



State Of Global Air Report 2019

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The **State Of Global Air Report 2019**, produced by the **Boston-based Health Effects Institute (HEI)** has revealed that 1.2 million Indians died due to ailments triggered by air pollution in 2017.

Key Findings

- **Air pollution ranks fifth** among global risk factors **for mortality globally**, exceeded only by behavioral and metabolic factors: poor diet, high blood pressure, tobacco exposure, and high blood sugar.
 - Globally, air pollution (PM 2.5, household and ozone emissions) is estimated to have contributed to about **4.9 million deaths** — 8.7% of all deaths globally and 5.9% of all life years lost to disability, **in 2017**.
- **India and China have the highest health burden** from air pollution, followed by Pakistan, Indonesia, Bangladesh and Nigeria.
- In 2017, exposure to **PM 2.5 pollution** was found to be the **third leading risk factor globally for Type 2 diabetes**-related deaths and disability after high blood sugar and excessive body weight.
 - Globally, such exposure contributed to about 2.76 lakh deaths and 15.2 million life years lost to disability in 2017.
 - **This burden was highest in India** followed by China, Indonesia, Mexico and Brazil.

India-Specific findings

- **Air pollution** is now the **third-highest cause of death** among all health risks, ranking just above smoking, in India.
 - **Over 1.2 million Indians died** early due to exposure to unsafe air in 2017.
 - Out of the 1.2 annual premature deaths, 673,100 deaths were due to exposure to outdoor PM2.5, and more than 481,700 deaths were due to exposure to household air pollution in India.

- **About 60% of India's population was exposed to household pollution in 2017.** However, the report also recognises that the proportion of households cooking with solid fuels in India has dipped from 76% in 2005 to 60% (846 million) in 2017, due to a major government program of shifting households from solid fuels to liquefied petroleum gas.
- **Entire Indian population** lives in areas **with PM2.5 concentrations above the WHO Air Quality Guideline of 10 µg/m³**, and only about 15 % of the population lives in areas with PM2.5 concentrations below the WHO's least-stringent target of 35 µg/m³.
- Exposure to PM2.5 pollution contributed to **55,000 deaths and 2.7 million life years lost from type 2 diabetes** in 2017.
- It can be noted that **India has initiated major steps** to address pollution sources: the **Pradhan Mantri Ujjwala Yojana Household LPG program**, accelerated **Bharat Stage VI vehicle standards**, and the new **National Clean Air Programme**.
 These and future initiatives have the potential, if fully implemented as part of a sustained commitment to air quality, to result in significant health benefits in coming years.

Type 2 Diabetes

- It is a chronic condition that affects the way one's body metabolizes sugar (glucose) — an important source of fuel for body.
- With type 2 diabetes, **one's body either resists the effects of insulin** — a hormone that regulates the movement of sugar into cells — **or doesn't produce enough insulin** to maintain normal glucose levels.
- It causes symptoms including Increased thirst, frequent urination, increased hunger and Unintended weight loss etc.

PM 2.5

- PM 2.5 is **an atmospheric particulate matter of diameter of fewer than 2.5 micrometres**, which is around 3 per cent the diameter of a human hair.
- It causes respiratory problems and also reduces visibility. It is an **endocrine disruptor** that can **affect insulin secretion and insulin sensitivity**, thus contributing to diabetes.
- It can only be detected with the help of an electron microscope because of them being very small.

Health Effects Institute (HEI)

- It is a **nonprofit corporation chartered in 1980** as an independent research organization to provide high-quality, impartial, and relevant science on the health effects of air pollution.
- It is **headquartered in Boston**, Massachusetts, United States.