



**Government of India  
Ministry of Earth Sciences  
India Meteorological Department**

**Press Release  
Date: 19<sup>th</sup> December, 2021  
Time of Issue: 1215 hrs IST**

**Subject:**

- I. Cold Wave/Severe Cold Wave Conditions very likely to continue over Northwest India during next 3 days and abate thereafter.**
- II. Dense Fog in isolated pockets over Uttarakhand during next 2 days and over Punjab, Haryana on 23<sup>rd</sup> & 24<sup>th</sup> December.**

**Observed Cold Wave, Cold Day and Dense Fog:**

- **Cold Wave conditions:** Today, Cold Wave to Severe Cold Wave conditions observed in some places over East Rajasthan; in isolated pockets over West Rajasthan and West Madhya Pradesh, Haryana, Punjab and Cold Wave conditions in some places over Uttar Pradesh, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Himachal Pradesh and East Madhya Pradesh.
- **Cold Day conditions:** Yesterday, Cold Day conditions observed in isolated pockets of Punjab, Haryana, Rajasthan and Madhya Pradesh.
- **Dense Fog:** Dense fog in isolated pockets over Uttarakhand.
- **Minimum Temperatures:** Churu has reported lowest minimum temperature of -2.6°C followed by Sikar (-2.5°C) and Amritsar (-0.5°C).

**Cold Wave and Fog Warning:**

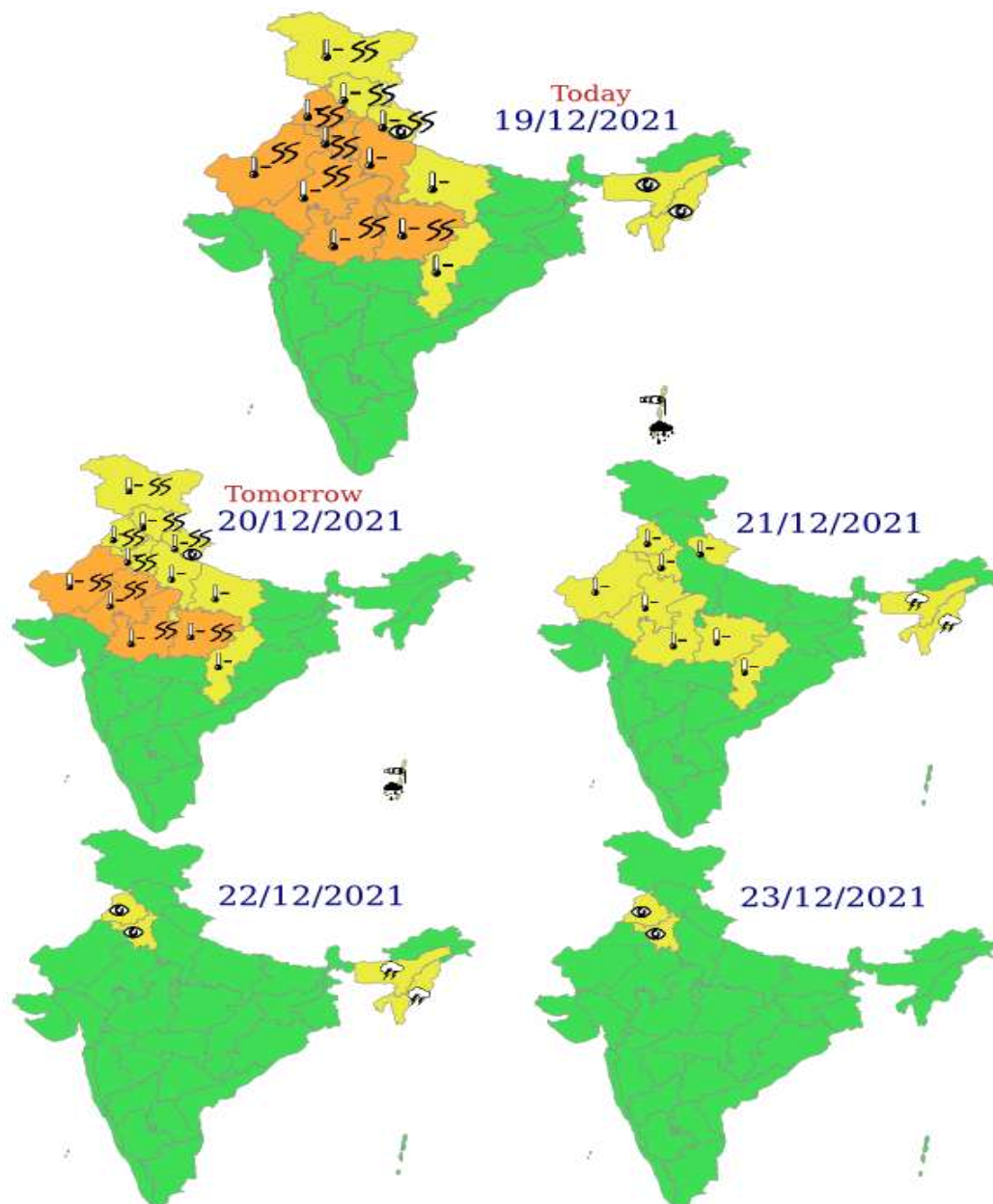
- No significant change in minimum temperatures very likely over most parts of Northwest India, Gujarat and Maharashtra during next 2 days and rise by 2-3°C thereafter. Gradual fall in minimum temperatures by 2-3°C very likely over most parts of East & adjoining Central India during next 3 days and no significant change thereafter.
- **Cold Wave to Severe Cold Wave conditions** very likely to continue to prevail over a few pockets of Punjab, Haryana & Chandigarh, Rajasthan, Madhya Pradesh on 20<sup>th</sup> & 21<sup>st</sup>; cold wave conditions at isolated pockets on 22<sup>nd</sup> December, 2021 and very likely to abate thereafter.
- **Cold Wave conditions** in a few pockets very likely to continue to prevail over Jammu, Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh and Chhattisgarh on 20<sup>th</sup>; cold wave conditions at isolated pockets on 21<sup>st</sup> December, 2021 and very likely to abate thereafter.
- **Cold Day Conditions** very likely in a few/isolated pockets over Uttarakhand, Madhya Pradesh and Uttar Pradesh till 20<sup>th</sup> December and likely to abate thereafter.
- Also, dry northwesterly winds of about 10-15 kmph likely to continue to prevail over plains of Northwest India till 21<sup>st</sup> December enhancing the adverse impact of Cold Wave & Cold Day Conditions.
- **Dense fog** in the morning hours in isolated pockets very likely over Uttarakhand during next 2 days and over Punjab and Haryana on 23<sup>rd</sup> & 24<sup>th</sup> December, 2021.
- **Ground frost** conditions in the morning hours in isolated pockets very likely over Punjab, Haryana & Chandigarh, Rajasthan, Madhya Pradesh and foothills of Himalayas during next 2 days.

### Low Pressure Area:

- A Low Pressure Area lies over Southeast Bay of Bengal & adjoining Equatorial Indian Ocean with associated cyclonic circulation extending upto 5.8 km above mean sea level. It is likely to move east-northeastwards. Under its influence:
  - ✓ **Isolated Heavy** Rainfall over Nicobar Islands on 19<sup>th</sup> & 20<sup>th</sup> December.
  - ✓ **Squally Weather** (40-50 kmph gusting to 60 kmph) over Southeast Bay of Bengal adjoining South Andaman Sea on 19<sup>th</sup> & 20<sup>th</sup> December.

For more details refer:

[https://mausam.imd.gov.in/imd\\_latest/contents/subdivisionwise-warning.php](https://mausam.imd.gov.in/imd_latest/contents/subdivisionwise-warning.php)



**Impact expected and action suggested due to Cold Wave/Severe Cold Wave conditions in isolated/few pockets over Uttarakhand, Punjab, Haryana, Chandigarh, Uttar Pradesh, Rajasthan, Madhya Pradesh and Chhattisgarh during next 3 days; over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and Himachal Pradesh during next 2 days.**

**Impact expected:**

- An increased likelihood of various illnesses like flu, running/ stuffy nose or nosebleed, which usually set in or get aggravated due to prolonged exposure to cold.
- Do not ignore shivering. It is the first sign that the body is losing heat. Get Indoors.
- Frostbite can occur due to prolonged exposure to cold. The skin turns pale, hard and numb and eventually black blisters appear on exposed body parts such as fingers, toes, nose and earlobes. Severe frostbite needs immediate medical attention and treatment.
- Impact on agriculture (Wheat, Potato, Mustard and other Rabi crops), water supply, transport and power sector at some places.

**Action suggested:**

- Moisturize your skin regularly with oil/cream.
- Eat vitamin-C rich fruits & vegetable and drink sufficient fluids preferably warm fluids to maintain adequate immunity.
- Avoid or limit outdoor activities.
- Keep dry, if wet, change cloths immediately to prevent loss of body heat. Wear insulated/waterproof shoes.
- Warm the affected area of the body slowly with lukewarm water; do not rub the skin vigorously.
- If the affected skin area turns black, immediately consult a doctor.
- Maintain ventilation while using Heaters to avoid inhaling toxic fumes.
- Take safety measures while using electrical and gas heating devices.

**Impact expected and action suggested due to Dense Fog in the morning hours at isolated pockets over Uttarakhand during 20<sup>th</sup> – 21<sup>st</sup>; over Punjab and Haryana, Chandigarh on 23<sup>rd</sup> & 24<sup>th</sup> December, 2021.**

**Impact expected:**

➤ **Transport and Aviation:**

- May affect some airports, highways and railway routes in the areas of met- sub-division.
- Difficult driving conditions with slower journey times.
- Some road traffic collisions

➤ **Power Sector:**

- Chances of Tripping of Power lines in the very dense fog routes

➤ **Human Health:**

- Lung related health impacts: Dense fog contains particulate matter and other pollutants and in case exposed it gets lodged in the lungs, clogging them and decreasing their functional capacity which increases episodes of wheezing, coughing and shortness of breath
- Impact on people having asthma bronchitis: Long time exposure to dense fog may cause respiratory problem for people having asthma bronchitis and other lung related health problems.
- Causes Eye Irritation: Dense fog contains pollutions of various types and these Pollutants in the air if exposed may tend to irritate the membranes of the eye causing various infections leading to redness or swelling of the eye.

**Action suggested:**

➤ **Transport and Aviation:**

- Careful while driving or outing through any transport.
- Use fog lights during driving.
- Be in touch with airlines and Railway and State transport for schedule of your journey.

➤ **Power Sector:**

- To keep ready Maintenance Team

- **Human Health:** To avoid outing until unless emergency and to cover the face.

**Legends:**

**Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4 mm.

**Region wise classification of meteorological Sub-Divisions:**

- 1) **Northwest India:** Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
- 2) **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- 3) **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- 4) **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 5) **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
- 6) **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

<b>SPATIAL DISTRIBUTION</b> (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)



<b>WARNING</b>	
WARNING (TAKE ACTION)	
ALERT (BE PREPARED)	
WATCH (BE UPDATED)	
NO WARNING (NO ACTION)	

<b>Probabilistic Forecast</b>	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

