





# Nepal

Air pollution was the leading risk factor for premature death in Nepal in 2019, accounting for nearly 22% of all deaths (more than 42,000). Considered separately, ambient particulate matter (PM<sub>2.5</sub>) ranked as the 4th leading risk factor, and household air pollution (HAP) ranked 3rd. Ozone was not in the top 20 risk factors.

## Key Statistics at a Glance

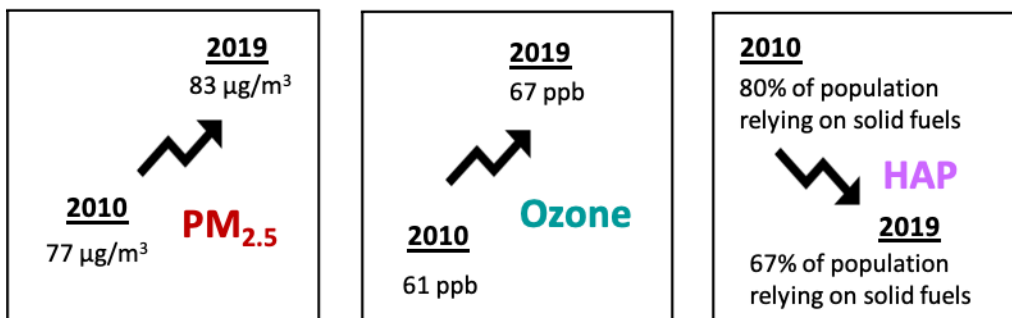
<p><b>More than 42,000 deaths due to air pollution in 2019.</b></p> <p><b>Nearly 22% of infant deaths attributable to air pollution.</b></p>	 <p><b>83 µg/m<sup>3</sup> population-weighted annual average PM<sub>2.5</sub> concentration.*</b></p> <p><b>Nearly 18,000 deaths attributable to exposure to outdoor PM<sub>2.5</sub>.</b></p>	 <p><b>67% of the population used solid fuels for cooking.</b></p> <p><b>More than 21,500 deaths attributable to exposure to HAP.</b></p>
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## Key Exposure Facts

**98% of Nepal's population lives in areas where PM<sub>2.5</sub> levels are above the WHO guideline for healthy air (10 µg/m<sup>3</sup>)\*\***

- Between 2010 and 2019, exposures to PM<sub>2.5</sub> and ozone increased, and HAP declined.
- There are 3 stations reporting PM<sub>2.5</sub> concentrations in Nepal.\*\*\*
- Among the 6 countries in the South Asia region, Nepal ranks 2nd in PM<sub>2.5</sub> exposure.

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



\* Please note that PM<sub>2.5</sub> 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 Nepal, the best estimate of the annual average exposure is 83 µg/m<sup>3</sup>, but it may range from 63 µg/m<sup>3</sup> to 107 µg/m<sup>3</sup>.

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

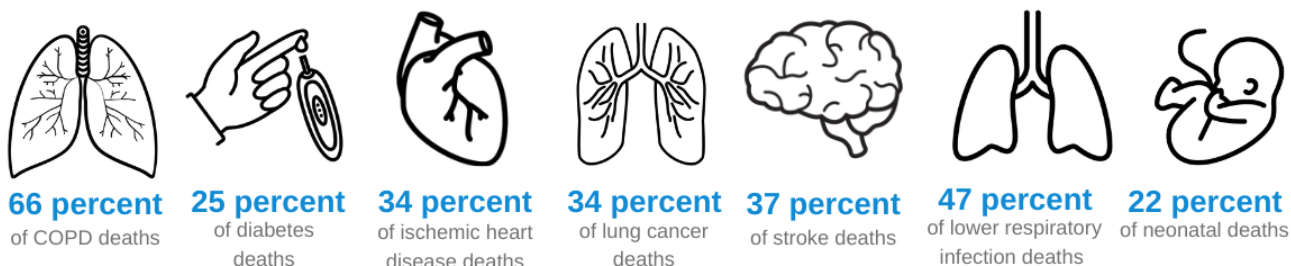
\*\*\* Based on data from OpenAQ.

# 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<sub>2.5</sub> 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<sub>2.5</sub> 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 Nepal in 2019**



## **Key Health Facts**

- Air pollution is the leading risk factor for premature death in Nepal. Leading causes of death in Nepal include COPD, ischemic heart disease, lower respiratory infection, intracerebral hemorrhage, and asthma, while leading risk factors include malnutrition, tobacco, high blood pressure, and dietary risks.
- There are 222 deaths per 100,000 people attributable to air pollution in Nepal compared with 86 deaths globally, adjusted for differences in age.
- 19% of total air-pollution-attributable deaths in Nepal are in children under 5, and 27% are in people over 70.

### **FOR MORE INFORMATION:**

For the full report and additional data, please visit [www.stateofglobalair.org](http://www.stateofglobalair.org).

### **ADDITIONAL RESOURCES:**

For open-access, real-time air quality data, visit [OpenAQ](http://OpenAQ)



For more details, please visit [www.stateofglobalair.org](http://www.stateofglobalair.org)

Contact us [contactsoga@healtheffects.org](mailto:contactsoga@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.