

Mpox (monkeypox)– infection prevention and control interim guidance for healthcare providers and health settings

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About this guidance

This document outlines the infection prevention and control (IPC) procedures for healthcare workers including primary and community care, acute care, sexual health clinics to provide a safe workplace for people, patients, and staff in healthcare settings that are receiving, assessing, and caring for patients suspected or confirmed to have mpox infection or patients who during risk assessment are identified as being at high risk of mpox infection.

This is a living document and will be updated as new or updated evidence emerges and in response to the level or risk of transmission in New Zealand.

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1. Introduction

This guidance aims to provide interim guidance for health practitioners who are assessing, receiving or caring for people with suspected or confirmed mpox. Some aspects of this guidance will need to be operationalised locally and in relation to each healthcare setting, however, the underlying principles of IPC should be adhered to.

Planning and implementation strategies to prevent and control mpox should ensure;

- current Ministry of Health and relevant healthcare care guidance is readily available and accessible in relevant areas
- early case recognition, containment, assessment, and reporting of cases occurs
- IPC control measures, including hand hygiene, appropriate use of personal protective equipment (PPE), patient placement, environmental cleaning and management of infectious laundry and waste are in place
- Keep up-to-date with information at the following links
 - [Te Whatu Ora/Health New Zealand](#)
 - [Communicable Diseases Control Manual](#)
 - [New Zealand Microbiology Network](#)

2. Key IPC recommendations

Transmission of mpox occurs mainly through contact with lesions, body fluids and respiratory secretions and infectious materials. It is unclear of the extent of transmission via the respiratory route therefore until there is more evidence, as a precautionary approach higher levels of transmission based precautions may be required.

- Screen and triage people who present with a rash and fever according to the national case definition
- Isolate infectious people from others.
- Place hospitalised confirmed mpox cases in isolation in a either a negative pressure room (if available) or a single room with own en-suite bathroom. Ensure the door is kept closed.
- Standard, contact and droplet precautions are the minimum set of precautions required. However, due to risk of transmission via the respiratory route with prolonged exposure, and procedures that may produce aerosols, airborne precautions should also be implemented.
- Practice and adhere to [5 moments of hand hygiene](#), either washing your hands with soap and water and drying thoroughly, or use an alcohol based hand sanitiser.

3. About mpox

Mpox virus belongs to the Orthopox virus genus in the family Poxviridae. The Orthopox virus genus also includes variola virus (which causes smallpox), vaccinia virus (used in the smallpox vaccine), and cowpox virus. Mpox is a rare viral zoonotic disease in which there are two clades of mpox virus, the West African clade and the Congo Basin (Central African) clade.

3.1. Transmission

Mpox can be transmitted from person to person through:

- direct contact with the infectious rash, scabs, or body fluids
- respiratory secretions during prolonged, face-to-face exposure or during intimate physical contact including kissing

- contact with contaminated surfaces and items e.g., bedding, linen and clothing.

Mpox is very infectious through the contact route but requires more prolonged exposure via the respiratory route.

3.2. Presentation/symptoms

People who present to various community and healthcare settings including but not limited to; primary and community care, sexual health services, infectious disease units, obstetrics and gynaecology, emergency departments and dermatology clinics should be assessed for other symptoms compatible with mpox.

For further information for;

- Symptoms
- Case definition (clinical and epidemiological criteria)
- Laboratory testing or diagnosis
- Contact tracing
- Treatment

It is important that healthcare teams relevant to healthcare setting – IPC team or local public health unit are informed of any person(s) who is suspected or confirmed for mpox.

Mpox is a notifiable disease under the [1956 Health Act](#).

4. Infection Prevention and Control in the Management of patients

4.1 Standard and transmission based precautions: patient placement

People suspected or confirmed of having mpox should be isolated from others. Within a healthcare facility, standard, contact and droplet precautions are the minimum required. In hospitals, appropriate isolation signage on door/area should be visible.

Community Healthcare setting

When assessing patients with suspected or confirmed mpox in **community healthcare setting**, the following are recommended:

- Patient should wear medical mask at the facility.
- Where practicable, patient should not wait for extended periods in shared waiting room.
- Assessment must be in a single room. This room should have as good ventilation as is possible for the facility. The door must be closed.
- Patients should not be examined in community pharmacies but are instead referred to primary care or sexual health service if the history suggests mpox.

Hospital settings

In **hospital settings**, patients with suspected or confirmed mpox may be assessed in outpatient clinic, acute assessment unit or emergency department in a single room using standard, contact and droplet precautions as minimum requirements. Patients admitted to the hospital must be in a single room, with access to own en-suite facilities.

- If available, an airborne infection isolation room (AIIR) also known as a negative pressure room, is recommended for prolonged stays. If there is no available AIIR, a single room with the door closed is an acceptable option. This room should not be positively pressured to the outside corridor.
- A portable HEPA filtration unit, if available, may be used in this setting to provide an additional measure of infection control.

- If the patient needs to go out of the room, they must wear a well-fitting medical mask and exposed skin lesions must be covered.

4.2 Standard and transmission-based precautions: Personal Protective Equipment

Initial interaction with a person before a clinical assessment indicating a risk of mpox will occur. Current requirement of medical mask use and adherence to hand hygiene practice will protect the healthcare worker in the first instance.

Standard, contact and droplet precautions are considered as the minimum level of PPE required for all healthcare settings and providers of care when interacting or providing care to a person with suspected, probable and confirmed mpox. PPE includes;

- Fluid resistant level II R medical mask
- Gloves
- Disposable fluid resistant long sleeve gown
- Eye protection (Face shield or goggles)

Healthcare workers can consider the use of a fit tested P2/N95 particulate respirator¹ when providing specific care for a person with probable or confirmed mpox including but not limited to;

- Undertaking procedures involving the oropharynx (including taking oropharyngeal samples)
- Prolonged close physical contact eg showering
- Handling of used contaminated linen, clothing and towels

Designated PPE donning and doffing stations should be located close to the point of use but separate from each other. If located outside a room then the two activities should not be occurring simultaneously. The sequence for donning and doffing PPE should be visually indicated, and a place for these activities should be designated.

4.3. Cleaning and disinfection - general considerations

Effective cleaning and decontamination procedures are necessary to ensure removal of pathogens from the environment. There should be processes in place to ensure that environmental cleaning and disinfection procedures are followed consistently and correctly. No 'stand-down' period for the room is required prior to cleaning.

The mpox virus can be inactivated through cleaning and disinfecting by using a detergent product followed by an approved disinfection product with activity against viruses. Alternatively a 2 in 1 detergent/disinfectant (single step) product can be used. Follow manufacturers' recommendations for contact time of products.

Pay particular attention to surfaces that are frequently touched such as door handles, tables, examination couches – ensure that a clean sheet or protective covering used in-between all patients as part of good practice in areas such as clinics and community practices. There should be adequate cleaning supplies and processes for cleaning of any reusable cleaning equipment. Avoid dusting or sweeping to reduce dispersal of infectious particles into the air. Floors should be cleaned using wet cleaning methods.

¹ User to perform a fit check (user seal check) each and every time they don a particulate respirator

Community Healthcare settings

Following departure of patient or client, ensure that cleaning and disinfection of items or surfaces is undertaken before the room is used by any other staff or patient. The same type of PPE used for clinical assessment is also recommended to use when cleaning the room. Ensure that gloves and gown which were used during patient or client interaction are removed and disposed of safely, clean hands and don new set of PPE before cleaning and disinfecting. No 'stand-down' period of the room is required before cleaning is undertaken or before it may be used again after cleaning provided manufacturer's instructions for disinfectant contact time has been followed.

Hospital settings

Cleaning staff should be trained and updated regularly on the appropriate PPE required.

- P2/N95 particulate respirator
- Gloves
- Eye protection
- Disposable long sleeve fluid resistant gown
- Cleaning schedules should include frequency of cleaning required.
- On discharge of patient, a terminal clean should be done as per local hospital IPC guidance which supports patient flow.
- Care should be taken when cleaning floors – damp mopping should be undertaken over vacuuming to reduce dispersal of particles in air.

Patient equipment

Patient equipment should be either dedicated to the patient for the duration of their care or single-use. Standard policies for re-processing re-usable equipment will apply.

4.4 Linen and laundry

Staff should follow the above PPE advice when handling used linen, gowns, clothing and towels. Do not shake or handle used items in a manner that could disperse infectious particles. Follow local policies for handling and collection of infectious linen.

4.5 Waste and sharps management

Adhere to standards for the management of healthcare waste NZS 4304:2002 *Management of Healthcare Waste* and follow local policy.

5. Occupational Health and Safety

Staff assigned to care for suspected or confirmed patients should:

- meet the occupational health policy for fitness to work in this situation
- follow the local Occupational Health procedure for staff contact tracing, monitoring and follow up

5.1 Management of HCW mpox exposure events

Risk assessment should be performed on health workers who have unprotected exposures (i.e. not wearing appropriate PPE) to patients with mpox or possible contaminated materials (e.g. linen).

Health workers who have cared for or otherwise been in direct or indirect contact with mpox patients while adhering to recommended IPC precautions may undergo self-monitoring or active monitoring as determined by local public health authorities.

5.2 Breach of PPE practice when providing care for a patient with suspected or confirmed mpox infection

Hospitals should have established processes to manage such events. Exposure events should be discussed with the hospital IPC, Occupational Health Service, and Public Health Unit to support the risk assessment process.

Treatment advice can be provided by your regional Infectious Disease physicians.

6. Additional IPC measures for in-patient care

1. Movement of patients, with suspected or confirmed mpox within the hospital.	<ul style="list-style-type: none"> • The patient must wear a medical mask for source control and any lesions should be covered. Ensure the patient cleans their hands prior to leaving their room. • Transfer ambulatory patients in a wheelchair to minimise contact with surfaces • Staff at the receiving department or ward should be advised prior to transfer that the patient is or is suspected of having mpox infection. Patients should not wait in communal areas. • Local procedures must be in place for cleaning and disinfecting local department equipment e.g. imaging equipment • Medical records should not be placed on the bed during transfer (consider placing in an envelope/plastic sleeve).
2. Entry into room (general information across all settings)	<ul style="list-style-type: none"> • Place clear signage on the door with instructions on the level of PPE required before entering the room. • Clearly demarcated donning and doffing areas including the sequence for donning and doffing PPE. • Access should be limited to essential health care workers only. • Local policy should guide non-essential health care workers access to the room, e.g. social worker.
3. Visitors (to patients)	<ul style="list-style-type: none"> • Visiting should only occur under exceptional circumstances (eg. due to patient clinical status or wellbeing) and limited in number to minimise potential exposure. • Signage for visitors for contact and droplet precautions need to be adhered to should be visible at the entrance to the room the required PPE, hand sanitiser and waste bins available.

	<ul style="list-style-type: none"> • There should be clear simple instructions provided on how to don and doff PPE, how to safely dispose of it and when to perform hand hygiene. • Local IPC policy for recording entry into room for contacting tracing purposes should be followed.
4. Food service	<ul style="list-style-type: none"> • Standard, contact and droplet precautions should guide non-essential health care worker access to the room, including meal delivery. • Unopened food items or food waste is to be discarded as per local waste policy.
5. Duration of precautions	<ul style="list-style-type: none"> • Precautions should be continued until lesions have healed with scabs fallen off and new layer of skin formed underneath. • IPC and ID to advise when precautions are discontinued.
6. Hospitalised patient is ready for discharge	The clinical team will determine when the patient is well enough for discharge. If deemed still infectious, liaison with Public Health team for ongoing care. (Information for patients who need to continue isolating can be found here)
7. Management of deceased patients	PPE must be worn when handling the deceased. The body should be placed in a fluid-proof body bag and once this has occurred Standard Precautions should be followed.

7. Further reading

- World Health Organization https://www.who.int/health-topics/mpox#tab=tab_1
- Centres for Disease Control and Prevention: Isolation and Infection Control: <https://www.cdc.gov/poxvirus/mpox/index.html>
- U.K Government: <https://www.gov.uk/government/publications/mpox-outbreak-epidemiological-overview>
- Australian Government, Infection Prevention and Control Expert Group Interim Guidance on mpox for Health Workers 15 Dec 2022 <https://www.health.gov.au/resources/publications/iceg-interim-guidance-on-mpox-for-health-workers?language=en>