

Malaria: advice for travellers and healthcare professionals

The malaria season in Southern Africa is from September to May each year, and an increase in both local (from malaria-endemic areas in South Africa) and imported (from other malaria-endemic countries) cases can be expected over the upcoming holiday season.

Malaria is endemic in three South African provinces: Limpopo, Mpumalanga, and north-eastern KwaZulu-Natal (KZN). South Africa has made major strides in malaria control with a marked decrease in the number of cases being reported, from 64 622 in 2000 to 5 248 in 2012 (Figure 1), 60% of which are imported cases. This has been accompanied by a decrease in malaria-related mortality from 459 deaths in 2000 to 42 deaths in 2012.

Travellers to malaria-endemic areas within South Africa or other malaria-endemic countries (notably Mozambique) need to take appropriate preventative measures. Mefloquine (Lariam[®], Meflam[®]), doxycycline, and atovaquone-proguanil (Malanil[®]) are recommended chemoprophylactic agents for Southern Africa where chemoprophylaxis is indicated, and the choice of agent needs to be individualised. For advice on preventive measures, access the following link: http://www.doh.gov.za/docs/policy/2011/malaria_prevention.pdf. Malaria must be considered in the differential diagnosis of

acute febrile illness in returning travellers; diagnostic tests for malaria should be done urgently, since prompt and appropriate management is critical to improving patient outcomes. Delays in diagnosis, misdiagnosis (most commonly as influenza), and delayed treatment are the most common factors associated with adverse outcomes. Healthcare workers, especially those in areas/provinces not endemic for malaria, must ensure that any case of malaria is notified to the Department of Health.

The South African national guidelines recommend the use of artemether-lumefantrine (Coartem[®]) or quinine plus doxycycline/clindamycin for uncomplicated falciparum malaria. Severe falciparum malaria is treated using quinine plus doxycycline/clindamycin or intravenous artesunate where available. An initial loading dose of 20 mg/kg of quinine is required for all cases of severe malaria to rapidly reach a therapeutic level. Chloroquine and sulphadoxine-pyrimethamine are not to be used in the treatment of falciparum malaria due to high-level resistance. Non-falciparum malarial infections are less common in sub-Saharan Africa; artemether-lumefantrine or quinine as above can be used for treatment of acute non-falciparum malarial illness. Chloroquine should only be used if there is reliable

laboratory confirmation of non-falciparum species. The addition of primaquine to the above initial treatment is indicated for *Plasmodium ovale* or *P. vivax* infections to prevent relapse.

http://www.doh.gov.za/docs/policy/2011/malaria_treatment.pdf.

The South African malaria treatment guidelines can be accessed through the following link:

Source: Division of Public Health Surveillance and Response, NICD-NHLS; Malaria Directorate, National Department of Health

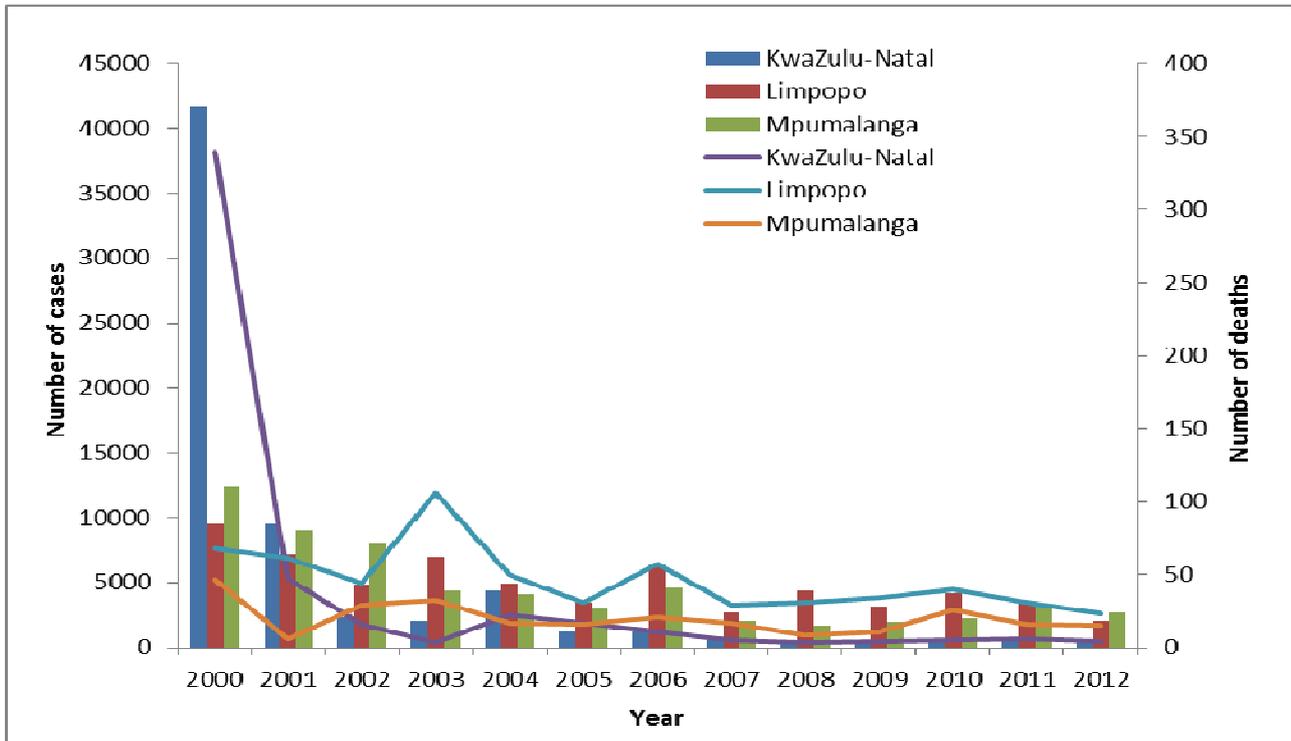


Figure 1. Malaria cases and deaths by year and by malaria-endemic province, South Africa, 2000 - 2012

An outbreak of probable gnathostomiasis recently occurred in staff and South African visitors on a houseboat that was cruising the Okavango Delta, northwestern Botswana. Four persons on board ate freshly-caught raw bream, marinated in lemon juice, on August 28 in the mid-Delta area, west of Moremi Game Reserve. Three of the four developed signs and symptoms of gnathostomiasis, including painful cutaneous larva migrans. Detailed clinical features are only known for one adult male patient, who returned to Pretoria on 31 August. On 2 September he developed severe diarrhoea and vomiting, followed by headaches and mild fever. Laboratory investigations were negative for malaria

and schistosomiasis, and full blood count and liver function tests were normal. The headaches, mild fever and fatigue persisted. On 13 September the patient developed severe pains in his right flank and right axilla, spreading to the scapula area. A clinical diagnosis of gnathostomiasis was made and treatment with albendazole (400 mg daily) was started on 16 September. Pain and headaches subsided quite quickly, but fatigue persisted until almost the end of the 21-day treatment period. Two

Source: Centre for Opportunistic, Tropical and Hospital Infection, NICD-NHLS

Source: Division of Public Health Surveillance and Response and Centre for Respiratory Diseases and Meningitis, NICD-NHLS