HEAT WAVE ACTION PLAN-2024 SUBARNAPUR





Prepared by:-District Disaster Management Authority Subarnapur Date :15.03.2024

ABBREVIATION

		ADDREVIATION
AC	:	Air Conditioner
ASHA	:	Accredited Social Health Activist
ANM	:	Auxiliary Nurse Midwife
AWW	:	Anganwadi Worker
BDO	:	Block Development Officer
CDO	:	Chief Development Officer
CDPO	:	Child Development Project Officer
CHC	:	Community Health Centre
CDM&PHO	:	Chief District Medical & Public Health Officer
CDVO	:	Chief District Veterinary Officer
DAMPS	:	Disaster Assistance Monitoring & Payment System
DHH	:	District Health Hospital
DEOC	:	District Emergency Operation Centre
DM	:	Disaster Management
DWO	:	District Welfare Officer
EO	:	Executive Officer
GP	:	Gram Panchayat
GPS	:	Global Positioning System
GFS	:	Global Forecast System
GFES	:	Global Ensemble Forecast System
HAP	:	Heatwave Action Plan
HWC	:	Health Wellness Centre
IEC	:	Information, Education & Communication
IMD	:	India Meteorological Department
LAC	:	Livestock Aid Centre
MGNREGA	:	Mahatma Gandhi National Rural Employment Guaranty Act
NAC	:	Notified Area of Council
NDMA	:	National Disaster Management Authority
OSDMA	:	Odisha State Disaster Management Authority
ORS	:	Oral Dehydration Solution
PHC	:	Primary Health Centre
PHD	:	Public Health Division
RC	:	Regional Centre
SEOC	:	State Emergency Operation Centre
SEM	:	Self Employed Mechanic
SP	:	Superintendent of Police
SOP	:	Standard Operating Procedure
SRC	:	Special Relief Commissioner
ULB	:	Urban Local Body
VD	:	Veterinary Dispensary
VSS	:	Vana Suraksha Samiti
WRF	:	Weather Research & Forecasting
		C



Foreword

Heat Wave Action Plan 2024 aims to be a handy document for public, officials and subject experts detailing the context and action to be taken with respect to heat wave condition in Subarnapur district. All departments concerned with heat wave response have been comprehensively covered and the SOPs to be followed by them has been detailed. Contact numbers of officials & staff has been shared which will be useful for information sharing & grievance redressal for the public. With the aim of zero casualty, I hope every citizen will follow the instruction issued by Government by abiding it consciously & sincerely and this Action Plan 2024 will serve its purpose.

10 Ms. Anya

Collector, Subarnapur

	CONTENTS	
Chapters		Page No
	Abbreviation	
	Foreword	
Chapter-1	Introduction	1-2
1.1	Rationale for Preparation of Heat Action Plan (HAP)	1
1.2	Heat wave Definition	1-2
1.3	Objective of Heat Action Plan	2
Chapter-2	District Profile	3-4
2.1	Climate & Location	3
2.2	District at a glance	3-4
2.3	Occurrence of Heat Wave	4
Chapter-3	Early Warning Dissemination	5-8
3.1	Forecast and Issuance of Heat Wave Alert by IMD	5-6
3.2	Monitoring by DDMA	7
3.3	Information dissemination on Heat Wave	7-8
3.4	Application of SATARK App	8
Chapter-4	Preparedness Measures	9-27
4.1	Department wise specific preparedness measures	9-13
4.2	Preparedness measures taken by major stakeholders	13-17
4.3	Standard Operating Procedure	18-23
4.4	Awareness & IEC activities	24-25
4.5	Heat Wave DOs and DON'Ts	26-27
Chapter-5	Annexures	28-49
	Annexure-I- Important contact numbers	28-30
	Annexure-II- IEC Materials22	31-35
	Annexure-III- Departmental Circulars	36-49

CONTENTS

Chapter-1

INTRODUCTION

1.1 Rationale for Preparation of Heat Action Plan (HAP)

Odisha has a history of Heat Waves with soaring temperatures being recorded in several parts of the state. About 2042 people died in the State in the year 1998 due to Heat Wave. Similarly, Subarnapur has experienced high temperature. Though Heat wave condition was felt throughout the state in 1998, fortunately no one died in Subarnapur due to heat wave. Heatwave was experienced again in the year 2003 & 2005 in which 4 & 7 persons died in the respective years. There could have been many possible reasons including growing urbanization, rising population and industrialization. The problem is further going to be magnified due to climate change. According to the estimates, the situation is likely to worsen in the coming years; the World Meteorological Organization (WMO) predicts heat related fatalities will double in less than 20 years. The situation demands that the policy makers and researchers revisit and strengthen the current HAP. Till date, the Heat Wave measures have been mostly preventive in nature. However, prolonged summers, increased temperature and climatic changes require designing adaptive measures and building resilience in the informal sector (vulnerability assessment and alternate livelihood generation of the vulnerable population) along with the preventive actions. Under these circumstances, adaptation is a key response strategy to minimize potential deaths and other adverse effects on health due to Heat Waves (NDMA Guideline 2019).

1.2 Heat wave Definition

Heat-wave is a condition of atmospheric temperature that leads to physiological stress, which sometimes can claim human life by disrupting the body's thermal equilibrium. Heat Wave is defined based on the temperature thresholds over a region in terms of actual temperature or its departure from normal. It is a condition where air temperature becomes fatal to human body when exposed. The World Meteorological Organization (WMO) defines a Heat Wave as 'five or more consecutive days during which the daily maximum temperature exceeds the average maximum temperature by five degrees Celsius'. Again, depending on the upper deviation from the normal temperature it can be moderate Heat Wave or Severe Heat Wave (www.imd.gov.in)

As per India Meteorological Department (IMD) classification, Heat Wave is considered if maximum temperature of a station reaches at least 40°C or more for plains, 37°C or more for coastal stations and at least 30°C or more for hilly regions. Following

criteria are used to declare a Heat Wave:

Based on Departure from Normal

- Heat Wave: Departure from normal is 4.5°C to 6.4°C
- Severe Heat Wave: Departure from normal is >6.4°C

Based on Actual Maximum Temperature (for plains only)

- Heat Wave: When actual maximum temperature $\geq 45^{\circ}$ C
- Severe Heat Wave: When actual maximum temperature ≥47°CTo declare a Heat Wave, the above criteria should be met at least at two stations in a Meteorological sub-division for at least two consecutive days. A Heat Wave will be declared on the second day. Higher peak temperatures daily and longer and acute Heat Waves are becoming increasingly frequent globally due to climate change

1.3 Objective of Heat Action Plan:

The objective of heat action plan is to work as a guide book to deal with heat wave condition and its related consequences. It provides a framework for implementing response. The HAP is formulated having following objectives which focuses on:

- (a) Institutional role clarity
- (b) Effective planning to reduce the impact.
- (c) Prompt response to combat the heatwave situation & its impact
- (d) Effective early warning dissemination.
- (e) Awareness among the community to protect themselves & their livestock.
- (f) Ensure departmental preparedness to deal with heat wave situation
- (g) Help the decision makers & plan executants to minimize the casualty to zero

Chapter-2 DISTRICT PROFILE

2.1 Climate and Location

The Climate is extreme. It is hot and moist. The mean maximum temperature 38°C goes up to 45°C. In the hot weather season from March to May, weather is generally dry and uncomfortable. Winters are very cold with temperature as low as 7°C. The mean minimum temperature is 13°C. The summer is followed by the rainy season, which starts with the outbreak of the south-west monsoon in June. It reaches its peak in August and retreats in the middle of October. It experiences fairly good rainfall and high degree of humidity. The actual rainfall varies from block to block. About 84% of rainfall is received during the period from June to September. The annual rainfall of the district is 1418.5 mm in 61.6 rainy days. This District mostly faces four seasons in a year, i.e., winter season from December to February is followed by the pre-monsoon or hot weather season from March to May. The period from June to September constitute the south-west monsoon season and the period of October and November is the post-monsoon season

Subarnapur is situated in north eastern corner of the Deccan plateau. The district is located in the western part of Odisha. Subarnapur lies between Latitudes 20° 30' N to 20°10' N and Longitudes 83° 27' E to 84°15' E. The district is spread over 2337 Sq.kms. 1.5 % of the State's land mass. It is bordered by Bolangir in the west, Bargarh in the North, Sambalpur in the North-East, Boudh in the South and South-east and Rairakhol sub-division of Sambalpur in the east.

		District at a Glance					
Particulars	No.	Remarks					
No. of villages	985						
Total Population	6,10,183						
a. Male	3,11,312						
b. Female	2,98,871						
c. Children	1,20,539						
No. of Blocks	06						
No. of Gram panchayat	109						
No. of Tehsil	06						
No. of RI circle	40						
No. of Police Stations	09						
No. of Fire Stations	07						
No. of Urban Local Bodies	03						
No. of Sub-centres	89						
No. of PHC	15						
No. of CHC	05						
No. of Sub-Divisional Hospital	01						
	No. of villagesTotal Populationa.Maleb.Femalec.ChildrenNo. of BlocksNo. of Gram panchayatNo. of Gram panchayatNo. of TehsilNo. of RI circleNo. of Fire StationsNo. of Urban Local BodiesNo. of PHCNo. of CHC	No. of villages 985 Total Population 6,10,183 a. Male 3,11,312 b. Female 2,98,871 c. Children 1,20,539 No. of Blocks 06 No. of Gram panchayat 109 No. of Tehsil 06 No. of RI circle 40 No. of Police Stations 09 No. of Urban Local Bodies 03 No. of Sub-centres 89 No. of CHC 05					

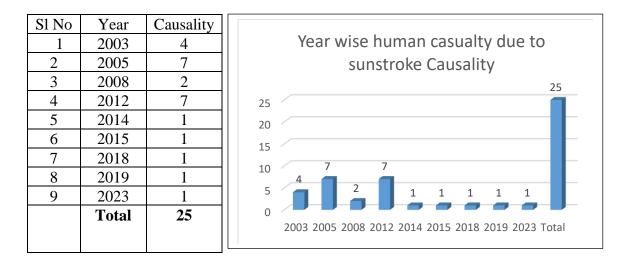
2.2 District at a Glance

14	No. of Veterinary hospitals	10
15	No. of Anganwadi Centres	1556
16	No. of ASHA	633
17	No. of Colleges	62
18	No. of Schools	993
19	No. of Odisha Adarsh Vidyalaya	06
20	No. of Rural Water Supply system	370
21	a) No. of Tube Wells	8850
22	b) No. of tube well functional/	8850
	running	
22	c) No. of tube well dysfunctional	0
23	d) No. of tube well dysfunctional	0
	but repairable	
24	e) No. of PWS having solar power	203
25	f) No. of Mega Water Supply	06

2.3 Occurrence of Heat Wave

Heat wave is also another concern area for the district. The district experiences high temperature in the month of April to June in each year. Extreme positive departures from the normal maximum temperature result in a heat wave during the summer season. The rising maximum temperature during the pre-monsoon months continues till June and in rare cases till July. The Average temperature exceeds more than 40° Celsius during the peak of April & May in each year. Due to Heat wave situation, there were 24 numbers. of causality reported in the district in the last 19 years.

The effect of heat wave was felt in 2003, 2005, 2008, 2012, 2014, 2015, 2018, 2019 & 2023 as a result 25 human casualty has been occurred. The year wise human casualty is shown in the figure below.



Chapter-3

WARNING DISSEMINATION

3.1 Forecast and Issuance of Heat Wave Alert by IMD

India Meteorological Department (IMD), Ministry of Earth Sciences, is the nodal agency for providing current and forecast weather information, including warnings for all weather- related hazards for optimum operation of weather-sensitive activities. It provides warning against severe weather phenomena like tropical cyclones, squally winds, heavy rainfall/ snow, thunder-squall, hailstorm, dust storms, Heat Wave, warm night, fog, cold wave, cold night, ground frost, etc. It also provides real time data and weather prediction of maximum temperature, Heat Wave, extreme temperatures and heat alerts for vulnerable cities/rural areas.

IMD has a big network of surface observatories covering entire country to measure various metrological parameters like Temperature, Relative humidity, pressure, wind speed & direction etc. Based on daily maximum temperature station data, climatology of maximum temperature is prepared for the period 1981-2010 to find out normal maximum temperature of the day for the particular station. Thereafter, IMD declares Heat Wave over the region as per its definition. IMD issues temperature forecast & warnings in following range:

- a) Short to medium range (lead time/validity of 1 to 5 days)
- b) Extended range (lead time/validity up to 4 weeks)
- c) Seasonal range (lead time/validity up to 3 months)

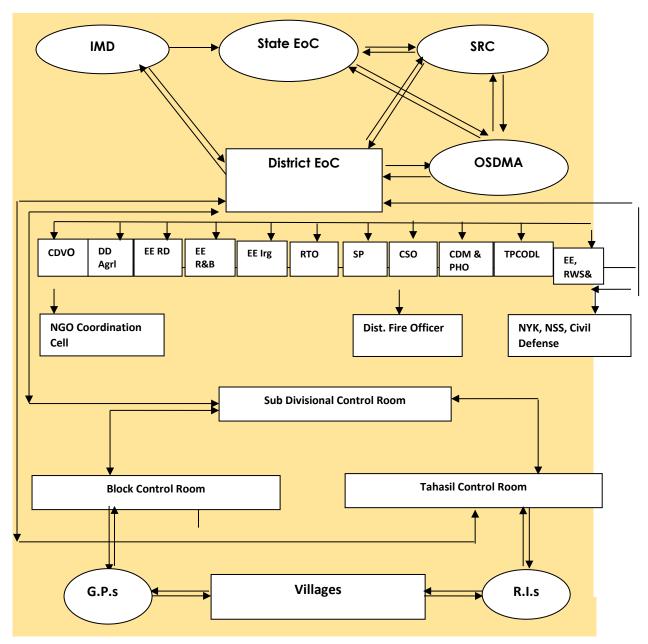
IMD predicts Heat Wave based on synoptic analysis of various meteorological parameters and from the consensus guidance from various regional & global numerical prediction models like, WRF, GFS, GEFS, NCUM, UMEPS, UM Regional etc. available at Ministry of Earth Sciences (MoES) and other international models accessible under bilateral multi-institutional arrangement

A common man may get Heat Wave information from, All India Weather Forecast Bulletin (https://mausam.imd.gov.in) and special Heat Wave guidance bulletins (http:// internal.imd.gov.in/pages/heatwave_mausam.php) every day from 1 April to 30 June.

The Heat Wave information is shared with concerned State Government Authority, Media and other stakeholders like Indian Railway, Health departments, Power Sector etc. The general public is informed through Print & Electronics Media. IMD issues forecasts and warnings for all weather-related hazards in short to medium range (valid for the next five days) every day as a part of its multi-hazard early warning system. These warnings, updated four times a day, are available at http://www.imd. gov.in/pages/ allindiawxfcbulletin.php.

A new system of exclusively heat-related warnings has been introduced with effect from 03 April 2017. These warnings, valid for the next 5(five) days, are issued around 1600 hours IST daily and are provided to all concerned authorities (Departments of Health, Disaster Management, Indian Red Cross and Indian Medical Association, NDMA etc.) for taking suitable action at their end. A bulletin in extended range with outlook for the next two weeks (for all hazards including Heat Wave) is issued every Thursday (available at http://www.imd.gov.in/pages/extended.php).

Information flow chart



Information flow chart from IMD/SEOC to Villages with early warning

Page 6 of 49

3.2 Monitoring Heat wave by DDMA

Based on IMD observations, heat conditions of District are analyzed on a daily basis by DDMA from March-June every year. Maximum temperature map of the state is prepared on GIS platform. The information is disseminated to the different stakeholders through social media.

- Convention of district level preparatory meeting in the month of March involving all stakeholders.
- Issue of directions to all line departments to take appropriate action asper SOP.
- Activation of control room at DEOC and ensure functioning of control rooms in all concerned offices.
- Warning dissemination & collection of information for onward submission to Govt.
- Compliance to heat wave alleged cases and necessary steps for providing exgratia.
- Overall monitoring of the situation in the district.
- Review the situation time to time.

3.3 Information Dissemination

• On receipt of warning messages from I.M.D./SRC/ OSDMA/SEOC, District Control Room will pass the same to the Block Control Rooms & subordinate offices to take necessary measures to combat the heat wave situation and to keep the people alert.

The warnings shall be disseminated through e-mail, Phone, What's app Groups & miking.

✤ The report on Heat Wave casualty should be reported immediately by the Tahasildar to the district for kind information of SRC. One joint enquiry of sunstroke death should be conducted by Tahasildar & Medical Officer and the joint verification report must reach to the district within 36 hours and the case should be initiated through DAMPs.

Colour	Alert	Warning	Impact	Suggested
Code				Actions
Green (No action)	Normal Day	Nil	Comfortable temperatures	No cautionary action required
Yellow Alert (Be updated)	Heat Alert	Heat wave conditions at district level, likely to persist for 2 days	Heat is tolerable for general public but moderate health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.	Avoid heat exposure

• Heatwave warning dissemination through color codes/signals.

Orange Alert (Be prepared)	Severe Heat Alert for the day	 i. Severe heat wave conditions likely to persist for 2 days. ii. With varied severity, heat wave is likely to persist for 4 days or more. 	Increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work. High health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.	Avoid heat exposure– keep cool. Avoid dehydration
Red Alert (Take Action)	Extreme Heat Alert for the day	 i. Severe heat wave likely to persist for more than 2 days. ii. Total number of heat/ severe heat wave days likely to exceed 6 days. 	Very high likelihood of developing heat illness and heat stroke in all ages.	Extreme care needed for vulnerable people.

3.4 Application of SATARK APP:

SATARK is a decision support system based on the Web / Smartphone that helps to provide early warning information for different risks. It is an application developed by OSDMA in collaboration with RIMES. Heat Wave advisory system uses IMD defined Heat Wave thresholds to automatically generate advisories based on forecast and disseminate advisories to the users well ahead of time about the likelihood of a Heat Wave along with precautionary measures to be taken. Every day, the SATARK system transmits the 10-day forecast information to the concerned government officials at State, District and Block level through e-mail automatically. It has improved risk communication in the state. "SATARK" mobile application was developed both in IOS and Android, providing block level alerts and preparedness advisories (Do's and Don'ts) in Odia and English languages. The application is incorporated with observation and forecast data from Indian Meteorological Department (IMD) and the best available forecast products. Block level and location specific alerts are issued through Mobile App, E-Mail, SMS and other available sources. The advisories are freely available through SATARK mobile application. In the near future, all the forecast information provided by the application will include the valueadded information provided by IMD-RC.

Chapter-4

PREPAREDNESS MEASURE

4.1 Department wise specific preparedness measures

1. Collector-cum-Chairman DDMA, Subarnapur

- Call for preparatory meeting involving all concerned stakeholders in the month of March.
- Issue of directions to all line departments to take appropriate action asper SOP.
- Ensure functioning of Control Room at DEOC and in all concerned offices.
- Overall monitoring of the situation in the district.
- Conduct meeting from time to time to review the situation.

2. CDO-cum-EO, Zilla Parisad, Subarnapur

- Issue directions to the work executants to reschedule the working hour and avoid working hour from 11.00 AM to 03.00 PM and arrangement of ORS, First Aid, drinking water & shed at worksites.
- Issue directions to BDOs to identify the water scarcity areas & make arrangement for drinking water.
- Instruct BDOs for procurement of spare parts & repairing of defunct tube wells.

3. District Emergency Operation Centre, Subarnapur

- Convention of district level meeting for review of preparedness by Line departments.
- Functioning of control room at DEOC.
- Preparation of Heat Action Plan for the district.
- Dissemination of warnings & collection of daily situation report.
- Prompt action for Ex-gratia payment.
- Initiative for awareness generation.
- Overall monitoring.

4. Chief District Medical & Public Health Officer, Subarnapur

- Ensure opening & smooth functioning of control rooms at DHH/SDH/PHCs/CHCs
- Arrangement of earmarked room/beds at all health institutions for the treatment of heat stroke patients.
- Arrangement of alternative power back up
- Prepositioning of ORS, IV fluids & life-saving medicines at all health institutions/ HWC/ASHAs/AWWs
- AC, cooler, freezers should be kept ready and check the functionality.

- Ambulance must be kept ready for quick transport & referral of heat stroke patients.
- All categories of health personnel should be sensitised on heat stress disorder & management.
- Mobile Health Units should be kept ready
- Arrangement of cool drinking water
- Awareness creation & display of IEC materials.

5. RWS&S/PHD Subarnapur

- Identification of water scarce pockets
- Provision of safe drinking water in the water scarce pockets
- Inspection of tube wells & immediate repair of defunct tube wells & PWSs
- Arrangement of tankers
- Meeting with BDOs for procurement of spare parts
- Ensure no complaint against drinking water till 15th June.

6. District Education Officer, Subarnapur/DWO, Subarnapur

- Rescheduling of school timing on receipt of instruction from S&ME department.
- Ensure completion of all examinations by March.
- Arrangement of drinking water & ORS packets in all school premises
- Instruct the parents to send their child with water bottles
- Ensure that students are drinking water at regular intervals
- Avoid physical activity by the students in the school hour
- Ensure a class to be taken to create awareness among students how to overcome heat stress disorders.

7. District Labour Officer, Subarnapur

- Issue directions to the work implementing agencies/ executants to reschedule working hour from 1st April to avoid exposure of workmen/labours.
- Ensure restriction of work during peak period ie 11.00 AM to 03.00 PM.
- Instruct the work executants for arrangement of drinking water, ORS packets, First Aid & rest sheds at work place.
- Instruct the Labour Inspector to visit the fields to check the above arrangements & report.
- On violation of the instructions by the contractors, appropriate action must be taken

8. CDVO, Subarnapur

• Ensure opening & functioning of control room at district veterinary hospital & veterinary dispensaries at block level.

- Stock piling of medicines at district & prepositioning of medicines at all VDs/LACs.
- Instruct field staff to create awareness among livestock keepers on how to take care of livestock during summer.
- Exhibition & distribution of IEC materials for wide publicity
- Construction of shallow vats for drinking purpose of stray animals
- Instruct the doctors & Livestock Inspectors for immediate treatment of the heat stress affected animal
- Formation of Mobile Veterinary Unit at block level

9. District Forest Officer, Subarnapur

- Ensure prevention of forest fire during summer
- Keep ready the equipment & manpower
- Capacity building of VSS
- Awareness of common people through VSS
- Ensure drinking water facility for animals in the forest
- Vigilant on the poaching of wild animals near the water body
- Vigilant on the mischief mongers who lighting fire in the forest

10. Asst. Fire Officer, Sonepur

- Remain alert with man and machine to tackle any untoward incidents due to fire in rural as well as urban areas.
- Instruct all Station Officers to remain alert
- Conduct awareness camps.

11. Regional Transport Officer, Subarnapur

- Organise a meeting with bus owners for rescheduling of bus timing of the bus running at the peak period.
- Ensure buses are not running overcrowded.
- Ensure potable water, ORS packets & First aids have been made available in public transport vehicles.
- Issue of directives for non-transportation of people in the open transport vehicles
- Strictly restrict bus owners not to ply passengers over the roof top of bus during peak hours.
- Ensure sensitization of drivers, helpers, conductors and pasting of a set of Do's & Don'ts in bus

12. District Social Welfare Officer, Subarnapur

• Orient the CDPOs supervisors & AWWs on heat stress management

- Educate through AWWs to pregnant women & lactating mothers regarding the dangers of Heat Waves, its related health impacts and the precautionary measures to be taken.
- Display IEC materials at Anganwadis centres.
- Provision of drinking water and first aid kits at all the Anganwadi Centres

13. Executive Engineer, Tata Power Western Odisha Distribution Ltd, Subarnapur

- Ensure uninterrupted power supply in the summer months.
- Ensure no electricity disconnection at hospitals, residential schools & PWSs
- If power cut requires due to over load, general public should be informed well in advance and it should be reduced to evening time
- Stock piling of spare parts for immediate repair
- Instruct field staff to follow the guideline on heat wave to avoid heat stress.

14. District Panchayat Officer, Subarnapur

- Sensitization of PRIs on heat wave Management
- Instruct PEOs to take initiative for opening of Jalachhatras

15. District Social Security Officer, Subarnapur

- Instruct BSSOs to distribute pension during morning hour
- Arrangement of drinking water & ORS packets at pension distribution place

16. District Information & Public Relation Officer, Subarnapur

- Dissemination of heat wave warning through miking.
- Take initiative for display of IEC materials and publication of Do's & Don'ts in media.

17. Block Development Officers

- Ensure safe drinking water for all
- Identification of water scarcity pockets & provision of water tankers for supplying drinking water
- Restrict the MGNREGA work from 11.00 AM to 03.00 PM
- Instruct contractors to reschedule the working hour & make arrangement of drinking water, ORS packets, First Aid & temporary sheds at work site.
- Opening of Jalachhatras/Paniya Jala Seva Kendra at public congregation places
- Stock piling of spare parts & repairing of defunct tube wells
- Maintenance of complaint register regarding non-functioning of tube wells and the complaints must be attended immediately
- Dissemination of warning to the last mile
- Creation of public awareness

18. Executive Officers of Municipality/NAC

- Ensure safe drinking water for all in wards.
- Provision of drinking water through tankers in water scarcity pockets.
- Opening of Paniya Jala seva Kendra in public gathering places.
- Defunct tube wells need to be repaired at the earliest. Complaints regarding defunct tube wells needs to be attended immediately.
- Check the functionality of cooling water points and repair immediately if require
- Instruct the work executants to reschedule the working hours with arrangement of drinking water, ORS, First Aid & temporary rest sheds

19. Tahasildars of the district

- Instruct the field functionaries to remain alert.
- Prompt reporting of the heat wave death cases if any to the DEOC.
- Do Joint Enquiry with the Medical Officer on death due to sunstroke and submit the enquiry report within 36 hrs.
- In case of confirmed death, the same should be immediately uploaded in DAMPs.

4.2 PREPAREDNESS MESURES TAKEN BY MAJOR STAKEHOLDERS

District Disaster management Authority, Subarnapur

District Disaster Management Authority has convened a preparatory meeting on 02.03.2024. Collector, Subarnapur reviewed the preparedness measures taken by Line departments and accordingly instructed to concerned departments take the specific preparedness measures. District/Block level officials were instructed to down load the SATARK Mobile Application & they have down loaded the Application. As per the instruction of Collector, all the BDOs have convened Block level preparatory meetings on heatwave management.

District Disaster Management Authority, Subarnapur has taken an initiative to create massive awareness among the teachers & students. 28 nos. awareness programs have been organized in different school & colleges from 12.02.2024 to 17.02.2024. 3386 students & teachers were oriented on heatwave management & its safety. IEC materials have been distributed and pasted at strategic points to create awareness among people.

District administration has kept ready 96 nos. water tanker at GP level to provide drinking water during need though 9454 tube wells & 27 nos. cold drinking water points are functional in the district. Further, 613 nos. Paniya Jal Seva Kendra (Jalchhatra) have been opened at different strategic location to provide drinking water.

Keeping in view the forthcoming General Election 2024 which will be conducted during the summer season, DDMA, Subarnapur has taken initiatives by circulating the guidelines to the National & state level political parties vide this office Letter No: 242/Emg Dated 16.03.2024 which will be followed by them to avoid any unwanted happenings. The guidelines are as follows.

- > The public meetings & rally may be organized in the morning or evening hour.
- Provide shade at the meeting venue for the participants during organization of any public meeting.
- Arrangement of sufficient cool drinking water, ORS packets & First Aid at the meeting venue and rally.
- Coordinate with nearest hospital for any medical assistance
- Keep a dedicated vehicle on the meeting venue for the transportation & immediate treatment of the sunstroke victim during the meeting/rally.
- ➤ Coordinate with nearest fire station to avoid & mange any unexpected happenings.
- Create volunteers for awareness campaigning on heatwave Do's & Don'ts before & during the meeting & rally.

Further, some precautionary measures may be taken at polling booths by District Election Officer (DEO) during the franchise of vote to tackle the heatwave situation. The precautionary measures may be

- Set up of tent/shade near the polling booths to shield the voters from direct sunlight.
- Arrangement of fans/coolers & handhold fans at the waiting/rest place of voters
- Sufficient stock of cool drinking water/ ORS packets
- Volunteers to be stationed at polling booths to conduct awareness on heat wave management
- ✤ Arrangement of First Aid
- Special focus to be given to the vulnerable persons like elderly voters, pregnant women, PWDs & people with comorbidities.
- ♦ Voting time may be scheduled to morning hour & afternoon.
- ✤ Be in readiness to manage any emergency arises at any polling station

Medical Arrangements

As reported by CDM&PHO, Subarnapur lifesaving medicines have been prepositioned at all health institutions, ear marked beds have been arranged, AC, Coolers have been kept ready, Mobile Health Units have been formed for six blocks and control rooms have been functioning at different health institutions. The control room numbers are stated below.

- 1. District Head Quarter Hospital, Sonepur- 7846850553
- 2. Subdivisional Hospital, Birmaharajpur 06651-254232

- 3. CHC Binka- 06654-283058
- 4. CHC Ullunda- 06654-225533
- 5. CHC Dunguripali-06653-270372
- 6. CHC Tarbha-06654-286198
- 7. CHC Naikenpali, Sonepur- 8658258724

Details of arrangement at different health institutions are as follows.

Name of the health institution	No of beds earmarked	No of AC	No of Coolers	No of ILR	No of deep freezer
CHC Binka	2	1	1	1	2
A.H Mahadevpali	1	0	1	1	1
PHC(N) Bankigiridi	1	0	1	1	1
PHC(N) Sankara	1	0	1	0	0
HWC ULLUNDA	2	1	1	2	2
HWC KOTSAMALAI	1	0	1	0	0
HWC JALOI	1	0	1	1	1
HWC SINDHOL	1	0	1	0	0
PHC(N), Lachhipur	1	0	1	0	0
PHC(N), Hardakhol	1	0	1	0	0
CHC, Naikenpali	1	1	1	1	3
SDH, Birmaharajpur	2	1	1	1	3
PHC, Subalaya	1	0	1	1	1
PHC, Mursundhi	1	1	1	1	1
PHC(N) Harihorjore	1	0	0	0	0
CHC Dunguripali	3	1	1	1	1
PHC Behemal	1	1	1	0	0
PHC Rampur	1	1	1	1	1
PHC Digsira	1	1	1	0	0
PHC Bhimtikra	1	1	1	0	0
PHC Sukha	1	1	1	1	1
CHC Tarbha	2	1	1	1	1
PHC Menda	1	0	1	1	1
PHC Kamsara	1	0	1	1	1
PHC Pua	1	0	1	0	0
OH Charvatta	1	1	1	0	0
DHH, SONEPUR	7	1	2	1	2
	39	14	27	17	23

Essential Drug Stock Position

- 1. ORS (20.5 gram) = 74000 Pkt
- 2. ORS (04.3 gram) = 16500 Pkt
- 3. Halazone Tab. = 1,24,000 Tab
- 4. Bleaching powder= 500 Kg
- 5. IV Fluids 500 ML= 9600
- 6. NS 500 ML =6200
- 7. Metronidazole = 25000
- 8. Ciprofoxacin IV= 6000
- 9. Ofloxacin IV =9000

Veterinary Arrangements:

- Control rooms at CDVO Office bearing no.9437613789 is functioning and control rooms at SDVO office & veterinary dispensaries are also functioning.
- Adequate essential medicines have been supplied to hospitals, dispensaries & LACs.
- IEC materials have been distributed through field functionaries.
- Necessary arrangements have been made in hospital & veterinary dispensaries for emergency treatment of animals suffering from heat stroke.
- Instruction has been given to field functionaries to arrange vats near the tube wells & wells for drinking of stray animals.
- Special awareness has been imparted to the buffalo owners.
- Mobile Van Units are sensitizing public by awareness camps.
- Awareness is going on in rural areas.

Drinking water arrangement by RWS&S

- All (8850) tube wells have been checked & defunct tube wells have been repaired
- All spare parts of tube wells & PWS are kept ready at block and section offices for repair of defunct tube wells & PWSs.
- 370 nos. PWS including 203 nos. solar PWS have been checked and all are functional.
- 360 nos. SEM & pump operators are ready for immediate repair of tube wells & PWSs.
- 12 nos. mobile vans have been engaged for repairing of tube wells.

<u>PHED, Subarnapur</u>

- 604 nos. tube wells of 3 ULBs have been checked & all are functional.
- All PWSs are functional & chlorinated.
- 35 nos. Stand posts are in functional status.
- DG sets have been kept ready for uninterrupted water supply during power cut.

DFO, Subarnapur

- Awareness programs have been conducted through street play in 42 Nos. of fire prone villages involving 13 Nos. of WSHG.
- All the plantation and nursery sites have been provided with tubewells for watering to the seedlings as well as drinking purpose for the labourers engaged in forestry activities.
- 37 Nos of active temporary Rest-Shade installed at various plantation and nursery sites for the labourers as well as common people
- Control room is functioning. Control room contact number is 9437497118.
- All the labourers/workman engaged under Forest Department have been instructed to perform their duties in two shift i.e from 06:30 AM to 11:30 AM and 03:30 PM to 06:30 PM with adequate precautions

<u>BDO, Tarbha</u>

- Block level preparatory has been convened on 05.03.2024.
- IEC materials have been distributed to GPs for pasting at strategic places.
- Control room will be functional from 01.04.2024, Control room No: 06654-246055
- Probable water scarcity pockets have been identified. (Deulpadar, Rambhasindhol, Menda, kumunde & Maraduguchha)
- 18 nos. water tankers are available for mobile water supply.
- 126 Jalachhatra Kendra will be opened from 01.04.2024

EO, Sonepur Municipality

- Control room is functioning. Control Room No: 06654220475
- 20 nos. cooling drinking water points are functional & all have been chlorinated.
- 02 nos. water tankers are kept ready for supply of drinking water during need.
- Jalachhatra will be opened at 05 places.

EO, Tarbha NAC

- Control room will function from 15th March 2024.
- 03 nos. cooling water points (Amrut Dhara) are functional
- 04 nos. jalachhatra will open soon.
- 06 nos. tankers are kept ready for supply of mobile drinking water.

RTO, SUBARNAPUR

- RTO, Subarnapur has convened a meeting with bus owners association to keep portable drinking water, ORS, First Aid and to paste the Do's & Don'ts in the buses.
- He has discussed to change the bus running time from 15th March 2024.
- He has discussed with the association to sensitize their drivers, conductors & helpers.
- He has instructed to open jalachhatras in all bus stands.

District Labour Commissioner, Subarnapur

- 02 nos. DLO & 05 nos. ALO have been assigned to make surprise visit to the construction sites to check & ensure arrangement of drinking water, ORS packets, First Aid and rest shade have been made for the labours.
- Labours who are coming to the office are being sensitized on heatwave precautionary measures.
- Officers visiting the construction site are also sensitizing the contractor & labours for taking precautionary measures to tackle heatwave.

<u>4.3 Standard Operating Procedures (SoPs) for management of</u> <u>Heat Wave Conditions</u>

1. Collector/ ADM/PD, DRDA

- i. Updating the Heat Action Plan for the District in the month of January
- Action plan for mitigating water scarcity problems in different towns and villages to be prepared in the January
- iii. Water scarcity areas to be identified in advance and supply of drinking water and for other uses through tanker to those areas to be ensured
- iv. Prepare list of water tankers and earmark them to water scarce area wise
- v. Preventive maintenance of tube wells has to be ensured
- vi. Suitable arrangements also to be made to promptly respond to reports of water scarcity anywhere in the district
- vii. Ensuring Public Awareness campaign through electronic and print media on heat wave precautionary measures (Dos and Don'ts) from February onwards
- viii. Involve Civil Society Organization and Panchayati Raj Institutions (PRI) members in awareness campaign and other measures to tackle the situation arising out of Heat Wave
 - ix. Issue directions to line departments officials for taking measures to tackle heat wave situations in the month of February
 - x. Issue direction to BDOs to convene meeting of PRI representatives-in the month of February
 - xi. Issue direction to ULBs/GPs for opening of "*Jal Seva Kendra*" (Water Kiosk) at market places, bus stands and other congregation points. Ensuring sanitation and hygiene of water distribution points.
- xii. Convene meeting of the Civil Society Organization to seek their assistance in Heat
 Wave mitigation activities including opening of "Jal Seva Kendra"
- xiii. Issue direction to CDVO/BDOs for construction/repair of vats for ensuring drinking water for roaming livestock
- xiv. Issue instructions to BDOs, District Education Officer and District Social Welfare Officer for making drinking water arrangements in all schools
- xv. Principles of all Government and Private colleges are to be instructed to make drinking water arrangements in their institutions
- xvi. Rescheduling of timing of classes and examination in schools and colleges during summer as per the directions given by SRC/School & Mass Education Department

- xvii. DSWO/CDPO/Dist. Child Protection Officer are to be instructed to facilitate availability of drinking water and health needs in all Child Care Institutions (CCIs) in the district
- xviii. District Labour Officer (DLO) to ensure rescheduling of the timing of working hours and make necessary arrangements for supply of drinking water, ORS packets and provision of rest shed at worksites as per directions of SRC/ Labour and ESI department
 - xix. Ensuring restriction of working hours in works under MGNREGA and other schemes
 - xx. Give instructions to the Regional Transport Officer (RTO) to ensure availability of water and ORS packets in public transport vehicles. Timing of public transport services and plying of buses to be rescheduled as per directions of SRC/ C&T (Transport) Department
 - xxi. To issue instruction to the Electricity Distribution Company to ensure uninterrupted power supply during heat wave period. Uninterrupted power supply to be maintained for critical facilities such as hospitals, urban health centres and water supply facilities
- xxii. If any information on casualty is received or report published in newspaper, it should be immediately enquired jointly by the medical and revenue officers
- xxiii. Prompt steps are to be taken for payment of ex-gratia to the bereaved family where, upon enquiry, the death is confirmed to be due to sunstroke

2. Chief District Medical & Public Health Officer (CDM & PHO)

- i. IEC activities and Public Awareness in the districts relating to Heat Wave conditions/ advisories to be done from the month of February onwards
- Take necessary steps for albedo/white painting of roof tops of hospitals, Community Health Centres (CHCs), Public Health Centres (PHCs) and patients resting areas in coordination with the concerned engineering Departments
- Sufficient Storage of life savings medicines, ORS in dispensaries, PHCs, CHCs and District Head Quarter Hospitals to meet any crisis. ORS to be available with ASHA and AWWs
- iv. Arrangement of separate wards and beds and cool rooms for treatment of heat stroke patients in different hospitals
- v. Continuous monitoring and preventive measures against diarrhoea and other health hazards during summer season
- vi. Daily reporting of cases and deaths to H&FW Department, SRC and Collector

vii. Copy of the post-mortem report of heat wave casualties to be shared with the Tahasildars to make the process of ex-gratia payment fast and smooth

3. Urban Local Bodies (ULB)/ Development Authorities

- i. Preventive maintenance of tube wells/pipe water supply-arrangements for distribution of water through water tankers in the water scarce areas
- ii. Awareness generation on Heat Wave Do's and Don'ts with Special attention to slums areas
- Opening of "Jal Seva Kendra" (Water Kiosk) at market places, bus stands, slums, vending zones and other congregation points-Ensuring sanitation and hygiene of water distribution points
- iv. Identification of suitable resting places for street vendors during summer
- v. Increasing access to public parks, public libraries for providing cool resting places for the public
- vi. Regular sprinkling of water on roads
- vii. Promote cool roof initiatives (albedo painting of roofs)
- viii. Encourage use of K-glass, doubly gazed glass in buildings and vehicles.

4. District Labour and Employment Officer (DLO)

- i. Monitoring and enforcement of rescheduling of working hours as per the instructions of SRC/ L&ESI Department
- iii. Monitoring provision of sufficient drinking water, ORS packets and first-aid, rest sheds at worksites
- iv. Instruct the Project Directors of all National Child Labours Projects (NCLPs) to reschedule the school timing for special schools running under NCLP in accordance with the timings prescribed by SRC/ School and Mass Education Department
- v. To ensure creation of awareness among the labourers and workers on risks, signs and symptoms of heat stress during probable heat wave like situations, preventive and precautionary measures including that through constructions agencies/contractors
- vi. Ensure the supervision of construction sites, quarries, factories and other vulnerable worksites, particularly during high temperature periods, to enforce labour laws related to heat safety

5. District Education Officer (DEO)

- i. Monitoring and enforcement of school timings and other restrictions.
- ii. Promoting IEC activities on Heat Wave prevention and management in schools

- Ensuring training of the teachers and conduct of mock drills among students on health risks and management during heat waves through workshops, orientation programmes, special classes, etc.
- iv. Ensuring provision of safe drinking water, ice packs, ORS, etc. in schools and examination centres
- v. Encourage concerned authorities/schools for Albedo paintings on roofs of schools

6. Executive Engineer-Electrical

- i. Identify overload energy points/transformers and take precautionary measures for uninterrupted power supply
- ii. Ensuring uninterrupted power supply for critical facilities such as hospitals, urban health centres and drinking water supply facilities
- iii. Keep energy gangs, equipment, spares ready at strategic locations for earliest restoration of power supply in case of outages
- iv. Setting up timing for power shedding, if absolutely required, and ensuring announcement of power shedding sufficiently in advance
- v. Record and monitor the peak load of primary substations/feeders regularly, so as to avoid breakdown due to failure of power transformers/ overloading and consequent snapping of conductors in co-ordination with competent authorities
- vi. Instruct all Junior Engineers (JEs)/Sub-Division Officers (SDOs) to monitor and record peak load status of the Distribution Transformers (DTs) (250KVA & both), so as to avoid burning of DTs due to over loading and consequent power outages there to

7. Regional Transport Officer (RTO)

- i. Taking initiatives on creating awareness among drivers and helpers of vehicles on Heat Wave
- Encourage the Bus/Truck owner's association of the district and the local NGOs to involve themselves in public awareness campaign on Heat Wave
- iii. Ensuring functioning of Control room at RTO office round the clock during Heat Wave period
- iv. Issue instructions for restriction of Bus plying times during peak hours and rescheduling of timing of the public transport as decided by SRC/ C&T (Transport) department
- v. Enforce and monitor provision of safe drinking water, ice packs, ORS packets in buses and cool resting places at bus stops

- vi. Facilitate setting up of "Jal Seva Kendra's" (water kiosk) at bus stops and bus stands
- vii. Conducting regular meetings with stakeholders for sorting out issues pertaining to Heat Wave conditions

8. Executive Engineers-Water Resources

- i. Prepare an action plan for storage of water in the reservoirs to meet the water requirement of drinking water supply facilities and irrigation
- ii. Monitoring release of water in canals for public use, to increase the underground water level and to reduce the atmospheric temperature during summer

9. District Mining Officer (DMO)

- i. Issuing directives for heat wave prevention and management in industries and mines
- ii. Give instructions for and facilitate water sprinkling in mines and other areas to settle down the suspended particulate matter (SPM)

10. District Tourism Officer (DTO)

- i. Issue instructions and monitor registration of tourists visiting the district
- ii. Disseminate safety tips (Do's and Don'ts) on Heat Wave at tourist points during summer
- iii. Ensure availability of water and rest sheds at tourist places
- iv. Rescheduling of visit hours at tourist places to avoid heat stress to the visitors

11. District Social Welfare Officer (DSWO)

- i. Use the Village Health Nutrition Day (VHND) for creating awareness and educate young girls and mothers regarding the dangers of Heat Wave, its related health impact and precautionary measures to be taken
- ii. Ensure display of IEC materials at Anganwadi Centres
- iii. Encourage Anganwadi workers to create awareness on Heat Wave with special focus on infants, children below five years, pregnant women, lactating mothers and geriatric population to protect them from dehydration.
- iv. Ensure provision of drinking water and first aid at all the Anganwadi Centres, old age homes and Child Care Institutions (CCIs)
- v. Sufficient ORS to be kept in Anganwadi Centres and with AWWs

12. Divisional Forest Officer (DFO)

- i. Identify water scarce locations in forest and prepare a plan of action for ensuring availability of water for animals and human habitation facing water scarcity inside reserved/protected forest
- ii. Keeping continuous watch in the forest areas to avoid forest fire.
- iii. Issue instruction and ensure arrangements for protection of the zoo animals from heat wave
- iv. Give instructions for conducting village meetings through NGOs prior to the hot weather seasons for making the villages aware for not setting forest fire
- v. Ensure proper afforestation (greenery) in public places

13. Project Administrator, Integrated Tribal Development Agencies (PA, ITDA)

- i. Generate awareness through IEC activities on Heat Wave prevention and management in tribal schools
- ii. Ensure availability of safe drinking water, ORS packets, Ice packs and other required first aid materials in tribal schools
- iii. Monitor and enforce school and examination timing as directed by SRC/SC&ST Department
- iv. Encourage concerned authorities/schools for albedo paintings on roofs of schools and hostel buildings

14. Chief District Veterinary Officer (CDVO)

- i. Issue advisory on animal care during heat wave by making provisions for drinking water for animals and birds with timely replacement at sheds
- ii. Generate awareness among animal owners for feeding the animals in early morning or during evening hours to avoid heat stress
- iii. Issue advisory for farmers for not leaving their animals outside the shed during peak hours of heat
- iv. Encourage the owners of livestock and poultry farms to plant bushy trees near the sheds
- v. Advisory to be issued for mixing electrolytes in drinking water of animals and birds to avoid dehydration
- vi. Issue instructions to the concerned authorities not to vaccinate or deworm the animals and birds during heat hours of the day to avoid any extra stress
- vii. Issue advisory to the farmers for restraining the animals from hard work in open areas during heat hour of the day

4.4 Awareness and IEC activities

Preparedness is the best mechanism which can help people to tackle the heat wave situation. People may overcome its related illness if proper awareness and Information, Education & Communication activities undertaken. CDM&PHO will create awareness among the ASHA through meetings, Anganwadi Workers will educate the pregnant and lactating mothers. CDVO will also create awareness for proper livestock care among livestock keepers through proper IEC activities like distribution of leaflets & posters. The knowledge on heat related illness is much essential to meet zero casualty.

Heat Related Illness	Clinical Presentation	Treatment
Heat edema	 Mild welling of feet, ankle and hands Appears in few days of exposure to hot environment Does not progress to pre tibial region 	 Usually resolves spontaneously within days to 6 weeks Elevate leg Compressive stocking
Prickly Heat	 Pruritic, maculopapular, erythematous rash normally over covered areas of body Itchiness Prolonged or repeated heat exposure may lead to chronic dermatitis 	 Antihistamine Wear clean, light, loose fitting clothing Avoid sweat generating situations Chlorhexidine in a light cream or lotion base Calamine lotion
Hea Cramps	 Painful, involuntary, spasmodic contractions of skeletal muscle (calves, thighs and shoulder) Occur in individuals sweating profusely and only drinking water or hypotonic solutions Limited duration Limited to certain muscle group 	 Fluid and salt replacement (IV or oral) Rest in cool environment
Heat Tetany	 Hyperventilation Extremity/s and circum oral paresthesia Carpopedal spasm 	 Calm the patient to reduce respiratory rate Remove from hot environment
Heat Syncope	Postural hypotensionCommonly in non-acclimatized elderly	Rule out other causes of syncopeRemoval from hot environmentRest and IV drip
Heat Exhaustion	 Headache, Nausea, Vomiting Malaise, Dizziness Muscle cramps Temperature < 40°C or normal May progress to heatstroke if fails to improve with treatment No CNS involvement 	 Remove the patient from heat stress area Volume replacement If there is no response to treatment in 30 minutes, then aggressively cool the patient to core temperature of 39°C

Spectrum of Heat Related Illness

Heat Stroke	 Core body temperature >40°C Signs of CNS dysfunction, 	• Remove the patient from heat stress area
	(Confusion, delirium, ataxia,	Volume replacement
	seizures, coma)Other late findings: anhidrosis,	• If there is no response to treatment in 30 minutes, the
	 Other fate findings: anindrosis, coagulopathy, multiple organ failure 	aggressively cool the patient
		to core temperature of 39°C (further details later in
		document)

Heat Related Illnesses: Clinical Manifestation

Clinical Entity	Cardinal Symptoms	Cardinal / Important Signs	Pertinent Negative findings
Heat rash/	Itchy Rash with Small Red	Diffused Red Colour	Not Focally
Prickly heat/ Miliaria	BUMPS at pores in the skin. Seen in setting of heat exposure, bumps can sometimes be filled with clear or white fluid	Skin or Vesicular Rash , itching of the skin without visible eruption	Distributed like a contact dermatitis
Heat Cramps	Painful Spasms of large and frequently used muscle groups	Uncomfortable appearance, may have Difficulty in Fully Extending Affected Limbs/Joints	No contaminated wounds/tetanus exposure, no seizure activity
Heat Exhaustion	Feeling overheated, lightheadedness, Exhausted and Weak , unsteady, feeling of Vomiting , 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 difficulty in swallowing food or speech; no drug/ overdose history
Heat Syncope	Feeling hot and weak; lightheadedness followed by a 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 difficulties in swallowing or speech
Heat Stroke	Severe overheating, profound weakness, Disorientation, Not Fully Alert, Convulsion, Or Other Altered Mental Status	Flushed, Dry Skin (notalways), Core Temp ≥40°C OR 104°F; altered mental status with disorientation, incoherent behaviour, Coma , Convulsion , tachycardia +/-hypotension	No coincidental signs and symptoms of infection; no focal weakness; no difficulties in swallowing or speech, no drug/overdose history

4.5 Heat Wave DOs and DON'Ts

DOs

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, you can take the following measures:

- Avoid going out in the sun, especially between 12.00 noon and 3.00 p.m.
- 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.
- Avoid strenuous activities when the outside temperature is high. Avoid working
- outside between 12 noon and 3 p.m.
- While travelling, carry water with you.
- Avoid alcohol, tea, coffee and carbonated soft drinks, which dehydrate the body.
- Avoid high-protein food and do not eat stale food.
- If you work outside, use a hat or an umbrella and also use a damp cloth on your head, neck, face and limbs
- Do not leave children or pets in parked vehicles
- If you feel faint or ill, see a doctor immediately.
- Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. which helps to re-hydrate the body.
- 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.

Tips for Treatment of a Person Affected by a Sunstroke:

- Lay the person in a cool place, under a shade. Wipe her/him with a wet cloth/wash the body frequently. Pour normal temperature water on the head. The main thing is to bring down the body temperature.
- Give the person ORS to drink or lemon sarbat/torani or whatever is useful to rehydrate the body.
- Take the person immediately to the nearest health center. The patient needs immediate hospitalization, as heat strokes could be fatal.

Acclimatization

People at risk are those who have come from a cooler climate to a hot climate. You may have such a person(s) visiting your family during the Heat Wave season. They should not move about in open field for a period of one week till the body is acclimatized to heat and should drink plenty of water. Acclimatization is achieved by gradual exposure to the hot environment during a Heat Wave.

Must for All

- Listen to Radio; watch TV; read Newspaper and other sources for local weather news/ heat advisories.
- Drink sufficient water even if not thirsty.
- Use ORS (Oral Rehydration Solution), homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated.
- Wear lightweight, light-coloured, loose, cotton clothes.
- Cover your head: Use a cloth, hat or umbrella and use protective goggles.
- Avoid caffeine, alcohol or sugared soda because they can dehydrate your

Employers and Workers

- Provide cool drinking water at the 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.

Other Precautions

- Stay indoors as much as possible.
- Keep your home cool, use curtains, shutters or sunshade and open windows at night.
- Try to remain on lower floors.
- Use fans, damp clothing and take bath in cold water frequently.
- If you feel faint or ill, see a doctor immediately.
- Keep animals in shade and give them plenty of water to drink.
- Carry water with you.

DON'Ts

- Avoid going out in the sun, especially between 11.00 noon and 3.00 p.m.
- Avoid strenuous activities when outside in the afternoon.
- Do not go out barefoot.
- Avoid cooking during peak hours. Open doors and windows to ventilate cooking area adequately.
- Avoid alcohol, tea, coffee and carbonated soft drinks which dehydrate the body.
- Avoid high-protein food and do not eat stale food.
- Do not leave children, pets or anybody in parked vehicles as they may get affected by heat.
- Don't drink cold drinks with ice as they can cause stomach cramping.

Chapter-5 ANNEXURES

Annexure-I

Important	Contact	Numbers
Important.	Contact	Tumbers

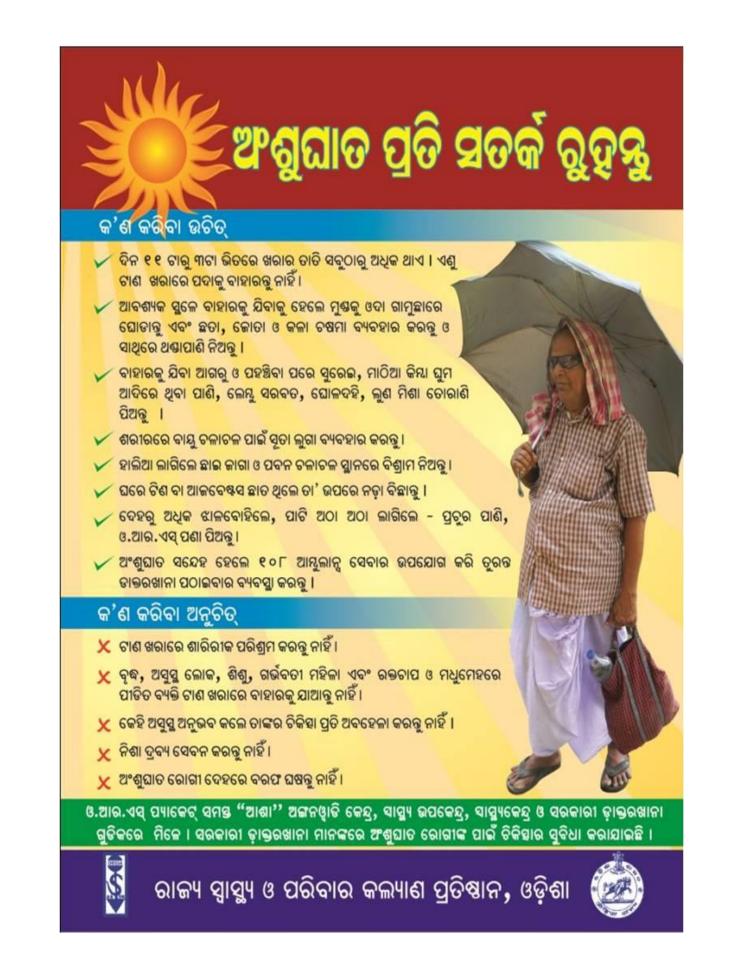
		Importa	int Contac	t Numbers	
Sl. No.	Name of the Officers	Designation	Office No.	Mobile No	Email. Id
1	Ms. Anya Das, IAS	Collector	06654- 220201 (o) 06654- 220353(R)	7077010311	dm-sonepur@nic.in collres.snp@gmail.co m
2	Sri Yashpratap Shrimal	SP	06654- 220349	9438916580	spsnp.orpol@nic.in
3	Sri Rajendra Majhi	ADM	06654- 220090	8117414637	admsubarnapur@gmai l.com
	Ms Anjalina Pradhan	ADM		9437393209	
4	Sri Aswini Ku Meher	CDO-cum- EO, Zilla Parishad	06654- 220366	9437420164 9348505865	Ori-dsonepur@nic.in
5	Miss Subhashree Rath	Deputy Collector, Emergency	06654- 291374	8249800031	emgcoll.subarnapur@ gmail.com
6	Biswanath Nayak	District Project Officer	06654- 291374	8456040302 8763010679	sddma.subarnapur@g mail.com
7	Dr Viswa Ranjan Pati	CDM&PHO	06654- 220209	9439987555	cdmosonepur@nic.in
8	Sri Soumya Ranjan Swain	BDO, Sonepur	06654- 220223	8093613741 8280405340	ori-bsonepur@nic.in
9	Sri Anil Kumar Kullu	BDO, Tarbha	06654- 286036	8456878263	ori-tarava@nic.in
10	Ms. Priyadarshini Mirdha	BDO, Birmaharajp ur	06651- 254236	9776016761	ori- birmaharajpur@nic.in
11	Sri Bipin Bihari Deep	BDO, Dunguripali	06653- 270223	9078563058	ori-dunguripali@nic.in
12	Sri Pramod Chandra Meher	BDO, Binka	06654- 283024	9437541254	ori-binika@nic.in
13	Ms. Karishma Besra	BDO, Ullunda	06651- 243501	9777068336 8280405342	ori-ulunda@nic.in
14	Sri Manoranjan Panda	Executive Officer, Sonepur MPL	06654- 220475	9938720555	sonepurm.hud@nic.in
15	Sri Satya Narayan Padhan	EO Binka NAC	06654- 283270	9178854689	nacbinka@gmail.com
16	Sri Laxmi Kanta Mallik	EO Tarbha NAC	06654- 286060	6370129099	nactarbha@gmail.com
17	Sri Jajati Keshari Padhan	Municipal Engineer, Sonepur MPL	06654- 220475	9437223822	

18	Sri Deepak	Municipal		7077610066				
10	Gartia	Engineer,		/0//010000				
	Oartia	Binka NAC						
19	Sri Dushasan	Municipal	06654-	9437529100	dushasan.pinak@gmai			
17	Sahu	Engineer,	286060	7978371409	l.com			
	Sulla	Tarbha NAC	200000	///05/110/				
20	Sri Tapan	SE, RWSS	06654-	9437451674	dwsm_snpr@nic.in			
	Padhan	, , , , , , , , , , , , , , , , , , , ,	220259		I			
21	Sri A. Kumar	AE, PH	06654-	9438253015	aephsonepur@gmail.c			
	Murty	Sonepur	220298		om			
22	Sri Ashok ku	E.E,		9437061869	eesonepur@tpwesterno			
	Mishra	TPWODL			disha.com			
23	Dr Umesh	CDVO	06654-	9437628437	cdvosonepur@gmail.c			
	Chandra Behera		220225		om			
24	Sri Madanlal	DFO	06654-	9437039132	dfosonepurdiv@gmail			
	Sharma		220501		.com			
25	Sri Bibhuti	CDAO I/c	06654-		ddason.dag@nic.in			
	Bhushan Mishra		220228	9937981009				
26	Sri Laxman	DEO		9439394820	deosonepur29@gmail.			
	Bhoi				com			
27	Sri Prasanna	ADF,	06654-	7978945590	adfsonepur@gmail.com			
	Patnaik	Fishery	220094					
28	Sri Dileswar	DLO	06654-	7681872900	dlosubarnapur@gmail.c			
	Khaka		220909		om			
29	Sri	DWO	06654-	9438236001	dwosonepur@gmail.c			
	Achyutananda		220372		om			
	Singh							
30	Smt. Anupama	DSWO		9937219899	dswosonepur@nic.in			
	Panda							
31	Gobinda	DSSO		9437223574	dsso-sonepur@gov.in			
	Ballabha							
22	Sadangi			0020247(70	diaraara10@araail.aara			
32	Sri Aswini	DI& PRO		9938347678	diprosnp19@gmail.com			
22	Bhoi Sri Alvahava	DTO	06654	6270026719	rta cananur@vahaa ca			
33	Sri Akshaya	RTO	06654-	6370936718	rto_sonepur@yahoo.co m			
34	Ku Jena	Tahasildar,	220555 06654-	8763968082	tahasildarsonepur@gm			
54	Ms Soumya Roopa Rath	Sonepur	220230	8703908082	ail.com			
35	Ms. Poonam	Tahasildar,	06651-	8144966763	tahasildarbmpur@gmail			
55	Mahapatra	Birmaharajp	254214	8144900703	.com			
	Manapatra	ur	234214					
36	Sri Sitaram	Tahasildar	06654-		binkatahasil@gmail.co			
50	Bhoi	Binka	283040	9938668935	m			
37		Tahasildar,	06653-	9938420638	tdrrmp@gmail.com			
	Sri Bimal Patra	Rampur	276036	220120000				
38	Sri Tula	Tahasildar,	06654-	9439760722	tarbhatahasil@gmail.co			
	Muduli	Tarbha	286244		m			
39	Sri Prasant Ku	Tahasildar,	06651-	9654658969	tahasil.ullunda@gmail.c			
	Maharana	Ullunda	243526	6370840960	om			
40	Sri Dhanajaya	Asst. Fire	06654-	9337982213	asst.fireofficersonepur			
	Mallick	Officer,	220222 &	9438061659	@gmail.com			
		Sonepur	221333					
Page 29 of <i>1</i> 9								

41	Sri Kabi Seth	S.O, Ullunda	06651- 243538	9937164210 9937010959	
42	Sri Paules Kujur	S.O, Dunguripali	82803085 03	9439037024	
43	Sri Bharatlal Ekka	S.O, Birmaharajp ur	06651- 254203	8249901932	
44	Sri Raghu Bagh	S.O, Rampur	06653- 276046	9439427638 8249353371	
45	Sri Anil Mishra	S.O, Tarbha	72055527 71	8280166479	
46	Sri Giridhari Bhosagar	S.O, Binka		9178690964	
47	Sri Ananga Negi	CEO RARE, Sonepur		9937618884	raresonepur@hotmail. com
48	Sri Laba Ku Meher	Sec. JAWARD Birmaharajpur		9938789272	jawardlkm@gmail.co m
49	Sri Somanath Mishra	Pre. Binka Sports Club		8249862250 9937219060	binkasportsclub@gma il.com
50	Sri Pramod Padhan	YMS, Ullunda		8249034350 8018303522	yuvamahasanghaullun da@gmail.com
51	Sri Bhabani Sankar Panda	PRAYAS Tarbha		9437933002	prayassonepur@gmail .com

IEC Materials







ଓଡ଼ିଶା ରାଜ୍ୟ ନିପର୍ଯ୍ୟଣ ପ୍ରଶମନ କର୍ଷାପଥଙ୍କ କରଫକୁ କନହିତରେ ପ୍ରକାଶିତ

Information booklet published by OSDMA for Heat Wave situation during summer

ଗ୍ରୀଷ୍ମ ପ୍ରବାହ (Heat Wave)

ଗ୍ରୀଷ୍ମ ପ୍ରବାହ କଂଶ ?

ଯଦି କୌଣସି ସ୍ଥାନର ତାପମାତ୍ରା ୪୦° ସେଲ୍ସିଅସ ପାଖାପାଖି ଥାଏ ଏବଂ ଏହା ସେହି ସ୍ଥାନର ସାଧାରଣ ତାପମାତ୍ରା ଠାରୁ ୫°–୬° ସେଲ୍ସିୟସ ବୃଦ୍ଧି ହୋଇଥାଏ, ତାହାକୁ ଗ୍ରୀଷ୍ମ ପ୍ରବାହ ଓ ୭° ସେଲ୍ସିୟସରୁ ଅଧିକ ବୃଦ୍ଧି ହୋଇଥିଲେ, ପ୍ରବଳ ଗ୍ରୀଷ୍ମପ୍ରବାହ କୁହାଯାଏ ।

ଯଦି କୌଣସି ସ୍ଥାନର ସର୍ବୋଚ୍ଚ ତାପମାତ୍ରା ୪୦° ସେଲ୍ସିୟସରୁ ଉର୍ଦ୍ଧ ଥାଏ ଏବଂ ଏହା ସାଧାରଣ ତାପମାତ୍ରା ଠାରୁ ୪–୫° ସେଲ୍ସିୟସ ବୃଦ୍ଧି ପାଇଥାଏ ତେବେ ତାହାକୁ ଗ୍ରୀଷ୍ମ ପ୍ରବାହ ଓ ୬° ସେଲ୍ସିୟସରୁ ଉର୍ଦ୍ଧ୍ୱ ବୃଦ୍ଧିକୁ ପ୍ରବଳ ଗ୍ରୀଷ୍ମପ୍ରବାହ କୁହାଯାଏ ।

ଯଦି କୌଣସି ସ୍ଥାନର ତାପମାତ୍ରା ୪୫° ସେଲ୍ସିୟସ ବା ତଦୁର୍ଦ୍ଧ ହୁଏ, ତେବେ ସେ ସ୍ଥାନରେ ସାଧାରଣ ତାପମାତ୍ରା ଯାହା ହେଲେବି ଏହାକୁ ଗ୍ରୀଷ୍ମପ୍ରବାହ କୁହାଯାଏ ।

ବେଳେବେଳେ ଅତ୍ୟଧିକ ଗ୍ରୀଷ୍ମପ୍ରବାହ ହେତୁ ମଶିଷ ମୃତ୍ୟୁମୁଖରେ ପଡିଥାଏ । ୧୯୯୮ ମସିହା ଏପ୍ରିଲ୍ରୁ ଜୁନ୍ ମାସ ମଧ୍ୟରେ ଗ୍ରୀଷ୍ମପ୍ରବାହ ହେତୁ ଓଡ଼ିଶାରେ ୨୦୪୨ ଜଣଙ୍କର ମୃତ୍ୟୁ ଘଟିଥିଲା । ଏହାକୁ ଅଂଶୁଘାତ ଜନିତ ମୃତ୍ୟୁ ବୋଲି କୁହାଯାଏ ।

ସୁରକ୍ଷା ଉପାୟ –

ଗ୍ରୀଷ୍ମ ପ୍ରବାହ ଓ ଅଂଶୁଘାତର ପ୍ରଭାବ କମ୍ କରିବା ପାଇଁ ନିମ୍ନଲିଖିତ ସୁରକ୍ଷା ବ୍ୟବସ୍ଥା ଗ୍ରହଣ କରିବା ଉଚିତ ।

9



- ୧. ଟାଣ ଖରାରେ ବାହାରକୁ ବାହାରହୁ ନାହିଁ । ହାଲୁକା, ଫିକା, ଢ଼ିଲା ସୂତା ଲୁଗା ବ୍ୟବହାର କରହୁ । ଘରେ ପରଦା ଟାଣହୁ । ରାତିରେ ଝରକା ଖୋଲା ରଖହୁ, ଫଳରେ ଘର ଥଣ୍ଡା ରହିବ । ଯେତେଥର ସୟବ ଥଣ୍ଡା ପାଣିରେ ଗାଧାହୁ ।
- ୨. ଶୋଷ ନଥିଲେ ମଧ୍ୟ ପ୍ରଚୁର ପାଣି ପିଅନ୍ତୁ । ଓ.ଆର୍.ଏସ୍. ପାଭତର କିୟା ଘରେ ଭପଲଞ୍ଚ ପାନୀୟ ଯଥା : ଲସି, ଘୋଳ ଦହି, ତୋରାଣି, ଲେୟୁ ପାଣି, ଦୁଧ ଇତ୍ୟାଦି ପ୍ରଚୁର ପରିମାଣରେ ପିଅନ୍ତୁ । ଗରିଷ ଖାଦ୍ୟ ଖାଆନ୍ତୁ ନାହିଁ ।
- ୩. ଚା, କଫି, ମାଦକଦ୍ରବ୍ୟ ଓ କାର୍ବନଯୁକ୍ତ ଥଶ୍ଚା ପାନୀୟ ବ୍ୟବହାର କରନ୍ତୁ ନାହିଁ ।
- ୪. ସଦି ବାହାରକୁ ଯିବାକୁ ପଡେ, ନିଜକୁ ରକ୍ଷା କରିବା ଭଳି ଉପକରଣ ଯଥା : କଳା ଚଷମା, ଜୋଡା ବା ତପଲ ଏବଂ ଧଳାଛତା ବା ଟୋପି ବ୍ୟବହାର କରନ୍ତୁ । ସାଙ୍କରେ ପାଣି ନେବାକୁ ଭୁଲନ୍ତୁ ନାହିଁ ।
- ଭୀଷଣ ଖରାରେ ବିଶେଷକରି ଦିନ ୧୨ଟା ଠାରୁ ୩ଟା ପର୍ଯ୍ୟନ୍ତ କଷ୍ଟକର ଶାରୀରିକ ପରିଶ୍ରମ କରନ୍ତୁ ନାହିଁ ।

- ୬. ବାହାରେ କାମ କରୁଥିଲେ, ଛତା ବା ଟୋପି ବ୍ୟବହାର କରିବା ସହ ଓଦା ଗାମୁଛାରେ ମୁଈ, ବେକଆଦି ଶରୀରର ବିଭିନ୍ନ ଅଂଶକୁ ଘୋଡାଇ ରଖନ୍ତୁ ।
- ୭. ଅସୁୟ ଅନୁଭବ କଲେ ତୁରତ୍ତ ଡାକ୍ତରଙ୍କ ପରାମର୍ଶ ନିଅନୁ ।
- ୮. ବନ୍ଦ ଗାଡ଼ି ଭିତରେ ଛୋଟ ପିଲାଙ୍କୁ ଛାଡି ଆସନ୍ତୁ ନାହିଁ ।
- ୯. ଗୃହପାଳିତ ପଶୁମାନଙ୍କୁ ମଧ୍ୟ ଛାଇରେ ରଖ୍ ପ୍ରଚୁର ପାଶି ପିଇବାକୁ ଦିଅନ୍ତୁ ।

ଅଂଶୁଘାତରେ ପୀଡିତ ବ୍ୟକ୍ତିର ଚିକିସ୍ଥା

- ୧. ପାଡିତ ବ୍ୟକ୍ତିର ଦେହ ଉତ୍ତାପକୁ କମାଇବା ପାଇଁ ଥଶ୍ଚା ଓ ଛାଇ ସ୍ଥାନରେ ଶୁଆଇ ରଖି ପ୍ରଥମେ ଓଦା କନା ବା ଗାମୁଛାରେ ତାଙ୍କୁ ପୋଛି ଦିଅନ୍ତୁ । ଆବଶ୍ୟକ ହେଲେ ମୁଣ୍ତରେ ଥଶ୍ଚା ପାଣି ଢାଳନ୍ତୁ ।
- ଓ.ଆର୍.ଏସ୍. ପାଭଡର ପାଶି, ଚୋରାଶି କିହା ଲେୟୁ, ଦହି ସର୍ବତ ଇତ୍ୟାଦି ପିଆଇ ଦେହର କଳୀୟଅଂଶ ପରିମାଣକୁ ଠିକ୍ ରଖ୍ବାକୁ ଚେଷା କରନ୍ତୁ ।
- ୩. ଅଂଶୁଘାତ ବେଳେବେଳେ ମୃତ୍ୟୁର କାରଶ ହୋଇଥାଏ । ଆଘାତପ୍ରାପ୍ତ ବ୍ୟକ୍ତିକୁ ତୂରତ୍ତ ନିକଟୟ ସ୍ୱାୟ୍ୟକେନ୍ଦ୍ରକୁ ପଠାଇବାର ବନ୍ଦୋବୟ କରନ୍ତୁ ।

ମନେରଖନ୍ତୁ :

ଅଂଶୁଘାତରେ ପାଡ଼ିତ ବ୍ୟକ୍ତିଙ୍କୁ ଏକାବେଳକେ ଅତ୍ୟଧିକ ପାନୀୟ ପିଇବାକୁ ଦିଅନ୍ତୁ ନାହିଁ । ସୁସ୍ତ ହେବା ପର୍ଯ୍ୟନ୍ତ ପ୍ରତି ଅଧ ଘଣ୍ଟାରେ ଅଧା ଗ୍ଲାସ ପାନୀୟ ଦେବା ଉଚିତ ।

9

Departmental circulars

A. Agriculture & Farmers' Empowerment Department

- Popularizing crops needing less water like Maize, Ragi, Pulses etc and short duration varieties of crops.
- Improving Water Use Efficiency by advocating use of Micro Irrigation (Drip, Sprinkler irrigation)
- Popularizing PUSA Hydrogel especially in crops like Mung, Biri to retain the soil moisture by preventing evaporation from soil and releasing water in slow phases based on the need of the crop.
- Promoting adoption of Mulching technique for soil moisture conservation.
- The water holding capacity would be improved by applying coir pith before sowing.
- Irrigate the crops in critical stages of crop growth period.
- Repairing of bunds and closing of holes to stop water loss.
- Timely weeding, inter-cultural operation and application of herbicides.
- Spraying of need-based pesticides during morning or afternoon hours.
- Taking appropriate control measures for incidence of Stem borer in Paddy, Thrips infestation in Pulses, Groundnut and Sunflower.
- Risk Coverage under crop insurance scheme for mid-season adversity, localized calamity & post-harvest loss.
- Creation of awareness to farming community on effects of Heat Waves.
- Provision of Drinking water supply, first-aid facility and temporary shed in the work site would be ensured.
- The labourers would be engaged up to 11 PM and there will be interval from 11 AM to 3 PM
- Morning office for the districts officials would be held from April, as per the decision of Govt.

B. Fisheries & ARD Department

ARD Sector

- At district level as well as Sub-division level, a Control Room for Heat Wave should be opened with adequate staff to attend any eventualities arising due to Heat Wave.
- The livestock holders need to be educated regarding the management practices to be followed while rearing of animals and birds during scorching heat of Summer.
- The scrolling news on Heat Wave needs to be telecast in different TV channels. The publications of advertisements on Heat Wave in different Odia newspapers needs to be made for the awareness of public.
- Leaflets, Pamphlets and hand-outs will be circulated for wide publicity among the farmers and field functionaries.
- Livestock and poultry are prone to heat stress due to herd system of management resulting in Summer diarrhea, dehydration and subsequent shock. Hence, they are to be treated immediately with fluid therapy and essential life-saving drugs.
- There is also a need for supplementary post Heat Wave treatment to the affected

animals and birds for which the veterinary Institutions (VDs & LACs) are to be equipped with sufficient stock of medicines.

- General Public would be advised to keep wide-mouthed water pots outside their houses for animals and birds.
- Temporary shallow water vats will be constructed for stray animals in strategic locations and in cattle markets through PR&DW Department. Accordingly, the detailed list with locations will be given to the respective DRDAS.
- The tube wells and animal vats should be constructed/ repaired in Veterinary Hospitals, Dispensaries and Livestock Aid Centers through PR&DW Department.
- The Mobile Veterinary Units in each block shall be utilized for monitoring the Heat Wave situation and for providing emergency veterinary service care.
- The farmers would be educated regarding the management of heat stress in animals and birds either during village meetings / trainings on Animal Husbandry activities or through different media.
- The successful management of heat stress includes the following:
- In order to treat or provide necessary first-aids to heat affected animals, all the Veterinary Dispensaries/ Livestock Aid Centers need to be properly assessed with regard to availability of cold drinking water, stock of essential medicines and technical personnel.
- All subordinate Staff / Officers are to be instructed to render selfless services to the affected livestock and poultry population in face of possible Heat Wave situations. Steps may be taken to open the field institutions beyond the prefixed schedule in case of necessity to cater the need of farmers.
- The NGO/ CBOs of the district may be requested to extend hands of co-operation to mitigate the sufferings of animals due to heat. Temporary arrangements for drinking water may be made with the help of District Administration, line Departments and voluntary organizations to overcome heat stress of susceptible animals.
- Care of affected animals should be taken immediately.

C. Fisheries Sector

- During the excavation/ renovation of MPY, PMMSY or Departmental farms, labourers should not be engaged from 11 am to 3 pm. The Fishers must not go out during noon other than for exigency works.
- On the work site, temporary shed and drinking water facilities should be ensured by the beneficiaries.
- All field level officers AFO/SFTA/JFTAs should sensitize the Fishers about it.
- When temperature rises, dissolve oxygen decreases in the pond, pH level also decrease and fish start to get sluggish. Water tank level should be minimum 1.0-1.5 mt. depth. The dissolved oxygen levels can be maintained by using aerators.
- Farmers must be sensitized on extreme heat in aquaculture practices through adequate awareness programs.

D. Housing and Urban Development Department

• Regular and adequate drinking water supply should be ensured by the PHEOULB to all the urban areas. For this, water supply pipe lines should be kept in good condition and any leakage or break down should be repaired within 24 hours on war

footing.

- For emergency measures to ensure drinking water supply, water tankers should be deployed in different scarcity pockets to provide drinking water. Additional number of tankers, if required, may be arranged on hiring basis.
- Control Rooms are to be opened as usual and responsible officials should manage and attend to the complaints received on water scarcity.
- The ULBs should start opening more no. of water kiosks- PANIYA JAL BITARAN KENDRA i.e. drinking water distribution centers at strategic places i.e. on road sides, cross roads, public offices, bus stand, railway station, market places etc. keeping in view the sanitation and hygiene of water distribution points. Support of NGOs may be taken for this purpose, if necessary.
- All the Tube Wells/ Hand Pumps must be kept in running condition and spare parts should be kept ready for repairing of Hand Pumps/Tube Wells immediately in case of any complaint.
- Banning of burning of municipal solid waste, garden/tree residual should be ensured.
- To handle the emergency situation arising out of excessive Heat Wave, Health Care centers and hospitals under ULBs should be kept ready.
- Adequate awareness may be created among the urban inhabitants to keep one pot of water in front of households for stray birds and animals. The water must be changed on alternate days for better hygienic purposes.
- City-Afforestation/ Adequate sustainable avenue plantations /plantations on vacant places like educational institutions, parks, official complexes need to be taken up by the Development Authorities/ Regional Improvement Trusts/ Urban Local Bodies.
- Roadside dust of urban areas is a major cause for temperature rise and excessive heat and almost all the urban areas are now suffering from the hazards of dust particles. Necessary precautions must be taken to check and arrest the flying dust.
- All the Environmental Acts/Rules, NGT guidelines concerning improvement of urban area environment must be followed strictly and authorities concerned like Police, Forest, OPCB etc. handling their respective portion of jobs may be requested accordingly.
- All the water bodies in and around urban areas should be renovated, restored and repaired and these should be made free from pollution to make them usable and increase access to general public.
- Urban Local Bodies/Development Authorities/RITs are also required to
- Display Heat Wave alerts and precautionary measures at strategic points.
- Provide shelter and shades in open and high congregation places.
- Open public parks during peak hours to provide cool resting spaces for the public.
- Water supply to slums through tankers if required.
- Public announcements through public address system as per requirement.
- Make provisions for water sprinkling to settle down the suspended particles on roads.
- Implement building code that entail passive cooling practices such as increased reflectivity of building roofs, Green roofs, increased natural ventilation and rain water harvesting. Incentive mechanism (e.g. reduced taxes) can be used to accelerate green infrastructure development.
- Increase access to public parks, water bodies, public libraries for general public and

create small, accessible green spaces by using vacant spaces such as side lots, parking medians, spaces between buildings and roads.

- Promote green energy technology, energy efficient building promotion, restricted use of heat producing equipments and increase use of renewable energy.
- Treated water coming out from the FSTPs and STPs may be reused for sprinkling of water on the road to keep the dust particles settled and the environment cool.

E. Information & Public Relations Department

- All the DIPROS /SDIPROs would be instructed to be vigilant for prompt dissemination of any message alerts at the District /Sub-Division level relating to Heat Wave publicity campaigns etc. They must also be ready for release of any emergency messages and disseminate information through social media updates.
- Round the clock Control Room will be opened and will operate under the supervision of the concerned District Collector/Sub Collector.
- Publicity campaign and stepping up of IEC activities through public announcements, news releases, advertisements in print media, Leaflets and pamphlets, hoardings, radio jingles, TV slots, social media uploads i.e., facebook, twitter, You Tube etc. to sensitize public and create mass awareness in a mission mode is to be done under the direction of the District Administration.
- The Information Officers of Groups of Departments will be in constant touch with the respective departments for quick sharing of information regarding the decision taken at the higher level with the approval of the concerned department.
- Control room at the State level will also be opened and a designated team of officials and staff of 1& PR Department function for the purpose and supervise the smooth functioning and dissemination of updated information relating to Heat Waves.
- Media briefings on updated information as and when necessary, must be shared under the supervision of higher authorities at Sub-Division/District &State level.

F. Industries Department

- Avoid work time between 11 AM to 3 PM for workers, particularly for outdoor activities.
- Special provisions for health facility for heat stroke patients in the hospitals of respective industries
- Provision for safe drinking water, ice pack, ORS water facility to be ensured at the industry/mining site.
- Provisions for water sprinkling to be made to settle down the suspended dust particles.
- Spreading awareness among employees/workers regarding the Heat Wave.

G. Department of Health and Family Welfare

- Capacity building of Health Care Service Providers (Doctor, Nurses, Pharmacist and health workers) on diagnosis and management of heat related illness.
- Maintaining data base and surveillance on heat related morbidity and mortality.
- Provision for Health facility readiness to manage heat affected patients (beds, staff, inventories, ambulance etc.).
- Special attention towards high-risk patients like geriatric/pediatric/pregnant women etc.

- Training of 108 workers and 'Mobile Health Units (MHU)' for management of
- heat related cases
- Display do's and don'ts of Heat Waves on 'Swasthya Kantha' (village health wall),
- Sensitize community on Heat Wave related issues at Kishori Swasthya Mela (adolescent health meet), and Village Health Nutrition Day (VHND) and Routine Immunization (RI) sessions and distribution of IEC materials
- Strengthen the control rooms for providing heat related information
- Establishment of mobile base alert systems for ASHA/ ANM/ health workers for effective and immediate assessment of heat stroke cases.
- Development of a specific reporting form for heat related events including morbidity and mortality.
- Coordinate with private hospitals to collect heat related morbidity and mortality data.
- Provision for power back up during summer.
- Provision for funds for Heat Wave management.
- Provide annual mortality data from their vital statistics division to OSDMA
- For the year 2024, IEC material must be circulated in print and electronic media with effect from 1st March for public awareness and precautionary measures
- These awareness activities should not be confined to the summer season only. They have to be done throughout the year for adoption of good practices and to change the general mindset of the people towards heat.
- Take necessary steps for albedo/white painting of roof tops of all hospitals, Community Health Centers (CHCs), Public Health Centers (PHCs) and patient resting areas.
- Instructions to be issued from Health and Family Welfare Department to all health officials to share a copy of the post-mortem report of Heat Wave as well as other disaster related causalities with the Tehsildars to make the payment of ex-gratia smooth.
- Take necessary steps to prevent diarrhea and other health hazards during summer season
- Daily reporting of cases and deaths to be done through the prescribed format. A daily report should be collected from all health institutions by evening. It should be complied and transmitted to the State health control room by Fax or E-mail by 12 noon of next day. This report must be transmitted by the State Control Room to the Revenue Control Room daily.

H. Labour & E.S.I. Department

- All the executive agencies of different Departments of the state Government All the executive agencies of different Departments of the State Government as well as those of Government of India and private employers would be advised to reschedule working hours so that no work is executed during the peak heat hours from 11.00 AM to 3.30 PM from 1st April, 2024 to 15th June 2024.
- Rescheduling of work in progress would be made as far as is practical, so that the works are done during morning and late afternoon hours without hampering the quantum of production or work done and without reduction of wages. Such arrangements may be made keeping in view the local requirements and weather Page **40** of 49

conditions.

- Where the nature of work is such that, the rescheduling of working hours is not possible or where the work is of emergent nature or connected with maintenance of essential services, the concerned employers, contractors and executants should be asked to ensure all appropriate precautionary measures such as provision of O.R.S. packets and rest sheds for workers at worksite.
- The C.D.M.Os, S.D.M.Os, medical officers of the PHCS / CHCs and dispensaries should be sensitized and kept alert during the Heat Wave conditions. The ESI dispensaries, which are meant to cater to the health needs of workers/ labourers have a special role to play. They should remain alert and ready to treat the patients suffering from heatstroke and other similar problems.
- The Project Directors of all NCLPs should be instructed to reschedule the school timing for all Special Schools run under NCLP in accordance with the timings prescribed by the Government in School & Mass Education Department
- Awareness programmes will be conducted in all industrial units and construction projects etc. to sensitize the labourers and workers on risks, signs and symptoms of heat stress.

I. Panchayati Raj & D.W. Department

- All Gram Panchayats/Panchayat Samities/Zilla Parishads must be instructed to open JalaChhatras/make arrangements for the supply of drinking water in earthen pots at weekly haats, Road crossings, Bus stops and other places of public gathering
- Deployment of Additional Vehicle and manpower for repair/maintenance by
- Block Development Officers.
- Deployment of tanker for the supply of water in areas of water scarcity, and provisions of water kiosks, tube wells, tankers strategic locations by Block Development Officers in coordination with RWSS authorities.
- Restrict the working hours from 11 AM to 3 PM under MGNREGS.
- Supply of drinking water and shade nets at working sites and construction of ponds, artificial lakes for cooling the environment by evaporation.
- 100% checks of tube wells and PWSSs shall be conducted on a priority basis as a part of preventive maintenance by the Nodal Officer of the concerned G.P. with the assistance of the Mobile Team followed by a 10% check by the BDO.
- The routine preventive maintenance shall be done in a mission mode and it should be ensured that the Blocks shall procure adequate spare parts, paints, riser pipes etc. by utilizing the Finance Commission Grants taking into consideration the indents of the Gram Panchayat on the recommendation of JE, RWSS-II.
- Nodal Officer (Extension Officer) of the concerned G.P. must review on the drinking water problem in the area on a daily basis and ensure that repair and maintenance of tube wells and PWSs are taken up on a priority basis. They are personally responsible for the availability of drinking water to people.
- Spare parts are to be procured at the Block level through the Purchase Committee inviting tenders as per norms of RWS&S/ OPWD/Odisha Panchayat Samiti Accounting Procedure Rules on the basis of the indent received from the G.Ps. The Purchase Committee will consist of BDO as Chairman, Assistant Executive Engineer/ Jr. Engineer, RWSS as a member and Accounts Officer as Member

Convener. The spare parts so purchased shall be kept in the Stock of the Block Register and issued to the sites as per requirement and certificate gave by Junior Engineer-II, RWSS.

- A control room is to be made functional at each Block from 8 A.M. to 8 P.M. to register compliant on tube wells and PWSSs and the Complaint Register to be updated daily basis with remarks
- The water scarcity villages as per experience in the last summer shall be identified and preventive measures shall be taken at the time of necessity for the supply of drinking water through tankers/tractors loaded with water tanks etc.
- The water tanks purchased during the last summer by the Block or G.P. shall be numbered and utilized properly during the water scarcity period in such villages with branding "BASUDHA".
- Any other critical issues regarding the supply of drinking water at the G.P. level shall be brought to the notice of the BDO and unresolved issues at the Block level shall be brought to the notice of the Project Director, DRDA during -summer.
- The GPs can take the assistance of Village Water and Sanitation Committee/ Women SHGs for ensuring proper drinking water supply to the habitations and also a collection of user fee from the household to whom the water connection is given.
- The Collector and PD, DRDA shall review weekly progress of preventive maintenance work of tube wells and PWS so that this can be completed in a mission mode.
- Nodal Officers of the PR & DW Department have been allotted to all 30 districts to supervise and monitor the supply of drinking water to the annual preparation of the State. All possible steps will be taken from villages to district level to meet the challenges of the Heat Wave conditions.
- All tube wells and PWC will be checked thoroughly and in case of water depletion rising pipes will be provided and grievances from the call center will be attended to within 48 hrs.
- VAT will be constructed near the tube wells platform for the Drinking purpose of cows.
- Every household should have a water pot in front of their home for birds, dogs and cats and water should be filled in every two days.

J. Rural Works Department

- Departmental State & district level Nodal officers would be identified for the Heat Wave management.
- Orientation programme for all the field staffs by the Nodal Officers would be conducted.
- Building public awareness and increasing community outreach to communicate the risks of Heat Waves and implement practices to prevent heat related death and illness must be done.
- Supply of Cold Water, ORS, emergency medicines & construction of cooling spaces like shades during extreme heat periods must be ensured at work sites by the agency.
- Outdoor work site from 11A.M to 3 P.M. would be restricted.
- Issue instruction for workers to keep their body covered with long sleeved shirts, caps & clothes for protection of ears and necks.

- Instruction management of the construction site (s) to provide transportation facility for shifting labours to health facility centre, in case of an emergency.
- Instruction management of the construction sites to display contact details of nearest health centre.
- Schedule strenuous jobs to cooler times of the day.
- Increase the frequency and length of rest breaks for outdoor activity.

K. School & Mass Education Department

- Student should be advised to wear clean uniform and footwear.
- Schools with electricity shall be advised to ensure functional head fans and schools without electricity shall be advised to ensure availability of hand fans.
- Safe Drinking Water facilities shall be made available at school campuses.
- Adequate ventilation shall be ensured in classrooms.
- Physical Training/ exercise sessions as school periods may be restricted during summer season to avoid any inconvenience.
- Students shall be advised to come to school with umbrellas and water bottles.
- All teachers shall be instructed to sensitize children on Prevention measures in case of occurrence of Heat Wave.
- All schools shall be equipped with First Aid Boxes.
- All the transport services to schools should have cold water, ice & First Aid box.
- Timing of all classes shall be re-fixed/ rescheduled as per the Heat Wave alert (preferably morning time 6.30 AM to 10.30 AM). This process shall be adopted for management of all schools.
- School Examination/ Assessment shall be scheduled in the morning hours.
- All school teachers, SMCs, students and parents should follow guidelines of govt. from time to time.
- Capacity building of teachers, Headmasters, education administration and SMC members should be made on the different precautionary measures
- Local Health Centers may be contacted immediately in case of any health hazard or health emergency.

L. Steel & Mines Department

- The working hours for workers engaged in outdoor activities for carrying out geological investigation have been rescheduled from 6.00 AM to 11.00 AM and from 3.00 PM to 6.00 PM.
- The exploration in-charge of every geological exploration unit has been advised to create temporary rest shades for their workers.
- Provision for sufficient cool drinking water, ORS, lemon water, butter milk will be made available in the exploration units.
- Awareness on Do's and Don'ts including their display will be made at different conspicuous places for workers and employees.
- Ambulances with AC facility have been made available for emergency services at working sites.
- Fire extinguishing equipment would be kept ready for emergency situations at different sites.
- First Aid Kits should be ensured in all working sites.

M. Commerce and Transport (Transport) Department

• Timing of public transport services will be rescheduled so that plying of buses

during peak Heat Wave hours i.e. between 11.00 AM to 3.00 PM is restricted.

- Provisions for safe drinking water ice pack, ORS in buses and provision of cool resting spaces at bus stops.
- Over-crowding of passengers in the public transport vehicles must be avoided.
- Jalachhatras to be opened at bus stands and bus stops for the passengers.
- Temporary Passenger sheds are to be erected near the bus stops with provisions of drinking water.
- Provision of water kiosk on highways.
- Proper checking will have to be made by the enforcement wing of this Department and penalty be imposed against the earning transporters/ operators
- The control rooms at district level should function around the clock during the period of Heat Wave
- The bus/truck associations of the district and the local NGOs should suitably be instructed to involve themselves in public awareness campaigns on Heat Wave.
- Regular meetings must be held to sort out different issues

N. Energy Department

TPSODL

- Supply will not be affected during Summer-2023 except in any emergency situation such as under frequency, tripping of power transformers, feeder faults, planned shutdown for execution of Govt. work with prior announcement etc.
- TPSODL will abide with the guidance issued to it by SLDC from time to time.
- In case of any emergency maintenance work, the same will be done only during
- morning hours when the effect of heat is less.
- In case of power interruption, the same will be intimated to the public through Urja Mitra Scheme and also will be intimated via electronic media such as TV scrolling, twitter and public announcements etc.
- Lift irrigation points that are inoperative will be provided with power supply.
- TPSODL has taken steps for the operation of Control rooms at Division level, Circle level and Corporate level through PSCC (Power System Control Centre).
- District Headquarter Hospitals are being provided with uninterrupted power supply through dedicated feeders.
- All PHD and RD water supply points will be ensured steady power supply.
- Early replacement of failed PTRs/DTRs will be taken up. Outage, if required for rectification of faults or any urgent reason, will be done for the minimum possible time.
- All the contractors/ agencies working under TPSODL have been geared up to meet any exigency such as repair, maintenance work etc.
- Preventive maintenance works have been planned during March to April to rectify jumpers, tilted poles, low ground sagging and tree branch cutting with respect to all 33KV and 11KV feeders.

TPWODL

- Survey and maintenance of feeders, Sub-stations, Distribution Sub-station will be completed by 31st March 2024.
- Adequate manpower and vehicles are available in TPWODL for preventive and break down maintenance of Sub-stations and feeders.

- Adequate consumables and petty materials have been procured and kept ready in central/divisional/sectional stores for preventive and breakdown maintenance.
- TPWODL has set up Power System Control Center (PSCC) for round the clock monitoring, PSCC Officials will co-ordinate with field officials for early identification and restoration of outages.
- All the 33/11 KV PSS within the jurisdiction of TPWODL has been supplied with android mobile phones and there are 9 Nos Satellites Phones for emergency contact during the exigency such as Kala Baisakhi and Cyclones.
- All the Circle Heads in-charge of Distribution Circles are empowered to release transformers in consultation with Chief Operation Services for early replacement of burnt transformers.
- All the TPWODL employees as well as BA employees with requisite maintenance gangs shall remain alert during the summer period.
- The Circle Heads/Divisional Managers will record/monitor the peak load of primary sub stations/feeders under their control daily so as to avoid breakdown due to failure of power transformers/overloading and consequent snapping of conductors in co-ordination with the Sub Transmission System.

TPWODL

- Sub-Transmission System Team shall monitor the load balancing of power Sub-Transmission System Team shall monitor the load balancing of power transformers and functioning of all the VCBs/ Relays to avoid any breakdowns.
- All the Divisional Managers have been directed to keep proper coordination with Grid Sub-stations under their control for proper load and outage management and the breakdown shall be attended at the quickest possible time for restoration of power supply and to minimize the duration of power interruption so as to avoid public confrontation.
- Prior information will be given to Customer Care Center (Ph: 18003456798) in case of shutdown and breakdown outages to keep consumers posted regarding ongoing outages.
- Preventive and breakdown outages information will be updated in Urja Mitra and TPWODL website for timely information to consumers.
- The Circle Heads of the Distribution Circle shall report to Chief Operation Services on power system status of their Circle.
- TPWODL will abide by the guidance issued to it by SLDC from time to time.
- In case of emergency maintenance work, the same will be done only during morning hour when the effect of the heat is less.
- TPWODL have taken steps for operation of Control rooms at Division level, Circle level and corporate level.
- District Head Quarter Hospitals are being provided with uninterrupted power supply through dedicated feeders. (N-1 Arrangements)
- All PHD and RD water supply points will be ensured steady power supply Early replacement of failed PTRs/DTRs will be taken up.

O. Forest, Environment & CC Department

- Ensure proper afforestation (greenery) under public place.
- Continuous watch in the forest area to avoid forest fires.

- Directive for making water available for animals in reserved/ protected forests and make necessary provisions, where necessary.
- Issue directives to the Zoo Authorities for special arrangements for the animals in zoo to protect them from the effect of Heat Wave.
- Directive for provision of water to human habitations facing water scarcity inside reserved forests
- Provision of funds for Heat Wave management.
- Prior to the hot weather season, village level meetings should be conducted through NGOs who can make them aware regarding extinguish or not setting forest fire.
- Monitoring, prevention and management of Forest Fire should be made during summer season.

P. Department of Tourism

- Mapping of high-risk zones (e.g. Dhenkanal, Angul, Sundergarh, Cuttack, Khordha, Ganjam) under the guidance of Indian Meteorological Dept. (IMD) conducting workshops for the District Tourist Office staff covering the high-risk zones, including the use of SATARK platform for enabling greater responsiveness.
- Advisories on Do's & Don'ts and special provisions will be compiled for and disseminated to: Tourists Digitally on Website, social media and physically at all Tourist Centers, Hotels, other hospitality accommodations, eateries and their employees, etc.
- Dept of Tourism in coordination with Health Department and district administration will review the responsiveness of links between tourist centers and nearest clinical care establishments (hospitals, clinics, etc.)
- Dept of Tourism & OTDC will encourage employees to exercise adequate precaution and positive habits by provisioning caps and water bottles
- Dept. of Tourism will work with concerned authorities and departments to alter employee shift schedules to reduce heat exposure risks.
- Ensure proper registration of tourists who are visiting the State.
- Ensure availability of heat relief measures at tourist places
- Display of Heat Wave precautionary measures for tourists during summer at tourist points and related information in website of department of tourism.
- Ensure the availability of drinking water and cool resting sheds.
- Restrict the timing of the visit of tourist places during peak summer days.

Q. Water Resources

Short Term Measures:

- Sufficient storage of water at reservoir to meet the Heat Wave.
- Release and storage of water in all the canals during summer.
- Release of canal water to the affected areas for public use, to increase the underground water level, reduce the atmospheric temperature and also improve the green areas.
- Canal water to be fed to nearby ponds, tanks, low lands for secondary storage of water during summer.
- The working hours for daily labourers to be re-scheduled i.e. from 6 a.m. to 11 a.m. and 3.30 pm to 6 pm. Orders / instruction to be given to make provision of drinking water and rest shade at the work sites.

- Construction of small temporary earthen check dams at Rivers / streams to instantly store surface water for cooling the environment by evaporation.
- Regularly evaluate the availability of water in Reservoirs, rivers, ponds and lakes.
- Promote rotation of canal water supply.
- Create awareness among the community about Heat Wave through Water Users Associations (WUA)/ Pani panchayat.

Long Term Measures:

- Construction of check dams at small streams for in-stream storage and greater recharge.
- Periodically evaluate the availability of water in Reservoirs, rivers, ponds and lakes.
- Conservation of rain & stream water.
- Create awareness among the people on Water conservation and effective use.
- Steps have been initiated for Plantation at road side, Dam site, Office & Colony Campus, Canal & Flood Embankment etc. from 2018.

Long Term Measures:

- Display of Heat Wave precautionary measures for tourists during summer at tourist points and related information in website of department of tourism.
- Ensure the availability of drinking water and cool resting sheds.
- Restrict the timing of the visit of tourist places during peak summer days.

R. SSEPD Department on Heat wave

- Rescheduling the time of pension disbursement i.e from morning 7.30 A.M to 10.30 A.M.
- Ensure availability of drinking water, ORS packets etc. and shed at the site of pension disbursement.
- Ensure precautionary measures for field staff of SSEPD Department i.e, carrying drinking water, ORS packets and umbrella or use cap or while stepping outside on duty.
- Restrict visit of Senior Citizens and PwDs to outside during the peak hours especially from 11.00 A.M to 3.00 P.M during summers.
- Ensure availability of drinking water, ORS packets etc. in the Office of DSSO and other field Offices under SSEPD Department.
- Ensure availability of drinking water, ORS Packets and medicines of emergency nature in the Residential Schools and Old Age Homes under SSEPD Department.
- To keep the mobile number of BSSOs/SSSOs and emergency numbers in the Residential Schools, OAHs for immediate contact in case of any emergency.
- Weekly visit by Field Officers of SSEPD Department to OAHs and Residential Schools under SSEPD Department.

S. ST & SC Development Department

- PA ITDAs and DWOs should ensure adequate and safe drinking water in all these residential schools and hostels.
- All toilets and bathrooms should have piped water supply provisions.
- Sufficient packs of ORS, ice packs and other first aid kits in schools / hostels to manage Heat Wave related illness, should be stacked in the residential schools.
- All HMs, teachers, ANMs, Matrons, CCAs/LCCAs and Students should be riefed

and trained on Heat Wave Management. They shall ensure that all necessary precautions are taken up in these schools and hostels.

- Awareness generation among students should be conducted by teachers through IEC materials, displays and activities. DWOs to plan with prior consultation with CDMO and concerned Health Officers
- Awareness generation among students should be conducted by teachers through IEC materials, displays and activities. DWOs to plan with prior consultation with CDMO and concerned Health Officers.
- If any student boarder has any sign and symptoms of sunstroke, instant first aid shall be provided and he/she should be hospitalized immediately.
- Daily monitoring should be ensured and all DWOs should submit the daily Disease Surveillance Report to Department's Control Room. All PA ITDAs and DWOs shall review the school-wise Heat Wave preparedness with the respective HMs time to time and inform the Department's Control Room in regular basis.

T. Women and Child Development & Mission Shakti Department

- Non-functional tube wells, if any, at AWCs may immediately be repaired by coordinating with concerned BDOs.
- Provision for sufficient safe drinking water may be made in all AWCs and Mini-AWCs. Parents may be advised to ensure that children use umbrellas and carry water bottles on opening of the AWCs.
- Adequate public awareness may be created in the community with special focus on children and pregnant and nursing women to take measures for protection from dehydration.
- IEC materials may be displayed at Anganwadi Centres and ICDS functionaries sensitized to disseminate Heat Wave related information.
- Village Health Sanitation Nutrition Day (VHSND) and Routine Immunization (RI) session platforms may be used to educate the children, adolescent girls, mothers and guardians on Heat Wave related hazards and precautionary measures to mitigate/prevent the same.
- ORS packets may be kept at all AWCs and AWWs sensitized to use them as and when required. AWW/ AWHs to also be suitably sensitized about Heat Wave related hazards &precautionary measures to mitigate/prevent the same.
- Ensure that all Swadhar Homes/ Ujjawala Homes and all CCls have adequate safe drinking water which are suitable to meet the Heat Wave conditions.
- Further, on opening of AWCs throughout the State (likely to be opened shortly), the Pre-School activities in all AWCs and Mini-AWCs may be conducted from 7.30 A.M. to 9.30 A.M.. Hot cooked Meals under Supplementary Nutrition Programme (SNP) may be served at 9.00 A.M. and Home visits may be completed by 10.00 A.M. This schedule may continue till end of the Heat Wave condition. However, these are subjected to specific instruction at the time of opening of AWCs

U. WORKS DEPARTMENT

- Adequate provision of rest shed at work site or near camp office site.
- Sufficient ventilation, windows and fans at rest shed.
- Provision of ORS and portable drinking water should be there at work sites and

camp sites.

- Workers must wear proper summer clothing, protective hats, sun glasses etc.
- Maintaining of work break cycle and no work during prohibited hours.
- During working, the Agencies shall be instructed to ensure following at work sites for occupational health safety measures of construction workers:
- During periods of elevated temperature, employees should wear light-colored,
- Light weight, loose-fitting cotton clothing that allows ventilation of air to the body.
- Protection from the sun by wearing a wide-brimmed hat/ cotton towels in lieu of hat and/ or sunglasses and sunscreen, if available, to prevent glaring heat and solar radiations.
- Provision of portable cool water, ORS and encourage employees to take breaks and hydrate any time they feel necessary.
- Pacing the job to allow more frequent breaks for fluid intake and sufficient recovery time.
- Work breaks must be taken in a shaded area which has sufficient windows and ventilation or an air-conditioned building.
- The contractors will be asked to remain alert to move the- Heat Wave affected persons having HRI symptoms working at site to the nearest PHC/ CHC or Hospital without delay.
- Opening of windows and adding fans to increase air movement in order to provide air cooling and ventilation of heat.
- Shielding radiant heat sources or exhaust at the point of heat generation.
- Providing shaded areas during remote outdoor work (e.g., constructing temporary shelters using tarps) tractors, lawnmowers and other outdoor equipment.