

**Please note: On November 28, 2022, the World Health Organization began using 'mpox' as the preferred term for monkeypox disease. Our content reflects this change.**

## Case Definition

### Confirmed Case:

A person who 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.

### Suspect Case:

A person of any age who presents with one or more of the following:

1. An unexplained<sup>1</sup> acute skin rash or lesion(s)<sup>2</sup> AND has at least one of the following signs or symptoms:
  - Headache
  - Acute onset of fever (>38.5°C),
  - Lymphadenopathy (swollen lymph nodes)
  - Myalgia (muscle and body aches)
  - Back pain
  - Prostration/asthenia (profound weakness)
  - Fatigue
  - Pharyngitis (sore throat)
  - Proctitis (rectal inflammation/pain)
2. An unexplained<sup>1</sup> acute genital, perianal, anorectal and/or perioral, oral, or oropharyngeal rash or lesion(s)<sup>2</sup>

### Probable Case:

A person of any age who meets the suspect case definition,  
**AND**

Has one or more of the following:

1. Has an epidemiological link to a probable or confirmed mpox (monkeypox) case in the 21 days before symptom onset.
2. Has an epidemiological link to a location/event where transmission of mpox is suspected or known to have occurred in the 21 days before symptom onset.

An epidemiological link can be:

- Face-to-face exposure, including health workers without appropriate personal protective equipment (PPE).

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<sup>1</sup> Common infectious causes of acute rash or lesion(s) can include Varicella zoster, herpes zoster, measles, herpes simplex, syphilis, chancroid, lymphogranuloma venereum, hand-foot-and-mouth disease.

<sup>2</sup> Acute rash or lesion(s): Mpox illness includes a rash or lesion(s) that can affect the mucous membranes in the oropharynx and anogenital area. The rash or lesion(s) can also affect the face, trunk, limbs, and palms of hands and soles of the feet. The rash or lesion(s) can last for 2 to 4 weeks and may appear as singular or multiple macules, pustules, vesicles, crusted lesions or ulcers. Lesions in varying stages can be present simultaneously. Anorectal lesions can manifest as anorectal inflammation (proctitis), pain and/or bleeding.

N.B. It is not necessary to obtain negative laboratory results for listed infectious causes of rash or lesion(s) in order to classify a case as suspected.

- Direct physical contact, including sexual contact; or contact with contaminated materials such as clothing or bedding.

## Laboratory Comments

### Confirmatory Laboratory Evidence:

To confirm the diagnosis of a mpox virus infection, one or more of the following diagnostic markers must be positive:

- presence of mpox virus DNA by PCR
- Isolation of mpox virus from viral culture

## Clinical Evidence

The mpox rash can be difficult to distinguish from a number of other infectious and non-infectious rashes.

A possible distinguishing feature of mpox is the presence of localized or generalized lymphadenopathy.

Smallpox can be similar to mpox in its presentation, but since its global eradication in 1980, it is not considered in the differential diagnosis unless there has been a serious laboratory breach.

Other infections to be considered in the differential diagnosis can include:

- Varicella zoster (chickenpox, shingles)
- herpes simplex
- lymphogranuloma venereum
- gonorrhea
- hand-foot-mouth disease
- molluscum contagiosum
- syphilis
- human papillomavirus infection
- chancroid
- orf (rare)

Co-infections of mpox with sexually transmissible and blood-borne infections (STBBIs) have been frequently reported during the 2022 outbreak, therefore clinicians should be vigilant and consider testing for HIV, syphilis, gonorrhea and other STBBIs in anyone suspected to have acquired mpox through sexual contact.

Clinical presentation of mpox continues to emerge in the literature.

- Belgium researchers found evidence that the virus itself does not differ between patients who present with symptoms versus patients who do not have symptoms (1).
- A German study, conducted in 42 health centres and clinics from 17 German cities, reported that all 546 mpox infections were in MSM, and almost half were living with HIV infection. However, the study noted that there were no apparent differences in clinical presentation between MSM with or without HIV infection (2).

## Reporting Requirements

Health Care Practitioners should report any suspect mpox cases to local Public Health and should contact the Infectious Disease physician on-call, as well as the Medical Microbiologist on-call if specimens will be submitted.

Local Public Health should report confirmed and probable cases **immediately** to DHW Surveillance via Panorama and the Surveillance Inbox.

- Upload the additional surveillance form into Panorama when completed or as requested to DHW Surveillance Team.

## Additional Forms

PHAC Case Report Form.

**Word Doc** <https://www.canada.ca/content/dam/phac-aspc/documents/services/diseases/monkeypox/health-professionals/monkeypox-case-report-form.docx>

**PDF File** <https://www.canada.ca/content/dam/phac-aspc/documents/services/diseases/monkeypox/health-professionals/monkeypox-case-report-form.pdf>

## References

1. De Baetselier, Irith and Van Dijck, Christophe and Kenyon, Chris and Coppens, Jasmine and Van den Bossche, Dorien and Smet, Hilde and Vanroye, Fien and Liesenborghs, Laurens and Ramadan, Kadrie and Platteau, Tom and Van Looveren, Karin and Baeyens, Jolien and Van Hoyweghen, Cindy and Mangelschots, Marjan and Coppens, Sandra and Heyndrickx, Leo and Michiels, Johan and De Block, Tessa and Manoharan-Basil, Sheeba and Brosius, Isabel and Ariën, Kevin K. and Van Griensven, Johan and Laga, Marie and Vanhamel, Jef and Vuylsteke, Bea and Bottieau, Emmanuel and Soentjens, Patrick and Florence, Eric and Vercauteren, Koen and Van Esbroeck, Marjan, Asymptomatic Monkeypox Virus Infections Among Male Sexual Health Clinic Attendees in Belgium. Available at SSRN: <https://ssrn.com/abstract=4142074> or <http://dx.doi.org/10.2139/ssrn.4142074>
2. Hoffmann C, Jessen H, Wyen C, Grunwald S, Noe S, Teichmann J, Krauss AS, Kolarikal H, Scholten S, Schuler C, Bickel M, Roll C, Kreckel P, Köppe S, Straub M, Klausen G, Lenz J, Esser S, Jensen B, Rausch M, Unger S, Pauli R, Härter G, Müller M, Masuhr A, Schäfer G, Seybold U, Schellberg S, Schneider J, Monin MB, Wolf E, Spinner CD, Boesecke C. Clinical characteristics of monkeypox virus infections among men with and without HIV: A large outbreak cohort in Germany. *HIV Med.* 2023 Apr;24(4):389-397. doi: 10.1111/hiv.13378. Epub 2022 Sep 4. PMID: 36059149