



## General Studies-3; Topic: Conservation, environmental pollution and degradation

### WHO Air Pollution Guidelines

#### Introduction

- The latest air-quality guidelines released by the World Health Organization (WHO) show **air pollutants are harmful at much lower levels than believed so far**.
- The new guidelines reflect an overwhelming scientific consensus that **countries need to more aggressively limit air pollution** and protect everyone's health.

#### New air quality guidelines

- The new air quality guidelines are the WHO's first update since 2005.
- The WHO has recommended minimum air-quality standards for six kinds of hazards. These include particulate matter (PM), ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide.
- **The exposure levels considered safe for all pollutants have been lowered.**
- For PM2.5, for example, we should risk no more than 15 micrograms per cubic metre within a 24-hour period, on average, down from 25 earlier.
- For PM10, no more than 45 micrograms, down from 50.

#### Air Pollution and its effects

- **Air pollution is the world's fourth leading cause of death**, contributing to about 13 premature deaths every minute.
- The gases and tiny particles can travel deep into the lungs, enter bloodstream and damage the cells.
- Air pollution levels that seem low are now linked to dangerous health outcomes such as **low birth weight, respiratory problems, heart disease and Alzheimer's disease**.
- Exposure to even very low levels of air pollution is associated with premature death, and that there does not seem to be a safe exposure level.

- Over 90% of people worldwide are exposed to levels of PM2.5 that exceed even the old WHO guidelines.
- In some places, like India, the yearly average PM2.5 concentration is nearly 12 times higher than the new WHO levels.

## Concerns / Challenges

- **No country has legal air quality standards that meet the new WHO recommendations.**
- Not everyone is equally protected by the existing air quality laws.
- Globally and locally, the people who bear the greatest burden of exposure to air pollution are generally those producing the least amount of air pollution.
- In the United States, the people and places most exposed to air pollution in the 1980s are still the most exposed today.

## Way Forward

- Reducing the drivers of air pollution can help fight another global crisis – climate change.
- Countries can improve their air quality by moving to cleaner sources of energy and cutting out fossil fuels.
- Electric vehicles can help reduce traffic-related air pollution.
- **Investing in more equitable air pollution monitoring networks that capture real-time air quality levels can help recognize risks.**
- Policymakers worldwide can use the new **evidence-based recommendations** to develop and enforce air quality policies.
- The new WHO air quality guidelines could help governments set limits on average air pollution exposure that better protect everyone's health.