

Heatwaves in India

Why in News?

India Meteorological Department (IMD) warns that many parts of India continued to swelter for the upcoming days due to heatwaves.

- A heatwave is basically a period of ***unusually high temperatures*** over a place.
- The threshold to declare a heatwave depends on the temperatures normally seen in that area in that time of the year.
- **Criteria** - According to the IMD, a heatwave is declared when the maximum temperature of a station reaches
 - At least 40 degree C or more for plains and
 - At least 30 degree C or more for hilly regions.
- **Based on Departure from Normal**
 - A heatwave is when the departure is 4.5 degree C to 6.4 degree C, and
 - A severe heatwave is declared when the departure is more than 6.4 degree C.
- **Based on Actual Maximum Temperature**
 - A heatwave exists when the maximum temperature is greater than 45 degree C, and
 - A severe heatwave when the temperature is over 47 degree C.
- If above criteria met at least in 2 stations in a Meteorological sub-division for at least two consecutive days and it declared on the second day.
- **Supportive meteorological factors** - High humidity, high wind speed, duration of heat wave events.
- **Prevalence** - Heatwaves in India occur ***mainly from March to June*** and in some cases, July.
- **Heatwave-prone areas** -
 - Northwest plains- Rajasthan, Punjab, Haryana, Delhi,
 - Parts of central India - Madhya Pradesh, Chhattisgarh), and
 - The eastern and peninsular regions- Uttar Pradesh, Bihar, Jharkhand, West Bengal, Odisha, coastal Andhra Pradesh, Telangana, and Vidarbha in Maharashtra.

COLOUR-CODED WARNINGS



GREEN ALERT

No risk



YELLOW ALERT

Be aware of high heat



ORANGE ALERT

Be prepared to take precautionary action against heat, or avoid exposure



RED ALERT

Be vigilant, step out only if necessary

- **Heat Index** - Combination of air temperature and relative humidity, it measures of how hot it really feels when relative humidity is factored in with the actual air temperature.

References

1. [The Indian Express - What is a heatwave?](#)
2. [IMD - FAQs](#)



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