NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES
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

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World Health Organization declared a multi-country outbreak of mpox a public health emergency of international concern (PHEIC) on July 23. As of January 3, 2023, there had been 83,943 confirmed cases and 72 deaths in 111 countries from all six WHO Regions. Since the peak in August 2022, the multi-country mpox cases have declined. The risk of mpox to the South African population has been low, given the low transmissibility of the virus. Nevertheless, South Africa has diagnosed five cases from the multi-country outbreak as of 14 March 2023, all men between 28 and 41 years of age, three of which with recent travel from Switzerland, Spain and Netherlands.

Transmission

Mpox 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). In the current outbreak, possible sexual transmission is also implied. 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. Mpox symptoms in humans are similar to but less severe than smallpox symptoms. 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 of 2022, localization of lesions in genital or peri-genital areas are 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.
2. 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.**
3. Clinical management is supportive and will vary from case to case, but typically cases are self-resolving.
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, 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:

1. See laboratory guidance on submission of samples for mpox testing. Please refer to lab guide mpox

For more information, visit the NICD website, Mpox