

DISTRICT KATHUA HEAT WAVE ACTION PLAN 2024



Prevention and Mitigation Impacts of Heat Wave-2024

Prepared by:

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FOREWORD



The Heat Wave Action Plan has been prepared as there is continuous increase of heat in the month of March to June over the past several years. The District Heat Wave Action Plan, which shall consist of mapping of Heat Wave Preparedness in the district, measures to mitigate it and define the administrative framework for coordination and dissemination of such information to the general public. Kathua district has embarked on the path of preparing and publishing a comprehensive Heat Wave Action Plan that shall address all the concerns of Heat Wave. In this context, a dedicated effort has been made by the DDMA, Kathua district to prepare a comprehensive Heat Wave Action Plan for the year 2024-2025 under the stewardship of District Administration & UTDMA (Jammu and Kashmir Union Territory Disaster Management Authority). I sincerely wish that this Heat Wave Action Plan for the year 2024- 2025 of Kathua will assist the Heat Wave Mitigation efforts of the district as a great deal and subsequently reduce the loss of life due to this disaster if the need arises.

We are thankful to all the institutions and persons who have provided us the vital information in process of making the Plan.

Dr. Rakesh Minhas, IAS
District Disaster Management Authority
(Deputy Commissioner)
Kathua

APRIL 2024

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INTRODUCTION

Global climate change is inevitable. Climate Change reasons increase the mean average surface temperature over a region. We are already witnessing extreme weather events. Heat-waves are projected to increase in number, intensity and duration over the most land area in the 21st century. It is a period of abnormally high temperatures, more than the normal maximum temperature that occurs during the pre-monsoon (April to June) summer season. Heat –waves typically occur between March to June, and in some rare cases even extend till July. Heat waves are more frequent over the Indo-Gangetic plains of India. On an average, 5-6 heat wave events occur every year over the northern parts of the country.

Extreme heat can lead to dangerous, even deadly, health consequences, including heat stress and heat stroke. Impact of rising temperatures and increasing frequency, duration and intensity of hot spells poses challenge to human safety and sustainability. This unusual and uncomfortable hot weather can impact human and animal health. Heat wave is also called a “silent disaster” as it develops slowly and kills and injures humans and animals. Higher daily peak temperatures of longer duration and more intense heat waves are becoming increasingly frequent globally due to climate change.

Paris Climate Conference–2015 (COP21) on Climate Change Action and Disaster Risk Reduction:

The COP 21 or the Paris Climate Conference led to a new international climate agreement, applicable to all countries, aiming to keep global warming below 2°C, in accordance with the recommendations of the Inter governmental Panel on Climate Change (IPCC).

COP 21 aims to build climate resilience on building resilience through risk-sensitive planning and implementation of the Sendai Framework for Disaster Risk Reduction (DRR) 2015-2030, on the need for a more integrated approach to adaptation, sustainable development, environmental management and DRR, and on the need to improve data on disaster losses by building on, expanding, and strengthening existing national disaster loss data bases and risk analysis.

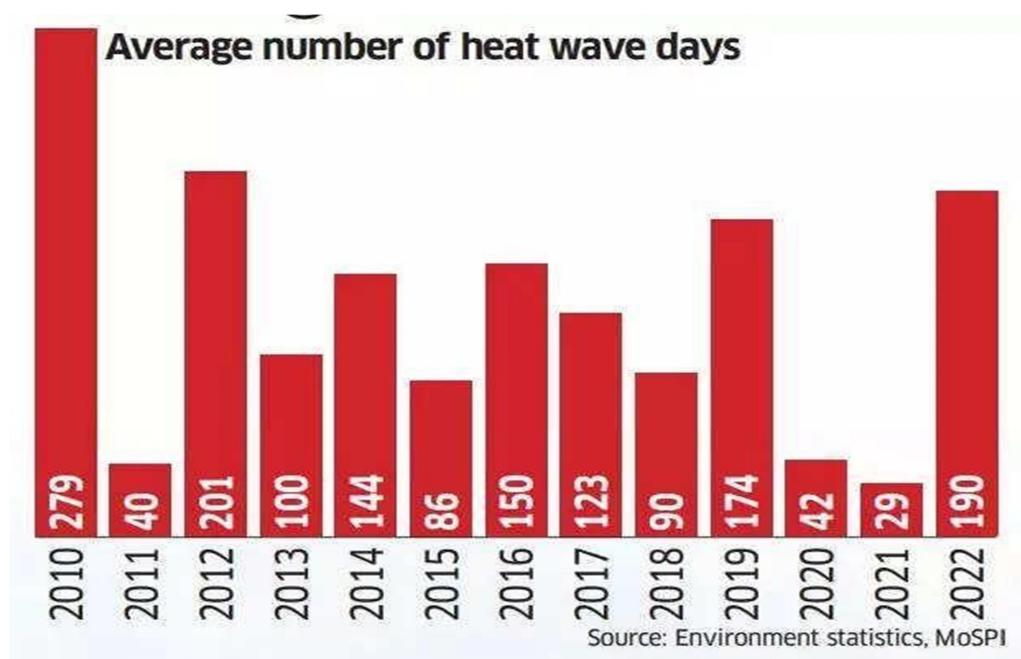
MAJOR GOALS ADOPTED IN THE CLIMATE AGREEMENT

The major goals adopted in the agreement:

1. A consensus on adopting the long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels.
2. Aim to limit the increase to 1.5°C, since this would significantly reduce risks and the impacts of climate change.
3. Accepting the need for global emissions to peak as soon as possible, recognizing that this will take longer for developing countries and
4. To undertake rapid reduction of emissions in accordance with the best available science.

HEAT WAVE IN INDIA

Increased mortality due to increasing heat waves is predicted to be a major burden on health due to climate change. The rising maximum temperature during the pre-monsoon months continues till June and in rare cases till July, over the north western parts of the country. In recent years, morbidity and mortality due to heat wave have increased. Abnormally high temperatures were observed during April–June during 2010 to 2022 across the country.



KATHUA: CLIMATE AND GEOGRAPHY

The total geographical area of the district is 2502 square kilometers. It stretches from 32-17' N to 32-55' N latitude and from 75-70'E to 76- 16' E longitude. As per 2011 census, the population of the District comes to nearly 511455, which is around 5% of the state population. The Kathua District comprises of 11 Tehsil, 19 Block, 560 Villages and 1 Municipal Council.

The maximum temperature ranges between 42°C and 48°C while the minimum temperature varies between 8°C and 10°C.

The areas falling in Kathua district experiences wide range of climate from sub-tropical to temperate area and even alpine in higher regions of Bani and Lohai-Malhar blocks. Because of altitudinal verities, there is vast difference between the temperature of two plain tehsils of Kathua and Hiranagar with those of Hilly Tehsils of Basohli and Billawar. The Summer temperature rises as high as 48 degree Celsius in the plains and Winter temperature in the upper hilly areas touches sub-zero. Most of the higher areas in the BASOHLI AND BILLAWAR Tehsils experiences SNOWFALLS for most part of the year. The District experiences rainfall during winter and early summer primarily from western disturbances and monsoon rains from second week of July onwards. The hilly area receives more rains than the plains. The annual rainfall in the district is approx. 1672 mm.



DISTRICT MAX. AND MIN. TEMPERATURE 2023

S.NO.	MONTH	MIN. TEMP.	MAX. TEMP.
1.	March	10°C	29°C
2.	April	13°C	35°C
3.	May	18°C	42°C
4.	June	20°C	47°C

HOTSPOTS DURING HEATWAVES

1. TEHSIL KATHUA
2. TEHSIL HIRANAGAR

As the max recorded temp. is 45°C– 47°C in both the Tehsils.

Purpose of the Action Plan

Kathua District Action Plan: Prevention And Mitigation of Impacts of Heat Wave 2024 aims to provide a framework for the implementation, coordination, and evaluation of extreme heat response activities in Kathua District that reduce the negative health impacts of extreme heat. The Plan's primary objective is to alert those populations most at risk of heat-related illness that extreme heat conditions either exist or are imminent, and to take appropriate precautions. This plan will also lay down the role and responsibility of various departments in various alert signs. The Standard Operating Procedures have also been laid down by the DDMA for the Heat Wave.

Aims of the Action Plan

Kathua District Action Plan: Prevention And Mitigation of Impacts of Heat Wave 2024 aims to reduce extreme heat impacts on vulnerable people like Children, pregnant women and elderly people with early warning system and integrated coordination with concerned agencies.

1. To incorporate the Prevention and Mitigation measures against Heat Illnesses.
2. To map potential heat island area and affected people.
3. To establish coordination and integration of all the concerned agencies from early warning to implementation of Action Plan.
4. To build a capacity of concerned professional and agencies.
5. To make more use of adaptation and mitigation tools for reducing heat waves, and
6. To make Kathua District more resilient against extreme heat wave.
7. To help the heat wave affected people in distress through proper
8. Ready available of safe drinking water at all prominent places.

Early Warning and Communication

Heat Wave: Heat wave is a condition of atmospheric temperature that leads to physiological stress, which sometimes may cause death. 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, heat wave conditions are considered if the maximum temperature of a station reaches at least 40°C or more for plains, 37°C or more for coastal areas and at least 30°C or more for hilly regions.

As per India Meteorological Department (IMD) following criteria is used to declare a heat wave conditions in India:

- a) Based on Departure from Normal:
 - Heat Wave: Departure from normal is 4.5°C to 6.4°C
 - Severe Heat Wave: Departure from normal is > 6.4°C.
- b) Based on Actual Maximum Temperature:
 - Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$
 - Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$.
- c) Warm Night:

It should be considered only when temperature remains 40 °C or more. It may be defined based on departure or actual minimum temperature as follows:

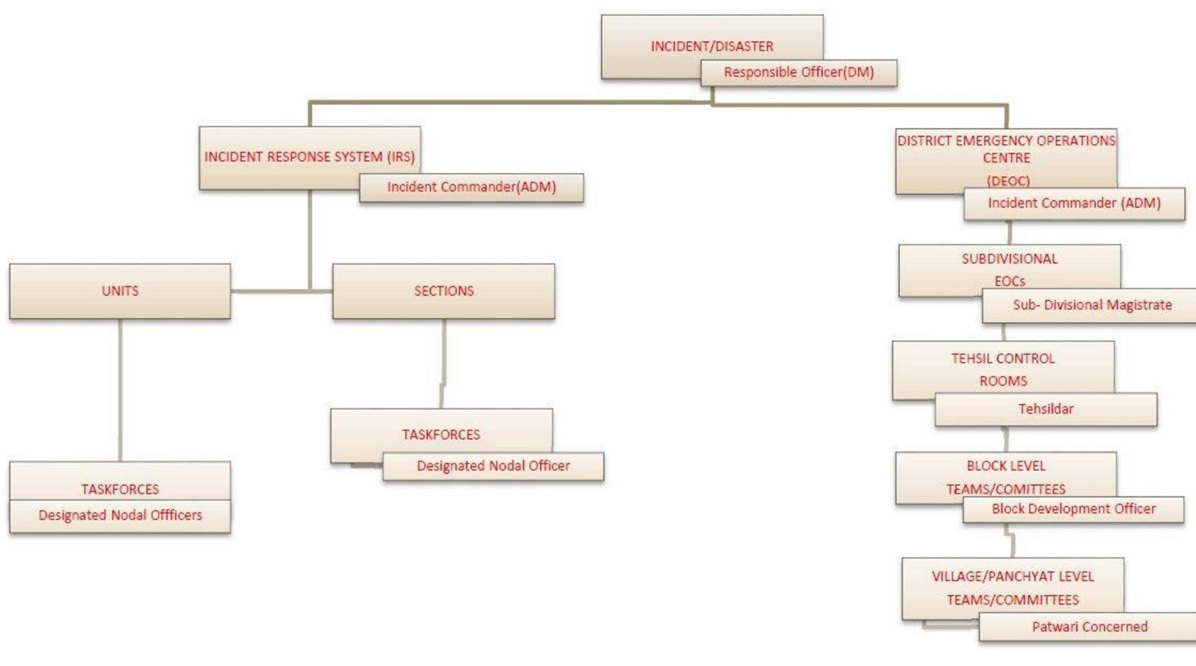
- Warm night: minimum temperature departure is 4.5°C to 6.4°C.
 - Very warm night: minimum temperature departure is >6.4°C.
- d) Criteria for describing Heat Wave for coastal stations:

When the maximum temperature departure is 4.5°C or more from normal, Heat Wave may be described provided actual maximum temperature is 37°C or more.

Declare Heat Wave

To declare a heat wave, the above criteria should be met for at least two stations in Meteorological sub-divisions for at least two consecutive days. A heat wave will be declared on the second day.

As per the annual climate summary report of the India Meteorological Department (IMD), the mean temperature over India has increased at a rate of 0.63°C /100 years since the beginning of the 20th century with large positive anomalies in the last couple of decades. The increase of mean temperature during summer season (March-May) in the same period has been at a rate of 0.56°C / 100 years. On an average, more than eight heat days and one to three severe heat wave days are experienced during the summer season from March to July over north and central parts of the country. Also, many of the stations in northwest India, Gangetic plains, Central India and east coast of India have experienced continued heat wave spell of more than 10 days, mostly during May and June. There has been an increasing tendency to extreme temperatures is higher along the west coast of India.



Identification of Colour Signals for Heat Alert

India Meteorological Department (IMD) issues forecast 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://imdahm.gov.in/stateforecast.pdf>.

Colour Code	Alert	Impacts	Suggested activities
White (Normal)	Normal Day	Comfortable temperature. No cautionary action required	Normal activity
Yellow Alert (Stay updated)	Hot Day	Moderate temperature. Heat is tolerable for general public but moderate health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.	(a) Avoid heat exposure. (b) Wear lightweight, light-coloured, loose, cotton clothes. (c) Cover your head
Orange Alert (Moderate Condition)	Severe Heat Alert Day	High temperature. Increased likelihood of heat illness symptoms in people who are wither 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.	(a) Avoid heat exposure- keep cool. (b) Wear lightweight, light-coloured, loose cotton clothes (c) Cover your head (d) Drink sufficient water- even if not thirsty € Use ORS, homemade drinks like lassi, buttermilk etc. (f) Avoid alcohol, tea, coffee and carbonated soft drinks (g) Take bath in cold water. <u>In case of Heatstroke:</u> Lay the person in a cool place, under a shade. Wipe her/him with wet cloth/ wash the body frequently. Pour normal temperature water on the head. Consult doctor immediately/ Call 108
Red Alert (Severe Condition- take action)	Extreme Heat Alert for the Day	Very high likelihood of developing heat illness and heat stroke in all ages.	Along with suggested actions in orange alert extreme care needed for vulnerable people.

Health Impacts of Heat Waves

The health impacts of Heat Waves typically involve dehydration, heat rash, heat cramps, heat exhaustion and/or heat stroke. The signs and symptoms are as follows:

Heat rash: Diffused red colour skin or vesicular rash, itching of the skin without visible eruption.

Heat Cramps: Edema (swelling) and Syncope (Fainting) generally accompanied by fever below 39°C i.e.102°F.

Heat Exhaustion: Fatigue, weakness, dizziness, headache, nausea, vomiting, muscle cramps and sweating.

Heat Stoke: Body temperatures of 40°C i.e. 104°F or more along with delirium, seizures or coma. This is a potential fatal condition.

Department of Health and Medical Services

Hospital Preparedness Measures for Managing Heat related Illness:

Director / Incharge of hospitals, CHCs, PHCs and UHCs should ensure the following measures:

- A detailed action plan to tackle Heat related illnesses well in advance of hotter months.
- Operational framework-preparing specific health adaptation plan, development of guidelines and response plan for climate sensitive diseases.
- Need for updating Heat Health Action Plan and issuing Advisory for Hospital Preparedness, Surveillance and weekly monitoring including Capacity Building.
- Promoting Strategic media coverage of climate and health, linkages at the state level in regional languages to increase support for climate mitigation and adaptation responses.
- Long term measures such as adopting cool roof, improving green forest coverage and analyzing health impacts in urban planning.
- Standard Operating Procedures to tackle all levels of Heat related illnesses. Capacity Building measures for doctors, nurses and other staffs should be undertaken.
- Cases with expected heat stroke should be rapidly assessed using standard treatment protocols.
- Identify search capacities and mark the beds dedicated to heat stroke victims and enhance emergency department preparedness to handle more patients.
- Identify RRT (Rapid Response Team) to respond to any exigency call outside the hospital.
- Ensure adequate arrangements of staff, beds, IV Fluids, ORS, essential medicines and equipments to cater to management of volume depletion and electrolyte imbalance.
- May try to establish outreach clinics at various locations easily accessible to the vulnerable population to reduce the number of cases affected. Health Centers must undertake awareness in campaigns for neighborhood communities using different means of information dissemination.
- Primary Health Centers must refer the patients to higher facility only after ensuring adequate stabilization and basic definitive care (cooling and hydration).

- Hospitals must ensure proper networking with nearby facilities and medical centers to share the patient load which exceed their search capacities.
- All cases of heat-related illnesses (suspected or confirmed) should be reported to IDSP (Integrated Disease Surveillance Programme) unit of the district.

Acclimatization

Those who come from a cooler climate to hotter climate especially during heat wave season at risk. They should be advised not to move out in open for period of one week. This helps the body get acclimated to heat. They should also be advised to drink plenty of water. Acclimatization is achieved by gradual exposure to the hot environment during a heat wave season.

Resources available:-

- a. GMC: 01**
- b. SDH:05**
- c. PHC:27**
- d. Sub-centres:190**

ROLES AND RESPONSIBILITIES OF DISTRICT AGENCIES

ADVISORIES FOR HEAT WAVE

Sr. No.	District Agencies and their Role/Responsibilities	
	Agencies	Role/Responsibilities
1.	District Admin./DDMA/ULBs/PRI	<ul style="list-style-type: none"> • Real-time surveillance and evaluation of weather situation. • To disseminate the information received from IMD to the public at large. • Disseminate the heat-health warning, determine the threshold for action and communicate the risks. • Prepare SoP for heat wave response based on forecast and Weather Prediction • Coordination among all stakeholders with clearly defined roles and responsibilities. • Flexible timing of market and offices. • Collaboration with non-government and civil society. • Special care for vulnerable groups- children, disabled, women and old aged.
2.	PRI/ULBs	<ul style="list-style-type: none"> • Appointment of Nodal Officer at each level (district, tehsil and block, department etc.) • Implementation of Heat Wave Action Plan. • Heat wave should be included in annual disaster training calendar. • Open parks/open areas during daytime for providing spaces with shade. • Sprinkling of water on roads. • Construct shelters, sheds at public places, provide access to public parks during heat wave season. • Promote cool roofs initiative such as paint roof white, create green roofs and walls, and plant trees in neighborhood to keep them cool. • Inter district collaboration for sharing experiences and data. • Reviewing preparedness & mitigation measures.
3.	Department of Health	<ul style="list-style-type: none"> • Prepare hospital preparedness plans • Dissemination of heat wave health plan by organizing awareness campaigns. • Undertake orientation/training and issue alerts to village level functionaries. • Adopt heat focused examination procedures at local hospitals. • Deploy additional staff to take care of persons affected due to sunstroke. • Activate Emergency services and keep sufficient stock of

		<p>ORS and glucose etc. in all hospitals or dispensaries.</p> <ul style="list-style-type: none"> • Adopt a uniform process for registration of causalities or deaths due to heat wave.
4.	Police Department	<ul style="list-style-type: none"> • Ensure shade for on duty traffic police, as they are more exposed to heat wave and distribution of cool jackets for traffic police personals.
5.	Department of PHE	<ul style="list-style-type: none"> • Ensure drinking water facilities at all common places. • Identify vulnerable places and ensure drinking water facilities. • Repair/maintenance of mechanical faults of tube wells, ponds at priority basis to ensure water storage. • Suitable arrangement for drinking water supply and promptly respond to water scarcity.
6.	Department of School Education/Higher Education	<ul style="list-style-type: none"> • Rescheduling of school timing and vacation as per heat wave situation. • Ensuring cool places for all educational institutions, and availability of water facilities. • Ensure that students avoid outdoor physical activities during the summer in schools. • Heat wave management should be added in school curriculum to sensitize school children and local people. • Encourage research on heat wave related issue through universities/colleges.
7.	Department of PWD/ Roads & Building	<ul style="list-style-type: none"> • Long term planning for heatresilience infrastructure. • Promote cool roofs technology and use other similar heat reducing technology. • Ensure implementation of mixed- use planning adopted in heat wave affected cities/towns. • Heat appropriate planning of new buildings (consideration, e.g., in architecture, width/height ratio, street development, orientation and site) in urban and rural areas. • Ensure capacity building of structural engineers, civil engineers and architects for construction of green buildings, maintenance and fire safety of the structures. • Ensure to construction of green buildings, environment and building code related to heat wave risk mitigation. • Ensure implementations of latest Building Code for the construction.
8.	Department of Information and Public Relation	<ul style="list-style-type: none"> • IEC Campaign to create awareness through print media, electronic media, social media, etc. • Display board with color coding for heat wave alert. • Display Do's and Don'ts in the Public Areas, Hospitals, Parks, etc. • Develop of mobile application for faster spread of heat related issues, alertness, space for shelters and drinking water.

9.	Department of Forest	<ul style="list-style-type: none"> • Ensure proper afforestation at public places. • Continuous watch in the forest area to avoid forest fires. • Provide safety drinking water and shade in forest areas. • Maintain water bodies/ponds in the forest area for wild animals and birds.
10.	Department of Forest	<ul style="list-style-type: none"> • Ensure proper registration of tourists who are visiting the State/UT/District. • Publicize advisories for tourists on Heat Wave conditions in the State/UT/District. • Build temporary shaded areas and ensure availability of safe drinking water for pilgrims at religious places.
11.	Department of Railways	<ul style="list-style-type: none"> • Repair/maintenance of mechanical/electrical system on priority basis including fan and cooling system. • Ensure drinking water facilities in trains and railway stations.
12.	Department of Transportation	<ul style="list-style-type: none"> • To ensure shelter/sheds at bus stops, drinking water facilities at busstops. • Enable better emergency transport system for affected people to health care facilities with adequate essential equipments.
13.	Department of PDD	<ul style="list-style-type: none"> • Ensure repair & maintenance work for uninterrupted power supply before and during the summer. • Re-scheduling load shedding.
14.	Department of Animal Husbandry	<ul style="list-style-type: none"> • Follow the advisory on heat wave. • Shelter for livestock and animal husbandry should be maintained. • Pre-positioning of adequate veterinary medicines and supplies. • Update contingency plan regarding provision of drinking water for animals. • Awareness on the impact of heat on animals and coping mechanisms.
15.	Department of Labour/Social Welfare	<ul style="list-style-type: none"> • Training with construction/industries/commercial entities regarding Heat Wave related illness. • Implement the directions for heat wave season. • Re-scheduling of working hours for employees in different sectors. • Ensure drinking water facilities at work places. • Coordinate with Health Department and ensure regular health check-up of the workers and provide emergency ice packs and heat illness prevention material to construction workers.

Annexure 1:-**LIST OF IMPORTANT CONTACTS**

S.No.	Name of the Officer	Designation	Contact No.
1.	Dr. Rakesh Minhas, IAS	Deputy Commissioner, Kathua	01922-234007
2.	Sh. Ranjit Singh, JKAS	Addl. Deputy Commissioner, Kathua	01922-234579
3.	Sh. Vishav Partap Singh	Asstt. Commissioner (Rev.), Kathua	01922-232634
4.	Sh. Shivdeep Singh Jamwal	Sr. Suptt. of Police, Kathua	01922-234010
5.	Sh. Gias Ul Haq Khanji, JKAS	Sub. Divisional Magistrate, Bani	7780944269
6.	Sh. Rakesh Kumar, IAS	Sub. Divisional Magistrate, Hiranagar	8604286353
7.	Sh. Gandeep Kumar	Tehsildar HQ to DC Kathua	01922-232643
8.	Sh. Vijay Raina	Chief Medical Officer, Kathua	9419194988
9.	Sh. Ajay Gupta	Xen PHE, Kathua	9419183663
10.	Sh. Kishore Kumar	Chief Education Officer, Kathua	9419214590
11.	Sh. Vikas Behl	Xen PWD, Kathua	9419180753
12.	Sh. Neeraj Bhargav	District Information Officer, Kathua	9796021745
13.	Sh. Kewal Krishan, JKAS	Regional Transport Officer, Kathua	9419136233
14.	Sh. Surinder Bhagat	Xen PDD EM&RE, Kathua	9419162839
15.	Dr. Jugal Kishore Gupta	Chief Animal Husbandry Officer, Kathua	9419257890
16.	Sh. Varun Choudhary	District Social Welfare Officer, Kathua	9419118696
17.	Sh. Naresh Kumar	Asstt. Labour Commissioner Officer, Kathua	9419212710

Annexure 2 :- TASK FORCES**AT DISTRICT LEVEL**

Deputy Commissioner	<u>Chairperson</u>
Addl. Deputy Commissioner	<u>Member/CEO</u>
Sr. Superintendent of Police	<u>Member</u>
Chief Medical Officer	<u>Member</u>
Superintending Engineers of R&B, PHEIFCEM&RE, MED	<u>Member</u>
Assistant Director FCS&CA	<u>Member</u>
Deputy Controller Civil Defense	<u>Member</u>
Deputy Director Fire & Emergency Services	<u>Member</u>
Executive Officer Municipal Committee	<u>Member</u>
District Disaster Management Officer (HQA to DC)	<u>Member</u>
Incharge SDRF Component	<u>Member</u>

AT BLOCK LEVEL

Block Development Officer	<u>Convenor</u>
Block Medical Officer	<u>Member</u>
Child Development Project Officer	<u>Member</u>
I/C Police Station	<u>Member</u>
I/C SDRF Component	<u>Member</u>
Tehsil Supply Officer	<u>Member</u>
Jr. Engineer R&B/PDD/RDD/I&FC/PHE	<u>Member</u>
Municipal Ward Officer	<u>Member</u>
Civil Defense Warden/Home Guards	<u>Member</u>
Civil Defense Volunteer	<u>Member</u>

Nodal Officers & Roles

District Level Nodal Officer			
S. NO.	Name of the Officer	Designation	Mobile
1.	Sh. Ranjit Singh, JKAS	Addl. Deputy Commissioner	9419166866

TEHSIL LEVEL NODAL OFFICERS

S No.	Tehsil	Name of the Officer	Designation	Role	Mobile No.
1.	Kathua	Sh. Vikram Kumar, JKAS	Tehsildar Kathua	Nodal officer	94190-28866
	Kathua	Ms. Aradhana Devi	ZEO Kathua	Member	9419102277
	Kathua	Sh. Munish Verma	Naib Tehsildar	Member	7006458191
2.	Billawar	Sh. Surinder Singh	Tehsildar Billawar	Nodal officer	9906175736
	Billawar	Sh. Lalat Kumar Sharma	Principal HSS Basohli	Member	9419235998
	Billawar	Sh. Hans Raj	Naib Tehsildar	Member	9622370424
3.	Bani	Sh. Predhyum Atri, JKAS	Tehsildar Bani	Nodal officer	91496-36969
	Bani	Sh. Chaman Lal	ZEO Bani	Member	6006573536
	Bani	Sh. Subash Chander	Naib Tehsildar	Member	9419112729
4.	Basohli	Sh. Sagar Vishav, JKAS	Tehsildar Basohli	Nodal officer	60057-58352
	Basohli	Sh. Lalat Kumar Sharma	Principal HSS Basohli	Member	9419235998
	Basohli	Er. Varun Bhagat	Naib Tehsildar	Member	9419146444
5.	Hiranagar	Ms Shreya Sharma, JKAS	Tehsildar Hiranagar	Nodal officer	94192-53475, 60058-29071
	Hiranagar	Sh. Des Raj	ZEO Hiranagar	Member	7006682752
	Hiranagar	Sh. Om Parkash	Naib Tehsildar	Member	9596621825
6.	Nagri Parole	Ms Aana Jamwal, JKAS	Tehsildar Nagri Parole	Nodal officer	60055-16558
	Nagri Parole	Ms. Sandhya Devi	ZEO Barnoti	Member	9419274367
	Nagri Parole	Sh. Gorav Vyas	Naib Tehsildar	Member	9419151701
7.	Dinga Amb	Sh. Amit Upadhaya	Tehsildar Dinga Amb	Nodal officer	9419115083 9906015083
	Dinga Amb	Sh. Ram Lal	ZEO Sallan	Member	7889966074
	Dinga Amb	Sh. Bishan Dass	Naib Tehsildar	Member	7006497042

8.	Marheen	Sh. Lekh Raj	Tehsildar Marheen	Nodal officer	94192-37302, 70069-79269
	Marheen	Ms. Veena Devi	ZEO Marheen	Member	7006578312
	Marheen	Sh. Rohit Kumar	Patwari	Member	7889303775
9.	Mahanpur	Miss Radhika Sohan, Jr. JKAS	Tehsildar Mahanpur	Nodal officer	70511-17185
	Mahanpur	Sh. Tilak Raj Andotra	Principal HSS Mahanpur	Member	7006599174
	Mahanpur	Sh. Ali Mohd.	Patwari	Member	9797457850
10.	Ramkot	Sh. Jeetinder Singh	Tehsildar Ramkot	Nodal officer	8825063228
	Ramkot	Sh. Kulsoom Akhter	ZEO Lakhanpur	Member	7006195250
	Ramkot	Sh. Subash Lal	Patwari	Member	7051599633
11.	Lohai Malhar	Sh. Anil Kumar, JKAS	Tehsildar Lohai Malhar	Nodal officer	96974-00483
	Lohai Malhar	Sh. Angrez Singh	ZEO Malhar	Member	9419218653
	Lohai Malhar	Sh. Ravinder Kumar	Patwari	Member	8803630855

BLOCK LEVEL NODAL OFFICERS

S No.	Name of the Officer	Designation	Mobile No.
1.	Sh. Pardeep Singh	BDO Kathua	94191-00203
2.	Sh. Ajit Singh	BDO Keerian Gandyal	94199-48565
3.	Sh. Sahil Abrol	BDO Barnoti	70068-74858
4.	Sh. Vijay Kumar	BDO Hiranagar	96825-69396
5.	Sh. Sonali Arora	BDO Marheen	7006396186
6.	Sh. Vijay Kumar	BDO Dinga-Amb	96825-69396
7.	Sh. Javed Iqbal	BDO Nagri HQ Khohkyal	77808-75493
8.	Sh. Rajesh kumar	BDO Basohli	7006752284
9.	Sh. Navdeep Sabherwal	BDO Mahanpur	94191-55689
10.	Sh. Navdeep Sabherwal	BDO Dhar Mahanpur	94191-55689
11.	Sh. Joginder Lal Sharma	BDO Nagrota Gujroo	99062-10169
12.	Sh. Shailender Kumar	BDO Bhoond	95968-45333
13.	Sh. Sandesh Kumar	BDO Duggain	99062-43526
14.	Sh. Joginder Lal Sharma	BDO Mandli	99062-10169
15.	Sh. Shabhaj Choudhary	BDO Billawar	94191-27526
16.	Sh. Shabhaj Choudhary	BDO L-Malhar	94191-27526
17.	Sh. Sandesh Kumar	BDO Baggan	99062-43526
18.	Sh. Rajesh Padha	BDO Bani	8493877883
19.	Sh. Rajesh Padha	BDO Duggan	8493877883

**Annexure 3 :-
Heat Wave Training**

DDMA has proposed two training programs for heat wave awareness. The first program aims to educate students and teachers about the risks associated with heat waves and the preventive measures to mitigate them. The Jr. Consultant (DDMA) will be the nodal officer for these trainings. SDRF and Health Departments are expected to cooperate with him in coordinating and executing these training sessions effectively. The second program targets local residents and community leaders, intending to raise awareness about heat wave risks and promote proactive measures within the community. Through these trainings initiatives, DDMA endeavors to enhance preparedness and resilience against heat wave events in Kathua District.

Proposed Trainig	Teams Involved	Participants
Awareness about Heat wave risks and Prevention for students	Medical Team, SDRF	Students, Teachers
Awareness about Heat Wave Risks and Prevention for Locals	Medical Team, SDRF	Local Residents, Community Leaders.

**Annexure 4:-
Heat wave Do's and Dont's**

Do's and Don'ts

Heat Wave conditions can result in physiological strain, which could even result in death. To minimize the impact during the heat wave and to prevent serious ailment or death because of heat stroke, the following measures are useful:

Do's Must for All

- Listen to Radio, watch TV, read Newspaper for local weather forecast to know if a heat wave is on the way.
- Drink sufficient water and as often as possible, even if not thirsty.
- Use ORS, homemade drinks like lassi, unripe mango juice (kachi keri), lemon water, buttermilk, etc. which help to re-hydrate the body.
- Wear lightweight, light-coloured, loose, and porous cotton clothes. Use protective goggles, umbrella/hat, shoes or chappals while going out in sun.
- Cover your head; Use a cloth, hat or umbrella

Employers and Workers

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

Other Precautions

- Stay indoors as much as possible
- Keep your home cool, use curtains, shutters or sunshade and open windows at night.
- Try to remain on lower floors
- Use fans, damp clothing and take bath in cold water frequently.
- While travelling, carry water with you.
- If you work outside, use a hat or an umbrella and also use a damp cloth on your head, neck, face and limbs.
- Recognize the signs of heat stroke, heat rash or heat cramps such as weakness, dizziness, headache, nausea, sweating and seizures. If you feel faint or ill, see a doctor immediately.
- Keep animals in shade and give them plenty of water to drink.

Don'ts

- Avoid going out in the sun, especially between 12.00 noon and 3.00 p.m.
- Avoid wearing dark, heavy or tight clothing.
- Avoid strenuous activities when the outside temperature is high.
- Avoid working outside between 12 noon and 3 p.m.
- Do not go out barefoot
- Avoid cooking during peak hours. Open doors and windows to ventilate cooking area adequately.
- Do not leave children or pets in parked vehicles- as they may get affected by Heat Wave
- Avoid alcohol, tea, coffee and carbonated soft drinks, which dehydrates the body.
- Avoid high-protein food and do not eat stale food.