Nigeria

Air pollution was the 3rd leading risk factor for premature death in Nigeria in 2019, accounting for nearly 12% of all deaths (nearly 198,000). Considered separately, ambient particulate matter (PM$_{2.5}$) ranked as the 9th leading risk factor, and household air pollution (HAP) ranked 5th. Ozone was not in the top 20 risk factors.

Key Statistics at a Glance

| Nearly 198,000 deaths due to air pollution in 2019. | 70 µg/m$^3$ population-weighted annual average PM$_{2.5}$ concentration.* | 77% of the population used solid fuels for cooking. |
| Nearly 25% of infant deaths attributable to air pollution. | 68,500 deaths attributable to exposure to outdoor PM$_{2.5}$. | More than 128,000 deaths attributable to exposure to household air pollution. |

Key Exposure Facts

100% of Nigeria’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.
- Among the 47 countries in the sub-Saharan Africa region, Nigeria ranks 2nd in PM$_{2.5}$ exposure.

How Have Pollutant Exposures Changed Between 2010 and 2019?

- PM$_{2.5}$: 2010 = 63 µg/m$^3$, 2019 = 70 µg/m$^3$
- Ozone: 2010 = 44 ppb, 2019 = 53 ppb
- HAP: 2010 = 77% of population relying on solid fuels, 2019 = 82% of population relying on solid fuels

* 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 Nigeria, the best estimate of the annual average exposure is 70 µg/m$^3$, but it may range from 45 µg/m$^3$ to 105 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.
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 Nigeria in 2019

- 58 percent of COPD deaths
- 25 percent of diabetes deaths
- 31 percent of ischemic heart disease deaths
- 32 percent of lung cancer deaths
- 38 percent of stroke deaths
- 50 percent of lower-respiratory infection deaths
- 25 percent of neonatal deaths

Key Health Facts

- Air pollution is the 3rd leading risk factor for premature death in Nigeria. Leading causes of death in Nigeria include malaria, diarrheal diseases, lower-respiratory infection, preterm birth, and neonatal encephalopathy, while leading risk factors include malnutrition, unsafe water, sanitation and hygiene, high blood pressure, and unsafe sex.
- There are 144 deaths per 100,000 people attributable to air pollution in Nigeria compared with 86 deaths globally, adjusted for differences in age.
- 15% of total air-pollution-attributable deaths in Nigeria are in children under 5, and 14% are in people over 70.

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

ADDITIONAL RESOURCES:
In 2019, Nigeria, in association with the Climate & Clean Air Coalition, implemented a national plan to address short-lived climate pollutants. The 22 mitigation measures include an aim to reduce PM$_{2.5}$ emissions by 75% by 2030. More.