Mpox (monkeypox)

Te Mana Ora Protocol

This protocol is based on the Ministry of Health Communicable Disease Control Manual[1] and the World Health Organisation website.

Te Whatu Ora has provided National guidance to inform local operational management of monkeypox, saved in CFS.

Content specific to Te Mana Ora is in green.

- Protocol users should **document** their response to **action points,** marked throughout with this arrow.

Contents

1. Associated documents

Te Whatu Ora Waitaha Māori health policy

Te Whatu Ora Waitaha Tikanga policy

Te Whatu Ora Waitaha Interpreter procedure

Te Mana Ora Privacy|Nohotapu policy

Forms, letters, questionnaires

Y:\CFS\ProtectionTeam\FinalDocs\NotifiableConditions\MonkeyPox\FormsStdLettersQuest

Manatū Hauora | Ministry of Health information

https://www.health.govt.nz/our-work/diseases-and-conditions/monkeypox-monkeypox

Y:\CFS\ProtectionTeam\FinalDocs\NotifiableConditions\Monkeypox\Resources

2. The Illness

Epidemiology

Mpox (monkeypox) is a **zoonotic** virus (animal-to-human transmission) endemic in parts of Central and West Africa. It is caused by the mpox virus which belongs to the orthopoxvirus genus of the Poxviridae family. While it is rare, mpox **can be transmitted human-to-human by close contact with skin lesions, body fluids, respiratory droplets and contaminated materials**. There is emerging evidence around presence in semen, but uncertainty about this as a form of transmission.

There are two clades of mpox, the **West African clade** and **Congo Basin (Central African) clade**. The case fatality ratio for the West African clade has been documented to be around 1%, whereas for the Congo Basin clade, it may be as high as 10%.

Global outbreak

In the 2022 global outbreak of mpox, the first case was identified in the United Kingdom on 7 May 2022 in a recent traveller from Nigeria. At the time of writing on 31 October 2022, global case numbers were over 70,000 confirmed cases across more than 100 countries.

Most cases within this outbreak are **men who have sex with men** (MSM) **with no travel history** to Central or West Africa. Most PCR samples are identified with **the less severe West African clade** mpox virus. Most cases so far are reported to have mild to moderate illness and are recovering well.

People at **increased risk for severe disease** include infants and young children, pregnant women, elderly and severely immunocompromised persons.

For more information on the outbreak refer to:

Manatū Hauora | Ministry of Health
Monkeypox photos and dermatologist advice
World Health Organization
United Kingdom
European Centre for Disease Prevention and Control
Centers for Disease Control and Prevention
World Organisation for Animal Health

Clinical description

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.

In the 2022 outbreak, presentations of mpox 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.

The clinical presentation is similar to diseases that are more commonly encountered in clinical practice, such as hand foot and mouth disease, varicella zoster, herpes simplex, syphilis and molluscum contagiosum. As a result, more common causes of acute rashes with similar appearances should be considered and excluded where possible.

However, co-infections have occurred sporadically, and given the evolving epidemiology of mpox, patients with a rash suggestive of mpox should be considered for testing, even if other conditions are likely.

Incubation

From exposure, incubation is usually **7 to 14** days but can range from 5 to 21 days. The incubation period may be influenced by the route of transmission, with invasive exposure (eg, contact with broken skin or mucous membrane) having a shorter incubation period than non-invasive exposure. This is why contacts are asked to monitor for symptoms and take precautions for 21 days from exposure.

Transmission

The natural reservoir of mpox virus remains unknown. However, it has been isolated from several African rodents and primates, including the Gambian pouched rat, tree squirrel, rope squirrel and sooty mangabey monkey. In Africa, mpox is a zoonosis with transmission typically occurring animal-to-human via rodents.

Mpox virus does not spread easily between people, but it can be transmitted person-to-person by **close contact (including sexual contact) with skin lesions, body fluids, respiratory droplets** (when masks aren't worn), and **contaminated materials such as bedding**. There has been evidence that it is present in semen, but it is uncertain whether it can be transmitted this way.

Communicability

The infectious period begins with the **onset of symptoms, either prodromal or rash**. Cases remain infectious until the **rash has resolved**, and **all lesions have formed scabs and fallen off, leaving fresh skin** underneath. Cases are not considered infectious prior to the onset of symptoms, however some cases may not be aware of their exact symptom onset date as initial symptoms may be both very subtle and/or not visible.

Prevention

Raising awareness of risk factors and educating people about the measures they can take to reduce exposure to the virus is the main prevention strategy for mpox. Planning is under way to provide **vaccination** for the prevention and control of mpox in New Zealand.

3. Notification

Mpox is a notifiable infectious disease in Schedule 1 of the Health Act 1956 from Thursday 9 June 2022. Health practitioners are required to notify the medical officer of health on suspicion of a case, prior to collection of any samples. Heads of medical laboratories are required to notify the medical officer of health of any NAAT result positive for mpox virus.

Clinicians in Te Mana Ora districts are asked to **notify the medical officer of health and the local clinical microbiologist on suspicion** of a case of mpox, prior to collection of any samples, to ensure that the case fulfils the clinical and epidemiological criteria required for testing, that the correct samples are obtained and collected in the right way, and to arrange sample transport logistics.

In the event of a case under investigation, probable or confirmed detected within New Zealand, **the medical officer of health is required to contact the Ministry of Health Communicable Diseases team** (0800 GET MOH or notifycommdiseases@health.govt.nz). If a case is notified after usual business hours, a medical officer of health may use their discretion as to when they report the case to the Communicable Diseases team; reporting after usual business hours or awaiting until usual business hours if sufficient information is available ascertain that the risk to public health is low. If after hours, and initial indications suggest risk of potential onward transmission or high-risk factors, then the case should be reported via calling 0800 GET MOH.

One case of mpox identified in New Zealand constitutes an outbreak.

National Focal Point Notifications

When inbound national focal point (NFP) requests are received by a regional public health service from the Public Health Agency, the response should contain only the minimum required information, to protect the privacy of the individual concerned.

It is recommended that high-risk close contacts do not travel internationally during their period of active monitoring. If they do choose to travel, the public health contact should ensure that the Communicable Disease Duty Officer is notified, to consider an NFP notification. The Public Health Agency and the public health service

will decide together whether to notify the jurisdiction where the contact has travelled to, for example where there are concerns for the contact's safety should their status as a MPX contact be made known to authorities in that jurisdiction.

If it is deemed appropriate to notify the jurisdiction where the contact has travelled to then personal information will be shared to allow for any public health follow-up deemed appropriate by the receiving jurisdiction. This personal information would be supplied in accordance with Article 45 of the International Health Regulations 2005 (IHR) which specifies that the information may be used or disclosed only for the purposes of assessing and managing a public health risk.

4. Case definition

Clinical criteria

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

AND

Epidemiological criteria

At least one of the following:

- **exposure[2] to a confirmed or probable case** in the 21 days before symptom onset.
- is in a **priority group** for testing. Current priority groups are:
    - persons who had **multiple (2 or more) 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 (as defined by WHO) in the 21 days before symptom onset.

Case classification

Under investigation: A case that has been reported to a medical officer of health but information is not yet available to classify it 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 case that has been investigated and subsequently found not to meet the case definition.

5. Laboratory testing

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.

In addition to standard precautions, **contact and airborne precautions** should be adhered to for clinical assessment and collecting samples. This includes the use of eye protection, P2/N95 mask, fluid repellent gown and gloves.

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

[1] More common causes of acute rashes with similar appearances should be considered and excluded where possible; varicella zoster, herpes simplex, syphilis, molluscum contagiosum.
[2] Exposure: direct physical contact with skin or skin lesions, including sexual contact; or contact with contaminated materials such as clothing, bedding or utensils; or face-to-face, including health care workers without appropriate PPE.

sampling. Clinicians are advised to follow the most up to date testing advice, which can be found on the New Zealand Microbiology Network website.

6. Cultural and social context

Cultural, social, work and home environments affect any person's risk of contracting a communicable disease, the likely impact of that disease on them, and their likelihood of passing the infection on others. Keep these factors in mind at every point of your investigation and follow-up.

Note that there is heightened public and media interest in mpox, with potential for stigmatisation of cases and contacts. Investigation and management must be undertaken with sensitivity, and with careful attention to people's right to privacy.

- Interviews should be undertaken by an **experienced staff member**. Sexual Health staff are available to assist with interviews.
- Request an **interpreter** if needed.
- **Consider** the potential impact of cultural, social, work or home factors on a person or family's ability or willingness to provide information and/or follow public health advice.
- **Tailor your advice** to the situation.
- **Seek advice yourself** if unsure. Talk to:
  - Te Mana Ora Māori Relationships Manager or Pacific Relationships Manager or Communicable Diseases Manager for advice on community and primary care support people or agencies.
  - Ngā Ratonga Hauora Māori for Māori patients at Christchurch Hospital or Christchurch Women's hospital.
- If appropriate, and with the case and/or contact's permission, seek the **assistance** of family or other community members, community leaders, and/or support agencies if required.

Funding for mpox isolation accommodation is provided nationally, but co-ordination of the accommodation is the responsibility of the local public health service.

7. Privacy

Maintaining the privacy of cases and contacts of mpox is especially important given the 2022 outbreak's disproportionate impact on the MSM community. Those to whom a mpox case or contact status is disclosed may interpret this information as confirmation the case or contact is a man who has sex with men, or otherwise a member of the LGBTIQA+ community. This could endanger the safety of the case or contact, or cause them reputational, emotional, or financial damage.

Disclosing case or contact status to any third party must therefore be carefully considered, discussed with the case, and weighed proportionally against the risk of transmission.

8. Management of case

Investigation

- **Action immediately.**
- On notification of a suspected case of monkey pox the **medical officer of health** should ascertain **whether the case meets the clinical and epidemiological criteria,** and if so**:**
  - obtain **contact details** for the case.
  - provide **interim isolation advice** for the clinician to give to the case.
  - advise the notifying **clinician** to **discuss the suspected case with a clinical microbiologist** for testing advice**.**
  - advise the **Ministry of Health** (0800 GET MOH or notifycommdiseases@health.govt.nz), the **microbiologist** on call, the **infectious diseases** clinical director or physician on call (both via Christchurch Hospital switchboard), the **sexual health clinician** (027 212 7335), and the Te Whatu Ora Waitaha **Communications** Team of the suspected case.

- advise the communicable disease team leader to **initiate case investigation.**

- For **suspected cases** the **case investigator** should**:**
  - Telephone the case and complete the **case questionnaire** (in K:\CFS\ProtectionTeam\FinalDocs\NotifiableConditions\MonkeyPox\FormsStdLettersQuest).
  - Advise the case of initial **isolation requirements** and **public health follow-up**
  - Provide **mpox fact sheet** and **letters** as required (in K:\CFS\ProtectionTeam\FinalDocs\NotifiableConditions\MonkeyPox\FormsStdLettersQuest).
  - Identify any **manaaki/support** needs and discuss with the team leader.
  - Complete all required details in **EpiSurv.**
- For **probable or confirmed cases** the **case investigator** should**:**
  - Provide **updated isolation advice** and arrange for ongoing regular **telephone check-ins.**
  - Check again about **manaaki/support** needs and discuss with the team leader.
  - Discuss the list of contacts identified in case investigation with the medical officer of health, record the **status of each contact**, and initiate contact follow-up.
  - If there is high suspicion that infection was community acquired consider further **source investigation** to determine the chain of transmission, preventative messaging, and health promotion. The potential public health benefits of source identification must be weighed against the potential risks to the case of disclosure of infection.
  - When the case is eligible for release from isolation **discuss** with medical officer or medical officer of health, and **release** the case and provide letters as required.
  - Update **EpiSurv** and close case file.
- If a case is **unable to be contacted** after local processes for identifying alternative contact details have been exhausted, NITC Finders Service can be utilised to find a new contact number. Email COVID-19_NITC_triage@health.govt.nz with as much of the following information about the case as is known, attached in a password-protected Excel workbook: full name, DOB, NHI, address, contact number, email address. Email the password separately.
- Cases should be followed up regularly until fully released from isolation. The method and frequency of follow-up is a local decision.

Restriction

While awaiting test results (cases under investigation)

When testing for mpox, the **clinician** undertaking testing will assess the case's symptoms, likelihood of mpox infection, and usual activities to **inform the restrictions** placed on that case while their test result is awaited. The following criteria facilitate this clinical assessment:

All people being tested for mpox **must isolate if any** of the following criteria apply to them:

1. Where the clinician has a **very high index of suspicion** that the person has mpox, such as those who are known sexual or intimate contacts of a case, or those who have attended a high-risk setting, such as a sex-on-site venue or festival, during their incubation period.
2. They have **oral mucous membrane lesions**.
3. They have **lesions that are not able to be easily covered** – for instance lesions on the face or hands.
4. They have **systemic symptoms**, including cold or flu symptoms such as fever, body aches, vomiting or diarrhoea.
5. **Immunocompromised** cases should isolate until they can be assessed by Public Health in collaboration with their usual clinician. Note that a case with HIV who has an undetectable viral load would not be considered immunocompromised in this instance.

Those not required to isolate should be advised:

a) If they **develop** systemic symptoms, uncoverable or oral lesions while awaiting their test result, they should commence isolation and advise their clinician.

b) To **avoid**, where possible, **all face-to-face contact with people at high risk of serious disease** from mpox. This includes being excluded from work or education if their usual activities are likely to bring them

into direct skin-to-skin contact with high-risk people. High-risk groups include pregnant people, young children, people with severe atopic eczema, and immunocompromised people.

All people being tested for mpox, regardless of whether they need to isolate, must be advised:

c) To **refrain from sexual or intimate activities**, including kissing and hugging and all skin-to-skin contact with other people.

d) That they **must inform any healthcare setting** they plan on attending that they are awaiting the results of a test from mpox prior to attending.

When test results are returned, those with negative test results should be advised they can cease taking additional precautions for mpox (other diagnoses in consideration may require their own precautions). Clinicians are advised of the possibility of false negative results early in the disease course of mpox. Repeat testing may therefore be warranted if the clinician has a high index of suspicion that the case has mpox.

Those who test positive are considered confirmed cases and managed accordingly.

For confirmed or probable cases

The Medical Officer of Health will advise the case on their management plan. Probable and confirmed cases will need to **isolate for a minimum of 7 days** from the first presence of lesions, **and then take other precautions** to prevent onward transmission once released from isolation. They must continue taking precautions until they are no longer infectious which is until their lesions have crusted, the scab has fallen off and a fresh layer of skin has formed underneath (symptoms normally last 14–28 days).

In the **first seven days** from the first presence of lesions, the case is **directed** to isolate. Isolation means that:

- Where able, cases should **sleep in a separate room** and **limit contact** with household members.
- Cases should wear a **mask** when in the same room as others and **cover skin lesions** (where possible).
- Cases **should not share** clothing, bedding, towels and unwashed crockery and cutlery.
- Cases **should not go out** to public places or venues or attend places of worship.
- Cases **must avoid physical contact, particularly sexual contact** over this period (including kissing, intimate touching).
- Cases can **walk** by themselves while keeping a 1 metre distance from others and must wear a mask when leaving the house.
- Cases should avoid close direct contact with **animals**, including domestic animals, (such as cats, dogs, mice, and other rodents), livestock, and other captive animals, as well as wildlife due to the possibility of human-to-animal transmission.
- All **waste**, including medical waste, should be disposed of in a safe manner which is not accessible to rodents and other scavenger animals.
- Cases should where possible, **avoid use of contact lenses** to prevent infection of the eyes. Where this is not possible, ensure hands are thoroughly washed prior to touching lenses or eyes, and that there are no open lesions on hands (cover these where present).
- Cases should **avoid shaving** areas where MPX lesions/rash are present.
- Cases **should not donate** blood, cells, tissue, breast milk, semen, organs, or faeces.
- Cases should **avoid contact with people who are at risk of serious disease**, including immunocompromised people, children, people with a history of severe atopic eczema, and pregnant people. If this is not possible with the case's living situation, this should be escalated to the Medical Officer of Health.

Staged Release from Isolation

Phase One

From day 8 onwards, the **Medical Officer of Health will assess** whether the case should remain in isolation or whether they can leave isolation with precautions. Such assessments must consider:

- **Occupation and workplace environment**: presence of and contact with people at high risk of serious disease from MPX, ability to work from home, physical distancing at workplace ability, etc.

The following **clinical criteria** must be met for phase one release:

- At least 7 days since first rash/lesion onset
- No new lesions for 48 hours
- No oral / oral mucous membrane lesions, or all oral / oral mucous membrane lesions completely healed (i.e., scab has fallen off and fresh skin has formed underneath)
- No fever or other systemic symptoms due to MPX for 72 hours
- All lesions on exposed skin (i.e., hands, arms, face) have scabbed over, the scab has fallen off and fresh skin has formed underneath, or can adequately cover any unhealed lesions with a dressing and/or clothing
- Not immunocompromised (note that a case with HIV who has an undetectable viral load would not be considered immunocompromised). Immunocompromised cases to be managed on a case-by-case basis with their treating clinician.

If the Medical Officer of Health is satisfied that the public health risk posed by the case leaving isolation is very low, after considering the above factors, the **case can leave isolation with additional precautions** to prevent transmission. This means:

- Cases can **return to work** if deemed safe to do so by the Medical Officer of Health
- Cases can **leave the house for essential activities**, including to buy groceries, medicines, or for solo exercise outdoors.
- Whenever leaving the home, cases **must ensure all lesions are covered**, (wear a mask if oral lesions present), and **avoid close contact** with others.
- Cases should **avoid all high-risk settings**, including early childhood education, gyms, schools.
- Cases must **inform healthcare providers** of their diagnosis prior to visiting so that appropriate safeguards can be put in place for staff and other patients.
- Cases should **avoid public transport** where possible.

If **new symptoms** develop after the first phase of isolation release which cause the Medical Officer of Health to believe there is a greater risk to public health posed by the case being out of isolation, the case may be placed back into isolation. It is anticipated this will be rare and exceptional.

Phase Two

Cases can be fully released from management when **all lesions have crusted, scabs have fallen off and a fresh layer of skin** has formed underneath.

The Medical Officer of Health will advise on release from isolation, which **requires confirmation from a clinician** that all lesions are healed.

For 3 months following release from isolation, the virus may still be present in semen. Therefore, **condom use** during sexual activity is recommended where a case's semen could come into contact with another person.

Treatment

Most cases are mild and self-limiting with people recovering within two–four weeks. Advice for clinicians is available on HealthPathways.

If patient transfer is required, for example for admission to hospital, the medical officer of health may convene or participate in an online transfer co-ordination meeting, including relevant clinicians, site staff, St John or other transfer staff, and infection prevention and control, to confirm safe transport arrangements.

Counselling

Advise the case and/or caregivers of the **nature of infection** and **mode of transmission**. Educate cases regarding **isolation requirements** and **high-risk people, activities and settings to avoid** while infectious.

Specific support for MSM and others within the rainbow community can be sought from OutLine, the Burnett Foundation, and a full list of support services for rainbow communities can be found on the Rainbow Youth website. Sexual health support and information is available on the Just the Facts website.

9. Management of contacts

Definition

Contacts can be separated into **three groups**: high risk close contacts, moderate risk close contacts, and casual contacts. The local Medical Officer of Health (or local public health or sexual health service) will assess contacts and categorise them based on their exposure to the case.

Close contact - high risk

A high-risk close contact is defined as any person with one or more of the following exposures to a probable or confirmed MPX case:

- **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** (bed linens healthcare equipment), crusts from lesions or with bodily fluids from a case

It also includes any **household contacts who have had close physical contact** with the case or contaminated materials, eg bedding or clothing.

A high-risk healthcare contact is a **healthcare worker with one or more** of the following exposures without appropriate PPE:

- Direct **physical contact** with case, case materials, crusts, or bodily fluids; or
- Presence in an enclosed room within 1.5 m of a case during **aerosol generating procedures**
- **Sharps injury** from a used needle (including to cleaning or laboratory staff)

Standard and transmission-based precautions should be adhered to.

More guidance on infection prevention and control

Close contact - moderate risk

A moderate-risk close contact is defined as a person with one or more of the following exposures to a probable or confirmed MPX case:

- **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 aeroplane**

It also includes **household contacts who have not had any direct physical contact but have spent more than three hours** with a case.

A moderate-risk healthcare worker is a **healthcare worker** who has had the following exposure without appropriate PPE:

- Spillage or leakage of **laboratory specimen** onto intact skin

Casual contact

A casual contact is defined as a person with one or more of the following exposures, or any unlisted exposure that doesn't meet the criteria above to a probable or confirmed MPX case:

- **Household members who have not spent time with or had direct physical contact** with the case or contaminated materials from the case.
- **Work colleagues** in the same workspace as the case.
- **Healthcare workers who were wearing appropriate PPE** throughout their interaction with a case.
- People on an **aeroplane** with the case, aside from the people sitting on either side of the case.

Air travel

See close contact medium risk and casual contact categories above.

If a case is deemed to have been infectious on an international flight or at an airport and there are potential close contacts to identify, initiate flight contact tracing by emailing COVID-19_NITC_triage@health.govt.nz. If contacts are

identified by NITC they will be provided back to the requestor for management, who may delegate them to the local public health service where they reside by telephoning the receiving medical officer of health.

Investigation

For identifying potential onward exposures, contact trace from prodrome symptom onset, or 24 hours before rash onset for cases without prodrome. Prioritise contact tracing close contacts and healthcare close contacts, such as recent sexual partners, household contacts, and any healthcare workers not wearing appropriate PPE. Contacts should be assessed for known risk factors that could result in more serious disease with MPX, so that further guidance and/or clinical guidance can be provided as required.

- For identified contacts, the case investigator should:
  - Record contact details in a **contacts spreadsheet** saved in the outbreak folder in CFS (consider using **CCAT** if there are two or more connected cases).
  - Telephone the contact and **advise quarantine requirements.**
  - Identify any **manaaki/support** needs and discuss with the team leader.
  - Arrange **regular follow-up** and **release** for high-risk contacts.
- If a contact is **unable to be contacted** after local processes for identifying alternative contact details have been exhausted, NITC Finders Service can be utilised to find a new contact number. Email COVID-19_NITC_triage@health.govt.nz with as much of the following information about the contact as is known, attached in a password-protected Excel workbook: full name, DOB, NHI, address, contact number, email address. Email the password separately.

Quarantine

No mpox contacts are required to quarantine unless they develop symptoms.

Symptomatic contacts

Mpox **contacts who develop symptoms** that could be consistent with mpox[3] are **required to isolate**. Isolating means staying at home and refraining from sexual activity or other close physical contact with others (including those in the home) until advised by Public Health.

Contacts should notify Public Health as soon as possible once symptoms develop.

Where testing is possible and appropriate given the contact's symptoms (i.e., presence of one or more lesions), liaison with sexual or primary health providers should be undertaken to **arrange priority testing**.

Where **testing is not possible** (e.g., symptoms are consistent with MPX prodrome only), contacts should be advised to **isolate until further symptoms develop or all symptoms resolve**. Release from isolation is at the discretion of the Medical Officer of Health.

Close Contacts – High risk

Quarantine is not required. Contacts directed to **isolate immediately if symptoms develop** and contact public health.

Active monitoring[4] of symptoms is undertaken for 21 days following last exposure to the case. If symptoms develop, isolate immediately and contact Public Health for further advice.

Contacts are directed, for 21 days following their last exposure to the case to:

- Wear a **mask** when around others
- If **travelling** outside the region/country, to advise public health so their management can be transferred

[3] These symptoms include: Any Rash, lesions, sores, blisters, or other skin changes not due to other known causes; Headache; Fever; Lymphadenopathy (any lumps or swelling around the neck, armpits, or groin); Myalgia (muscle aches & pains); Arthralgia (joint stiffness); Backache; Rectal pain, discharge, or constipation

[4] **Active monitoring** for symptoms is when public health officials are responsible for contacting (i.e., by phone, email, text) periodically to see if a person under monitoring has signs/symptoms. The individual under monitoring must take their temperature daily, watch for signs/symptoms compatible with MPX, and immediately isolate and report to public health officials if they have signs/symptoms. If initial symptoms (other than a rash) they should be quarantined and watched closely over the following seven days. If no rash develops, they can return to temperature monitoring for the remaining days. Completion of monitoring will be based on a high trust model. If a contact reports no presentation of rash for 21 days since last close contact exposure to the case (while infectious), they will be released from follow-up.

- Advise public health if they work in **healthcare**
- **Avoid high-risk activities** including sexual activity, kissing, and other skin-to-skin contact with others

Vaccination may be considered when available.

Close Contact – Moderate Risk

Quarantine is not required. Contacts directed to **isolate immediately if symptoms develop** and contact public health.

Passive monitoring (self-monitoring)[5] of symptoms for 21 days. If symptoms develop, isolate immediately and contact Public Health for further advice.

Vaccination may be considered for those at higher risk of serious disease when available.

Casual Contact

No quarantine or routine monitoring. No vaccination considered.

Prophylaxis and immunisation

The Ministry of Health and PHARMAC are exploring options to secure access to vaccines and antivirals. In the interim control activities should focus on isolation of suspected or confirmed cases and contact tracing.

Counselling

Advise the contact and/or caregivers of the nature of the disease and symptoms to monitor for.

10. Other control measures

Infection prevention and control

Detailed infection prevention and control advice is available on the Ministry website for healthcare settings, people isolating at home, people isolating in accommodation, and accommodation providers.

Care must be taken when handling **used linen, clothing and towels**. Avoid shaking used/soiled linen to avoid dispersal of infectious particles. Follow healthcare facility policy and guidance for handling contaminated used linen. Waste should be handled and disposed of as infectious waste as per healthcare facility policy.

Follow healthcare facility procedures and policies for cleaning and disinfecting environmental surfaces with approved products, and ensure the appropriate PPE is worn by cleaning staff.

Health education

Information for the public is available on the Ministry website.

11. Legislation and enforcement

The Health Act 1956, sets out the roles and responsibilities of individuals to safeguard public health. The Ministry's Guidance on Infectious Disease Management under the Health Act 1956 and its Summary webpage provide guidance to the use of Health Act powers and responsibilities. Part 3A of the Act mandates contact tracing and permits medical officers of health to give directions to individuals posing public health risk. Directions should be given in writing, and should be discussed in advance with the clinical director and the Office of the Director of Public Health.

[5] **Self-monitoring** for symptoms may be advised for low-risk contacts. Self-monitoring is when the person being monitored is responsible for taking their temperature once daily and watching for signs/symptoms compatible with MPX. The individual should immediately isolate and report to public health officials if they have such signs/symptoms within 21 days of last exposure. If initial symptoms (other than a rash) they should be quarantined and watched closely over the following seven days. If no rash develops, they can return to temperature monitoring for the remaining days.
Completion of monitoring will be based on a high trust model. If a contact reports no presentation of rash for 21 days since last close contact exposure to the case (while infectious), they will be released from follow-up.

12. Communications

Communications

Public facing information about mpox, including a factsheet, awareness poster and Infection Prevention Control guidance is available on the Ministry of Health website here.

Due to the stigma surrounding the virus, communications will always be considered with sensitivity. In the event of wider community spread, strategic communications will be distributed to support community needs for information and guidance. Public Health Services will be kept up to date with new communications – and where to best direct them.

For communications materials queries, please contact covid_imt_responsemgr@health.govt.nz with 'Please forward to comms team' in the Subject line.

Media Engagement

Media enquiries about cases under investigation, probable or confirmed cases and contacts should be directed to the Te Whatu Ora media team who will manage responses. A weekly update on mpox case numbers will be published on the Ministry of Health website every Thursday afternoon.

For media queries, please contact Te Whatu Ora media team on media@hnz.govt.nz (note: this inbox is monitored seven days a week).

13. Reporting

- Enter case details on **EpiSurv.**
- **Document** your response to each **action point** (marked with this arrow) in this protocol**.**

14. References and further information

1. Ministry of Health, *Communicable Disease Control Manual*. 2019, Ministry of Health: Wellington.

15. Appendix One: Ministry of Health summaries of contact tracing definitions and quarantine requirements

Footnotes to the tables are included on page 15.

Table 1: Summary of contact tracing definitions

Close contact – high risk of infection

Type of interaction	Examples
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). • potentially contaminated materials (bed linens healthcare equipment); crusts from lesions or with bodily fluids from a case CONTACT NOT WEARING APPROPRIATE PPE	Sexual or intimate contact with or without a condom (including oral, anal, vaginal sex, and kissing). Dancing (e.g., where skin to skin contact occurs) Body fluids from case (e.g., saliva) contact with eyes, nose, or mouth of contact
Household contact (higher risk) CONTACT NOT WEARING APPROPRIATE PPE	Close skin to skin contact (e.g., frequent touching or cuddling, or who have shared bedding, clothing, or towels with a case) Changing or washing soiled bedding or clothing of a case
Healthcare setting contact (higher risk) • Direct physical contact with case, case materials, crusts, or bodily fluids; or • Presence in an enclosed room within 1.5 m of a case during aerosol generating procedures • Sharps injury from a used needle (including to cleaning or laboratory staff) CONTACT NOT WEARING APPROPRIATE PPE	Handling soiled bedding or clothing from a case with active lesions (e.g., cleaners, laundry staff) Presence in the same room when soiled linen has been shaken Showering a case. Presence in the same room when a case was undergoing an oropharyngeal procedure such as intubation, bronchoscopy

Close contact – moderate risk of infection

Type of interaction	Examples
Healthcare contact (moderate risk) CONTACT NOT WEARING APPROPRIATE PPE	Spillage or leakage of laboratory specimen onto intact skin
Household contact (moderate risk) CONTACT NOT WEARING A MASK	Individuals who live in the same household and have spent more than 3 hours with a case but have not had any direct physical contact
Indirect contact in an enclosed poorly ventilated indoor space within 1 meter of a case for more than 3 hours CONTACT NOT WEARING A MASK	• People in a workplace or social setting • Flight contacts sitting next to a monkeypox case on a plane • Sharing a vehicle with a case (e.g., car, taxi)

Casual contact – low risk of infection

Type of interaction	Examples
All other contact with a monkeypox case including the above scenarios where appropriate PPE was used by the contact	Flat mates who spent minimal time together in the same room. Healthcare workers who had no direct contact and remained more than 1 meter from the case (even if not wearing PPE) Brief face to face conversations, such as colleagues in the same office Flight crew; people on flights with a case other than those sitting either side.

Table 2: Summary of contact management

Contact Type	Management Pathway
Close Contact – High Risk	Contacts are told they have had contact with a case, but no identifiable information about a case is disclosed. Quarantine is not required. Contacts directed to isolate immediately if symptoms develop and contact public health. Active monitoring of symptoms is undertaken for 21 days following last exposure to the case. For 21 days following their last exposure to the case, contacts are 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 Vaccination may be considered when available.
Close Contact – Moderate Risk	Contacts are told they have had contact with a case, but no identifiable information about a case is disclosed. Quarantine is not required. Contacts directed to isolate immediately if symptoms develop and contact public health. Passive monitoring (self-monitoring) of symptoms for 21 days. Vaccination may be considered for those at higher risk of serious disease when available.
Casual Contact – Low Risk	No quarantine or monitoring required. No vaccination considered. No disclosure of status.

Footnotes to Ministry of Health summary tables 1&2:

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

[2] 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.

[3] Two or more

[4] Per WHO

[5] These symptoms include: Any Rash, lesions, sores, blisters, or other skin changes not due to other known causes; Headache; Fever; Lymphadenopathy (any lumps or swelling around the neck, armpits, or groin); Myalgia (muscle aches & pains); Arthralgia (joint stiffness); Backache; Rectal pain, discharge, or constipation

[6] **Active monitoring** for symptoms is when public health officials are responsible for contacting (i.e., by phone, email, text) periodically to see if a person under monitoring has signs/symptoms. The individual under monitoring must take their temperature daily, watch for signs/symptoms compatible with MPX, and immediately isolate and report to public health officials if they have signs/symptoms. If initial symptoms (other than a rash) they should be quarantined and watched closely over the following seven days. If no rash develops, they can return to temperature monitoring for the remaining days. Completion of monitoring will be based on a high trust model. If a contact reports no presentation of rash for 21 days since last close contact exposure to the case (while infectious), they will be released from follow-up.

[6] **Self-monitoring** for symptoms may be advised for low-risk contacts. Self-monitoring is when the person being monitored is responsible for taking their temperature once daily and watching for signs/symptoms compatible with MPX. The individual should immediately isolate and report to public health officials if they have such signs/symptoms within 21 days of last exposure. If initial symptoms (other than a rash) they should be quarantined and watched closely over the following seven days. If no rash develops, they can return to temperature monitoring for the remaining days.

Completion of monitoring will be based on a high trust model. If a contact reports no presentation of rash for 21 days since last close contact exposure to the case (while infectious), they will be released from follow-up.

16. Document Control

Protocol review task	Responsibility	Date completed + version no.
Advise team, quality, doc control & web coordinators of review (and planned timeframes).	Public Health Specialist (PHS)	V1, 09/08/2022
Open the protocol in EDMS Owner's view, ensure it is based on the current template, remove any blue font formatting (indicating new content for the previous version), and turn on "track changes".	PHS	V1, 09/08/2022
Review Ministry of Health (MoH) advice, literature, other protocols, and write draft update, marking new content in blue font.	PHS	V1, 09/08/2022
Update Fact Sheet as necessary (or source the URL link from MoH website)).	PHS	
Start an EDMS review workflow of draft version to pre-set document members – MOsH, CD, Team Leader, and HPO for feedback. (Check members are correct before starting workflow.)	PHS	V1, 09/08/2022
Incorporate feedback and update draft(s) further as required.	PHS	V1, 09/08/2022
Start an EDMS approval/ publishing workflow of final version to Clinical Director (Authoriser).	Com Dis medical officer of health (MOoH)	V1, 09/08/2022
Clinical Director approval recorded in EDMS.	Clinical Director (CD)	
Document Controller receives EDMS notification of CD approval – Complete **electronic** document control tasks, incl.: header; footer; EMDS document properties/metadata. Check Te Mana Ora policies and procedures site page links are valid, and add new links as required. Create .pdfs (for external links), and save to CFS folders: • Protocols – Y:\CFS\Quality\Archive\Protection\IntranetPROTOCOLS • Fact Sheets –Y:\CFS\Quality\Archive\Protection\FactSheets • Once a new or reviewed document has been approved, upload pdf version to: • Protocols – Surveillance (PHU server) website and Microsoft Teams on-call documentation group. • Fact Sheets – CPH website or links are checked to MoH website	Quality Coordinator (QC)	V5, 16/02/2023
Update **paper** copies as required (on-call folder/ vehicle).	Health Protection Officer (HPO)	V5, 16/02/2023
Advise operational/ regional staff of update, summarising any substantial changes (text highlighted in blue font in document).	QC or HPO or Team Leader	V1, 09/08/2022
Once process finalised, **move** any original draft documents saved in CFS locations to: Y:\CFS\Quality\Archive\Protection\ComDisProtocolsArchive	QC	V1, 09/08/2022
Minor update notes: v2 updated footer owner/authoriser details	QC	V2, 10/08/2022
Major update notes: v3 added note about multidisciplinary transfer meetings; multiple changes from CD Manual and Te Whatu Ora guidelines	PHS	V3, 02/12/2022
Minor update notes: V4 change of disease name, Cases under investigation isolation requirements updated in line with CD Manual changes.	PHS	V4, 15/12/2022
Minor update notes: V5 added Pacific Relationships Manager into Cultural and Context section	QC	V5, 16/02/2023