

AIR POLLUTION CHOKING ASIA'S PROSPECTS

Outdoor and indoor air pollution is a serious issue for the region, increasing inequalities and holding back socioeconomic development.



Asia is home to **54% of the world's urban population**, and by 2050 **more than 3.4 billion** people will live in its urban areas¹



97% of cities in low- and middle-income countries with more than 100,000 inhabitants do not meet the air quality guidelines of the World Health Organization (WHO)²



Asia dominated the global AirVisual most polluted city rankings for 2018 with cities in **India, the People's Republic of China, Pakistan, and Bangladesh** occupying the top 50³



Deaths per 100,000 population attributable to outdoor and indoor air pollution in 2016⁴



Ranking among world's most polluted countries in 2018⁵



Ranking among world's most polluted cities in 2018⁶



WHO annual PM2.5 guideline⁷



Annual average PM2.5 level



Maximum monthly average PM2.5 level

0-12.0

Air quality is satisfactory and poses little or no risk.

12.1-35.4

Sensitive individuals should avoid outdoor activity as they may experience respiratory symptoms.

35.5-55.4

General public and sensitive individuals in particular are at risk to experience irritation and respiratory problems.

55.5-150.4

There is a higher likelihood of adverse effects and aggravation to the heart and lungs among the general public.

150.5-250.4

General public will be noticeably affected. Sensitive groups should restrict outdoor activities.

250.5+

General public is at high risk to experience strong irritations and adverse health effects. Everyone should avoid outdoor activities.

DHAKA, BANGLADESH



103 DEATHS



1st



17th

Air Pollution Meter

10 $\mu\text{g}/\text{m}^3$

97.1 $\mu\text{g}/\text{m}^3$

202.3 $\mu\text{g}/\text{m}^3$

DELHI, INDIA



141 DEATHS



3rd



11th

Air Pollution Meter

10 $\mu\text{g}/\text{m}^3$

113.5 $\mu\text{g}/\text{m}^3$

218.8 $\mu\text{g}/\text{m}^3$

JAKARTA, INDONESIA



81 DEATHS



11th



160th

Air Pollution Meter

10 $\mu\text{g}/\text{m}^3$

27.6 $\mu\text{g}/\text{m}^3$

45.3 $\mu\text{g}/\text{m}^3$

ULAANBAATAR, MONGOLIA



97 DEATHS



6th



72nd

Air Pollution Meter

10 $\mu\text{g}/\text{m}^3$

58.5 $\mu\text{g}/\text{m}^3$

141.8 $\mu\text{g}/\text{m}^3$

KATHMANDU, NEPAL



133 DEATHS



8th



100th

Air Pollution Meter

10 $\mu\text{g}/\text{m}^3$

54.4 $\mu\text{g}/\text{m}^3$

91.9 $\mu\text{g}/\text{m}^3$

ISLAMABAD, PAKISTAN



113 DEATHS



2nd



239th

Air Pollution Meter

10 $\mu\text{g}/\text{m}^3$

38.6 $\mu\text{g}/\text{m}^3$

70.2 $\mu\text{g}/\text{m}^3$

BEIJING, PEOPLE'S REPUBLIC OF CHINA



140 DEATHS



12th



122nd

Air Pollution Meter

10 $\mu\text{g}/\text{m}^3$

41.4 $\mu\text{g}/\text{m}^3$

50.9 $\mu\text{g}/\text{m}^3$

PM2.5 = fine particulate matter less than 2.5 microns in diameter, $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

¹ United Nations Department of Economic and Social Affairs. 2018. 68% of the World Population Projected to Live in Urban Areas by 2050, says UN. 16 May. <https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html>.

² WHO. 2018. WHO Global Ambient Air Quality Database (update 2018). <https://www.who.int/airpollution/data/cities/en/> (accessed 23 May 2019).

³ AirVisual. 2018. World Air Quality Report, Region and City PM2.5 Ranking.

⁴ WHO. Global Health Observatory Data Repository: Joint Effects of Air Pollution, Data by Country. <http://apps.who.int/gho/data/node.main.ENVHEALTHJOINTAAPHAP?lang=en> (accessed 23 May 2019).

⁵ Based on annual average PM2.5 levels using available city data weighted by population. AirVisual. 2018. World Most Polluted Countries 2018 (PM 2.5). <https://www.airvisual.com/world-most-polluted-countries> (accessed 27 May 2019).

⁶ Based on annual average PM2.5 levels. AirVisual. 2018. World Most Polluted Cities 2018 (PM 2.5). <https://www.airvisual.com/world-most-polluted-cities> (accessed 27 May 2019).

⁷ Guideline recommended by WHO to minimize the risk of health impacts, while advising that no level of exposure has been shown to be free of health impacts.