

Mpox

NSW Control Guideline for Public Health Units

Revision history

| Version | Date | Revised by | Changes | Approval |
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| 1.0 | 27 July 2022 | CDNA | New guideline developed by the Monkeypox Working Group | CDNA |
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| 3.1 | 15 August 2024 | CDB | Interim NSW guidance on evidence-based recommendations for public health for clade II while awaiting SoNG updates. | CHO |
| 4.0 | 14 October 2024 | CDNA | Full revision to update evidence-based recommendations for public health and strengthen clade I information. | CDNA |
| 4.1 | 11 December 2024 | CDB | NSW specific guidance as indicated by call-outboxes throughout the document | CHO |

NSW specific mpox guidance

This guideline is based on the [Mpox – CDNA National Guidelines for Public Health Units](#). NSW specific mpox guidance is included within these call-out boxes throughout the document. The content of the CDNA SoNG has not been modified.

Disclaimer

These guidelines for public health units (PHUs) outline Australia's national minimum standard for the routine public health management of mpox. They are intended to reflect the current evidence base, with pragmatic guidance provided where evidence is still evolving. Jurisdictions may implement policies that exceed the national minimum standard based on the local epidemiological context, available resources, and other factors. The Communicable Diseases Network Australia (CDNA) will review and update these recommendations as new information becomes available.

Readers should not rely solely on the information contained within these guidelines. Guideline information is not intended to be a substitute for advice from other relevant sources, including, but not limited to, advice from a public health specialist or other health professional. Clinical judgment and discretion may be required to interpret and apply these guidelines. PHUs should refer to and follow jurisdictional guidance regarding disease management where appropriate.

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1. Summary

Public Health Priority

Mpox* – the disease caused by the monkeypox virus (MPXV) – is a nationally notifiable disease.

**Monkeypox virus infection” was the initial listing made on the National Notifiable Disease List in 2022, prior to the official changing of the disease name to mpox.

Public health priority classification and response

| Priority Classification | Public health response timeline | Data entry timeline |
|-------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------|
| Urgent | Respond to suspected, probable, and confirmed cases immediately (within 24 hours). | Within 1 working day for all probable and confirmed cases. |

Actions in the event of a suspected case

When a suspected case is reported to the Public Health Unit (PHU), immediately (within 24 hours):

- Arrange for appropriate testing, including Whole Genome Sequencing (WGS) where appropriate, to be undertaken in collaboration with the diagnosing clinician and relevant laboratory.
- Advise the suspected case to follow case exclusions and restrictions until a negative result is received.
- Consider identifying contacts and assessing their risk while waiting for test results.

Actions in the event of a probable or confirmed case

For:

- All probable and confirmed locally acquired cases; and
- All confirmed clade II cases

PHUs should immediately (within 24 hours):

- Advise the case to follow case exclusions and restrictions to prevent further disease spread.
- Identify contacts during the case’s infectious period and follow the contact management guidance.
- Attempt to identify the source of infection and/or risk factors.

Refer to case management for further details on response times and procedures, treatment and exclusion and restriction guidance.

For:

- All cases for which there is a reasonable suspicion of clade I infection (see [Section 8: Box 1](#)); and
- All confirmed clade I cases

In addition to the steps for PHUs outlined above, the jurisdictional communicable disease branch should notify the National Incident Centre (NIC) immediately (within 24 hours) via email to health.ops@health.gov.au.

Management of contacts

PHUs should advise **contacts** of probable and confirmed mpox cases to:

- Monitor for mpox symptoms for 21 days after the date of last exposure.
- Follow contact exclusions and restrictions relevant to their [contact risk category](#).
- Offer post-exposure vaccination, if appropriate to their contact risk category.
- Contact the PHU for further advice if symptoms compatible with mpox develop.

Refer to [contact management](#) for more information about public health measures recommended for medium and high-risk contacts.

2. The disease

On 28 November 2022, the World Health Organization (WHO) announced a change in disease name from monkeypox to mpox. Mpox is caused by infection with monkeypox virus (MPXV).

Infectious agent

MPXV is an enveloped double-stranded deoxyribonucleic acid virus of the genus Orthopoxvirus (related to the Poxviridae family), which also includes variola virus (which causes smallpox), vaccinia virus (which is used to produce the smallpox vaccine) and cowpox virus (1).

MPXV has two distinct genetic clades:

- Clade I: formerly known as the Congo Basin or Central African clade, has historically caused more severe disease than other clades, and has two subclades, clades Ia and Ib; and
- Clade II: formerly known as the West African clade also has two subclades, clade IIa and clade IIb (1, 2).

Clade IIb refers primarily to the group of variants circulating globally since the beginning of a global outbreak in 2022 and is transmitted primarily through sexual contact (3).

While official designation is pending, the WHO reported in 2024 that a new virus sub-clade, clade Ib, had emerged in the Democratic Republic of the Congo (DRC). While not identified until

2024, the clade had likely been circulating since late 2023 and has since spread internationally (4).

In this Guideline, the existing MPXV endemic virus is referred to as 'MPXV clade Ia'. 'MPXV clade I' refers to both Ia and Ib subtypes, collectively.

Reservoir

The natural reservoir of MPXV remains unknown. However, the virus has been isolated from several African rodents and primates, including the Gambian pouched rat, tree squirrel, rope squirrel, and sooty mangabey monkey (5, 6).

Disease occurrence and public health significance

Following the eradication of smallpox in 1980 and subsequent cessation of smallpox vaccination programs in the same year, MPXV has emerged as the most significant Orthopoxvirus for public health. Historically, MPXV primarily occurred in humans in Central and West Africa, often in proximity to tropical rainforests. Around 75% of cases during the 1980s were attributable to contact with infected animals (1, 6–8).

Before 2018, the only cases with secondary transmission outside Africa occurred in 2003 in the United States of America. In this outbreak, which largely affected children, transmission was associated with contact with infected prairie dogs sold as pets, that had themselves been infected by imported rodents from Ghana (9, 10).

In early May 2022, multiple countries outside of the African continent reported outbreaks of MPXV clade IIb, predominantly associated with direct transmission of MPXV through prolonged, usually sexual, intimate contact. On 20 May 2022, Australian health authorities detected cases associated with this global outbreak locally – this was the first time the virus had been detected in Australia (11).

The WHO declared the mpox outbreak, due to MXPV clade IIb, a public health emergency of international concern (PHEIC) on 23 July 2022. The Australian Chief Medical Officer subsequently declared mpox a Communicable Disease Incident of National Significance on 28 July 2022, which was stood down on 25 November of the same year. After sporadic overseas acquired cases in 2023, sustained locally acquired human-to-human transmission of MPXV clade IIb was observed in Australia in 2024 (12).

Following the spread of clade Ib from the DRC to several neighbouring African countries, the WHO declared mpox a PHEIC for a second time on 14 August 2024. This triggered the process for Emergency Use Listing for mpox vaccines, accelerating vaccine access for lower income countries (13). On 15 August 2024, Sweden became the first country outside the African continent to confirm a case of clade Ib in a person with a travel history to central Africa (14).

Mode of transmission

MPXV is primarily transmitted directly through close contact with an infected person or indirectly through contact with materials contaminated with the virus (15, 16).

Transmission occurs through broken skin (even if skin breaks are not visible), or via mucous membranes (respiratory tract, conjunctiva, nose, mouth, or genitalia).

Other potential routes of transmission are outlined below:

Respiratory transmission, particularly during prolonged face to face contact (16, 17, 18).

- Indirectly via fomites (e.g., contaminated sheets and clothing).
- Animal to human transmission: infrequently described but can occur through direct contact via bites or scratches and indirectly from contact with blood, bodily fluids, cutaneous lesions or mucosal lesions – there is also limited evidence to suggest that humans can transmit the virus to household pets (16, 19, 20).
- Vertical transmission (16, 20, 25–28).
- Blood borne transmission: limited evidence suggests the potential for transmission through blood or via semen or vaginal fluids (21–23).
- Aerosol-generating and percutaneous procedures (20, 24).

In the international outbreak of MPXV clade IIb, which commenced in May 2022, the highest risk of transmission has been associated with direct and close contact, particularly sexual contact, among men who have sex with men (MSM). Airborne transmission of MPXV is possible but does not appear to be a predominant feature of the clade IIb outbreak (29).

Peer reviewed evidence on the MPXV clade Ib outbreak, which began in the DRC in September 2023 (Ib 2023), is scarce, but initial reports indicate that transmission is primarily linked to sexual contact and the highest incidence is in adolescents and young adults not involved in sex work, followed by sex workers (30). Isolated cases of clade Ib infection have occurred outside of the African continent, with both Sweden and Thailand reporting cases shortly after the PHEIC declaration.

Incubation period

The average incubation period for mpox is estimated to be 8 days, with a range of 3 to 21 days (5, 31,36). There is no evidence to suggest that the incubation period varies by clade, but may be influenced by the route of transmission, with direct exposure (e.g., contact with broken skin or mucous membrane) having a shorter incubation period (37).

Infectious period

Mpox cases may be infectious up to 4 days prior to the onset of symptoms, either prodrome, rash or proctitis (38). Cases remain infectious until all symptoms have resolved, and all lesions have formed scabs and fallen off, leaving fresh skin underneath. Some cases may not be aware of their exact symptom onset date as initial symptoms may be very subtle or not visible (16, 39–42).

Cases who develop no visible lesions should be considered infectious for 21 days after diagnosis or until symptoms resolve.

Asymptomatic cases should be considered infectious for 21 days after a positive test, see [Section 8: Guidance for asymptomatic cases](#).

Clinical presentation and outcomes

Mpox is usually a self-limiting disease with symptoms lasting for 2 to 4 weeks.

The illness may have a prodromal period lasting 1 to 5 days that is characterised by lymphadenopathy, fever ($\geq 38^{\circ}\text{C}$) or history of fever, headache, myalgia, arthralgia, back pain, and sore throat. Not all cases report prodromal symptoms (43, 44).

A maculopapular rash is typical of mpox and may develop 1 to 5 days after the onset of fever. The rash may be generalised or localised, discrete, or confluent. It is classically described as centrifugal, more concentrated on the face and extremities than the trunk. Skin lesions often present at first as macules (lesions with a flat base), which progress to papules (slightly raised firm lesions), vesicles (lesions filled with clear fluid) and pustules (lesions filled with yellowish fluid). Crusted scabbing usually begins 14 to 21 days after rash onset. Scabs then fall off, leaving dyspigmented scars (45).

A typical distinguishing feature of mpox (clade I and IIa), not observed in smallpox or varicella, is the presence of lymphadenopathy such as swelling at the maxillary, cervical or inguinal lymph nodes (46).

Many cases associated with the ongoing clade IIb outbreak have not presented with the classically described clinical picture for mpox as above (28, 47). Differing presentations of cases in the clade IIb outbreak have been described as follows¹:

- Lymphadenopathy, present in 57% of cases (22, 48).
- Cases have often been mild, sometimes with very few lesions, or a single lesion, with 39% of cases having ≤ 5 lesions (22), and cases in the IIb outbreak were five times more likely to report a 'mild' rash than cases with clade IIb from prior outbreaks (47).
- Lesions have appeared in the genital or perianal area and have not spread further (68% of cases with mucosal lesions) (22).
- Visible skin lesions have been absent in some cases (5% of cases), instead presenting with proctitis, urethritis, rectal pain and/or rectal bleeding (22).
- Lesions may also appear in the oral cavity (49).
- Rashes and lesions commonly appear before the onset of fever, malaise and other constitutional symptoms (prodromal period) (22).

¹ Proportion estimates of specific symptoms in clade II outbreak cases presented above have been informed by a single study with a small sample size and should be considered accordingly.

Symptomatic manifestations of mpox can cause severe pain and affect vulnerable anatomic sites; painful proctitis or oral lesions may be the primary presentation. More severe complications of mpox include secondary infections including cellulitis, bronchopneumonia, sepsis, encephalitis, and infection of the cornea with subsequent scarring and loss of vision. Severe dehydration may occur, secondary to vomiting, diarrhoea and oral lesions preventing adequate hydration (27).

Mpox reinfections after initial infection and infections in partially or fully vaccinated people can occur, although evidence regarding these cases is currently limited. One study has demonstrated that cases who are infected after vaccination may report mild symptoms (50). Other evidence in this space has people infected with MPXV, during or after the 2022 clade IIb outbreaks, reporting milder symptoms than those infected in previous outbreaks of clade IIb, though this has not been explicitly linked to vaccination (47).

Mortality

Globally, the mpox case fatality rate (CFR) ranges from 0% to 11%, but there are challenges in accurately estimating this rate (51).

Clade IIa has an estimated CFR ranging between 1 and 6% (37, 38), and clade IIb has an estimated CFR of <1% (76).

Clade I has a CFR estimated at 10% (52), although information from current epidemiological investigations to assess the severity of clade Ia and clade Ib infections is limited.

Early evidence from 2023 clade Ib outbreak cases in the DRC shows an aggregated CFR of 3.6% (53). However, the CFR is estimated to be higher in children aged under 1 year of age, at 8.6%, compared to persons aged 15 years or older, at 2.4% (77). The high CFR for clade I is likely influenced by the health infrastructure, social demographics, and treatment availability in affected countries. The CFR for clade I cases may be lower for cases detected in high-income countries.

For more information about global mpox case data, including deaths, please see: [WHO Emergency situation reports](#).

Groups at increased risk of severe disease

Varying levels of evidence suggest that the following groups are at risk of more severe disease if infected with MPXV:

- People who are unvaccinated (40).
- Immunocompromised individuals, particularly people living with poorly controlled HIV infection (CD4 count <200 cells/ μ L) (54-56).
- Children: severe outcomes in children have been recorded in clade I outbreaks, especially in those younger than 10 years. This could be related to prolonged close contact with family members or caregivers who are cases, malnourishment, co-infection

with other infectious agents, lack of vaccination with vaccines conferring cross-immunity, such as smallpox vaccine, and varying levels of healthcare access (57-60).

- Pregnant people: evidence to support increased risk of severe disease in this group in the context of contemporary global outbreaks is mixed and often based on small numbers. However, vertical transmission of MPXV can occur and may carry a high risk of pregnancy loss or severe congenital infection in some cases (25, 61–64).

High-risk settings and communities

While diverse modes of transmission mean that anyone can acquire or transmit mpox, cases in the ongoing clade IIb outbreak have occurred primarily, but not exclusively, in gay, bisexual, and other men who have sex with men (GBMSM+) (28, 43, 45). The 2023 clade Ib outbreak is also strongly associated with sexual contact and has been amplified in networks that include commercial sex and sex workers (53).

High-risk settings for transmission in the context of contemporary outbreaks include:

- households (58)
- sex-on-premises venues (SOPV) (66–68)
- events, parties, or other venues where skin-to-skin contact and other intimate contact occurs (68–71)
- healthcare settings (though only 10% of cases in health care workers in the clade IIb outbreak have reported their exposure as occupational) (61,72); and
- countries or areas where mpox is endemic or there is a high risk of exposure (11).

Schools and childcare settings may be considered a higher risk setting for transmission for any communicable disease. There is currently insufficient evidence to support specific operational guidance for mpox cases detected in these settings in Australia. If a case is detected in either a school or a childcare setting, follow conservative management as per guidance in [Section 8: Case management](#) and [Section 10: Contact management](#)

NSW specific mpox guidance

Cases attending school and childcare settings should be escalated to NSW Health CD on call, in business hours via email and outside of business hours by phone call to the CD on call medical officer.

For NSW specific guidance for responding to an mpox case in a child who attends an early childhood education and care setting please refer to Appendix C.

3. Routine prevention activities

PHUs may consider undertaking the following measures to prevent sustained transmission of mpox in the community:

- Develop and disseminate mpox educational material to groups at higher risk of infection and severe disease (see [Section 2: Groups at risk of severe disease and High risk settings and communities](#)).
- Establish partnerships with local sexual health clinics, s100 prescribing GPs and other high-caseload practices, to facilitate testing and connect cases and contacts with relevant community support organisations.
- Engage with local community-controlled organisations for the LGBTQIA+ community, people living with HIV, SOPVs, and sex workers, to assist with targeted communications on universal prevention measures and importance of vaccination.

PHUs should take steps to promote community awareness by making guidance publicly available for at risk people (and the wider community where necessary), to minimise their risk of infection, including advice to:

- Exchange contact information with any new sexual partner(s) during periods of local mpox transmission to facilitate contact tracing if required (see [Section 8: Response Procedure](#)).
- Use condoms and perform hand hygiene after condom use, particularly if:
 - having sex while travelling, or
 - attending SOPVs or events where intimate contact with a large number of people occurs (noting that condoms may not be sufficient to stop transmission from uncovered lesions, and MXPV may still transmit in these settings via respiratory droplets or fomites, such as clothes/linen).
- Check [Smart Traveller guidance](#) prior to departure if travelling to countries where mpox is endemic (particularly Central and West Africa).

NSW specific mpox guidance

Mpox: Information for overseas travellers is available on the [NSW mpox hub](#)

During periods of sustained local transmission, PHUs should encourage active case finding by:

- Asking local doctors, sexual health clinics, emergency departments and laboratories to report suspected cases of mpox to the local PHU immediately (this may be done by clinician alert or other means).
- Considering the need for broader communications to assist in case finding, particularly in high-risk settings (see [Section 11: Other specific settings](#)).

Vaccination

Vaccines to prevent or reduce mpox infection and severity are available. Both post-exposure preventative vaccination (PEPV) and primary preventative vaccination (PPV) can reduce the likelihood of widespread community transmission and should be promoted to high-risk groups.

Refer to:

- [The Australian Immunisation Handbook Mpox page](#) for advice specific to available vaccines and their use for PEPV and PPV.
- The [ATAGI interim statement on the use of vaccines for prevention of mpox in 2024](#) for further advice on vaccine effectiveness and waning immunity.
- The [Australian Human Monkeypox Treatment Guidelines](#) for advice on therapeutic options, and prevention and management of vaccine related complications relating to the second-generation vaccine.

NSW specific mpox guidance

NSW specific mpox vaccination advice is available on the mpox hub.

- [Eligibility criteria](#)
- [JYNNEOS vaccine consent, supply and administration in NSW](#)
- [JYNNEOS vaccination clinics](#)
- [PEPV information](#)

4. Surveillance objectives

Key surveillance objectives are to:

- Identify and describe the epidemiology of mpox cases to inform public health interventions.
- Identify clusters of mpox cases and sources of infection to minimise transmission through case and contact management.
- Enable effective prevention and control measures and effective communication strategies based on:
 - identified routes of transmission
 - at-risk groups, and
 - high-risk settings.
- Provide robust data to support efforts to reduce human-to-human transmission.

5. Data management

All confirmed and probable cases should be entered on to the National Notifiable Diseases Surveillance System (NNDSS) by state and territory PHUs, ideally within one working day of notification.

To note:

- The date of onset is the date that symptoms began, which may be prodromal/systemic symptoms, proctitis, or may be a rash. If no symptoms develop then do not enter a date of onset.
- State and territory PHUs should document the clade for each case's infection in the notifiable disease database.
- Suspected cases that, upon follow up, are subsequently shown not to have mpox should have their case status in the jurisdictional notifiable disease surveillance system revised within one working day.
- The jurisdictional communicable disease branch should notify the NIC immediately (within 24 hours) of all cases for which there is a reasonable suspicion of clade I infection (see Section 8: Box 1) and all WGS confirmed clade I cases via email health.ops@health.gov.au and include the following information:
 - History of overseas or interstate travel.
 - Place of acquisition (if known).
 - Number of high-risk contacts.

6. Case definition

Both **confirmed cases** and **probable cases** should be notified. A suspected case definition has been developed in response to current multi-country outbreaks of mpox in non-endemic countries and may be discontinued as the outbreak evolve. Suspected cases should not be notified to the National Notifiable Disease Surveillance System (NNDSS) but should be reported by clinicians and laboratories to state and territory PHUs.

Confirmed case

A confirmed case requires **laboratory definitive evidence** only:

Laboratory definitive evidence

1. Detection of monkeypox virus by nucleic acid amplification testing in clinical specimens

OR

2. Detection of monkeypox virus-specific sequences using next generation sequencing for clinical specimens

OR

3. Isolation of monkeypox virus by culture from clinical specimens.

Probable case

A probable case requires laboratory suggestive evidence **AND** clinical evidence:

Laboratory suggestive evidence

1. Detection of Orthopoxvirus by nucleic acid amplification testing in clinical specimens

OR

2. Detection of Orthopoxvirus by electron microscopy from clinical specimens in the absence of exposure to another orthopoxvirus.

Clinical evidence

A clinically compatible rash or lesion(s)^{1,2,3,4} on any part of the body with or without one or more clinical feature(s) of monkeypox virus infection:

- lymphadenopathy
- fever (>38 °C) or history of fever
- headache
- myalgia
- arthralgia
- back pain
- fatigue.

Suspected case⁴

A suspected case requires clinical evidence⁵ **AND** epidemiological evidence:

Clinical evidence

As for probable case

Epidemiological evidence

1. An epidemiological link to a confirmed or probable case of monkeypox virus infection in the 21 days before symptom onset

OR

2. Overseas travel in the 21 days before symptom onset

OR

3. Sexual contact and/or other physical intimate contact with a gay, bisexual, or other man who has sex with men in the 21 days before symptom onset

OR

4. Sexual contact and/or other physical intimate contact with individuals at social events associated with mpox activity⁶ in the 21 days before symptom onset.

Notes

1. Lesions typically begin to develop simultaneously and evolve together on any given part of the body, and may be generalised or localised, discrete or confluent. The evolution of lesions progress through four stages – macular, papular, vesicular, to pustular – before scabbing over.

2. For which the following causes of acute rash do not explain the clinical features: chickenpox, shingles, measles, herpes simplex, or bacterial skin infections.

3. Some cases may present with proctitis (painful inflammation of the rectum) in the absence of an externally visible rash or lesion(s).

4. PHUs should seek advice from the responsible authorising pathologist and the clinician regarding testing for monkeypox virus and other alternative causes.

5. A high or medium risk contact of a confirmed or probable case only requires one or more clinical feature(s) (i.e. does not require rash or lesion(s), if another symptom present) to be a suspected case.

6. This includes events previously associated with mpox activity internationally such as sex-on-premises venues, raves, festivals, and other mass gatherings where there is likely to be prolonged close contact or meeting new sexual partners through a dating or hook-up “app”.

7. Testing

Patients with symptoms who present with a history suggestive of exposure to MPXV should have a specimen collected and be referred for laboratory testing. Testing of asymptomatic persons is not recommended, although treating clinicians may choose to test asymptomatic high-risk contacts based on individual clinical risk (74).

Most testing is performed at jurisdictional public health laboratories. For further information on recommendations for laboratory testing please refer to the [Public Health Laboratory Network](#)

Mpox Laboratory Case Definition. Specific advice from the specialist microbiologist at the testing laboratory may be sought to obtain advice on specimen collection, safe packaging, and transport.

Specimen collection and handling

General advice relating to specimen collection and handling is outlined in the Public Health Laboratory Network Guidance on Monkeypox patient referral, specimen collection and test requesting for general practitioners and sexual health physicians.

Lesion material should be collected from people with suspected mpox who have an active lesion, rash or proctitis. Acceptable sample types include lesion fluid, lesion tissue, lesion crust or skin biopsy or anorectal swab. It is advisable to collect samples from more than one lesion where possible, however excessive sample collection should be discouraged to minimise risk to healthcare workers or laboratory personnel.

NSW specific mpox guidance

NSW Health Pathology recommends that only one skin lesion is sampled, with swabs also being collected from rectal and nasopharyngeal sites if relevant symptoms. Where the differential diagnosis includes HSV, VSV or syphilis the lesion should be swabbed twice and specimens and requests placed in separate bags.

Lesion specimens are preferred. However rectal, throat or nasopharyngeal swabs are also suitable specimens. Such specimens may be collected in persons with prodromal symptoms who present with no lesions (e.g., a contact who develops symptoms). Whole blood or serum can be tested in specific circumstances but are often negative due to the transient nature of viraemia and should not be used to exclude infection with MPXV. Whole blood or serum should only be collected on the advice of a specialist microbiologist. MPXV may be detected in semen, though definitive evidence of MPXV transmission via semen is lacking (see Public Health Laboratory Network Mpox Laboratory Case Definition).

Specimens should be collected using a sterile dry swab. Avoid using transport medium, as this may dilute the sample and increase risk of leakage. For further advice, including on appropriate PPE and safe handling and transport of specimens, refer to the Public Health Laboratory Network Mpox Laboratory Case Definition.

Characterisation of clades, subclades, and lineages

Whole genome sequencing (WGS) is required to determine clades, subclades, and lineages of MPXV; however, some public health reference laboratories may develop and use MPXV nucleic acid amplification tests to distinguish between MPXV clade I and MPXV clade II infections.

Public health reference laboratories may conduct WGS of positive samples to:

- differentiate clades, subclades, and lineages;
- monitor mutations to ensure routine nucleic acid amplification tests are fit for purpose;
- assist, in conjunction with epidemiologic information, the identification of transmission links and/or clusters, where these are not already clear; and
- monitor *in silico* antiviral resistance patterns (73).

The circumstances under which WGS should be performed is determined by individual state and territory health department and reference laboratory. Jurisdictions may choose to sequence strains where:

- there is a reasonable suspicion that the case is infected with clade I (see [Section 8: Box 1](#)),
- cases do not have epidemiological links and/or are atypical (i.e., female case with no MSM contact),
- an mpox outbreak is emerging (rather than as standard practice during a stabilised outbreak), and
- jurisdictions have capacity for WGS capacity and resources are available.

8. Case management

Response times

Urgent: immediately (within 24 hours).

Response procedure

PHUs should begin follow-up investigation for all suspected, probable, and confirmed cases on the day of notification to identify the source of exposure and contacts.

It is important that the PHU conducts an assessment of whether the case is potentially infected with MPXV clade I (See Box 1) to assist with appropriate management of a case prior to confirmation of the clade. If there is a reasonable suspicion based on this assessment that a case is infected with clade I, or clade I is confirmed by WGS, the jurisdictional communicable diseases unit should notify the NIC immediately (within 24 hours) via email to health.ops@health.gov.au.

Box 1: Factors to consider in an mpox risk assessment

While awaiting confirmation of the clade, PHUs may consider the following factors to determine whether there is a reasonable suspicion the case is infected with MPXV

clade I:

- Travel, within 21 days of symptom onset, to a destination that has detected cases of MPXV clade I infection.
- Epidemiological links to cases infected with or suspected to be infected with MPXV clade I.
- No known epidemiological link to a MPXV clade II case.
- Severe presentation of disease with unknown clade.
- No reported known risk factors (e.g., no sexual contact in the 21 days prior to symptom onset).

NSW specific mpox guidance

A list of countries with Clade I circulation is maintained by the NSW Specialist Service for High Consequence Infectious Diseases (HCID) and is available to NSW Health staff via the NSW Biocontainment Centre [SharePoint site](#).

PHUs should respond to a case in collaboration with the case's treating clinician or local health service, and ensure that the following actions are taken:

- Samples for relevant pathology tests are collected and results are confirmed.
- Where possible, contact the treating doctor to ensure they have discussed the diagnosis with the case (or caregiver) and advise the need for the PHU to interview the case (or caregiver) for public health purposes.
- The case (or caregiver) is interviewed to:
 - ascertain the onset date of illness and symptoms
 - ascertain travel history, any high-risk settings or activities, any exposure to a confirmed or probable case, the nature of any contact with a confirmed or probable case, details of sexual contacts and intimate partners during the 21 days prior to symptom onset and smallpox and mpox vaccination status.
- Prioritise identification of high and medium-risk contacts: in instances where sexual encounters are anonymous, or where cases are unwilling or unable to provide details of contacts, consider whether the case can provide information to contacts directly – this could include the use of web or app based notification tools (e.g., [Let Them Know](#), [The Drama Downunder](#)).
- Identify the likely source of infection.

- Implement public health management of confirmed and probable cases, and their contacts. This includes providing advice around prevention and arrangements for access to post-exposure preventative vaccination for contacts.
- If the case has no identified sexual source of infection, the PHU should urgently investigate other plausible sources, such as the household or workplace.
- Ensure people with mpox have access to a PHU contact number to seek advice or support where required.

NSW specific mpox guidance

Information on case exposures should be obtained utilising the NSW case investigation form for mpox (see Appendix B).

Exclusion and restriction

PHUs should advise cases to undertake the following exclusions and restrictions during their infectious period, including the prodromal and rash stages of the illness.

Until they meet the clearance criteria, cases should:

- Keep lesions covered when around other people or animals—use a waterproof dressing or bandage and then cover with clothing.
- Wear a surgical mask when around other people or animals if oral lesions, pharyngitis, or respiratory symptoms (such as coughing) are present.
- Always practice careful hand and respiratory hygiene.
- Avoid touching their face or rubbing their eyes, especially if blisters are present on or near their eyes or hands.
- Limit close contact with household members where possible, by sleeping in a separate room and/or using a separate or ensuite bathroom.
- Not share clothing, bedding or towels, and do their own laundry.
- Not share unwashed cutlery and crockery.
- Work from home, if possible, unless risk is assessed by PHU as suitable to attend the workplace.
- Clean and disinfect any shared spaces (including bathrooms), appliances or items immediately after use.

Cases should not:

- Have close or intimate contact with others, including all sexual activity.
- Enter high-risk settings such as early childhood education and care services, aged care, healthcare settings, and settings with young children and those at higher risk of severe disease, including for work, unless seeking medical attention*.

- Have contact with people who are at higher risk of severe disease, including immunosuppressed people, pregnant people, and young children.
- Have close contact with animals, particularly dogs and rodents (e.g., mice, rats, hamsters, gerbils, guinea pigs, etc.), due to the possibility of human-to-animal transmission.
- Donate any human tissue, including blood, cells, tissue, breast milk, semen, or organs (while unwell and for 12 weeks following clearance).

NSW specific mpox guidance

Human to animal transmission has only been described in one case. It is recommended that cases are aware of the potential for transmission to animals, but this risk can generally be mitigated by covering lesions and wearing a surgical mask if respiratory involvement. Strict isolation from pets is not required in NSW.

In certain circumstances, cases should isolate (at home or in hospital) until they meet the clearance criteria ** and wear a surgical mask when around other people or animals, including where:

- They are unable to cover their lesions due to disseminated disease or potential generation of infectious droplets due to oral lesions, pharyngitis, or respiratory symptoms.
- There is a reasonable suspicion the case is infected with clade I (see Section 8: Box 1), or clade I has been confirmed via WGS.

*PHUs may conduct a risk assessment for cases who work in or visit high-risk settings and cannot work from home. The risk assessment should consider: the clade, the type and nature of work, number and location of lesions, and mode of transport to and from work. Cases must cover all lesions and wear a surgical mask when in high-risk settings.

**Cases who are advised to isolate at home should stay at home unless they need to leave for essential reasons (such as seeking medical care).

Cases with confirmed MPXV clade I infection or epidemiological links

In addition to the general case exclusion and restriction recommendations listed above, if there is a reasonable suspicion a case is infected with MPXV clade I (see Section 8: Box 1) the case should also:

- Isolate while infectious (at home or hospital), as directed by the PHU.
- Sleep in a separate room and not have contact with household members.
- Use a separate bathroom to others in the household where possible.
- Wear a surgical mask when in the same room as others (even if no oral lesions or pharyngitis are present) and cover skin lesions.

- Discuss with the PHU if they need to access non-urgent healthcare.

The PHU should conduct an assessment of the case’s isolation location, the ability of the case and their household members to follow the above advice, and whether they live with any individuals at increased risk of severe disease. Based on this assessment, the PHU may need to provide additional advice to mitigate risk.

NSW specific mpox guidance

Cases where there is a suspicion of mpox clade I infection must be urgently escalated to NSW Health CD on call, in-hours via email and after-hours via phone to the CD on call medical officer.

Management in healthcare settings

Healthcare facilities should manage mpox cases according to Table 1. For cases where the clade is unknown, treating clinicians should use standard, contact and airborne precautions until a risk assessment is performed ([Section 8: Box 1](#)), or the clade is determined, whichever comes first.

Table 1. Summary of mpox infection prevention and control precautions in healthcare settings

| Case type | Recommended IPC precautions |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Confirmed clade I | <ul style="list-style-type: none"> • Standard, contact and airborne precautions. • Continue until lesions/rash and other symptoms have resolved* |
| Confirmed clade II | <ul style="list-style-type: none"> • Standard and contact precautions only. • Add droplet precautions where there is: <ul style="list-style-type: none"> ○ Disseminated disease ○ Respiratory involvement ○ Aerosol generating and dispersing procedures[†] (including showers, handling linen and fluffing bed linen). |

* advice is subject to change pending experience with the clinical disease and its transmission dynamics.

[†] transmission of MPXV from aerosol generating procedures has not been detected in Australia, however, depending on the nature of the activity it may be appropriate to consider using additional airborne precautions, such as a PFR.

Where possible, all suspected, probable, and confirmed mpox cases being assessed or managed in health care settings should be placed in a single room with an ensuite.

In certain situations, a negative pressure room should be used if available (e.g., where a case is confirmed clade I or there is a reasonable suspicion the case is infected with clade I). Do not place suspected, probable, or confirmed cases in a positive pressure room.

Healthcare workers caring for mpox cases in a clinical setting

Should:

- Manage all cases as per Table 1 until all lesions and other symptoms have resolved.
- Avoid exposure to body fluids, lesion material or contaminated material from an infected person.
- Avoid contact with any materials, such as bedding, that have been in contact with an infected person (unless wearing appropriate PPE).
- Perform hand hygiene in accordance with the 5 moments for hand hygiene.
- Receive PEPV where high-risk activities were undertaken without PPE, as per contact definitions and management sections.
- Use airborne precautions (or, for clade IIb cases, droplet precautions) when undertaking environmental cleaning, waste management and handling of the case's clothing, linen, and towels.

Patients with a suspected, probable, or confirmed mpox infection in a clinical setting

Should:

- Wear a surgical mask when outside their room.
- Keep skin lesions covered with non-stick dressings, a sheet or gown/clothing, regardless of clade.

NSW specific mpox guidance

NSW specific guidance is available from the [Clinical Excellence Commission](#)

Case clearance

Cases can resume most normal activities when all lesions have crusted, scabs have fallen off and a fresh layer of skin has formed underneath.

The PHU or managing clinician will advise on clearance of a case.

For 12 weeks following clearance, cases should:

- wear a condom during sexual activity (receptive and insertive oral/anal/vaginal sex) (23, 28)
- not donate blood, cells, tissue, breast milk, semen, or organs.

NSW specific mpox guidance

Clearance of mpox cases is a clinician responsibility. For cases not being managed by sexual health clinics PHUs are to ensure that the managing clinician is aware of their responsibility to review and issue case clearance. The PHU may provide clearance, particularly if there are challenges with accessing a GP for clearance.

PHUs should ensure cases that work or attend high-risk settings such as early childhood education and care services, aged care, healthcare settings, and settings with young children and those at higher risk of severe disease receive clearance before returning to normal activities in a high-risk setting.

Guidance for cases with non-visible skin lesions

For cases with non-visible skin lesions (e.g., cases with proctitis), PHUs should recommend that they follow the same exclusion and restriction requirements as cases with visible lesions as above, until complete resolution of all symptoms, or after 21 days post symptom onset, whichever is longer.

Guidance for asymptomatic cases

International reports of asymptomatic MPXV infection in cases associated with the ongoing clade IIb outbreak are rare and generally only detected and described in research studies. There is limited evidence available to determine whether asymptomatic cases are infectious (74, 75). In the event an asymptomatic case is detected, they should be managed as per other suspected, probable, and confirmed cases and can be considered cleared 21 days after positive test.

Treatment

Mpox is generally self-limiting. Most cases will not require specific treatment other than supportive management of symptoms or treatment of complications (e.g., antibiotics for secondary cellulitis).

Advice on clinical management should be sought from an infectious disease physician and/or sexual health physician, particularly in persons with severe disease or at risk of severe disease.

If antiviral treatment is indicated, it should be initiated in consultation with an infectious disease physician and/or sexual health physician.

Tecovirimat (TPOXX) is the preferred treatment for severe MPXV infection, although this must be requested from the Chief Medical Officer via state or territory Chief Health Officers.

NSW specific mpox guidance

Antiviral agents can be accessed through the **NSW Specialist Service for High Consequence Infectious Diseases** (or contact the infectious diseases physician on-call at Westmead Hospital via the switchboard on **02 8890 5555**).

For further advice, refer to the [Australian Human Mpox Treatment Guidelines](#).

9. Contact definitions

Table 2. Clade II^a: Contact definitions

| Contact type | Definition of exposure during the case's infectious period | Examples |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High risk | Contact ¹ via <u>broken skin</u> or <u>mucous membranes</u> with an mpox case (while infectious), potentially contaminated materials (including bed linens and healthcare equipment), crusts, or bodily fluids. | <ul style="list-style-type: none"> Sexual or intimate partners, including sex parties. Someone whose eyes, nose, mouth, orifice, or exposed wound has had contact with bodily fluid from a case. |
| Medium risk | <ul style="list-style-type: none"> Contact with an mpox case via <u>intact skin</u> (while case is infectious), potentially contaminated materials (including bed linens and healthcare equipment), crusts, or bodily fluids, while the contact was not wearing appropriate PPE² <p>OR</p> <ul style="list-style-type: none"> Exposure to aerosols from an mpox case, while the contact was not wearing appropriate PPE², during any process or procedure that may create aerosols from oral secretions, skin lesions or resuspension of dried exudates (e.g., shaking of soiled linens, showering patients, or conducting procedures involving the oropharynx). | <ul style="list-style-type: none"> Those providing personal care¹ to an mpox case while not wearing appropriate PPE² or in the case of a PPE breach. Healthcare workers present during an aerosol-generating procedure without wearing appropriate PPE². Cleaning or laundry staff who have changed or laundered the bedding of an mpox case who has rash/lesions without wearing appropriate PPE². Attendance at a higher risk social setting or situation (76) when an mpox case attended during their infectious period³. |

Notes:

¹ **Household contacts** who have intimate contact with a case or are in a caring role may be considered high-risk contacts. Individuals who reside in the same household but without engaging in intimate contact or caring may be considered lower risk.

² **Appropriate PPE** as determined by the PHU based on a risk assessment including the nature of contact, likely transmission pathway/s and setting type, noting the minimum standard defined in [Section 8: Case management](#).

³ **A higher risk social setting or situation** constitutes those settings where the nature of interaction may pose some risk of transmission (e.g. raves, festivals, and other mass gatherings where there is likely to be prolonged close contact). A risk assessment should consider the case's symptoms and location of lesions. This should be limited to identifiable social contacts unless broader communications for the venue is considered necessary by the PHU.

^aAs per epidemiological links, travel history or WGS.

Table 3. Clade I*: Contact definitions

| Contact type | Definition of exposure during the case's infectious period | Examples |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High risk | <ul style="list-style-type: none"> Contact via broken skin or mucous membranes with a clade I case, potentially contaminated materials (including bed linens and healthcare equipment), crusts, or bodily fluids, while the contact was not wearing appropriate PPE¹. <p>OR</p> <ul style="list-style-type: none"> Household contacts. <p>OR</p> <ul style="list-style-type: none"> Being in an enclosed room of a clade I case during any process or procedure that may create aerosols from oral secretions, skin lesions or resuspension of dried exudates (e.g., shaking of soiled linens, showering patients, or conducting procedures involving the oropharynx), while the contact was not wearing appropriate PPE¹. | <ul style="list-style-type: none"> Sexual or intimate partners, including sex parties. Household contacts who have been in the same residence as the case for at least one night. Caregivers of symptomatic clade I cases who were not wearing appropriate PPE¹. Healthcare workers caring for a clade I case or present during an aerosol-generating procedure without wearing appropriate PPE¹. Someone whose eyes, nose, mouth, orifice, or exposed wound has had contact with bodily fluid from a clade I case. Any person changing the bedding of a clade I case who has rash/lesions without wearing appropriate PPE¹. Any person who has attended a higher risk social setting or situation when a clade I case attended during their infectious period. |
| Medium risk | <ul style="list-style-type: none"> Contact via intact skin with a clade I case, potentially contaminated materials, crusts, or bodily fluids while the contact was not wearing appropriate PPE¹ <p>OR</p> <ul style="list-style-type: none"> Being in an enclosed space with a clade I case while the contact was not wearing appropriate PPE¹. | <ul style="list-style-type: none"> Passengers who were not wearing a mask while seated within 2 rows of a clade I case on a flight for 3 hours or more. Drivers and passengers who were not wearing a mask while in the same vehicle as a clade I case for 3 hours or more. Attendance at a school or childcare centre where a clade I case has attended for 3 hours or more. |

Notes:

¹ **Appropriate PPE** is the minimum standard as defined in [Section 8:Case management](#).

*As per epidemiological links, travel history or WGS.

10. Contact management

PHU staff should directly follow up:

- all high-risk contacts, regardless of clade; and
- all contacts of probable or confirmed mpox cases for which there is a reasonable suspicion of clade I infection (see [Section 8: Box 1](#)).

Where direct follow up by PHUs is not possible, or where the case is not willing or able to provide details of contacts to the PHU for follow up, other strategies should be used to help ensure people at risk receive public health advice. For example, PHUs may provide a written message for the case to pass onto people they think may be at risk, which could include the case messaging their sexual partner/s via direct messaging through social media or 'hook up' apps (See [Section 8: Case Management – Response Procedure](#)).

Regardless of the method of providing advice to contacts, PHUs should advise contacts to **monitor** for signs and symptoms of mpox for 21 days after the date of their last exposure to the case. All contacts should be encouraged to practise good hand hygiene and respiratory etiquette.

Where PHU are conducting contact tracing of a case with an epidemiological history that generates reasonable suspicion of clade I infection (see [Section 8: Box 1](#)), they should classify contacts as if the case were clade I (Tables 3 and 4) until the clade of the case is confirmed. If WGS results confirm clade II, return to managing contacts according to Tables 2 and 4.

See Table 4 for detailed guidance on management of high- and medium-risk contacts.

Table 4. Management of high- and medium-risk mpox contacts

| Type of contact | Recommended contact management |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High risk | <p>Surveillance: Active self-monitoring¹, or active monitoring by PHU for clade I contacts.</p> <p>Post-exposure preventative vaccination (PEPV) administration²: Vaccination should be offered if not fully vaccinated. See Australian Immunisation Handbook.</p> <p>Testing priority: Urgent if symptoms develop.</p> <p>Additional recommendations:</p> <p>For 21 days from last exposure:</p> <ul style="list-style-type: none">• Abstain from sexual activity.• If working in a high-risk setting, ensure that the contact remains symptom free.• Avoid childcare and aged care facilities other than for work purposes; avoid healthcare facilities unless seeking medical attention.• Avoid contact with those potentially at higher risk of severe infection (young children, older people, immunocompromised people, and pregnant people).• Do not donate blood, cells, tissue, breast milk, semen, or organs. <p>Contacts of suspected, probable, or confirmed cases for whom there is a reasonable suspicion of MPXV clade I infection (Section 8: Box 1) should also:</p> <ul style="list-style-type: none">• Avoid any close physical contact with others, including sexual contact.• Work from home where the contact has employment that requires close physical contact with others, attends an educational setting or a high-risk |

setting (e.g., healthcare, aged-care, childcare settings). The PHU should conduct a case-by-case assessment of risk. Where return to work/education is advised, precautions may include:

- Practice good hand hygiene.
- Wear a surgical mask when outside the home and when in the same room as other people when in the home.
- Avoid non-essential outings, especially to crowded settings.
- Avoid contact with animals, particularly dogs and rodents (e.g., rats, mice, hamsters, gerbils, guinea pigs, etc.).

Medium risk

Surveillance: Active self-monitoring¹

PEPV administration²: Vaccination should be offered if not fully vaccinated. See [Australian Immunisation Handbook](#).

Testing priority: High if symptoms develop³

Additional recommendations:

For **21 days** from last exposure:

- If working in a high-risk setting⁴, ensure the contact remains symptom free.
- Avoid childcare⁵ and aged care facilities, other than for work purposes; avoid healthcare settings unless seeking medical attention. PHU should assess and manage workers, residents, and attendees in these settings on a case-by-case basis.
- Avoid close contact with those at potential higher risk of severe infection (young children, older people, immunocompromised people, and pregnant people).
- Do not donate blood, cells, tissue, breast milk, semen, or organs.

Contacts of probable or confirmed cases for whom there is a reasonable suspicion of MPXV clade I infection (Section 8: Box 1) should also:

- Avoid working in a high-risk setting⁴, if possible.
- Practice good hand hygiene.

Notes:

¹ Active self-monitoring is the contact watching for signs or symptoms compatible with mpox infection; if they appear, follow case exclusion and restriction criteria and seek medical review. If the contact is facing difficulty accessing medical review call the PHU for assistance. During the incubation period the PHU may choose to regularly monitor high and medium risk contacts (by phone, email, text) to check for the emergence of any signs or symptoms at intervals if there are concerns about the contact's health literacy, self-efficacy, or if other supports are needed.

² For current ATAGI recommendations and the latest evidence for mpox vaccines, please see the [Australian Immunisation Handbook](#).

³ Treating clinicians may choose to test asymptomatic high-risk contacts based on an assessment of individual clinical risk, e.g. if the patient is immunocompromised. This should not delay PEPV administration if appropriate.

⁴ **High-risk settings** are defined as childcare, aged care and disability facilities and healthcare environments.

⁵ Children who are medium risk contacts of clade IIb cases may attend childcare and school

11. Other specific settings

Sex on premises venues

To minimise the risk of an outbreak occurring at an SOPV, PHUs should encourage venues to implement the following preventative measures:

- Display informative posters and provide clear information about:

- mpox prevention and risk reduction strategies including the potential for transmission through sexual and close contact,
- PEPV and PPV recommendations and identification of symptoms, and
- encouragement to seek medical assessment and testing.
- Ensure appropriate infection prevention and control measures are taken to prevent the spread of mpox including routine cleaning, disinfection, and waste disposal.

In the event a case or cases are reported to have attended an SOPV whilst infectious, a PHU may consider the following outbreak management strategies:

- Encourage SOPV owners and/or proprietors to notify the PHU if they become aware of a mpox case attending their venue.
- Distribute messages to patrons of the venue, through venue owners and/or proprietors, advising date and time of attendance of the mpox case.
- Advise patrons and staff to monitor for symptoms and to seek medical advice as soon as possible if they develop symptoms.
- Provide advice to venues regarding:
 - Cleaning and disinfection, including increasing frequency of cleaning for surfaces that may contact people's skin, areas soiled with bodily fluids or lubricant, and frequently touched objects/surfaces.
 - Not undertaking activities that may cause particulate dispersal, such as sweeping (wet cleaning methods are preferred), and shaking used linen, clothing, or towels before laundering.
 - Waste management (i.e. waste [paper towels, tissues, condoms] should be double bagged before being disposed through standard waste management).
 - The PPE that should be worn by staff undertaking cleaning, waste disposal and laundering, which at a minimum should include a fluid resistant surgical mask, non-sterile disposable gloves, and a disposable apron.
- Consider offering SOPV outreach vaccination programs.

Methods of messaging and the ability to contact trace may be limited due to the willingness of patrons to provide contact information. Best practice may require assessment on a case-by-case basis.

Congregate living settings

Congregate living settings are facilities or other housing where people who are not related reside in close proximity and share at least one common room (e.g., sleeping room, kitchen, bathroom, living room). Congregate living settings can include correctional and detention facilities, shelters for people experiencing homelessness, group homes, dormitories at institutes of higher education, boarding schools, seasonal worker housing, residential substance use treatment facilities and other similar settings but *not* healthcare settings.

In the event of a case in a congregated living setting, PHUs may consider the following outbreak management strategies:

- Undertake contact tracing to identify staff, volunteers or residents who may have been exposed to a mpox case.
- Ensure appropriate infection prevention and control measures are undertaken including the cleaning and disinfection of areas where people with mpox spent time while infectious, waste and laundry management, the accessibility of handwashing facilities and provision of and training in the use of appropriate PPE. For more information, please see [Section 8: Management in healthcare settings](#).
- Distribute messaging to staff, volunteers and residents providing information about mpox and advising a case has been detected.
 - Clearly communicate and provide information about mpox prevention, including the potential for transmission through close, sustained physical contact, including sexual activity.
- Advise staff, volunteers, and residents who are suspected to have mpox to seek testing and medical evaluation and facilitate this if required.
- Recommend that people identified to have mpox should have their own bedroom and bathroom facilities; where this is not possible, cohorting of cases may be recommended:
 - If cohorting is not possible, ensure residents with mpox maintain physical distancing from others, cover any skin lesions with clothing, bandages, or a sheet or gown and wear a well-fitting disposable mask over their nose and mouth in situations where they are unable to physically distance.
 - If required, multiple residents who test positive for mpox can stay in the same room.
- Recommend that a dedicated laundry space should be identified for residents in isolation, and that anyone handling laundry should wear appropriate PPE (as per advice in [SOPV section](#) above) and that the below procedure for waste management be followed:
 - Use a plastic bag to contain all the waste in the infected person's area, then tie the bag off and directly dispose of it into the general waste stream (not recycling).
 - Perform hand hygiene immediately after disposing of waste.
- Recommend that the number of staff engaging with cases is reduced to those essential for operations or care.
- Direct staff and volunteers who test positive to follow the same advice for existing cases. If there are workforce shortage concerns, a risk assessment for workplace attendance may be undertaken by a PHU on case-by-case basis.
- Consider recommending vaccination on a case-by-case basis, including PEPV and targeted PPV for certain groups within the facility.

Aboriginal and Torres Strait Islander Communities

If introduction of mpox occurs in an Aboriginal and Torres Strait Islander community, the risk of mpox transmission may be higher than the general community, due to inadequate and overcrowded housing. For this reason, a low threshold should be used to initiate disease control

measures, including consideration of communications and broader vaccination strategies. PHUs may consider targeted action to all community members in a remote Aboriginal or Torres Strait Islander community if supported by the epidemiological context. The nature of any action will depend on factors including the size and remoteness of the community. Community engagement should be central to any community-based response and should continue throughout implementation to ensure actions are culturally appropriate.

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13. Appendices

Appendix A: Mpox Public Health Unit Checklist

Probable or confirmed cases should be immediately notified to the relevant state or territory communicable disease branch.

Contact the case's treating clinician to:

- Confirm case has been notified of test results.
- Collect details of clinical presentation.
- Collect other relevant clinical or exposure details.

Contact the case or caregiver to:

- Confirm onset date and symptoms of the illness.
- Identify the likely source of infection.
- Ensure relevant pathology tests have been undertaken at appropriate laboratory facilities.
- Ensure relevant isolation and infection control measures are in place.
- Identify contacts and obtain their contact details.
- Provide information on mpox.

Contact laboratory to:

- Check samples received and obtain any outstanding results.

Confirm case:

- Assess information against case definitions.

Notify patient's contacts to:

- Assess risk of mpox (exposure history) and determine category for management.

- Determine current symptoms.
- Assess for vaccination (see [Contact management](#)).
- Ensure access to thermometer and telephone.
- Explain symptoms and restrictions to the contact.
- Provide information on mpox.

Other issues:

- Enter case data into notifiable diseases database.

NSW specific mpox guidance

Appendix B: Mpox case investigation forms

- [Fillable](#)
- [Non-fillable](#)

Appendix C:

- General advice for responding to an mpox case in a child who attends an early childhood education and care setting