Core Cold Wave Zone

Why in News?

The National Programme on Climate Change and Human Health (NPCCHH), under the Ministry of Health and Family Welfare has a public advisory on **cold wave conditions** for **Rajasthan and 16 other states and Union Territories.**

Key Points

- **Cold Wave Season and Core Cold Wave Zone:**
  - A cold wave is a rapid fall in temperature **within 24 hours to a level requiring substantially increased protection to agriculture,** industry, commerce, and social activities.
  - The **cold wave season spans from November to March**, with **December and January** experiencing the most **extreme cold events.**
- **Affected Regions:**
  - Telangana, Punjab, Himachal Pradesh, Uttarakhand, Jammu and Kashmir, Ladakh, Delhi, Haryana, Rajasthan, Uttar Pradesh, Gujarat, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal, and Odisha.
- **Vulnerable Groups:**
  - The advisory identifies the following **populations as particularly at risk:**
    - Homeless individuals
    - Elderly people
    - Economically disadvantaged individuals
    - Pregnant and lactating women
    - Children
    - Outdoor workers and farmers
    - Managers of night shelters
- **Definition of a Cold Wave:**
  - According to **Indian Meteorological Department (IMD)** Standards:
    - For **plains**, a cold wave occurs when the minimum temperature is ≤10°C.
    - For **hilly regions**, it is defined as a minimum temperature of ≤0°C.
- **Potential Health Issues:**
  - **Hypothermia** is caused by prolonged exposure to very low temperatures.
  - **Frostbite** is damage to skin and tissues due to freezing temperatures.
  - **Non-freezing Cold Injuries** are conditions like **Immersion Foot,** resulting from prolonged exposure to cold and wet conditions.
    - In severe cases, cold exposure can lead to fatalities if precautions are not taken.

India Meteorological Department

- IMD was **established in 1875.**
- It is an agency of the **Ministry of Earth Sciences of the Government of India.**
- It is the principal agency responsible for meteorological observations, weather forecasting and seismology.