THE PATHCARE NEWS

MPOX UPDATE – JUNE 2024

Introduction

Since May 2022, more than 97 000 cases of mpox have been reported globally from 117 countries, with 186 deaths (as of 31 May 2024). Between June and September of 2022, five cases of mpox were reported in South Africa, with no fatalities. All of these cases reported either a history of travel to countries reporting mpox cases or contact with someone who had recently travelled to a country reporting mpox cases. In May-June 2024, a further 13 laboratory-confirmed cases have been reported in South Africa (as of 15 June 2024), with two fatalities reported. This includes seven cases in KwaZulu-Natal, five cases in Gauteng, and a single case in the Western Cape. Sequencing data available to date has confirmed that all cases identified in South Africa were clade IIb, which is the clade associated with the ongoing multi-country outbreak. Given the recent cases reported in South Africa, heightened vigilance is required in order to contain the spread of this virus.

This document aims to provide guidance regarding sample submission to PathCare and should be read in conjunction with available NICD documentation (available at https://www.nicd.ac.za/diseases-a-z-index/mpox-2/).

Epidemiology

The virus is transmitted by contact with infected animals or humans, or other contaminated material. The virus can enter the body through broken skin, the respiratory tract or mucous membranes (eyes, mouth or nose). Person-to-person transmission occurs through close contact. The contagious period lasts through all stages of the rash, until all the scabs have fallen off.

Clinical presentation

A non-specific febrile prodrome is followed by the typical rash with lesions progressing through various stages from macules, to papules, to vesicles, to pustules, and eventually to crusts or scabs which dry and fall off after approximately 2-4 weeks. Lesions or ulcers can also occur on the mucous membranes such as the mouth, eyes and genital area. The lesions usually start on the head or face and progress to the trunk and limbs, with lesions also occurring on the soles of the feet and palms of the hands. Lymphadenopathy and lesions which progress through the same stages at the same time may help to differentiate mpox from chickenpox in which cropping occurs (ie lesions at different stages are present simultaneously). During the current multi-country outbreak, reports have noted frequent localization of lesions in the genital and/or peri-anal areas. Other conditions which should be considered in the differential diagnosis include herpes simplex virus, varicella zoster virus, molluscum contagiosum virus, enterovirus, measles, scabies, Treponema pallidum (syphilis), bacterial skin infections, medication allergies, parapoxviruses (causing orf and related conditions) and chancroid.

Management

Treatment is supportive and the majority of cases are mild, however, complications and, more rarely, death may occur in some cases. Tecovirimat is an antiviral that may be used in selected cases of severe mpox disease, and a limited supply is available in South Africa through a section 21 application following discussion with the NICD. In a health care setting, PPE when managing suspected or confirmed cases should include a gown (preferably disposable), gloves, eye protection (goggles or a face shield that covers the front and sides of the face), and N95 mask. The number of staff working with such patients should be limited where possible to minimize exposure. Patients should be nursed in a single-person room, ideally with the door closed and a dedicated bathroom. Movement outside of the room should be limited as far as medically feasible and if movement is necessary, the patient should wear a mask and cover any exposed lesions with a sheet or gown.

It is important to remember that mpox is a notifiable disease. Details regarding notification processes can be found in the NICD documentation.

Laboratory testing for suspected cases

On presentation of a suspected case, the clinician should determine whether the signs and symptoms are compatible with mpox. Clinical and epidemiological features will assist in determining the need for testing. Infection control procedures should be implemented to ensure that exposure of health care workers, other patients and close contacts are minimized.

Lesion fluid and/or material (vesicle/pustule skin) is required for the diagnosis of mpox. Dacron or polyester flocked swabs with VTM or dry swabs may be used. Where possible, more than one lesion should be sampled, preferably from different locations on the body and/or different looking lesions. These samples should be collected by the clinician (using appropriate PPE) and accompanied by a fully completed NICD case investigation form for submission to the laboratory.

Throat swabs may be submitted as an additional sample but are not required. Please note that throat swabs will be processed as a separate sample and will therefore result in an additional PCR test being billed.

Samples must be double or triple packaged and reach the laboratory without delay. Samples must be kept cold during transport (ice packs may be used).

References

1. NICD. Guidance for the laboratory investigation of suspected cases of mpox in South Africa. March 2023.
2. NICD. MPOX PREPAREDNESS: An update for Physicians, Accident & Emergency Practitioners and Laboratorians. May 2024.
3. NICD. Mpox Frequently Asked Questions. May 2024.
4. WHO. Laboratory testing for the monkeypox virus. Interim guidance. 23 May 2022.
5. CDC. Monkeypox. https://www.cdc.gov/poxvirus/monkeypox/index.html
6. WHO. 2022-24 Mpox (Monkeypox) Outbreak: Global Trends. Available at https://worldhealthorg/shinyapps.io/mpx_global
7. NDOH. Department welcomes the first batch of mpox treatment as cases increase (media statement). Available at https://www.nicd.ac.za/wp-content/uploads/2024/06/Department-receives-mpox-treatment-1.pdf

PathCare

PRACTICE NO. 5200539

BARCODED STICKER AREA

Mpox REQUEST FORM

BARCODE STICKER

FOR URGENT RESULTS

Contact Person				
Please indicate	Tel	Fax	Cell	Email
Contact number				

* REFERRING DR.	1st Copy Dr & Code	3rd Copy Dr & Code	
	2nd Copy Dr & Code	Hospital Ward and Code	
* PATHCARE CODE	File No.		

PERSON RESPONSIBLE FOR PAYMENT OF ACCOUNT (* compulsory - please complete)

REQ. INFO

* Patient ID Passport nr		DOB DD MM YYYY	
* Patient Surname		* M F	
* Patient First Name		* Patient Title	
* Tel. (h) / cell		* Tel. (w)	
* E-mail			
* Patient Residential address			
* Address			
* City			
* Postal Code			
* Province			
* Collected by	* Date DD MM YYYY	* Time	
Priority	Location Code		
* Received by	* Date DD MM YYYY	* Time	
Births	Single ☐	Twins ☐ 1 2	Triplets ☐ 1 2 3

* Guarantor ID No.		* Title Mr Mrs Ms Dr Prof	
* Surname		* Initials	
* Postal Address			
* Tel. (h) / cell		* Tel. (w)	
* E-mail			
* Medical Aid			
* Medical Aid No.			

HOSPITAL STICKER

HOSPITAL STICKER

IMPORTANT

*** ICD 10 CODE**

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SPECIMEN INFORMATION AND TEST COUNT

URINE	HEPARIN	EDTA 4ml	EDTA 6ml	CITRATE	GEL	ACD	CLOTTED	FLUORIDE	OTHER - please specify	TEST COUNT

OTHER TESTS AND CODES

RELEVANT CLINICAL DATA AND PRESENT MEDICATION

LMP D D M M Y Y Y Y

FASTING YES NO

I certify that the above information is correct. I give specific consent for tests analysis and fully understand the implications of the test(s) and I have received adequate pre-test counselling. I hereby request and agree that all my pathology test results and accounts from Drs. Dietrich, Voigt, Mia & Partners ("PathCare") may be sent to my nominated email address and cellphone number, to my medical aid administrators, medical practitioner(s) and/or insurance company. I indemnify PathCare against action that may be brought by virtue of this request and I understand that it is entirely my responsibility to safeguard access to my email. I undertake to pay outstanding monies not covered by the medical aid.

SIGNATURE PATIENT CONSENT

Mpox PCR

H6044 ☐ Skin swab (required; see below for details)

H6044 ☐ Throat swab (optional; will result in an additional PCR billed)

Specimen requirements

1. Lesion fluid or material (vesicle/pustule skin) is required. Dacron or polyester flocked swabs with VTM or dry swabs may be used. Where possible, more than one lesion should be sampled, preferably from different locations on the body and/or different looking lesions.
2. Throat swabs may be submitted in addition, but are not required, and will be processed as a separate sample (therefore two PCR tests will be billed).
3. All specimens must be accompanied by a completed NICD case investigation form.

Transportation

Specimens must be double bagged for transportation to the laboratory.

Specimens must be kept cold during transport (ice packs may be used).

NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES
Division of the National Health Laboratory Service

Division of Public Health Surveillance and Response and
Centre for Emerging Zoonotic and Parasitic Diseases
(NICD) 24-hour hotline number: 0800 212 552
COMPILED: 2 SEPTEMBER 2022 UPDATED: 15 MARCH 2023

CASE INVESTIGATION FORM: MPOX

I. PATIENT DETAILS

Surname:		Name/s:				
Date of birth:	DD / MM / YYYY	Age:		Sex:	Male ☐	Female ☐
Contact Tel./Cell:	(000) 0000000	(000) 0000000		Occupation:		
Physical home address:						

II. ATTENDING HEALTHCARE WORKER AND HEALTHCARE FACILITY DETAILS

Name of clinician:		Contact Tel./Cell clinician:	(000) 0000000		
Healthcare facility name:		Location of healthcare facility:			
Hospital case nr.:		Date of admission:	DD / MM / YYYY	Ward:	

III. RISK FACTORS/ EXPOSURE HISTORY – during the 21 days prior to onset of symptoms

Close contact with suspected or confirmed case of monkeypox* Yes ☐ No ☐ Unknown ☐

History of international travel to country reporting monkeypox in 21 days prior to onset of illness Yes ☐ No ☐ Unknown ☐

None of the above Yes ☐ No ☐ Unknown ☐

IV. CLINICAL INFORMATION

A. Date of onset of illness: DD / MM / YYYY

B. Clinical features (Tick appropriate box: yes, no, unknown)

Fever	Yes ☐	No ☐	Unknown ☐
If yes, specify temperature	_____ °C		
Lymphadenopathy	Yes ☐	No ☐	Unknown ☐
Headache	Yes ☐	No ☐	Unknown ☐
Muscle pain	Yes ☐	No ☐	Unknown ☐
Fatigue	Yes ☐	No ☐	Unknown ☐
Sore throat	Yes ☐	No ☐	Unknown ☐
Nausea/vomiting	Yes ☐	No ☐	Unknown ☐
Cough	Yes ☐	No ☐	Unknown
☐ Chills/sweats	Yes ☐	No ☐	Unknown ☐
Light sensitivity	Yes ☐	No ☐	Unknown ☐

Rash Yes ☐ No ☐ Unknown ☐

Date of onset of rash DD / MM / YYYY

Distribution of rash:

Face ☐ Oral ☐ Arms☐ All over Trunk

☐ Genitals ☐ Legs ☐ body ☐Thorax

☐ Soles of hands ☐ Soles of feet ☐Type

of rash: Macular Yes ☐ No ☐

Maculopapular Yes ☐ No ☐

Vesicular Yes ☐ No ☐

Petechial Yes ☐ No ☐

Vasculitis Yes ☐ No ☐

Other, specify:

If female, pregnant: Yes ☐ No ☐ Unknown ☐ n/a (male) ☐

V. PAST MEDICAL AND TRAVEL HISTORY

Underlying illness** Yes ☐ No ☐ Unknown ☐

If yes, give details:

Country/ies visited:	Location/s visited within country:	Date of arrival:	Date departure:
		DD / MM / YYYY	DD / MM / YYYY

Activities at the location/purpose of travel:

Footnotes: * Contact tracing should be initiated according to protocol ** Any immunosuppressing condition including active HIV disease.

SUBMIT COMPLETED FORM WITH SPECIMEN TO: Special Viral Pathogens Lab, National Institute for Communicable Diseases, National Health Laboratory Service, 1 Modderfontein Road, Sandringham 2192, South Africa

EMAIL COMPLETED FORM TO: jacquelinew@nicd.ac.za / naazneenm@nicd.ac.za / outbreak@nicd.ac.za