

HEAT WAVE ACTION PLAN 2024-25



DISTRICT RAMBAN

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PREFACE

It is expected that extreme heat waves will become more common worldwide because of rising average global temperature. Since the beginning of the 21st century, this has increased by nearly a degree Centigrade. This weather pattern, coupled with the El-Nino effect, is increasing the temperatures in Asia. Further, high humidity compounds the effects of the temperatures being felt by human beings.

Extreme heat can lead to dangerous, even deadly, consequences, including heat stress and heatstroke. India is also vulnerable to the impacts of climate change. Experts have been warning that the rising temperatures will lead to more floods, heat-waves, storms, rising sea levels and unpredictable farm yields. There is evidence that climate change is causing increase in extreme weather events as well as severity and frequency of natural disasters. Deforestation is also adding to the environmental instability and contributing to global warming and climate change. There has been an increasing trend of heat-wave in India over the past several years whereby several cities in India have been severely affected. Heat wave killed about 3000 people in 1998 and more than 2000 in 2002. Heat wave caused over 2000 deaths in 1998 in Odisha and more than 1200 deaths in 2002 in southern India. More than 2400 people died in the heat wave of 2015. Heat wave also caused death of cattle and wildlife besides affecting animals in various zoos in India.

The increased occurrences and severity of heat-wave is a wake-up call for all agencies to take necessary action for prevention, preparedness and community outreach to save the lives of the general public, livestock and wild life.



Government of Jammu & Kashmir



Preface

It gives me immense pleasure to present the Heat Wave Action Plan for Ramban District. This document is not just a set of guidelines, but it reflects our commitment to ensuring the safety and well-being of our community in the face of extreme heat events.

As we navigate through a changing climate, proactive disaster preparedness is paramount. This plan outlines our strategies, organizational structure, and commitment to swift and effective response under the supervision of the District Administration.

While policy decisions are made at higher levels, it is the District Administration's responsibility to implement them. This plan serves as a practical guide to minimize the impact of heat waves, drawing from our past experiences and aiming for swift restoration of normalcy.

I welcome feedback for improvement and alignment with community needs. Together, let us work towards resilience and safety in the face of extreme heat events.


Baseer-Ul-Haq Chaudhary, IAS
Deputy Commissioner/Chairman DDMA
Ramban

April,2024

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CHAPTER 01

INTRODUCTION

India, with approximately 1.32 billion people is the second most populous country in the world with considerably high levels of population density. India is among the worst disaster prone countries of the world. As per 2011 census, 31% of India's population live in urban areas and 69% live in rural areas. The trend shows that the number of persons living in urban areas will continue to grow at a faster rate than the population in the rural areas due to migration and increasing urbanization.

The World Meteorological Organization century, this is directly affecting the communities; (WMO) statements on global climate during 2011 and 2012 indicate that the global temperatures are continuing to increase.

Heat -waves are projected to increase in number, intensity and duration over the most land area in the 21st undermining their livelihoods through gradual, insidious changes in temperature and rainfall patterns, and resulting in increased frequency and intensity of hazards such as floods, cyclones, droughts, unseasonal rains and hailstorms, causing extensive damage to crops and agro-rural economy. Heat wave 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.

The most notable amongst the recent ones are Hyderabad (Andhra Pradesh) 46 °C, Khammam 48 °C, Jharsuguda (Odisha) 45.4°C, Bhubaneshwar (Odisha) 44°C, Allahabad (Uttar Pradesh) 47.8°C , Delhi 46.4°C, Jashpur (Chattisgarh) 44.5°C, Kolkatta (West Bengal) 44.5°C, Gaya (Bihar) 46.3°C, Nagpur (Vidarbha region in Maharashtra) 47.1°C, Kalburgi (Karnataka) 44.1°C and Churu (Rajasthan) 48.0°C in 2015. The extreme temperatures combined with high humidity and resultant atmospheric conditions adversely affect people living in these regions leading to physiological stress, sometimes even death. This unusual and uncomfortable hot weather can impact human and animal health and also cause major disruption in community infrastructure such as power supply, public transport and other essential services. Heat wave is also called a "silent disaster" as it develops slowly and kills and injures humans and animals nationwide. Higher daily peak temperatures of longer duration and more intense heat waves are becoming increasingly frequent globally due to climate change.

India too is feeling the impact of climate change in terms of increased instances of heat wave with each passing year. Importantly, the adverse impact of heat wave are preventable by educating the public on the preventive actions, following the Do's and Don'ts, reporting early to health facilities and timely diagnosis and treatment.

CHAPTER 02

INTRODUCTION TO HEAT WAVE

2.1 Objective of Heat wave:

Heat-wave is a condition of atmospheric temperature that leads to physiological stress, which sometimes can claim human life. Heat-wave is defined as the condition where maximum temperature at a grid point is 3°C or more than the normal temperature, consecutively for 3 days or more. 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. If the maximum temperature of any place continues to be more than 45° C consecutively for two days, it is called a heat wave condition.

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. To calculate the effect of humidity we can use Heat Index Values. The Heat Index is a measure of how hot it really feels when relative humidity is factored in with the actual air temperature. As an example, if the air temperature is 34°C and the relative humidity is 75%, the heat index--how hot it feel is **Table 1: Temperature/Humidity Index** when the relative humidity is 100 %. The temperature vs humidity chart is placed and temperature actually felt.

Relative Humidity %	Temperature °C																
	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
40	27	28	29	30	31	32	34	35	37	39	41	43	46	48	51	54	57
45	27	28	29	30	32	33	35	37	39	41	43	46	49	51	54	57	
50	27	28	30	31	33	35	36	38	41	43	46	49	52	55	58		
55	28	29	30	32	34	36	38	40	43	46	48	52	54	58			
60	28	29	31	33	35	37	40	42	45	48	51	55	59				
65	28	30	32	34	36	39	41	44	48	51	55	59					
70	29	31	33	35	38	40	43	47	50	54	58						
75	29	31	34	36	39	42	46	49	53	58							
80	30	32	35	38	41	44	48	52	57								
85	30	33	36	39	43	47	51	55									
90	31	34	37	41	45	49	54										
95	31	35	38	42	47	51	57										
100	32	36	40	44	49	56											
	Caution			Extreme Caution					Danger			Extreme Danger					

Source: Calculated °F to °C from NOAA's National Weather Service

2.2 Heat wave in India:

Extreme positive departures from the normal maximum temperature result in a heat wave during the summer season. During the rising maximum temperature the pre-monsoon months continues till June and in rare cases till July, over the northwestern parts of the country. In recent years, heat wave casualties have increased. Abnormally high temperatures were observed during April –June during 2010 to 2015 across the country. In India the heat wave took 3028 lives in 1998 and more than 2000 lives in 2002. In Odisha, heat wave caused 2042 deaths in 1998 and more than 1200 deaths in 2002 in southern India. In India heat-wave caused 22562 deaths since 1992 to 2015 at various states (Table 2). Heat wave also caused death of wildlife, birds, poultry in states and most of the zoos in India.

Table 2

Year	No. of Deaths
1992	612
1993	631
1994	773
1995	1677
1996	434
1997	393
1998	1016
1999	628
2000	534
2001	505
2002	720
2003	807
2004	756
2005	1075
2006	754
2007	932
2008	616
2009	1071
2010	1274
2011	793
2012	1247
2013	1216
2014	1677
2015	2422

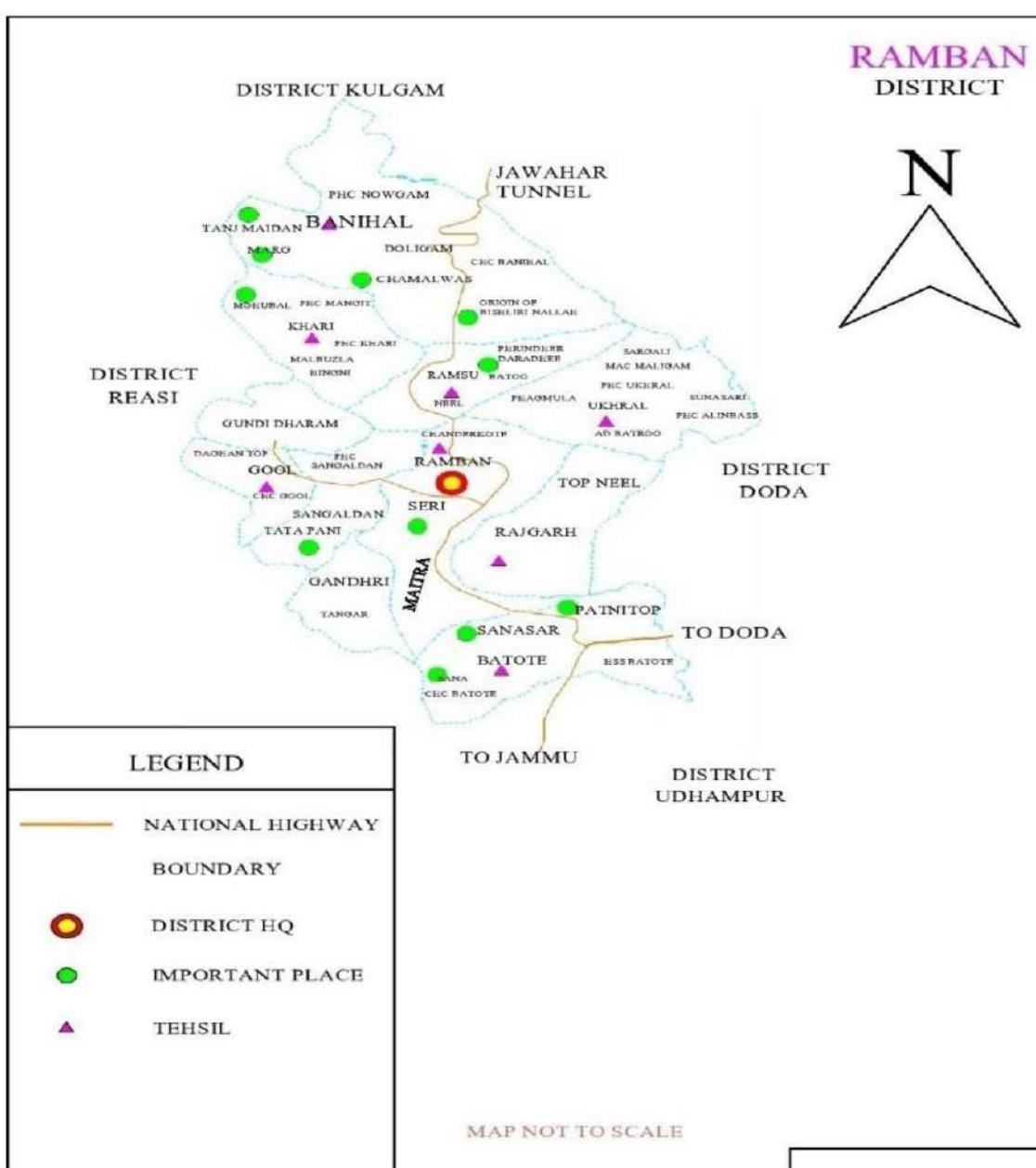
Source: IMD Heat wave Death details

Ramban Municipal Corporation having Zero Death in last 10 years on span according to GMC

Healthdepartment reports. As precaution and awareness has been done widely to avoid such Criticality in Ramban Municipal Corporations.

CHAPTER 03

DISTRICT PROFILE



Ramban District is one of 22 Districts in Jammu and Kashmir UT of India. The District has a total area of 1330 km². Ramban is located in the lap of Pir-Panjal range of the Himalaya Range of mountains. Ramban has a very unique Geography. The District is completely mountainous with approximately 80% of its population living in villages situated in far-flung and inaccessible areas.

The mighty River Chenab flows through the Ramban District and several areas of the District are drained by the various tributaries of this river. The major tributaries of the Chenab in Ramban are Bichleri, Chengi Nallah, Ind Nallah and Rajgarh Nallah.

The boundary lines of Ramban District encompass the hill station of Patnitop as its southernmost point, Assar and Pogal Paristan on its eastern edge, Gool to the west, and Banihal to the north. The District shares its boundaries with Udhampur, Doda, Kishtwar, Anantnag, Kulgam and Reasi Districts of J&K.

District Ramban started functioning as an independent unit on April 1, 2007. Ramban town is the District Headquarters. The town is located midway between Jammu and Srinagar along the Chenab river, on National Highway-44 approximately 150 kms from Jammu and Srinagar. Ramban District has three sub divisions. These are:

1. Ramsoo
2. Banihal
3. Gool

There are eleven Community Development Blocks in Ramban.

1. Ramban
2. Batote
3. Rajgarh
4. Gool
5. Sangaldan
6. Gundi Dharam
7. Gandhri
8. Ramsoo
9. Pogal Paristan (Ukhral)
10. Banihal
11. Khari

The entire Ramban district is part of the Doda, Udhampur, and Kathua Parliamentary Constituency. Within Ramban there are 3 MLA constituencies of Gool-Arnas, Banihal and Ramban. Further there are 11 Blocks wherein 11 Block Development Councils have been established. There are 142 Panchayats in Ramban District.

Natural calamities, like cloud bursts, flash floods, heavy rains, earthquake, snowfall, hail storms, landslides, drought and road accidents have been a recurrent

Phenomena causing a lot of misery to the people in terms of loss of life, & property damage. Further the River Chenab is a very fast flowing and deep river. It flows along the National Highway-44 in Ramban and thus is highly susceptible to accidents. Due to its strength of flow and depth, it creates a large impediment for retrieval of vehicles and victims.

Ramban has often been victim to natural calamities causing severe damage to life and property. Added to this are the disasters caused due to development activities of construction of NH-44 and Railway link projects. Hence the significance of Disaster Management Plan for Ramban is very high.

The following table sums up the District Profile of Ramban.

3.1 District Ramban Demographics

S. No.	Description	Unit
1.	Geographical Area	1329 Sq. Km
2.	Sub-Division	03- Banihal, Ramsoo, & Gool

3.	Tehsil	08- Batote, Rajgarh, Ramban, Ukhral, Khari, Banihal, Ramsoo and Gool
4.	Block	11- Ramban, Batote, Rajgarh, Gool, Sangaldan, Gundidharam, Gandhri, Ramsoo, Ukhral, Banihal, and Khari
5.	Village	129
6.	Panchayat	142
7.	Municipal Council	Nil
8.	Municipal Committee	03 –Ramban, Banihal, & Batote
9.	Population	Total =271902 (Male:142317 Female: 129585)
10.	Schedule Tribe Population	39772
11.	Forest cover	641.71 sq. kms
12.	Health infrastructure	C.H.C. = 03 P.H.C. = 08 Hospitals = 02 Trauma Care Hospitals=04 (Banihal, Batote, Ramsoo, Ramban)
13	Literacy (2011 Census)	Total = 124065 Male = 82938 Female = 41127
14.	Education	Primary Schools = 526 Middle Schools = 296 High/Higher Secondary Schools = 85 Govt. Degree Colleges=05 Ramban, Banihal, Batote, Ukhral, and Gool Govt. I.T.I.'s=03, Ramban, Banihal, and Gool Anganwaris=778

3.2 District Max. & Min. Temperature 2023, Month (March-June) (Source: Accuweather Monthly Weather Report)

S.No.	Month	Min Temp.	Max Temp.
1.	March	12°C	30°C
2.	April	13.2°C	38°C
3.	May	18° C	40°C
4.	June	20°C	43°C

3.3 Vulnerable Hotspots:

Ramban district has never experienced a Heat Wave before. But, according to above conclusions, only **Tehsil Ramban** can be considered to be at risk of Heat Wave Susceptibility.

CHAPTER 04

PREPARING A HEAT WAVE ACTION PLAN

4.1 Heat-wave and Disaster Management:

Section 2 (d) of the Disaster Management Act 2005 defines “disaster” as a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, and is of such a magnitude to be beyond the coping capacity of the affected area. Heat-wave has not been notified as a disaster by Government of India yet. But the data of the casualties it has been causing suggests that it is time that the various stakeholders realize the damaging repercussions that heat wave can cause to the health of humans and animals. Heat wave is not notified in the list of twelve disasters eligible for relief under National/ State Disaster Response Fund norms.

However, a State Government may use up to 10 per cent of the funds available under the SDRF for providing immediate relief to the victims of natural disasters that they consider being “disasters” within the local context in the State and which are not included in the notified list of disasters of the Ministry of Home Affairs subject to the condition that the State Government has listed the State specific natural disasters and notified clear and transparent norms and guidelines for such disasters with the approval of the State Authority.

4.2 Purpose of Heat-wave Action Plan:

The Heat-Wave Action plan aims to provide a framework for implementation, coordination and evaluation of extreme heat response activities in cities/town in India that reduces the negative impact of extreme heat. The Plan’s primary objective is to alert those populations at risk of heat-related illness in places where extreme heat conditions either exist or are imminent, and to take appropriate precautions, which are at high risk. Preventive heat management and the administrative action need to be taken by the concerned ministries/departments are enumerated in Table 5. All cities can learn from their experience and develop a plan to deal with Heat wave in their specific cities/town and thus reduce the negative health impacts of extreme Heat. In addition the State Governments should also prepare a comprehensive plan to combat Heat wave.

CHAPTER 05 **STRATEGIES TO IMPLEMENT HEAT WAVE ACTION PLAN**

5.1 Key strategies on Heat wave plan Implementation:

The heat-wave action plan is intended to mobilize individuals and communities to help protect their neighbors, friends, relatives, and themselves against avoidable health problems during spells of very hot weather. Broadcast media and alerting agencies may also find this plan useful. Severe and extended heat-waves can also cause disruption to general, social and economic services. For this reason, Government agencies will have a critical role to play in preparing and responding to heat-waves at a local level, working closely with health and other related departments on long term strategic plan.

- ***Establish Early Warning System and Inter-Agency Coordination*** to alert residents on predicted high and extreme temperatures. Who will do what, when, and how is made clear to individuals and units of key departments, especially for health.
- ***Capacity building / training programme*** for health care professionals at local level to recognize and respond to heat-related illnesses, particularly during extreme heat events. These training programmes should focus on medical officers, paramedical staff and community health staff so that they can effectively prevent and manage heat-related medical issues to reduce mortality and morbidity.
- ***Individuals, community groups, and the media*** are also essential in fighting the effects of extreme heat. Individuals can take specific preventative steps to protect themselves, their families, and their communities from harmful heat waves including
 - Talking with their doctor or Health Centre about early signs of heat wave
 - Limiting heavy work during extreme heat
 - Drinking water
 - Staying out of the sun
 - Wearing light clothing
 - Checking on neighbors
 - Informing their fellow community members about how to keep cool and protect themselves from heat.

The media plays an essential awareness-building role by sharing news about health threats, and increases public protection by running ads and providing local resources information.

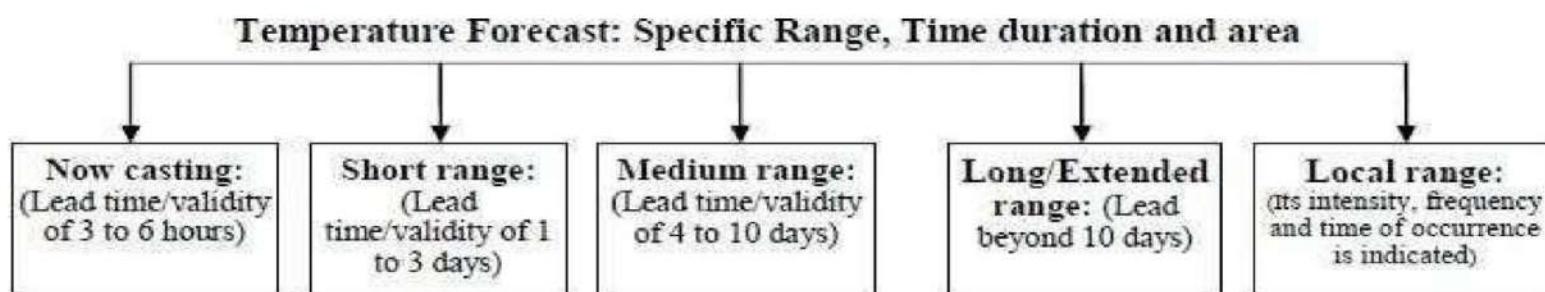
While summer is defined as spanning May, June and July Ramban's hottest temperatures can run from May through July, with temperatures generally peaking in July and warm days through November.

- ***Public Awareness and community outreach*** Disseminating public awareness messages on how to protect against the extreme heat-wave through print, electronic and social media and Information, Education and Communication (IEC) materials such as pamphlets, posters and advertisements and Television Commercials (TVCs) on Do's and Don'ts and treatment measures for heat related illnesses.

5.2 Forecast and Issuance of Heat Alert or Heat Warning:

India Meteorological Department (IMD):

The IMD is mandated to meteorological observations and provides current and forecast meteorological information for optimum operation of weather-sensitive activities. It provides warning against severe weather phenomena like tropical cyclones, dust storms, heavy rains and snow, cold and heat waves etc. It also provides real time data and weather prediction of maximum temperature, Heat-wave warning, Heat-alert for the vulnerable cities/rural area of the severity and frequency. IMD provides following range and validity of time forecast:



3.3 Identification of Color Signals for Heat Alert³:

Red Alert (Severe Condition)	Extreme Heat Alert for the Day	Normal Maximum Temp increase 6° C to more
Orange Alert (Moderate Condition)	Heat Alert Day	Normal Maximum Temp increase 4° C to 5° C
Yellow Alert (Heat-wave Warning)	Hot Day	Nearby Normal Maximum Temp.
White (Normal)	Normal Day	Below Normal Maximum Temp.

CHAPTER 06 **HEAT WAVE MECHANISM AND DEALING WITHILLNESS**

Dealing with Heat Related Illness

Identification of Heat-Wave illness and recordings of casualties:

In the past, when the Government declared ex-gratia compensation for heat-wave affected families, it was observed that some people who were aware of the provision of direct cash relief reported natural deaths as the heat wave deaths. In the event of false reporting, the following procedures can be used for verifying and ascertaining the real cause of death.

- Recorded maximum temperature on the particular time periods and place.
- Recording incidents, panchnama or others witnesses, evidence or verbal – autopsy.
- Postmortem/medical checkup report with causes.
- Local authority or Local body enquiry/verification report.

Prevention of Heat Related Illness:

Heat-related illness is largely avoidable. The most crucial point of intervention concerns the use of appropriate prevention strategies by susceptible individuals. Knowledge of effective prevention and first-aid treatment, besides an awareness of potential side-effects of prescription drugs during hot weather is crucial for physicians and pharmacists.

Acclimatization:

People at risk are those who have come from a cooler climate to a hot climate. When such visitors arrive during the heat wave season, they should be advised not to move out in open for a period of one week till the body is acclimatized to heat and should drink plenty of water. Acclimatization is achieved by gradual exposure to the hot environment during heat wave.

Table No 03: Symptoms and First Aid for various Heat Disorders

Heat Disorder	Symptoms	First Aid
Sunburn	Skin redness and pain, possible swelling, blisters, fever, headaches.	Take a shower, using soap, to remove oils that may block pores preventing the body from cooling naturally. If blisters occur, apply dry, sterile dressings and get Medical attention.
Heat Cramps	Painful spasms usually in leg and abdominal muscles or extremities. Heavy sweating.	Move to cool or shaded place. Apply firm pressure on cramping muscles or gentle massage to relieve spasm. Give sips of water. If nausea occurs, discontinue.

Heat Exhaustion	Heavy sweating, weakness, skin cold, pale, headache and clammy. Weak pulse. Normal temperature possible. Fainting, vomiting.	Clothing. Apply cool, wet cloth. Fan or move victim to air-conditioned place. Give sips of water slowly and If nausea occurs, discontinue. If vomiting occurs, seek immediate medical attention. Or call 108 and 102 for Ambulance
Heat Stroke (Sun Stroke)	High body temperature (106+F). Hot, dry skin. Rapid, strong pulse. Possible unconsciousness. Victim will likely not sweat.	Heat stroke is a severe medical emergency. Call 108 and 102 for Ambulance for emergency medical Services or takes the victim to a hospital immediately. Delay can be fatal. Move victim to a cooler environment. Try a cool bath or sponging to reduce body temperature. Use extreme caution. Remove clothing. Use fans and/or air conditioners. DO NOT GIVE FLUIDS.

The past few summers have shown that the risk of heat illness from high temperatures is one of the most serious challenges to the safety and health of peoples. This action plan guide you plan how to prevent heat illness among you and provide training to our citizens.

Heat illness can be a matter of life and death. Workers die from heat stroke every summer and every death is preventable.

- When heat stroke doesn't kill immediately, it can shut down major body organs causing acute heart, liver, kidney and muscle damage, nervous system problems, and blood disorders.
- Having a serious injury or death occur
- People suffering from heat exhaustion are at greater risk for accidents, since they are less alert and can be confused.



YELLOW ALERT	Hot Day Advisory	41.1°C – 43°C
ORANGE ALERT	Heat Alert Day	43.1°C – 44.9°C
RED ALERT	Extreme Heat Alert Day	≥ 45°C

TYPES OF HEATS ILLNESS

There are mainly three categories of heat injuries:-

- Heat Cramps.
- Heat Exhaustion.
- Heat Stroke.
- Hot weather.
- Humid weather.
- Sun – you absorb more heat if you are in the sun.
- Heat our bodies generate when we are physically active and doing hard work
- Too little fluid.
- Too few electrolytes (Salt or minerals)

CHAPTER 07 **Heat Wave Do's and Don'ts**

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.

1. Listen to radio, watch TV, read newspaper for local weather forecast to know if Heat Wave is on the way.
2. Drink sufficient water and as often as possible, even if not thirsty.
3. Use ORS, homemade drinks like lassi, unripe mango juice (kachi keri), lemon water, buttermilk, etc. which help to re-hydrate the body.
4. Wear lightweight, light-colored, loose, and porous cotton clothes. Use protective goggles, umbrella/hat, Shoes or chappals while going out in sun.

Employers and Workers

1. Provide cool drinking water near work place.
2. Caution workers to avoid direct sun light.
3. Schedule strenuous jobs to cooler times of the day.
4. 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 sunshades and open windows at night.
3. Try to remain on lower floors.
4. While traveling carry water with you.
5. Keep animals in shade and give them plenty of water to drink.

Don'ts

1. Avoid going out in sun, especially between 12 noon to 3PM.
2. Avoid wearing dark, heavy or tight clothing.
3. Avoid working under the sunlight.
4. Do not go out barefoot.
5. Avoid alcohol, Tea, Coffee and Carbonated soft drinks which dehydrates the body.
6. Avoid high proteins food and do not eat stale food.

The best defence against extreme heat to be prepared, and remember:

Get ready :

- Take steps now to prepare your home, workplace, and community for preparation and prevention of Heat Wave.

Get Set :

- Know the symptoms of Heat related illnesses and what to do in an emergency.

Go:

- Check on those who may need help during an extreme heat event, like children, elderly family home bound neighbors, or outdoor workers.

CHAPTER 8: ROLES & RESPONSIBILITIES

ADVISORIES FOR HEAT WAVE

Sr. No.	District Agencies and their Role/Responsibilities	
	Agencies	Role/Responsibilities
1.	District Admin./DDMA/ ULBs/PRIs	<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.	PRIs/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.
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/Higer 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 heat resilience 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 reaction	<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 affore station 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 Tourism	<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 bus stops. • 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.

8.1 TASK FORCES

LIST OF IMPORTANT CONTACTS

S. No.	Name of the officer	Designation	Contact No.
1	Baseer Ul Haq Choudhary, IAS	Deputy Commissioner, Ramban	9419156577
2	Varunjeet Charak, JKAS	Addl. Deputy Commissioner, Ramban	9906094697
3	Harpal Singh, JKAS	Asstt. Commissioner (Rev.), Ramban	9419215035
4	Anuj Kumar, IPS	Sr. Suptt. of Police, Ramban	9716033581
5	Ghanshayam Basotra	Sub Divisional Magistrate, Ramsoo	9682140256
6	Pawan Kumar Goswami	Sub Divisional Magistrate, Gool	9419125824
7	Rizwan Asgar	Sub Divisional Magistrate, Banihal	8082211529
8	Kamal Jee Zadoo	Chief Medical Officer, Ramban	9419285534
9	Rajiv Ghai	Xen PHE, Ramban	9419181354
10	Dav Anand	Chief Education Officer, Ramban	9419278505
11	Abhishek Gupta	Xen PWD, Ramban	9419189642
12	Parshant Kumar	District Information Officer, Ramban	9540266779
13	Sajad Ahmed	Divisional Forest Officer Ramban	9596649425
15	Sheetal Kumar Sharma	Asstt. Regional Transport Officer, Ramban	9419337635
16	Tassaduq Hussain	Xen PDD/JPDCL, Batote	9419072590
17	Suhail Jaan Kawoosa	Chief Animal Husbandry Officer, Ramban	7006833320
18	Rahul Gupta	District Social Welfare Officer, Ramban	7006421239
19	Sushant Mahajan	Asstt. Labour Commissioner, Officer, Ramban	9419787339

8.2 NODAL OFFICER

District Level Nodal Officer

S.No	Name of the Officer	Designation	Mobile No.
1	Sh. Harpal Singh (JKAS)	Assistant Commissioner Revenue, Ramban	7006101083

Block Level Nodal Officer

S.No	Name of the Officer	Designation	Mobile No.
1	Sh. Deep Kumar (JKAS)	Tehsildar Ramban	7006739036

8.3 Facility Available

- a) Emergency 24x7
- b) O.P.D All Specialties : Medicine, Surgery, Gynae., Paediatrics, Eye, E.N.T, Orthopaedic Surgeon, Dental, Homoeopathic and neuropsychiatry.
- c) I.P.D Facility wherever required.
- d) Laboratory: Biochemistry and hematology except FNAC and PBF.
- e) X-Ray Facilities : Round the clock.
- f) Ultrasound Facilities.
- g) CT Scan Facilities.
- h) Free Services to Mother and Newborn under JSSK, Including Free medicines, Diet and Transportation.
- i) Ambulances Services round the clock.

8.4 Roles and Responsibilities of Nodal Officer

Pre-Summer

- Designate point of contact for each department.
- Identifies facilitator to coordinate communications and schedule monthly meetings.
- Establishes heat mortality tracking system and updates data sets.
- Establishes heat action web page on web site.
- Facilitates training of school children and school staff.
- Launches heat wave awareness campaigns before on set of summer.
- Creates list of high risk areas of city heat wise.

During heat event:

- Appoints Nodal officer in each department for coordination with District Nodal Officer.
- Coordinates heat action plan activities through Nodal Offices in each department.
- Communicates location of emergency facilities and cooling centers/shaded areas to all stakeholders.
- Monitors severity of heat alert based on forecast.

Post Summer Evaluation:

- Review quantitative and qualitative data for process evaluation and improvements.
- Call meeting for annual evaluation of heat plan with key agencies and community partners.

