



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

**Press Release
Date: 18th December, 2021
Time of Issue: 1400 hrs IST**

Subject:

- I. Cold Wave/Severe Cold Wave Conditions over Northwest India during next 3 days and improvement thereafter.**
- II. Dense Fog in isolated pockets over Uttarakhand, Himachal Pradesh, Punjab, Haryana and Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 2 days.**

Observed Cold Wave and Fog Warning:

- **Cold Wave conditions observed (from 0830 hours IST of yesterday to 0830 hours IST of today):** Cold Wave to Severe Cold Wave conditions are prevailing in some parts of north Rajasthan and Punjab and Cold Wave conditions in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, north Rajasthan and north Madhya Pradesh.
- **In addition, dry northwesterly winds of about 10-15 kmph and markedly below normal Maximum Temperatures are prevailing over Punjab, Haryana and north Rajasthan since past 3 days enhancing the adverse impact of Cold Wave Conditions which are likely to prevail during next 3 days and improve thereafter.** Churu has reported lowest minimum temperature of -1.1°C followed by Amritsar (0.7°C) and Ganganagar (1.1°C).
- **Fog observed (at 0830 hrs IST of today):** Dense Fog prevailed in isolated pockets over Haryana, Uttarakhand and Bihar and Shallow to Moderate Fog in many parts of Punjab and in isolated pockets over Delhi, north Rajasthan and Uttar Pradesh.
- **Visibility (meters) recorded at 0830 hrs IST of today (500m or less):** Hissar, Bhiwani, Pantnagar and Darbhanga-50 each; Chandigarh, Ludhiana, Patiala and Ambala-200 each and Delhi (Safdarjung, Palam), Amritsar, Karnal, Pilani, Ganganagar, Aligarh, Fursatganj and Sabour-500 each.

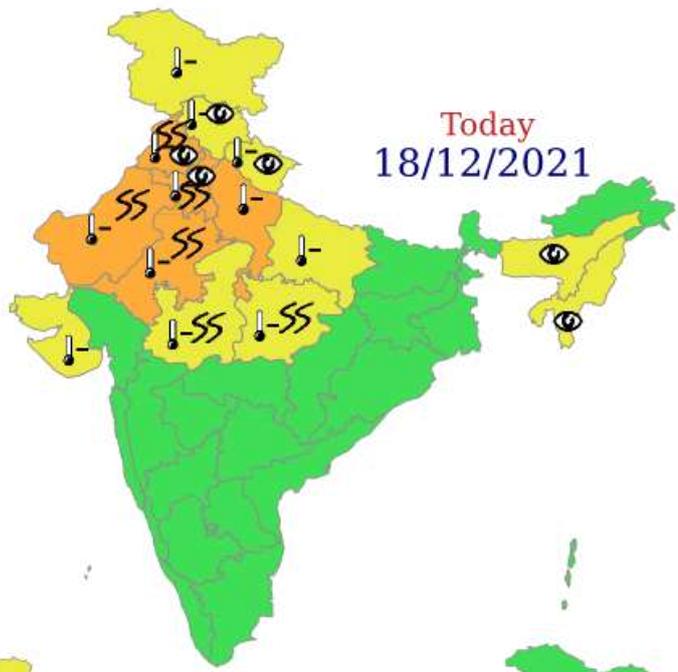
Cold Wave and Fog Warning:

- Gradual fall in **minimum temperatures** by $2-3^{\circ}\text{C}$ over most parts of Northwest, Central and East India and over Maharashtra till 21st and rise by $2-3^{\circ}\text{C}$ over these areas thereafter.
- No significant change in minimum temperatures over Gujarat till 21st and rise by $2-3^{\circ}\text{C}$ thereafter.
- **Cold Wave to Severe Cold Wave conditions** very likely to prevail over some parts of north Rajasthan, Punjab and Haryana & Chandigarh till 21st December, 2021.
- **Cold Wave conditions** in some parts very likely to prevail over Jammu, Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh and north Madhya Pradesh till 21st and over Kutch till 20th December.
- In addition, **Cold Day Conditions** in some parts very likely over north Rajasthan and northwest Madhya Pradesh till 20th and over Punjab, Haryana & Chandigarh and northeast Madhya Pradesh on 18th December.
- **Also, dry northwesterly winds of about 10-15 kmph likely to continue to prevail over plains of Northwest India till 21st December enhancing the adverse impact of Cold Wave & Cold Day Conditions.**
- **Dense fog** in the morning hours in isolated pockets very likely over Himachal Pradesh and Uttarakhand during next 3 days and over Punjab, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 19th & 20th and over Haryana on 19th December, 2021.

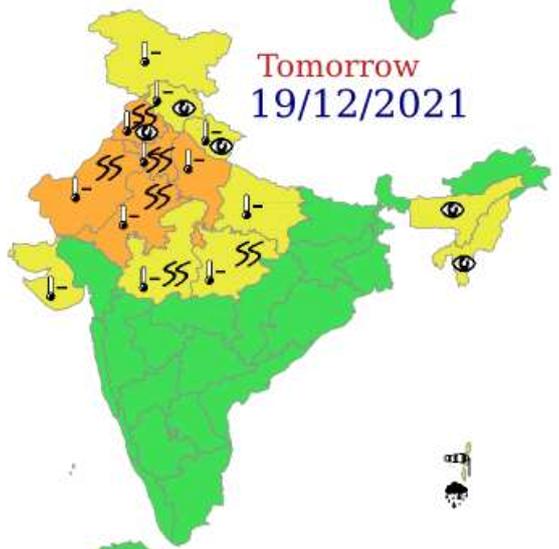
- **Ground frost** conditions in the morning hours in isolated pockets very likely over Punjab, Haryana & Chandigarh and north Rajasthan during next 3 days and north Madhya Pradesh during next 2 days.
- A Low Pressure Area lies over Southeast Bay of Bengal & adjoining Equatorial Indian Ocean with associated cyclonic circulation extending upto 5.8 km above mean sea level. It is likely to move east-northeastwards and become more marked during next 48 hours. Under its influence:
 - **Isolated Heavy** Rainfall over Nicobar Islands on 19th December.
 - **Squally Weather** (40-50 kmph gusting to 60 kmph) over Southeast Bay of Bengal on 18th and over Southeast Bay of Bengal adjoining South Andaman Sea on 19th & 20th December.

For more details refer:

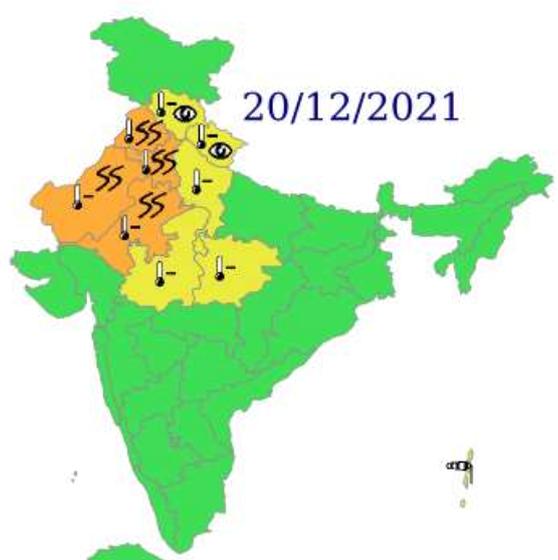
https://mausam.imd.gov.in/imd_latest/contents/subdivisionwise-warning.php



Today
18/12/2021



Tomorrow
19/12/2021



20/12/2021



21/12/2021



22/12/2021

Impact expected and action suggested due to Cold Wave/Severe Cold Wave conditions in isolated/some over Himachal Pradesh, Punjab, Haryana, Chandigarh, West Uttar Pradesh and north Madhya Pradesh during next 3 days; over Uttarakhand and north Rajasthan during next 4 days; over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad during next 2 days and Kutch 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 Himachal Pradesh and Uttarakhand during 19th – 21st ; over Punjab during 19th to 20th ; over Haryana, Chandigarh on 19th and over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 19th & 20th 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.

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)



Heavy Rain



Strong Winds



Thunderstorm with Lightning



Visibility/Fog



Cold wave

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