighbour hoods during a **heat alert**, if feasible.
- Have Regional Health Officers visit UHCs to confirm proper preparation has been made for heat related illness case audits during heat season may be conducted.

108/104 EMERGENCY SERVICE:

- Ensure adequate supply of ice packs and IV fluids.
- Disseminate SMS text messages to warn local residents during a **heat alert**.

LABOUR & EMPLOYMENT DEPARTMENT

- Encourage employers to shift outdoor workers' schedules away from peak afternoon hours (1pm - 5pm) during a **heat alert**.
- Provide emergency ice packs and heat-illness prevention materials to construction workers as pilot project.

ANIMAL HUSBANDRY DEPARTMENT

- Conduct training for Dept., field workers as well as for cattle and poultry farmers on heatwave plan in Animal Husbandry sector
- Display posters / distribute pamphlets in villages, and important government offices
- Ensure availability of adequate field staff during heatwave and ensure that they visit villages for follow up action.

TRANSPORT DEPARTMENT

- Display posters & distribute pamphlets on prevention of heat related illness
- Ensure availability of shade, drinking water, ORS et
- Permit use of school premises as shelter during day time.
- Establish Health teams at major bus stands / Terminals and other public places
- Ensure that buses do not run during peak hours (12-4 pm) when Heatwave is declared.

TSRTC

- Display posters & distribute pamphlets on prevention of heat related illness
- Ensure availability of shade, drinking water, ORS for passengers & crew at Bus stands, Depots.
- Establish Health stations at major bus stands / Terminals and other public places
- Ensure that buses do not run during peak hours (12-4 pm) when Heatwave is declared.
- Provide emergency ice packs and heat-illness prevention materials to TSRTC staff (Drivers, Conductors) etc.

EDUCATION DEPARTMENTS

- Display posters & distribute pamphlets on prevention of heat related illness in Schools and Colleges.
- Identify shelter space, of shade, drinking water, ORS facilities with signs.
- Ensure that Schools do not function during peak hours (12-4 pm) when Heatwave is declared.
- No open air classes to be conducted.

INFORMATION TECHNOLOGY (IT) DEPARTMENT

- Prepare Dynamic Heat wave Plan with links of Departments for real-time / implementation.
- Send real time information to all Departments through Dash board/ interface.
- Activities to be displayed on Dash board/ Interface/Online Monitoring Tool.
- Activate Heat Wave APP

NGOs, COMMUNITY GROUPS AND INDIVIDUAL

- Keep cool and hydrated during the heat season by drinking water, staying out of the sun, and wearing light clothing.
- Check on vulnerable neighbours, particularly during a **heat alert**.
- Limit heavy work in direct sun or indoors if poorly ventilated, especially during a **heat alert**.

PHASE 3: POST-HEAT SEASON

(ANNUALLY IN JULY THROUGH SEPTEMBER)

<i>CDM & EOPS</i>	<i>- Nodal Officer for State</i>
<i>District Collector</i>	<i>- Nodal Officer) for District</i>
<i>Commissioner, GHMC</i>	<i>- Nodal Officer for GHMC</i>
<i>Commissioner</i>	<i>- Nodal Officers for Municipal Corporation/Municipalities</i>

1. Organize an annual meeting with key agency leaders and relevant stakeholders to review Heat Wave Action Plan.
2. Evaluate the reach and impact of the Plan and update/revise it based on review and evaluation.
3. Evaluate the Plan process based on performance and revise accordingly.
4. Evaluate the reach and impact of the Plan and revise accordingly.
5. Display the revised Plan to the Disaster Management/District website ahead of the next heat season for stakeholders.
6. Discuss establishing cooling center facilities in high-risk areas around city.
7. Make important recommendations arising out of review and evaluation to Government

INDIA METEOROLOGICAL DEPARTMENT (IMD)

- Provide season report containing duration of Heatwave, maximum temperatures location-wise.
- Obtain feedback on cases, plan, and measures taken
- Revise plan accordingly
- Report to Government

INFORMATION & PUBLIC RELATIONS (I & PR) DEPARTMENT

- Collect feedback on publicity, reach and implementation of plan from media and other sources.
- Collect all news items/reports on Heatwave plan published/telecast.
- Collect all news items/reports on Heatwaves.

MEDICAL & HEALTH DEPARTMENT AND MEDICAL PROFESSIONALS

- Perform an epidemiological case review of heat-related mortalities during the summer.
- Conduct and gather epidemiological outcomes from the data on heat risk factors, illness and death, based on average daily temperatures.
- Incorporate data and findings into future versions of the Heat Action Plan.
- Measure mortality and morbidity rates based on data before and after the Plan's interventions.

108/104 EMERGENCY SERVICE

- Review implementation of Heatwave Action Plan.
- Obtain feedback on cases, plan, and measures taken.
- Revise plan accordingly.
- Report to Government.

LABOUR & EMPLOYMENT DEPARTMENT

- Review implementation of Heatwave Action Plan.
- Obtain feedback on cases, plan, and measures taken.
- Revise plan accordingly.
- Report to Government.

TRANSPORT DEPARTMENT

- Review implementation and effectiveness of Plan.
- Obtain and give feedback for further improvement of Plan.

TSRTC

- Review implementation and effectiveness of Plan.
- Obtain and give feedback for further improvement of Plan.

EDUCATION DEPARTMENTS

- Review implementation and effectiveness of Plan.
- Obtain and give feedback for further improvement of Plan.

ANIMAL HUSBANDRY DEPARTMENT

- Review implementation of Heatwave Action Plan.
- Obtain feedback on cases, plan, and measures taken.
- Revise plan accordingly.
- Report to Government.

INFORMATION TECHNOLOGY (IT) DEPARTMENT

- Collect data of temperatures mandal wise.
- Collect data on number of downloads of APP & map accordingly.

NGOs, COMMUNITY GROUPS/ INDIVIDUALS

Reach the unreached and educate the community on a continuous basis.

All Departments are requested to (create awareness) circulate this plan to their district/division/mandals/village offices for the benefit of field staff.

ANNEXURES



HEAT ILLNESS - TREATMENT PROTOCOL*

Recognizing the treatment protocols which may vary slightly according to the setting (EMS, health center, clinic, hospital emergency department, etc.), the following should apply generally to any setting and to all patients where there is a potential concern for heat illness. Special thanks to Drs. Arthur Yancey and Nee-Kofi Mould-Millman of Grady Emergency Medical Services, Emory University Department of Emergency Medicine, Atlanta, GA USA.

1. Initial patient assessment - primary survey (airway, breathing, circulation, disability, exposure), vital signs, including temperature.
2. Consider heat illness in differential diagnosis if:
 - a. Presenting with suggestive symptoms and signs (see table)
 - b. Patient has one or more of the following risk factors:
 - i. Extremes of age (infants, elderly)
 - ii. Debilitation/physical de conditioning, overweight or obese
 - iii. Lack of acclimatization to environmental heat (recent arrival, early in summer season)
 - iv. Any significant underlying chronic disease, including psychiatric, cardiovascular, neurologic, hematologic, obesity, pulmonary, renal, and respiratory disease
 - v. Taking one or more of the following:
 1. Sympathomimetic drugs
 2. Anticholinergic drugs
 3. Barbiturates
 4. Diuretics
 5. Alcohol
 6. Beta blockers
3. Remove from environmental heat exposure and stop physical activity
4. Initiate passive cooling procedures
 - a. Cool wet towels or ice packs to axillae, groin, and around neck; if patient is stable, may take a cool shower, but evaluate risk of such activity against gain and availability of other cooling measures.
 - b. Spray cool water or blot cool water onto skin.
 - c. Use fan to blow cool air onto moist skin.
5. If temperature lower than 40°C, repeat assessment every 5 minutes; if improving, attempt to orally hydrate (clear liquids, ORS can be used but not necessary; cool liquids better than cold) and observe.
6. If temperature 40°C or above, initiate IV rehydration and immediately transport to emergency department for stabilization.



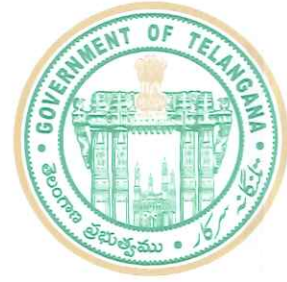
Case Definitions

Heat Illness - Typical Presentations

Sl. No	Clinical Entity	Age Range	Setting	Cardinal Symptoms	Cardinal Signs	Pertinent Negatives	Prognosis
1	Heat rash	All, but frequently children	Hot environment; +/- insulating clothing or swaddling	Itchy rash with small red bumps at pores in setting of heat exposure; bumps can sometimes be filled with clear or white fluid	Diffuse maculopapular rash, occasionally pustular, at hair follicles, pruritic	Not focally distributed like a contact dermatitis; not confluent patchy; not pelechal.	Full recovery with elimination of exposure and supportive care.
2	Heat Cramps	All	Hot environment, typically with exertion, +/- insulating clothing.	Painful spasms of large and frequently used muscle groups.	Uncomfortable appearance, may have difficulty fully extending affected limbs/Joints.	No contaminated wounds/tetanus exposure; no seizure activity.	Full recovery with elimination of exposure and supportive care.
3	Heat exhaustion	All	Hot environment; +/- exertion; +/- insulating clothing or swaddling.	Feeling overheated, lightheaded, exhausted and weak unsteady, nauseated, sweaty and thirsty, inability to continue activities.	Sweaty/diaphoretic; flushed skin; hot skin; normal core temperature; +/- dazed, +/- generalized weakness, slight disorientation.	No coincidental signs and symptoms of infection; no focal weakness; no aphasia/dysarthria; no overdose history.	Full recovery with elimination of exposure and supportive care; progression if continued exposure.
4	Heat Syncope	Typically adults	Hot environment; +/- exertion; +/- insulating clothing or swaddling.	Feeling hot and weak; lightheadedness followed by brief loss of consciousness.	Brief, generalized loss of consciousness in hot setting, short period of disorientation if any.	No seizure activity, no loss of bowel or bladder continence, no focal weakness, no aphasia/dysarthria.	Full recovery with elimination of exposure and supportive care; progression if continued exposure.
5	Heat stroke	All	Hot environment, +/- exertion; +/- insulating clothing or swaddling.	Severe overheating; profound weakness; disorientation; obtundation, seizures, or other altered mental status.	Flushed, dry skin (not always) core temp $\geq 40^{\circ}\text{C}$; altered mental status with disorientation, possibly delirium, coma, seizures; tachycardia; +/- hypotension.	No coincidental signs and symptoms of infection; no focal weakness; no aphasia/ dysarthria; no overdose history	25-50% mortality even with aggressive care; significant morbidity of survive

Heat illness - Case Definitions

6	Clinical Entity	Case Definition
7	Heat rash	Diffuse, pruritic, maculopapular or vesicular rash in the setting of heat exposure, often with insulating clothing or swaddling.
8	Heat crams	Painful contractions of frequently used muscle groups in the setting of heat exposure, often with exertion.
9	Heat exhaustion	Syndrome of generalized weakness and or exhaustion, often with lightheadedness, limiting functioning in a hot environment, without history of recent infection. May or may Not be exertional.
10	Heat Syncope	Brief loss of consciousness in the setting of heat exposure without evidence of seizure activity, stroke, or medication overdose.
11	Heat stroke	Altered mental status (including disorientation, delirium, seizure, obtundation) with elevated core body temperature $\geq 40^{\circ}\text{C}$ in the setting of heat exposure, without signs of stroke, history of infection, or signs of medication overdose. May or may not be exertional.



Follow the safety Measures to save yourself from Sunstroke

• Sunstroke Symptoms •

Splitting headache, dizziness in head, high fever, sleepiness and hallucinations, fits of unconsciousness

Do's

- Use an umbrella
- Use white colour, cotton clothes
- Use white cap or turban. Drink buttermilk / glucose for rehydration.
- Anyone suffering from Sunstroke must be shifted to cool spot
- Give a sponge bath with a cold cloth.
- Do this, till the body temperature falls to 101° F. Ensure the person is closer to the fan
- Take him to the nearest hospital
- Always drink lots of water
- If you are going out in Sun, ensure you drink lots of lime/ coconut / cold water. When you are in Sun and have severe headache, visit the immediate health centre.

Don'ts

- Keep yourself away from the heat wave
- Don't hesitate to take the person with sunstroke to nearest health care centre
- Don't do excessive physical work in the afternoons (during 10.00 am to 4.00 pm)
- When you return home in Sun, never take sweet things or honey
- Don't drink excessive cold water or take ice cubes as this may cause throat infections.







ఎండ తీవ్రతకు గురికాకుండా జాగ్రత్తలు పాటించండి

• వడదెబ్బ లక్షణాలు •

తలనొప్పి, తల తిరగటం, తీవ్రమైన జ్వరం కలిగియుండటం,
మత్తు నిద్ర, కలవరింతలు, ఫిట్స్,
పాక్షిక లేదా పూర్తి అపస్వారిక స్థితి

ఎండ తీవ్రంగా ఉన్నప్పుడు తీసుకోవలసిన జాగ్రత్తలు

- ఎండ ఎక్కువగా ఉన్న రోజుల్లో గొడుగు తప్పనిసరిగా వాడాలి.
- దూదితో నేయబడిన తెలుపు/లేత రంగు గల పలుచటి వస్త్రాలను ధరించాలి.
- నెత్తిపై టోపి, లేదా రుమాలు పెట్టుకోవాలి.
- ఎండ ఎక్కువగా ఉన్నప్పుడు నీరు ఎక్కువగా సేవించాలి.
- ఉప్పు కలిపిన మజ్జిగ / చిటికెడు ఉప్పు కలిపిన గ్లూకోజు నీరు / ఓరల్ రీహైడ్రేషన్ ద్రావణము త్రాగవచ్చును.
- వడదెబ్బకు గురైన వారిని శీతల ప్రాంతానికి వెంటనే చేర్పాలి.
- వడదెబ్బకు గురైన వారిని చల్లని నీటిలో ముంచిన తడిగుడ్డతో శరీరం అంతా తుడుస్తూ ఉండాలి. శరీర ఉష్ణోగ్రత 101 డిగ్రీల కంటే తక్కువ స్థాయికి వచ్చేవరకు ఈ విధంగా శరీరాన్ని తుడుస్తూ ఉండాలి. ఫ్యాను క్రింద ఉంచాలి.
- వడదెబ్బకు గురైన వారి ఆరోగ్య పరిస్థితిలో ఆశించిన మార్పు లేనిచో శీతల వాతావరణంలో దగ్గర్లోని ప్రాథమిక ఆరోగ్య కేంద్రానికి తరలించాలి.

ఎండ తీవ్రంగా ఉన్నప్పుడు చేయకూడని పనులు

- సూర్య కిరణాలకు, వేడి గాలికి ఎక్కువ గురి కాకూడదు.
- వేడిగా ఉన్న సూర్యకాంతిలో గొడుగు లేకుండా తిరుగరాదు.
- వేసవిలో నలుపు/ముదురు రంగు దుస్తులు, మందంగా ఉండే దుస్తులు ధరించరాదు
- నెత్తిపై టోపి లేక రుమాలు లేకుండా సూర్యకాంతిలో తిరుగరాదు.
- వడదెబ్బకు గురైన వారిని వేడినీటిలో ముంచిన గుడ్డతో తుడువరాదు.
- దగ్గర్లోని ప్రాథమిక ఆరోగ్య కేంద్రానికి చేర్చుటలో ఏ మాత్రం ఆలస్యం చేయరాదు.





DO's



- Try to stay in cold places
- Use umbrella during hot days
- Wear thin, loose cotton garments, preferably of white colour
- Wear a hat of cotton or a turban
- Avoid outdoor physical activity from 12-3 P.M. If unavoidable, attend to only light physical activity under the hot sun
- Take ample water along with salted butter milk or glucose water
- Take measures to reduce the room temperature like watering, using window shades, fanning, and cross ventilation
- Shift the person with heat stroke symptoms to cool dwelling
- The person suffering with heat stroke should have minimum clothing
- The person suffering with heat stroke has to be sponged with cold water, indirect application of ice-packs
- The person suffering with heat stroke should be kept in between ice-blocks
- If the person affected with heat stroke is not showing any improvement, he should be shifted to a hospital immediately preferably with cooling facility

Don'ts



- Expose to direct sunlight or hot breeze
- Move under hot sun without umbrella
- Use of black and synthetic, thick clothes during summer season
- Move under the hot sun without a hat or turban.
- Attend to strenuous physical activity under the hot sun
- Allow direct hot air into the living room
- Delay in shifting the person suffering with heat stroke to a cool place
- The person suffering with heat stroke to have thick clothing
- The person suffering with heat stroke to be sponged with hot water and to be exposed to hot air.
- The person suffering with heat stroke to be sponged with hot water and to be exposed to hot air.

చేయవలసినవి (Do's)

√

- √ వేడిగా ఉన్న రోజులలో తప్పనిసరిగా గొడుగు వాడాలి.
- √ తెలుపురంగు గల పలుచటి కాటన్ వస్త్రాలను ధరించాలి.
- √ నెత్తికి బోపి, లేదా రుమాలు పెట్టుకోవాలి.
- √ ఉప్పు కలిపిన మజ్జిగ లేదా గ్లూకొజు కలిపిన నీరు త్రాగవచ్చును, లేదా ఒరల్ రి హైడ్రేషన్ ద్రావణము త్రాగవచ్చును.
- √ వడదెబ్బకు గురి అయినవారిని శీతల ప్రాంతానికి వెంటనే చేర్వాలి.
- √ వడదెబ్బకు గురి అయినవారిని తడిగుడ్డతో శరీరం అంతా రుద్దుతూ ఉండాలి. ఐస్ నీటిలో బట్టను ముంచి శరీరం అంతా తుడవవలెను. శరీర ఉష్ణోగ్రత 101° F □ డిగ్రీస్ కంటే లోపునకు వచ్చేవరకు ఐస్ వాటర్ బట్టతో శరీరాన్ని తుడుస్తూ ఉండాలి మరియు ఫ్యాను క్రింద ఉండాలి.
- √ వడదెబ్బకు గురి అయినవారిలో మంచి మార్పులు లేనిచో శీతల వాతావరణంలో దగ్గరలోని ప్రాథమిక ఆరోగ్య కేంద్రానికి తరలించవలెను.
- √ మంచి నీరు ఎక్కువ సార్లు త్రాగాలి.
- √ ఇంటి నుంచి బయటకు వెళ్ళేముందు ఒక గ్లాసుమంచి నీరు త్రాగాలి.
- √ ఎండలో బయటి నుంచి వచ్చిన వెంటనే ఒక మాదిరైన చల్లని నిమ్మరసముగాని, కొబ్బరి నీరు లేదా చల్లని నీరు త్రాగాలి.
- √ తీవ్రమైన ఎండలో బయటికి వెళ్ళినప్పుడు తలతిరుగుట మొదలైన అనారోగ్య సమస్య ఏర్పడితే దగ్గరలో వున్నవైద్యుణ్ణి సంప్రదించి ప్రాథమిక చికిత్స పొంది వడ దెబ్బ బారిన పడకుండా కాపాడుకోవచ్చును.

చేయకూడనివి (Don'ts)

X

- X సూర్య కిరణాలకు, వేడి గాలికి గురి కాకుడదు.
- X వేడిగా ఉన్న సూర్య కాంతిలో గొడుగు లేకుండా తిరుగరాదు.
- X వేసవి కాలంలో నలుపురంగు దుస్తులు, మందంగా ఉండే దుస్తులు ధరించరాదు.
- X నెత్తికి బోపి లేక రుమాలు లేకుండా సూర్య కాంతిలో తిరుగరాదు.
- X వడదెబ్బకు గురి అయిన వారిని వేడి నీటిలో ముంచిన బట్టతో తుడువరాదు.
- X దగ్గరలోని ప్రాథమిక ఆరోగ్య కేంద్రానికి చేర్చుటలో ఏ మాత్రం అలస్యం చేయరాదు.
- X మధ్యాహ్నం తరువాత (అనగా ఉదయం 10.00 గంటల నుండి సాయంత్రం 4.00 గంటల మధ్యకాలంలో) ఆరుబయట ఎక్కువ శారీరక శ్రమతో కూడిన పని పనిచేయరాదు.
- X ఎండలో బయట నుంచి వచ్చిన వెంటనే తీవ్రపదార్థములు మరియు తేనె తీసుకొన కూడదు. శీతలపానీయములు, మంచు ముక్కలు తీసుకుంటే గొంతుకు సంబంధించిన అనారోగ్యము ఏర్పడుతుంది.



3. చంద్రశేఖర్ రావు
ముఖ్యమంత్రి
తెలంగాణ ప్రభుత్వం



“వడదెబ్బ ప్రమాదకరం, జాగ్రత్తలతో నివారణ సాధ్యం”



డా॥ సి. లక్ష్మారెడ్డి
అరోగ్య కుటుంబ సంక్షేమశాఖ మంత్రి
తెలంగాణ ప్రభుత్వం

వడదెబ్బ (Sunstroke) లక్షణాలు మరియు నివారణ చర్యలు

ఎలా వస్తుంది

తీవ్రమైన ఎండ, వేడి గాలులు వీచినప్పుడు వడదెబ్బకు గురి అయ్యే అవకాశం ఉంది

లక్షణాలు

- తీవ్రమైన శరీర ఉష్ణోగ్రత పెరగడం
- తీవ్రమైన తలనొప్పి
- నాడి వేగంగా కొట్టుకొనడం
- నాలుక ఎండిపోవడం
- శరీరంలో నీటి శాతం కోల్పోవడం
- పొక్కిల లేదా పూర్తిగా అపస్వేదకం చేరటం

ప్రథమ చికిత్స

- వడదెబ్బకు గురి అయిన వ్యక్తిని త్వరగా నీడగల ప్రదేశానికి చేర్చాలి.
- శరీరాన్ని చల్లని నీటిలో ముంచిన గుడ్డతో తుడవాలి.
- వడదెబ్బ తగిలిన వారికి ఉప్పు కలిపిన చల్లని కొబ్బరినీళ్ళు నిష్పర్సం, గ్లూకోజ్ మరియు ఓ.ఆర్.ఎస్ కలిపిన నీటిని త్రాగించాలి.
- ప్రథమ చికిత్స చేసిన వెంటనే ఏ మాత్రం ఆలస్యం చేయకుండా, దగ్గరలో ఉన్న ఆరోగ్యకేంద్రం / ప్రభుత్వం ఆసుపత్రికి తరలించాలి

జాగ్రత్తలు

- ఎండ తీవ్రంగా ఉన్నప్పుడు బయట తిరగటం ఆడటం చేయరాదు
- తప్పని పరిస్థితిలో ఎండలోకి వెళ్ళవే చట్రి, టోపి, తెల్లని రూమాల్ తప్పక ధరించాలి.
- తెల్లని నూలు వస్త్రాలు ధరించాలి.
- నీరు మరియు ఇతర ద్రవ పదార్థాలు వీలైనంత ఎక్కువగా తీసుకోవాలి.
- ముట్టు పానీయాలు తీసుకోరాదు.
- వడదెబ్బకు గురి అయిన వారిని ఏ మాత్రం ఆలస్యం చేయకుండా దగ్గరలో ఉన్న ఆరోగ్య కేంద్రం/ప్రభుత్వ ఆసుపత్రికి తరలించాలి.
- అత్య అవసరమైతేనే బయటికి వెళ్ళాలి.
- ముఖ్యంగా పిల్లలు, వృద్ధులు, అనారోగ్యంతో బాధపడేవారు జాగ్రత్తగా ఉండాలి.

గమనిక : మరియు సమాచారం కొరకు 104, అత్యవసర సేవలకై 108ని సంప్రదించండి.

మిషన్ డైరెక్టర్, జాతీయ ఆరోగ్య మిషన్ మరియు కమిషనర్ ఆరోగ్య కుటుంబ సంక్షేమ శాఖ, తెలంగాణ ప్రభుత్వం హైదరాబాద్.



డా. చంద్రశేఖర్ రావు
ముఖ్యమంత్రి
ఆంధ్రప్రదేశ్



డా. సి. అశ్వినిధర్
అధ్యక్షుడు, సాంఘిక సంక్షేమ శాఖ
ఆంధ్రప్రదేశ్

“ వడదెబ్బ ప్రమాదకరం, జాగ్రత్తలతో నివారణ సాధ్యం ”

వడదెబ్బ (Stroke) లక్షణాలు మరియు నివారణ పర్యలు

ఎలా వస్తుంది

తీవ్రమైన ఎండ, వేడి గాలులు వీచినప్పుడు వడదెబ్బకు గురి అయ్యే అవకాశం ఉంది

లక్షణాలు

- ♦ తీవ్రమైన శరీర ఉష్ణోగ్రత పెరగడం ♦ తీవ్రమైన తలనొప్పి ♦ నాడి వేగంగా కొట్టుకొనడం
- ♦ నాలుక ఎండిపోవడం ♦ శరీరంలో నీటి శాతం కోల్పోవడం
- ♦ పొక్కిల లేదా పూర్తిగా అపస్వేదకం చేరటం

ప్రథమ చికిత్స

- ♦ వడదెబ్బకు గురి అయిన వ్యక్తిని త్వరగా నీడగల ప్రదేశానికి చేర్చాలి.
- ♦ శరీరాన్ని చల్లని నీటిలో ముంచి గుడ్డతో తుడవాలి.
- ♦ వడదెబ్బ తగ్గింది వారికి ఉప్పు కలిపిన చల్లని కొబ్బరినీళ్లు, నిమ్మరసం, గ్లూకోజ్ మరియు ఓ.ఆర్.ఎస్ కలిపిన నీటిని త్రాగించాలి.
- ♦ ప్రథమ చికిత్స చేసిన వెంటనే ఏ మాత్రం ఆలస్యం చేయకుండా, దగ్గరలో ఉన్న ఆరోగ్యకేంద్రం / ప్రభుత్వ ఆసుపత్రికి తరలించాలి.

జాగ్రత్తలు

- ♦ ఎండ తీవ్రంగా ఉన్నప్పుడు బయట తిరగటం ఆడటం చేయరాదు.
- ♦ తప్పని పరిస్థితిలో ఎండలోకి వెళ్ళే ఛత్రి, టోపి, తెల్లని రూమాల్ తప్పక ధరించాలి.
- ♦ తెల్లని నూలు వస్త్రాలు ధరించాలి.
- ♦ నీరు మరియు ఇతర ద్రవ పదార్థాలు వీలైనంత ఎక్కువగా తీసుకోవాలి.
- ♦ మత్తు పానీయాలు తీసుకోరాదు.
- ♦ వడదెబ్బకు గురి అయిన వారిని ఏ మాత్రం ఆలస్యం చేయకుండా దగ్గరలో ఉన్న ఆరోగ్య కేంద్రం/ప్రభుత్వ ఆసుపత్రికి తరలించాలి.
- ♦ అత్య అవసరమైతేనే బయటికి వెళ్ళాలి.
- ♦ ముఖ్యంగా పిల్లలు, వృద్ధులు, అనారోగ్యంతో బాధపడేవారు జాగ్రత్తగా ఉండాలి.

చేయవలసినవి (Do's) ✓

- ✓ వేడిగా ఉన్న రోజులలో తప్పనిసరిగా గొడుగు వాడాలి.
- ✓ తెలుపురంగు గల పలుచటి కాటన్ వస్త్రాలను ధరించాలి.
- ✓ నెత్తికి టోపి, లేదా రుమాలు పెట్టుకోవాలి.
- ✓ ఉప్పు కలిపిన మజ్జిగ లేదా గ్లూకోజ్ ద్రావణము త్రాగవచ్చును.
- ✓ లేదా ఓల్డ్ లిహైడ్రేషన్ ద్రావణము త్రాగవచ్చును.
- ✓ వడదెబ్బకు గురి అయినవారిని శీతల ప్రాంతానికి వెంటనే చేర్చాలి.
- ✓ వడదెబ్బకు గురి అయినవారిని తడిగుడ్డతో శరీరం అంతా రుద్దుతూ ఉండాలి.
- ✓ ఐస్ నీటిలో బట్టను ముంచి శరీరం అంతా తుడవవలెను శరీర ఉష్ణోగ్రత 101° F- డిగ్రీస్ కంటే లోపునకు వచ్చేవరకు ఐస్ వాటర్ బట్టతో శరీరాన్ని తుడుస్తూ ఉండాలి మరియు ఫ్యాను త్రింది ఉంచాలి.
- ✓ వడదెబ్బకు గురి అయినవారిలో మంచి మార్పులు లేనిచో శీతల వాతావరణంలో దగ్గరలోని ప్రాథమిక ఆరోగ్య కేంద్రానికి తరలించవలెను.
- ✓ మంచి నీరు ఎక్కువ సార్లు త్రాగాలి.
- ✓ ఇంచి సుంచి బయటకు వెళ్ళే ముందు ఒక గ్లాసు మంచి నీరు త్రాగాలి.
- ✓ ఎండలో బయటి నుంచి వచ్చిన వెంటనే ఒక మాదిరిన చల్లని నిమ్మరసముగాని, కొబ్బరి నీరు లేదా చల్లని నీరు త్రాగాలి.
- ✓ తీవ్రమైన ఎండలో బయటికి వెళ్ళేప్పుడు తలతిరుగుట మొదలైన అనారోగ్య సమస్య ఏర్పడితే దగ్గరలో వున్న వైద్యుణ్ణి సంప్రదించి ప్రాథమిక చికిత్స పొంది వడదెబ్బ బారిన పడకుండా కాపాడుకోవచ్చును.

చేయకూడనివి (Don'ts) ✗

- ✗ సూర్య కిరణాలకు, వేడి గాలికి గురి కాకుడదు.
- ✗ వేడిగా ఉన్న సూర్య కాంతిలో గొడుగు లేకుండా తిరుగరాదు.
- ✗ వేసవి కాలంలో నలుపురంగు దుస్తులు, మందంగా ఉండే దుస్తులు ధరించరాదు.
- ✗ నెత్తికి టోపి లేక రుమాలు లేకుండా సూర్య కాంతిలో తిరుగరాదు.
- ✗ వడదెబ్బకు గురి అయిన వారిని వేడి నీటిలో ముంచిన బట్టతో తుడువరాదు.
- ✗ దగ్గరలోని ప్రాథమిక ఆరోగ్య కేంద్రానికి చేరుటలో ఏ మాత్రం ఆలస్యం చేయరాదు.
- ✗ మధ్యాహ్నం తరువాత (అనగా ఉదయం 10.00 గంటల నుండి సాయంత్రం 4.00 గంటల మధ్యకాలంలో) ఆరుబయట ఎక్కువ సార్లక ప్రమేయం కూడిన పని చేయరాదు.
- ✗ ఎండలో బయట నుండి వచ్చిన వెంటనే తీసివార్చుములు మరియు తేనె తీసుకొని కూడదు శీతలపానీయాలు, మంచు ముక్కలు తీసుకుంటే గొంతుకు సంబంధించిన అనారోగ్యము ఏర్పడుతుంది.

గమనిక : మరియు సమాచారం కొరకు 104, అత్యవసర సేవలై 108ని సంప్రదించండి.

మిషన్ డైరెక్టర్, జాతీయ ఆరోగ్య మిషన్ మరియు కమిషనర్ ఆరోగ్య కుటుంబ సంక్షేమ శాఖ, తెలంగాణ ప్రభుత్వం హైదరాబాద్

ఎండకాలంలో వేడి నుండి పశువుల రక్షణ

ఎండకాలంలో తీవ్రమైన ఎండల వల్ల పశువులు అధిక వేడి/తాపానికి గురై ఉత్పాదక శక్తి కోల్పోవడమే కాకుండా కొన్ని సందర్భాలలో మరణం కూడా సంభవించే అవకాశమున్నది

ఎండకాలంలో వేడి నుండి పశువులను/గొర్రె మేకలను సంరక్షించుకోవడానికి సూచనలు



పశువులను, గొర్రె మేకలను ఏలైనంత వరకు ఉడయం మరియు సాయంత్రం మాత్రమే బయట మేపుకు తీసుకెళ్ళాలి. ఎండ తీవ్రత ఉన్నప్పుడు కొట్లలోనే ఉంచాలి



కొట్టాలు / షేడ్ సౌకర్యం లేని వారు చెట్ల నీడలలో పశువులను ఉంచాలి.



(పశుగ్రాహ వసతి ఉంటే షేడల్లో మేపడమే మంచిది)



కొట్టాలు / షేడ్ చుట్టు ప్రక్కల నీడ నిచ్చే చెట్లను పెంచాలి.



పగటి సమయాలలో కొట్టాలు / షేడలకు గోనె సంచులు కట్టి తడవడం వల్ల లోపట చల్లగా ఉంటుంది.



వేసవిలో తగినంత తాగునీరు అందుబాటులో ఉంచాలి. (వేసవిలో ప్రతి పశువుకు రోజుకు సుమారు 60-70 లీ. త్రాగునీరు అవసరం.)



ఏలైనంత వరకు ఎక్కువగా పబ్లిమేత అందించాలి. దాణా తడిపి యివ్వడం మంచిది.



వాటిజ్జ పరంగా పాడి పశువుల పెంపకం, గొర్రెల మేకలపెంపకం చేపట్టే వారు, షేడల్ ఫాన్లు, ఫాగర్స్ ఎర్పరుచుకొనిఉష్టోగ్రతను తగ్గించవచ్చు.

దాణాతో పాటు లవణ మిశ్రమము మరియు పుష్కలంగా తాగునీరు ఇవ్వడం వల్ల పశువులు బలహీన పడకుండా, తొందరగా డి హైడ్రేషన్ కు గురికాకుండా కాపాడవచ్చు.



వేసవి తాపానికి గురైన పశువులు, అధిక శరీర ఉష్ణోగ్రత కలిగి, అధికంగా శ్వాస తీస్తు బాధపడుతుంటాయి. అలాంటి పశువులకు వెంటనే, తల మరియు శరీరభాగాలను నీటితో తడుపుతు సమీప పశువైద్యాధికారిచే చికిత్స చేయించాలి.

సంచాలకులు
పశుసంవర్ధకశాఖ, తెలంగాణ

