



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

**Press Release**

**Date: 27<sup>th</sup> December, 2022**

**Time of Issue: 1230 hours IST**

**Subject: (i) Dense to Very Dense Fog conditions over northwest India during next 24 hours and dense fog thereafter for subsequent 3-4 days.**  
**(ii) Cold Day conditions likely to abate over northwest India from tomorrow.**

**Weather observed during past 24 hours ending at 0830 hrs IST of today:**

- ❖ **Minimum temperatures** are in the range of 3-7°C over many parts of Punjab, Haryana, Chandigarh & Delhi, Rajasthan, West Uttar Pradesh & adjoining northwest Madhya Pradesh. The **lowest minimum temperature of 0.5°C** reported at **Churu (West Rajasthan)**.
- ❖ Today morning, **Dense to very dense fog** over many parts of Punjab, Haryana, Chandigarh & Delhi and North Rajasthan; **Dense fog** in isolated pockets over Jammu division, Uttar Pradesh, Assam and Odisha.
- ❖ Yesterday, **Cold day to severe cold day conditions** prevailed over many parts of Haryana & Delhi and at isolated places over West Uttar Pradesh. **Cold day conditions** prevailed over some parts of Punjab and Northwest Rajasthan.
- ❖ Today, **cold wave to severe cold wave conditions** prevailed in many pockets over Himachal Pradesh; in isolated pockets over Haryana and North Rajasthan

**Minimum Temperature Forecast, Cold Wave/Cold Day & Fog Warnings (Annexure I & II):**

**Fog Warning**

- ❖ **Due to prevailing light wind and high moisture in lower tropospheric levels, Dense to Very Dense Fog** very likely to continue over many parts of Haryana, Chandigarh & Delhi, West Uttar Pradesh and in isolated pockets over north Rajasthan during next 24 hours. Its intensity & spread likely to reduce thereafter. However, **Dense Fog** in isolated pockets likely to continue over the above region during subsequent 3-4 days.
- ❖ **Dense Fog** very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 3 days.

**Minimum Temperature Forecast & Cold Wave/Cold Day Warning**

- ❖ Gradual rise in minimum temperatures by 2-4°C likely over plains of Northwest India during next 3 days and fall by 2-4°C thereafter. Fall in minimum temperatures by 3-5°C likely over many parts of East India during next 3 days and no significant change thereafter. No significant change in minimum temperatures likely over Madhya Pradesh during next 3 days and fall by 2-3°C thereafter.
- ❖ **Cold Wave/Severe Cold Wave Conditions** very likely in isolated pockets over north Rajasthan during next 2 days. **Cold Wave Conditions** in isolated pockets over Punjab, Haryana-Chandigarh-Delhi during next 24 hours.
- ❖ **Cold Day/Severe Cold Day Conditions** very likely in some parts over Punjab, Haryana, Chandigarh, Delhi on 27<sup>th</sup> and over West Uttar Pradesh on 27<sup>th</sup> and 28<sup>th</sup> December 2022.

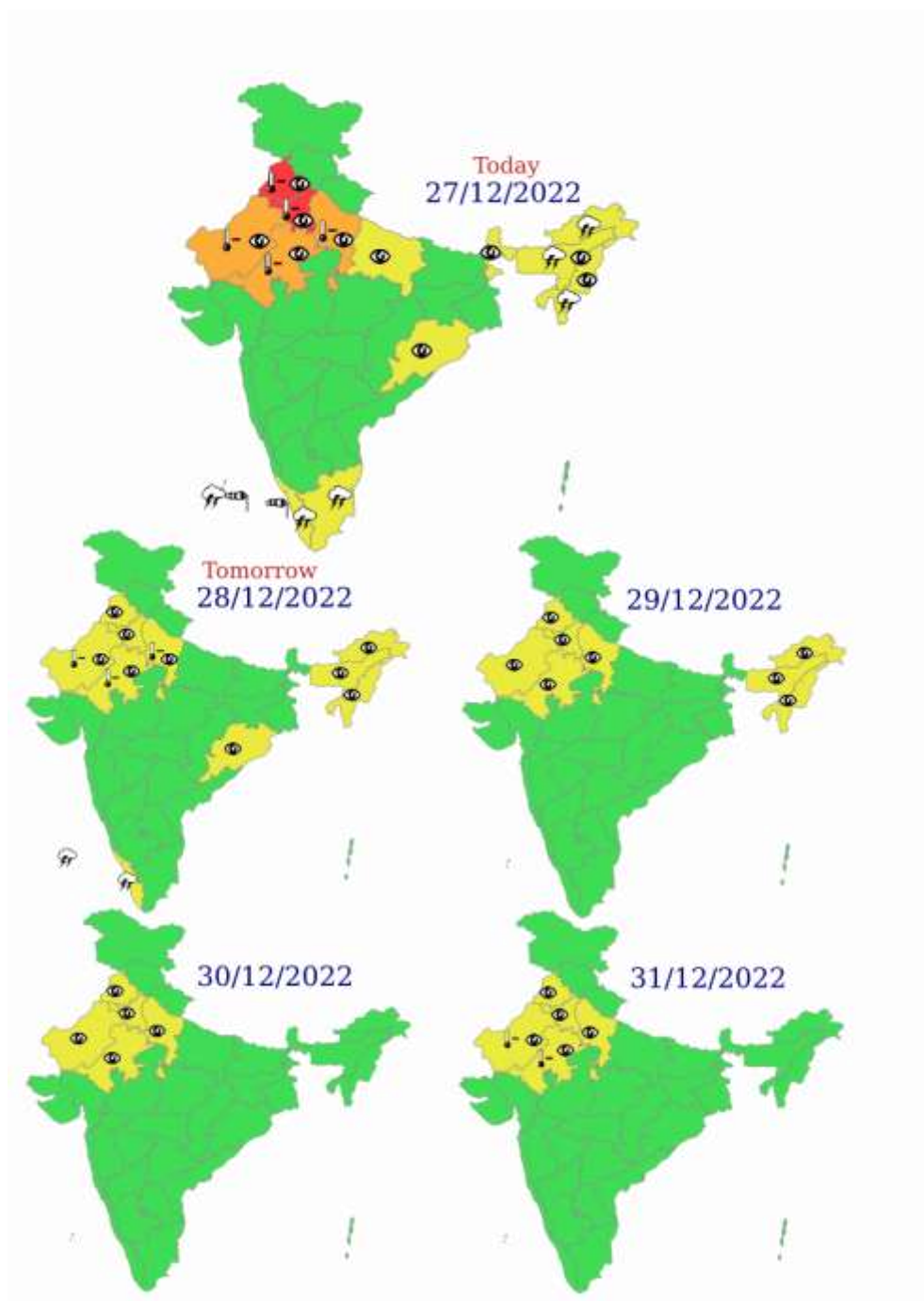
**Weather systems and forecast & warning:**

- ❖ A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Longitude 58°E to the north of Latitude 32°N. Under its influence:
  - Isolated to scattered light rainfall/snowfall likely over Western Himalayan Region on 29<sup>th</sup> & 30<sup>th</sup> December.

For more details kindly refer:

[https://mausam.imd.gov.in/imd\\_latest/contents/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php)

**Annexure I**



**Impact expected and action suggested due to Dense/Very Dense fog in the night/morning hours some/many parts** over north Rajasthan, West Uttar Pradesh Punjab, Haryana, Chandigarh & Delhi during next 24 hours.

**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.

**Impact expected and action suggested due to Cold Day/Severe Cold day conditions** in isolated/some parts over Punjab, Haryana-Chandigarh-Delhi and West Uttar Pradesh during next 24 hours.

**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 or earlobes. Severe frostbite needs immediate medical attention and treatment.
- Impact on agriculture, crop, livestock, water supply, transport and power sector at some places.

**Action suggested:**

- 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. Wear several layers of loose fitting, light weight; warm woolen clothing rather than one layer of heavy cloth.
- 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.
- Extreme care needed for vulnerable people.
- Seek medical attention as soon as possible for someone suffering from frostbite/ Hypothermia.
- Protect livestock from cold weather. (For details kindly refer NDMA guidelines: [https://ndma.gov.in/Resources/awareness/Cold\\_Wave](https://ndma.gov.in/Resources/awareness/Cold_Wave))

**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:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and 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)

**WARNING**

WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

**Probabilistic Forecast**

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

 Heavy Rain	 Heavy Snow	 Thunderstorm	 Dust Storm
 Strong Winds	 Visibility	 Cyclone	 Squall/ Hail
 Frost	 Cold Wave	 Heat Wave	 Sea State