AIR QUALITY AND HEALTH



CLEAN AIR DAY 2025



MS BONO NEMUKULA ENVIRONMENTAL HEALTH



04 SEPTEMBER 2025





BACKGROUND



AIR POLLUTION AND ITS IMPACT

- Defn of air pollution: 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.
 WHO, 2025; household combustion devices, motor vehicles, industrial facilities and forest fires
- WHO data show that almost all of the global population (99%) breathe air that exceeds WHO guideline limits and contains high levels of pollutants, with low- and middle-income countries suffering from the highest exposures.





HEALTH AND ENVIRONMENT SCORE CARD



Health and environment scorecard

South Africa



Summary score: 54

Exposure score:

57

Health score:

62

Policy score:

44

The scores represent simple averages.

See methods and results for additional information.

The scores are out of 100.

Extent of the problem

Health impact

¹ Air pollution causes many other diseases

ischaemic heart disease have been chosen.

for this scorecard.

and adverse health outcomes, only stroke and

Policies



View actions

and interventions



4 x the WHO air quality guideline value for PM₅

WHO Guideline (annual mean): 5 µg/m³

Annual country mean: 20 µg/m³



11%
Population without clean fuels and technology for cooking



24%

Deaths from stroke and ischaemic heart disease caused by air pollution¹



Existence of legal standards for PM_{2.5}

yes



Compliant with WHO Air Quality Guidelines

no



Existence of national policy on household energy

yes

INTERVENTIONS BY HEALTH



Legislative framework

- ➤ Health Professions Act, 1974 (Act 56 of 1974), as amended; Regulations defining the Scope of the Profession of Environmental Health (Government Gazette No. 32334, Notice No. R. 698, dated 26 June 2009
- Domestic Indoor Air Quality Guidelines
- Draft Air Quality and Health Strategy
- Capacity building of stakeholders



A guide for Environmental Health Practitioners in South Africa









INTERVENTIONS BY HEALTH



Stakeholder engagement:

- National Air Quality and Health Focus Group meetings since 25 November 2022 & meet on quarterly basis. (training, policy and M&E; Community engagement and research)
- DFFE such as Priority areas engagements etc.
- Community engagements

Air pollution related complaints and media queries

Education and awareness of community members. Leverage support from stakeholders (IEC)

M&E (DHIS):

- Child under 5 years pneumonia incidence
- Child under 5 years pneumonia case fatality rate





CONCLUSION



- Research interface policy (e.g. Burden of disease report, DHB report etc.)
- Collaborations + integration

All hands-on deck – together we can do more



