



## Secondary Analysis RP#16

▼ Which age group is most affected by air pollution-related health outcomes—and how Does this vary by city?

170 k children died—<https://www.pressreader.com/similar/281633900410123>

86% child, 100-120 under age of 5- <https://www.business-standard.com/india-news/air-pollution-in-indian-cities-raises-death-risk-across-age-groups-study-1240827004701.html>

2.2 million children in Delhi show lung impairment - [https://en.wikipedia.org/wiki/Air\\_pollution\\_in\\_Delhi](https://en.wikipedia.org/wiki/Air_pollution_in_Delhi)

India lost \$36.8 billion (₹3 lakh crore) - <https://www.worldbank.org/en/country/india/publication/catalyzing-clean-air-in-india>

Pictures from - <https://www.downtoearth.org.in/air/gassed-how-air-pollution-is-causing-greater-loss-of-healthy-life-years-in-children-compared-to-older-people-93151>

Adolescent asthma-

[https://journals.lww.com/lungindia/fulltext/2021/09000/association\\_between\\_air\\_pollution](https://journals.lww.com/lungindia/fulltext/2021/09000/association_between_air_pollution)

Adults death - <https://media.assettype.com/newindianexpress/2024-06/0976aa52-1781-436e-86da-5b29e4d41add/Health%20Effects%20Institute.PNG?w=1920>

[https://www.researchgate.net/publication/348190003\\_2020-Air\\_Pollution\\_in\\_India-\\_GBD\\_study](https://www.researchgate.net/publication/348190003_2020-Air_Pollution_in_India-_GBD_study)

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▼ Who are the major competitors in the Indian air purifier market, and what are their key differentiators (e.g., price, filtration stages, smart features)?

<https://docs.google.com/spreadsheets/d/1DdgyCVgwcnCgyq2XpvObXy.ybBrIXeAsG/edit?usp=sharing&ouid=117631539964702633225&rtpof=true&sd=true>

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▼ What is the relationship between a city's population size and its average AQI—do larger Cities always suffer from worse air quality? (Consider 2024 population and AQI data for this)

<https://worldpopulationreview.com/cities/india>

[https://docs.google.com/spreadsheets/d/1AIScmGI7mX8IONcd48f54D3e0QXqkf3nsc\\_IIW!usp=sharing](https://docs.google.com/spreadsheets/d/1AIScmGI7mX8IONcd48f54D3e0QXqkf3nsc_IIW!usp=sharing)

- ▼ How aware are Indian citizens of what AQI (Air Quality Index) means—and do they understand its health implications?

Survey response - <https://docs.google.com/spreadsheets/d/1Mo-UOH0Yag4urDcWfNHwHdm8um2Tpl6oaq30x8QQ1vU/edit?usp=sharing>

- ▼ Which pollution control policies introduced by the Indian government in the past 5 years have had the most measurable impact on improving air quality—and how have these impacts varied across regions or cities?

PLAN & RESULT - <https://prana.cpcb.gov.in/#/about>

[https://cpcb.nic.in//upload/Downloads/AQI\\_Bulletin\\_20250703.pdf](https://cpcb.nic.in//upload/Downloads/AQI_Bulletin_20250703.pdf)

<https://www.downtoearth.org.in/pollution/indian-cities-see-27-drop-in-air-pollution-since-2019-but-usual-suspects-fare-poorly-report>

Limitations - <https://www.downtoearth.org.in/pollution/most-polluted-delhi-noida-among-cities-with-less-than-40-national-clean-air-programme-fund-utilisation-cse-assessment>

[https://airquality.cpcb.gov.in/AQI\\_India/#](https://airquality.cpcb.gov.in/AQI_India/#)

Answer Critical Questions:

- ▼ How do AQI spikes correlate with pediatric asthma admissions?

**10-unit increase in AQI**, there was an approximate **1-1.4% increase in pediatric asthma ED visits or admissions**.

<https://pubmed.ncbi.nlm.nih.gov/35394903/>

Supporting research papers—

<https://pubmed.ncbi.nlm.nih.gov/37628320/>

[https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2021.798746/full?utm\\_](https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2021.798746/full?utm_)

[https://www.mdpi.com/2077-0383/14/13/4659?utm\\_](https://www.mdpi.com/2077-0383/14/13/4659?utm_)

[https://www.medrxiv.org/content/10.1101/2024.05.29.24307906v1.full?utm\\_source](https://www.medrxiv.org/content/10.1101/2024.05.29.24307906v1.full?utm_source)

<https://timesofindia.indiatimes.com/city/bengaluru/asthma-cases-surge-thanks-to-poor-air-quality-late-diagnosis/articleshow/120905786.cms>

- ▼ Do pollution emergencies increase purifier searches/purchases?

<https://trends.google.com/trends/explore?date=today%205-y&geo=IN&q=%2Fm%2F04gjp9,%2Fm%2F0dc7h&hl=en>

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