Romania

Air pollution was the 8th leading risk factor for premature death in Romania in 2019, accounting for nearly 7% of all deaths (more than 17,000). Considered separately, ambient particulate matter (PM$_{2.5}$) ranked as the 10th leading risk factor. Ozone and household air pollution (HAP) were not in the top 20 risk factors.

**Key Statistics at a Glance**

<table>
<thead>
<tr>
<th>More than 17,000 deaths due to air pollution in 2019.</th>
<th>16 µg/m$^3$ population-weighted annual average PM$_{2.5}$ concentration.*</th>
<th>13% of the population used solid fuels for cooking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearly 6% of infant deaths attributable to air pollution.</td>
<td>More than 14,500 deaths attributable to exposure to outdoor PM$_{2.5}$.</td>
<td>More than 2,400 deaths attributable to exposure to HAP.</td>
</tr>
</tbody>
</table>

**Key Exposure Facts**

99% of Romania 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$_{2.5}$, ozone, and HAP declined.
- There are 117 stations reporting PM$_{2.5}$ concentrations in Romania.***

- Among the 29 countries in the Central Europe, Eastern Europe, and Central Asia region, Romania ranks 23rd in PM$_{2.5}$ exposure.

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

<table>
<thead>
<tr>
<th>2010 PM$_{2.5}$</th>
<th>2010 Ozone</th>
<th>2010 HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 µg/m$^3$</td>
<td>40 ppb</td>
<td>17% of population relying on solid fuels</td>
</tr>
<tr>
<td>16 µg/m$^3$</td>
<td>33 ppb</td>
<td>13% of population relying on solid fuels</td>
</tr>
</tbody>
</table>

* 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 Romania, the best estimate of the annual average exposure is 16 µg/m$^3$, but it may range from 15 µg/m$^3$ to 17 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.

*** Based on data from OpenAQ.
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 Romania in 2019**

- 14 percent of COPD deaths
- 15 percent of diabetes deaths
- 11 percent of ischemic heart disease deaths
- 13 percent of lung cancer deaths
- 11 percent of stroke deaths
- 9 percent of lower respiratory infection deaths
- 6 percent of neonatal deaths

**Key Health Facts**

- Air pollution is the 8th leading risk factor for premature death in Romania. Leading causes of death in Romania include ischemic heart disease, ischemic stroke, intracerebral hemorrhage, hypertensive heart disease, and lung cancer, while leading risk factors include high blood pressure, tobacco, dietary risks, high BMI, and high LDL.
- There are 45 deaths per 100,000 people attributable to air pollution in Romania compared with 86 deaths globally, adjusted for differences in age.
- 5% of total air-pollution-attributable deaths in Romania are in children under 5, and 7% are in people over 70.

**GOOD NEWS:** Deaths attributable to HAP decreased by 26% since 2010. Romania 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.