WHO Director-General declares mpox outbreak a Public Health Emergency of International Concern (PHEIC) on 14 August 2024
Health advisory for Pacific Island health professionals, 28 August 2024

Aim of this advisory

This health advisory is to inform health professionals about the rationale behind declaring mpox a Public Health Emergency of International Concern (PHEIC), provide an update on the global epidemiological situation, and to share current WHO guidance for strengthening surveillance. Additionally, advice on vaccination and risk communication and community engagement is provided. It is recommended for PICTs to remain vigilant and keep up-to-date with the most recent and reliable sources.

Global epidemiological situation

The African Region remains most affected by mpox, notably the Democratic Republic of Congo (DRC), where testing limitations mean reported numbers likely underestimate the true burden of disease. Since the beginning of this year, DRC has been experiencing a severe outbreak of mpox, with more than 3,235 reported cases and 19 deaths. In addition, 12 countries in Africa have reported mpox this year, with 9 countries facing active outbreaks.

Outbreaks of mpox have been reported in DRC for decades, but the number reported cases in the first six months of this year alone matches the total from last year. The global outbreak of mpox between 2022 and 2023 was linked to a strain identified as Clade IIb. The current outbreak is caused by a new offshoot of Clade I, called **Clade Ib** which is spreading between people through sexual transmission and other types of close contact, and is known to cause **more severe disease.**

On the 14 August 2024, the WHO Director-General declared mpox outbreak a **Public Health Emergency of International Concern (PHEIC).** Dr Tedros' declaration came on the advice of an IHR Emergency Committee of independent experts, who consider the upsurge of mpox Clade Ib cases in DRC and a growing number of countries in Africa to have a potential to **spread further across countries in Africa and possibly outside the continent.**

On 15 August 2024, the first case of Clade Ib outside of the African Region was detected in Sweden. Additionally, on 22 August 2024, the Department of Disease Control confirmed Thailand's first imported case of mpox Clade Ib. Both cases involved individuals with travel histories to Central Africa.

Key facts

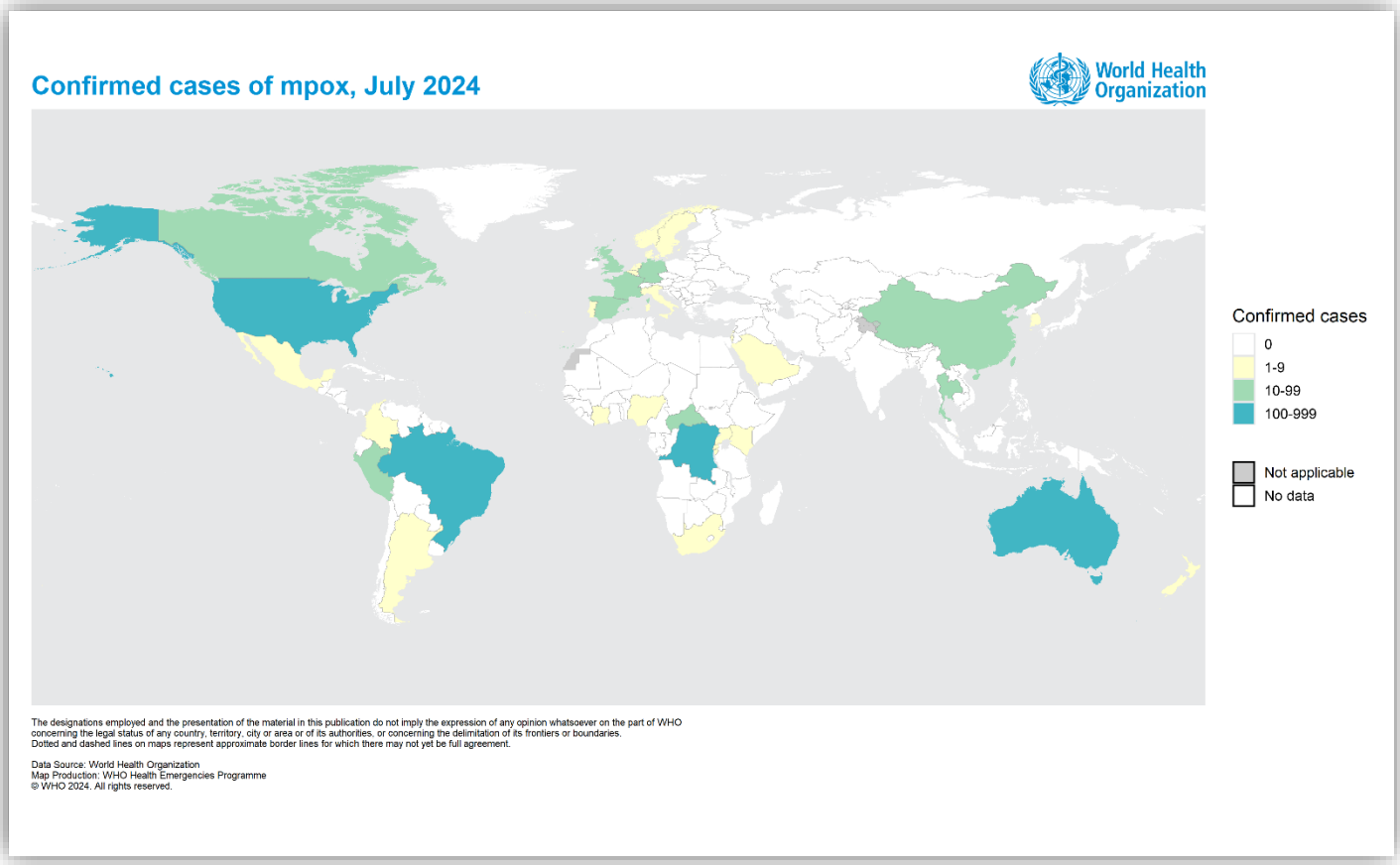
Mpox, formerly known as monkeypox, is a viral disease caused by the monkeypox virus (MPXV), which belongs to the *Orthopoxvirus* genus. It was historically found in Central, West and East Africa.
There are two distinct clades: Clade I (formerly called Congo Basin/Central African clade) and Clade II (former West African clade) consisting of two subclades IIa and IIb. Clade IIb continues to circulate worldwide.

Mpox symptoms usually appear 6-13 days after infection, but can start between 1-21 days after exposure. The most common symptoms include a skin rash or mucosal lesions lasting 2-4 weeks, often accompanied by fever, headache, muscle pain, back pain, fatigue, ano-rectal pain and bleeding and swollen lymph nodes.
Children, pregnant people and people with weak immune systems are at risk for complications from mpox.

Transmission occurs through direct contact with the skin lesions or bodily fluids of infected wild animals in Africa or humans, including both sexual and non-sexual contact, or through contact with materials contaminated with the virus.
People with mpox are considered infectious until all their lesions have crusted over, the scabs have fallen off and a new layer of skin has formed underneath, which usually takes from 2 to 4 weeks.

Preventive measures include avoiding close contact with infected individuals, contaminated materials and infected animals, and cleaning hands frequently with soap and water or an alcohol-based solution.

Supportive care is the primary treatment



In the Western Pacific region, as of August 2024, the mpox long term risk assessment by WHO defined the risk as moderate. There have been **no cases of Clade Ib in the Pacific or in neighbouring countries to date.**

The last alerts issued through our Epidemic and emerging disease alerts in the Pacific reports date back to 09 May 2023 in Australia, 11 October 2023 in New Zealand and 02 August 2022 in Hawaii, all being associated with Clade IIb.

The latest data reported for the region are as follows:

- In **New Zealand**, in the January 2024 monthly notifiable disease surveillance report, Institute of Environmental Science and Research (ESR) reported two locally acquired Clade IIb cases (one confirmed and one probable).
- In **Hawaii**, as of May 2024, State of Hawaii, Department of Health reported six Clade IIb mpox cases in non-residents.
- In **Australia**, there have been multiple outbreaks occurring since May, with NSW, Queensland, Victoria, South Australia, and ACT reporting increased cases. New South Wales, as of the 11 July, reported an increased case due to local transmission, with 22 Clade IIb mpox cases notified in the past 3 weeks. In Queensland, as of the 05 August, 22 cases were reported. Additionally, Western Australia Department of Health, also reported on the august 21st, two locally acquired cases of mpox virus. All infections reported to date have been caused by Clade IIb and are not connected to the more severe Clade Ib strain spreading through east and central Africa.

Surveillance and Laboratory testing

The aims of mpox surveillance and case investigation are to rapidly detect cases, provide appropriate clinical care, prevent transmission, notably through contact-tracing, and protect at-risk groups, including frontline healthcare workers. Maintaining epidemiological surveillance through laboratory testing and using clear case definitions (Surveillance, case investigation and contact tracing for Monkeypox: Interim guidance (who.int)), is essential for early outbreak detection and improved responses. Additionally, implementation of genomic surveillance using national or reference laboratories for identifying circulating clades and contributing to public health knowledge through the sharing of genetic data is important.

Sample Collection and Laboratory Testing

The decision to test for mpox should be informed by both clinical symptoms and epidemiological factors, as the rash associated with mpox can often resemble those caused by other diseases, complicating diagnosis based on clinical observation alone. The preferred sample for monkeypox virus (MPXV) testing is material from an active lesion or rash. Possible sample types include lesion fluid, tissue, crust, or skin biopsy. It might be necessary to de-roof a lesion for adequate material collection. Individuals tasked with sample collection should employ rigorous safety measures, including the use of personal protective equipment—gowns, gloves, N95 masks/respirators, and eye protection such as safety glasses/goggles, or face shields. Sample collection should be performed with a swab made of synthetic material like Dacron or polyester with a plastic handle, as wooden handles are not suitable. Each swab should be stored in a separate container or collection tube. The protocol for adding the swab to universal/viral transport medium differs with each testing laboratory. Samples should be stored at 4-8°C (refrigerated) for no more than 7 days; samples not tested within this timeframe should be frozen at -20°C or lower.

The recommended diagnostic method for MPXV is real-time polymerase chain reaction (PCR), or other nucleic acid amplification testing (NAAT) techniques. Ideally, the PCR detection should include specific tests for MPXV and broader tests for orthopoxvirus to prevent false negatives potentially caused by genetic variations in the MPXV genome. Particularly in the initial stages of a suspected outbreak, samples that test positive for MPXV should undergo further testing to determine their clade, either through whole genome sequencing or clade-specific PCR.

If there is no local capacity for MPXV testing, countries in the South Pacific can refer samples to the Victorian Infectious Disease Reference Laboratory (VIDRL) in Melbourne, Australia, while those in the North Pacific can utilise public health laboratories in Guam or Hawai'i.

The World Health Organization (WHO) is expected to release detailed laboratory guidance for Pacific Island Countries and Territories (PICTs) in the near future.

Clinical case management

Mpox clinical signs can be similar to other infectious conditions. It is important to distinguish mpox from chickenpox, measles, bacterial skin infections, scabies, herpes and other sexually transmissible infections, and medication-associated allergies. During the management of suspected, probable, and confirmed mpox cases, early identification is essential through screening protocols tailored to local conditions. These cases should be promptly self-isolated, with appropriate infection prevention and control (IPC) measures implemented immediately. Mild or uncomplicated mpox cases need symptomatic treatment at home, while hospitalisation could be required for any severe or complicated patients. Several antivirals, such as tecovirimat, originally developed to treat smallpox have been used to treat mpox and further studies are underway. More information can be found in the clinical management and infection prevention and control for monkeypox: interim rapid response guidance.

Vaccination

While vaccines exist and are one of the important tools in an outbreak setting, vaccine supplies are limited and mass vaccination for mpox is not recommended. The focus should be on controlling mpox spread through early detection, diagnosis, isolation, and contact tracing. In outbreak settings where vaccines are available for individuals at high-risk, WHO recommends the use of MVA-BN or LC16 vaccines, or the ACAM2000 vaccine when the others are not available, given within four days of exposure.

On an individual level, vaccination should not be used as a substitute for other preventative measures.

Risk communication and community engagement

Communicating about mpox related risks and engaging at risk- and affected communities, civil society organisations and health care providers, including sexual health clinics on prevention, early recognition, prompt treatment and self-isolation of mpox cases is essential. Public health advice on how the disease in transmitted, its symptoms, and preventive measures should be shared widely through various media and community channels, including social networks and healthcare facilities. Authorities should also prevent the spread of rumours and false or incorrect information by monitoring media and social media and taking benefit of community feedback mechanisms, as well as encouraging the public to rely on official trustworthy sources. More information can be found in Risk communication and community engagement readiness and response toolkit: mpox.

Refer to the "**mpox (Monkeypox) Outbreak Toolbox"** (in the reference section) for standardised tools and resources to support detailed outbreak investigations and data collection for epidemiologists and field investigators.

Recommendations

- Strengthen Surveillance and Case Investigation: Rapidly identify and investigate cases and clusters to provide optimal clinical care, isolate cases to prevent further transmission, and identify risk groups, particularly those at higher risk for severe disease, including children and pregnant women.

- Enhance Contact Tracing and Monitoring: Initiate contact tracing immediately upon identifying a suspected case. Monitor contacts daily for 21 days, but quarantine or exclusion from work is not required unless symptoms develop. Encourage contacts to practice rigorous hygiene, avoid vulnerable individuals, and limit non-essential travel during the monitoring period.

- Vaccination and Public Information: Offering pre- and post-exposure vaccination can be considered for individuals at risk and disseminating accurate information to those most vulnerable to mpox infection.

- Timely Reporting: Clinicians should promptly report suspected cases to public health authorities, and probable and confirmed cases should be reported to WHO through IHR national focal points, following international guidelines.

- Safe Clinical Examination and Specimen Collection: Conduct clinical examinations in well-ventilated rooms using appropriate personal protective equipment (PPE), and safely collect and dispatch specimens for laboratory testing.

Further information about mpox can be accessed via the following links:

- WHO – mpox (monkeypox) (who.int)
- WHO – mpox Outbreak Toolbox (who.int)
- WHO – 2022-24 mpox (Monkeypox) Outbreak: Global Trends (shinyapps.io)
- WHO – Diagnostic testing for the monkeypox virus (MPXV): interim guidance, 10 May 2024
- WHO - Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance, 10 June 2022
- ECDC – ECDC recommends enhancing preparedness as more imported cases of clade I mpox highly likely

This advisory has been prepared by the Surveillance, Preparedness and Response Programme, Public Health Division (PHD), Pacific Community (SPC), Focal Point of the Pacific Public Health Surveillance Network (PPHSN) Coordinating Body. Email: FocalPointPPHSN-CB@spc.int

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