

The Battle Against Air Pollution in Africa: A Call for Urgent Action

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Air pollution: Is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere. Air pollution has emerged as a global crisis, affecting the health and well-being of millions worldwide.

While the issue is often associated with industrialized nations, it is essential to shed light on the alarming situation in the African region. In this blog, we will explore [the latest data regarding air pollution in Africa](#) and discuss the urgent need for action to mitigate its devastating consequences.



The Scope of the Problem:

According to the WHO, [834,000 premature deaths annually in the African Region each year are due to air pollution](#), bearing a significant burden. The region faces a complex mix of air pollution sources, including industrial emissions, vehicular exhaust, biomass burning, and household energy usage. Factors such as rapid urbanization, population growth, and inadequate environmental regulations have exacerbated the situation. [In 2019, Ambient \(outdoor\) air pollution](#) was estimated to have caused around 339,000 premature deaths in the African Region. [Household air pollution](#) is estimated to have caused around 639,000 deaths in the African Region in 2019.

Air pollution is one of the greatest environmental risks to health. By reducing air pollution levels, countries can reduce the burden of disease from stroke, heart disease, lung cancer, and both chronic and acute respiratory diseases, including asthma.

The Health Impacts:

[Air pollution poses severe health risks](#), leading to a range of diseases and conditions. In Africa, particulate matter (PM) pollution is a significant concern, primarily attributed to household cooking practices and inefficient energy sources. Exposure to PM2.5, tiny particles that penetrate deep into the respiratory system, is linked to respiratory infections, cardiovascular diseases, lung cancer, and even adverse birth outcomes.

Urban Air Quality:

Urban centers in the African region face challenges when it comes to air pollution. Rapid urbanization has led to an increase in vehicular emissions and industrial activities. Cities like Lagos and Nairobi frequently experience high levels of pollution, exceeding the WHO's guidelines. The concentration of pollutants, such as nitrogen dioxide (NO₂) and sulfur dioxide (SO₂), poses a threat to the health of urban dwellers, especially vulnerable populations like children and the elderly.



Household Air Pollution:



In the African region, many households rely on solid fuels like wood, charcoal, or biomass for cooking and heating. [This practice contributes to indoor air pollution, leading to a significant health burden](#). Exposure to smoke from these fuels increases the risk of acute respiratory infections, chronic obstructive pulmonary disease (COPD), and low birth weight among infants. Women, who bear the responsibility of household chores, are disproportionately affected.

Climate Change and Air Pollution:

Air pollution and climate change are closely interconnected. [The burning of fossil fuels, deforestation, and other human activities contribute to both problems](#). In Africa, the effects of climate change, such as extreme weather events and desertification, further exacerbate air pollution. Increased heatwaves and prolonged droughts have led to more frequent wildfires, which release harmful pollutants into the atmosphere.

Individual efforts on reducing air pollution:

- Save energy - at home, at work, and everywhere else.
- Use [environmentally friendly paints](#) and cleaning products when available.
- Consider using gas logs instead of wood for heating.
- Ensure that your tires are properly inflated.

- When refueling with gasoline, [follow the instructions for efficient vapor recovery](#), and make sure not to spill fuel while always tightening your gas cap securely.
- Avoid burning leaves, trash, and other materials

The Way Forward:

Addressing air pollution in the African region requires collaborative efforts at local, national, and international levels. [Governments must enact and enforce strict environmental regulations to curb industrial emissions, improve vehicle standards, and promote cleaner energy sources](#). Investing in renewable energy infrastructure can help reduce dependence on fossil fuels and transition to cleaner power generation.

Furthermore, promoting the adoption of clean cooking technologies and providing access to affordable and efficient energy alternatives for rural communities is crucial. [Raising awareness among the public about the health risks of air pollution and the importance of sustainable practices is essential for behavioral change and community engagement](#).

International organizations and developed nations should extend support to African countries in terms of technology transfer, capacity building, and financial assistance to combat air pollution effectively. Collaboration between researchers, policymakers, and public health experts is vital for data collection, monitoring, and implementation of evidence-based interventions.

Air pollution in the African region is a pressing issue with profound health implications for its population. Urgent action is needed to reduce emissions, improve air quality monitoring systems, and promote sustainable practices. By addressing this crisis, African nations can not only safeguard the health of their citizens but also contribute to global efforts

WHO Response on Ambient air pollution:

- WHO's work on "Measuring health gains from sustainable development" has proposed air pollution indicators as a marker of progress for development goals related to sustainable development in cities and the energy sector.
- WHO develops and produces "[Air quality guidelines](#)" recommending exposure limits to key air pollutants.
- WHO produces evidence regarding the linkage of air pollution to specific diseases, such as cardiovascular and respiratory diseases and cancers, as well as burden of disease estimates [from existing air pollution exposures, at country, regional, and global levels](#).

References

[Air Pollution Regional Fact Sheet](#)
[Air Pollution](#)
[Household Air Pollution](#)
[Causes of Climate Change](#)
[Raising awareness on climate change and health](#)
[Actions You Can Take to Reduce Air Pollution](#)