

## SADC MALARIA WEEK 2021

### What is SADC Malaria week?

World Malaria Day is an international awareness day aimed at highlighting the fight against malaria and is celebrated annually on the 25<sup>th</sup> of April. Although this date is within the malaria transmission season in the northern hemisphere, it does not coincide with the transmission season in the Southern hemisphere. The Southern African Development Community (SADC) therefore highlights the fight against malaria during the first week of November, which coincides with increased malaria transmission in the southern hemisphere. SADC malaria week culminates with a celebration on SADC Malaria Day which falls on the 6<sup>th</sup> of November. The 6<sup>th</sup> of November is a very important day in the malaria world as it was on this day in 1899 that Dr Alphonse Laveran identified the malaria parasite as the causal agent of malaria.

### What is the malaria situation in South Africa?

The Elimination Eight Initiative (E8) is a coalition of eight southern African countries working across national borders to eliminate malaria in by 2030. South Africa is one of four front-line E8 countries earmarked to eliminate malaria by 2025.

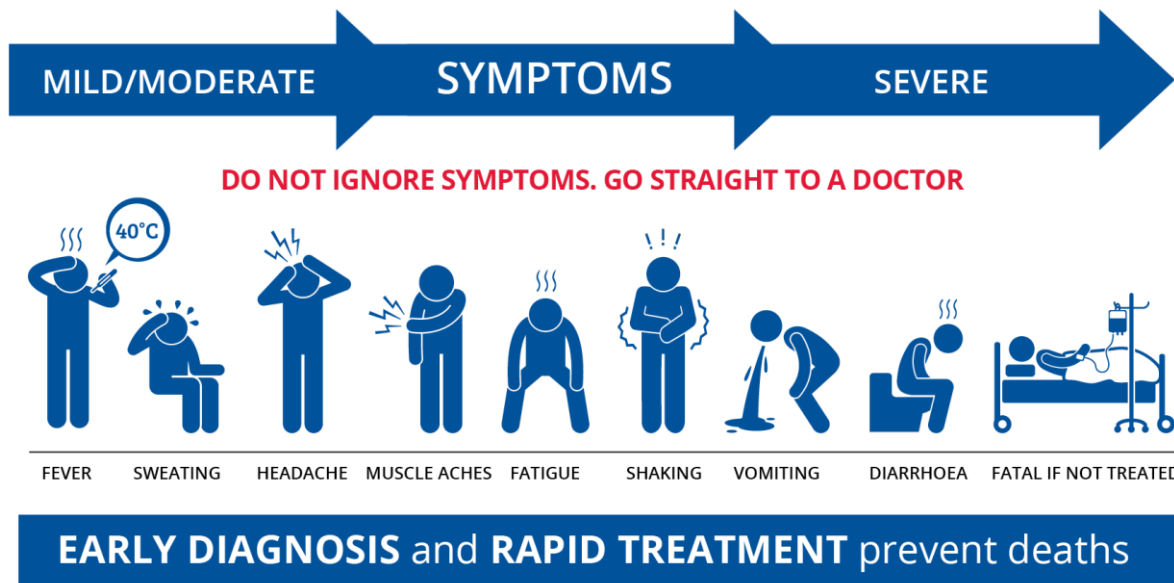
The E8 monitors the progress of the front-line four towards their elimination goals through an E8 scorecard (Figure 1).

Figure 1: Key data from the E8 scorecard for the four front-line countries for 2020 (source <https://malariaelimination8.org/south-africa>)

2020	Epidemiology									Vector Control		Financing
Country	Number of Confirmed Malaria Cases	Malaria Incidence Rate	Indigenous Malaria Incidence Rate	Reported Indigenous Malaria Cases	Reported Malaria Deaths	Test Positivity Rate (%)	Proportion of suspected Cases Tested (%)	Completeness of Reporting (%)	Proportion of Confirmed Cases Treated as per Guidelines (%)	IRS Operational Coverage (%)	LLINs Operational Coverage (%)	National Public Sector Financing (%)
<b>FRONT-LINE COUNTRIES</b>												
Botswana	927 ↑	0.39 ↑	0.36 ↑	868 ↑	11 ↑	8.3 ↑	94.2	86.5	98	76.5		11.4
Eswatini	322 ↓	0.95 ↓	0.69 ↓	235 ↑	4 ↑	1.3	100	89 ↑	100	92.0 ↑		10.5
Namibia	14,227 ↑	8.70 ↑	7.30 ↑	11,934 ↑	52 ↑	4.4 ↑	99	97	100	45.2		12.0
South Africa	8,126 ↓	0.84 ↑	0.33 ↑	3,173	38 ↓		100	96	100	89.0 ↑		13.0

While South Africa has made significant progress towards eliminating malaria, the country still needs to do more as only of the front-line four countries, Namibia reported, more cases than South Africa in 2020 (Figure 1). Access to malaria services needs to be expanded to ensure that all malaria carriers are detected and treated to prevent the seeding of secondary transmission.

How do you know if you have malaria?



Preventing Malaria:

### THE A,B,C,D OF MALARIA PREVENTION

	<b>A</b>	<b>AWARENESS</b> Be <b>AWARE</b> of the risk and symptoms
	<b>B</b>	<b>BITE PREVENTION</b> Avoid being <b>BITTEN</b> by mosquitoes (from dusk till dawn)
	<b>C</b>	<b>CHEMOPROPHYLAXIS</b> Take <b>CHEMOPROPHYLAXIS</b> (antimalarial medication) if prescribed
	<b>D</b>	<b>DIAGNOSIS</b> Early <b>DIAGNOSIS</b> and Rapid Treatment

Source: Property of the University of Pretoria Institute for Sustainable Malaria Control; adapted from International SOS Malaria Facts sheet (2015 AEA International Holdings, Pty. Ltd.)

### Choosing the right chemoprophylaxis for you:

	<b>Mefloquine</b>	<b>Doxycycline</b>	<b>Atovaquone-Proguanil</b>
<b>Trade names</b>	Lariam	Vibramycin, Monodox, Acticlate, Atridox, Avidoxy, Doxy etc.	Malarone
<b>Prophylactic Efficacy</b>	Highly effective against <i>P. falciparum</i> in areas where it has been tested. Effective against acute infections caused by <i>P. vivax</i> . Limited data on efficacy against other species. Relapses can occur	Highly effective against <i>P. falciparum</i> in areas where it has been tested. Limited protection against acute <i>P. vivax</i> infections. Relapses can occur	Highly effective against <i>P. falciparum</i> in areas where it has been tested. Also effective against acute infections caused by <i>P. vivax</i> , <i>P. ovale</i> and <i>P. malariae</i> . Relapses can occur
<b>Most common side effects</b>	Nausea, strange dreams, dizziness, mood changes, insomnia, headache and diarrhoea.	Skin photosensitivity (three per cent in one study), oesophageal ulceration, gastrointestinal symptoms, candida superinfection of the gut and vagina	Well tolerated. Headache and abdominal pain most frequent adverse effects.
<b>Contraindications</b>	Current or history of epilepsy or psychiatric illness, including depression. Past severe reactions to mefloquine. Underlying cardiac conduction disturbance or arrhythmia. Concurrent use of halofantrine (and other cardiotoxic drugs). Infants weighing less than five kilograms	Pregnancy. Children under eight years of age. Caution in travellers with myasthenia gravis	Severe renal impairment (creatinine clearance of

<b>Special Precautions</b>	Travellers requiring fine coordination.	Avoid excessive UV exposure, use high SPF sunscreen. Take after a meal with a full glass of water. Do not lie down for at least one hour after taking.	Take with milk or food for better absorption.
<b>Dosage interval</b>	Once weekly.	Daily dose.	Daily dose.
<b>Time period needed before entering malaria area</b>	General recommendation: One week. For first time use: Two to three weeks.*	24-48 hours	24-48 hours
<b>Resistance</b>	Resistance appears to be rare - mainly SE Asia	Resistance appears to be rare.	No known resistance

Source: National guidelines for the prevention of malaria, South Africa, 2018: [https://www.nicd.ac.za/wp-content/uploads/2019/03/National-Guidelines-for-prevention-of-Malaria\\_updated-08012019-1.pdf](https://www.nicd.ac.za/wp-content/uploads/2019/03/National-Guidelines-for-prevention-of-Malaria_updated-08012019-1.pdf).

## How can I prevent mosquito bites?

Repellents have the potential to prevent vector-human contact, but due to individual variation cannot be relied upon as the sole means of mosquito protection. There are several approved mosquito repellents, which have documented evidence for their efficacy.

**DEET:** N,N-diethyl-m-toluamide or DEET is a common and effective repellent. DEET should be used with the relevant precautions on children, where skin irritation is a possibility. This compound should not be used on children under the age of 6 months.

Icaridin/ Picaridin/ KBR 3023: Provides long-lasting protection against mosquito bites, equivalent to 10% DEET. Compared to DEET it is relatively odourless, does not cause skin irritation and does not have adverse effects on plastics.

IR3535

Oil of lemon eucalyptus (OLE)

Para-menthane-diol (PMD)

2-undecanone