



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Date: 04th January, 2023
Time of Issue: 1310 hours IST

**Subject: i) Dense to very dense fog and cold day conditions very likely to continue over northwest India during next 3 days and decrease in intensity & distribution thereafter.
ii) Cold wave conditions very likely to continue over northwest India during next 3 days and decrease in intensity thereafter.**

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

- ❖ **Minimum temperatures** are in the range of 2-6°C over many parts northwest India and Madhya Pradesh.
- ❖ **Dense to very dense fog observed** in many parts of Punjab; in a few pockets over Haryana and West Uttar Pradesh; in isolated pockets over West Rajasthan and East Uttar Pradesh; **dense fog in isolated pockets** over Assam & Meghalaya, Tripura, Sub-Himalayan West Bengal, Uttarakhand and Chhattisgarh today morning.
- ❖ **Yesterday, Cold Day to severe cold Day conditions** observed in most parts over Punjab and West Uttar Pradesh; in some parts over Haryana, Chandigarh and East Uttar Pradesh; isolated parts of Uttarakhand, Delhi, West Madhya Pradesh and Bihar.
- ❖ **Today, Severe Cold Wave conditions** observed in isolated pockets over Uttar Pradesh and Rajasthan; **Cold Wave conditions** in some pockets over Himachal Pradesh, Punjab, Haryana and in isolated pockets over Delhi.

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

Fog and Cold Day Warning

- ❖ Due to light winds and high moisture near surface over Indo-Gangetic plains, **dense to very dense fog** very likely to continue in some/many pockets during night/morning hours over Punjab, Haryana, Chandigarh and Uttar Pradesh next 3 days and dense fog thereafter; in isolated pockets over Uttarakhand and Rajasthan during next 2-3 days.
- ❖ **Dense fog** in isolated pockets very likely over Bihar during next 5 days; over Jammu & Kashmir, Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Assam & Meghalaya and Nagaland Manipur, Mizoram and Tripura during next 2 days; Sub Himalayan West Bengal & Sikkim, Jharkhand during next 24 hours.
- ❖ **Cold Day to severe cold day conditions** very likely in isolated/some pockets over Uttar Pradesh during next 5 days; in isolated/some pockets over Uttarakhand, Punjab, Haryana during next 2-3 days; **Cold Day conditions** in isolated pockets over Bihar, Rajasthan and Madhya Pradesh during next 2 days.
- ❖ **Ground frost conditions** in isolated pockets over north Rajasthan during next 2 days.

Minimum Temperature Forecast & Cold Wave Warning

- ❖ No significant change in minimum temperatures very likely over many parts of Northwest India during next 2 days and rise by 2-4°C thereafter. As a result;
 - **Cold wave to severe cold wave conditions** in isolated/some pockets very likely over northern Parts of Rajasthan and **Cold wave conditions** in isolated pockets over Punjab, Himachal Pradesh and Haryana, Chandigarh & Delhi during next 2 days.
- ❖ No significant change in minimum temperatures very likely over East India during next 2 days and fall by 2-4°C thereafter. No significant change in minimum temperatures very likely over remaining parts of the country during next 5 days.
- Due to trough from southeast Uttar Pradesh to west Vidarbha in lower tropospheric levels; isolated light rainfall likely over south Madhya Pradesh, Vidarbha, Chhattisgarh, north Madhya Maharashtra and Marathwada during next 2 days.
- Under the influence of a fresh Western Disturbance isolated/scattered rainfall/snowfall likely over Western Himalayan Region from 07th January, 2023.

For more details kindly refer: https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php

Impact expected and action suggested due to dense to very dense fog in the night/morning hours in some/many pockets over Punjab, Haryana, Chandigarh and Uttar Pradesh during next 3 days.

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:

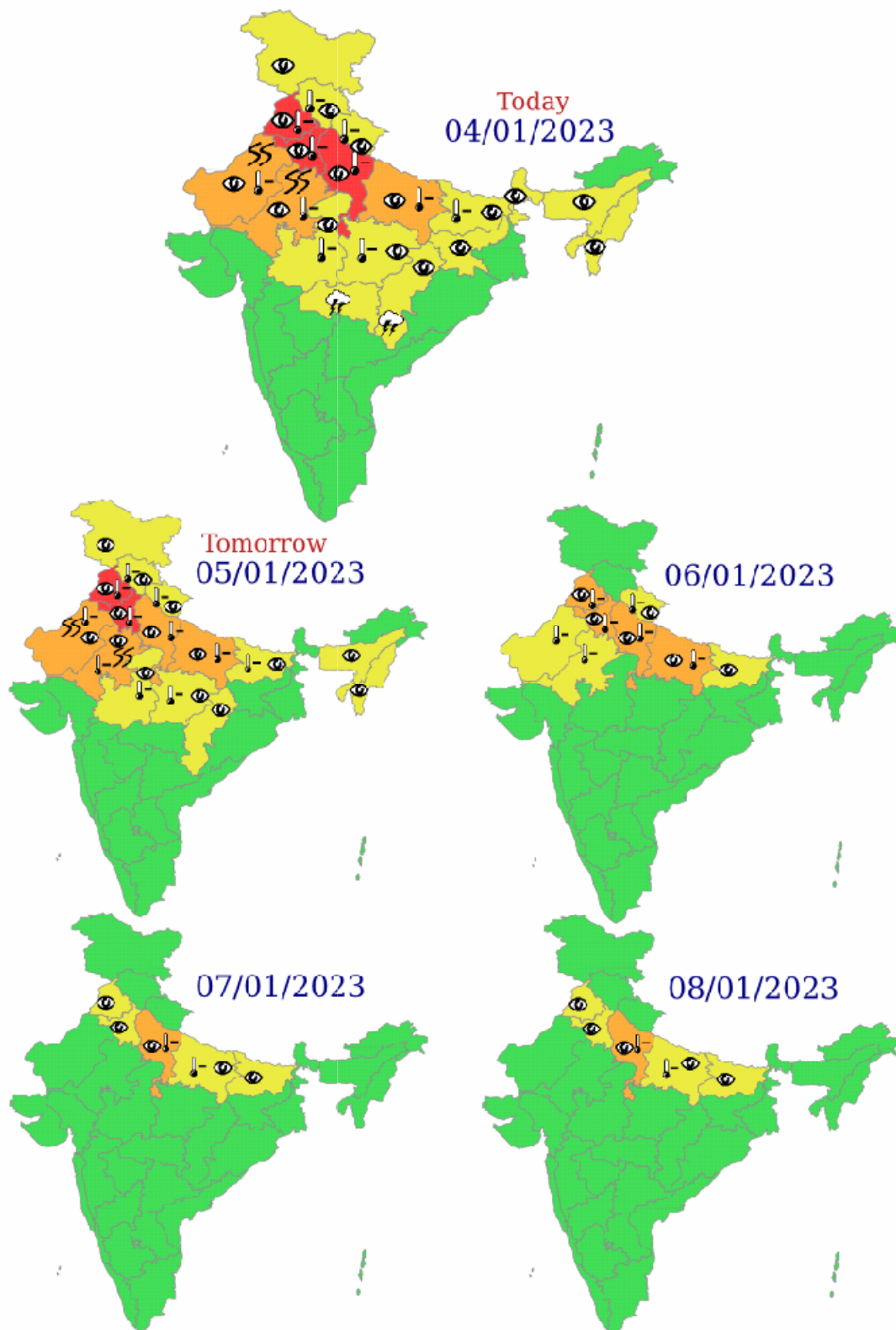
➤ **Transport and Aviation:**

- 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:** 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.

SPATIAL DISTRIBUTION (% 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