

Air Pollution: A Primer on Public Health Crisis



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Air Pollution and Public Health

A huge chunk of the global population is suffering from the harmful health impacts of air pollution. In 2019, premature deaths linked to polluted air soared to 7 million worldwide, most of which occurred in Asia. This led the World Health Organization (WHO) to coin it as the **“single biggest environmental threat to human health.”**

Air Quality and Public Health

Long-term exposure to polluted air can cause serious health problems. For starters, this includes an increased susceptibility to respiratory infections, lung cancer, and chronic obstructive pulmonary diseases. But in addition to these lung issues, air pollutants can also lead to heart problems, including blocked arteries and damaged arterial walls. These can result in poor blood circulation, increased blood pressure, and even heart attack.

Air Quality and COVID-19 Mortality

Individuals with pre-existing illnesses are more at risk for COVID-19 complications. Hence, the pandemic has only amplified the health impacts of poor air quality. In fact, numerous studies have found a clear link between exposure to air pollution and COVID-19 mortality since many of the same illnesses brought upon us by exposure to air pollution are also associated with worse health outcomes from the disease.

A recent study conducted by the Centre for Research on Energy and Clean Air (CREA) and the Institute for Climate and Sustainable Cities (ICSC) estimates that around 66,000 premature deaths every year are linked to air pollution in the country. The same study also revealed that air pollution costs the country Php 4.5 trillion annually

due to healthcare costs related to illness, hospitalization and death, loss of labor, and decreased productivity.

To prevent air-pollution induced illnesses, we need to bring the amount of harmful pollutants in the air down to safe levels. This is possible through implementing and enforcing laws and standards that sets limits to the amount of pollutants in the air we breathe.



Background

The **Philippine Clean Air Act (Republic Act 8749)**, passed in 1999, aims to **guarantee the right of Filipinos to breathe clean air**. To do this, the act specified ambient air quality standards, but with a caveat that these must be kept up-to-date.

Standards, not Status Quos

RA 8749 requires the Department of Environment and Natural Resources (DENR), as the lead department for implementing the law,

to base these standards on guidelines issued by the WHO. **These national standards are meant to be updated** as society learns more about the impacts of air pollution and develops competence in monitoring and controlling pollutants.

Philippine ambient air quality standards have not changed since 1999.

Unfortunately, out of many air pollutants listed in the Clean Air Act, only PM2.5 has been updated since 1999 . This means that in 2020, the country is 15 years late in adopting the 2005 WHO ambient air quality recommendations into national standards or law.

In 2021, the WHO released their most updated guidelines. Now the guidelines are even stricter than the 2005 guidelines, as recent science indicates much lower concentrations of pollutants can cause serious health impacts.

Emissions are finding their way into ambient air.

According to the findings from the National Emissions Inventory, the total air pollution has been increasing since the country's first inventory in 2002. Multiple pollutants from vehicles, factories, and power plants are in the air we breathe and worsening pollution and putting public health at greater risk.

It does not help that our current emission standards remain too lenient.

For example, coal-fired power plants in the country are allowed to release higher amounts of pollutants into the air compared with our Southeast Asian counterparts.



We are also yet to plan for an upgrade of the Euro 4 motor vehicle fuel standards that we adopted in 2016.

We need to urgently upgrade our standards to safeguard our right to clean air.

More than 20 years after RA 8749 was passed, the Philippine government continues to fall short of adopting the previous 2005 WHO recommendations on protective ambient air quality standards. With the release of the more stringent 2021 WHO update and new information on the health impacts of air pollution even at low concentrations, the Philippines will lag further and further behind unless we upgrade our standards now.

We can only regulate what we can measure.

Air quality monitoring (and so data) is also lacking in many Philippine regions, including the highly congested areas of Metro Cebu and Metro Davao. Upgrading our monitoring capability will enable us to zoom in on the state of air pollution in the different parts of the country and implement solutions that are tailored to the respective localities.

Sources:

- 1 Aiming Higher: Benchmarking the Philippine Clean Air Act
- 2 Section 12, Article 1, Chapter 1 of RA8749 states that “The DENR shall base such ambient air quality standards on World Health Organization (WHO) standards, but shall not be limited to nor be less stringent than such standards”.
- 3 DENR Administrative Order 2013-13 establishes the provisional guidelines for PM2.5 and was subsequently amended by DENR Administrative Order 2020-14
- 4 The WHO Global Air Quality Guidelines was released in September 2021.
- 5 Data taken from the EMB emissions inventory webpage.
- 6 Euro standards were developed to limit the pollutant emissions from vehicles and have been widely adopted globally. There are currently 6 levels in the Euro standards with Euro 1 being the most lenient and Euro 6 the most stringent.
- 7 Aiming Higher: Benchmarking the Philippine Clean Air Act

