

# SRINAGAR HEAT WAVE ACTION PLAN 2024-2025



DISTRICT DISASTER MANAGEMENT
AUTHORITY SRINAGAR

# Message

Climate change is driving temperatures higher as well as increasing the frequency and severity of heat waves globally. India too has been experiencing the impact of climate change in terms of increased frequency of heat waves every year. The Himalayan Mountain complex has been regarded as especially vulnerable to the climate change phenomena and the effects are already perceptible. According to a special report released by the Inter-governmental Panel in Climate Change (IPCC) in October 2018, global warming of 1.5°- 2° will further worsen the situation in the urban agglomerations.

Despite being located at a high altitude, surrounded by mountainous and forested areas and having large water bodies viz, Dal Lake, River Jhelum, the Hokersar Wetland etc., District Srinagar is not immune to abnormally high temperatures. District Srinagar experienced its second-highest maximum temperature ever recorded in September 2023 since 1891, when the local weather observatory was established in the region.

Rapid urbanization and changing land use on the suburbs coupled with the congested residential and commercial areas in the city make the District a classic case of "Urban Heat Island Effect" enhancing our vulnerability to abnormally higher temperatures, which when combined with the changing Macro-Climatic Scenario may lead to Heatwaves.

In order to prevent such instances in the long run, inter departmental interventions aimed at heat-reduction such as development of Green Spaces, induction of Electric Buses, prevention of illegal conversion of Abi and Nambal lands and encroachment on water bodies and urban forests are being implemented vigorously.

This plan is a package of mitigative measures and aims to protect lives of citizens without affecting individual livelihoods or macro-economic growth and stability. It provides insights into various aspects related to heat risk prevention, reduction and mitigation. It is also aimed at facilitating convergence and coordination among all the stakeholders including departments, individuals and community-based organizations for mitigating the impacts of heat wave.

My best wishes to all the stakeholders and citizens.

Dr. Bilal Mohi-Din Bhat (IAS)

Deputy Commissioner, Chairperson, DDMA, Srinagar



# Acknowledgment

We extend our sincere gratitude to everyone who contributed to the Srinagar Heat Wave Action Plan 2024-2025. Special thanks are due to our Consultant, Mushtaq Ahmad Bhat, and our Supervisor, Umer Gulzar (JKAS), DDMO, for their invaluable guidance and dedicated efforts in the preparation of this comprehensive plan.

Their expertise and insight have been crucial in addressing the intricate challenges posed by heat waves in the region, ensuring that our strategies are robust and effective. This plan aims not only to mitigate the risks but also to enhance the resilience of the Srinagar community against future heat-related incidents.

We are thankful for their commitment and leadership, which inspire us to continue working towards a safer and well-prepared community.

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# **District Profile**

Srinagar district, the summer capital of Jammu and Kashmir is one of the most beautiful places of Kashmir valley. It is located on the banks of river Jhelum at an average elevation of 1555 meters above the mean sea level. It is situated between 74° 56' and 75° 79' East longitude and 33°18' and 34°45' North latitude. Srinagar district is bounded by natural wall of mountains (sub mountain branches of Pir Panjal ranges and Zanskar mountains). In the east it is bounded by Zabarwan mountains with lush green vegetation, locating famous Dachigam National Park and Mughal gardens and is environed by the famous lakes of Dal and Nageen with the eminence of hillocks of Shankaracharya and Kohi-Maraan (Hari Parbat) in the centre. The average rainfall as observed from the nearest meteorological station at Srinagar is 650 mm and average temperature ranges from 2.5°C in winter to 23.8°C in summer.

The Kashmir Valley has currently reeled under an intense and record-breaking heatwave. The summer capital Srinagar on September 12, 2023 recorded its second hottest September day in 132 years since 1891, second only to the all-time high of 35°C on September 18, 1934. when the local weather observatory was established in the region, according to India Meteorological Department's (IMD) regional centre. A heatwave is declared for hilly regions when the maximum temperatures for a station reach 30 degrees Celsius or more. The average temperature in Kashmir Valley is between 19.1°C to 27.6°C from April to mid-September, The World Meteorological Organization (WMO) said in a report that there is a "high probability" that 2024 will be another record-hot year and warned that the world's efforts to reverse the trend have been inadequate.



# **Hazard Profile**

#### **Definition 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 wave 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.

#### 2.1 Heat Waves and Need for Heat Action Plan

#### **Heat Waves:**

Green (No Action)	Normal Day	Maximum temperatures are near normal
Yellow (Be updated)	Hot day advisory	>= 30 °C
Orange Alert (Be prepared)	Heat alert day	>= 33°C
Red Alert (Take Action)	Extreme heat alert day	>= 35°C

As per the National Disaster Management Authority, a Heat Wave is a period of abnormally high temperature, more than the normal maximum temperature that occurs during the summer season. According to Indian Meteorological Department (IMD), a heat wave condition is said to have occured when the maximum temperature of a station reaches at least 30°C or more for Hilly regions.

### 2.2 What has the government done?

#### Vision

Reduction of heat-wave deaths in India to zero has been the vision adopted by the present Central government. This vision has been followed since 2015.

To this end, the government's priorities for action are

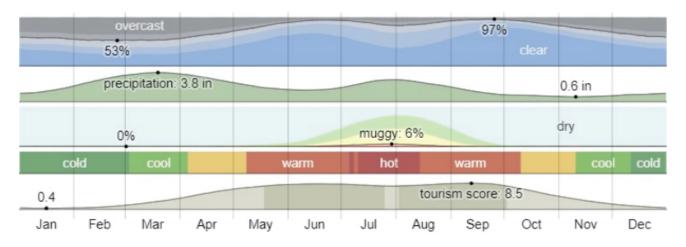
- a. Understanding disaster risk;
- **b.** Strengthening disaster risk governance to manage disasters;
- c. Investing in disaster risk reduction for resilience; and
- **d.** Enhancing disaster preparedness for effective response and to 'build back better' in recovery, rehabilitation and reconstruction under the Sendai Framework for Disaster Risk Reduction (adopted at the Third UN World Conference on Disaster Risk Reduction in Sendai, Japan).

The other objective is to bring about a change in approach, from 'response-centric management to holistic management of disasters. The emphasis would be on prevention, preparedness and mitigation.

# Climate in Srinagar

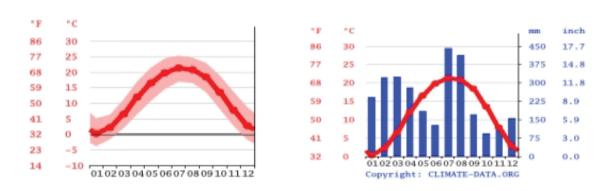
### 3.1 Summer weather in Srinagar

Summer season starts in June and ends in August, with warm temperatures and high humidity levels. The high temperature during these months varies from 24.4°C (75.9°F) to 34°C (93.2°F), and the low temperature ranges from 12°C (53.6°F) to 17°C (62.6°F).



Source: www.climatestotravel.com/climate/india/srinagar

### 3.2 Data And Graphs for Weather & Climate in Srinagar



Source: https://en.climate-data.org/asia/india

### 3.3 Table Data Depicts the Maximum and Minimum Temperature for the Year 2024

Months	April	May	June	July	August	September
Max.	25°C	29°C	33°C	31°C	31°C	29°C
Min.	10°C	13°C	16°C	18°C	18°C	14°C

Source: https://www.accuweather.com/en/in/srinagar

#### 3.4 Effects

The intense heatwave is an indication of climate change and in the long run, the heatwave has tendency to hit Kashmir's main cash crops and tourism industry:-

- If the temperature goes above 30°C a hormonal change happens in the apple plant, impacting its physiology and overall productivity. Other main cash crop viz saffron, can also be affected by heat wave.
- The tourism industry and tourism-dependent economies are also highly vulnerable to the impacts of rising temperatures. The best times of year to visit Srinagar for warm-weather activities are from mid May to late July and from early August to early October, which is the high risk period for high temperatures and heatwaves.
- Economic losses-labour productivity, loss of job days, reduced labour and opportunity loss.

# Heat Wave Action Plan Strategy, Roles and Responsibilities

### **Benefits of Heat Wave Action Plan**

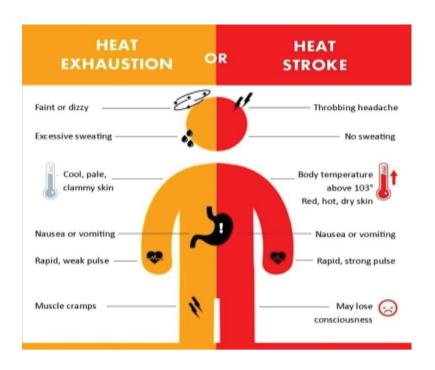
- Government commitment to protect the poor and vulnerable citizens.
- Reduces chances of illness due to heat strokes.
- Better preparedness of hospitals/health centres.

The Heat wave Action Plan provides a framework for implementation, coordination and evaluation of extreme heat response in district Srinagar and guides on mitigation and adaptive measures to avert loss of life and productivity. The Plan's primary objective is to alert populations at risk of heat- related illness, such as in places where extreme heat conditions either exist or are imminent, and to take appropriate precautions. The Heat Action Plan brings together all stakeholders for a district wide strategy in enforcing preventive, mitigation and adaptive measures to check heat- related debility among people.

#### 4.1 This Heat Wave Action Plan identifies:

Vulnerable populations and the health risks specific to each group, Impact of Heat wave on Health, Livelihood and Productivity General heat-health risks impact on Health, Livelihood and Productivity.

Effective strategies, agency coordination, and response planning Process of activating heat alerts and the plan implementation Evaluate and update the Heat Action Plan based on new learning.



### 4.2 Designated Department/ Nodal Officers and Responsibilities

There needs to be greater clarity around the roles and responsibilities in the management of Heat wave, for that matter any disaster. Preparation and response to Heat wave is to be managed in an integrated manner for which clear leadership to anchor the process is necessary. A central agency leads the response to a particular type of emergency. Support agencies provide resources, such as personnel, essential services and materials, to support or assist a control agency or affected person.

Sr. No	Name of Officer	Designation	Contact No's
1.	Deputy Commissioner	Nodal Officer	7006964625
2.	Addl. Deputy Commissioner Srinagar (K)	Member/CEO	9419507089
3.	Sr. Superintendent of Police Srinagar	Member	8119998012
4.	Chief Medical Officer	Member	9419009132

5.	Director IMD	Member	9419376737
6.	Superintending Engineer Hydraulic Srinagar	Member	9469574460
7.	Chief Education Officer	Member	9149705969
8.	Deputy Director Information	Member	9906578459
9.	Deputy Director F&ES	Member	7006027180
10.	Sub-Divisional Magistrate East	Member	9697939000
11.	Sub-Divisional Magistrate West	Member	9419004267
12.	Headquarter Assistant/DDMO	Member	7889317381
13.	Tehsildar Central Shalteng	Member	7006563301
14.	Tehsidar Chanapora / Natipora	Member	9419317162
15.	Tehsildar Eidgah	Member	9797280108
16.	Tehsidar Khanyar	Member	7006188634
17.	Tehsidar Pantha chowk	Member	788917381
18.	Tehsildar Srinagar North	Member	9906920373
19.	Tehsildar Srinagar South	Member	9622554774
20.	Consultant (DDMA)	Member	9797370930

- 1. To convene Meeting with Departments/ Organization/ NGOs involved in rehab/ agencies to review mechanism to respond extreme heat event.
- **2.** To Interact regularly with concerned departments for review the feedback.
- 3. To identify High risk area of the State/Districts vulnerable to heat wave and focus on such

- area and initiate focused activities on prevention for heat related illness.
- **4.** To organize training for Health Workers, School Children and the local community with the Health Department in prevention measures and treatment protocol.
- **5.** To distribute IEC material (Pamphlets, Posters & Stickers) in Local Language with Tips to prevent heat wave to Hospitals, Schools, and professional associations.

# **Vulnerability Mapping**

Heat waves may have both direct or indirect impacts on human health, influenced by interactions between medical, environmental, demographic and geographical factors, which may further compound health related effects. While it is clear that all people are at risk of illness and deaths due to exposure to hot temperatures, there are certain sub-groups that are highly vulnerable in comparison. Similarly, some areas of a city bear the brunt of heat waves more than remaining parts. Vulnerability assessment for heat waves have to take into account both geographical area and vulnerable populations.

A heat wave health vulnerability assessment allows health department/ medical stakeholders to better understand and identify people and places that are more likely to face adverse health impacts. It further helps in implementing targeted public health interventions and minimize health-heat risks.



### **5.1 Tehsil Level Heat Wave Response Teams**

Srinagar district administration has constituted a Tehsil Level Committees to take appropriate and necessary action during the heat wave in district. Following committees at every tehsil level will be liable to control the situation as desired and submit the report at Deputy Commissioners office as per guidelines.

### **Detail of Tehsil Level Heat Wave Response Teams**

Tehsil	Functionaries of IRS	Name of the Officer	Designated Officer	Cell No. (whatsapp)	Email-ID
1	Responsible Officer (RO)	Mr. Sajad Rasool Shah	Tehsildar	9622554774	Tehsildar-South@Jk.Gov.In
	Incident Commander (IC)	Mukhtar Ahmad Parray	Naib Tehsildar	9596391211 9848001128	
S O U	Deputy Incident Commander (DIC)	Gh. Nabi Sheikh	Zonal Education Officer	7006053584	
T H	Operation Section Chief (OSC)	Umer Nehvi	AEE, PHE	9469785688	
	Planning Section Chief (PSC)	Mushtaq Ahmad	Incharge Fire Station, Fire & Emergency Services Officer	7889558833	
	Safety Officer (SO)	Dr. Sameena	Medical Officer South	9906721302	
2	Responsible Officer (RO)	Mr.Zubair Ahmed (JKAS)	Tehsildar	9419010161	Tehsildar-North@Jk.Gov.In
N O	Incident Commander (IC)	Sheeraz Ahmad	Naib Tehsildar	7006405463	
R T H	Deputy Incident Commander (DIC)	Ghulam Hassan Lone	Zonal Education Officer	6005452279	
	Operation Section Chief (OSC)	Mohd Yousf	AEE, PHE	6005361191	

		Planning Section Chief (PSC)	Bilal Ahmad	Incharge Fire Station, Fire & Emergency Services Officer	7006082041	
		Safety Officer (SO)	Dr Farhat	Medical Officer	9419007008	
03		Responsible Officer (RO)	Mr. Syed Shahid Hussain Shirazi	Tehsildar	7006188634	Tehsildar-Khanyar@Jk.Gov.In
		Incident Commander (IC)	Syed Ulfat Rasool Bukhri	Naib Tehsildar	7006413058	
	K H A	Deputy Incident Commander (DIC)	Usman Ahmad	Zonal Education Officer	7006889914	
	N Y A R	Operation Section Chief (OSC)	Umer Nahvi	AEE, PHE	9469785688	
	K	Planning Section Chief (PSC)	Bashir Ahmad Khan	Incharge Fire Station, Fire & Emergency Services Officer (Central Jail)	9906727593	
		Safety Officer (SO)	Dr. Tariq Ahmad	Medical Officer	9469019460	
04		Responsible Officer (RO)	Mr.Kifayat Ali (JKAS)	Tehsildar	9419317162	Tehsildar-Chanapora@Jk.Gov.In
		Incident Commander (IC)	Muzaffar Khan	Naib Tehsildar	7006003327	
	C H A	Deputy Incident Commander (DIC)	Ghulam Nabi Sheikh	Zonal Education Officer	7006053584	
	N P O R	Operation Section Chief (OSC)	Monisa Manzoor	AEE, PHE	9419062325	
	A	Planning Section Chief (PSC)	Bilal Ahmad Wani	Incharge Fire Station, Fire & Emergency Services Officer	9596333320	
		Safety Officer (SO)	Dr. Parveez	Medical Officer	6005689826	
05		Responsible Officer (RO)	Mr.Rayees Ahmed Dar	Tehsildar	7006563301	Tehsildar-Shalteng@Jk.Gov.In
		Incident Commander (IC)	Imtiyaz Ahmad Ganai	Naib Tehsildar	7051686006	

	C	Deputy Incident Commander (DIC)	Ms. Nighat Ara	Zonal Education Officer	7006217718	
	E N T R	Operation Section Chief (OSC)	Shoib yousf	AEE, PHE	7780833122	
	A L SHALTENG	Planning Section Chief (PSC)	Mohd Sultan Dobi	Incharge Fire Station, Fire & Emergency Services Officer	9149781582	
		Safety Officer (SO)	Dr. Sameena	Medical Officer	9906721302 9419357838	
06		Responsible Officer (RO)	Mr. M.Iqbal Zargar (JKAS)	Tehsildar	9797280108	Tehsildar-Eidgah@Jk.Gov.In
		Incident Commander (IC)	Hyder Hussain Bhat	Naib Tehsildar	7889824621	
	E I D	Deputy Incident Commander (DIC)	Ms. Nighat Parveen	Zonal Education Officer	7006053584	
	G A H	Operation Section Chief (OSC)	Mohd Yousf	AEE, PHE	6005361191	
		Planning Section Chief (PSC)	Fayaz Ahmad Bhat	Incharge Fire Station, Fire & Emergency Services Officer	7889506944	
		Safety Officer (SO)	Dr. Samreen	Medical Officer	7006956829	
07		Responsible Officer (RO)	Mr.Muzamil Zuman (JKAS)	Tehsildar	9419131786	
		Incident Commander (IC)	Zaid Ali Poswal	Naib Tehsildar	7889510548	
		Deputy Incident Commander (DIC)	Mr. Raja Younis	Zonal Education Officer	7889736974	
		Operation Section Chief (OSC)	Nusrat Habib	AEE, PHE	7780961209	
		Planning Section Chief (PSC)	Farroq Ahmad Beigh	Incharge Fire Station, Fire & Emergency Services Officer	7006580171	
		Safety Officer (SO)	Dr. Umera	Medical Officer	6005430270	/

## **5.2** Roles and Responsibilities for managing Heat Wave – Pre Heat Season:

Sr. No.	Name of the activates	Name of the Agency	Responsibilities	Directions
01	Early warning	India Meteorological Department (IMD)	<ul> <li>Issue Heat wave alerts warnings.</li> <li>Weather forecasts on Short/ Medium/Long range duration, Communicate Max.</li> <li>Temperatures district wise.</li> </ul>	<ul> <li>DDMA –To disseminate the information received from IMD to Public</li> <li>High Risk Area mapping and Identification of vulnerable groups</li> </ul>
02	Mitigating Heat Wave	MCD, PWD, I&FC & Traffic Police	<ul> <li>To construct Shelters/ Sheds, Bus Stands with cool roof.</li> <li>Identification of areas to provide shelters and drinking water during heat alert period.</li> <li>Provide Drinking Water at major landmarks, chowks in the cites &amp; project sites.</li> </ul>	
03	Mitigating Heat Wave	Transport Department	<ul> <li>Display Posters and distribute pamphlets on prevention of heat wave related illness.</li> <li>Ensure availability of adequate Bus Shelters with Drinking Facilities.</li> </ul>	PHE - To ensure proper arrangement of Drinking water at bus queue shelters.
04	Mitigating Heat Wave	Animal Husbandry Department	<ul> <li>Display posters and distribute pamphlets on the precautionary measures to be taken to safeguard cattle and poultry birds during heat period in villages and important junctions.</li> <li>Ensure adequate stock of medicine in all veterinary hospitals.</li> <li>Ensure visit of field staff during heat wave to villages for follow up action in treatment of cattle / poultry birds.</li> </ul>	PHE - To ensure proper arrangement of Drinking water at bus queue shelters.

05	Early warning	Education Department	<ul> <li>Display Posters and distribute pamphlets on prevention of heat wave related illness.</li> <li>Ensure that schools do not run during pick hours (12- 4pm) when heat wave is declared.</li> <li>Identify the shelter space, drinking water, ORS facilities with signs.</li> <li>No open-air classes to be conducted.</li> </ul>	<ul> <li>Director Education         (Kashmir) to take         necessary action and         implement in Srinagar         Capital.</li> <li>To conduct Training of         school teachers to equip         them with knowledge of         heat Protection tips and         activities which they can         disseminate in classrooms.</li> </ul>
06	Monitoring and response	Medical & Health Department and Medical Professional	<ul> <li>Stockpiling of ORS in Hospitals and Dispensaries.</li> <li>Creating Medical Posts at vulnerable places.</li> <li>First Aid Kits with provision to relieve symptoms and heat wave illness-Training of human resources and deployment of additional staff to attend to the influx of patients during Heat Wave.</li> <li>Display Heat- related illness prevention tips and how to stay cool around Hospitals and Dispensaries</li> </ul>	
07	Media campaign & IEC activities	Information and Public Relation	<ul> <li>Identification of areas to post warnings and information during heat season.</li> <li>Create awareness among the public through advertisement in local language.</li> <li>Display hoarding at important places.</li> <li>Creation of awareness through Print, Electronic and Outdoor media.</li> <li>Increase the no. Of Installed LED screens with rolling updated temperature forecast.</li> <li>Utilizing the local radio FM to</li> </ul>	

			alert public during Heat wave.  • Send Heat wave warning through Text, WhatsApp Massages, Emails, etc.	
08		Information Technology (IT) Department	<ul> <li>Development of Disaster and Emergency Management System which includes Heat waves and prepare a Dash board to monitor heat wave scenario.</li> <li>Mapping of Risk areas and dissemination of warnings and alerts to all stakeholders automatically through web and mobile applications.</li> <li>Prepare map on web interface with colour coding system.</li> </ul>	
09		Srinagar Fire Services Department	To check the readiness of vehicles and firefighting equipment's to face any emergency.	
10	Communities & individuals	Community groups, Self-help groups, ward level committees, NGOs	<ul> <li>Conduct training programmes, workshops and outreach sessions with community / Self- help groups and mobilizes such as RWAs, ASHA workers, Anganwadi's, and Ward Committees in Municipalities to help inform and get vulnerable communities more actively involved.</li> <li>Identification of NGOs, Voluntary Organizations in reaching out to the Public, especially vulnerable groups.</li> <li>Encourage discussions for finding early signs of heat exhaustion with local doctors or Health Centres.</li> <li>Inform fellow community members about how to keep cool and protect oneself from Heat.</li> </ul>	

11	Jal Shakti	<ul> <li>To ensure proper arrangement of</li> </ul>	Jal Shakti department
	department	drinking water at various public	Srinagar to arrange
	Srinagar	places including residential,	enough storage of water.
		commercial, industrial areas.	Sprinkler of water

### 5.3 Key Strategy and Components of Heat Action Plan

The heat-wave action plan is intended to mobilize individuals and communities to help protect their neighbours, 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.

**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.

Collaboration with non-government and civil society: Collaboration with non-governmental organizations and civil society organizations to improve bus stands, building temporary shelters, wherever necessary, improved water delivery systems in public areas and other innovative measures to tackle Heat wave conditions.

# **Early Warning & Communication**

#### Effective early warning

The primary objective of a warning system is to empower individuals and communities to respond timely and appropriately to the hazards in order to reduce the risk of death, injury, property loss and damage. Warnings need to get the message across and stimulate those at risk to take action.

### 6.1 Following measures needs to be ensure:

- Extending the lead time of warnings;
- Improving the accuracy of warnings;
- Greater demand for probabilistic forecasts;
- Better communication and dissemination of warnings;
- Using Existing/new technologies to alert the public;
- Targeting of the warning services to relevant and specific users (right information to right people at right time at the right place);
- Warning messages are understood and the appropriate action taken in response.

### 6.2 Forecast and Issuance of Heat Alert or Heat Warning

India Meteorological Department (IMD) Srinagar: 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:

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

### **6.3 Heat Wave Alert Warning System**

The District Disaster Management Authority (DDMA) plays a pivotal role in disseminating crucial information regarding impending natural hazards to the grassroots level. Once notified by the Jammu & Kashmir Disaster Management Authority and UT Emergency Operation Centre, the DDMA promptly relays this vital data to the relevant Sub-Divisional Magistrates (SDMs), Tehsildars, Station House Officers (SHOs) and relevant departments through official channels. Utilizing modern communication platforms such as WhatsApp, email, and recently developed DSS System a Project of JTFRP Govt of J&K under the Financial assistance of World Bank, the DDMA ensures swift and comprehensive transmission of warnings and alerts. Additionally, the District Emergency Operation Centre actively participates in this process, facilitating seamless coordination and information sharing to enhance community preparedness and response measures. This collaborative effort aims to safeguard lives and mitigate the impact of natural disasters at the grassroots level.

### **6.4 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 Consultant (DDMA) will be the nodal officer for these training's under the supervision of DDMO. SDRF, Civil Defence 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 training initiatives, DDMA endeavors to enhance preparedness and

# resilience against heat wave events in Srinagar district.

Proposed Training	Tentative Dates	Teams Involved	Participants	Venue
Awareness about Heat Wave Risks & Prevention for Students	2nd week of June	Medical team, SDRF, Civil Defence and NGO's	Students, Teachers	Colleges, Schools
Awareness about Heat Wave Risks & Prevention for Locals	3rd week of June	Local Residents, Community Leaders	Community Halls and Panchayat Buildings	Colleges, Schools

# Aims of the Action Plan:

The Heat Wave Action Plan 2024: Aims to reduce extreme heat impacts on vulnerable people like Children, pregnant women, elderly people and the people belongs to economically weaker section with early warning system & integrated coordination with concerned agencies.

- **I.** To incorporate the Prevention and Mitigation measures against Heat Illnesses.
- **II.** To establish coordination and integration of all the concerned agencies from early warning to implementation of Action Plan.
- **III.** To build a capacity of concerned professional and agencies.
- IV. To make more use of adaptation and mitigation tools for reducing heat waves, and
- V. To make District Srinagar more resilient against extreme heat wave.
- VI. To help the heat wave affected people in distress through proper medical aid.
- VII. Ready available of safe drinking water at all prominent places.

#### 7.1 PURPOSE

This Heat Wave Action Plan aims to provide a framework for the implementation, coordination, and evaluation of extreme heat response activities in district Srinagar that reduce the negative health impacts of extreme heat and its spillover impact on employment and consequently economy. The Plan's primary objective is to alert and facilitate those socio-economic groups which are at risk of heat-related illness, and to take appropriate precautions.

#### 7.2 Conclusion:

Heat wave action plans are key to city adaptation strategies. With the forecast of increased frequency and intensity of heat waves in the future, a climate adaptive heat wave action plan will enable Srinagar to efficiently prepare, mitigate and adapt to the heat wave induced by climate change. The spatially differentiated Heat wave Action Plans (HWAPs) will serve to support Srinagar's medium-term development planning especially in prioritizing and integrating adaptive resilience within the agenda of climate-resilient smart cities.

# Preparedness at community level-Do's and Don'ts

#### **HEAT CRAMPS**

Signs: Muscle pains or spasms in the stomach, arms or legs

### **HEAT EXHAUSTION**

Signs: Heavy sweating, paleness, muscle cramps, tiredness, weakness, fast or weak pulse, dizziness, headache, fainting, nausea, vomiting.

Sr. No.	Do's	Don'ts
01.	Try to stay in cold places	Expose to direct sun light or hot Breeze (loo)
02.	Use umbrella during hot days	Move under hot sun without umbrella
03.	Wear thin loose cotton garments, preferably of white colour	Use of black and synthetic, thick clothes during summer season
04.	Wear a cotton hat or protective headcover	Move under the hot sun without a hat or turban
05.	Avoid outdoor physical activity from 12 to 3 p.m. If unavoidable attend to only light physical activity under the hot sun.	Attend to strenuous physical activity under the hot sun
06.	Give the person ORS to drink or lemon, Lasi sharbat/torani or whatever is useful to rehydrate the body.	Not stay hydrated

07.	Take measures to reduce the room temperature like watering, using window shades, fanning and cross ventilation	Allow direct hot air into the living rooms
08.	Shift the person with heat stroke symptoms to a cool dwelling as a first measure.	Delay in shifting the person suffering with heat stroke to a cool place
09.	The person suffering with heat stroke should have minimum clothing	The person suffering with heat stroke do not have thick clothing
10.	The person suffering with heat stroke has to be sponged with cold water, indirect application of ice packs.	The person suffering with heat stroke not to be sponged with hot water and not to be exposed to hot air.
11.	If air conditioning is not available in your home go to a cooling center. Take cool showers or baths	
12.	If the persons affected with heat stroke are not showing any improvement, he/she should be shifted to a hospital immediately, preferably with cooling facility.	Delay in shifting the person affected with heat stroke whenever there is no improvement in his condition