

Pollution

The Silent Killer of Millions in Poor Countries

Pollution is the leading cause of death in low- and middle-income countries. Exposures to polluted soil, water and air (both indoor and outdoor) resulted in 8.4 million deaths in 2012 in these countries. More than one in seven deaths in the world are pollution-related.

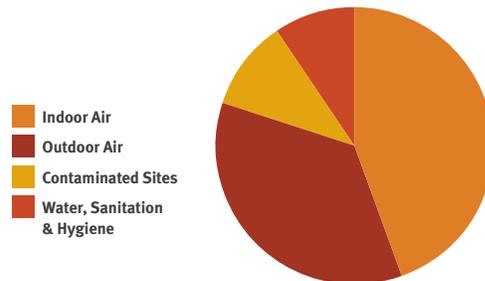
What is Pollution?

Pollution is contaminated water, soil, and air that is harmful or poisonous, caused by human activity. Pollution comes in many forms, and each has a distinct set of solutions. Particulates from power plants, cars and trucks pollute outdoor air. Cook stoves poison indoor air. Mercury and other heavy metals from industry and mining contaminate soil, water and food. Sewage pollutes local river systems.

Pollution especially harms children and can cause birth defects, developmental and neurological disabilities, immune system damage, and many diseases. It also can severely hamper economic growth by degrading human and natural resources.

Deaths Caused by Pollution^{1,2,3} (2012)

Low- and Middle-income Countries



Total Deaths in Low- and Middle-income Countries = **8.4 Million**

Total Global Deaths = **8.9 Million**

How Does it Kill People?

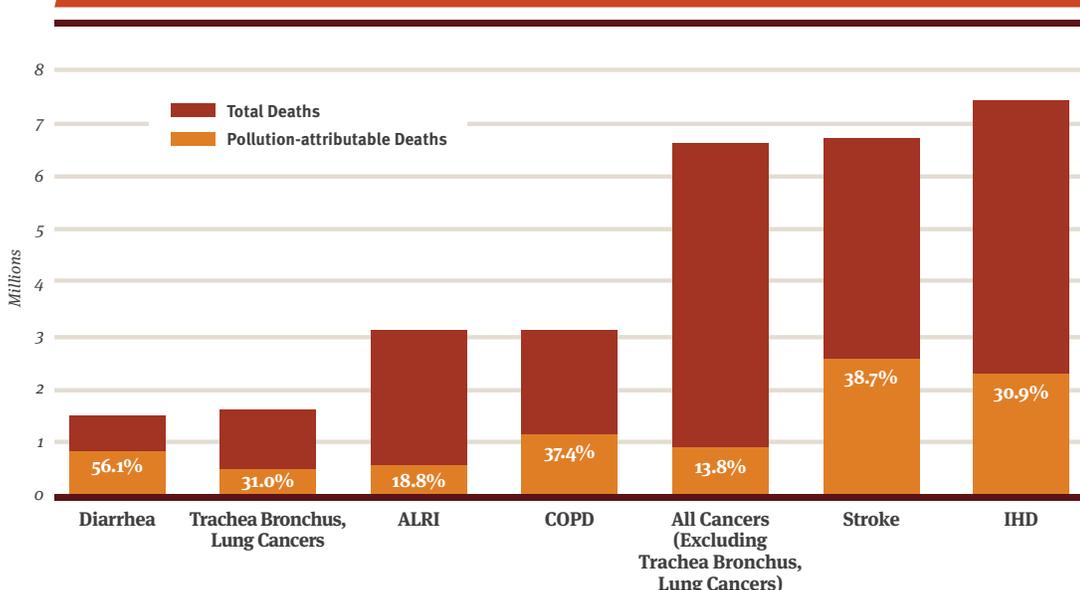
Pollution causes various cancers, heart diseases and lung diseases, to name just a few. The chart below shows how much pollution adds to disease, resulting in much higher death tolls.

Comparatively, death by pollution is larger than any other major cause. Clearly there is a need for attention and investment and prevention.

Billions spent on sanitation, malaria, HIV and TB have had a major impact in improving health.

It's time to turn our attention to pollution.

Leading Causes of Deaths^{4,5} and Portion Caused by Pollution (World—2012)



ALRI: Acute Lower Respiratory Disease

COPD: Chronic Obstructive Pulmonary Disease

IHD: Ischaemic Heart Disease

References

- 1 Air pollution estimates for 2012. Available at http://www.who.int/phe/health_topics/outdoorair/databases/en/
- 2 Contaminated sites data extrapolated from GAHP database
- 3 WHO 2012 http://www.who.int/water_sanitation_health/gbd_poor_water/en/
- 4 World Health Organization (WHO). The top 10 causes of death. <http://www.who.int/mediacentre/factsheets/fs310/en/>
- 5 Institute for Health Metrics and Evaluation (IHME). Data for 2010. <http://vizhub.healthdata.org/gbd-cause-patterns/>

Sources: WHO, GAHP, and IHME

Pollution is overwhelmingly a poor country problem. The majority—94 percent—of the burden of disease from pollution falls on low- and middle-income countries, the countries least equipped to deal with the problem. Pollution has, for the most part, been controlled in wealthy countries, but poor people in developing countries, especially women and children, continue to be poisoned, suffer lifelong disabilities, and die prematurely from pollution.

Why Should Wealthy Countries Care?

Our economy is global and so are the pollutants. Contaminated air from China can now be measured in other countries, mercury from gold mining and coal plants can be found in our fish, and arsenic has been found in our rice.

Many highly polluting industries have moved overseas to poor countries lacking environmental regulations and technology. Clean technologies and green growth are possible for emerging economies and can prevent decades of future contamination that will impact us all. Western nations have had success in cleaning up their toxic and legacy pollution and can now transfer technology and funding to low- and middle-income countries.

How Can We Fix This Problem?

Prioritizing the prevention and clean-up of toxic pollution

will mitigate climate change, reduce threats to biodiversity, and **save lives right now.**

Glancing through the program priorities of major international organizations, the low priority of pollution issues is startling, given its impact. The likely reason for this is a lack of awareness, as well as not knowing where to begin to address this complex set of problems.

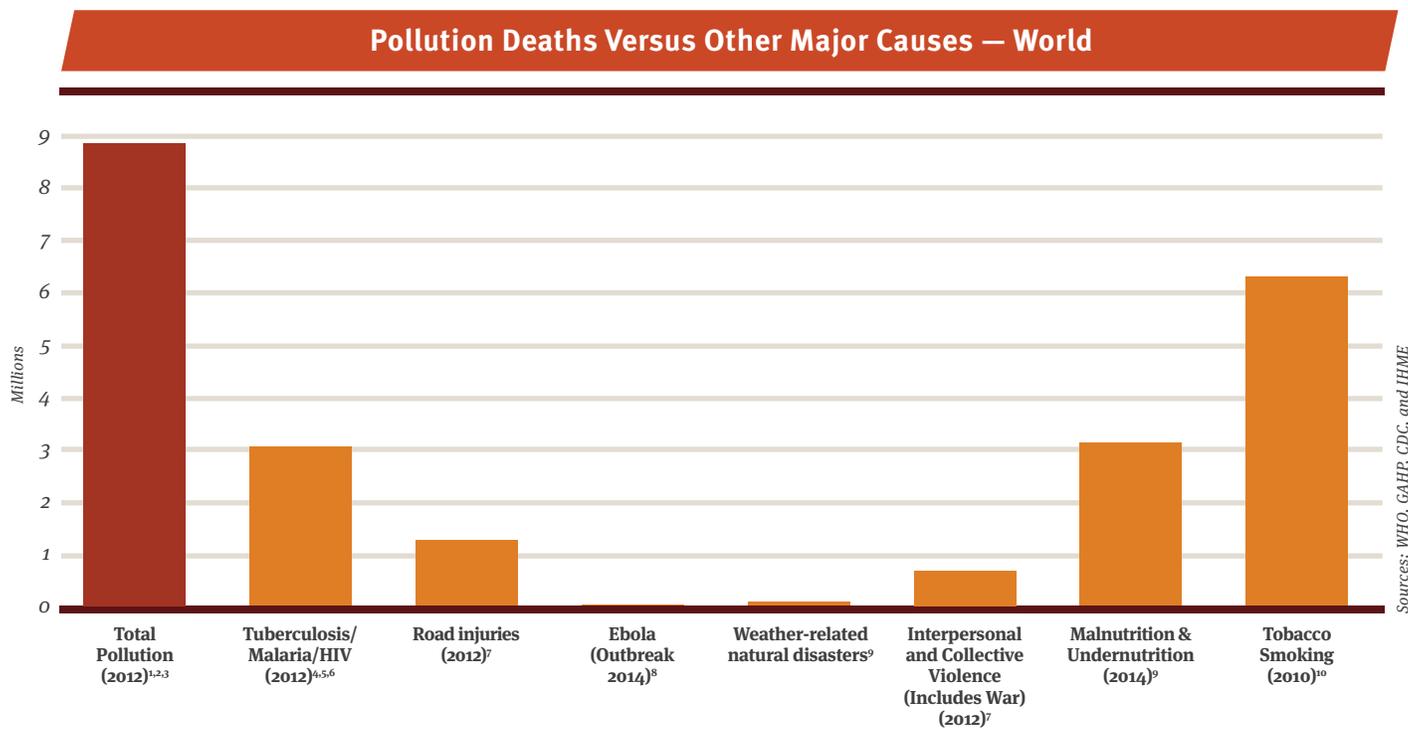
The Global Alliance on Health and Pollution (GAHP) is galvanizing resources to assist low- and middle-income countries address priority pollution problems. As well as educating on all forms of pollution, GAHP assists countries to:

- Identify and assess toxic pollutant threats, especially for contaminated sites;
- Create a planning process to prioritize action for problems posing the greatest risk to human health;
- Implement solutions to save lives.

The technology and knowledge exists in wealthy countries to address this health and economic threat. Solutions can be implemented in low- and middle-income countries for a fraction of the cost spent in the West addressing legacy toxic pollutants from industrialization.

Pollution is not inevitable.

It is a problem that is solvable, in our lifetime.



References

1 Air pollution estimates for 2012. Available at http://www.who.int/phe/health_topics/outdoorair/databases/en/
 2 Contaminated sites data extrapolated from GAHP database
 3 WHO. http://www.who.int/water_sanitation_health/gbd_poor_water/en/
 4 WHO. HIV deaths per country 2012. <http://apps.who.int/gho/data/node.main.623>
 5 WHO. Malaria deaths 2012. <http://www.who.int/mediacentre/factsheets/fs094/en/>
 6 WHO. Number of deaths due to tuberculosis, excluding HIV. 2012. Available at <http://apps.who.int/gho/data/view.main.57016?lang=en>

7 WHO. Global Health Observatory Data Repository. Deaths 2012. <http://apps.who.int/gho/data/node.main.CODWORLD?lang=en>
 8 CDC. 2014 Ebola Outbreak in West Africa. <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.html>
 9 WHO. Climate change and health. <http://www.who.int/mediacentre/factsheets/fs266/en/>
 10 Institute for Health Metrics and Evaluation (IHME). Data for 2010. <http://vizhub.healthdata.org/gbd-cause-patterns/>