



cold wave-2025

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A cold wave has gripped parts of Telangana, with districts like Kohir and Yalal recording temperatures near 8°C — $3\text{--}5^{\circ}\text{C}$ below normal.

What is a Cold Wave?

- A cold wave refers to a sharp and unusual drop in minimum temperatures, severe enough to cause physiological stress or danger to humans. It is declared when temperatures fall below defined IMD thresholds in plains or hilly regions.

IMD Criteria for Cold Wave:

- **Plains:**
- Minimum temperature 10°C and **departure -4.5°C to -6.4°C** (Cold Wave).
- Departure -6.4°C (Severe Cold Wave).
- Independent of normal: 4°C (Cold Wave), 2°C (Severe Cold Wave).
- **Hilly regions:**Minimum temperature 0°C or less.
- **Coastal regions:**Cold wave when departure -4.5°C and minimum temperature 15°C .
- Must be observed in at least two stations for two consecutive days.

How a Cold Wave Currents(Mechanism)?

- Cold waves originate when high-pressure systems over North/Northwest India push **cold, dry continental winds**
- Clear skies and low moisture allow rapid **radiational cooling at night**, dropping temperatures sharply over inland regions like the Deccan Plateau