

## Traffic-Related Air Pollution in Africa: Emissions, Sources and Health Impacts

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Transport sector, which is made up of sub-sectors, that include roadways, railways, seaways, and airways contributes to ambient air pollution and poor air quality. This work focuses solely on road traffic-related air pollution in Africa. It reviews main pollutants and sources, and their impacts on health and the environment. It explores key driving factors, such as diverse transportation modes, traffic congestion, unpaved roads, vehicle fleet conditions, urban planning challenges, fuel quality disparities, road design issues, and traffic management. Health outcomes associated with long-term exposure to road traffic pollutants are numerous, ranging from headaches, pulmonary and respiratory outcomes and cardiovascular issues to developmental and cognitive issues and increased mortality associated burden. Few recommendations and solutions are formulated, and include public sensitization, deployment of monitors, adequate regulation, and policy. A comprehensive approach is needed, and few solutions or proposals to be investigated and adapted to specific contexts are more investment to improve public transportation, development of green infrastructure and modes integration, sustainable urban planning, and stringent vehicle emission standards. Even though some of these solutions could be difficult to implement in the African countries, they are necessary if we want to reduce mortality due to road traffic-related pollution and improve the life expectancy, especially in sub-Saharan Africa.

**Keywords:** roadways, transport, air pollutants, Africa, health.

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