

SADC MALARIA DAY WEBINAR 2025

CLIMATE CHANGE, MIGRATION, AND COMMUNITY RESILIENCE IN MALARIA CONTROL

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PRESENTATION LAYOUT



1. LEGISLATIVE FRAMEWORK
2. HEALTH RISKS ASSOCIATED WITH CLIMATE CHANGE
3. CLIMATE CHANGE IMPACTS ON MALARIA
4. CLIMATE CHANGE RISK VULNERABILITY ASSESSMENT HEALTH SYNTHESIS REPORT
5. CLIMATE CHANGE STRATEGIES FOR MALARIA CONTROL
6. IMPACTS OF MIGRATION ON MALARIA
7. SADC MALARIA RISK MAP
8. SOUTH AFRICAN MALARIA RISK MAP
9. MALARIA CONTROL STRATEGIES FOR THE HEALTH SECTOR
10. ADAPTATION STRATEGIES TOWARDS A RESILIENT COMMUNITY AGAINST MALARIA

LEGISLATIVE FRAMEWORK



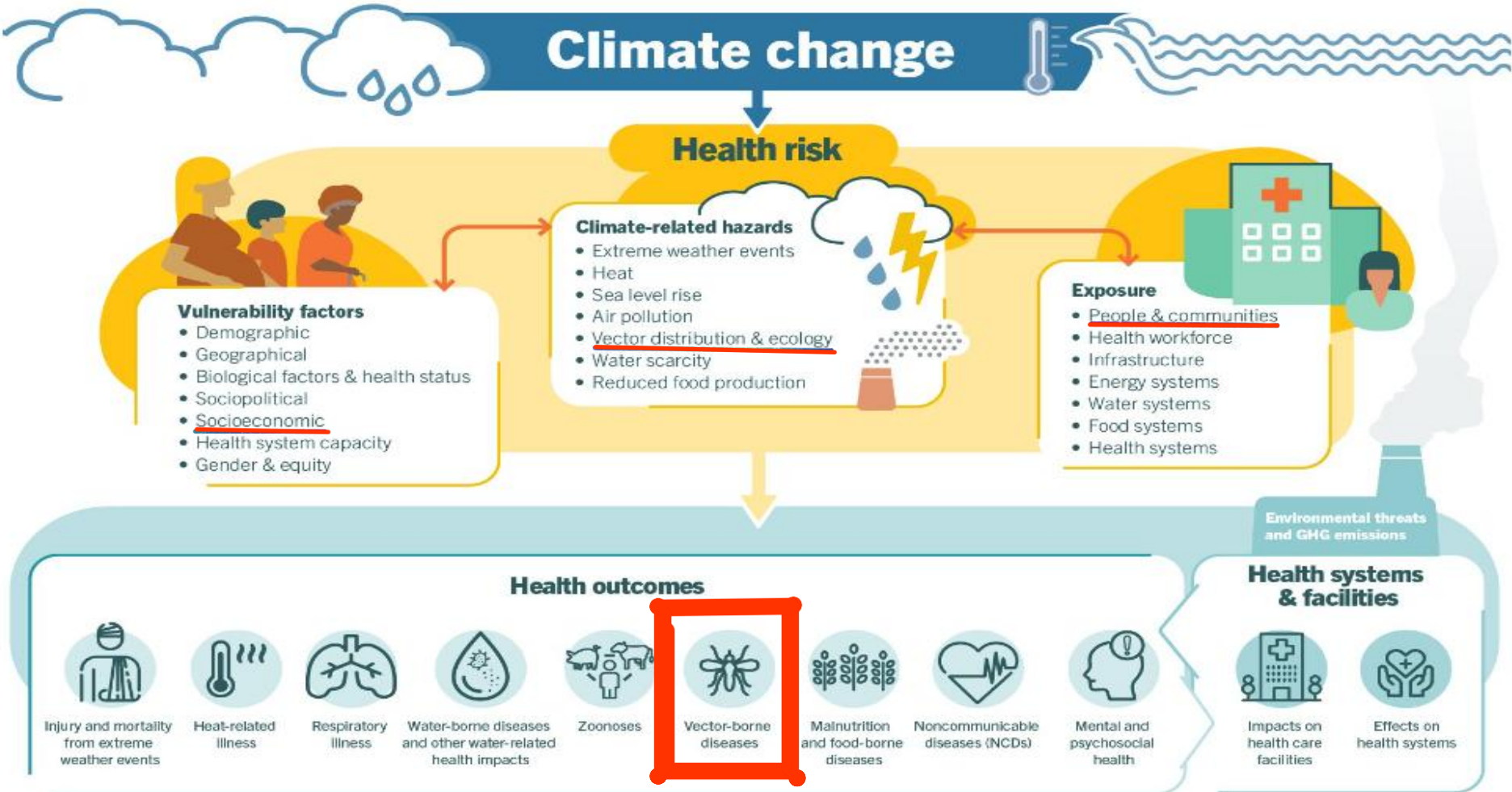
ACTS

The Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)
National Health Act, 2003 (Act 61 of 2003)
National Environmental Management Act, 1998 (Act 107 of 1998)
Hazardous Substances Act, 1973 (Act 15 of 1973)
Occupational Health and Safety Act, 1993 (Act 85 of 1993)
Medicines and Related Substances Act, 1965 (Act 101 of 1965)
Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947)
Climate Change Act, 2024 (Act 22 of 2024)

STRATEGIC PRESCRIPTS

Malaria Elimination Strategic Plan (2025 – 2030)
National Environmental Health Norms and Standards 17 October 2025
National Vector Control Strategy (2023-2027)
Vector Control Management Manual for EHPs in South Africa, 2023

HEALTH RISKS ASSOCIATED WITH CLIMATE CHANGE



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CLIMATE CHANGE IMPACTS ON MALARIA



- Climate Change presents a major **threat to health** and the fight against malaria.
- Increased temperatures and rainfall leads to increased malaria transmission (**El Nino and La Nino season**).
- Frequent powerful natural disasters which destroy infrastructure and displace populations (**Cyclone Freddy impacted Madagascar, Mozambique, Malawi, and Southern African countries in 2023**).
- Damage to **Health facilities**, populations unprotected against mosquitoes, and hindering the restoration of services.
- Predicted (**Africa CDC**): malaria cases and deaths, as well as **neglected tropical diseases (NTDs)** , to become the face of climate change and health.
- **Anopheles mosquito** is more likely to transmit malaria in urban areas due to our fastest growing population and economic centers.
- Malaria intervention **adaptation must be prioritized** within the climate change and health agenda.
- Low-income families, Pregnant women and children and persons with disabilities are most vulnerable (**Greater Risk**)

CLIMATE CHANGE RISK VULNERABILITY ASSESSMENT HEALTH SYNTHESIS REPORT



Table 3. Burden of Disease, Sub-category: Communicable, Maternal, Perinatal and Nutritional

BoD Sub-category	Very Hot days	Relative Humidity	Extreme precipitation days	Flood	Drought	Fire	Reasoning
Lower respiratory tract Infection	No Effect	No Effect	Increase	Increase	No Effect	Increase	Wet and humid conditions or flood or smoke particulates could aggravate
Diarrhoeal diseases	Significant Increase	Increase	Significant Increase	Significant Increase	Increase	No Effect	High temperatures, humidity and flood will encourage spoiling of food, growth of bacteria, or contamination with waste or faeces
Preterm birth complications	Increase	No Effect	Significant Increase	No Effect	Increase	No Effect	Heat may impact maternal conditions and stress
Septicaemia	Increase	Increase	Significant Increase	Increase	No Effect	No Effect	All except fire could contribute to runaway infections
Meningitis/encephalitis	No Effect	No Effect	No Effect	No Effect	Increase	No Effect	Typically occurs in cold dry climate conditions
Sepsis/other newborn infections	Significant Increase	Increase	Significant Increase	Increase	Increase	No Effect	As for septicaemia - all except fire could create conditions for infections or aggravate them
Other perinatal conditions	No Effect	No Effect	Significant Increase	Increase	Increase	Increase	As for septicaemia - all except fire could create conditions for infections or aggravate them
Malaria	Significant Increase	Increase	Significant Increase	Increase	No Effect	No Effect	Extreme precipitation and flooding provide extra breeding grounds and along with heat rapid replication of mosquitoes and malaria parasites



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CLIMATE CHANGE STRATEGIES FOR MALARIA CONTROL



The health sector faces an urgent need to reduce carbon emissions and combat the effects of climate change by:

- **Mitigation:** Reduce supply chains' carbon footprint, locally manufacture commodities, use renewable energy sources
- **Sector Collaboration:** Implement integrated solutions (e.g., improving irrigation can prevent mosquito breeding sites, FOCI Clearance).
- **Adaptation:** Build capacity to plan for climate risks, recruit additional health workers, integrate climate data into health information systems, and strengthen service delivery by deploying the full malaria toolkit, accounting for social determinants of health, and improving emergency preparedness
- **Co-Financing:** Align country and donors climate funding priorities to close the funding gap for health system adaptation.

IMPACTS OF MIGRATION ON MALARIA



“ Efforts to address malaria should take into account migration flows, the vulnerability aspects of the entire migration process and access to health care for the vulnerable migrants and mobile populations. Malaria is preventable and treatable. However, the reality is malaria is a fatal disease that neither knows nor respects borders. ”



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IMPACTS OF MIGRATION ON MALARIA



- **Migration:** a major challenge to the country's malaria elimination goals through the **importation of cases** from neighbouring, higher-endemic countries.
- **Access to Healthcare Services:** Undocumented Migrants, particularly may face challenges in accessing health services due to lack of awareness of available services, fear of deportation, and or financial constraints.
- **Strain on Health Systems:** Increase in patients can increase the risk of severe illness, death, and further transmission.
- **Case Importation:** The movement of people across borders (both legally and illegally) leads to secondary local transmission.
- **Active Surveillance and Control: Domestic** and migrant populations (seasonal workers and informal traders) are difficult to track.
- **Spread of Drug Resistance:** The movement of people can facilitate the introduction and circulation of drug-resistant parasite strains.



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SADC ELIMINATION 8



MALARIA ELIMINATION IN SOUTHERN AFRICA

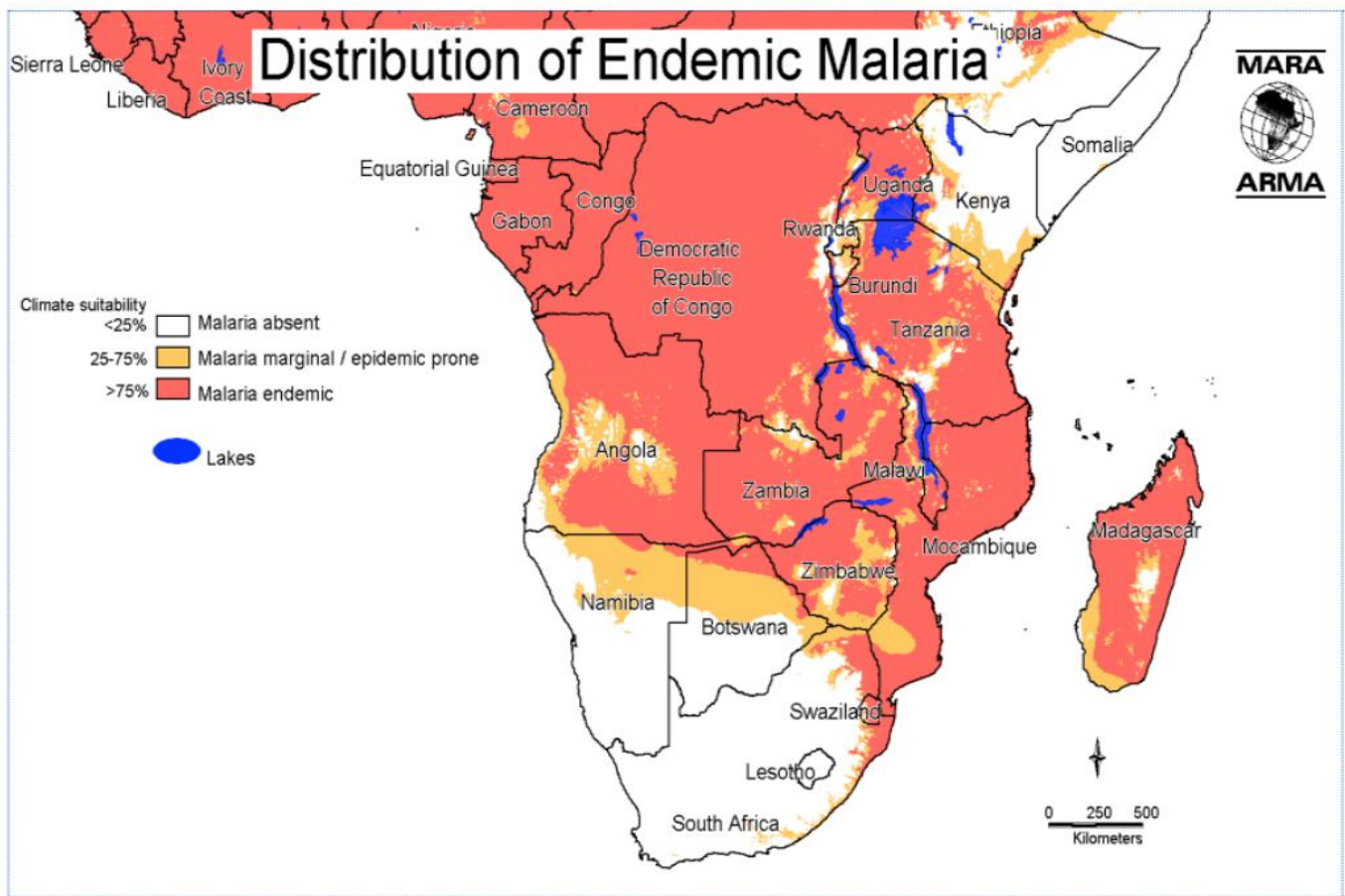
The Elimination Eight Initiative (E8) is a coalition of eight countries working across national borders to eliminate malaria in southern Africa by 2030. As the malaria response arm of the Southern Africa Development Community (SADC), the E8 is pioneering an ambitious regional approach and driving collective action to end this deadly disease once and for all. Guided by the belief that countries are stronger when they work together, the E8 is building a model that will inform coordinated efforts in southern Africa and beyond.



SADC MALARIA RISK MAP



Figure 1: Malaria transmission in SADC Member States



SOUTH AFRICAN MALARIA RISK MAP



MALARIA CONTROL STRATEGIES FOR THE HEALTH SECTOR



- Conduct **research** to understand the specific mosquito species responsible for transmission and apply tailored interventions.
- Combine environmental management with other tools **like indoor residual spraying (IRS) and long-lasting insecticidal nets (LLINs)** for a comprehensive strategy.
- Ensuring, developing and implementing a **malaria control programme** for the country, thus lowering parasite levels in the population and preventing deaths through rapid diagnosis and prompt treatment;
- ensuring a continued active and feasible **malaria surveillance programme**;
- carrying out **house-to-house surveys** to actively detect malaria cases;
- ensuring blood smears are taken from foreigners and people who have visited malaria-endemic countries for **malaria parasitaemia screening**;
- ensuring randomized screening of the population by **blood sampling for testing during seasonal changes in high-risk malaria areas**;
- carrying out **epidemiological surveys to research the extent of transmission** and gather data on the infected population
- Undertaking **vector control** on an annual basis by application of residual

ADAPTATION STRATEGIES TOWARDS A RESILIENT COMMUNITY AGAINST MALARIA



- Mosquitoes which carry malaria generally **bite between dusk and dawn**. **Close windows and doors and remain indoors** during this time.
- Use **mosquito repellent** on exposed skin.
- Spray your accommodation with an **aerosol insecticide or use mosquito coils**.
- **Wear** long-sleeved, light-coloured clothing, long trousers and socks.
- **Sleep under a net** (preferably impregnated with an approved insecticide) or in a netted tent or use screens to prevent mosquitoes from flying in.
- Ceiling fans and air conditioners are also effective in preventing mosquito bites.
- **Chemoprophylaxis** help to **reduce the chances** of getting ill with malaria.
- **Medicines** must be taken according to the **instructions** given by your local **medical practitioner or pharmacist**.
- Ensure **Community participation** in planning and implementing control activities for better long-term success.
- Conduct Multisectoral **collaboration** with **Border Management Agency, Agriculture, Urban Planning, and Water and Sanitation** to incorporate health goals into their activities.



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GLOBAL, REGIONAL AND NATIONAL MALARIA RESOURCES



World malaria report 2024

Addressing inequity in the global malaria response



World Health Organization



Safeguarding Africa's Health

ROADMAP FOR THE IMPLEMENTATION OF MALARIA GENOMIC SURVEILLANCE IN AFRICA



www.africacdc.org
africacdc



International Organization for Migration (IOM)

MALARIA CONTROL AND ELIMINATION IN THE CONTEXT OF MIGRATION AND HUMAN MOBILITY



SWEDEN



Norad



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GLOBAL, REGIONAL AND NATIONAL MALARIA RESOURCES



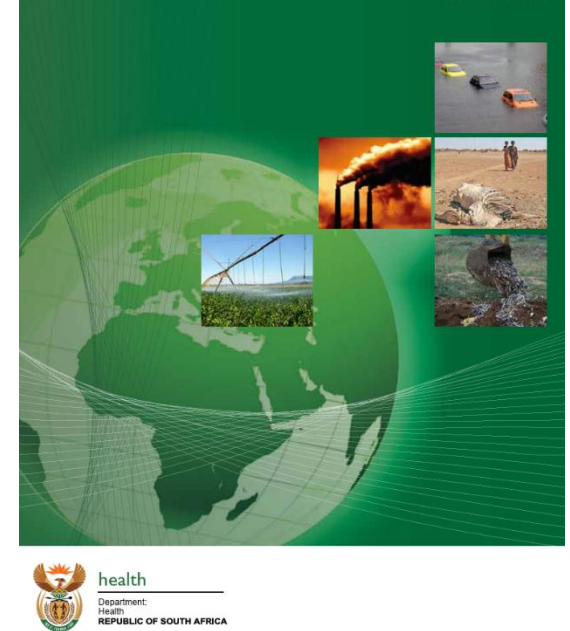
NATIONAL GUIDELINES FOR THE TREATMENT OF MALARIA, SOUTH AFRICA 2019



NATIONAL GUIDELINES FOR THE PREVENTION OF MALARIA, SOUTH AFRICA 2018



NATIONAL CLIMATE CHANGE & HEALTH ADAPTATION PLAN 2014-2019





THANK YOU!!!



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