



**COMPILED: 30 AUGUST 2022 UPDATED 15 MARCH 2023**

## **GUIDANCE FOR THE LABORATORY INVESTIGATION OF SUSPECTED CASES OF MPOX IN SOUTH AFRICA**

### **STEP 1: COMPLETE THE CASE INVESTIGATION FORM**

- Complete the case investigation form fully ([CIF-MPOX](#))
- Include case investigation form with specimens submitted for testing

### **STEP 2: SUBMIT SPECIMENS FOR SPECIALIZED LABORATORY INVESTIGATION**

- For testing, the following specimens are used:

| <b>Sample type</b>  | <b>Collection materials</b>  | <b>Comments</b>   |
|---|--|---|
| <u>Skin lesion material:</u><br>Swabs of lesion exudate/<br>Aspirate of lesion fluid<br>Lesion roof/s<br>Lesion crust/s | Dacron or polyester flocked swabs with viral transport media (VTM) or dry swab | <b>Required for all investigations</b><br><b>May ship on ice packs, but not essential</b> |

- The specimens should be packaged in compliance with the guidelines for the transport of dangerous biological goods (i.e. Category A shipments with triple packaging using absorbent material) and couriered directly and urgently to:

**Centre for Emerging Zoonotic and Parasitic Diseases  
Special Viral Pathogens Laboratory  
National Institute for Communicable Diseases (NICD)  
National Health Laboratory Service (NHLS)  
No. 1 Modderfontein Rd  
Sandringham, 2131**

#### **Laboratory contact details:**

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## **Annex A: World Health Organization case definitions**

(as on 22 December 2022, [Surveillance, case investigation and contact tracing for Mpox: Interim guidance \(who.int\)](#))

### **Suspected case:**

A person who is a contact of a probable or confirmed mpox case in 21 days before the onset of signs or symptoms, and who presents with any of the following:

- Headache
- Acute onset of fever ( $>38.5^{\circ}\text{C}$ ),
- Lymphadenopathy (swollen lymph nodes)
- Myalgia (muscle and body aches)
- Back pain
- Asthenia (profound weakness) or fatigue

### **OR**

A person presenting with:

- An unexplained acute rash\*
- Lymphadenopathy (swollen lymph nodes) or,
- Mucosal lesions

\* The skin rash may include single or multiple lesions in the ano-genital region or elsewhere on the body. Mucosal lesions may include single or multiple oral, conjunctival, urethral, penile, vaginal, or ano-rectal lesions. Ano-rectal lesions can also manifest as ano-rectal inflammation (proctitis), pain and/or bleeding.

### **AND**

for which the following common causes of acute rash do not explain the clinical picture: varicella zoster, herpes zoster, measles, Zika, dengue, chikungunya, herpes simplex, bacterial skin infections, disseminated gonococcus infection, primary or secondary syphilis, chancroid, lymphogranuloma venereum, granuloma inguinale, molluscum contagiosum, allergic reaction (e.g., to plants); and any other locally relevant common causes of papular or vesicular rash.

*N.B. It is not necessary to obtain negative laboratory results for listed common causes of rash illness in order to classify a case as suspected. Further, if suspicion of mpox infection is high due to either history and/or clinical presentation or possible exposure to a case, the identification of an alternate pathogen which causes rash illness should not preclude testing for MPXV, as co-infections have been identified.*

### **Probable case:**



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A person meeting the case definition for a suspected case

**AND**

One or more of the following:

- has an epidemiological link (face-to-face exposure, including health workers without eye and respiratory protection); direct physical contact with skin or skin lesions, including sexual contact; or contact with contaminated materials such as clothing, bedding or utensils to a probable or confirmed case of mpox in the 21 days before symptom onset
- reported travel history to a mpox endemic country in the 21 days before symptom onset
- Identifies as gay, bisexual or other man who has sex with men
- has had multiple and/or casual sexual partners in the 21 days before symptom onset
- has a positive result of an *orthopoxvirus* serological assay, in the absence of recent smallpox/monkeypox vaccination or other known exposure to orthopoxviruses

**Confirmed case:**

A case meeting the definition of either a suspected or probable case and is laboratory confirmed for mpox virus by detection of unique sequences of viral DNA either by real-time polymerase chain reaction (PCR) and/or sequencing.

\*\*Mpox endemic countries are: Benin, Cameroon, the Central African Republic, the Democratic Republic of the Congo, Gabon, Ghana (identified in animals only), Côte d'Ivoire, Liberia, Nigeria, the Republic of the Congo, Sierra Leone and South Sudan. Countries recently reporting cases of the West African clade are Cameroon (n=18) and Nigeria (n=800) as of 1/3/2023. Benin and South Sudan have documented importations from Nigeria in the past in 1978 and 2005. The WHO conducted a follow-up examination and discovered evidence of sporadic, infrequent cases of mpox in southern Sudan, pointing to intermittent introductions from local, putative animal reservoirs. With this case definition, all countries except these four (Nigeria, Cameroon, Benin, South Sudan) reported cases as new cases of mpox as part of the 2022 multi-country outbreak (West African Clade). As of 1/3/2023, Benin reported 3 cases and South Sudan none. In addition, until 3/1/2013, African countries reported mpox cases with Liberia (n=7), Ghana (n=121), CAR (n=27), Congo (n=5), DRC (n=395) and Gabon, Côte d'Ivoire, sierra Leone none. Sudan, Egypt, Mozambique and South Africa reported 18, 3, 1 and five cases respectively from the multi-country outbreak as of 1/3/2023.

