

SUMMARY OF THE LANCET COMMISSION ON POLLUTION AND HEALTH 2017

In 2015, diseases caused by air, water & soil pollution were responsible for 9 million premature deaths, that is 16% of all global deaths.

- Exposures to contaminated air, water and soil kill more people than smoking, hunger, natural disasters, war, AIDS, or malaria.
- 9 million is a conservative estimate, as the health impacts of many pollutants have not been fully quantified.

Pollution is costly—Welfare losses due to pollution are estimated at \$4.6 trillion per year—6.2% of global economic output.

- The costs attributed to pollution-related diseases will increase as researchers discover more associations between pollution & disease.

The health impacts from many chemical pollutants have not been quantified because of insufficient data collection and scientific research.

- There are more than **140,000 new chemicals** since 1950—5,000 of these materials are produced in great volume.
- Fewer than half of these high-production-volume chemicals have been fully tested for safety.
- Many known toxins have not been evaluated for their global health impact.

Pollution mitigation and prevention yields large returns on investment for human health and the economy.

- In the US, air pollution control has returned an estimated US \$30 in economic benefit (range, \$4–\$88) for every dollar invested since 1970—an aggregate benefit of **\$1.5 trillion** against an investment of \$65 billion.
- The removal of lead from gasoline and the resulting increases in the American population's IQ and productivity have returned an estimated \$200 billion (range, \$110–\$300 billion) to the American economy each year since 1980—an aggregate benefit to date of over \$6 trillion.

Pollution disproportionately kills the poor and the vulnerable.

- Nearly **92% of pollution-related deaths** occur in low- and middle-income countries.
- Children are at high risk of pollution-related disease, as exposures to even small amounts of certain chemicals in utero and in early infancy can result in disease, life-long disability and death.
- Almost all exposures to pollution are involuntary and represent a massive global injustice.

Pollution-related diseases reduce GDP in low- to middle-income countries by up to 2% per year.

- **Up to 7% of health spending** in heavily polluted, rapidly developing middle-income countries goes to care for people made sick by pollution.

The nature of pollution is changing.

- Significant investments in improving access to safe water and sanitation have greatly reduced water pollution's impact.
- However, modern forms of pollution from industry and transport are at a scale never seen before. These include outdoor air, chemical and soil pollution, and exposures in the workplace.

Air pollution and climate change are closely linked and share common solutions.

- Fossil fuel combustion in higher-income countries and the burning of biomass in lower-income countries accounts for **85% of airborne particulate pollution** and is a major source of greenhouse gases and other pollutants that drive climate change.
- Accelerating the switch to cleaner sources of energy will reduce air pollution and improve human and planetary health.

This crisis can be solved.

- The evidence can be found in the success of the many pollution control strategies that have proven cost-effective in high- and middle-income countries.
- High-income countries have achieved this progress while **growing GDP by nearly 250%**.

Recommendations

Governments in affected countries:

Integrate pollution challenges and control strategies into planning processes. Collaborate on solving pollution with development agencies. Design and implement programs that reduce pollution, and save lives.

Donors, foundations, and individuals:

Prioritize pollution interventions and planning.

Anyone affected by pollution:

Visit www.pollution.org, review data related to toxic exposures in your community, connect with agencies, advocate for solutions.

REDUCING POLLUTION PRESENTS A POWERFUL OPPORTUNITY TO SAVE LIVES & GROW ECONOMIES