



**Health Protection Agency  
Ministry of Health**

# **Surveillance guideline for mpox**

**(HPA-SUR-U000212-GG-2024-2)**

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**Compiled by the  
Public Health Surveillance Section  
Public Health Preparedness Surveillance and Epidemiology Division  
Health Protection Agency  
Ministry of Health**

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## Introduction

The purpose of this guideline is to define a systematic method of collecting data for the purpose of surveillance of mpox in Maldives. The goal is to rapidly identify cases and clusters of infections and the sources of infections as soon as possible. This guide serves as a guiding document for the surveillance, case investigation and contact tracing of mpox cases.

This document is will be updated regularly reflecting the changing nature of disease epidemiology and accompanying diagnostic and surveillance methods.

## Case Definition

### Suspected case

A person of any age presenting with an unexplained acute rash

**AND**

one or more of the following signs or symptoms, since 15 March 2022:

- Headache
- Acute onset of fever ( $>38.5^{\circ}\text{C}$ ),
- Myalgia
- Back pain
- Asthenia
- Lymphadenopathy

**AND**

for which the following common causes of acute rash do not explain the clinical picture: varicella zoster, herpes zoster, measles, 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.

### Probable case

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 care 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 monkeypox in the 21 days before symptom onset
- reported travel history to a monkeypox endemic country<sup>1</sup> in the 21 days before symptom onset
- has had multiple or anonymous sexual partners in the 21 days before symptom onset
- Is hospitalized due to the illness

## Confirmed case

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

***Please note that the suspected case should be isolated as mentioned above, before any further actions, including reporting, are done.***

## Surveillance Strategy

- a. Use Standard Case Definitions by all health facilities (Inhabited islands and resorts) and at Points of Entry
- b. Even one case of Mpox is to be considered as an outbreak. A detailed investigation needs to be initiated through
- c. Report any suspected case immediately to the Surveillance unit of HPA
- d. Collect and transport the samples as per the guidelines to IGMH lab along with case reporting form
- e. Initiate contact tracing
- f. Reporting
  - a. Report using the [Annex 1 Mpox Investigation Form](#) (HPA-SUR-U000211-F-2024-02). Please also inform immediately by phone to 7791861 (Aminath Aroosha, Director Surveillance, HPA), including during unofficial hours and public holidays (leave a message with your name, institution and mention you are reporting a mpox case if phone not immediately answered). Fill ALL the case details in the form, including travel history (foreign and local) and clinical details with symptoms, onset of symptoms, and details of any lab investigations done. Sexual history should also be taken. Once case details are obtained, HPA will guide further on patient transfer, sample collection and contact tracing. If you have any queries, please email to Dr. Fathimath Nazla Rafeeg, Head of Communicable Disease Control, HPA at [nazla@health.gov.mv](mailto:nazla@health.gov.mv)

## Sample Collection

Clinical samples to be collected from the cases as per the criteria mentioned below

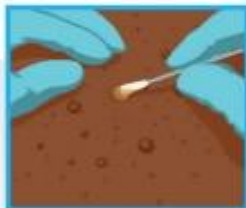
- **swabs of lesion surface and/or exudate**, roofs from more than one lesion, or lesion crusts.
  - Swab the lesion vigorously, to ensure adequate viral DNA is collected viral transport media (VTM) or Universal transport media (UTM)
- Lesions, crusts and vesicular fluids should not be mixed in the same tube.
- Oropharyngeal swab placed in VTM or UTM



Sanitize lesions



Remove  
lesion roof



Brush  
lesion base



Put swab in  
container



Put roof in  
container

## Case Investigation

Close physical contact, including sexual contact, with a person who has or may have mpox is the most significant risk factor for MPXV infection. If mpox is suspected, the investigation should consist of:

- clinical examination of the patient, using appropriate infection prevention and control (IPC) measures as reported in the specific guidance.
- enquiring about possible sources of exposure and the presence of similar illnesses among the patient's contacts or in their community prior to diagnosis of mpox, to identify the source (backward contact tracing).
- Identifying all possible contacts from the time of exposure or, if unknown, from the beginning of the infectious period, until all lesions are healed, to put in place control measures and reduce onward transmission (forward contact tracing).
- safe collection and dispatch of specimens for mpox diagnostic testing and laboratory examination.

Samples taken from persons with suspected mpox should be safely handled by trained staff working in suitably equipped laboratories. Laboratory should be informed, in advance, of samples to be submitted from persons with suspected or confirmed mpox, so that they can minimise risk to laboratory workers and, where appropriate, safely perform laboratory tests that are essential for clinical care.

Any patient with suspected mpox should be isolated during the presumed and known infectious periods, that is during the prodromal and rash stages of the illness, respectively

## Contact tracing

### Definition of a contact

A contact is defined as a person who has been exposed to a person with suspected (clinically compatible), probable or confirmed mpox during the infectious period and who has one or more of the following exposures:

- direct skin-to-skin physical contact (such as touching, hugging, kissing, intimate or sexual contact)
- contact with contaminated materials such as clothing or bedding, including material dislodged from bedding or surfaces during handling of laundry or cleaning of contaminated rooms
- prolonged face-to-face respiratory exposure in close proximity
- respiratory exposure (i.e., possible inhalation of) or eye mucosal exposure to lesion material (e.g., scabs/crusts) from an infected person
- The above also apply for health workers potentially exposed in the absence of proper use of appropriate personal protective equipment (PPE) *ie. without fluid resistant disposable gown, mask, gloves, and eye protection*

### Other Types of Contacts

Direct exposure of skin or mucous membranes to skin or respiratory secretions of a person with confirmed, probable or suspected Mpox, their body fluids (e.g., lesion vesicular or pustular fluid) or potentially infectious material (including clothing or bedding) if not wearing appropriate PPE. This

includes:

- inhalation of droplets or dust from cleaning contaminated rooms
- mucosal exposure due to splashes from body fluids
- physical contact with someone who has Mpox, including direct contact during sexual activities. This includes face-to-face, skin-to-skin or mouth-to-skin contact or exposure to body fluids or contaminated materials or objects (fomites)
- normally sharing a residence (permanently or occasionally) during the infectious period with a person who has been diagnosed with Mpox
- a penetrating sharps injury from a contaminated device or through contaminated gloves.
- no direct contact but close proximity in the same room or indoor physical space as a symptomatic Mpox patient, if not wearing appropriate PPE.

### Tracing period

The infectious period for mpox is the period beginning with the onset of the index case's first symptoms), or if relevant up to two days before the onset, and ending when their skin lesions have crusted, the scabs have fallen off and a fresh layer of skin has formed underneath. In the absence of symptoms, a person with a positive PCR test for mpox, for example from an oropharyngeal or anal swab, should also be considered a confirmed case and infectious; contact-tracing initiated as outlined here.

Tracing should start from infectious period i.e. from onset of symptoms till full isolation. Those who handled laundry or room cleaning will have the last contact date as date they handled laundry or room last without using full precautions.

### Details of contacts to be collected

Name	ID/PP number	Age	Sex	Nationality	Tourist or staff	Type of contact	Date of last contact	Comorbidities	Occupation

### Monitoring of contacts

Contacts should be monitored, or should self-monitor, daily for the onset of signs or symptoms for a period of 21 days from the last contact with the probable or confirmed case or their contaminated materials (or up to two days before the onset of symptoms if feasible and appropriate). Signs and symptoms of concern include headache, fever, chills, sore throat, myalgia, malaise, fatigue, rash, and

lymphadenopathy. Contacts should monitor their temperature twice daily irrespective of symptoms.

During the 21-day monitoring period, contacts should regularly practice hand hygiene and respiratory etiquette. As a precautionary measure, asymptomatic contacts should not donate blood, cells, tissue, organs, breast milk, or semen while they are under symptom surveillance. Contacts should also avoid physical contact with persons who are immunocompromised or pregnant. As a precautionary measure, contact with children should be minimized during the monitoring period, if possible, while keeping the overall health and wellbeing of children as the primary consideration, and avoided if any symptoms appear. Contact with animals should be avoided, including pets where feasible.

Asymptomatic contacts who adequately and regularly monitor their status can continue routine daily activities such as going to work and attending school (i.e., no quarantine is necessary). Although evidence on pre-symptomatic or asymptomatic transmission is still emerging and not conclusive, known contacts of confirmed or if not tested, clinically compatible, cases are advised to avoid sexual contact with others during Surveillance, case investigation and contact tracing for mpox (monkeypox): Interim guidance - 15 - the 21-day monitoring period, irrespective of their symptoms. This is a precautionary measure to minimise the risk of onwards transmission from contacts.





## mpox Investigation Form

Health Protection Agency

Male', Republic of Maldives

HPA-SUR-U000211-F-2024-02

## SECTION 1: PATIENT IDENTITY

1. Full Name \_\_\_\_\_
2. Date of birth \_\_\_\_/\_\_\_\_/\_\_\_\_
3. Age in days (neonate) \_\_\_\_ Age in months (Infant) \_\_\_\_ Age in years (others) \_\_\_\_
4. Gender ☐ M ☐ F
5. Permanent Address \_\_\_\_\_ Atoll \_\_\_\_\_ Island \_\_\_\_\_
6. Current Address \_\_\_\_\_ Atoll \_\_\_\_\_ Island \_\_\_\_\_
7. Nationality \_\_\_\_\_
8. Occupation of the patient \_\_\_\_\_

## SECTION 2: CLINICAL HISTORY / PRESENTATION

1. Date of onset of symptoms: \_\_\_\_/\_\_\_\_/\_\_\_\_
2. Address of Onset \_\_\_\_\_ Atoll \_\_\_\_\_ Island \_\_\_\_\_
  - a. Did the patient travel anytime in the three weeks before becoming ill? ☐ YES ☐ NO
  - b. If yes, indicate the places (1) \_\_\_\_\_ (2) \_\_\_\_\_  
(3) \_\_\_\_\_ Others: \_\_\_\_\_
  - c. Did the patient travel during illness? ☐ YES ☐ NO
  - d. If Yes, indicate the places (1) \_\_\_\_\_ (2) \_\_\_\_\_  
(3) \_\_\_\_\_ Others: \_\_\_\_\_
3. Does the patient have a cutaneous eruption/rash? ☐ Yes ☐ No
  - a. If yes, date of onset for the rash: \_\_\_\_/\_\_\_\_/\_\_\_\_
4. Did the patient have fever? ☐ YES ☐ NO
  - a. If yes, date of onset for the fever: \_\_\_\_/\_\_\_\_/\_\_\_\_ Grade \_\_\_\_ °C or \_\_\_\_ °F
5. At Present,
  - a. Are the lesions in the same state of development on the body? ☐ YES ☐ NO
  - b. Are all of the lesions the same size? ☐ YES ☐ NO
  - c. Are the lesions deep and profound? ☐ YES ☐ NO
6. Does or did the patient have any of the following symptoms (check all that apply)
 

Headache	<input type="checkbox"/> Yes <input type="checkbox"/> No	Lesions that itch	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cough	<input type="checkbox"/> Yes <input type="checkbox"/> No	Muscle pain (myalgia)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lymphadenopathy, inguinal	<input type="checkbox"/> Yes <input type="checkbox"/> No	Fatigue	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lymphadenopathy, axillary	<input type="checkbox"/> Yes <input type="checkbox"/> No	Conjunctivitis	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lymphadenopathy, cervical	<input type="checkbox"/> Yes <input type="checkbox"/> No	Sensitivity to light	<input type="checkbox"/> Yes <input type="checkbox"/> No
Chills or sweats	<input type="checkbox"/> Yes <input type="checkbox"/> No	Is the patient bedridden?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Sore throat when swallowing	<input type="checkbox"/> Yes <input type="checkbox"/> No	Oral ulcers	<input type="checkbox"/> Yes <input type="checkbox"/> No

Vomiting/nausea

☐ Yes ☐ No

7. If female, Pregnancy status:

☐ Pregnant ☐ Not pregnant

8. HIV status:

☐ Negative ☐ Positive

☐ Unknown

9. Any other known medical condition (Please state)

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10. Localization of the lesions

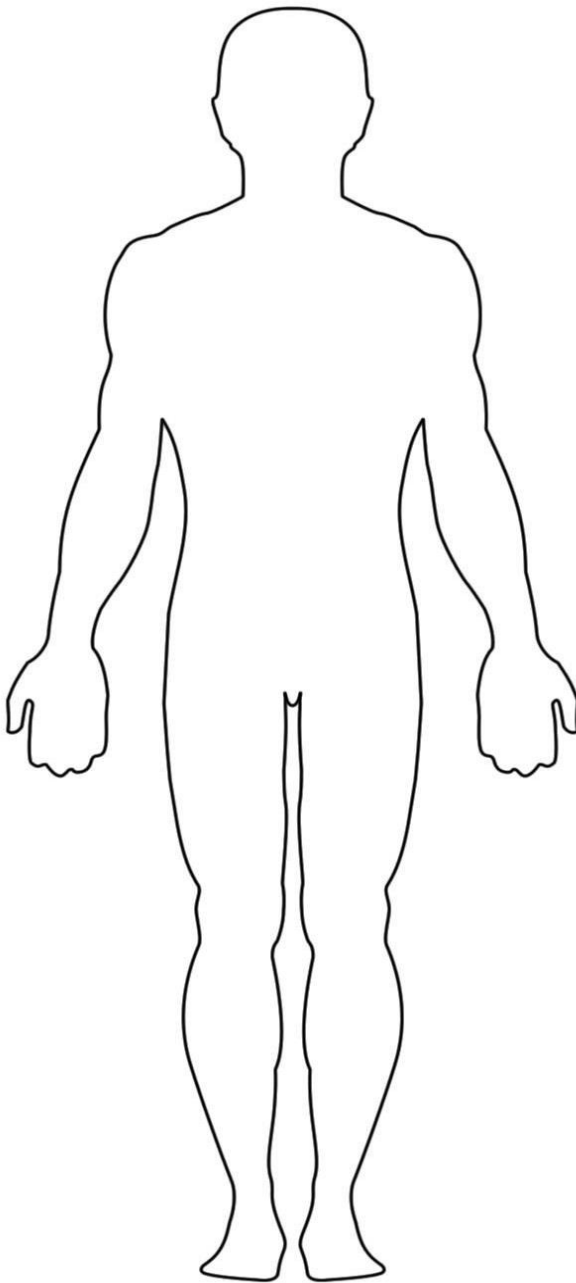
☐ Face

☐ Eyes

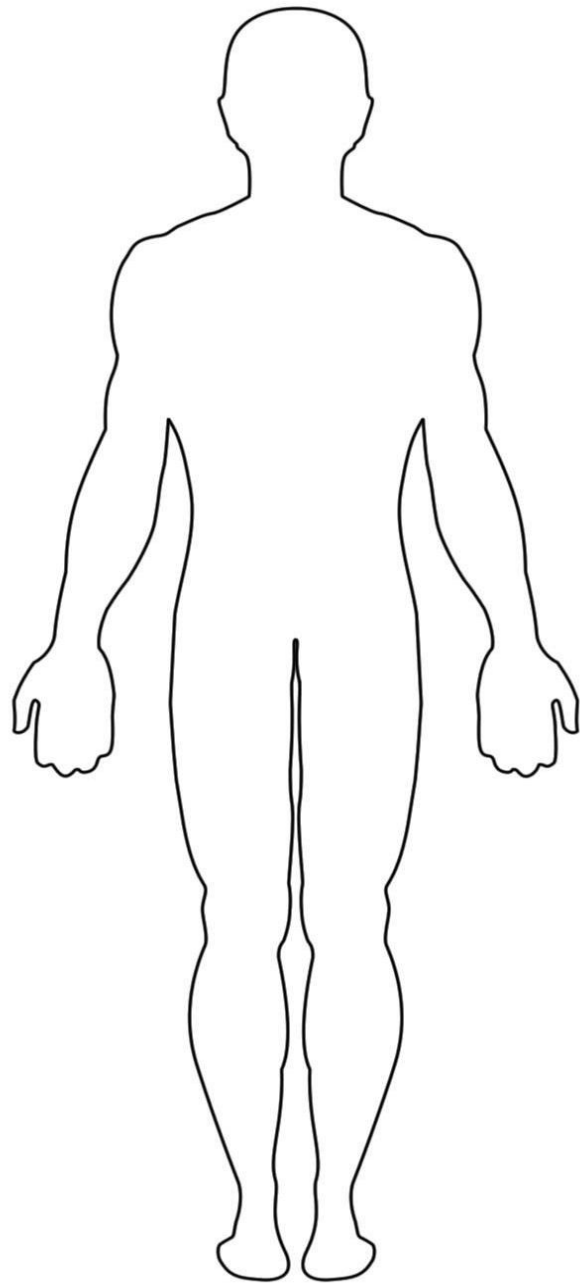
☐ Legs

☐ Soles of the feet

FRONT



BACK



\* Send Photos of the lesions when sending this form

- |                                   |                                      |                                  |   |
|-----------------------------------|--------------------------------------|----------------------------------|---|
| <input type="checkbox"/> Perianal | <input type="checkbox"/> Back        | <input type="checkbox"/> Chest   | <input type="checkbox"/> Palms of the hands |
| <input type="checkbox"/> Arms     | <input type="checkbox"/> Abdomen     | <input type="checkbox"/> Genital | <input type="checkbox"/> All over the body  |
| <input type="checkbox"/> Neck     | <input type="checkbox"/> Other _____ |                                  |   |

11. Did the patient develop ulcers? ☐ YES ☐ NO

#### SECTION 4: EXPOSURE

1. During the three weeks preceding the onset of symptoms, did the patient have contact with one or more persons who had similar symptoms? ☐ Yes ☐ No
  - a. If yes, respond to the following questions concerning these additional ill people (indicate all of the ill people).
    - i. Full name \_\_\_\_\_
    - ii. Relationship with the patient \_\_\_\_\_
    - iii. First date of contact with the ill person \_\_\_\_/\_\_\_\_/\_\_\_\_
2. Did the patient touch a domestic or wild animal during the three weeks preceding symptom onset? ☐ Yes ☐ No
  - a. If Yes, what kind of animal \_\_\_\_\_
  - b. Date of contact \_\_\_\_/\_\_\_\_/\_\_\_\_
  - c. Type of contact (check all that apply)
 

<input type="checkbox"/> Rodents alive in the house	<input type="checkbox"/> Dead animal found in the forest
<input type="checkbox"/> Alive animal living in the forest	<input type="checkbox"/> Animal bought for meat Others: _____

#### SECTION 5: LABORATORY

1. Was a specimen collected? Yes ☐ No ☐
  - a. If Yes, date and Time \_\_\_\_/\_\_\_\_/\_\_\_\_ - \_\_\_\_:\_\_\_\_
  - b. Type:
 

<input type="checkbox"/> Nasal Swab	<input type="checkbox"/> Throat Swab	<input type="checkbox"/> Swabs from Pustule
<input type="checkbox"/> Crusts / scabs	<input type="checkbox"/> Swabs of vesicular lesions	<input type="checkbox"/> Swabs of Maculopapular lesions
<input type="checkbox"/> Blood	<input type="checkbox"/> Others _____	

#### SECTION 6: UPDATE ON THE HOSPITAL INFORMATION

2. Was the patient sent to a hospital? ☐ Yes ☐ No
3. Was the patient admitted in the isolation ward? ☐ Yes ☐ No
  - a. If Yes, name of hospital \_\_\_\_\_ Hospitalization date \_\_\_\_/\_\_\_\_/\_\_\_\_
  - b. Date of discharge \_\_\_\_/\_\_\_\_/\_\_\_\_ OR Date of death \_\_\_\_/\_\_\_\_/\_\_\_\_

#### SECTION 7: Notified By

Reporting Facility \_\_\_\_\_ Date of Reporting \_\_\_\_/\_\_\_\_/\_\_\_\_

Name: \_\_\_\_\_ Designation: \_\_\_\_\_ Signature: \_\_\_\_\_