

Division of the National Health Laboratory Service

## **MPOX PREPAREDNESS**

# An update for Physicians, Accident & Emergency Practitioners and Laboratorians

Division of Public Health Surveillance and Response and Centre for Emerging Zoonotic and Parasitic Diseases (NICD) 24-hour hotline number: 0800 212 552

# COMPILED: 4 JULY 2022, UPDATED 27 AUGUST 2024

In mid-August 2024, the WHO and Africa CDC declared the mpox outbreak in Africa a public health emergency of international concern (PHEIC) and public health emergency of continental security (PHECs), respectively. Clade I, previously known as the Congo Basin clade, has two sub-clades, Ia and Ib. Clade Ib denotes the new strain of the disease discovered in September 2023 that has spread in the DRC and neighbouring countries. The mode of transmission and the high-risk populations distinguish the deadlier Clade I strain from Clade II. In addition to sexual contact, Clade Ia is transmitted through household contact and contact with contaminated animals. The new variant, Clade Ib, seems to spread more easily through routine close contact, as evidenced by the number of children affected by the outbreak.

This outbreak is happening concurrently with the multi-national outbreak that started in 2022. Clade II, previously known as the West African clade, has two sub-clades, IIa and IIb. Clade IIb is the strain that caused the 2022 global outbreak and is primarily transmitted through sex. In this outbreak, the most at-risk group was identified as men who have sex with men. South Africa reported 5 cases in 2022 and 24 cases in 2024, as of August 2024. No cases of Clade I have been detected in South Africa to date. The mpox risk classification for South Africa is Moderate.

#### **Transmission**

Monkeypox virus can be transmitted to a person upon contact with the virus from an animal, human, or materials contaminated with the virus. Person-to- person transmission of the virus is through close contact (i.e. prolonged face to face contact, kissing). Entry of the virus is through broken skin, respiratory tract, or the mucous membranes (eyes, nose, or mouth). A person is contagious from the onset of the rash/lesions through the scab stage. Once all scabs have fallen off, a person is no longer contagious.

#### Signs and symptoms

The incubation period (time from infection to symptoms) for mpox is on average 7-14 days but can range from 5-21 days. Initial symptoms include fever, headache, muscle aches, backache. chills and exhaustion. Lymphadenopathy is also noted. Skin lesions (or rash) develops between 1-3 days following onset. The lesions may be found spread over the body or localised. For cases reported in the multi-country outbreak, localization of lesions in genital or peri-genital areas have been often reported. The lesions progress through several stages before scabbing over and resolving. Notably, all lesions of the rash will progress through the same stage at the same time. Case fatality rate is very low and most cases will not need hospitalization or specific treatment. More severe cases have been historically reported in children, pregnant women and individuals with untreated HIV disease.

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#### Response to a suspected case:

- 1. Establish that the patient meets the signs and symptoms for suspected mpox.
- Observe appropriate infection control procedures (i.e. isolation with universal precautions). As soon as the decision is made to proceed on the basis of a presumptive diagnosis of mpox, measures should be applied to minimize exposure of HCWs, other patients and other close contacts.
- Clinical management is supportive and will vary from case to case, but typically cases are selfresolving. Tecovirimat is an anti-viral agent that may be used for people with severe mpox disease.
- 4. Inform the NICD hotline (0800 212 552) and notify the local and provincial communicable disease control co-ordinator (CDCC) telephonically so that additional case finding and extensive contact tracing can be conducted.
- 5. Notify the case telephonically and through the NMC App complete the Case Investigation Form (CIF-MPOX). Submit forms to provincial CDCC.
- 6. Submit samples to NICD for laboratory testing.

# Differential diagnosis:

Other rash illnesses, some commonly found, include chickenpox (caused by varicella virus), hand-foot-and-mouth disease, measles, bacterial and fungal skin infections, syphilis, molluscum contagiosum and drug-related rashes.

Lymphadenopathy in the prodromal phase of illness distinguishes mpox from chickenpox.

## Sample collection and testing for mpox:

 See laboratory guidance on submission of samples for mpox testing. Please refer to <u>lab guide mpox</u>