

2025 CLIMATE AND HEALTH POLICY PRIORITIES FOR SOUTH AFRICA

This document summarises key priority areas of focus for South Africa, supported by evidence from the 2025 Global Report of the Lancet Countdown.

1 ENHANCE HEAT-HEALTH RESILIENCE THROUGH A NATIONAL ACTION PLAN

South Africa must develop and implement a National Heat-Health Action Plan to reduce preventable deaths, protect vulnerable groups, and sustain productivity under rising heat. The plan must include forecast-based heat alerts, occupational safety standards for outdoor workers, and public awareness campaigns to help communities recognise and respond to heat risks.

Heat exposure is already taking a serious toll on the health of people in South Africa. In 2024, people in South Africa were exposed to 13 heatwave days each, on average. Of these, 10.5 (80%) would not have been expected to occur without climate change. **(Indicator 1.1.1)**. Prolonged heat increases the risk of heat stroke, heat exhaustion, and cardiovascular events such as heart attacks and strokes¹. Between 2012 and 2021, around 4,500 annual deaths were attributed to heat, a 191% increase compared with 1990–1999 **(Indicator 1.1.5)**.

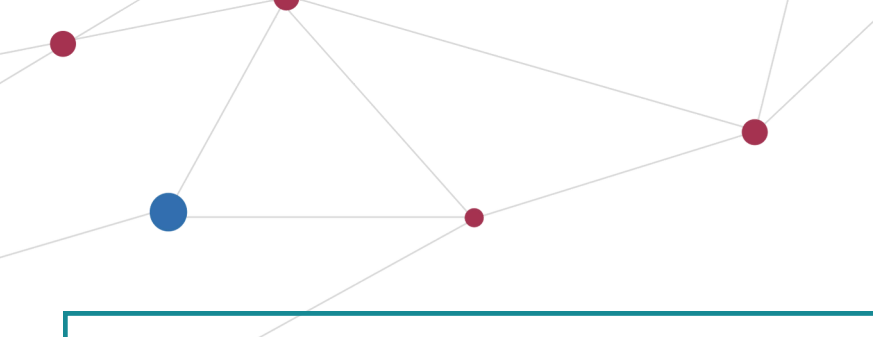
Rising temperatures are also threatening the health of workers, as well as reducing their labour capacity and undermining their livelihoods, in turn driving major economic losses. In 2024, heat exposure caused an estimated 374 million lost labour hours, with agriculture and construction accounting for nearly 90% of these losses **(Indicator 1.1.3)**. Between 2020–2024, the average annual monetary value of heat-related mortality reached over US\$1 billion, equivalent to more than 67,000 average annual incomes **(Indicator 4.1.2)**.

Implementing a coordinated National Heat-Health Action Plan, integrated with early warning systems, occupational safety standards, and provincial disaster management frameworks, would enable forecast-based heat alerts, activation of cooling centres, and response protocols across workplaces, schools, and health facilities. Prioritising older adults, outdoor workers, and informal settlements through targeted outreach, emergency preparedness, and training for health and community responders would reduce preventable deaths, sustain productivity, and build resilience to intensifying heat.

2 STRENGTHEN SURVEILLANCE AND EARLY WARNING FOR CLIMATE-SENSITIVE INFECTIOUS DISEASES

South Africa must strengthen surveillance and early-warning systems for climate-sensitive infectious diseases by integrating meteorological data, enhancing laboratory and vector-monitoring capacity, and expanding public awareness campaigns in high-risk areas.

Rising temperatures and shifting rainfall patterns are expanding the ecological suitability of major disease vectors. While the transmission potential for dengue by *Aedes aegypti* mosquito remains low in South Africa (climate-defined $R_0 = 0.21$ in 2015–2024), it has increased by 66% since 1951–1960 **(Indicator 1.3.1)**. Over the same period, the climate-defined R_0 for West Nile virus rose by 16% **(Indicator 1.3.3)**. These shifts heighten the likelihood of outbreaks and demand faster, data-driven health responses.



Integrating meteorological and entomological data into early-warning and surveillance systems, linked to district health information platforms, will enable accurate outbreak forecasting and rapid response. Scaling up vector control through drainage improvement, waste management, insecticide rotation, and targeted fogging during high-risk periods will limit transmission. Community engagement through school awareness programmes and neighbourhood clean-up drives, alongside coordination across health, urban planning, and water management authorities, will reduce breeding habitats and build long-term resilience.

IMPLEMENT THE NATIONAL CLIMATE CHANGE RESPONSE PLAN TO STRENGTHEN DROUGHT AND FLOOD PREPAREDNESS

3

South Africa must strengthen preparedness for extreme droughts and floods through the full implementation of its National Climate Change Response Plan. This requires investing in integrated forecasting and early-warning systems, improving coordination across meteorological, health, and disaster-management agencies, and supporting community-level adaptation and awareness programmes.

Exposure to droughts and floods is increasing, heightening health risks and environmental degradation. Between 1951–1960 and 2020–2024, the area experiencing at least one month of extreme drought each year grew, now affecting 56% of land on average (**Indicator 1.2.2**). Droughts are intensifying wildfire danger, with people in South Africa exposed on average to 63 days of high wildfire risk annually, up 14% from 2003–2012 (**Indicator 1.2.1**). In 2024, over 68,000 people lived less than one metre above sea level, amplifying flood vulnerability (**Indicator 2.2.4**).

Investing in early-warning systems, resilient health and water infrastructure, and community preparedness will enable faster responses, reduce injuries and disease outbreaks, and protect livelihoods during climate-related disasters. Strengthening coordination between health, meteorological, and disaster management systems is essential to ensure timely forecasts and effective local responses. Expanding flood-resilient health facilities, climate-proofing water and sanitation networks, and developing community drought and flood contingency plans, particularly for rural and informal settlements, will reduce health risks, sustain essential services, and build long-term resilience.

Accelerating Action

Acting now to strengthen South Africa's health systems and early-warning capacity for heat, drought, floods, and infectious diseases will reduce preventable deaths, safeguard essential services, and enhance community resilience. Investing in climate-resilient infrastructure and preparedness across sectors is critical to protect lives and secure a healthier, safer, and more sustainable future for all.

References

1. https://www.scienceopen.com/document_file/37079458-4a28-4c60-a8d9-53d40f59d91a/ScienceOpen/Article12.pdf

Contributors

This document was written by Tafadzwanashe Mabhaudhi, Zakari Ali, Wendy Geza, and Getrude Njokwe (University of Pretoria) from the Lancet Countdown Africa Centre. Review on behalf of the Lancet Countdown was provided by Mahnoor Saeed, MPP and Elise Digga, MPH.