



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Date: 1ST January, 2023
Time of Issue: 1330 hours IST

Subject: Dense to very dense fog and cold wave conditions very likely to continue over plains of northwest India during next 5 days.

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 of Punjab, Haryana, Delhi, north Rajasthan and west Uttar Pradesh.
- ❖ **Very Dense Fog** was observed in a few places over Punjab, Haryana and Uttar Pradesh; at isolated places over Bihar and **Dense fog** in isolated pockets over West Madhya Pradesh, Sub-Himalayan West Bengal, Odisha, Assam & Tripura today morning.
- ❖ **Cold wave** observed at isolated places over Punjab and Rajasthan.

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 in some/many pockets in night/morning hours over Uttarakhand, Punjab, Haryana, Uttar Pradesh during next 2-3 days and in isolated pockets over Bihar during next 4 days. **Dense fog** in isolated pockets over Himachal Pradesh, Madhya Pradesh, Odisha, Sub Himalayan West Bengal, Assam & Tripura during next 2-3 days.
- ❖ **Cold Day conditions** in isolated pockets very likely over Uttarakhand, Punjab, Haryana & Chandigarh on 01st Jan and over Uttar Pradesh and West Madhya Pradesh on 01st-02nd January 2023.

Minimum Temperature Forecast & Cold Wave Warning

- ❖ Due to northwesterly winds from Himalayas over plains of northwest India, minimum temperatures very likely to fall by 2-4°C over the northwest & adjoining central India during next 2 days and no significant change thereafter. As a result;
 - **Cold wave to severe cold wave conditions** in isolated pockets very likely over northern Parts of Rajasthan during 1st-3rd Jan and Cold wave conditions thereafter. **Cold wave conditions** in isolated pockets over Himachal Pradesh and Uttarakhand during 1st-4th Jan; over Punjab, Haryana, Chandigarh and Delhi during 1st-5th Jan and over West Uttar Pradesh on 2nd & 3rd January, 2023.
- ❖ No significant change in minimum temperatures very likely over remaining parts of the country during next 5 days.

For more details kindly refer:

https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php

Annexure I

Impact expected and action suggested due to dense to very dense fog in the night/morning hours in some/many pockets over Uttarakhand, Punjab, Haryana, Uttar Pradesh during next 2-3 days and in isolated pockets over Bihar during next 4 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:

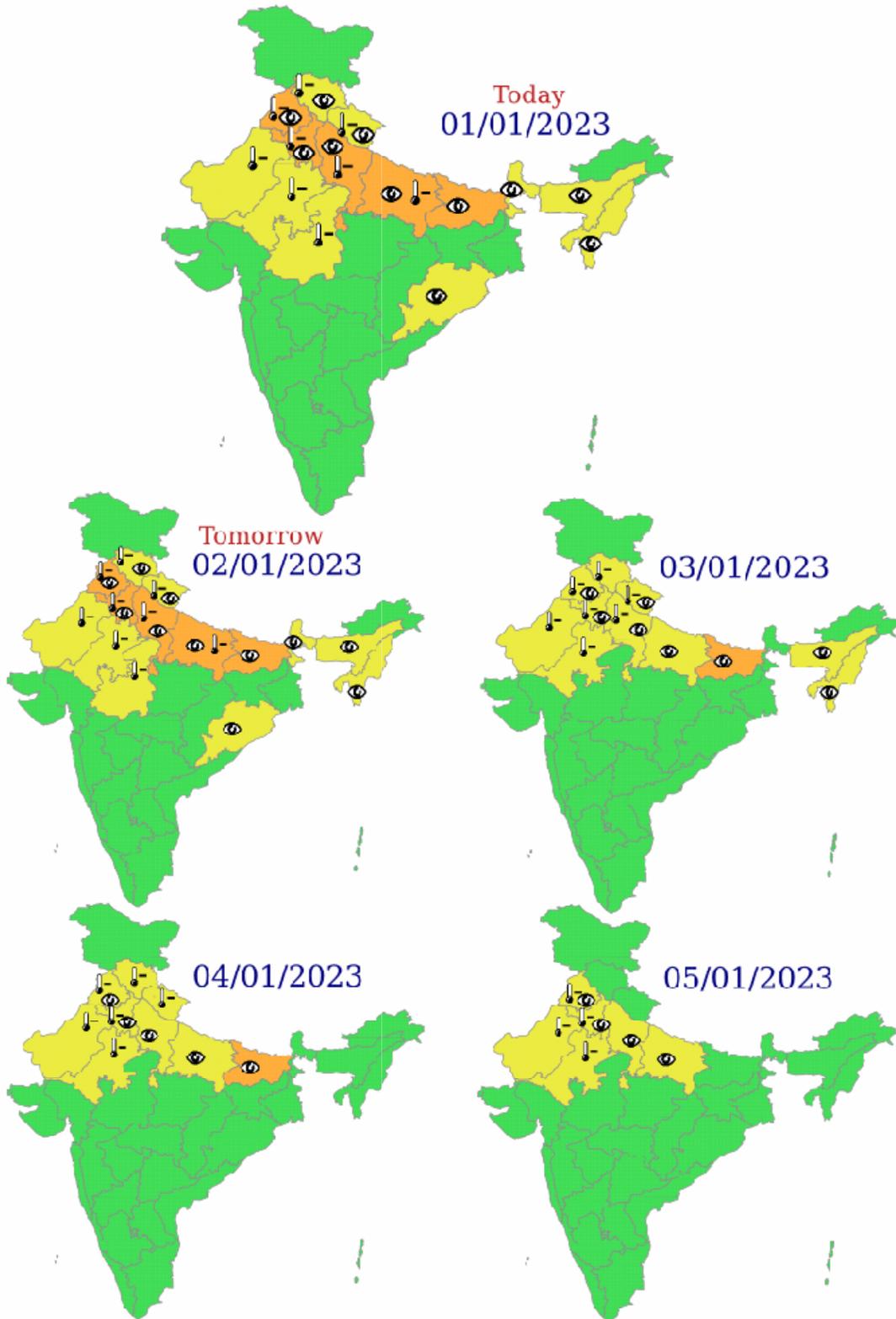
➤ **Transport and Aviation:**

- 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