

Government of India Ministry of Earth Sciences India Meteorological Department Meteorological Centre, Shimla (HP)



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## PRESS RELEASE

# **<u>Subject</u>**: Cold wave to severe cold wave conditions most likely to continue over some parts of lower hills / plains of Himachal Pradesh during next 7 days.

### 1. <u>Prevailing Weather Conditions:</u>

- Cold wave to severe cold wave conditions are prevailing over some parts of Mandi district since 4<sup>th</sup> Dec; over Una district since 5<sup>th</sup> Dec; over Hamirpur district since 6<sup>th</sup> Dec; Bilaspur district since 9<sup>th</sup> Dec; over Kangra district since 10<sup>th</sup> Dec and over Chamba district since 13<sup>th</sup> Dec, 2024.
- Minimum temperatures are prevailing in the range of -1 to -7<sup>o</sup>C over many parts of high hills; in the range of 1 to 5<sup>o</sup>C over many parts of mid hills and in the range of 1 to 3<sup>o</sup>C over many parts of lower hills/plains. They are below normal by 2 to 3<sup>o</sup>C over some parts of lower hills/plains of the state and normal to near normal over rest parts of the state.

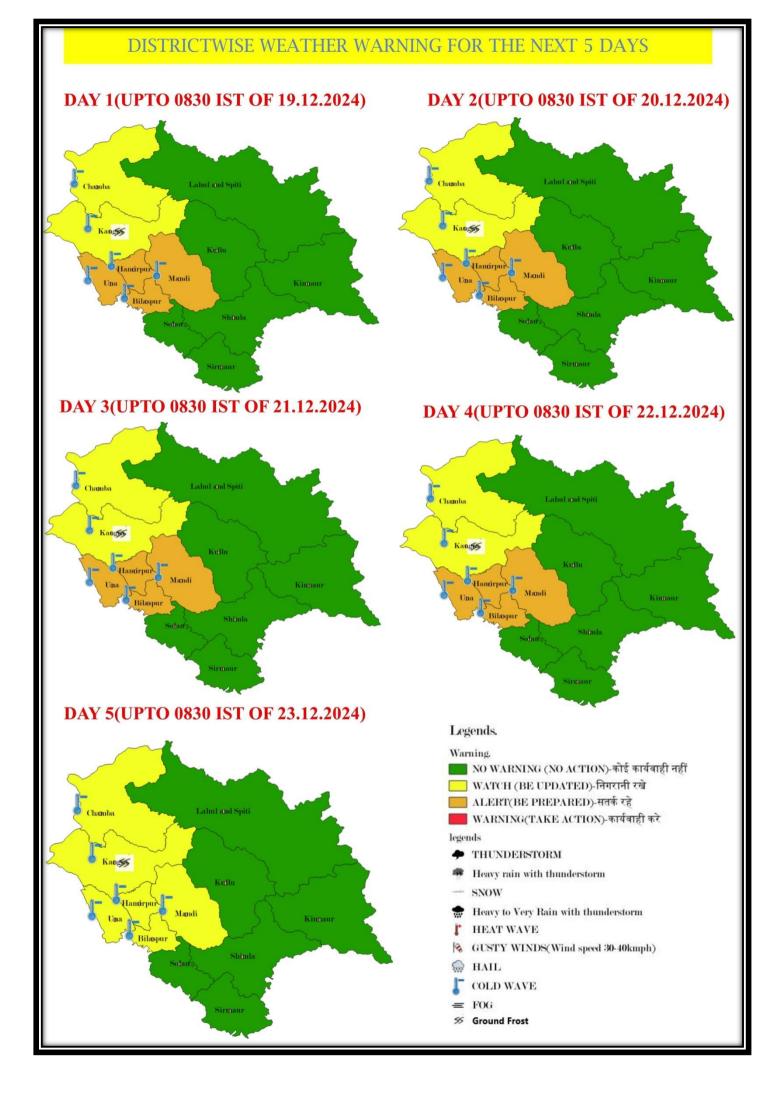
### 2. Weather System

- Western disturbance as a trough in lower & middle tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along Long. 60°E to the north of Lat. 28°N and it is very likely to move nearly east-northeastwards.
- An induced cyclonic circulation lies over south west Rajasthan and extends upto 1.5 Km above mean sea level.
- Sub tropical westerly Jet Stream with core winds of the order upto 125 knots at 12.6 Km above mean sea level are prevailing over North India and it is likely to continue over the region during next 4 days.

# Under the influence of above synoptic features following weather very likely to prevail over the state:

### 3. Forecast

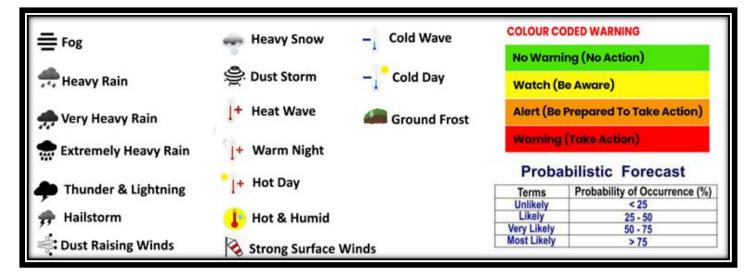
- Temperature: No large change in minimum and maximum temperatures over many parts of the state during next 24 hours and gradual fall by 2-3 °C over some parts of the state for subsequent 3 days.
- Cold Wave: Cold wave to Severe Cold wave conditions most likely at a few places over Una, Hamirpur, Bilaspur & Mandi districts and cold wave conditions in isolated pockets over Chamba & Kangra districts during next 7 days. (Warning graphics attached)
- Ground Frost: Ground frost conditions very likely at isolated places over Mandi, Una, Bilaspur, Hamirpur and Chamba districts mainly from late night to morning hours during next 5 days.
- Fog: Moderate to Dense fog likely over & adjoining areas of reservoir area of Bhakra dam (Bilaspur district) and Shallow/ moderate fog over some parts of Balh valley (Mandi district) & Hamirpur district mainly from late night to early morning/ morning hours during next 4 days.
- Rain/Snow: Light snowfall is likely at isolated places over Lahaul- Spiti and higher reaches of Kinnaur, Chamba & Kullu districts till 19<sup>th</sup> Dec. morning and mainly dry weather very likely to prevail over most parts of the state during next 7 days.



### Expected Impact and Action suggested due to Cold wave/ Severe cold wave and fog conditions over <u>Himachal Pradesh</u>

Weather Warning	Affected areas	Impacts and advisories
Cold Wave/severe cold wave	Una, Hamirpur, Bilaspur, Mandi, Chamba & Kangra	<ul> <li>Wear several layers of loose fitting, light weight, warm woolen clothing. Cover your head, neck, hands and toes adequately as majority of heat loss occurs through these body parts.</li> <li>Eat vitamin-C rich fruits &amp; vegetable and drink sufficient fluids preferably warm fluids to maintain adequate immunity Avoid or limit outdoor activities.</li> <li>Keep dry, if wet, change cloths immediately to prevent loss of body heat. Wear insulated/waterproof shoes.</li> <li>Warm the affected area of the body slowly with lukewarm water; do not rub the skin vigorously.</li> <li>If the affected skin area turns black, immediately consult a doctor.</li> <li>Maintain ventilation while using Heaters to avoid inhaling toxic fumes.</li> <li>Take safety measures while using electrical and gas heating devices.</li> <li>Extreme care needed for vulnerable people.</li> <li>Seek medical attention as soon as possible for someone suffering from frostbite/ Hypothermia.</li> <li>Protect livestock from cold weather. In case of low temperature, make adequate arrangements for artificial lighting and heating for animals.</li> <li>As the temperature has fallen so give the winter packing to bees colonies.</li> </ul>
Fog	Mandi and Bilaspur	<ul> <li>Be updated</li> <li>Drive safe and slowly</li> <li>Use fog lights</li> </ul>

### **Legends and Criteria:**



Cold Wave	(a). Based on departure	
	Cold Wave: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C.	
	Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C	
	(b) Based on actual Minimum Temperature (for Plains only)	
	Cold Wave : When Minimum Temperature is ≤ 4.0 °C	
	Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C	
	( c) For Coastal Stations When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C	
Fog	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km	
	Moderate Fog: When the visibility between 500-200 metres	
	Dense Fog: when the visibility between 50- 200 metres	
	Very Dense Fog: when the visibility < 50 metres	
	Ice deposits on ground	
Frost		

Regards, Met Centre Shimla

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