



HEAT WAVE MANAGEMENT & ACTION PLAN-2023-24

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District Disaster Management Authority, Jharsuguda

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ABBREVIATION

| | | |
|-------|---|--|
| ADM | : | Additional District Magistrate |
| AWC | : | Anganwadi Centre |
| BDO | : | Block Development officer |
| BCR | : | Block Control Room |
| CCA | : | Climate Change Adaptation |
| CDMO | : | Chief District Medical Officer |
| CDPO | : | Child Development Project Officer |
| CDVO | : | Chief District Veterinary Officer |
| CMRF | : | Chief Ministers Relief Fund |
| DC | : | District Collector |
| DCR | : | District Control Room |
| DDMA | : | District Disaster Management Authority |
| DDMP | : | District Disaster Management Plan |
| DDM | : | District Disaster Manager |
| DEOC | : | District Emergency Operation Centre |
| DRDA | : | District Rural Development Agency |
| DSWO | : | District Social Welfare Officer |
| DRR | : | Disaster Risk Reduction |
| GoI | : | Government of India |
| GP | : | Gram Panchayat |
| HRVA | : | Hazard Risk and Vulnerability Assessment |
| IAY | : | Indira Aawas Yojana |
| MO | : | Medical Officer |
| NGO | : | Non-granted Organisation |
| OSDMA | : | Odisha State Disaster Management Authority |
| OIC | : | Officer In charge |
| PDS | : | Public Distribution System |
| PHC | : | Primary Health Centre |
| PWD | : | Public Works Department |
| RD | : | Route Distance |
| SP | : | Superintendent of Police |
| VSO | : | Veterinary Stock officer |
| W&CD | : | Women & Child Development |
| UNDP | : | United Nations Development Programme |
| NIDM | : | National Institute of Disaster Management |

FOREWARD

The Heat Action Plan has been prepared as there is continuous increase of heat I the month of March to June over the past several years. Heat wave of Odisha took a toll of 2042 people in 1998. In later years 2005, heat wave casualty was massive and it took causality of 61 people in its grip. Now it is more challenging to address the issue and spread more awareness to mitigate and manage the heat wave and minimize the risk factor. The present Heat wave action plan has been prepared by taking all the stakeholders planned action points to be taken at appropriate time in dealing with the heat wave during the month of April to June to minimize the adverse impacts.

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. Casualties related to Heat Wave were experienced by the state again in 2005 when 236 lives were lost. 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 What is Heat Wave?

Heat wave is a condition of atmospheric temperature that leads to physiological stress, which sometimes can cause deaths as well. The World Meteorological Organization 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. Different countries define heat wave differently in context of their local conditions. In India, as per 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:

a) Based on Departure from Normal

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

b) Based on Actual Maximum Temperature (for plains only)

- 1- Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$
- 2- Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$

To 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. The level of heat discomfort is determined by a combination of meteorological (temp, RH, wind, direct sunshine), social/cultural (clothing, occupation, accommodation) and physiological (health, fitness, age, level of acclimatization) factors. There will be no harm to the human body if the environmental temperature remains at 37° C. Whenever the environmental temperature increases above 37° C, the human body starts gaining heat from the atmosphere. If humidity is high, a person can suffer from heat stress disorders even with the temperature at 37°C or 38°C as high humidity does not permit loss of heat from human body through perspiration.

1.3 DISTRICT SCENARIO-

Impact of Heat Wave on Agricultural Productivity

Apart from, impact on human life, the Heat Wave has also been found to profoundly affect crop production both in terms of quantity and quality. Primarily, crop loss happened due to flower drop and higher mortality in new plantations. Kharif crops are more impacted than Rabi crops owing to variability in rainfall associated with Heat Wave. Since, Kharif crops are sown in May to June and harvested in September to October; any extreme change in temperature would affect the productivity. Within Kharif, particularly rice production is significantly affected with decreased grain yield which is a matter of concern as rice is a staple diet of all Odisha's population.

Impact of Heat Wave on Life and Livelihood

The human thermoregulatory system has limits. Our muscles generate heat, which must be shed to the environment to maintain our core temperature of about 36.70C. Evaporation of sweat helps human bodies to keep cool when it is hot, however, when there is excessive sweating it leads to dehydration with consequent rise in internal body temperature which is fatal. More or less, population might be acclimatized to heat and humidity but there is an upper level of heat tolerance limit. However, acclimatization to heat can only offer limited protection. When temperature soars beyond the tolerance limit, precautionary measures like avoiding the sun and physical exertion, maintaining hydration, and resting in a cool place are suggested.

However, serious challenges arise when extreme heat events linger for prolonged periods, as cessation of activities for weeks is often not an option. Especially, majority of Odisha's individuals are working in unorganized and informal sectors that have to earn their daily livelihood. Thus, on the advent of long spells of Heat Wave they either have to stay indoors and compromise their source of income or run the risk of succumbing to Heat Wave related illness upon continuing to work. This necessitates exploring alternate options for such kind of vulnerable population for income generation to sustain a healthy life. In view of the above, there was a need to revisit and strengthen the existing Heat Wave response plan in order to make it more specific and strategic.

Early Warning and Communications

1.3.1 Forecast and Issuance of Heat Alert or Heat Warning

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 warning, extreme temperatures, and heat alerts for vulnerable cities/rural areas.

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/heatwave.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>). In addition to the above, Climate Forecast System based forecasts maps of daily maximum temperatures and their departures from normal for the next 21 days (issued every Thursday) are also available on IMD website (http://nwp.imd.gov.in/cfs_all.php?param=tmax and http://nwp.imd.gov.in/cfs_all.php?param=tmaxa, respectively).

From 2016, IMD has introduced a system of issuing seasonal temperature outlooks for the next three months. For 2017, the first outlook valid for March to May was issued on 28 February, 2017; and the second one valid for April to June was issued on 02 April, 2017. These are also provided to all concerned Chief Secretaries, Disaster Managers and to the health sector through the India Medical Association (IMA).

1.3.2. Identification of Colour Signals for Heat Alert

IMD currently follows a single system of issuing warnings for the entire country through a colour code system as given below (Figure-4). This system advises on the severity of an expected heat hazard. However, threshold assessments carried out in different parts of the country tells us that there are different cut-off points that determine the warning signals appropriate for a specific state/ region. The States should, therefore, carry out their respective threshold assessments for mortality and provide the information to IMD so that it can provide specific warning alerts to those States.

Colour code, Meaning, Temperature Details and Action Needed

| | | | |
|------------------------------|------------|--|--|
| Green (No action) | Normal Day | Maximum temperatures are near normal | Comfortable temperature. Cautionary action required. |
| Yellow Alert (Be updated) | Heat Alert | Heat wave conditions at district level, likely to persist for 2 days | Moderate temperature. Heat is tolerable for general public but moderate health concern for vulnerable people e.g. infants, elderly, people with chronic diseases. Avoid heat exposure. |

| | | | |
|----------------------------|--------------------------------|--|--|
| Orange Alert (Be prepared) | Severe Heat Alert for the day | (i) Severe heat wave conditions may exist for 2 days. (ii) With varied severity, heat wave is likely to persist for 4 days or more. | High temperature. 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 may 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. |

Under the DM Act 2005, it is mandatory on the part of District Disaster Management Authority (DDMA) to adopt a continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary and expedient for prevention as well as mitigation of disasters. These processes are to be incorporated in the developmental plans of the different departments and preparedness to meet the disaster and relief, rescue and rehabilitation thereafter, so as to minimize the loss to be suffered by the communities and are to be documented so that it is handy and accessible to the general public.

1.4 Aims and Objectives of the Heat Wave action Plan 2023

- i. To identify the areas vulnerable to heat wave in Jharsuguda district.
- ii. To adopt proactive measures at Jharsuguda district level by all the govt. departments to prevent heat wave.
- iii. To define and assign the different tasks and responsibilities to stakeholders during the period of Heat Wave.
- iv. To enhance Heat Wave resilience of the people in the Jharsuguda district by way of capacity building.
- v. Reduce the loss of public and private property, especially critical facilities and infrastructure, through proper planning.
- vi. Manage future development to mitigate the effect of Heat Wave in the Jharsuguda district.
- viii. To develop the standardized mechanism to respond to Heat Wave situation to manage the Heat Wave efficiently.

- x. To prepare a response plan based upon the guidelines issued in the State Heat Wave Action Plan so as to provide prompt relief, rescue and search support during Heat Wave.
- xi. To adopt Heat Wave resilient construction mechanism in the district by way of using Information, Education and Communication for making the community aware of the Heat Wave situation.
- xii. To make the use of media during Heat Wave for proper information dissemination.

The Heat Wave Action Plan for Jharsuguda is the guide for achieving the objective i.e. mitigation, preparedness, response and recovery. This Plan needs to be prepared to respond to Heat Wave affected with sense of urgency in a planned way to minimize human, animal, property and environmental loss.

Chapter 2

DISTRICT PROFILE

Jharsuguda was a Tahasil under the Jharsuguda Sadar Sub-division. It was upgraded to a Sub-division in 1979 and was given the status of a district on 1st April 1994. Mineral rich District, Jharsuguda is one of the most industrially developed District of Odisha. Earlier it was a part of Jharsuguda District. It was created by amalgamation of the erstwhile Jamindars of Rampur, Kolabira, Padampur and Kudabaga. The District is surrounded by Sundargarh District in the North, Jharsuguda District in the East, Bargarh District in the

South and Chattisgarh state in the West. Jharsuguda District is situated at a distance of 515 km from Kolkata, 616 km from Nagpur, 48 km from Jharsuguda and 372 km from state capital Bhubaneswar. The total geographical area of the district is 2114 sq. km and it occupies 1.36% of the state's area. In order of size, Jharsuguda district occupies 29th position among the 30 districts of the state of Odisha.

Jharsuguda district is situated between 21° 02' 37" N to 22° 00' 32" N latitudes and 83° 31' 12" E to 84° 24' 00" E longitudes in the north-western part of the state of Odisha. It is surrounded by Sundargarh district in the north, Jharsuguda district in the east, Bargarh district in the south and Chattisgarh state in the west. According to the Census of 2011, the district had a population of 5,79,505 out of which 2,96,690 were Males and 2,82,815 were Females. In terms of population, the district occupies 27th position among the 30 districts of Odisha.

Administrative Setup: The Collector and District Magistrate is the administrative head of the district. There is only one Sub-division, Jharsuguda, in the district and a Sub-Collector is in-charge of administration of this Sub-division. For convenience of revenue administration the district is divided into 5 Tahasils, namely Lakhanpur, Jharsuguda, Laikera, Kirimira and Kolabira and each Tahasil are kept in charge of a Tahasildar. Similarly, for carrying on developmental activities smoothly, the district is divided into 5 CD Blocks, namely, Lakhanpur, Jharsuguda, Kirimira, Laikera and Kolabira and each CD Block is kept under the administrative control of a Block Development Officer. Under each CD Block there are several Gram Panchayats consisting of a number of villages. The list of CD Blocks with number of Gram Panchayats and villages is given below.

2.1 District at a Glance

| Sl. No | Particulars | No. |
|---------------|--|-----------------|
| 1 | No. of villages | 372 |
| 2 | Total Population | 5,79,505 |
| 3 | No. of Blocks | 5 |
| 4 | No. of Gram panchayat | 78 |
| 5 | No. of Tehsil | 5 |
| 6 | No. of RI circle | 37 |
| 7 | No. of Police Stations | 10 |
| 8 | No. of Fire Stations | 7 |
| 9 | No. of Urban Local Bodies | 3 |
| 10 | No. of UPHC | 4 |
| 11 | No. of PHC | 16 |
| 12 | No. of CHC | 9 |
| 14 | No. of Veterinary hospitals | 5 |
| 20 | No. of pipe Water Supply system | 197 |
| 21 | a) No. of Tube Wells | 7240 |
| 22 | b) No. of tube well Functional/running | 7201 |
| 22 | c) No. of tube well dysfunctional | 39 |

Block Wise set up of Gram Panchayats and Villages

| Sl No. | Name of CD Block | No. of Gram Panchayats | No. of Villages |
|--------|------------------|------------------------|-----------------|
| 1. | Lakahanpur | 33 | 146 |
| 2. | Jharsuguda | 17 | 73 |
| 3. | Kirimira | 08 | 42 |
| 4. | Laikera | 11 | 45 |
| 5. | Kolabira | 09 | 47 |
| TOTAL | | 78 | 353 |

A. **Climate&Rainfall:**TheDistrictofJharsuguda is characterized by a hot dry summer.

The temperature in the month of May is 46 degree at the maximum. The average rainfall of the District is 1500 millimeter. From April to August the wind blows from south and southwest whereas from September onwards wind blows from North West.

B. **Preparedness for Heat Stress Management:**

- Capacity building of Health Care Service Providers (Doctor, Nurses, Pharmacist and health workers) on diagnosis and management 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.).
- Cool hospital initiatives for hospitals (Albedo painting).
- Special attention towards high-risk patients like geriatric/ pediatric/pregnant women etc.
- Timely submission of autopsy report in case alleged/death due to Sunstroke.
- Training of 108 Ambulance staff 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 system through the ASHA/ ANM/ health workers for effective and immediate assessment of heat stroke cases.
 - Development of specific reporting form for heat related events including morbidity and mortality.
 - Regular conducting of GKS meeting in each GKS with proper follow-up and monitoring and having an agenda on Heat wave Management apart from other agenda of the meeting. The said meeting must be attended by concerned health staff.
 - Provision of water kiosk (Jal Chhatra) at strategic point of GKS out of the GKS/GP untied fund.
 - Coordinate with private hospitals to collect heat related morbidity and mortality data.
 - Provision of power back up during summer at institution level.
 - IEC/BCC activities through Ward Kalyana Samiti(WKS), MahilaArorgya Samiti(MAS) ,urban ASHA under NUHM in Jharsuguda Municipality.
 - Regular conducting of meeting of the WKS and MAS in each ward of the Jharsuguda Municipality having an agenda on Heat wave Management apart from other agenda. The said meeting must be attended by concerned health staff without fail.
 - Provision of water kiosk (Jal Chhatra) at strategic point in each ward and untied fund of MAS may be utilized for the said under the supervision of WKS.
 - Awareness on Heat Wave to students of AWC, Schools(Day/Residential) through RBSK,MHT staff as per their micro plan.
-
- ADPHCO and PHEO will be responsible for awareness and IEC/BCC activities district and block level respectively.
 - Timely launching of AnshughataRatha and awareness generation in the district. The said Action plan to be provided to District Emergency section for appraisal of the Collector &DM.
 - Provision of funds for Heat Wave management.

HEALTH FACILITY PREPAREDNESS ON HEAT WAVE, 2023, JHARSUGUDA

| SI No | Name Of The Institution (CHCs/PHCs/UPHCs) | Position Of Heat related illness drugs | | | | | Earmarked Bed Position for Heat Stroke patients | | | No. of | | | | Ambulance Available (Yes/No) | Control Room Contact Number | Remarks | | |
|--------------|--|--|--------------|--------------|--------------|------------------------|--|-------------------|-----------|-----------------|--------------|----------|---|------------------------------------|-----------------------------------|------------|----------------------|-------|
| | | ORS | NS | RL | IV set | Any Other | No. AC Bed | No. Cooler Bed | ILR | Deep Freezer | Refrigerator | Ice Pack | | | | | | |
| 1 | OSMCL Store, Jharsuguda | 958000 | 12624 | 24160 | 6000 | 12605* 580# | | | | | | | | | | | * DNS #5D | |
| 2 | DHH, JHARSUGUDA | 216000 | 3000 | 5160 | 3500 | 1120 * | 2 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 150 | NO | 9777092139 | * DNS |
| 3 | UPHC PANCHAPADA | 3000 | 30 | 40 | 50 | | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 100 | NO | 9437348491 | |
| 4 | UPHC, JHARSUGUDA | 15120 | 40 | 8 | 30 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | NO | 6645253122 | |
| 5 | CHC BRAJRAINAGAR | 257040 | 108 | 78 | 550 | | 1 | 1 | 0 | 2 | 2 | 2 | 2 | 2 | 250 | NO | 9439987027 | |
| 6 | CHC RAIPUR | 1640 | 20 | 20 | 120 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | NO | 9439999317 | |
| 7 | PHC LOISING | 1440 | 46 | 55 | 50 | | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | NO | 9439986981 | |
| 8 | PHC SRIPURA | 4795 | 58 | 63 | 91 | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 100 | NO | 9439987029 | |
| 9 | PHC TALPATIA | 14380 | 20 | 50 | 120 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | NO | 7008578344 | |
| 10 | UPHC KUKRIKANI | 4320 | 55 | 146 | 200 | | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 100 | NO | | |
| 11 | CHC LAKHANPUR | 29200 | 768 | 1010 | 500 | | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 352 | NO | | |
| 12 | PHC ADHAPARA | 500 | 23 | 0 | 23 | | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 12 | NO | | |
| 13 | PHC PALSADA | 2220 | 6 | 16 | 40 | | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 150 | NO | | |
| 14 | PHC REMTA | 4500 | 50 | 30 | 100 | | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 20 | NO | NO | | |
| 15 | PHC KUMARBANADH | 2000 | 40 | 40 | 100 | | 1 | 1 | 0 | 2 | 1 | 2 | 2 | 100 | NO | NO | | |
| 16 | PHC KANAKTORA | 7080 | 12 | 118 | 92 | | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 100 | NO | NO | | |
| 17 | PHC GOVINDPUR | 1300 | 0 | 24 | 47 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NO | | |
| 18 | UPHC BELPAHAR | 130 | 26 | 98 | 25 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | NO | 8260559892 | | |
| 19 | CHC KOLABIRA | 190000 | 120 | 150 | 400 | | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 10 | NO | | | |
| 20 | PHC POKHRAASALE | 5680 | 142 | 140 | 113 | | 2 | 2 | 0 | 1 | 1 | 2 | 2 | 10 | NO | 9439986990 | | |
| 21 | PHC BHADIMIAL | 17650 | 50 | 7 | 9 | | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 10 | NO | 9178013099 | | |
| 22 | CHC KIRMIRA | 8720 | 259 | 130 | 130 | | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 10 | NO | NO | | |
| 23 | PHC BAGDIHI | 6000 | 40 | 30 | 50 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | NO | NO | | |
| 24 | PHC ARDA | 48400 | 15 | 19 | 26 | | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 10 | NO | NO | | |
| 25 | CHC MUNDRAIORE | 142240 | 40 | 60 | 200 | | 2 | 2 | 16 | 1 | 1 | 1 | 1 | 150 | NO | NO | | |
| 26 | PHC SAHASPUR | 10864 | 21 | 48 | 138 | | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 100 | NO | NO | | |
| 27 | PHC PAKELPADA | 18000 | 19 | 42 | 54 | | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 10 | NO | NO | | |
| 28 | PHC LAIKERA | 18500 | 45 | 32 | 160 | | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 42 | NO | NO | | |
| Total | | 1988719 | 17677 | 31774 | 12918 | 13725* 580# | 36 | 44 | 29 | 26 | 37 | | | | | | * DNS #5D | |

Handwritten signature and date
9/3/23

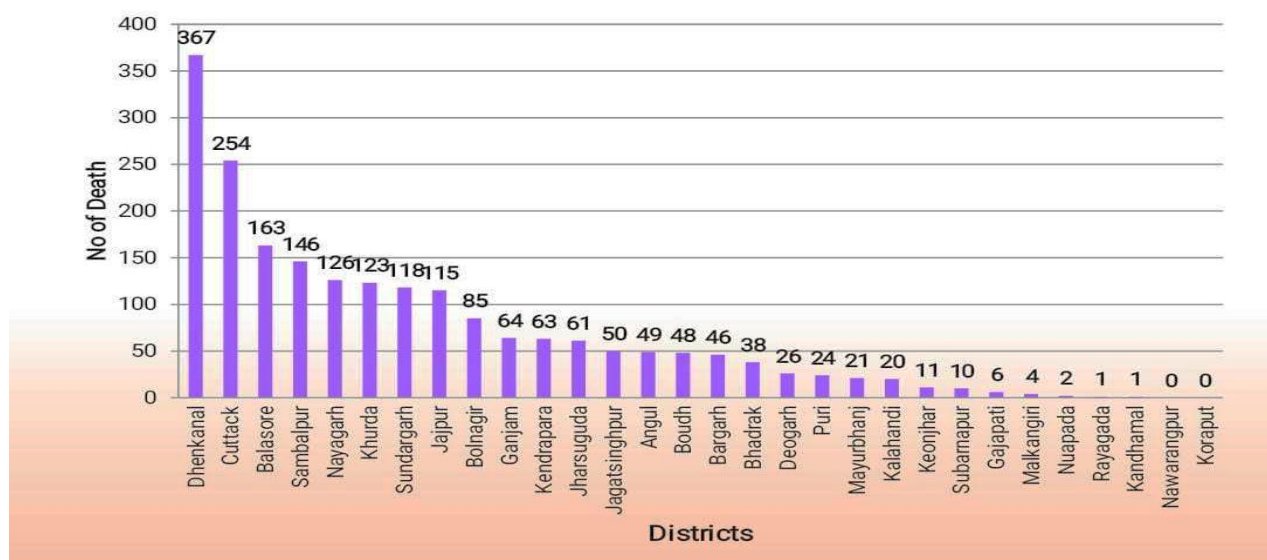
2.2 Occurrence of Heat Wave

The Heat Waves over District

Jharsuguda generally occurs during the summer season which commences in March and stretches until June/July. The maximum temperature during this period goes well above 48°C. Heat Wave pattern differs from region to region, coastal area of the state experiences humid heat and western part experiences more dry heat.

61 deaths in a year definitely taught us to think and take appropriate steps to reduce the deaths. With proper planning, mass awareness through posters / miking, prompt actions, community involvement, preparedness at all death figure reduced in last 13 yrs.

Heat wave Deaths District-wise in 1998



Rapid heat gain caused by exposure to hotter-than-average conditions compromises the body's ability to regulate temperature and can result in a chain reaction of illnesses such as heat cramps, heat exhaustion, heatstroke, and hyperthermia. Heat has significant indirect health effects. Heat can affect human behavior, disease transmission, health service delivery, air quality, and critical social infrastructure such as energy, transportation, and water. Heat-related deaths and hospitalizations can occur extremely quickly (the same day) or have a delayed effect (several days later), resulting in accelerated death or illness in the already frail, as seen in the first days of heatwaves. Even minor deviations from seasonal average temperatures are linked to an increase in

illness and death. Extreme temperatures can also aggravate chronic conditions such as cardiovascular, respiratory, and cerebrovascular disease, as well as diabetes-related conditions.

CHAPTER -III

EARLY 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, hail storm, 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 meteorological 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 upto 4 weeks)
- c) Seasonal range (lead time/validity upto 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/allindiawxbulletin.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>).

| Color Code | Alert | Warning | Impact | Suggested Actions |
|-------------------------------|--------------------------------|--|---|--|
| Green (No action) | Normal Day | Nil | Comfortable temperatures | No cautionary action required |
| Yellow Alert (Be updated) | Heat Alert | Heatwave 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 |
| Orange Alert (Be prepared) | Severe Heat Alert for the day | i. Severe heatwave conditions likely to persist for 2 days. ii. With varied severity, heatwave 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. |

3.2 Monitoring Heat wave by DDMA

Based on IMD observations, SRC & OSDMA, 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.

The DEOC shall be in overall charge of Collector & District Magistrate. In the absence of Collector, ADM, Khordha / ADM, Bhubaneswar, PD, DRDA, Khordha will be in-charge and Dy. Collector; Emergency shall be the focal point for the DEOC. The officer in charge of District Emergency Operation Center (DEOC) shall be personally responsible for implementing the SOP. She/he shall take all decisions as outlined below and sign for the Collector on all reports mentioned below. She/he shall not wait for orders from anybody. The existing staffing pattern of the DEOC:

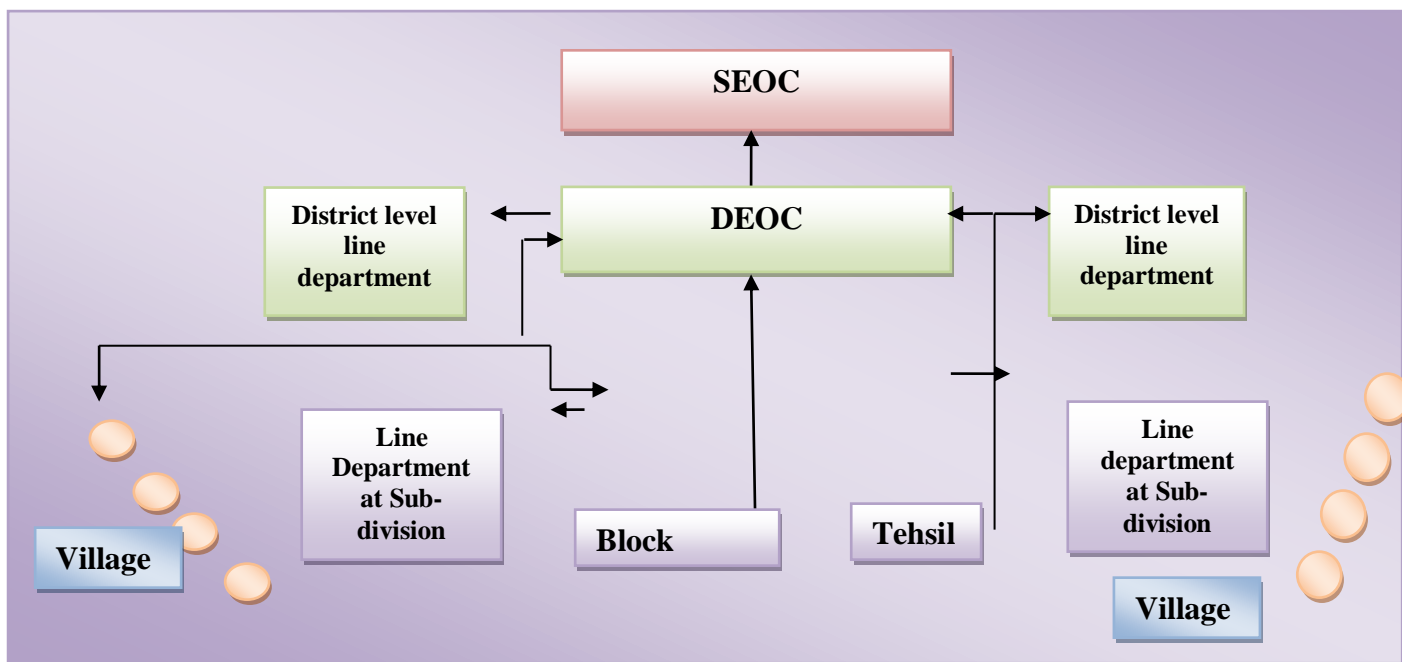
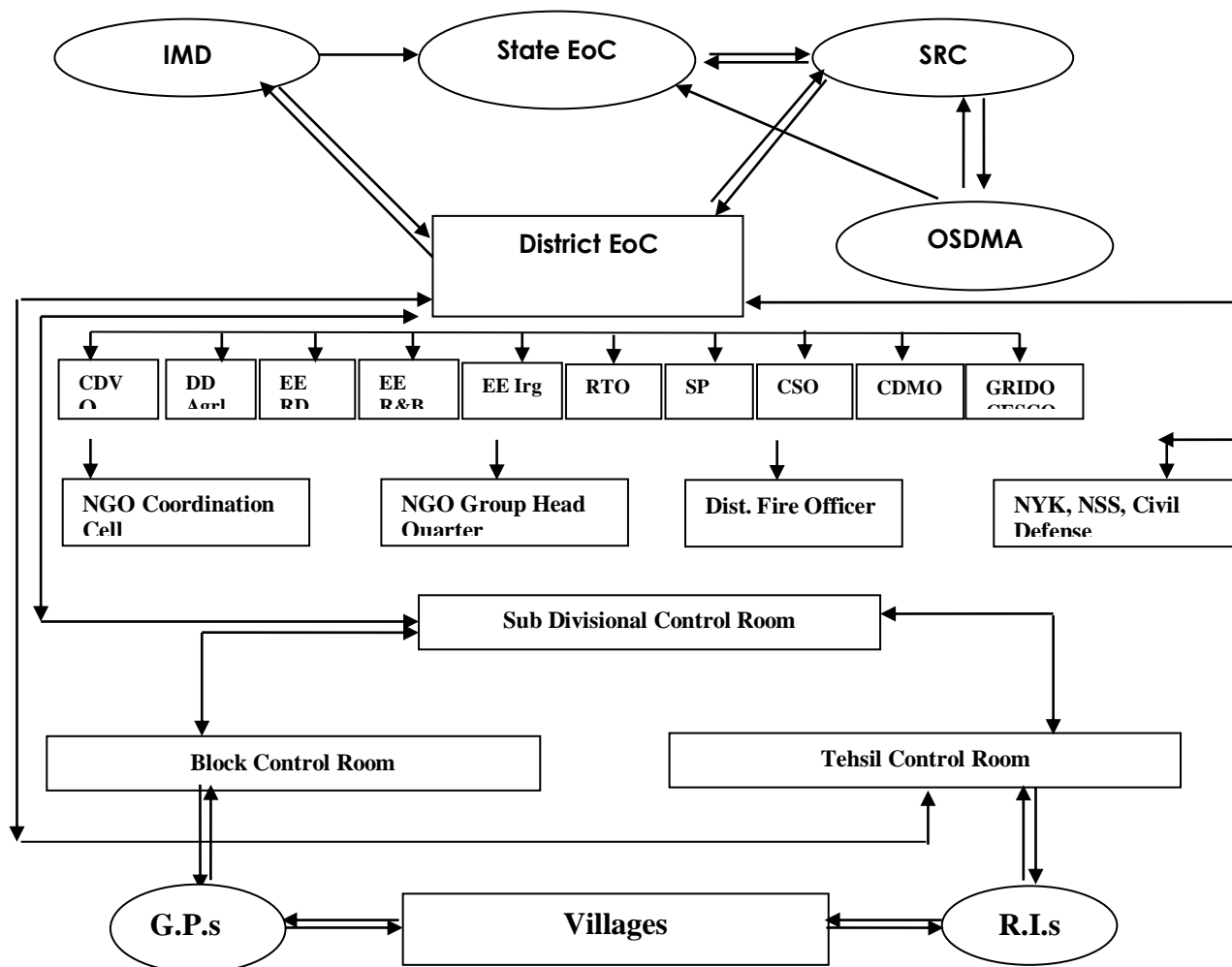
- ✓ Following staff and officers shall assemble in the DEOC on getting any information from any reliable source about any upcoming emergency / urgency. Apart from this, any other officer or staffs who get the information from any source will reach the DEOC. Control Room duty staff must be present during the duty period.
- ✓ DEOC need to be kept in readiness from all aspects during normal period and the following preparatory steps need to be taken up for keeping the DEOC functional during emergency.
- ✓ Alert message to be given to field officers like BDOs, Tahasildars, MOs, VAS, Police, Fire stations, Industries, Telephone, Agriculture, RWSS, RD, R&B, DSWO / ICDS, Irrigation, TOCODL, KED, National Highways, PHD, Municipality / ULBs, DEO, Station Director, All India Radio, through VHF / Telephone / e-mail / if required local print and electronic media shall be used.

3.3 Information Dissemination

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. Once a person downloads the app and gives the location, he / she shall receive Block level & location specific alerts through Mobile App, E-Mail, SMS and other available sources. The link is

https://play.google.com/store/apps/details?id=satark.app.io.ionic&hl=en_IN&gl=US.

3.4 Information Dissemination Flow Chart:



CHAPTER - IV

PREPAREDNESS MEASURE

4.1 DEPARTMENT WISE SOP WITH CIRCULARS-

A. Agriculture & Farmers' Empowerment Department (Circular No.3873, date02.03.2022)

- 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, Thripsinfestation 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(Circular No.1901, dt,19.02.2022)

ARD Sector

- In each district 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 need to be telecast in different TV channels. The publications of advertisements on Heat Wave in different Odia newspapers need 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, dissolved oxygen decreases in the pond, pH level also decrease and fish start to get sluggish. Water tank level should be to 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 (Circular No. 2601, 16.02.2022)

- 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/ plantation 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 (Circular No.1492, dated 15.02.2022)

- 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 I & 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 (Circular No.2425, dated 16.03.2022

- 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 (Circular No.5759, dated 17.03.2022)

- 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 2023, 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 casualties 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 compiled 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 (Circular No.2005, dated 11.03.2022)

- 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, 2023 to 15th June 2023.
- Rescheduling of work in progress would be made as far as is practical, so that the work is 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 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 project setc. to sensitize the labourers and workerson risks, signs and symptoms of heat stress.

I. Panchayati Raj & D.W. Department (Circular No.2898, dated 15.02.2022)

- All Gram Panchayats/Panchayat Samities/Zilla Parishads must be instructed to open Jala Chhatras/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 given 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 complaints 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 (Circular No.8105, Dated 15.03.2022)

- 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 11 A.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 (Circular No.4042, dated 10.03.2022)

- 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 box and 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 (Circular No.2497, dated 17.03.2022)

- 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 (Circular No.2174, dated 16.03.2022)

- 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 (circular No. 1567, dated 24.02.2022)

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 2023.
- Adequate manpower and vehicles are available in TPWODL for preventive and breakdown 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/overloadingandconsequentsnappingofconductorsinco-ordinationwiththeSubTransmissionSystem.

TPWODL

- Sub-TransmissionSystemTeamshallmonitortheloadbalancingofpowerSub-TransmissionSystemTeamshallmonitortheloadbalancingofpowertransformersandfunctionin gofalltheVCBs/Relaystoavoidanybreakdowns.
- AlltheDivisionalManagershavebeendirectedtokeeppropercoordinationwithGridSub-stationsundertheircontrolforproperloadandoutagemanagementandthebreakdownshallbeatte ndedatthequickestpossibletimeforrestorationofpowersupplyandtomimizethedurationofpo werinterruptionsoastoavoidpublicconfrontation.
- PriorinformationwillbegiventoCustomerCareCenter(Ph:18003456798)incaseofshutdownan dbreakdownoutagestokeepconsumerspostedregardingongoingoutages.
- PreventiveandbreakdownoutagesinformationwillbeupdatedinUrjaMitraandTPWODLwebsi tefortimelyinformationtoconsumers.
- TheCircleHeadsoftheDistributionCirclesshallreporttoChiefOperationServicesonpowersyste mstatusoftheirCircle.
- TPWODLwillabidebytheguidanceissuedtoitbySLDCfromtimetotime.
- Incaseofemergencymaintenancework,thesamewillbedoneonlyduringmorning hour when theeffectoftheheat is less.
- TPWODLhavetakenstepsforoperationofControlroomsatDivisionlevel,Circlelevelandcorpor atelevel.
- DistrictHeadQuarterHospitalsarebeingprovidedwithuninterruptedpowersupplythroughdedi catedfeeders.(N-1Arrangements)
- AllPHDandRDwatersupplypointswillbeensuredsteadypower supplyEarlyreplacementoffailedPTRs/DTRswillbetakenup.

O. Forest, Environment & CC Department (Circular No. 6565, dated 04.04.2022)

- 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 (Circular No.3024, dated 17.03.2022)

- Mapping of high-risk zones (e.g.Dhenkanal, Angul,Sundergarh, Cuttack,Khordha, Ganjam)undertheguidance of Indian Meteorological Dept. (IMD)conductingworkshopsfortheDistrictTouristOfficestaffcoveringthehigh-risk zones, including theuse of SATARK platform forenabling greater responsiveness.
- Advisorieson Do's & Don'ts and special provisions willbecompiledforanddisseminatedto:Tourists-Digitallyon Website,SocialMediaandphysicallyatallTouristCenters,Hotels,otherhospitalityaccommodations,eateriesand their employees, etc.
- Dept of Tourism in coordination withHealthDepartmentanddistrictadministrationwill reviewtheresponsivenessoflinksbetweentouristcentersandnearestclinicalcareestablishments (hospitals,clinics,etc.)
- DeptofTourism&OTDCwillencourageemployeestoexerciseadequateprecautionandpositivehabitsbyprovisioningcapsandwaterbottles
- Dept. ofTourismwillworkwithconcernedauthoritiesanddepartmentstoalter employee shiftschedules 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 pointsand related information in website of department of tourism.
- Ensure the availability of drinking water andcool resting sheds.
- Restrict thetimingofthevisitoftouristplacesduringpeaksummerdays.

Q. Water Resources (Circular No.3358, dated 11.02.2022)

Short Term Measures:

- Sufficient storageofwater at reservoirto meet the Heat Wave.
- Release andstorage of water in allthecanalsduring 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 11a.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 checkdams 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 to tourist places during peak summer days.

R. SSEPD Department on Heat wave (Circular No.2466, dated 30.03.2022)

- 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 out side 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 (Circular No.2904, dated 21.02.2022)

- 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 stocked in the residential schools.
- All HMs, teachers, ANMs, Matrons, CCAs/LCCAs and Students should be briefed 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 (Circular No.4023, dated 04.03.2022)

- 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 CCIs 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 (Circular No.2327, date 02.03.2022)


- 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,
 - Lightweight, 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.

4.2 Awareness and IEC activities

IEC Materials Disseminated by the Government of Odisha



ଅଶୁଦ୍ଧାତ ପ୍ରତି ସତର୍କ ରୁହନ୍ତୁ

କ'ଣ କରିବା ଉଚିତ୍ !

- ଦିନ ୧୧ ଟାରୁ ୩ଟା ଭିତରେ ଖରାବ ତାପି ସବୁଠାରୁ ଅଧିକ ଥାଏ । ଏଣୁ ତାଣ ଖରାରେ ପଦାକୁ ବାହାରରୁ ନାହିଁ ।
- ଆବଶ୍ୟକ ସ୍ଥଳେ ବାହାରକୁ ଯିବାକୁ ହେଲେ ମୁଣ୍ଡକୁ ଓଦା ଗାମୁଛାରେ ଘୋଡ଼ାକୁ ଏବଂ ଛତା, ଯୋତା ଓ କଳା ଚଷମା ବ୍ୟବହାର କରନ୍ତୁ ଓ ସାଥରେ ଅଣ୍ଟାପାଣି ନିଅନ୍ତୁ ।
- ବାହାରକୁ ଯିବା ଆଗରୁ ଓ ପହଞ୍ଚିବା ପରେ ସୁରେଇ, ମାଠିଆ ଓ ଘୁମ ଆଦିରେ ଥିବା ପାଣି, ଲେୟୁ ସରବତ, ଘୋଳଦହି, ଲୁଣ ମିଶା ତୋରାଣି ପିଅନ୍ତୁ ।
- ଶରୀରରେ ବାୟୁ ଚଳାଚଳ ପାଇଁ ପୂଜା ଲୁଗା ବ୍ୟବହାର କରନ୍ତୁ ।
- ହାଲିଆ ଲାଗିଲେ ଛାଇ ଯାଗା ଓ ପବନଚଳାଚଳ ସ୍ଥାନରେ ବିଶ୍ରାମ ନିଅନ୍ତୁ ।
- ଘରେ ଚିଣ ଓ ଆକବେଷ୍ଟସ ଛାଡ଼ି ଥିଲେ ତା' ଉପରେ ନଡ଼ା ବିଛାନ୍ତୁ ।
- ଦେହରୁ ଅଧିକ ଝାଳବୋହିଲେ, ପାଟି ଅଠା ଅଠା ଲାଗିଲେ - ପ୍ରଚୁର ପାଣି, ଓ.ଆର.ଏସ୍, ଓ ପଣା ପିଅନ୍ତୁ ।

କ'ଣ କରିବା ଅନୁଚିତ୍ ! !

- × ତାଣ ଖରାରେ ଶାରିରୀକ ପରିଶ୍ରମ କରନ୍ତୁ ନାହିଁ ।
- × ବୁଦ୍ଧ, ଅସୁସ୍ଥ ଲୋକ, ଶିଶୁ, ଗର୍ଭବତୀ ମହିଳା ଏବଂ ରକ୍ତଚାପ ଓ ମଧୁମେହରେ ପୀଡ଼ିତ ବ୍ୟକ୍ତି ତାଣ ଖରାରେ ବାହାରକୁ ଯାଆନ୍ତୁ ନାହିଁ ।
- × ଅଶୁଦ୍ଧାତ ରୋଗୀ ଦେହରେ ବରଫ ଘଷନ୍ତୁ ନାହିଁ ।
- × କେହି ଅସୁସ୍ଥ ଅନୁଭବ କଲେ ତାଙ୍କର ଚିକିତ୍ସା ପ୍ରତି ଅବହେଳା କରନ୍ତୁ ନାହିଁ ।
- × ନିଶା ଦ୍ରବ୍ୟ ସେବନ କରନ୍ତୁ ନାହିଁ ।

ଓ.ଆର.ଏସ୍ ପ୍ୟାକେଟ୍ ସମସ୍ତ "ଆଶା" ଅଜ୍ଞାନସ୍ୱୀତି କେନ୍ଦ୍ର, ସ୍ୱାସ୍ଥ୍ୟ ଉପକେନ୍ଦ୍ର, ସ୍ୱାସ୍ଥ୍ୟକେନ୍ଦ୍ର ଓ ସରକାରୀ ଡାକ୍ତରଖାନା ଗୁଡ଼ିକରେ ମାଗଣାରେ ମିଳେ । ସରକାରୀ ଡାକ୍ତରଖାନା ମାନଙ୍କରେ ଅଶୁଦ୍ଧାତ ରୋଗୀଙ୍କ ପାଇଁ ଚିକିତ୍ସାର ସୁବିଧା କରାଯାଇଛି ।

ରାଜ୍ୟ ସ୍ୱାସ୍ଥ୍ୟ ଓ ପରିବାର କଲ୍ୟାଣ ପ୍ରତିଷ୍ଠାନ, ଓଡ଼ିଶା

ସାବଧାନ !

ସାବଧାନ !

ଅଂଶୁଘାତକୁ ସାବଧାନ



ପାଖରେ ଥିବ ପାଣି ବୋତଲ
ହାତରେ ଥିବ ଛତା
ପାଦରେ ଥିବ ଚପଲ ଯଦି
ଖରାକୁ ନାହିଁ ଚିନ୍ତା

- ଦିନ ୧୧ ଟାରୁ ୩ଟା ଭିତରେ ଖରାର ତାତି ସବୁଠାରୁ ଅଧିକ ଥାଏ । ଏଣୁ ଟାଣ ଖରାରେ ପଦାକୁ ବାହାରକୁ ନାହିଁ ।
- ଅଧିକ ପାଣି, ଓ.ଆର.ଏସ୍., ପଣା, ଚୋରାଣି, ଘୋଳଦହି, ଆଖୁରସ ପିଅନ୍ତୁ ଓ କାକୁଡ଼ି, ତରଭୂଜ ଆଦି ଖାଆନ୍ତୁ ।
- ଖରାରେ କଠିନ ପରିଶ୍ରମ କରନ୍ତୁ ନାହିଁ ।
- ହାଲିଆ ଲାଗିଲେ ଛାଇ ଯାଗାରେ ବିଶ୍ରାମ କରନ୍ତୁ ।
- ମୁଣ୍ଡ ଓ ଦେହରେ ଓଦା ଗାମୁଛା ପକାନ୍ତୁ ।
- ନିଶାଖାଇ ଟାଣ ଖରାକୁ ବାହାରିଲେ ଜୀବନ ପ୍ରତି ବିପଦ ଥାଏ ।
- ଅଂଶୁଘାତ ରୋଗୀ ଦେହରେ ବରଫ ଘଷନ୍ତୁ ନାହିଁ ।

ସରକାରୀ ଡ୍ରାକ୍ଟରଖାନାରେ ଅଂଶୁଘାତ ରୋଗୀଙ୍କ
ଚିକିତ୍ସା ପାଇଁ ସୁବିଧା କରାଯାଇଛି ।



ସ୍ୱାସ୍ଥ୍ୟ ଓ ପରିବାର କଲ୍ୟାଣ ବିଭାଗ, ଓଡ଼ିଶା ସରକାର

ପ୍ରସ୍ତୁତି : ରାଜ୍ୟ ସ୍ୱାସ୍ଥ୍ୟ ଓ ପରିବାର କଲ୍ୟାଣ ପ୍ରତିଷ୍ଠାନ, ଓଡ଼ିଶା



ଅଶୁଭାତ କ୍ଷୟ ଓ ପ୍ରତିକାର

ଅଶୁଭାତର ଲକ୍ଷଣମାନ

- ଅସାଧାରଣ ଦୁର୍ଘଟଣା ଘଟିବା
- ପ୍ରତୀକ୍ଷିତ, ବ୍ୟବସାୟ ପ୍ରକଳ୍ପର ବିଫଳ ହେବା
- ଚାକିରି ହରାଇବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା
- ଅସାଧାରଣ ଭାବରେ ମୃତ୍ୟୁ ହେବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା



ଅଶୁଭାତର ପ୍ରତିକାର

- ଚୋରା ଚାକିରିରୁ ଦୂରରେ ରହିବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା
- ଅସାଧାରଣ ଭାବରେ ଅସୁସ୍ଥ ହେବା

ଅଶୁଭାତର ପ୍ରତିକାର : ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା ଓ ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା

OSDMA ଓଡ଼ିଶା ସରକାରଙ୍କ ଦ୍ଵାରା ସ୍ଵାଧୀନ ଭାବରେ ଗଠିତ ଏକ ନିୟମିତ ସଂସ୍ଥା

ଅଶୁଭାତ ହୋଇପାରେ... ସାବଧାନ ରୁହନ୍ତୁ !

ମୁଖରୁ ଜଣା ପାଏକ ଜୋରା ପକାଇ ଦେହେ ଓମା ଗାମୁଛା ପଖାଳ ଚୋରାଣି ଲୁଣ୍ଠନିଶା ପାଣି ପିଆଇ କାକୁଡ଼ି ଖାଇବ ଜାଣି ।

ଅଶୁଭାତର ମୁକ୍ତିକାମ

- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା

ଅଶୁଭାତର ମୁକ୍ତିକାମ

- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା
- ଅଶୁଭାତରୁ ଦୂରରେ ରହିବା



OSDMA ଓଡ଼ିଶା ସରକାରଙ୍କ ଦ୍ଵାରା ସ୍ଵାଧୀନ ଭାବରେ ଗଠିତ ଏକ ନିୟମିତ ସଂସ୍ଥା



ଅଶୁଦ୍ଧାତ ପ୍ରତି ସାବଧାନ!



- ✦ ଟାଣଖରାରେ ପତାକୁ ବାହାରକୁ ନାହିଁ।
- ✦ କଠିନ ପରିଶ୍ରମ କରନ୍ତୁ ନାହିଁ।
- ✦ ଜରୁରୀକାମରେ ବାହାରକୁ ଯିବାକୁ ହେଲେ ମୁଣ୍ଡରେ ଡୋରାମାଛା, ଛତା, ପେଲ, କଳା ଷେମା ବ୍ୟବହାର କରନ୍ତୁ।
- ✦ ବାହାରକୁ ଯିବା ସମୟରେ ପାଣି ବୋଲେ ସାଙ୍ଗରେ ନିଅନ୍ତୁ।
- ✦ ଜଳ ଶୁଷ୍କତାରୁ ରକ୍ଷା ପାଇବା ପାଇଁ ଅଧିକ ପାଣି, ଓ.ଆର୍.ଏସ୍ ପ୍ରଭୃତି, ପରା, ପରା, ଡୋରାଣି, ଘୋଳଦହି ଓ ଆଖୁରସ ପିଅନ୍ତୁ। କାକୁଡ଼ି, ରେଭୁଜ ଆଦି ଖାଆନ୍ତୁ।
- ✦ ମାଦକ ପ୍ରବ୍ୟାସେବନ କରନ୍ତୁ ନାହିଁ।
- ✦ ହାଲକା ଓଡିଲା ଡ୍ରେସ୍ ପରିଧାନ କରନ୍ତୁ।
- ✦ ଅଶୁଦ୍ଧାରେ ଆକ୍ରାନ୍ତ ବ୍ୟକ୍ତିଙ୍କୁ ଯଥାସାମ୍ଭବ ଦୂରରେ ରଖିବା ନେଇ ଚିତ୍ତିତ୍ୱ କରନ୍ତୁ।



OSDMA

ଓଡ଼ିଶା ରାଜ୍ୟ ବିପର୍ଯ୍ୟୟ ପରିଚାଳନା କର୍ମସଂସ୍ଥା
ଭବନ ୧୧୧୨, ଭୁବନେଶ୍ୱର

ସଚେତନତା ଓ ସଚର୍ଯ୍ୟତା
ହିଁ ସୁରକ୍ଷା!



ଗ୍ରୀଷ୍ମ ପ୍ରବାହ (Heat Wave)

ଗ୍ରୀଷ୍ମ ପ୍ରବାହ କ'ଣ ?

ଯଦି କୌଣସି ସ୍ଥାନର ତାପମାତ୍ରା 40° ସେଲ୍‌ସିୟସ ପାଖାପାଖି ଥାଏ ଏବଂ ଏହା ସେହି ସ୍ଥାନର ସାଧାରଣ ତାପମାତ୍ରା ଠାରୁ 3° - 5° ସେଲ୍‌ସିୟସ ବୃଦ୍ଧି ହୋଇଥାଏ, ତାହାକୁ ଗ୍ରୀଷ୍ମ ପ୍ରବାହ ଓ 5° ସେଲ୍‌ସିୟସରୁ ଅଧିକ ବୃଦ୍ଧି ହୋଇଥିଲେ, ପ୍ରବଳ ଗ୍ରୀଷ୍ମପ୍ରବାହ କୁହାଯାଏ ।

ଯଦି କୌଣସି ସ୍ଥାନର ସର୍ବୋଚ୍ଚ ତାପମାତ୍ରା 40° ସେଲ୍‌ସିୟସରୁ ଉର୍ଦ୍ଧ୍ୱ ଥାଏ ଏବଂ ଏହା ସାଧାରଣ ତାପମାତ୍ରା ଠାରୁ 4 - 8° ସେଲ୍‌ସିୟସ ବୃଦ୍ଧି ପାଇଥାଏ ତେବେ ତାହାକୁ ଗ୍ରୀଷ୍ମ ପ୍ରବାହ ଓ 5° ସେଲ୍‌ସିୟସରୁ ଉର୍ଦ୍ଧ୍ୱ ବୃଦ୍ଧିକୁ ପ୍ରବଳ ଗ୍ରୀଷ୍ମପ୍ରବାହ କୁହାଯାଏ ।

ଯଦି କୌଣସି ସ୍ଥାନର ତାପମାତ୍ରା 48° ସେଲ୍‌ସିୟସ ବା ତଦୁର୍ଦ୍ଧ୍ୱ ହୁଏ, ତେବେ ସେ ସ୍ଥାନରେ ସାଧାରଣ ତାପମାତ୍ରା ଯାହା ହେଲେବି ଏହାକୁ ଗ୍ରୀଷ୍ମପ୍ରବାହ କୁହାଯାଏ ।

ବେଳେବେଳେ ଅତ୍ୟଧିକ ଗ୍ରୀଷ୍ମପ୍ରବାହ ହେତୁ ମଣିଷ ମୃତ୍ୟୁମୁଖରେ ପଡ଼ିଥାଏ । ୧୯୯୮ ମସିହା ଏପ୍ରିଲରୁ 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 ।



୧. ଟାଣ ଖରାରେ ବାହାରକୁ ବାହାରକୁ ନାହିଁ । ହାଲୁକା, ଫିକା, ଢିଲା ସୂତା କୁଟା ବ୍ୟବହାର କରନ୍ତୁ । ଘରେ ପରଦା ଟାଣନ୍ତୁ । ରାତିରେ ଝରକା ଖୋଲା ରଖନ୍ତୁ, ଫଳରେ ଘର ଥଣ୍ଡା ରହିବ । ଯେତେଥର ସମ୍ଭବ ଥଣ୍ଡା ପାଣିରେ ଗାଧାନ୍ତୁ ।
୨. ଶେଷ ନଥିଲେ ମଧ୍ୟ ପ୍ରଚୁର ପାଣି ପିଅନ୍ତୁ । ଓ.ଆର୍.ଏସ୍. ପାଉଡର କିମ୍ବା ଘରେ ଉପଲବ୍ଧ ପାନୀୟ ଯଥା : ଲସି, ଘୋକ ଦହି, ତୋରାଣି, ଲେମ୍ବୁ ପାଣି, ହୁଏ ଇତ୍ୟାଦି ପ୍ରଚୁର ପରିମାଣରେ ପିଅନ୍ତୁ । ଗରିଷ୍ଠ ଖାଦ୍ୟ ଖାଆନ୍ତୁ ନାହିଁ ।
୩. ଚା, କଫି, ମାଦକଦ୍ରବ୍ୟ ଓ କାର୍ବନଯୁକ୍ତ ଥଣ୍ଡା ପାନୀୟ ବ୍ୟବହାର କରନ୍ତୁ ନାହିଁ ।
୪. ଯଦି ବାହାରକୁ ଯିବାକୁ ପଡେ, ନିଜକୁ ରକ୍ଷା କରିବା ଭଳି ଉପକରଣ ଯଥା : କଳା ଚଷମା, ଜୋଡା ବା ଚପଲ ଏବଂ ଧଳାଛତା ବା ଟୋପି ବ୍ୟବହାର କରନ୍ତୁ । ସାଙ୍ଗରେ ପାଣି ନେବାକୁ ଭୁଲନ୍ତୁ ନାହିଁ ।
୫. 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 ମୁଣ୍ଡ, ବେକଆଦି ଶରୀରର ବିଭିନ୍ନ ଅଂଶକୁ ଘୋଡାଇ ରଖନ୍ତୁ ।
୭. ଅସୁସ୍ଥ ଅନୁଭବ କଲେ ତୁରନ୍ତ ଡାକ୍ତରଙ୍କ ପରାମର୍ଶ ନିଅନ୍ତୁ ।
୮. ବନ୍ଦ ଗାଡ଼ି ଭିତରେ ଛୋଟ ପିଲାଙ୍କୁ ଛାଡି ଆସନ୍ତୁ ନାହିଁ ।
୯. ଗୃହପାଳିତ ପଶୁମାନଙ୍କୁ ମଧ୍ୟ ଛାଇରେ ରଖି ପ୍ରଚୁର ପାଣି ପିଇବାକୁ ଦିଅନ୍ତୁ ।

ଅଂଶୁଘାତରେ ପାଡିତ ବ୍ୟକ୍ତିର ଚିକିତ୍ସା

୧. ପାଡିତ ବ୍ୟକ୍ତିର ଦେହ ଉତ୍ତାପକୁ କମାଇବା ପାଇଁ ଥଣ୍ଡା ଓ ଛାଇ ସ୍ଥାନରେ ଶୁଆଇ ରଖି ପ୍ରଥମେ ଓଦା କନା ବା ଗାମୁଛାରେ ତାଙ୍କୁ ପୋଛି ଦିଅନ୍ତୁ । ଆବଶ୍ୟକ ହେଲେ ମୁଣ୍ଡରେ ଥଣ୍ଡା ପାଣି ଭାଜନ୍ତୁ ।
୨. ଓ.ଆର୍.ଏସ୍. ପାଉଡର ପାଣି, ତୋରାଣି କିମ୍ବା ଲେମ୍ବୁ, ଦହି ସର୍ବତ୍ର ଇତ୍ୟାଦି ପିଆଇ ଦେହର ଜଳୀୟ ଅଂଶ ପରିମାଣକୁ ଠିକ୍ ରଖିବାକୁ ଚେଷ୍ଟା କରନ୍ତୁ ।
୩. ଅଂଶୁଘାତ ବେଳେବେଳେ ମୁହଁର କାରଣ ହୋଇଥାଏ । ଆଘାତପ୍ରାପ୍ତ ବ୍ୟକ୍ତିକୁ ତୁରନ୍ତ ନିକଟସ୍ଥ ସ୍ୱାସ୍ଥ୍ୟକେନ୍ଦ୍ରକୁ ପଠାଇବାର ବ୍ୟବସ୍ଥା କରନ୍ତୁ ।

ମନେରଖନ୍ତୁ :

ଅଂଶୁଘାତରେ ପାଡିତ ବ୍ୟକ୍ତିଙ୍କୁ ଏକାବେଳେକେ ଅତ୍ୟଧିକ ପାନୀୟ ପିଇବାକୁ ଦିଅନ୍ତୁ ନାହିଁ । ସୁସ୍ଥ ହେବା ପର୍ଯ୍ୟନ୍ତ ପ୍ରତି ଅଧ ଘଣ୍ଟାରେ ଥଧା ଗ୍ଲାସ ପାନୀୟ ଦେବା ଉଚିତ ।

4.3 PREPAREDNESS BY MAJOR STAKEHOLDERS OF THE DISTRICT

The role and responsibilities of all Block/Tahasil level officers of the concerned line departments as well as other Stake Holders were taken in preparing the action plan.

Heat Wave Management Action Plan-2023 with special focus on water scarcity management in the identified vulnerable wards/villages in the Municipality/NACs as well as Blocks in the district. It was given focused on zero causality & reduces morbidity due to heat wave. Civil Society organizations to make provision for Water Kiosk at strategic locations at their level during this summer & community level awareness generation Heat Wave. The details responsibilities of all concerned Block level Officers and others stakeholders were discussed in details for its implementation in Block Heat Wave Management Action Plan.

Functioning of Block Control Room at Panchayat Samiti, Jharsuguda and other offices.

- Block Level Officers will submit the list of their staff to Block Office for smooth functioning of the control room from **1st April, 2023 to 1st Week of June, 2023** as per the allotted duty .The Telephone No of District level Control Room of DEOC, Jharsuguda - **0674-272902/ 1077 (Toll Free)**.
- The Panchayat Samiti Office Jharsuguda will operationalize the Control Room with utmost sincerity along with proper reporting.
- The BEOC, Jharsuguda will regularly monitor the situation, Co-ordination and corrective measures as and when required.
- All concerned Block Level Officers will functionalize Heat Wave Control Rooms at Block level from **1st April, 2023**.

Water Scarcity and Management

Drinking water supply arrangements in both urban and rural scarcity / vulnerability areas.

- Water scarcity areas in the district will be identified in advance and supply of water to those areas will be ensured.
- Executive Engineers/AE PHD, RWSS to intimate the status of running and defunct tube wells on a weekly basis to District Emergency control room. Immediate Measures to be taken for repair and restoration of defunct tube wells on war footing manners by end of 15th March-2023 positively to avoid water scarcity.
- All complaints regarding repair of tube wells must be attended within 48 hrs and emergency arrangements will be made for uninterrupted supply of drinking water in the scarcity pockets.
- Sufficient no. of water tankers will be mobilized to meet the situation arising out of breakdown of normal drinking water supply system at water scarcity pockets.

- Executive Officers of Municipality & NACs to make all arrangements for smooth drinking water supply in the ULBs and opening of “JALA CHHATRA” at strategic locations.
- The Gram Panchayats functionalize the “JALA CHHATRA” at public congregation places out of their own funds. The DPO & all BDOs to ensure it. The BDOs may request the NGOs to open “JALACHHATRA”.
- The BDO & the JE / AE RWSS planned to meet weekly in an appointed day in the Block and discuss regarding the water scarcity in their Block and submit a weekly status report to District office.

Out of 62 of Jharsuguda Municipality

40- PHED (Inspect & Maintenance by 15th March 2023)

22- Municipality (Inspect & Maintenance by 15th March 2023)

Out of 101 of Brajarajnagar Municipality

51- PHED (Inspect & Maintenance by 15th March 2023)

50-Municipality (Inspect & Maintenance by 15th March 2023)

- Supply of Drinking Water through Tankers.
 - a. For water scarcity area of Lakhanpur, Belpahar, Brajarajnagar & Jharsuguda meeting taken by PD, DRDA, Jharsuguda and Sub-Collector, Jharsuguda.
 - b. For Brajarajnagar & Jharsuguda completed the tender process completed by MCL.
 - c. PEO or GRS blocks to sign in the Log book of MCL in order to check the illegal practice.
 - d. EE, RWSS to provide one tanker in each Block.
 - e. In respect of Belpahar Municipality, EE, PHED shall arrange additional 4 tankers for supply of drinking water in consultation with the E.O. Belpahar Municipality.
 - f. G.M. Orient, MCL, Brajarajnagar will provide 2 tankers to Brajarajnagar Municipality for supply of drinking water to the areas of water scarcity.

JALACHATRAS-

ULBs and GPs, like previous years will setup Jalachhatras at market places, Bus stands and other congregation points preferably in shaded area with special focus on hygiene from 1st week of April, 2023. Jalachhatras will be also opened at the places where the drinking water facility is not available and special instruction has been given not to open the Jalachhatras where the drinking water facility like tube well is available. In all Jalachhatras the following points are to be strictly ensured by all PEOs.

- Safe & fresh drinking water Everyday.
- Use and throw Glass are to be kept
- Handled ladle is to be used
- Clean red cloth is to be used to the earthen vessel kept on wet sand.
- Ensure presence of appointed persons to provide water at jalachhatras.

Previously there were 153 Jalachhatras functioning in Lakhanpur Block which will continue, so also 48 in Kirmira, 45 in Laikera and 84 in Jharsuguda, but in Kolabira in place of 41 for previous year this year 38 Jalachhatras will be set up.

Response and Relief Measures

- Display heat alerts and precautionary measures at strategic points.
- Providing shelter and shades in open and high congregation places
- Opening of the parks during peak hours.
- Providing drinking water through water kiosk (Jal Chhatras) at strategic points
- Water supply to slums through tankers.
- Public announcements through public address system.
- Restrict plying of city public transport.
- Provision of ice pack, first aid and water at City public transport vehicles plying during peak hours.
- Provision of vats (near tube wells) for drinking water for animals.
- Provision for Water sprinkling to settle down the suspended particles on roads.
- Issue advisories for Albedo painting of office building. /houses/apartment/schools/hospitals and other buildings.
- Provision of funds for Heat Wave management.
- IEC/BCC activities through Ward Kalyana Samiti(WKS),Mahila Arorgya Samiti(MAS) ,urban ASHA under NUHM in Jharsuguda Municipality.
- Regular conducting of meeting of the WKS and MAS in each ward of the Jharsuguda Municipality having an agenda on Heat wave Management apart from other agenda. The said meeting must be attended by concerned health staff without fail.
- Provision of water kiosk (Jal Chhatra) at strategic point in each ward and untied fund of MAS may be utilized for the said under the supervision of WKS.
- To check and arrest the flying dusts and to take other mitigative measures in urban areas the letter **No.6132 Dt.17.03.2017 of the Commissioner –cum-Secretary, HUD, Govt. of Odisha** will be followed.

Water Resources Department

- Provision to release water from Rengali dam to Ramial River during water scarcity.
- 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 reduces the atmospheric temperature and also improve the green areas.
- Canal water to be feed to nearby ponds, tanks, low lands for secondary storage of water during summer.
- The working hours for daily labourers need 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.
- 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)/ Panipanchayat.
- Create awareness among the people on Water conservation and effective use.

Department of Tourism and Culture (Tourism).

- Ensure proper registration of tourists who are visiting the district.
- 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
- Mapping of high-risk zones (e.g. Jharsuguda, Angul, Sundergarh, Cuttack, Khordha, Ganjam) under the guidelines of India Meteorological Department (IMD) conducting workshops for the District Tourism Office staff covering the high-risk zones, including the use of **SATARK** platform for enabling greater responsiveness.
- Provisioning of alternative safe drinking water at tourist spots on payment basis.
- Provision of funds for Heat Wave management.

Department of Industry/ Steel and Mines.

- Issue directives for Heat Wave prevention and management for industries and mines.
- Generate awareness through IEC activities.
- Provision for water sprinkling to settle down the suspended particles.
- Provision of funds for Heat Wave management.

Women and Child Development & Mission Shakti Department.

The DSWO, Jharsuguda will take public awareness campaign with special focus on children, pregnant & lactating mothers in order to protect them from dehydration.

- Use the Village Health Nutrition Day (VHND) and RI sessions for creating awareness and educate adolescents and mothers regarding precautionary measures for Heat Waves and its related health impacts.
- Display IEC materials at Anganwadi Centres and encourage integrated child development scheme (ICDS) workers to disseminate Heat Wave related information with special focus on infants, children below five years, pregnant and lactating mothers, and geriatric population to protect them from dehydration.
- Provision of drinking water and first aid at all the Anganwadi Centers, old age homes, orphanages.
- Provision of funds for Heat Wave management.

Department of Fisheries and Animal Resources Development.

- The farmers are to be requested not to leave their animals outside the shed during 11.00 AM to 4.00 P.M.
- Provision of adequate cold drinking water to be made for the animals and birds with its timely replacement.
- The farmers can rest their animals under the sheds of bushy trees during scorching heat.

- The Livestock and Poultry should not be over fed during peak hours of heat. More preferably the total ration required by the animals per day may be fed either in the early morning or during evening hours to avoid the heat incensement.
- The owners of the Livestock and Poultry may be requested to plant more numbers of bushy trees nearing the animal sheds.
- To avoid dehydration of the animals and birds electrolytes may be mixed with drinking water. In case of animals, common salt and molasses may be mixed with water for achieving the purpose.
- The animals and birds should not be vaccinated or dewormed during heat hours of the day to avoid any extra stress.
- The animals should be restrained from hard work in open areas/ field during heat hours of the day.
- The animas need to be bathed at least once during a day accordingly arrangements/ provisions are to be made.
- Animal sheds and poultry pens may be covered with water drenched clothes or gunny bags which may be periodically drenched.
- Usually in deep tube well waters remain cold during summer, which may be used for drinking of animals and birds.

ST &SC Development, Minorities and Backward Classes Welfare Department.

- Provision of availability of safe drinking water, ORS packets, ice packs and other required first aid material in school to manage Heat Wave related illness.
- Capacity building of key functionaries-trainings on Heat Wave management.
- Awareness generation among students through IEC materials display and activities.
- Changing the timing of examinations, changing the school timings.
- Provision of funds for Heat Wave management.

Department of School and Mass Education.

- Restriction of school timing (6.00 am to 11.00 am) during summer and guidelines of the department to be followed scrupulously.
- Ensure Avoidance of physical activities during school hours.
- Issue directive for Albedo painting on school roofs
- IEC activities on Heat Wave prevention and management in schools (Promote School Safety Plan
- Encourage Plantation of trees and promote green campus
- Provision for safe drinking water, ice packs, ORS, etc., at schools and examination centers.
- Training to the teachers and mock drills among students via special workshops and classes on identification, health risks and the subsequent management during Heat Waves.
- Provision of funds for Heat Wave management.

Labour and Employee's State Insurance Department.

- Issue directives for flexible working hours to restrict heat **exposure with effect from March to June 2023 and submit enforcement reports at regular intervals.**
- Guidelines for workers to protect from heat exposure and provision of First Aid, drinking water and cooling space at work site.
- Awareness activities for construction workers, factory laborers, manual laborers and workers whose occupations require intensive work outdoors during extreme heat about the risks, signs, and symptoms of heat stress.
- Training on heat illness diagnosis and management for factory medical officers.
- Advisory for one A/C relief chamber at factory facilities for emergency
- Ensuring health centers/dispensary are open during peak summer hours.
- Ensure overseeing construction sites, quarries, factories and other vulnerable worksites, particularly during high temperature periods, to enforce labor laws related to heat safety.
- Provision of funds for Heat Wave management.

Procedure of Enquiry/autopsy on Alleged Sunstroke Death:-

- It is clearly mentioned in the GO no-1936/R&DM (SR) Dt. 01-06-2015 of the Principal Secretary to Govt.& SRC.

Condition -1

Where a person is admitted to a hospital/Medical institution after being affected by a disaster and his or her death has occurred during treatment in such hospital/medical institution, the cause of death reported by the treating Medical Officer may be referred for sanction of the ex-gratia assistance. But, no opinion is formed by the treating Medical Officer about the cause of death in such cases, post mortem should be carried out for ascertaining the same.

Condition-II

In case of report of death of a person due to heat wave/sun stroke, except where the death has occurred in a hospital/Medical institution after being admitted and treated there, in addition to the postmortem report, a joint enquiry will be conducted by the local Revenue Officer authorized by the Collector/Sub-Collector and local Medical Officer of the PHC/SHC/CHC/DHH, which will be taken into consideration for sanction of the ex-gratia.

Department of Energy:-

- Create awareness among people on energy conservation.
- Develop a policy for power cuts depending on vulnerable areas and population.
- Guideline for workers of the department.
- Power shedding should be cut down/reduced during severe heat (frequency and timing).
- The timing should be announced before one day.
- Frequency and regularities should be maintained
- Preventive repair & maintenance
- Provision of power back up for life line institute.

- Provision of funds for Heat Wave management.

Department of Forest and Environment.

Provision of community awareness to community about their responsibility towards prevention of forest fire.

- Continuous watch in the forest area to avoid forest fires. Each forest fringe village should be fixed with some remuneration so as to engage themselves actively for prevention of forest fire.
- 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.
- 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.
- 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.
- Each Forest Division should dig out at least 06 nos. of causeway-shape pond so that the wild animals like elephant, tiger, deer, sambar, rabbit etc. can get water.
- To harvest / conserve rain water, the pits of size 1 cubic meter should be dug out at a distance of 10 meters inside forest and hill area. At least each Division should dig out 4000 nos. of such pit prior to rainy season by mentioning the GPS reading.

Department of Commerce and Transport.

- Provision for Creating awareness among drivers and other staffs, Bus/Truck Association and NGOs.
- Issue a guideline for each public transport to address Heat Wave.
- **Restriction of plying times. Restricted Time(11AM to 3PM) and Enforcement**
- Provision of safe drinking water, ice pack, ORS in buses and provision of cool resting spaces at bus stops.
- Provision of water kiosk on highways.
- Operationalize 24X7 Control Room at district Level.
- Provision of Temporary passenger shed for bus stoppages with drinking water.
- Overcrowding in public transport must be avoided.
- Provision of funds for Heat Wave management.

Information & Public Relation:

- Block Development Officer/Tahsildars to take steps for wide public awareness through leaflets and posters of "DO"s & Don'ts" issued by the Health & Family Welfare

Department that are to be disseminated through Print & Electronic Media and Co-ordinate with all related line departments at district level and report compliance.

- On receipt of warning message from IMD/ Rev. Control room through District Control Room the DIPRO to make the general public alert by using local media.

Panchayati Raj Department & Drinking Water:

- Prepare Vulnerability map.
- Sensitize vulnerable population on Heat Wave
- Public announcement about the do's and don'ts issued by the department of Health and family welfare and OSDMA.
- Provision of water kiosks, tube wells, tankers at strategic locations.
- Provision of funds in department budget for capacity building.
- Encourage for alternative livelihood activities & rescheduling of works.
- Encourage for alternative livelihood activities. Restrict the working hours from 11 AM to 3 PM under MGNREGA.
- Provision of funds for Heat Wave management.
- Supply of Drinking water and shade nets at working sites.
- Construction of ponds, artificial lakes for cooling the environment by evaporation
- Identification of cooler places.
- Provide cool shelter during summer (must be explored through innovation and partnership).
- The water scarcity village as per experience in the last summer to be identified and preventive measures will be taken at the time of necessity for supply of drinking water through Tankers / Tractors loaded with water Tanks etc.
- Provision of funds for Heat Wave management.

4.4 HEAT WAVE DO AND DON'TS

DO's

Must for All

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

Employers and Workers

- 7- Provide cool drinking water near work place.
- 8- Caution workers to avoid direct sunlight.
- 9- Schedule strenuous jobs to cooler times of the day.
- 10- Increasing the frequency and length of rest breaks for outdoor activities.
- 11- Pregnant workers and workers with a medical condition should be given additional attention.

Other Precautions

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

DONT's

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

Important Contact Numbers

| Sl. No. | Name of the Officers | Designation | Office No. | Mobile No | Email. Id |
|---------|--------------------------------------|--|--------------|-------------|----------------------|
| 1 | Mrs. ABOLI SUNIL NARAVANE , IAS | DM & Collector | 06645-270070 | | dm-jharsuguda@nic.in |
| 2 | Shri Parmar Smit Parshottamdas, IPS | SP | 06645-270808 | | Spjdsd.orpol@nic.in |
| 3 | Sri Tapiram Majhi, OAS (SAG) | PD, DRDA | | 9937630010 | |
| 4 | Sri. Prabeer Kumar Nayak , OAS (SAG) | ADM (General) | | 9437410396 | |
| 5 | Sri Lankeswar Amat OAS (S) | ADM(Revenue) | | 9437349351 | |
| 6 | Smt. Pratima Ping OAS- A (JB) | Deputy Collector, Emergency | | 7894164687 | deocjsg@gmail.com |
| 7 | Sri. Susanta Kumar Mishra | District Project Officer OSDMA | | 7749861874 | |
| 8 | Dr. Dolamani Patel | CDM & PHO | | 9439986890 | |
| 9 | Dr. Pabitra Kumar Parija | CDVO | | 9437318471 | |
| 10 | Sri Manoj Tandri | Executive Officer, Jharsuguda Municipality | | 9556139421 | |
| 11 | Sri. Bikash Bhoi | Executive Officer, Belpahar ULB | | 9337709381 | |
| 12 | Sri. B. Mohanty | Executive Officer, Brajrajnagar ULB | | 9348209682 | |
| 13 | Sri Dilip Dehury | Executive Engineer, RWSS | | 9437408147 | |
| 14 | Sri K. Patel | Executive Engineer, PHD | | 9437104678 | |
| 15 | Smt. Pratima Ping OAS- A (JB) | Indian Red Cross | | 7894164687 | |
| 16 | AJKA | NGO | | 9937632642 | |
| 17 | Emergency Control Room | | | 06645272902 | |

Important Contact Numbers Block Officials

| Sl. No. | Name of the Officers | Designation | Office No. | Mobile No | Email. Id |
|----------------|-----------------------------|--------------------|-------------------|------------------|------------------|
| 1 | Sri Purna Chandra Bhoi | BDO Jharsuguda | | 9938978799 | |
| 2 | Sri Jayanta Sahu | BDO Lakhanpur | | 9685354536 | |
| 3 | Sri Aswini Kumar Panda | BDO Kolabira | | 7008855187 | |
| 4 | Sri Surya Kumar Nayak | BDO Kirmira | | 9348629518 | |
| 5 | Sri Alekha Ghuta | BDO Laikera | | 7751914473 | |