

Air Quality Life Index (AQLI) report, 2023

By IASToppers | 2023-09-01 15:05:00



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The **Energy Policy Institute at the University of Chicago (EPIC)**, recently released **Air Quality Life Index (AQLI) report, 2023** indicating that air pollution shortens life of Indians.



[Ref- Down To Earth]

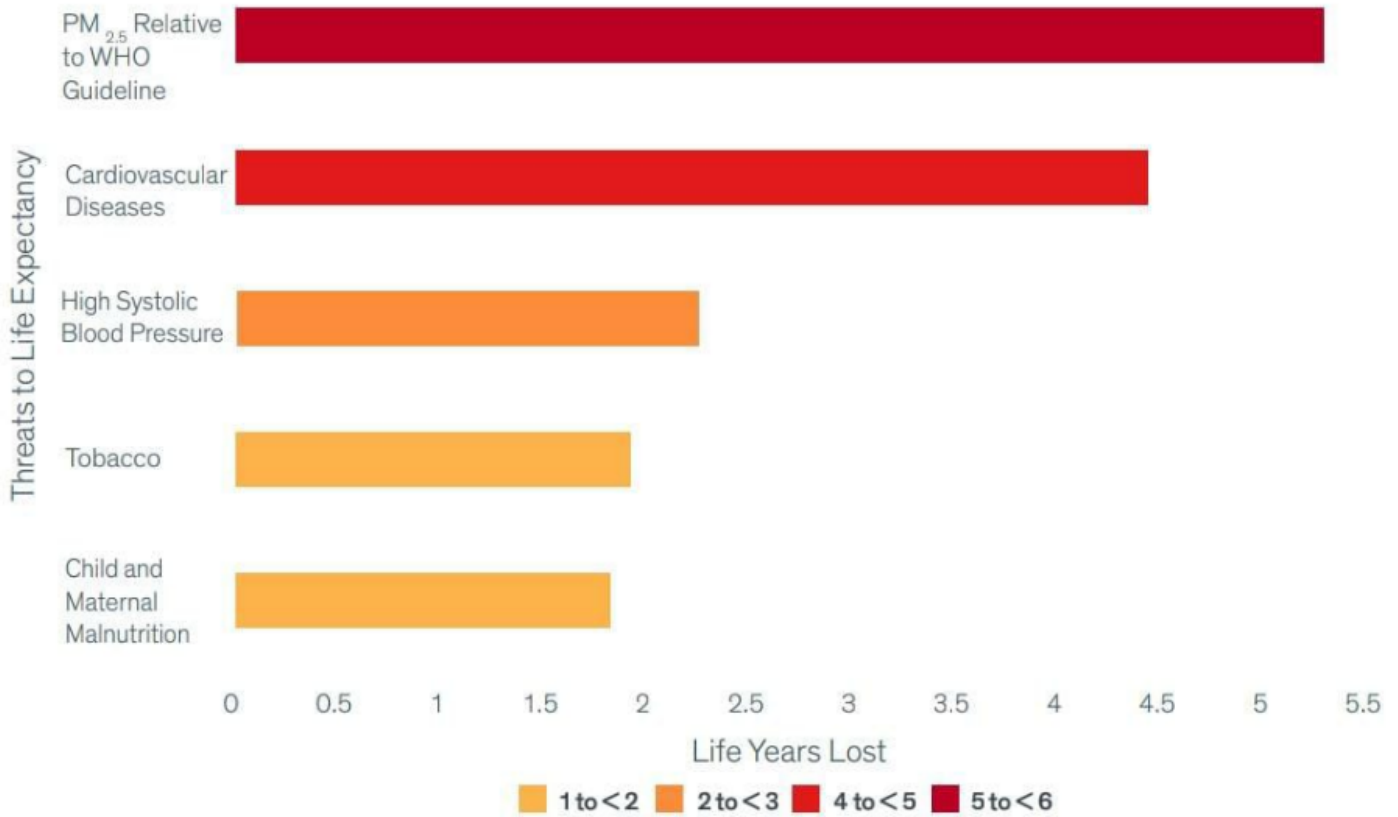
About Air Quality Life Index (AQLI) report:

- **AQLI** is based on **frontier research** that quantifies **relationship** between **human exposure to air pollution** and **reduced life expectancy**.
- It combines research with **hyper-localized**, and **satellite measurements** of global **Particulate Matter (PM2.5)**.
- It illustrates that **pollution policies** can increase life expectancy if it meets **World Health Organization (WHO)** and existing national **air quality standards**.
- The life expectancy is relative to **WHO guideline** of **5 micrograms per cubic meters ($\mu\text{g}/\text{m}^3$)**.

Key Findings of AQLI 2023 on India:

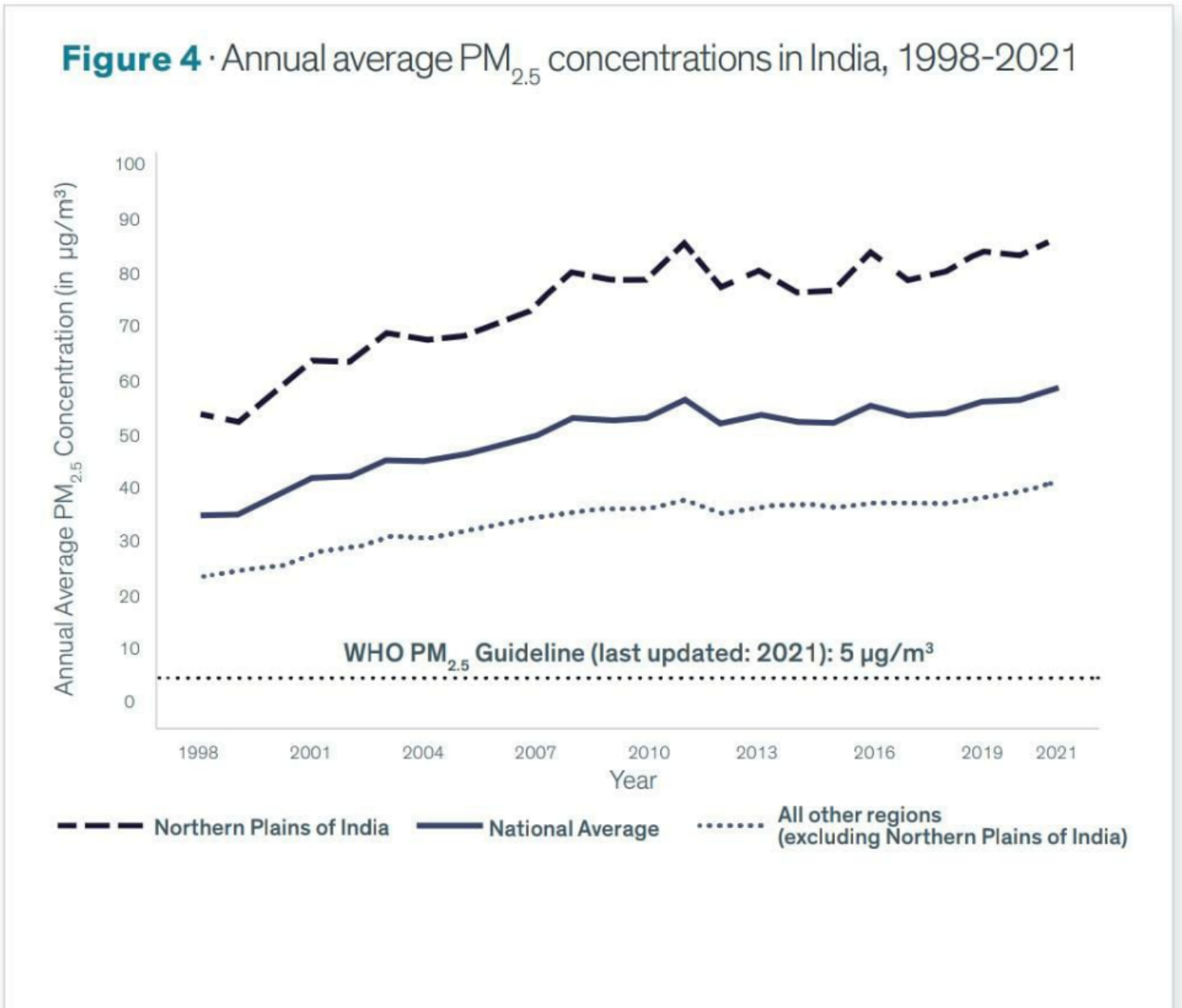
- Particulate pollution is the **greatest threat to human health** in India.
- Particulate Matter **2.5 shortens** an average Indian's life expectancy by **5.3 years**.
- Cardiovascular diseases, caused by the pollution, **reduces** the average life expectancy by **about 4.5 years**.
- **Child and maternal malnutrition** reduce **life expectancy** by **1.8 years**.
- About **67.4%** of population live in areas exceeding India's **national air quality standard** of **40 $\mu\text{g}/\text{m}^3$** .
- **Particulate pollution** has **increased** from **1998** to **2021**.
- Average annual particulate pollution increased by **67.7%** reduces average life expectancy by **2.3 years**.
- **59.1%** of the **world's increase** in pollution **came from India** between 2013 to 2021.
- The **Northern Plains region** of India is the **most polluted (38.9%)**.

Figure 3 · Top 5 threats to life expectancy in India



Source: Global Burden of Disease (<https://vizhub.healthdata.org/gbd-results/>) level-2 causes and risks data and WHO Life Tables (<https://apps.who.int/gho/data/node.main.LIFECOUNTRY?lang=en>) were combined with the Life table method to arrive at these results. "PM_{2.5} relative to WHO Guideline" bar displays the reduction in life expectancy relative to the WHO guideline as calculated by latest AQLI (2021) data.

[Ref- AQLI]



[Ref- AQLI]

Scenario in South Asia:

- Increase in PM2.5 levels from 2013 to 2021:
 - South Asia- 9.7%
 - India- 9.5%
 - Pakistan- 8.8%
 - Bangladesh- 12.4%

Policy Impacts of India:

- If India would reduce particulate pollution as per the WHO guidelines, residents in **Delhi** would gain **11.9 years** of life expectancy.

- India launched [National Clean Air Programme \(NCAP\)](#) in **2019** to reduce particulate pollution.
- NCAP aimed to reduce particulate pollution by **20-30% relative to 2017 levels** by **2024**.
 - It focused on **102** cities as **non-attainment cities**- which **do** not match national annual average PM2.5 standard.
- **Revamp** reduction target for NCAP (2022) by setting goal of **40% reduction** in **2017 levels** for 131 non-attainment cities by **2025-26**.
- The average PM2.5 exposure would be **21.9 µg/m³** lower than **2017 levels** and add **2.1 years** of life, if new targets are achieved.