



South Africa

Air pollution was the 7th leading risk factor for premature death in South Africa in 2019, accounting for nearly 6% of all deaths (nearly 30,000). Considered separately, ambient particulate matter (PM_{2.5}) ranked as the 7th leading risk factor. Ozone and household air pollution (HAP) were not in the top 20 risk factors.

Key Statistics at a Glance

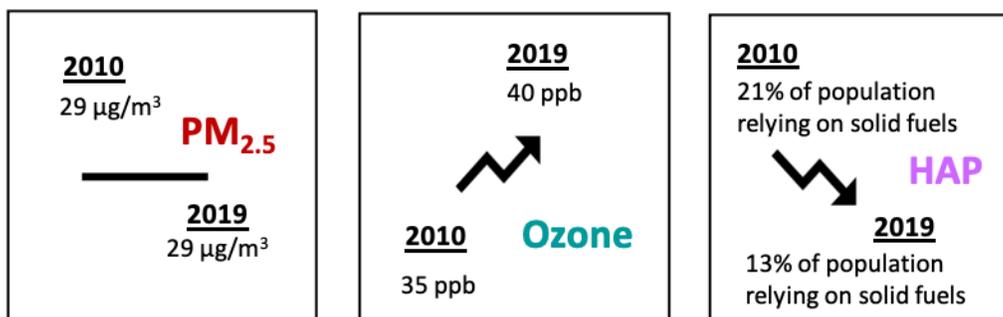
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| <p>Nearly 30,000 deaths due to air pollution in 2019.</p> <p>Nearly 12% of infant deaths attributable to air pollution.</p> |  <p>29 µg/m³ population-weighted annual average PM_{2.5} concentration.*</p> <p>Nearly 25,000 deaths attributable to exposure to outdoor PM_{2.5}.</p> |  <p>13% of the population used solid fuels for cooking.</p> <p>Nearly 4,600 deaths attributable to exposure to HAP.</p> |
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Key Exposure Facts

100% of South Africa's population lives in areas where PM_{2.5} levels are above the WHO guideline for healthy air (10 µg/m³).**

- Between 2010 and 2019, exposures to PM_{2.5} remained the same, exposures to ozone increased, and HAP declined.
- Among the 47 countries in the Sub-Saharan Africa region, South Africa ranks 32nd 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 South Africa, the best estimate of the annual average exposure is 29 µg/m³, but it may range from 24 µg/m³ to 34 µg/m³.

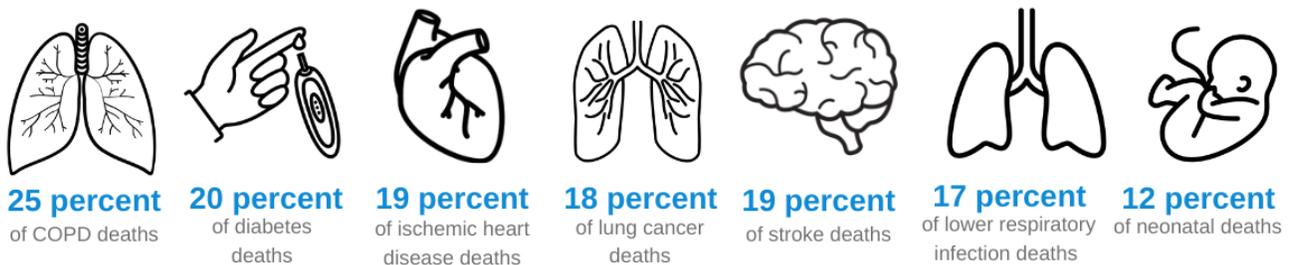
** WHO provides an Air Quality Guideline of 10 µg/m³ for PM_{2.5} to minimize health risks to populations, as well as three interim targets (35 µg/m³, 25 µg/m³, and 15 µg/m³) as incremental steps toward the progressive reduction of air pollution.

STATE OF GLOBAL AIR /2020

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 South Africa in 2019



Key Health Facts

- Air pollution is the 7th leading risk factor for premature death in South Africa. Leading causes of death in South Africa include HIV/AIDS, drug-susceptible tuberculosis, ischemic heart disease, lower respiratory infections, and type II diabetes, while leading risk factors include unsafe sex, malnutrition, high BMI, high blood sugar, and high blood pressure.
- There are 73 deaths per 100,000 people attributable to air pollution in South Africa compared with 86 deaths globally, adjusted for differences in age.
- 8% of total air-pollution-attributable deaths in South Africa are in children under 5, and 9% are in people over 70.

GOOD NEWS: Deaths attributable to HAP decreased by 26% since 2010. South Africa released its National Clean Air Programme in 2019 with a view to reducing outdoor PM_{2.5} levels by 2024. In April 2020, the country initiated a switch to Bharat Stage VI (BS-VI) emission standards, which is likely to bring benefits over the next few years.

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](https://openaq.org)



For more details, please visit www.stateofglobalair.org
Contact us contactsoqa@healtheffects.org



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The State of Global Air website is a collaboration between the Health Effects Institute and the Institute for Health Metrics and Evaluation, with expert input from the University of British Columbia.