NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES
Division of the National Health Laboratory Service

ALERT

## Update on the re-emerging public health threat from chikungunya fever

### July 2025

Chikungunya is a Category III notifiable medical condition in South Africa. The disease is caused by a mosquito-borne virus and in South Africa is typically reported in returning travellers.

From December 2024 until 28 July, the NHLS-NICD and Lancet laboratory surveillance reported a total of ten confirmed or probable chikungunya cases. These cases involved travellers returning from Mauritius (n=4), Kenya (n=1), India and the Himalayas (n=1), La Réunion (n=1), Seychelles (n=1), and Madagascar (n=2).

**Ongoing outbreaks**

Chikungunya fever outbreaks have occurred across Africa, the Americas, the Caribbean, Asia, Europe, and the Indian and Pacific Oceans. As of 4 May 2025, the Americas reported the highest number of chikungunya cases globally: 135,654 cases, including 54,377 confirmed infections. There are current outbreaks in Africa, in La Réunion, Mayotte, Mauritius, Madagascar, Kenya, Somalia, and Sri Lanka. This resurgence comes nearly 20 years after the significant 2005–2006 outbreak that began in Comoros and spread to La Réunion, Mayotte, Mauritius, the Seychelles, and Madagascar. La Réunion experienced an explosive outbreak, with 264,000 infections out of a population of 770,000 and 237 associated deaths. Mayotte reported approximately 7,300 cases during that period.

The first locally transmitted (autochthonous) case in over ten years was reported in La Réunion in August 2024. Since the start of 2025, the number of cases and their geographic spread have increased considerably, particularly from March onward. As of 4 May 2025, over 47,500 cases and 12 deaths had been reported in La Réunion. The virus was first introduced to Mauritius on 15 March 2025, and by the end of April, 26 cases had been confirmed. Mayotte reported 116 cases by 4 May 2025. The initial imported case of this outbreak was identified on 5 March 2025. Madagascar is currently reporting cases as of June 2025.

**Causative agent, transmission and disease symptoms**

Chikungunya virus (CHIKV) is transmitted among humans via mosquito bites from *Aedes aegypti* and *Aedes albopictus*. Its transmission cycle is quite similar to that of dengue viruses, with mosquitoes facilitating human-to-human transmission in urban settings. Chikungunya symptoms include fever, muscle aches, rash, arthralgia, and arthritis. Although the illness is typically self-limiting, symptoms can be severe and debilitating, with arthritis occasionally becoming chronic. While there have been no cases of human-to-human transmission, viraemic persons, such as travellers with chikungunya fever and the virus in their blood, may transmit the virus to vulnerable hosts through local mosquito populations. A clinical diagnosis of chikungunya is suspected in a patient with a relevant travel or exposure history and the clinical signs described above. Confirmation may be obtained through specialised laboratory testing such as RT-PCR and/or serology testing. Testing is available at the NICD/NHLS and private pathology laboratories.

**The risk for South Africa**

Chikungunya is occasionally reported in travellers returning from various destinations where the disease is present to South Africa. Some current outbreaks are reported from popular travel locations, such as the Indian Ocean Islands, which are common holiday destinations, thereby increasing the likelihood of cases being diagnosed and reported in South Africa. Although there have been no autochthonous cases of chikungunya reported linked to the current outbreaks in South Africa yet, the presence of *Aedes aegypti* in urban areas means that the risk of potential autochthonous outbreaks should be considered. These mosquitoes are especially common along the east coast, particularly in KwaZulu-Natal and the Eastern Cape, as well as in the high-altitude Gauteng Province.

As of July 2025, there have been ten travel-related cases of confirmed or probable chikungunya diagnosed by NICD-NHLS and Lancet in South Africa. Four of the cases were identified in travellers from Mauritius, one from Kenya, one from India and the Himalayas, one from La Réunion, one from Seychelles and two from Madagascar between 11 Dec 2024 and 28 July 2025. Four of the cases—two returning from Madagascar to Pretoria/Tshwane and MalaMala, along Kruger National Park, and one returning from Mauritius and one from Seychelles to Cape Town —had acute chikungunya infection (PCR positive).

Recommendations for travellers:

1. Seek medical attention during or after travel if you experience fever, joint pain, headache, muscle aches, joint swelling, or rash. CHIKV and dengue symptoms usually appear shortly after returning from affected regions due to incubation periods (time between mosquito bite exposure and clinical illness) of up to 14 days.
2. Pregnant individuals are advised to reconsider travel to affected areas due to potential health risks.
3. Prevent mosquito bites, especially during the day and late afternoon. Use effective insect repellents on exposed skin, wear long-sleeved clothing and trousers, and stay in air-conditioned or well-screened environments.
4. There are currently no licensed vaccines for chikungunya available in South Africa.