

## Understanding Air Quality Index

### Why in news?

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- National capital region smog pollution reaches hazardous levels.

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- It is time to know about mechanism of air quality index

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### What the Air Quality Index (AQI)?

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- AQI is a number used to communicate to the public how polluted the air currently is or how polluted it is forecasted to become.

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- As AQI increases, an increasingly large percentage of the population is likely to experience increasingly adverse health effects.

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- Different countries have their own air quality indexes, corresponding to different national air quality standards.

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- The AQI is most commonly used to describe ground-level ozone levels.

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- However, the AQI can be used to represent five pollutants that pose a threat to human health.

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- These pollutants are:

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1. Ground-level Ozone or O<sub>3</sub>

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2. Particulate Matter (soot and dust) or PM

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3. Carbon Monoxide or CO

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- 4. Sulphur Dioxide or SO<sub>2</sub> and
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- 5. Nitrogen Dioxide or NO<sub>2</sub>
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### How it is calculated?

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- The pollutants in the affected air are given a weight based on a formula.
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- That weight depends on the kind of impact it has on human health, each of the pollutants is given a weight.
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- The worst of these weights is given as a composite air quality.
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- So instead of giving six different numbers, six different colours, it throws up one single colour, one single number.
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- The index will throw up one number which will be given to the public.
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- People will know the health of their air quality based on this number and one associated colour code.
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| \n<br><b>Colour</b><br>\n | \n<br><b>Level of Health Concern</b><br>\n | \n<br><b>AQI Values</b><br>\n |
|---------------------------|--|-------------------------------|
| \n<br>Green<br>\n         | \n<br>Good<br>\n                           | \n<br>0 to 50<br>\n           |
| \n<br>Yellow<br>\n        | \n<br>Moderate<br>\n                       | \n<br>51 to 100<br>\n         |
| \n<br>Orange<br>\n        | \n<br>Unhealthy for sensitive groups<br>\n | \n<br>101 to 150<br>\n        |

|                    |                            |                        |
|--------------------|----------------------------|------------------------|
| \n<br>Red<br>\n    | \n<br>Unhealthy<br>\n      | \n<br>151 to 200<br>\n |
| \n<br>Purple<br>\n | \n<br>Very Unhealthy<br>\n | \n<br>201 to 300<br>\n |
| \n<br>Maroon<br>\n | \n<br>Hazardous<br>\n      | \n<br>301 to 500<br>\n |

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**Source: Indian Express**

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