

## 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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