











Chemoprophylaxis Reimagined: Role of Doxycycline in Malaria Elimination

Knowledge Hub Webinar 28th August 2025



















- Malaria rapidly progresses to severe disease
- Critical to take measures to reduce the chances of being infected
 - Non-pharmaceutical measures (insect repellants, long-sleeved and long trousers, screened windows/doors)
 - Pharmaceutical measures
- Malaria risk and medical advice guide what measures to use



















- Chemoprevention has also been part of South Africa Guidelines to Prevent Malaria
- Three regimens are recommended in the current guidelines

Summary box 3

Recommended prophylactic regimens

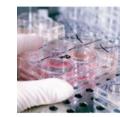
Page 15 Guidelines for the Prevention of Malaria in South Africa

- Mefloquine (weekly). Start at least one week before entering a malaria area, take once weekly while there and for four weeks after leaving the malaria area, OR
- Doxycycline (daily). Start one day before entering a malaria area, take daily while there and for four weeks after leaving the malaria area, OR
- Atovaquone-proguanil (daily). Start one to two days before entering malaria area, take daily
 while there and for seven days after leaving the area.

See Table 1 for a comparison of the benefits and risks of these prophylactic regimens.



















- Significant challenging ensuring universal access to malaria preventative measures
 - Requirement of prescriptions
 - Costs
- Advocacy and motivation by the National Malaria Programme with support the South African Malaria Elimination Committee got both doxycycline and artemether-lumefantrine (standard treatment for uncomplicated malaria) downregulated from Schedule 4 to Schedule 2
- In 2021 was added to the Essential Medicines List

MEDICINE TREATMENT

Prophylaxis

CAUTION

Immunocompromised patients, pregnant women and children <8 years of age should avoid visiting malaria-endemic areas, as they are more prone to the serious complications of malaria.

However, if this cannot be avoided, malaria chemoprophylaxis should be considered (as recommended by the National Guidelines for the Prevention of Malaria (2018) found at: https://www.nicd.ac.za/wp-content/uploads/2019/03/National-Guidelines-for-prevention-of-Malaria updated-08012019-1.pdf

However, as only doxycycline is provided in the public sector, alternative options for pregnant women and children <8 years of age need to be purchased in the private sector.)

Non-pregnant adults:

· Doxycycline oral, 100 mg daily.

2020-4_Version 1.1_20 January 2025

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CHAPTER 10

INFECTIONS AND RELATED CONDITIONS

 Take from 2 days prior to entering endemic area until 4 weeks after exiting the endemic area.

Children ≥8 years of age:

LoE:IIIb⁴

- Doxycycline oral, 2 mg/kg/dose daily.
 - Take from 2 days prior to entering endemic area until 4 weeks after exiting the endemic area.

 LoE:IVb⁵

Note: Doxycycline is contra-indicated in pregnant women, and in children <8 years of age.



- Despite these simplifying mechanisms, uptake of this policy has been limited
 - Safety concerns
 - Regulatory concerns
 - Costs
 - Confusion regarding implementation