

# AIR POLLUTION IN INDIA: Impacts on Disease Burden, the Economy and Human Capital

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# THE LANCET

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COMMISSION ON POLLUTION AND HEALTH

# COMMISSION'S MAIN HEALTH FINDINGS

**Pollution killed an estimated 9 MILLION people in 2015...**

**3 TIMES MORE than AIDS, tuberculosis and malaria combined.**



**9 MILLION**  
premature deaths

**=**

**16%**

of all deaths  
worldwide

**10 times more deaths than war, terrorism and all forms of violence**



**HOUSEHOLD AIR  
POLLUTION  
KILLS ALMOST 3 MILLION PER YEAR**

# AMBIENT AIR POLLUTION KILLS ABOUT 4 MILLION PER YEAR

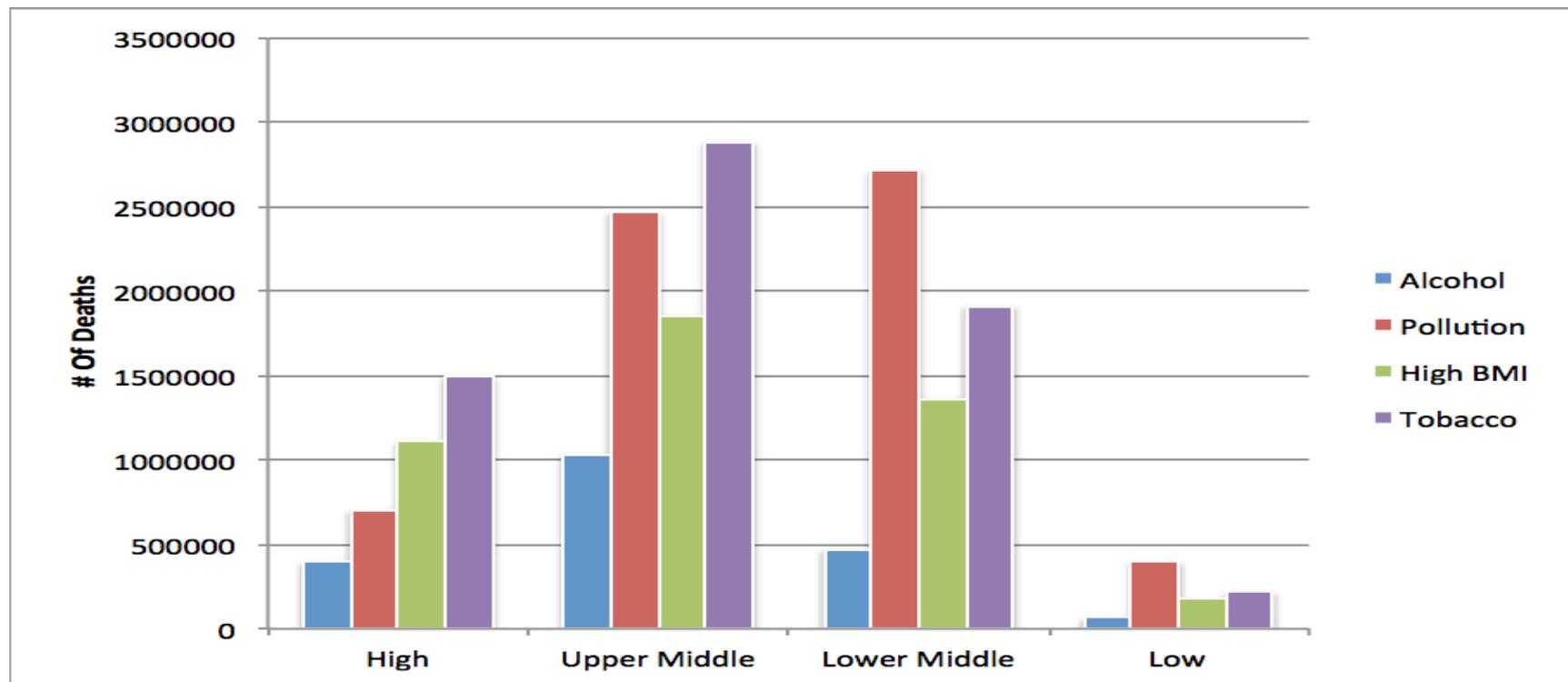


# AIR POLLUTION DEATHS ARE INCREASING

- Deaths from household air pollution are declining in number
- But deaths from ambient air pollution are increasing. They are projected to double by 2050 in the absence of aggressive intervention
- Most severe effects are seen in the rapidly growing cities of low and middle-income countries
- Major drivers: uncontrolled urbanization, increasing energy demand, industrialization, growing numbers of petroleum-powered vehicles

# 70 PERCENT OF POLLUTION-RELATED DISEASE IS NON-COMMUNICABLE DISEASE

22% of all cardiovascular deaths, 25% of stroke deaths, 53% of COPD deaths, and 40% of lung cancer deaths



# **A 6-POINT STRATEGY FOR CONTROLLING POLLUTION AND PREVENTING POLLUTION-RELATED DISEASE**

- Make pollution prevention a high priority within countries and internationally. Link to development strategy, SDG planning and climate change commitments
- Increase funding for pollution control
- Work with countries and cities to advise on development of pollution control plans
- Support research to further elucidate links between pollution and disease
- Engage the general public, the media and civil society
- Create a Global Observatory on Pollution and Health

# DEVELOPMENTS IN AIR POLLUTION CONTROL SINCE RELEASE OF LANCET COMMISSION REPORT

- The UN Environment Assembly (UNEA 3) issued a global call for a pollution-free planet
- The World Bank's Independent Evaluation Group recommended increasing support for pollution management
- WHO, UN Environment, WMO and other partners convened the first Global Conference on Air Pollution and Health
- The Berggruen Institute and the Leonardo DiCaprio Foundation launched the Every Breath Matters initiative
- Five National Academies of Science and Medicine call for urgent action against air pollution
- Global Observatory for Pollution and health formed at Boston College

# GLOBAL OBSERVATORY ON POLLUTION AND HEALTH AT BOSTON COLLEGE

## Goal

- To work with partners to provide highly credible, carefully curated, information and forecasts that to identify emerging pollution problems and track progress.
- Findings will guide UN agencies and leaders of governments, inform civil society and the media, and assist cities and countries to address and prioritize pollution problems and prevent disease.

## STUDY OF AIR POLLUTION IN INDIA

- Requested by Indian Ministry of Environment, Forest and Climate Change
- Undertaken through partnership: CDE, Delhi School of Economics; UN Environment; and Boston College with many colleagues
- Goal. To present high-quality, unbiased data on the health and economic impacts of air pollution in India that can inform decision making nationally and in the states

**THANK YOU**

## TODAY'S KEY MESSAGES

- 1.24 million deaths in India in 2017 associated with air pollution
  - 60% due to ambient air pollution; 40% to household air pollution
- Lost output due to YLDs is 0.24% of India's GDP; lost output due to premature mortality 0.50% of GDP
- In Uttar Pradesh, Bihar and Rajasthan, the sum of these losses exceeds 1% of GDP
- Health expenditures associated with air pollution are over 10% of total health expenditures
- Economic losses far exceed what we have quantified