Chikungunya virus disease, Global

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Overall risk and confidence*

Overall risk
Global
Moderate

Confidence in available information
Global
High

Overall Risk statement

This RRA aims to assess the overall public health risk at the global level posed by the chikungunya virus (CHIKV) transmission during 2025, considering the criteria of potential risk for human health, the risk of geographical spread, and the risk of insufficient control capacities with available resources, and the implications for the 2026 transmission season.

Chikungunya virus (CHIKV) poses a significant and growing global health risk due to large and widespread regional outbreaks in recent years, climate-driven mosquito expansion, lack of specific treatment, and increasing international travel. While mortality remains relatively low, the CHIKV infection can cause prolonged arthritis with disability as well as severe illness in some patients.

From 1 January to 10 December 2025, 502 264 CHIKV disease cases including 208 335 confirmed cases, and 186 CHIKV deaths, were reported globally. While certain WHO Regions are reporting lower case numbers compared to 2024, others are experiencing marked increases, furthermore some countries are seeing an emergence of chikungunya in previously unaffected populations. This heterogeneity in regional trends complicates the interpretation of the global situation. The data suggest localized resurgence or emergence in specific geographic areas. The region of the Americas has reported the highest number of confirmed cases followed by the European region (comprised of cases reported predominantly from French Overseas Departments in the Indian Ocean). Further, the potential for geographic spread remains substantial given that chikungunya can be introduced into new areas by infected travellers where local transmission may be established in the presence of competent *Aedes* mosquito, a susceptible population and favorable climatic and ecological conditions.

The global public health risk posed by CHIKV transmission is assessed as moderate, driven by widespread outbreaks across multiple WHO regions during the 2025 season including areas with previously low or no transmission. The resurgence and emergence of cases in new geographic areas are facilitated by the presence of competent *Aedes* mosquito vectors, limited population immunity, favorable environmental conditions, and increased human mobility. The uneven distribution of cases complicates global interpretation, but highlights significant localized transmission. Control capacities remain challenged by gaps in surveillance, diagnostic access, healthcare infrastructure, and sustainable vector surveillance and control.

Given the ongoing outbreaks reported globally in 2025, the potential for further spread in 2026 cannot be ruled out.

*Confidence refers to the level of confidence in the data/information or the quality of the evidence available at the time the RRA is conducted. Poor quality information may increase the overall perceived risk due to the incertitude in the assessment.

Risk question	Assessment		Risk	Rationale
	Likelihood	Consequences		
Potential risk for human health?	Likely	Moderate	High	Chikungunya is a mosquito-borne disease, caused by the chikungunya virus (CHIKV), that is widely distributed in tropical and subtropical regions and is characterised by sudden fever, severe joint pain, muscle pain, headache, and rash. Joint pain can persist for months or years and can lead to prolonged disability. From January to 10 December 2025, an overall of 502 264 CHIKV disease cases including 208 335 confirmed cases, and 186 deaths were reported globally from 41 countries and territories, including autochthonous and imported cases in travellers. While the overall fatality rate is low compared to some other arboviruses, severe illness and complications can occur, especially in vulnerable populations such as newborns, young children, pregnant women, elderly individuals, and individuals with pre-existing health conditions including diabetes, hypertension, and cardiovascular diseases. Moreover, high attack rates have been documented in recent outbreaks across several countries. Such large outbreaks have the potential to overwhelm health systems, particularly in resource-limited settings, due to high hospitalization rates and increased demands for long-term clinical care.
Risk of geographical spread of the event?	Unlikely	Moderate	Moderate	CHIKV represents a growing global health threat with potential for rapid spread. Some WHO Regions are experiencing significant increases in case numbers compared to 2024, while others are reporting lower case numbers. This uneven distribution of cases across regions makes it challenging to characterize the situation as a global rise; however, given the ongoing outbreaks reported globally in 2025, the potential for further spread remains significant. CHIKV disease can be introduced into new areas by infected travellers and local transmission may be established if there is the presence of competent *Aedes* mosquito and a susceptible population. The risk is heightened by limited population immunity in previously unaffected areas, favourable environmental conditions for vector breeding, gaps in surveillance and diagnostic capacity, and increased human mobility and trade. In 2025, a resurgence of CHIKV disease was noted in a number of countries, including some that had not reported substantial case numbers in recent years. Prior to 2025, autochthonous transmission of CHIKV had been reported from 119 countries and territories. A total of 27 countries and territories across six WHO regions have established competent populations of *Aedes aegypti* mosquitoes but have not yet reported autochthonous CHIKV transmission. Additional countries have established populations of *Aedes albopictus* mosquitoes, which can also transmit CHIKV, and in which transmission efficiency is enhanced for CHIKV lineages with viral mutations, most notably at E1 226V. The expanding geographic presence of these *Aedes* species (spp) vectors poses a continuous threat of chikungunya introduction and spread in previously unaffected areas. Given the ongoing outbreaks reported globally in 2025, the potential for further spread cannot be ruled out..

Risk of insufficient control capacities	Unlikely	Moderate	Moderate	These outbreaks often place a significant burden on healthcare systems due to the number of affected individuals requiring outpatient visits and/or hospitalization. Countries differ in their ability to detect and report chikungunya and other vector-borne diseases, with many outbreaks identified only retrospectively, hindering effective public health responses. Early detection of chikungunya cases, particularly in persons at risk for severe disease, and timely access to appropriate medical care, including diagnostics, are essential for minimizing clinical complications and reducing mortality. In some areas, there is a lack of medical facilities with limited geographical access. In addition, access to intensive care is insufficient for patients with severe conditions requiring adult or neonatal ICU monitoring/management further limiting people's ability to access essential health care. Other challenges can be stockouts of several essential supplies for prevention and control (insecticide, equipment, PPE), lack of reagents and consumables for laboratory diagnosis, and need for re-training field teams and health workers. The variation in distribution of cases across regions highlights the importance of continued investment in surveillance, preparedness, and response capacities to address evolving regional dynamics.

Major actions recommended by the risk assessment team

	Action	Timeframe
☐	Refer the event for review by IHR Emergency Committee for consideration as a PHEIC by DG (Art 12, IHR)	Choose an item.
☐	Immediate activation of WHO response mechanism as urgent public health response is required	Choose an item.
☐	Recommend setting up WHO grading call	Choose an item.
☐	Immediate support to response, but no WHO grading recommended at this point in time	Choose an item.
☐	Rapidly seek further information and repeat RRA (including field risk assessment)	Choose an item.
☒	Support Member States to undertake preparedness measures	Continuous
☒	Continue to closely monitor	Continuous
☐	No further risk assessment required for this event, return to routine activities	Choose an item.

Immediate actions

WHO country offices (WCOs) to:

- Continue supporting public health response.
- Continue supporting national authorities' efforts to strengthen gaps in surveillance, case detection and reporting, laboratory confirmation of cases, case management, infection prevention and control.
- Continue supporting strengthening of community awareness on the ongoing outbreaks as well as prevention measures.
- Continue supporting resource mobilisation for an adequate implementation of response activities.
- Continue supporting the development of vaccine requests for supplementary immunization activities where necessary, according to regional and global recommendations (RITAG, SAGE).

WHO Regional Offices (RO) to support WCOs with:

- Advocacy efforts for timely information sharing.
- Regional partners coordination for a coordinated and efficient response.
- Monitoring of chikungunya case trends across the Regions, and in-depth risk analytics to identify high-risk areas and guide targeted interventions.

WHO HQ will support WCOs and ROs as needed, including:

- Support with vaccine recommendations, once the available evidence for the two available CHIKV vaccines has been reviewed by the chikungunya vaccine working group for the Strategic Advisory Group of Experts in immunization is completed, (RITAG, SAGE).
- Support for the procurement of laboratory reagents and specimen collection kits.

Supporting information

Hazard assessment

Chikungunya is an *Aedes*-borne viral disease caused by the CHIKV, an RNA virus in the *alphavirus* genus of the family *Togaviridae*. CHIKV is transmitted by infected female mosquitoes, most commonly *Aedes aegypti* and *Aedes albopictus*, which can also transmit dengue and Zika viruses. These mosquitoes bite primarily during daylight hours and *Aedes aegypti* feeds both indoors and outdoors, whereas *Aedes albopictus* feeds primarily outdoors. They lay eggs in manmade and natural containers with standing water.

When an uninfected *Aedes* spp mosquito feeds on a person who has CHIKV circulating in their bloodstream, the mosquito can ingest the virus. Over a period of about 10 days (range: 7-12 days), the virus replicates in the mosquito and enters its salivary glands. Once this occurs, the mosquito becomes capable of transmitting the virus to a new human host through a subsequent bite. In the newly infected person/human, the virus begins to replicate and reaches high concentrations in the blood, enabling further transmission to other mosquitos and perpetuating the transmission cycle.

In symptomatic patients, illness onset is typically 4–8 days (range 2–12 days) after the bite of a CHIKV-infected mosquito. Disease is characterized by an abrupt onset of fever, frequently accompanied by severe joint pain. The joint pain is often debilitating and usually lasts for a few days but may be prolonged, lasting for weeks, months or even years. Other common signs and symptoms include joint swelling, muscle pain, headache, nausea, fatigue and rash. Since these symptoms overlap with other infections, including those with dengue and Zika viruses, cases can be misdiagnosed. In the absence of significant joint pain, symptoms in infected individuals are usually mild and the infection may go unrecognized. Most patients recover fully from the infection; however, occasional ocular, cardiac, dermatological and neurological disease manifestation and shock have been reported with CHIKV infections. Patients at extremes of the age spectrum are at higher risk for severe disease including newborns infected during delivery to infected mothers or bitten by infected mosquitoes in the weeks after birth, and older people, particularly those with underlying medical conditions. Patients with severe disease require hospitalization because of the risk of organ damage and death. Once an individual is recovered, available evidence suggests they are likely to be immune from future chikungunya infections. CHIKV may be detected directly in blood samples collected during the first week of illness using molecular tests such as reverse transcriptase–polymerase chain reaction (RT–PCR), and after the first week of illness using serologic tests to detect immunoglobulin-M (IgM) antibodies produced in response to CHIKV infection.

Clinical management includes managing fever and joint pain with anti-pyretic, analgesics, maintaining adequate hydration by consuming sufficient fluids and ensuring general rest. There is no specific antiviral drug treatment for CHIKV infections. Paracetamol (acetaminophen) is recommended for pain relief and reducing fever until dengue infection is ruled out, as non-steroidal anti-inflammatory drugs (NSAIDs) can increase the risk of bleeding in patients with dengue.

There are currently two chikungunya vaccines that have received regulatory approvals and/or have been recommended for use in populations at risk in several countries, but the vaccines are not yet widely available nor in widespread use. WHO and external expert advisors are reviewing vaccine trial and post-marketing data in the context of global chikungunya epidemiology to inform possible recommendations for use.

Exposure assessment

Globally as of December 2024, autochthonous transmission of CHIKV had been reported from 119 countries and territories across six WHO regions. In addition, 27 countries and territories had evidence of established and competent *Aedes aegypti* and *Aedes albopictus* vector populations, but had not yet documented autochthonous CHIKV transmission.

From January to 10 December 2025, a total of 502 264 CHIKV disease cases including 208 335 confirmed cases, and 186 deaths were reported globally from 41 countries and territories. While certain WHO Regions reported lower case numbers compared to 2024, others experienced marked increases, with some Regions experiencing continued transmission at the time of writing. This heterogeneity in regional trends precludes the interpretation of a global increase. Rather, the data reflect localized resurgence or emergence in specific geographic areas. The region of the Americas reported the highest number of confirmed cases followed by the European region, comprised of cases reported predominantly from French Overseas Departments in the Indian Ocean. Based on

available information, the number of suspected and confirmed CHIKV disease cases and deaths reported globally in 2025 are as below.

Table 1. Number of suspected and confirmed CHIKV disease cases and deaths by region in 2025, as of 10 December 2025.

Region	Total cases	Confirmed cases	Deaths	Source
African region	2 211	111	0	Country situation reports/epi bulletins
Eastern Mediterranean Region	1 596	67		Country situation reports /epi bulletins
European Region*	56 986[#]	56 986	43	ECDC, ARS Reunion and ARS Mayotte
Region of the Americas	291 451	110 039	141	PLISA
South- East Asia region	115 985	7 097	0	Bangladesh India, Sri Lanka, Thailand
Western Pacific Region*	34 035	34 035	2	IHR reports and the official government website:China, Guangdon Province, China, Hong Kong SAR, Philippines, Singapore,
Total	**502 264**	**208 335**	**186**	

* For the European region and Western Pacific region- data is referred to the confirmed cases only.
[#]the figures for the European region include data from overseas territories located in the African region

Region	Context
African region	As of 6 December 2025, a total of 2211 suspected, including 111 confirmed CHIKV disease cases have been reported from four countries: Comoros, Kenya, Mauritius, and Senegal with Mauritius recording the highest number of cases. In Comoros, four confirmed cases were reported between epidemiological weeks (EW)1 and 22 (1 January to 31 May 2025), while Senegal recorded 10 confirmed cases from EW 1 to EW 49, with the last case reported in EW 39. In Mauritius, a total of 1583 cases were reported between 15 March to 4 August 2025 (EW week 12 to EW 32), including 1543 local and 40 imported cases. There were no reported deaths. In Kenya, a chikungunya outbreak was confirmed in Mombasa County as of 8 June 2025 (EW23). From the start of the outbreak until 6 July 2025 (EW 27), a total of 614 cases were recorded, including 97 laboratory-confirmed cases and no deaths. Since then, no further cases have been reported.
Eastern Mediterranean Region	As of October 2025, a total of 1596 cases, including 67 confirmed CHIKV disease cases have been reported from Pakistan and Somalia**.** In Pakistan, CHIKV disease cases in 2025 have been reported at rates similar to those in 2024. A notable increase occurred between 4 May to 21 June 2025 (EW 19 to 25), with 101 to 121 suspected CHIKV disease cases reported per week during this period. In September 2025, an outbreak was declared in Peshawar district, with 28 laboratory-confirmed cases reported from 15 September to 18 October. The outbreak affected mainly males from the age groups from 10 to 20 years and above 60 years, suggesting potential behavioural or occupational exposure. In Somalia, a chikungunya outbreak was confirmed in Sool region, with 488 suspected cases reported between January and June 2025. Eight out of 10 samples tested were laboratory-confirmed for chikungunya.

European Region	Since the beginning of 2025 and as of 3 December 2025, two European countries—France and Italy—have reported locally acquired cases of CHIKV disease. Mainland France has recorded 788 cases distributed across 78 clusters, with seven clusters currently active; the onset date of the last reported chikungunya case was 30 October, in Antibes, Provence-Alpes-Côte d'Azur. Italy has reported 384 locally acquired cases distributed across six clusters of which two clusters are currently active. Prior to 2025, a single case of autochthonous chikungunya was reported in France in 2024, and prior to that, the last reported autochthonous transmission in mainland Europe was in 2017. In the French overseas department of La Réunion, a total of 54 555 confirmed cases and 43 deaths have been reported in 2025 (as of 5 December 2025). The reporting of new cases has steadliy declined since 26 April (EW 17) indicating that the outbreak is waning. This marks the first autochthonous transmission of chikungunya on the island since 2010. A rapid seroprevalence study was conducted in La Réunion between July-November 2025 using blood specimens collected at private laboratories across the island for other purposes; 1565 blood specimens were tested and results adjusted for the population structure, yielding an estimated seroprevalence of 66% (ranging from 58.1% in the north, to 74.3% in the west). The French Regional Health authority concluded that there was low risk of a new large-scale epidemic in La Réunion during the southern hemisphere summer of 2025-2026 but possible limited seasonal resurgence with sporadic cases or localized outbreaks. In the French overseas department of Mayotte, following two imported cases from La Réunion, the first locally acquired CHIKV disease case was confirmed in March 2025. As of 5 December 2025, a total of 1259 locally acquired cases, including 40 hospitalizations, have been reported. The transmission receded since August with only a few cases reported per week on average. In total, 56 986 CHIKV disease cases, and 43 deaths, have been reported from two countries in the European region – France and Italy - in 2025 including overseas territories. Please note thatfor the European Region, data refer to confirmed cases only.
Region of the Americas	As of 6 December 2025, CHIKV disease transmission continues across the Americas in line with expected seasonal patterns. A total of 291 451 cases have been reported from 16 countries, including 110 039 confirmed cases and 141 deaths. In Bolivia, a total of 5784 CHIKV disease cases have been reported, 70% of which are laboratory confirmed, and four deaths. The outbreak primarily affected the department of Santa Cruz.Additionally, cases were reported in the departments of Beni, Chuquisaca, Cochabamba, Pando, and Tarija. Brazil accounts for nearly 84% of all reported cases and 82% of deaths in the region, with 243 915 cases and 116 deaths. In Cuba, since the beginning of the current outbreak in July 2025, as of 6 December 2025 a total of 38 342 cases have been reported, 1241 of which are laboratory confirmed, and 21 deaths. The cases were identified in 13 of 15 provinces: Artemisa, Camagüey, Ciego de Ávila, Cienfuegos, Granma, Guantánamo, Holguín, La Habana, Matanzas, Pinar del Río, Sancti Spíritus, Santiago de Cuba and Villa Clara.
South- East Asia Region	As of early December 2025, over 115 985 CHIKV disease cases have been reported in the WHO South-East Asia region, primarily from India and Thailand.

	In India, between 1 January and 31 August 2025, a total of 108 379 suspected cases and 4995 confirmed cases were reported. The states reporting the highest number of confirmed cases were Maharashtra, Karnataka and Gujarat. In Bangladesh, the Institute of Epidemiology, Disease Control and Research reported a total of 1081 suspected CHIKV disease cases in Dhaka city between 1 January and 30 November2025. Of these, 572 cases were laboratory-confirmed by RT-PCR. Cases have been reported from both Dhaka North and South City Corporations, reflecting widespread urban transmission. In Sri Lanka, a total of 151 confirmed CHIKV disease cases were reported from sentinel sites in Colombo, Gampaha and Kandy between 1 January 2025 and the second week of March 2025. According to the Epidemiology Unit Division situation report, dated 31 October 2025, although the absolute case numbers were not provided, the proportional distribution of reported chikungunya cases indicates that June accounted for the largest share of cases in 2025, representing approximately 25% of all cases reported since 1 January to 31 October. Following the mid-year peak, a gradual decline was observed during July–September but cases increased again in October, driven largely by rising transmission in the Northern and Eastern Provinces. Since August, these two provinces have contributed an increasing share of the national caseload, reflecting a shift in geographic transmission patterns later in the year. In October, Jaffna accounted for more than 80% of all chikungunya cases reported nationally. In Thailand, a total of 1379 chikungunya cases were reported between 1 January and 10 December 2025 with 857 cases being females and 522 cases being male. Compared to the same period in 2024, the number of reported cases in 2025 is approximately double, increasing from 690 cases in 2024. No deaths were reported. The age distribution of cases is as follows: 0-4 years 24 (1.8%), 5-14 years 119 (8.6%), 15-24 years 102 (7.4%), 25-34 years 196 (14.2%), 35-44 years 252 (16.2%), 45-54 years 223 (16.2%), 55-64 years 237 (17.2%), ≥ 65 years 226 (16.4%). The northern region—particularly Chiang Mai, which lies along Thailand's border corridor with Myanmar and in proximity to Laos—is reporting the highest prevalence. Chiang Mai has reported 462 cumulative cases, with an incidence of 28.3 per 100 000 population, which is the highest among all provinces.
Western Pacific Region	A total of 34 035 CHIKV disease cases, including two deaths, have been reported from 11 countries and areas in the Western Pacific region in 2025. Seven countries and areas reported local chikungunya transmission and four reported only imported cases. In China (excluding China, Hong Kong SAR; China, Macao SAR; and Taiwan, China), as of 4 December 2025, a total of 29 497 locally confirmed cases has been reported, mainly in Guangdong (25 826), followed by Guangxi Zhuang Autonomous Region (2 198), Sichuan (358), Chongqing (296), Fujian Province (243), and Hunan (146), while other provinces such as Hainan and Jiangxi also reported a few local cases. Up to now, all reported cases have been mild, with no severe cases or deaths. China's national and provincial health authorities have implemented response efforts, including enhanced surveillance, early detection, clinical management, reinforced vector control, and community engagement activities. In China, Hong Kong SAR, as of 5 December 2025, a total of 77 confirmed cases, including one death, have been reported. Of these, nine cases were classified as local. The Centre for Health Protection (CHP) of the Department of Health continues to implement various prevention and control measures in collaboration with government departments and relevant organizations, aiming to minimize the public health impact of the disease in affected areas.

	In Indonesia, as of 31 July 2025, a total of 3608 confirmed CHIKV disease cases across 19 provinces have been reported, compared to 1399 confirmed cases reported during the same period in 2024. No chikungunya-related deaths have been recorded to date. The risk of future increases persists, particularly during the transition from the rainy to the dry season, with heightened concern in the most populous and frequently visited provinces: West Java, Central Java, East Java, and Banten. The Ministry of Health of Indonesia has strengthened detection and reporting through its Early Warning Alert and Response System (EWARS) and has implemented response measures in high-risk areas. In Malaysia, as of 6 December 2025, a total of 59 CHIKV disease cases have been reported, compared to the 87 cases reported during the same period in 2024. No chikungunya-related deaths have been recorded to date. Case investigation, integrated vector management, community engagement, and multisectoral collaboration efforts were implemented. All outbreaks were successfully contained within two weeks of detection, indicating an effective public health response and outbreak management. In the Philippines, as of 23 August 2025, a total of 653 CHIKV disease cases have been reported, a 78% decrease from 3009 cases reported in the same period in 2024. Cases ranged from 1 to 87 years old, with a median age of 33. Females accounted for 66% of cases (432 out of 653). There was one death reported (CFR: 0.15%). Local health authorities have investigated areas with clustering of cases to determine risk factors and implement vector control activities. In Singapore, as of 6 December 2025, 33 cases of CHIKV disease cases have been reported, compared to 13 cases reported during the same period in 2024. The majority of the cases were individuals with recent travel to chikungunya-affected areas. No chikungunya-related deaths and no sustained local transmission have been reported. The Communicable Diseases Agency will continue to coordinate closely with agencies working on vector control as part of the overall public health response Please note- for the Western Pacific region- data refers to confirmed cases only.

Context assessment

Chikungunya is a disease caused by the CHIKV , an *Aedes*-borne arbovirus that is widely distributed in tropical and subtropical regions. While the overall fatality rate is low, severe disease can occur, especially in vulnerable populations such as infants, pregnant women, the elderly, and those with pre-existing medical conditions. Chikungunya can be introduced to new areas by viremic travelers and generate local transmission in the presence of competent vectors, an immunologically susceptible population and favorable environmental conditions.

Factors associated with increased CHIKV transmission include:

- broader geographic range of *Aedes* mosquitoes associated with transport of immature mosquito stages (eggs, larvae, pupae) in goods and vessels, and expansion of conducive mosquito habitats due to climate change and periodic extreme events, with increased potential for chikungunya transmission in previously unaffected areas;
- unplanned urbanization and poor water management contribute to vector reproduction and persistent transmission cycles;
- low coverage or lack of sustainability of the vector control programs;
- political instability and conflict in countries at risk, such as Somalia, Sudan, and Yemen face exacerbated public health challenges include disruption of healthcare infrastructure hampering case detection and outbreak response;
- viral mutations linked to adaptation to *Aedes albopictus* mosquitoes, including E1-A226V, documented during the 2025 transmission;
- increased travel to and from endemic regions introducing cases into areas with established populations of competent mosquito vectors and favorable environmental conditions.

The public health impact of the outbreaks depend on several factors, including the ability to detect chikungunya transmission, overall capacities for a coordinated public health response and clinical management, and the proportion of the population immunologically susceptible to CHIKV infection (i.e., people not previously infected with CHIKV). Young children, elderly individuals, and those with pre-existing medical conditions such as diabetes, hypertension, and cardiovascular diseases are at higher risk of developing severe disease. Additionally, people living in areas with high mosquito populations and inadequate vector control measures are at greater risk of being infected. Effective public health strategies such as vector surveillance and control, and community education, are crucial in reducing the risk infection for susceptible individuals and preventing outbreaks.

In some areas, there is a lack of medical facilities with limited geographical access, making it difficult for people to access basic health care. Other challenges can be stockouts of several essential supplies for prevention and control, lack of reagents and consumables for laboratory diagnosis, and need for re-training field teams and health workers.

Given the ongoing outbreaks reported globally in 2025, the potential for further spread remains significant. Although some WHO Regions are currently reporting lower case numbers compared to 2024, others are experiencing a resurgence with significant increases in case numbers, furthermore some countries are seeing an emergence of chikungunya in previously unaffected populations. This uneven distribution of cases across regions makes it challenging to characterize the situation as a global rise but rather substantial increases in particular geographical areas. Further, the potential for geographic spread remains substantial given that chikungunya can be introduced into new areas by infected travelers where local transmission may be established in the presence of competent *Aedes* mosquito and a susceptible population. The risk is heightened by limited population immunity in previously unaffected areas, favorable environmental conditions for vector breeding, gaps in surveillance and diagnostic capacity, and increased human mobility and trade. Strengthening surveillance, enhancing vector surveillance and control, and improving public health preparedness are essential to mitigate the risk of further transmission.

WHO is supporting Member States in strengthening preparedness and response to arbovirus epidemics and pandemics, in alignment with the pillars of the Global Arbovirus Initiative, the Global Strategic Preparedness, Readiness and Response Plan, and the 5Cs of WHO's global architecture for Strengthening health emergency prevention, preparedness, response and resilience (HEPR).

Capacities and vulnerabilities related to the chikungunya outbreak response in the affected countries

Capacities	Vulnerabilities
Coordination & Leadership • Existing sitreps in some countries provide up-to-date timely situation reports • National and regional coordination mechanisms—including incident management systems and multisectoral response plans have been activated, developed or under development in some affected countries. • Continuous capacity development has been supported through webinars, workshops, and virtual collaboration spaces, facilitating knowledge sharing through Community of Practice, peer learning, and sustained technical cooperation among Member States. • Due to chikungunya outbreaks, some countries have requested guidance to support public health policy decision-making. • All regional actions are aligned with WHO's global frameworks, ensuring strategic coherence, standardization of approaches, and reinforcement of global and regional preparedness and response architecture for arboviral diseases.	**Coordination & Leadership** • Countries vary in their capacity to detect and report chikungunya and other vector-borne diseases, and outbreaks are often reported retrospectively, meaning real-time epidemiological data necessary for public health response is lacking. • Multiple emergencies in some countries may saturate response structures and health systems.
Resource mobilization • Emergency procurement procedures established during prior outbreaks can be leveraged to fast-track acquisition of supplies.	**Resource mobilization** • All affected countries are experiencing acute funding gaps that are impeding rapid implementation of outbreak response measures. • Delays in mobilizing and disbursing emergency resources further compound response challenges.
Surveillance • Integrated epidemiological, laboratory, entomological, and clinical surveillance systems have been strengthened. Several regions have also advanced data integration for arboviruses and introduced/strengthened genomic surveillance. • Virtual Cooperation Spaces (VCS) have been created in the Region of the Americas as a collaborative surveillance initiative between PAHO/WHO and Member States that allow the automated generation of different epidemiological analyses, situation rooms, and epidemiological bulletins, strengthening epidemiological surveillance of arboviruses, including chikungunya.	**Surveillance** • Enhanced surveillance and epidemiologic investigations are essential to more accurately determine the incidence and trends of CHIKV infection. Current surveillance systems often prioritize dengue over other *Aedes*-borne arboviruses, leading to frequent clinical misdiagnosis and misreporting of CHIKV as dengue. • Strengthening early detection and multisource surveillance capacity will support rapid risk assessment to guide targeted response measures such as risk communication and vector control strategies. Ongoing, close monitoring of the regional situation is also critical, along with active cross-border coordination and information sharing, given the potential for transmission in neighbouring countries.

Laboratory • Many of the affected countries have the capacity (human resources, equipment) to test and confirm cases. • Case confirmation protocols are in place. • RT-PCR capacity has been acquired in recent years across many regions. • Laboratory systems are part of integrated surveillance efforts.	**Laboratory** • Although many countries have acquired the capacity to perform RT-PCR testing in recent years, the availability of reagents for chikungunya testing is limited, costs may be prohibitive. • Serology is generally cheaper and more accessible but, in some regions, serological tests can cross-react with other alphaviruses and produce false positive test results. • Access to reliable diagnostics may be uneven, especially in low-resource settings • Stockouts and logistical challenges can disrupt testing and reporting.
Clinical management • WHO and Member States have strengthened clinical capacities through the dissemination and implementation of standardized guidelines, health worker training, and the establishment of clinical expert networks, with the aim of improving diagnosis and case management. • The Region of the Americas has an international technical group of experts on arboviral diseases that supports technical cooperation activities in the countries. In addition, a regional network of experts in arboviral disease has been created (RECA), and 12 countries has already created their national networks supporting clinical training at subnational level.	**Clinical management** • In some areas, limited medical facilities and geographical access, combined with shortages of essential supplies and the need to retrain field teams and health workers, hinder the delivery of basic healthcare and the effective surveillance and reporting of cases. • Underestimation of clinical burden due to underreporting of severe chikungunya. • In some affected countries there is weak integration of case notification between private health providers and national surveillance systems. • Epidemics of chikungunya can overwhelm health systems, exceeding the capacity for space and response in hospitalization and intensive care units. Many countries lack the infrastructure and resources to adequately respond to a situation of high patient demand caused by this disease.
Vaccination • Laboratory systems in many affected countries are equipped to support vaccine-related surveillance and monitoring. • WHO and Member States have enhanced monitoring and vaccine readiness, given that two chikungunya vaccines have now received regulatory approval and/or been recommended for use in at-risk populations in several countries by national/regional authorities. • WHO's global strategies can guide coherence and implementation of potential vaccination efforts in future • WHO and external advisors are evaluating vaccine trial and post-marketing data to inform future recommendations for broader use. • Countries introducing new vaccines, should aways strengthen their vaccine safety surveillance and	**Vaccination** • Although two vaccines have received regulatory approval, they are not yet in widespread use. • WHO and expert advisors are still reviewing vaccine trial and post-marketing data in the context of global chikungunya epidemiology and has initiated a process to evaluate potential use scenarios and the optimal use of vaccines, aiming to maximize public health impact while awaiting clinical effectiveness data—to support recommendations in endemic countries. This may delay implementation. • Shortages of prevention and control materials may also impact vaccine logistics and availability. Field teams and health workers may require updated training to support vaccination efforts effectively.

implement plans to generate evidence to contribute to other countries decision making.	
Vector Control • Intensive adult mosquitoes control and larval source reduction activities are underway in some countries. • Community mobilization is being supported through local structures. • Countries have implemented a mix of evidence-based vector control interventions, including environmental management, larviciding, fogging, and innovative technologies such as drone-assisted spraying, complemented by monitoring of insecticide resistance. • AMRO: Strengthened the capacity of Member States to monitor insecticide resistance and viral detection in mosquitoes. • AMRO: A new operational model for *Aedes* control has been developed and is being implemented in the Americas. • AMRO: Support for strengthening the entomological surveillance of member states through virtual collaboration spaces (VCS), enabling an integrated analysis of entomological and epidemiological data.	**Vector Control** • Insecticide resistance in *Aedes* mosquitoes reduces the effectiveness of chemical control methods. • Limited community involvement hampers source reduction and personal protection efforts. • Weak surveillance systems delay detection and response to outbreaks. • Unplanned urbanization and poor sanitation create widespread mosquito breeding sites. • Fragmented and underfunded programs lead to inconsistent and unsustainable control measures. • Climate change expands mosquito habitats and prolongs breeding seasons.
Risk communication & community engagement • Public awareness and behavioural change campaigns have been implemented in some countries, emphasizing personal protection, household vector control, and early care-seeking. • Risk communication has been strengthened through multiple channels, including media, community health workers, and social platforms. • Many countries have strong community networks and community health workers capable of engaging households and rapid mobilization.	**Risk communication & community engagement** • Globally, public awareness of chikungunya transmission and prevention is increasing but inconsistent. Regions with active outbreaks tend to have higher awareness, while newly affected areas often lack sufficient knowledge, resulting in poor adherence to recommended actions such as eliminating mosquito breeding sites and using personal protection. Strengthening community participation and improving targeted risk communication are essential to enhance outbreak control and reduce disease transmission.

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