Air pollution was the 2nd leading risk factor for premature death in Bangladesh in 2019, accounting for around 20% of all deaths (nearly 174,000). Considered separately, ambient particulate matter (PM$_{2.5}$) ranked as the 5th leading risk factor, and household air pollution (HAP) ranked 4th. Ozone was not in the top 20 risk factors.

**Key Statistics at a Glance**

- Nearly 174,000 deaths due to air pollution in 2019.
- Nearly 20% of infant deaths attributable to air pollution.
- 63 µg/m$^3$ population-weighted annual average PM$_{2.5}$ concentration.*
- Nearly 74,000 deaths attributable to exposure to outdoor PM$_{2.5}$.
- 76% of the population used solid fuels for cooking.
- Nearly 95,000 deaths attributable to exposure to household air pollution.

**Key Exposure Facts**

- **100% of Bangladesh’s population lives in areas where PM$_{2.5}$ levels are above the WHO guideline for healthy air (10 µg/m$^3$).**

  - Between 2010 and 2019, exposures to PM$_{2.5}$ and ozone increased, but exposure to household air pollution declined.
  - There are less than 5 stations reporting PM$_{2.5}$ concentrations in Bangladesh.
  - Among the 6 countries in the South Asia region, Bangladesh ranks 3rd in PM$_{2.5}$ exposure.

**How Have Pollutant Exposures Changed Between 2010 and 2019?**

* Please note that PM$_{2.5}$ concentrations reported here are estimated using a combination of satellite data, ground air quality monitoring data, and chemical transport models. These estimates can be more uncertain in regions where ground monitoring data are limited or not available. In Bangladesh, the best estimate of the annual average exposure is 63 µg/m$^3$, but it may range from 55 µg/m$^3$ to 74 µg/m$^3$.

**WHO provides an Air Quality Guideline of 10 µg/m$^3$ for PM$_{2.5}$ to minimize health risks to populations, as well as three interim targets (15 µg/m$^3$, 25 µg/m$^3$, and 35 µg/m$^3$) as incremental steps toward the progressive reduction of air pollution.**

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Air Pollution Accounts for a Substantial Percentage of Global Deaths from Specific Causes.

Air pollution exposures, including exposure to outdoor PM$_{2.5}$ and HAP, have been linked to increased hospitalizations, disability, and early death from respiratory diseases, heart disease, stroke, lung cancer, and diabetes, as well as communicable diseases like pneumonia. Exposure to ozone is linked to chronic obstructive pulmonary disease (COPD), and in children, especially those under the age of 5, increases susceptibility to lower-respiratory tract infections. Exposure to PM$_{2.5}$ also puts mothers at risk of delivering babies too early and smaller than normal, and such babies are more susceptible to dying from a range of diseases.

Percentage of Deaths (by Cause) Attributed to Air Pollution in Bangladesh in 2019

- 61 percent of COPD deaths
- 25 percent of diabetes deaths
- 33 percent of ischemic heart disease deaths
- 33 percent of lung cancer deaths
- 38 percent of stroke deaths
- 44 percent of lower-respiratory infection deaths
- 20 percent of neonatal deaths

Key Health Facts

- Air pollution is the 2nd leading risk factor for premature death in Bangladesh. Leading causes of death in Bangladesh include ischemic heart disease, intracerebral hemorrhage, stroke, COPD, and lower-respiratory infection, while leading risk factors include high blood pressure, dietary risks, tobacco, and high blood sugar.
- There are 145 deaths per 100,000 people attributable to air pollution in Bangladesh compared with 86 deaths globally, adjusted for differences in age.
- 18% of total air-pollution-attributable deaths in Bangladesh are in children under 5, and 22% are in people over 70.

GOOD NEWS: The Clean Air and Sustainable Environment project (CASE) in Bangladesh addressed air pollution from two key sources — highly polluting brick kilns and air pollution from traffic. The project encouraged adoption of cleaner brick manufacturing technologies requiring less energy, and also took measures to address public transportation in the capital city of Dhaka. More

FOR MORE INFORMATION:
For the full report and additional data, please visit www.stateofglobalair.org.

ADDITIONAL RESOURCES:
For open-access, real-time air quality data, visit OpenAQ.