

QUICK UPDATES

Measles, South Africa

The ongoing measles outbreak which began in October 2022, has resulted in a cumulative total of 421 laboratory-confirmed cases (as of 26 January 2022). The majority of cases (406/421; 96.4%) have been reported from the five provinces that have declared measles outbreaks, namely Limpopo (n=149), Mpumalanga (n=81), North West (n=133), Gauteng (n=18) and Free State (n=18). For updated case numbers and more information on the outbreak, please visit the NICD alerts page (<https://www.nicd.ac.za/media/alerts/>).

Source: <https://www.nicd.ac.za/south-african-measles-outbreak-update-2023-26-january/>

COVID-19: South Africa

As of 21 January 2023, South Africa has recorded a cumulative total of 4 054 206 laboratory-confirmed cases of COVID-19 since the start of the pandemic. There were 1 506 new cases reported in week 3 of 2023, an 18.1% decrease compared to the number of new cases reported in week 2 of 2023 (n=1 855).

Considering the current global situation, as well as ongoing circulation of the virus in South Africa, there is a need for continued surveillance to detect any new variants of concern in the country. The National Department of Health (NDoH) has recently updated the guidelines on booster vaccinations

to include an additional booster dose for persons 18 years and older. In light of this, persons between the ages of 18 and 49 will now be eligible to receive a total of four doses of the vaccine, and those who are 50 years and older will be eligible to receive a total of five doses. Measures are also being taken to improve vaccination uptake and strengthen surveillance and risk communication and community engagement (RCCE) activities in the country.

For more information and updated case numbers, please visit the COVID-19 portal on the NICD website at www.nicd.ac.za.

Sources: <https://www.nicd.ac.za/wp-content/uploads/2023/01/COVID-19-Weekly-Epidemiology-Brief-week-3-2023-.pdf>; NDoH National Vaccination Programme Circular 1 of 2023

ZOONOTIC AND VECTOR-BORNE DISEASES

Rabies

As of 23 January 2023, there have been no human rabies cases reported in South Africa for the present year. There were 13 laboratory-confirmed and six probable cases of human rabies reported in 2022, a small decrease compared to the 19 laboratory-confirmed and four probable cases reported in 2021 (Figure 1). A person who has clinical signs and symptoms of rabies, with a history of contact with a suspected/probable/laboratory-confirmed rabid animal, is considered to be a probable case.

Although rabies is endemic throughout South Africa, laboratory confirmation of human cases has come from six of the country's nine provinces in the past ten years, namely, Eastern Cape (n=34), KwaZulu-Natal (n=30), Limpopo (n=20), Free State (n=6), Mpumalanga (n=3), and North-West (n=1). Since the total number of cases recorded, including probable cases, is 131, the number of 94 laboratory-confirmed human cases for

the same time period (2013-2022) represents underreporting of the total burden.

From 2019 to 2022, the provinces with the highest burden of human rabies cases were Eastern Cape, KwaZulu-Natal and Limpopo. These provinces have experienced ongoing localized outbreaks of canine and human rabies with an increase in frequency and expansion to new localities starting from 2021 onwards.

Through widespread dog vaccination, awareness campaigns, and early post-exposure prophylaxis following a bite or exposure to saliva from a suspected rabid animal, human rabies can be prevented. The main way that humans are exposed to rabies is through rabid dogs. You can get more details on rabies and how to prevent it at www.nicd.ac.za.

ZOONOTIC AND VECTOR-BORNE DISEASES

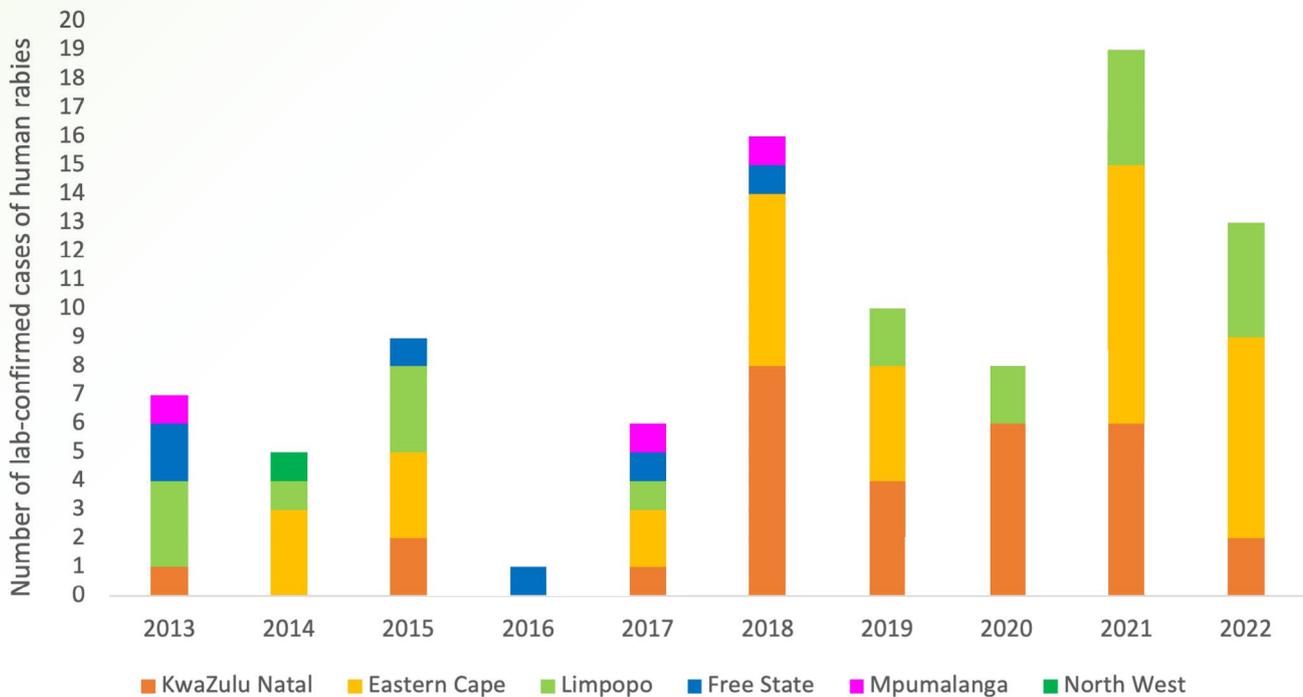


Figure 1. Laboratory-confirmed human rabies cases by province, South Africa, 2013-2022 (n=94) (Created from NHLS-NICD data).

Source: Centre for Emerging Zoonotic and Parasitic Diseases, NICD-NHLS; veerlem@nicd.ac.za, jacquelinew@nicd.ac.za

Malaria

Malaria cases generally peak in South Africa in January and February after the holiday season. There should be a high index of suspicion for malaria in patients with fever or flu-like illness (headache, fever, chills, fatigue, muscle, and joint pain) that occurs up to three weeks after potential exposure, particularly if travel to, or residence in, a malaria-endemic area is reported. In endemic areas within South Africa (see risk map), all patients with a fever or a recent history of fever must be tested for malaria either by rapid diagnostic test or microscopy. If this is initially negative and no other diagnosis is found, the malaria test should be repeated. Malaria treatment should be started as soon as the patient is found to be positive. Clinicians do not need to wait for other results, such as COVID-19, before initiating treatment. Malaria rapidly progresses to severe illness, so early detection and treatment are essential to ensure positive outcomes.

Clinicians also need to be aware of Odyssean or 'taxi malaria'. This occurs when an infective mosquito is inadvertently transported from an endemic to a non-endemic area, where it subsequently infects people who have no recent travel history. Malaria should therefore be considered as a differential diagnosis, and be tested for, in patients with unexplained fever who get progressively sicker, especially if they have low platelet counts.

Artemether-lumefantrine (Coartem®) remains very effective in South Africa for the treatment of uncomplicated malaria. Patients must take each dose with some fatty food (milk, cheese, peanut butter) to ensure optimal absorption of the drugs. Intravenous (IV) artesunate (Garsun®) is the recommended treatment for severe malaria and is preferred to IV quinine as it has significantly better treatment outcomes and is easier to use. For *P. vivax* and *P. ovale*, a follow-on treatment course of primaquine is essential to eradicate the residual hepatic phase to prevent relapse.

ZOONOTIC AND VECTOR-BORNE DISEASES

Primaquine is contra-indicated in severe G-6-PD deficiency, pregnant women and infants under six months of age.

Malaria is classified as a category one Notifiable Medical Condition (NMC), which requires immediate reporting via written or electronic notification within 24 hours of diagnosis. It is the responsibility of the healthcare practitioner who makes the diagnosis, following either a positive rapid diagnostic test (RDT) (bedside) test for malaria and/or a positive test from a blood

specimen submitted to a laboratory, to immediately notify the case. Clinicians should test urgently for malaria in all travellers to or residents of malaria transmission areas who present with acute febrile illness, irrespective of any consideration for COVID-19 infection.

FAQs and further information on malaria prevention are available on the NICD website at www.nicd.ac.za

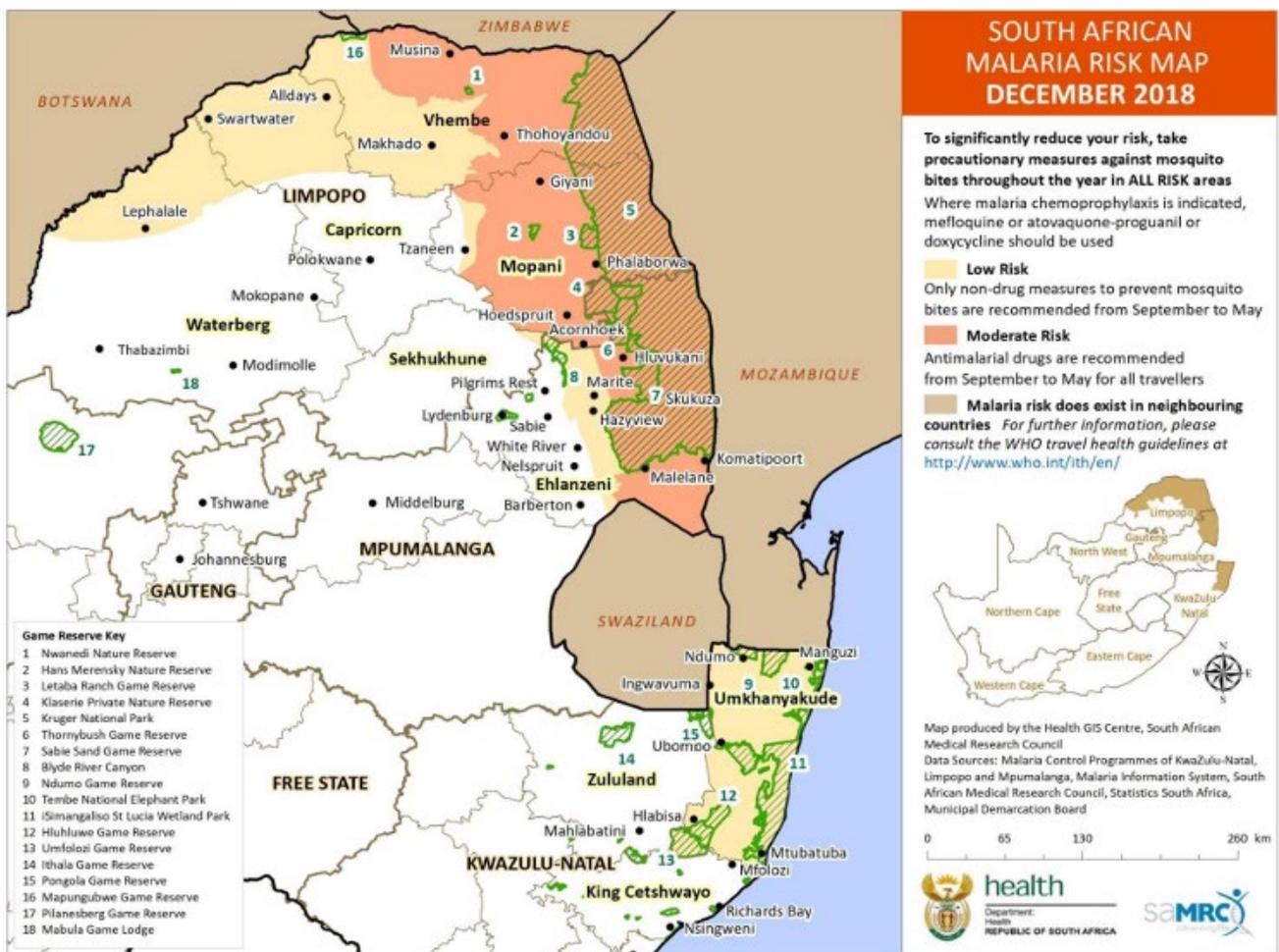


Figure 2. South African Malaria Risk Map

Source: Centre for Emerging Zoonotic and Parasitic Diseases, NICD-NHLS; charlottes@nicd.ac.za, johnf@nicd.ac.za, basilb@nicd.ac.za, veerlem@nicd.ac.za