

Human Health Impacts of Air Pollution

Why in news?

- The World Environment Day is being celebrated on June 5 every year.
- In this backdrop, the United Nations has warned that 9 out of 10 people on the planet are now breathing polluted air and nobody is safe from air pollution.

What causes air pollution?

- The five main sources of air pollution are -
 - 1. indoor burning of fossil fuels, woods and other biomass to cook, heat and light homes
 - 2. industry, including power generation such as coal-fired plants and diesel generators
 - 3. transport, especially vehicles with diesel engines
 - 4. agriculture, including livestock, which produces methane and ammonia, rice paddies, which produce methane, and the burning of agricultural waste
 - 5. open waste burning and organic waste in landfills
- Burning fossil fuels for power, transport and industry is a major contributor to air pollution.
- Some of the same pollutants contribute to both climate change and local air pollution, including black carbon or soot and methane.

How serious is air pollution?

- Air pollution has led to a growing global health crisis, which already causes about 7 million deaths per year according to WHO.
- It is as well the main source of planet-warming carbon emissions.
- In the 15 countries that emit the most planet-warming gases, the cost of air pollution for public health is estimated at more than 4% of GDP.
- In comparison, keeping heat to the Paris Agreement temperature limits would require investing about 1% of global GDP.

What are the evident human impacts of air pollution?

- **Air pollution** kills 800 people every hour or 13 every minute.
- This accounts for more than 3 times the amount of people who die from malaria, tuberculosis and AIDS combined each year.
- Air pollution is responsible for 26% of deaths from ischemic heart disease, 24% of deaths from strokes, 43% from chronic obstructive pulmonary disease and 29% from lung cancer.
- **Household air pollution** causes about 3.8 million premature deaths each year.
- The vast majority of them are in the developing world, and about 60% of these deaths are among women and children.
- 93% of **children** worldwide live in areas where air pollution exceeds WHO guidelines.
- 600,000 children below the age of 15 died from respiratory tract infections in 2016.
- In children, it is associated with low birth weight, asthma, childhood cancers, obesity, poor lung development and autism, among others.
- As many as 97% of **cities** in low- and middle-income countries with more than 100,000 inhabitants do not meet the WHO minimum air quality levels.
- In high-income countries, 29% of cities fall short of guidelines.
- Among **urban ambient air pollution** factors from fine particulate matter,
 - i. about 25% is contributed by traffic
 - ii. 20% is contributed by domestic fuel burning
 - iii. 15% is contributed by industrial activities including electricity generation
- Keeping global warming well below 2°C could save about one million lives a year by 2050 through reducing air pollution alone.

Source: Indian Express

