Türkiye

Air pollution was the 7th leading risk factor for premature death in Türkiye in 2019, accounting for nearly 10% of all deaths (more than 44,000). Considered separately, ambient particulate matter (PM$_{2.5}$) ranked as the 7th leading risk factor. Ozone and household air pollution were not in the top 20 risk factors.

**Key Statistics at a Glance**

<table>
<thead>
<tr>
<th>More than 44,000 deaths due to air pollution in 2019.</th>
<th>26 µg/m$^3$ population-weighted annual average PM$_{2.5}$ concentration.*</th>
<th>49 ppb average seasonal population-weighted ozone.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10% of infant deaths attributable to air pollution.</td>
<td>Nearly 41,500 deaths attributable to exposure to outdoor PM$_{2.5}$.</td>
<td>Nearly 3,000 deaths attributable to exposure to ozone.</td>
</tr>
</tbody>
</table>

**Key Exposure Facts**

99% of Türkiye’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 household air pollution declined, but exposures to ozone remained the same.
- Among the 19 countries in the North Africa and Middle East region, Türkiye ranks 19th in PM$_{2.5}$ exposure.

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

- 2010 PM$_{2.5}$: 29 µg/m$^3$
- 2019 PM$_{2.5}$: 26 µg/m$^3$
- 2010 Ozone: 49 ppb
- 2019 Ozone: 49 ppb
- 2010 HAP: 1.4% of population relying on solid fuels
- 2019 HAP: 0.7% 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 Türkiye, the best estimate of the annual average exposure is 26 µg/m$^3$, but it may range from 23 µg/m$^3$ to 29 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 (35 µg/m$^3$, 25 µg/m$^3$, and 15 µg/m$^3$) as incremental steps toward the progressive reduction of air pollution.
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 Türkiye in 2019

- 26% of COPD deaths
- 20% of diabetes deaths
- 16% of ischemic heart disease deaths
- 18% of lung cancer deaths
- 16% of stroke deaths
- 14% of lower respiratory infection deaths
- 8% of neonatal deaths

### Key Health Facts

- Air pollution is the 7th leading risk factor for premature death in Türkiye. Leading causes of death in Türkiye include ischemic heart disease, stroke, lung cancer, chronic obstructive pulmonary disease (COPD), and Alzheimer disease, while leading risk factors include high blood pressure, tobacco, high BMI, high blood sugar, and dietary risks.
- There are 53 deaths per 100,000 people attributable to air pollution in Türkiye compared with 86 deaths globally, adjusted for differences in age.
- 5% of total air-pollution-attributable deaths in Türkiye are in children under 5, and 9% 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.net).