

## Mpox (monkeypox) – clinical update

**22 December 2022**

This update is based on current information and the situation may quickly change within New Zealand. Further information and advice will be provided when known.

### Current situation

#### Mpox in New Zealand

- Mpox is a zoonotic virus (transmission occurring animal-to-human) which is endemic in parts of Central and West Africa. Outbreaks outside the African continent occasionally occur but are often small due to the low transmissibility of the virus.
- On 7 May 2022 a confirmed case of mpox was notified by the United Kingdom. This is now a global outbreak with more than 100,000 cases confirmed or suspected in more than 100 countries outside of where mpox is usually endemic. Most infections are among men who have sex with men (MSM), and most have had recent international travel but not to East or West Africa.
- All sequenced PCR samples are identified with the less severe Clade II of the virus.
- The first confirmed case of mpox was reported in New Zealand on 9 July 2022. As of 20 October 2022, there are 27 confirmed cases in total. Of these, 9 are acquired overseas and 18 acquired locally through community transmission,

#### Risk assessment

- Overall, there is a low to moderate public health risk to New Zealand from mpox.
- The likelihood of transmission of mpox in New Zealand is as follows:
  - the risk of transmission among men who have sex with men (MSM), especially those with multiple sexual partners is considered high
  - the likelihood of widespread community transmission is very low
  - the risk of sustained transmission is low with adequate contact tracing measures in place.
- The level of risk is being reviewed regularly as new information emerges internationally.

### Mpox transmission and symptoms

- Since 9 June 2022 mpox has been a notifiable disease in New Zealand on Schedule 1 of the Health Act 1956. This enables a prompt response to any mpox cases to minimise the risk of community transmission. Health practitioners must notify their Medical Officer of Health of suspected cases or confirmed cases.

#### Transmission

- Mpox is generally transmitted through:
  - close physical, intimate or sexual contact with someone who has mpox, via skin-to-skin contact
  - direct contact with the skin rashes, lesions or scabs, or bodily fluids (eg, saliva) of someone with mpox
  - touching the clothing, bedding or towels used by someone with an MPX rash.
- Mpox can also be passed on through breathing in droplets that have been exhaled by someone who has the virus. As this requires prolonged contact and for people to be

very close together, the risk of the virus spreading in this way is very low. It is uncertain whether mpox is also spread through other bodily fluids (eg, semen).

- Typically, a person with mpox is infectious and can pass the virus on to others from when they first develop symptoms until their lesions or scabs crust, dry or fall off. The infectious period will normally last for around two to four weeks.

### Symptoms

- Mpox classically presents with a prodrome with fever, aches, and lymphadenopathy, followed by a characteristic centrifugal rash with the lesions first appearing on the face and moving to distal extremities. The rash also progresses through four stages simultaneously from macules to papules, vesicles then pustules, followed by scabbing.
- However, in the 2022 outbreak, presentations of monkeypox have been atypical:
  - The rash/lesions may be localised to ano-genital skin, or oropharynx or rectal mucosa (proctitis)
  - There may be a solitary lesion
  - The rash/lesions may not necessarily progress through four stages as described above
  - Systemic symptoms may be absent or have developed after the onset of rash.

## Mpox case definition

### Clinical criteria

A clinically compatible illness characterised by the presence of acute unexplained<sup>1</sup> skin and/or mucosal lesions or proctitis (for example anorectal pain, bleeding)

AND

### Epidemiological criteria

At least one of the following:

- exposure<sup>2</sup> to a confirmed or probable case in the 21 days before symptom onset
- is a priority group for testing. At this time priority groups for testing include the following:
  - Persons who had multiple<sup>3</sup> or anonymous sexual partners in the 21 days before symptom onset
  - Gay, bisexual or other men who have sex with men (MSM).
- history of travel to a country where mpox is endemic<sup>4</sup> in the 21 days before symptom onset

### Laboratory test for diagnosis

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<sup>1</sup> More common causes of acute rashes with similar appearances should be considered and excluded where possible; varicella zoster, herpes simplex, syphilis, molluscum contagiosum.

<sup>2</sup> Exposure: direct physical contact with skin or skin lesions, including sexual contact; or contact with contaminated materials such as clothing, bedding or utensils; or prolonged face-to-face contact, including health care workers without appropriate PPE.

<sup>3</sup> Two or more

<sup>4</sup> Per WHO

Laboratory definitive evidence for a confirmed case requires mpox virus detection by NAAT.

Testing should be limited only to patients who meet the clinical and epidemiological criteria. Laboratory confirmation requires the detection of mpox virus nucleic acid by PCR from an appropriate clinical sample. Local laboratories are to test for Varicella (chickenpox, VZV), Herpes simplex (HSV), +/- syphilis if there is capability, prior to referral to a reference laboratory for mpox testing.

Potential cases are most likely to present to sexual health, primary care or emergency departments, where the treating physician will collect samples. Note that patients should not present to a community collection centre for sampling. Clinicians are advised to follow the most up to date testing advice which can be found on the **New Zealand Microbiology Network website**.

### Case classification

- **Under investigation:** A person that has been reported to a Medical Officer of Health but where information is not yet available to classify them as confirmed, probable or not a case.
- **Confirmed:** A person with laboratory definitive evidence.
- **Probable:** A person who meets the clinical and epidemiological criteria and laboratory confirmation is not possible
- **Not a case:** A person that has been investigated and subsequently found not to meet the case definition.

## Managing mpox

**Prepare** by looking look out for signs and symptoms consistent with mpox particularly in men who have sex with men and their sexual partners.

**Inform** your local Medical Officer of Health<sup>5</sup> and/or clinical microbiologist depending on your local HealthPathway on suspicion of a mpox case, prior to the collection of any samples.

**Test** cases who meet the clinical AND epidemiological criteria.

### Infection prevention and use of personal protective equipment

In addition to Standard Precautions, Contact and Droplet Precautions should be adhered to for physical examination and collecting samples. This includes the use of eye protection, fluid resistant level II R medical mask, fluid repellent gown and gloves. Upgrade mask to an N2/P95 when undertaking procedures involving the oropharynx (oropharyngeal samples) or handling used contaminated linen, clothing, or towels. A face covering is sufficient for preliminary clinical assessment.

**Advise** probable cases to isolate and avoid close contact (including kissing or sexual contact) with others while waiting test results. It is important they are do not share bedding or clothing with others while symptomatic. Anyone who has been tested for mpox must remain in isolation while awaiting their test result.

**Manage** the case with regular check-ins to monitor symptoms. Probable and confirmed cases will need to be actively managed by the National Public Health Service until their lesions are fully healed, scabs have fallen off and a complete layer of skin has formed underneath.

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<sup>5</sup> <https://www.health.govt.nz/new-zealand-health-system/key-health-sector-organisations-and-people/public-health-units/publichealth-unit-contacts>

Probable or confirmed cases should avoid close direct contact with animals, including domestic animals (such as cats and dogs), livestock, and other captive animals, as well as wildlife. People should be particularly vigilant around animals known to be susceptible, such as rodents and non-human primates.

Ensure that all waste, including medical waste, is disposed of in a safe manner and that it is not accessible to rodents and other scavenger animals.

Contact tracing of cases and close contacts will be undertaken by the local Medical Officer of Health or their delegate in consultation with the case, and the treating physician or sexual health clinic.

## Mpox Contacts

No mpox contacts are required to quarantine. If symptoms develop, they must isolate.

### Actively Monitored Close Contacts

Actively monitored close contacts are those who have had one or more of the following exposures during their infectious period:

- Direct physical contact with skin or mucous membranes of a case. (i.e., skin to skin, skin to mucous membranes, mucous membrane to mucous membrane).
- Direct contact with potentially contaminated materials and not wearing the appropriate PPE (bed linens healthcare equipment), crusts from lesions or with bodily fluids from a case
- **If a P2/N95 particulate respirator/eye protection has not been worn:** Presence in an enclosed room within 1 m of a case during aerosol generating procedures
- Sharps injuries (including to cleaning or laboratory staff)

Actively monitored close contacts undergo symptom monitoring for 21 days since last contact with a confirmed or probable case. If any symptoms develop, they will need to isolate. For 21 days following their last exposure to the case, contacts are directed to:

- Wear a mask when around others
- If travelling outside the region/country, to advise public health so their management can be transferred
- Advise public health if they work in healthcare
- Avoid high-risk activities including sexual activity, kissing, and other skin-to-skin contact with others

### Self-monitoring Close Contacts

Self-monitoring close contacts are those who have had one or more of the following exposures during their infectious period:

- Indirect contact in an enclosed poorly ventilated indoor space within 1 meter of a case for more than 3 hours
- People sitting either side of a case on an airplane
- Household contacts who have not had any direct physical contact but have spent more than three hours with a case.
- Spillage or leakage of laboratory specimen onto intact skin

Options for post exposure vaccine prophylaxis for both types of close contacts are being explored for when vaccine becomes available.

Treatment advice can be provided by your local Infectious Disease and/or Sexual Health Physicians. The Ministry of Health Therapeutic Technical Advisory Group has developed advice around use of vaccines or antivirals for cases and close contacts.

### **More information**

For more information, including updates on overseas case numbers and investigations, please refer to:

- Ministry of Health: <https://www.health.govt.nz/our-work/diseases-and-conditions/monkeypox>
- Mpox photos and dermatologist advice: <https://dermnetnz.org/topics/monkeypox>
- WHO: <https://www.who.int/emergencies/emergency-events/item/2022-e000121>
- UK: <https://www.gov.uk/government/news/monkeypox-cases-confirmed-in-england-latestupdates>
- ECDC: <https://www.ecdc.europa.eu/en/news-events>
- CDC: <https://www.cdc.gov/poxvirus/monkeypox/outbreak/us-outbreaks.html>
- WOH: <https://www.woah.org/en/disease/monkeypox/>