

Mpox

CDNA National Guidelines for Public Health Units

Version 5.0

Date: 16 December 2025

Creative Commons Licence

This publication is licensed under the Creative Commons Attribution 4.0 International Public License available from <https://creativecommons.org/licenses/by/4.0/legalcode> ("Licence"). You must read and understand the Licence before using any material from this publication.

Restrictions

The Licence may not give you all the permissions necessary for your intended use. For example, other rights (such as publicity, privacy and moral rights) may limit how you use the material found in this publication.

The Licence does not cover, and there is no permission given for, use of any of the following material found in this publication:

- the Commonwealth Coat of Arms. (by way of information, the terms under which the Coat of Arms may be used can be found on the Department of Prime Minister and Cabinet website)
- any logos and trademarks;
- any photographs and images;
- any signatures; and
- any material belonging to third parties. The third party elements must be included here or have a footnote reference throughout the document showing where they are

Attribution

Without limiting your obligations under the Licence, the Department of Health and Aged Care requests that you attribute this publication in your work. Any reasonable form of words may be used provided that you:

- include a reference to this publication and where, practicable, the relevant page numbers;
- make it clear that you have permission to use the material under the Creative Commons Attribution 4.0 International Public License;
- make it clear whether or not you have changed the material used from this publication;
- include a copyright notice in relation to the material used. In the case of no change to the material, the words "© Commonwealth of Australia (Australian Centre for Disease Control) 20XX" may be used. In the case where the material has been changed or adapted, the words: "Based on Commonwealth of Australia (Australian Centre for Disease Control) material" may be used; and
- do not suggest that the Australian Centre for Disease Control endorses you or your use of the material.

Enquiries

Enquiries regarding any other use of this publication should be addressed to the Branch Manager, Communication Branch, Australian Centre for Disease Control, GPO Box 9848, Canberra ACT 2601, or via e-mail to copyright@health.gov.au

Using these guidelines

These guidelines for public health units (PHUs) outline Australia's agreed national approach for the routine public health management of mpox. They consider available evidence at the time of publication to develop pragmatic guidance, including where evidence is still evolving or where jurisdictional approaches differ. Jurisdictions may implement policies that differ from these national standards based on local factors.

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, jurisdictional public health guidelines and 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. These guidelines are not intended to provide public health guidance or advice to other (non-PHU) audiences.

Members of the Communicable Diseases Network Australia (CDNA), the Australian Health Protection Committee (AHPC), and the Australian Government, as represented by the interim Australian Centre for Disease Control (CDC), do not warrant, or represent that the information contained in these guidelines is accurate, current, or complete. The CDNA, the AHPC and the interim Australian CDC do not accept any legal liability or responsibility for any loss, damages, costs, or expenses incurred by the use of, reliance on, or interpretation of the information contained in these guidelines.

Endorsed by CDNA Jurisdictional Executive Group: 7 November 2025

Noted by AHPC: 16 December 2025

Published: 17 December 2025

Summary of revision history

Version	Date	Revised by	Changes
Version 5.0	16 December 2025	CDNA	Full revision to update evidence-based recommendations for public health response and align approaches for clade I and II.
Version 4.0	14 October 2024	CDNA	Full revision to update evidence-based recommendations for public health and strengthen clade I information.
Version 3.0	20 December 2022	CDNA	Full revision to present evidence-based recommendations for public health. Revised: The disease, Routine prevention activities, Surveillance objectives, Case management, Specific settings.
Version 2.0	08 September 2022	CDNA	Revised: The disease, Case management, Contact definitions, Contact management.
Version 1.0	27 July 2022	CDNA	Developed by the Monkeypox Working Group.

Table of contents

Public health approach.....	4
Disease summary.....	8
Case classification.....	13
Case management.....	15
Contact classification.....	22
Contact management.....	24
Population level prevention.....	26
Aboriginal and Torres Strait Islander Peoples and communities.....	28
Special situations.....	29
References.....	32
Appendix 1: Information for cases and contacts.....	39
Appendix 2: Sample case investigation form.....	44

Public health approach

This section outlines the public health response to notifications of mpox of any clade.

Priority

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

Public health priority classification and response

Priority Classification	Public health response timeline
Urgent	Respond to suspected, probable, and confirmed cases immediately (within 24 hours).

Data entry timeline: Within 1 working day for all probable and confirmed cases.

States and territories may review and amend their response time according to assessed public health risk.

Data management

All confirmed and probable cases should be entered on to the National Notifiable Diseases Surveillance System ([NNDSS](#)) by state and territory public health units (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 a rash. If asymptomatic infection, do not enter a date of onset.
- State and territory PHUs should document the clade, if tested, for each case's infection in the notifiable disease database.

The jurisdictional communicable disease branch should advise the National Incident Centre (NIC), if required (see [Response procedure](#)).

PHUs should complete enhanced mpox data fields, where possible. States and territories should transmit enhanced mpox data to the NNDSS in line with jurisdictional standards. Ideally, mpox enhanced data should be transmitted to the NNDSS on a fortnightly or monthly basis. Mpox data are checked quarterly by the Commonwealth.

Public health importance

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 (1–4). Before 2018, the only cases with secondary transmission outside Africa occurred in 2003 in the United States of America (USA), associated with contact with infected animals (5,6).

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 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 (7).

The World Health Organization (WHO) declared the mpox outbreak, due to MPXV clade IIb, a public health emergency of international concern (PHEIC) on 23 July 2022, followed by Australia's declaration of mpox as a Communicable Disease Incident of National Significance on 28 July 2022 (stood down on 25 November 2022). From January 2022 to June 2025, over 100,000 mpox cases (largely MPXV clade IIb) were reported in more than 100 countries outside of Africa (8). Case numbers peaked in August 2022, followed by a significant decrease into late 2022 and onward, but transmission continues globally. In Australia, sustained locally acquired human-to-human transmission of MPXV clade IIb was observed in 2024 (9).

The WHO declared mpox a PHEIC for a second time on 14 August 2024, following the upsurge of clade Ib from the Democratic Republic of the Congo (DRC) to several neighbouring African countries from late 2023 (10). From January 2022 to June 2025, more than 43,000 mpox cases (largely MPXV clade Ib, but also clade Ia) were reported in 30 African countries, with the majority of cases from the DRC, Uganda, and Burundi (8).

By July 2025, imported MPXV clade Ib cases were reported in 18 countries outside of Africa, including Australia, and three countries outside of Africa reported imported clade Ia cases (8). The PHEIC status for mpox was declared over by the WHO on 5 September 2025 (11).

By October 2025, locally acquired clade Ib cases were reported in four European countries and the USA, indicating ongoing transmission in sexual networks in the community (12).

Public health response aims

The aim of the public health response to mpox in Australia is to suppress transmission of mpox and prevent future cases. This approach acknowledges the risk of ongoing incursions of mpox cases into Australia, and inability to eliminate all cases of mpox from Australia given the global epidemiology.

Priority populations

High-risk groups and settings

While diverse modes of transmission mean that anyone can acquire or transmit mpox, cases in the global clade IIb outbreak have occurred primarily, but not exclusively, in gay, bisexual, and other men who have sex with men (GBMSM+) (8,13), as has been seen in the Australian context. The ongoing clade Ib outbreak in the DRC and other African countries is also strongly associated with sexual contact/direct physical contact and household contact (14).

High-risk settings for transmission include:

- households (15)
- sex-on-premises venues (SOPV) (16–18)
- events, parties, or other venues where skin-to-skin contact and other intimate contact occurs (8,18–20)
- healthcare settings (though only 2% of cases in healthcare workers in the global clade IIb outbreak have reported a healthcare associated exposure) (8)
- countries or areas where mpox is endemic or there is a high risk of exposure (7).

Evidence of mpox transmission in schools and childcare settings outside of Africa is limited (21), and these have not been identified as high-risk settings in Australia. If a case is detected in a school or childcare setting, a risk assessment should be undertaken and guidance followed as in [Case management](#) and [Contact management](#).

Groups at increased risk of severe disease

People infected with MPXV who may be at greater risk of more severe disease include:

- **Immunocompromised people:** Individuals immunocompromised due to uncontrolled human immunodeficiency virus (HIV) infection (CD4 count <350 cells/μL) or other immunocompromising conditions or treatments (22–26).
- **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 (27–31).

- **Children:** The WHO identifies children as groups who may be at greater risk of more severe disease, reflecting the data from the global outbreak of clade IIb indicating children younger than 5 years were twice as likely to be hospitalised due to mpox compared with people aged 15-44 years (25). Additionally severe outcomes in children have been recorded in clade I outbreaks in Africa, likely relating to factors such as malnourishment, co-infection and lack of access to healthcare and vaccination (14,15,25,32,33). It is unclear whether children in Australia may be at greater risk of severe disease due to the limited number of cases in this population notified in Australia to date.

Surveillance aims

Key surveillance objectives:

- 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.

Disease summary

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

Infectious agent

Pathogen

MPXV is an enveloped double-stranded deoxyribonucleic acid (DNA) 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 and has two subclades, clades Ia and Ib.
- Clade II: formerly known as the West African clade and has two subclades, clades IIa and IIb (1,34).

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.

Mode of transmission

The primary mode of transmission for mpox is via direct contact with lesions (through broken skin or mucous membranes). Less frequently, transmission of mpox may occur via contact with materials contaminated with MPXV (35–37).

Other potential routes of transmission include:

- Indirectly via fomites (e.g., contaminated sheets and clothing).
- Aerosol-generating and percutaneous procedures (38,39).
- 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 (36,38,40).
- Vertical transmission (27,36,38,41,42), including reported pregnancy loss or congenital mpox due to MPXV clade Ib infection (31).

- Contact with blood and body fluids: Limited evidence suggests the potential for transmission through blood or via semen or vaginal fluids (13,43,44).
- Transmission via droplet exposure is uncommon (36,45–47), with no reported mpox cases attributed to inhalation/airborne transmission as a single route of transmission.

Summary of mpox transmission routes/settings by region and MPXV clade

Region/country	MPXV clade	Transmission route/setting
International outbreak (8)	IIb	<p>Direct contact with skin or mucosal lesions during sexual activity among GBMSM+(87%) (based on 38,048 cases)</p> <p>Setting (data available for 8,736 cases):</p> <ul style="list-style-type: none"> • party setting with sexual contact (57%) • household (9%) • healthcare (0.2%)
The DRC (14)	Ib	<p>Total number of cases: 4,436</p> <ul style="list-style-type: none"> • sexual/physical contact (44%) • household contact (21%) • caregiving or healthcare activities (with exposure to bodily secretions or excretions) (7%)
The DRC (14)	Ia	<p>Total number of cases: 459</p> <ul style="list-style-type: none"> • household contact (32%) • animal contact (22%) • interaction at school/market/church (13%) • sexual/physical contact (5%)
Sweden, the UK (48,49)	Ib (imported)	<p>One imported clade Ib mpox case was reported in Sweden in 2024, acquired infection in Africa through close physical contact - no secondary transmission.</p> <p>Two imported clade Ib mpox cases were reported in the UK in 2024, acquired infection in African countries via massage/heterosexual contact. One case resulted in 3 secondary cases within the household (the partner and 2 children) and the other case had no secondary transmission.</p>

Incubation period

The average incubation period for mpox is estimated to be 8 days, with a range of 3 to 21 days (50–52). There is no evidence to suggest the incubation period varies by clade, but it may be influenced by transmission route, with infections acquired through direct exposure (e.g., contact with broken skin or mucous membranes) having a shorter incubation period (53).

Infectious period

People with mpox are typically infectious from the onset of symptoms—either prodrome, rash, or proctitis (26). People remain infectious until all symptoms have resolved, and all lesions have formed scabs and fallen off, leaving fresh skin

underneath. Some people may not be aware of their exact symptom onset date, as initial symptoms may be very subtle or not visible (26,36,54–56).

There is limited evidence regarding infectivity pre-symptom onset. However, a small number of studies have demonstrated pre-symptomatic transmission, or presence of virus, up to 4 days prior to symptom onset (26,57–60).

Contact tracing is generally recommended from symptom onset. However, PHUs may consider undertaking contact tracing for up to 4 days pre-symptom onset for:

- exposures in highly susceptible populations (e.g. exposure on an oncology ward)
- sexual contacts (due to the potential for unrecognised anorectal or genital lesions and absent prodromal symptoms).

Symptomatic cases without visible lesions should be considered infectious until complete resolution of all symptoms, or after 21 days post symptom onset, whichever is longer. See [Guidance for cases without visible skin lesions](#).

Asymptomatic cases should be considered infectious for 21 days after a positive test. See [Guidance for asymptomatic cases](#).

Clinical condition

Clinical features

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

The illness may have a prodromal period lasting 1 to 5 days, 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 (18,61).

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 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 (62).

Many cases associated with the global clade IIb outbreak have not presented with the classically described clinical picture for mpox outlined above (42,63). This relates to the mode of transmission predominantly being via sexual contact and attenuated illness among those vaccinated against mpox. Differing presentations have included the following:

- Lymphadenopathy, present in 20-60% of cases (8,13,64).
- Rash in 95% of cases (with 64% having ≤ 10 lesions) (13).

- Lesions which appeared in the genital or perianal area and did not spread further (68% of cases with mucosal lesions) (13).
- Absence of visible skin lesions in 5% of cases. People may present with proctitis, urethritis, rectal pain and/or rectal bleeding (13) and tenesmus. Vomiting, diarrhoea, nausea and abdominal pain may also occur (65). Lesions may also appear in the oral cavity (66).
- Rashes and lesions commonly appearing before the onset of fever, malaise and other constitutional symptoms (prodromal period) (13).
- Concomitant sexually transmitted infections were reported in 29% of mpox patients (13).

Clinical data from mpox cases in the DRC indicate distinct presentations for clade Ia and Ib, with higher proportions of respiratory symptoms (around 50%) and higher lesion counts (median counts: 91 for clade Ib cases; 163 for clade Ia cases), compared with clade IIb outbreaks (14). This difference likely reflects the greater virulence and systemic dissemination of clade I viruses. Additionally, environmental factors such as biomass smoke from wood and charcoal burning for cooking, common in the DRC (67), could plausibly exacerbate respiratory symptoms among mpox patients.

Imported clade Ib cases reported in Sweden (48), the UK (49) and other European countries (68) have shown mild to moderate illness characterised mainly by fever, localised vesiculopustular rash, and lymphadenopathy.

Complications and outcomes

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 such as 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 (41).

During the global MPXV clade IIb outbreaks, 9% of cases were hospitalised, 0.4% admitted to an intensive care unit (ICU), and the case-fatality rate was 0.3% (8).

Based on mpox data from the DRC, 50% of mpox clade I cases were hospitalised, and the case-fatality rate was 4.4% for clade Ia and 0.6% for clade Ib (14). The high case-fatality rate for clade Ia is likely influenced by multiple factors, including varying diagnostic methods, co-existing medical conditions such as HIV, malaria and tuberculosis, treatment availability, and potentially higher virulence (69).

Mpox clade I cases identified in countries outside of Africa have presented with milder symptoms and no deaths have been reported (70). Additionally, of the first 16 cases identified in the UK, a case review identified high hospitalisation rates initially to manage isolation and perceived transmission risk, rather than due to disease

severity, with hospitalisation decreasing over time as the transmission route was better understood and clade Ib cases were managed in the community (71).

Reinfection

Mpox reinfection is very uncommon, occurring in less than 0.2% of reported cases (72). Documented reinfections typically occur in high-risk populations and are generally milder than the initial illness (73). Natural infection provides stronger and longer-lasting immunity than vaccination; about 85% of previously infected individuals remain seropositive at around two years, compared with approximately 32% for those vaccinated with the two-dose MVA-BN (JYNNEOS) vaccine (74).

Case classification

Surveillance case definition

See the CDNA [Monkeypox virus infection – Surveillance case definitions](#).

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 outbreaks evolve. Suspected cases should not be notified to the National Notifiable Disease Surveillance System (NNDSS).

Clinicians and laboratories should notify cases to state and territory health departments in accordance with jurisdictional legislation and local guidance.

Laboratory case definition

See the [Public Health Laboratory Network \(PHLN\) laboratory case definitions](#).

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 arrange testing for asymptomatic high-risk contacts based on individual clinical risk (75).

Testing is performed in jurisdictional public or private medical 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 on 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](#).

It is advisable to collect samples from more than one lesion where possible. However, excessive sample collection should be discouraged to minimise the risk to healthcare workers or laboratory personnel.

While lesion specimens are preferred, rectal, throat or nasopharyngeal swabs are also suitable. Such specimens may be collected in people with prodromal symptoms who present with no lesions (e.g., a contact who develops symptoms).

For further advice, including on appropriate personal protective equipment (PPE) and safe handling and transport of specimens, see the [Public Health Laboratory Network Mpox Laboratory Case Definition](#).

Characterisation of clades, subclades, and lineages

Whole genome sequencing (WGS) is used to characterise clades, subclades, and lineages of MPXV; however, some public health reference laboratories may develop and use MPXV nucleic acid amplification (NAA) 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 NAA 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
- monitor *in silico* antiviral resistance patterns (76).

Decisions about WGS are made by individual states and territories after agreement between laboratory and public health professionals. Jurisdictions may choose to sequence strains where:

- there is a reasonable suspicion that the person is infected with MPXV clade I in the absence of clade and subclade specific NAA tests
- cases do not have epidemiological links and/or are atypical (e.g., a female with no GBMSM contact)
- an mpox outbreak is emerging (rather than as standard practice during a stabilised outbreak)
- jurisdictions have capacity and resources available for WGS.

Case management

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.

The jurisdictional communicable diseases unit should notify the National Focal Point within 3 working days via email to health.ops@health.gov.au if:

- there is concern regarding the potential for a mass transmission event or multi-jurisdictional outbreak
- the infection appears to have been acquired on a cruise ship or plane
- the infection appears to have been acquired via an unusual transmission pathway.

A risk-based approach is advised to inform case management and should be guided by the characteristics of case presentation and contact with those at risk of severe disease. Factors to inform a risk-based approach may include:

- disease severity or epidemiological links to a person with disseminated disease
- factors that may increase the risk of onward transmission, including disseminated rash/lesions, respiratory symptoms, aerosol generating procedures (AGPs), and higher-risk activities undertaken during the infectious period
- work or attendance at high-risk settings including healthcare, daycare/childcare, residential care facilities, and SOPV
- cases among individuals living or working in remote communities (including [Aboriginal and Torres Strait Islander communities](#)) where timely clinical assessment and intervention may be limited
- potential difficulties following exclusion and restriction criteria due to the social determinants of health, such as those experiencing homelessness, overcrowding or other social issues.

Case investigation

PHUs should respond to a case in collaboration with the treating clinician and/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 person (or caregiver) and advise the need for the PHU to interview the case (or caregiver) for public health purposes.
- Interview the case (or caregiver) to ascertain symptom onset date and obtain the following information for the exposure period (from 21 days prior to symptom onset) and the [infectious period](#) (for duration of symptoms, or up to 4 days pre-symptom onset in some instances):
 - Symptoms and healthcare presentations.
 - Travel history.
 - Attendance at any high-risk settings or activities.
 - Any exposure with a confirmed or probable case and nature of the contact.
 - Details of sexual contacts and intimate partners, including recent travel history.
 - Details of living circumstances.
 - Smallpox and mpox vaccination status.
- Prioritise identification of contacts: In instances where sexual encounters are anonymous, or where people are unwilling or unable to provide details of contacts, consider whether the case can provide information to contacts either directly or via private messages on the dating/hook up apps on which they met.
- Identify the likely source of infection.
- Implement public health management of confirmed and probable cases, and their contacts. This includes providing advice around transmission prevention and arrangements for access to vaccination as post exposure prophylaxis (PEP) for contacts.
- Ensure people with mpox have access to contact numbers for the PHU and counselling services, to seek advice or support where required. See the [Department of Health, Disability and Ageing website](#) for a list of mental health and suicide prevention services.

Exposure investigation

PHUs should do the following:

- Aim to identify the source of infection from the information obtained during the case investigation.
- Undertake upstream testing of suspected cases, if appropriate, to identify the source, understand transmission pathways and risk factors, and inform public health action.
 - Discuss upstream testing with a clinical microbiologist to determine most appropriate method. This may not be feasible during high case

numbers, during which broader public health messaging and mechanisms to increase vaccination may be more effective.

- Investigate other plausible sources, such as the household or workplace, if the person has no identified sexual source of infection.

Exclusions and restrictions

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 are **recommended to do** the following:

- Keep lesions covered when around other people or animals—use a waterproof dressing or bandage and then cover with clothing.
- Do their own laundry.
- Always practice careful hand and respiratory hygiene.
- Limit close contact with household members and pets where possible, by sleeping in a separate room and/or using a separate or ensuite bathroom.
- 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.

If the case is unable to cover their lesions due to disseminated disease or there is potential generation of infectious droplets due to oral lesions, pharyngitis, or respiratory symptoms, the case should isolate (at home or in hospital) and wear a surgical mask when around other people or animals. PHUs may undertake a risk assessment to determine whether a person with lesions that can be covered up and respiratory involvement (e.g., oral lesions or sore throat only) does not need to isolate and may be permitted to resume usual activities with general case exclusion guidance, including wearing a mask when around other people.

Cases are **recommended to avoid** the following while infectious:

- Close or intimate contact with others, including all sexual activity.
- Sharing clothing, bedding, towels, or unwashed cutlery and crockery with others.
- Touching their face or rubbing their eyes, especially if blisters are present on or near their eyes or hands.
- Entering 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 or on the advice of the PHU after a risk assessment has been undertaken*.

- Contact with people who are at higher risk of severe disease, including immunosuppressed people, pregnant people, and young children.
- Donating any human tissue, including blood, cells, tissue, breast milk, semen, or organs (see [Case clearance](#) for additional restriction periods).
- Travel domestically or internationally without prior discussion with the PHU.

Cases may be able to attend secondary/higher educational settings if preventative measures can be followed independently.

The PHU should conduct an assessment of the case's living situation, the ability of the case and their household members to follow the above advice, and whether they live with any people at increased risk of severe disease. Based on this assessment, the PHU may need to consider providing additional advice and support to mitigate risk.

*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 disease severity, the type and nature of work, number and location of lesions, the presence or absence of respiratory symptoms, and whether the person works with particularly susceptible populations. Cases must cover all lesions and may be advised to 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).

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 (where appropriate), will advise on clearance of a case.

For 12 weeks following clearance, cases should:

- use a condom during sexual activity (receptive and insertive oral/anal/vaginal sex) (42,44)
- not donate semen.

Cases should not donate blood until 4 weeks after they have fully recovered. Refer to [Lifeblood](#) guidance.

Longer periods may apply for the donation of breast milk, organs, tissues, cells, and other biological products, as advised by the relevant tissue collection authority.

Guidance for cases without visible skin lesions

For symptomatic cases (e.g., with proctitis) without visible skin lesions, 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 (75,77). In the event an asymptomatic case is detected, they should be managed as per other confirmed cases and can be considered cleared 21 days after their positive test.

Case education

PHUs should ensure people with mpox have been advised about:

- mpox symptoms, transmission and duration of infectivity
- how to prevent passing on mpox to others, including personal hygiene and infection prevention and control measures
- seeking treatment or medical assistance if required
- the importance of contact tracing to notify close contacts of their risk.

PHUs should provide information about appropriate social services available to support people with mpox at risk of complex social situations.

Refer to [information for cases](#) for more information.

Treatment

The clinical management of mpox is the responsibility of the treating clinician.

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 can be sought from an infectious diseases physician and/or sexual health physician, particularly in persons with, or at risk of, severe disease. If antiviral treatment is indicated, it should be initiated in consultation with an infectious diseases physician and/or sexual health physician.

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

Infection prevention and control

Healthcare workers should use a risk-based approach to select appropriate PPE and infection prevention and control interventions when caring for individuals with suspected or confirmed mpox. The risk assessment should consider:

- the type of care or procedures to be undertaken for the individual
- severity of symptoms, dissemination of disease and respiratory involvement
- clinical setting (primary care or acute care), including the potential for transmission to others and ability to isolate cases.

Note: the mode of transmission for mpox is primarily the same, regardless of clade.

In all healthcare settings, mpox cases should be managed in a single room with a dedicated ensuite.

Use **contact precautions**, in addition to **standard precautions**, where the risk of onward transmission is considered low (e.g., a single lesion that can be covered completely or proctitis only).

Use **droplet precautions**, in addition to **contact and standard precautions**, if there is disseminated disease or respiratory symptoms/involvement.

PPE for combined droplet and contact precautions includes the use of a gown or apron, gloves, surgical mask, and eye protection.

A risk assessment should be undertaken to inform the use of a particulate filtration respirator, considering the level of exposure and nature of activity, when performing AGPs (including airway management), or for providing care to patients admitted to a healthcare facility with disseminated disease or respiratory symptoms/involvement.

Deroofing lesions and throat swabs are not considered to be AGPs in this context, although they may generate droplets (78). Healthcare workers should wear PPE for combined droplet and contact precautions when performing these procedures.

See the [Australian Guidelines for the Prevention and Control of Infection in Healthcare](#).

Active case finding

In the event of a large exposure event or outbreak, active case finding should be considered. The extent to which this is taken should be proportionate to the risk. The avenues used may depend on the severity of disease, including information about the clade (if available), public sentiment and fatigue relating to public health messaging, and risk groups affected. Targeted public communications may be preferential compared to general communications.

PHUs should consider the following:

- Alerting clinicians (local doctors, sexual health clinics, emergency departments and laboratories) in the area via clinician alerts or targeted clinician communications, with an emphasis on diagnosis, testing and notification to the local PHU. This may be done by clinician alert or other means.
- Targeted communications to at-risk groups, including via relevant non-government and peer-based organisations, specific venues such as SOPV.

- Broader public communications regarding increasing mpox risk, vaccination for at-risk populations, high risk activities, symptoms to monitor for, and where to seek testing.

Contact classification

Contact identification

PHU staff should directly follow up, or provide information to, all medium and high-risk contacts.

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 potential contacts receive public health advice. For example, PHUs may provide written information for the case to pass onto potential contacts, which could include the case messaging their sexual partner/s via direct messaging through social media or 'hook up' apps.

See [Case Management – Response Procedure](#).

Contact definitions

Mpox contact definitions

Contact type	Definition of exposure during the case's infectious period	Examples
High risk	<ul style="list-style-type: none">Contact 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.ORExposure to aerosols from an mpox case undergoing an aerosol-generating procedure in an enclosed room while the contact was not wearing appropriate PPE¹.	<ul style="list-style-type: none">Sexual or intimate partners, including at sex parties.Carer is a case with disseminated or uncovered lesions who has provided physical personal care to young children (contact) such as assistance with dressing, toileting, bathing and feeding, and where close contact through sharing a bed, hugging and/or kissing occurs.Someone whose eyes, nose, mouth, orifice, or exposed wound has had contact with bodily fluid from a case.Healthcare workers present in an enclosed space during an aerosol-generating procedure without wearing appropriate PPE¹. This may be in a patient's room, or in a curtained area, e.g. in an emergency department.
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	<ul style="list-style-type: none">Healthcare workers providing personal care to an mpox case in a hospital setting while not wearing appropriate PPE¹ or in the case of a PPE breach.

equipment), crusts, or bodily fluids, while the contact was not wearing appropriate PPE¹.

OR

- Exposure to aerosols from an mpox case, while the contact was not wearing appropriate PPE¹, during an aerosol dispersing activity that may create aerosols from oral secretions, skin lesions or resuspension of dried exudates (e.g., shaking of soiled linens, showering patients, or conducting examinations or procedures involving the oropharynx).
- Cleaning or laundry staff who have changed or laundered the bedding of an mpox case who has rash/lesions without wearing appropriate PPE¹.
- Attendance at a higher risk social setting or situation (79) when an mpox case attended during their infectious period².
- Household contacts, where the case has not covered their lesions while being in communal areas.

Notes:

¹ **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 [Case management](#). Refer to jurisdictional and local guidelines/policies.

² **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.

Contact management

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.

Management of mpox contacts

Type of contact	Recommended contact management
High risk	<p><u>Surveillance:</u> Active self-monitoring¹.</p> <p><u>Post exposure prophylaxis (PEP) administration</u>²: Vaccination should be offered if not fully vaccinated. See the Australian Immunisation Handbook. Antiviral PEP may be considered under specified circumstances. See the Mpox Treatment Guidelines.</p> <p><u>Testing priority:</u> Urgent if symptoms develop³.</p> <p><u>Additional recommendations:</u></p> <p>For 21 days from last exposure:</p> <ul style="list-style-type: none">• Abstain from sexual activity.• Continue attending work as long as remain symptom free. If working in a high-risk setting⁴ or employment that requires close physical contact with others, attending an educational setting or a high-risk setting (e.g., healthcare, aged care, childcare settings), the PHU should conduct a case-by-case risk assessment. Generally, healthcare workers or carers in a high-risk setting may be permitted to continue working depending on their role, exposure risk, pre-exposure vaccination status and risk to others. This may include recommending wearing a surgical mask.• Outside of work, avoid:<ul style="list-style-type: none">○ Childcare and aged care facilities○ Healthcare facilities unless seeking medical attention.• Avoid close physical contact with those potentially at higher risk of severe infection (young children, older people, immunocompromised people, and pregnant people).• For contacts who are <5 years old, the PHU should conduct a risk-assessment to determine whether exclusion from an educational or care setting or other places attended by other young children is required. This may depend on the ability for close symptom monitoring of the child, the exposure risk, and vulnerability of the setting. Children aged 5 years and over should generally be permitted to attend educational settings with careful monitoring for symptoms; PHUs should undertake a risk assessment including age, vulnerability of the setting and additional caring needs.• Reconsider domestic and international travel due to reduced ability to isolate or access healthcare if symptoms develop, and requirements for strict isolation in some countries.• Do not donate breast milk, organs, tissues, cells or semen. Longer periods may apply as advised by the appropriate collection authority. <p>For 28 days from last exposure:</p> <ul style="list-style-type: none">• Do not donate blood. See Lifeblood guidance.

Medium risk

Surveillance: Active self-monitoring¹

PEP administration²: Vaccination should be offered if not fully vaccinated. See the [Australian Immunisation Handbook](#). Antiviral PEP may be considered under specified circumstances. See the [Mpox Treatment Guidelines](#).

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. PHUs should assess and manage workers, residents, and attendees in these settings on a case-by-case basis.
- Children may attend caring and educational settings and have contact with other young children if closely monitored for symptoms.
- Outside of work, avoid:
 - Aged care facilities
 - Healthcare settings unless seeking medical attention.
- Avoid close contact with those at potential higher risk of severe infection (young children, older people, immunocompromised people, and pregnant people), where possible.
- Use a condom during sexual activity (receptive and insertive oral/anal/vaginal sex).
- Do not donate breast milk, organs, tissues, cells or semen. Longer periods may apply as advised by the appropriate collection authority.

For **28 days** from last exposure:

- Do not donate blood. See [Lifeblood](#) guidance.

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 PEP administration if appropriate.

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

Contact education

PHUs should, at a minimum, provide the following information to contacts:

- Mpox symptoms, transmission routes and likely risk of developing mpox.
- How to seek testing if symptoms develop.
- A contact phone number for the PHU.

If a large number of contacts is identified in a facility or institution, information to residents, workers or attendees may be distributed via the facility or institution manager.

Refer to the [information for contacts](#) section below for further information.

Population level prevention

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 [Priority populations](#)). Establish partnerships with local sexual health clinics, primary health care services, primary health networks, and Aboriginal community-controlled organisations, to facilitate testing and clinician awareness and education, and connect cases and contacts with relevant community support organisations. GPs and primary care facilities play a vital role in testing for mpox.
- Engage with local community-controlled organisations for the LGBTQIA+ community, people living with HIV, SOPVs, sex workers, and [Aboriginal and/or Torres Strait Islander people](#) 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 the following advice:

- Exchange contact information with any new sexual partner(s) during periods of local mpox transmission to facilitate contact tracing if required (see [Response Procedure](#)).
- Use condoms and perform hand hygiene after condom use, particularly if:
 - having sex while travelling
 - 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 close contact or fomites, such as through contact with contaminated clothes/linen).
- Check [Smart Traveller guidance](#) prior to departure if travelling to countries where mpox is endemic (particularly Central and West Africa).

Vaccination

Vaccines to prevent or reduce mpox infection and severity are available (80). Both primary vaccination and post exposure prophylaxis (PEP) 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 primary vaccination and PEP

- the [ATAGI Clinical guidance on the use of vaccines for the prevention of mpox](#) for further advice on vaccine effectiveness and waning immunity.
- The [Australian mpox treatment guidelines](#) for advice on therapeutic options and prevention and management of vaccine-related complications relating to the second-generation vaccine.

Aboriginal and Torres Strait Islander Peoples and communities

Identification of mpox in an Aboriginal and Torres Strait Islander community should prompt active case and contact management by the PHU, undertaken in partnership with the affected community.

A small number of mpox clade II cases have been reported among Aboriginal and Torres Strait Islander people in Australia. To date, there have been no documented outbreaks in Aboriginal or Torres Strait Islander communities. It is important to note that limitations in surveillance and reporting may under detect the true burden of disease in Aboriginal and or Torres Strait Islander people.

The risk of severe disease in Aboriginal and/or Torres Strait Islander people and communities remains uncertain and warrants close monitoring and early action to reduce the risk of transmission.

Communications with the community regarding targeted action may be undertaken in partnership with the local Aboriginal Community Controlled Health organisation (ACCHO) and other relevant community-led organisations, as appropriate. Community and local stakeholder engagement should be central to any community-based response and should continue throughout implementation to ensure actions are culturally appropriate.

PHUs must remain cognisant and responsive to the intersection of stigma and discrimination that an Aboriginal and Torres Strait Islander community member may face if diagnosed with mpox. The PHU should work with the person to determine their preferred services to access, including cultural sensitivities related to gender.

Special situations

Sex on premises venues (SOPV)

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

- Display informative posters and provide clear information about mpox:
 - symptoms and the need for patrons to seek medical assessment and testing if symptoms develop
 - transmission (primarily through sexual and close contact)
 - prevention and risk reduction strategies, including primary vaccination and PEP.
- Ensure appropriate infection prevention and control measures are taken to prevent the spread of mpox including:
 - routine cleaning and disinfection
 - 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, a disposable apron, and protective eyewear where there is a risk of splashes or sprays of fluids into the face and eyes.
- 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. Messaging through mainstream media may not have adequate reach, and avenues to provide messaging through partnerships with non-government organisations should be explored. 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). This can include correctional and detention facilities, shelters for people experiencing homelessness or family violence, 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 congregate 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.
- 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 develop mpox symptoms 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.
- 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 PEP and targeted primary vaccination for certain groups within the facility.

References

1. Sah R, Padhi BK, Siddiq A, Abdelaal A, Reda A, Ismail Lashin B, et al. Public Health Emergency of International Concern declared by the World Health Organization for Monkeypox. *Global Security: Health, Science and Policy*. 2022 Dec 31;7(1):51–6.
2. Alakunle E, Moens U, Nchinda G, Okeke MI. Monkeypox Virus in Nigeria: Infection Biology, Epidemiology, and Evolution. *Viruses*. 2020 Nov 5;12(11):1257.
3. Durski KN, McCollum AM, Nakazawa Y, Petersen BW, Reynolds MG, Briand S, et al. Emergence of Monkeypox - West and Central Africa, 1970-2017. *MMWR Morb Mortal Wkly Rep*. 2018 Mar 16;67(10):306–10.
4. Heymann, D. *Control of Communicable Diseases Manual*. In Alpha Press; 2015. p. 565–8.
5. Ligon BL. Monkeypox: a review of the history and emergence in the Western hemisphere. *Semin Pediatr Infect Dis*. 2004 Oct;15(4):280–7.
6. Centers for Disease Control and Prevention. Update: Multistate Outbreak of Monkeypox --- Illinois, Indiana, Kansas, Missouri, Ohio, and Wisconsin, 2003 [Internet]. Available from: <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5227a5.htm>
7. Australian Government Department of Health Disability and Ageing. Mpox [Internet]. [cited 2025 Aug 3]. Available from: <https://www.health.gov.au/diseases/monkeypox-mpox>
8. World Health Organization. Global Mpox Trends [Internet]. Available from: https://worldhealthorg.shinyapps.io/mpx_global/#key-figures
9. Australian Government Department of Health Disability and Ageing. National Notifiable Disease Surveillance System [Internet]. Available from: <https://nindss.health.gov.au/pbi-dashboard/>
10. World Health Organization. WHO Director-General declares mpox outbreak a public health emergency of international concern [Internet]. Available from: <https://www.who.int/news/item/14-08-2024-who-director-general-declares-mpox-outbreak-a-public-health-emergency-of-international-concern>
11. World Health Organization. WHO Director-General's opening remarks at the media briefing – 5 September 2025 [Internet]. Available from: <https://www.who.int/news-room/speeches/item/who-director-general-s-opening-remarks-at-the-media-briefing---5-september-2025>
12. European Centre for Disease Prevention and Control. Local transmission of clade 1b mpox cases detected in EU/EEA, ECDC urges renewed vigilance [Internet]. Available from: <https://www.ecdc.europa.eu/en/news-events/local->

transmission-clade-1b-mpox-cases-detected-eueea-ecdc-urges-renewed-vigilance

13. Thornhill JP, Barkati S, Walmsley S, Rockstroh J, Antinori A, Harrison LB, et al. Monkeypox Virus Infection in Humans across 16 Countries - April-June 2022. *N Engl J Med*. 2022 Aug 25;387(8):679–91.
14. Malembi E, Escrig-Sarreta R, Ntumba J, Beiras CG, Shongo R, Bengheya J, et al. Clinical presentation and epidemiological assessment of confirmed human mpox cases in DR Congo: a surveillance-based observational study. *Lancet*. 2025 May 10;405(10490):1666–75.
15. World Health Organization. Monkeypox - Questions and Answers [Internet]. Available from: <https://www.who.int/news-room/questions-and-answers/item/monkeypox>
16. Centers for Disease Control and Prevention. Social Gatherings, Safer Sex, and Monkeypox [Internet]. Available from: <https://www.cdc.gov/poxvirus/monkeypox/specific-settings/social-gatherings.html>
17. World Health Organization. Monkeypox in the European Region: what we know so far and how we need to respond [Internet]. Available from: <https://www.who.int/europe/news/item/30-05-2022-monkeypox-in-the-european-region--what-we-know-so-far-and-how-we-need-to-respond>
18. Kröger ST, Lehmann MC, Treutlein M, Fiethe A, Kossow A, Küfer-Weiß A, et al. Mpox outbreak 2022: an overview of all cases reported to the Cologne Health Department. *Infection*. 2023 Oct;51(5):1369–81.
19. Amer F, Khalil HES, Elahmady M, ElBadawy NE, Zahran WA, Abdelnasser M, et al. Mpox: Risks and approaches to prevention. *J Infect Public Health*. 2023 June;16(6):901–10.
20. Pinto P, Costa MA, Gonçalves MFM, Rodrigues AG, Lisboa C. Mpox Person-to-Person Transmission-Where Have We Got So Far? A Systematic Review. *Viruses*. 2023 Apr 28;15(5):1074.
21. Nemechek K, Stefanos R, Miller EL, Riser A, Kebede B, Galang RR, et al. Notes from the Field: Exposures to Mpox Among Cases in Children Aged ≤12 Years - United States, September 25-December 31, 2022. *MMWR Morb Mortal Wkly Rep*. 2023 June 9;72(23):633–5.
22. European Centre for Disease Prevention and Control. Joint ECDC-WHO Regional Office for Europe Monkeypox Surveillance Bulletin [Internet]. Available from: <https://monkeypoxreport.ecdc.europa.eu/>
23. Iñigo Martínez J, Gil Montalbán E, Jiménez Bueno S, Martín Martínez F, Nieto Juliá A, Sánchez Díaz J, et al. Monkeypox outbreak predominantly affecting men who have sex with men, Madrid, Spain, 26 April to 16 June 2022. *Euro Surveill*. 2022 July;27(27):2200471.

24. Perez Duque M, Ribeiro S, Martins JV, Casaca P, Leite PP, Tavares M, et al. Ongoing monkeypox virus outbreak, Portugal, 29 April to 23 May 2022. *Euro Surveill.* 2022 June;27(22):2200424.
25. Laurenson-Schafer H, Sklenovská N, Hoxha A, Kerr SM, Ndumbi P, Fitzner J, et al. Description of the first global outbreak of mpox: an analysis of global surveillance data. *Lancet Glob Health.* 2023 July;11(7):e1012–23.
26. World Health Organization. Clinical management and infection prevention and control for mpox: living guideline, May 2025 [Internet]. Available from: <https://www.who.int/publications/i/item/B09434>
27. Mbala PK, Huggins JW, Riu-Rovira T, Ahuka SM, Mulembakani P, Rimoin AW, et al. Maternal and Fetal Outcomes Among Pregnant Women With Human Monkeypox Infection in the Democratic Republic of Congo. *J Infect Dis.* 2017 Oct 17;216(7):824–8.
28. Royal College of Obstetricians & Gynaecologists. Mpox (Monkeypox) in Pregnancy [Internet]. Available from: <https://www.rcog.org.uk/media/mrpkttraf/2023-11-mpox-monkeypox-in-pregnancy.pdf>
29. Dashraath P, Nielsen-Saines K, Mattar C, Musso D, Tambyah P, Baud D. Guidelines for pregnant individuals with monkeypox virus exposure. *Lancet.* 2022 July 2;400(10345):21–2.
30. Velázquez-Cervantes MA, Ulloa-Aguilar JM, León-Juárez M. Mpox and pregnancy: A neglected disease and its impact on perinatal health. *Rev Clin Esp (Barc).* 2023 Jan;223(1):32–9.
31. Vakaniaki EH, Kuispond NRS, Hirata Y, Bangwen E, Brosius I, Kinganda-Lusamaki E, et al. Three Cases of Vertical Transmission of Clade Ib Mpox Virus. *N Engl J Med.* 2025 June 19;392(23):2385–7.
32. Bunge EM, Hoet B, Chen L, Lienert F, Weidenthaler H, Baer LR, et al. The changing epidemiology of human monkeypox-A potential threat? A systematic review. *PLoS Negl Trop Dis.* 2022 Feb;16(2):e0010141.
33. Centers for Disease Control and Prevention. Monkeypox in the United States: What Clinicians Need to Know June 2022 [Internet]. Available from: <https://stacks.cdc.gov/view/cdc/119786>
34. Estep RD, Messaoudi I, O'Connor MA, Li H, Sprague J, Barron A, et al. Deletion of the monkeypox virus inhibitor of complement enzymes locus impacts the adaptive immune response to monkeypox virus in a nonhuman primate model of infection. *J Virol.* 2011 Sept;85(18):9527–42.
35. Morgan CN, Whitehill F, Doty JB, Schulte J, Matheny A, Stringer J, et al. Environmental Persistence of Monkeypox Virus on Surfaces in Household of Person with Travel-Associated Infection, Dallas, Texas, USA, 2021. *Emerg Infect Dis.* 2022 Oct;28(10):1982–9.

36. Pan D, Nazareth J, Sze S, Martin CA, Decker J, Fletcher E, et al. Transmission of monkeypox/mpox virus: A narrative review of environmental, viral, host, and population factors in relation to the 2022 international outbreak. *J Med Virol*. 2023 Feb;95(2):e28534.
37. BMJ Best Practice. Mpox [Internet]. Available from: <https://bestpractice.bmj.com/topics/en-gb/1611/pdf/1611/Mpox.pdf>
38. Araf Y, Nipa JF, Naher S, Maliha ST, Rahman H, Arafat KI, et al. Insights into the Transmission, Host Range, Genomics, Vaccination, and Current Epidemiology of the Monkeypox Virus. *Vet Med Int*. 2024;2024:8839830.
39. Verreault D, Killeen SZ, Redmann RK, Roy CJ. Susceptibility of monkeypox virus aerosol suspensions in a rotating chamber. *J Virol Methods*. 2013 Feb;187(2):333–7.
40. Seang S, Burrell S, Todesco E, Leducq V, Monsel G, Le Pluart D, et al. Evidence of human-to-dog transmission of monkeypox virus. *Lancet*. 2022 Aug 27;400(10353):658–9.
41. Lum FM, Torres-Ruesta A, Tay MZ, Lin RTP, Lye DC, Rénia L, et al. Monkeypox: disease epidemiology, host immunity and clinical interventions. *Nat Rev Immunol*. 2022 Oct;22(10):597–613.
42. World Health Organization. Multi-country monkeypox outbreak: situation update [Internet]. 2022. Available from: <https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON396>
43. Peiró-Mestres A, Fuertes I, Camprubí-Ferrer D, Marcos MÁ, Vilella A, Navarro M, et al. Frequent detection of monkeypox virus DNA in saliva, semen, and other clinical samples from 12 patients, Barcelona, Spain, May to June 2022. *Euro Surveill*. 2022 July;27(28):2200503.
44. Lapa D, Carletti F, Mazzotta V, Matusali G, Pinnetti C, Meschi S, et al. Monkeypox virus isolation from a semen sample collected in the early phase of infection in a patient with prolonged seminal viral shedding. *Lancet Infect Dis*. 2022 Sept;22(9):1267–9.
45. Beeson A, Styczynski A, Hutson CL, Whitehill F, Angelo KM, Minhaj FS, et al. Mpox respiratory transmission: the state of the evidence. *Lancet Microbe*. 2023 Apr;4(4):e277–83.
46. Kuehn R, Fox T, Guyatt G, Lutje V, Gould S. Infection prevention and control measures to reduce the transmission of mpox: A systematic review. *PLOS Glob Public Health*. 2024;4(1):e0002731.
47. Leong FY, Ge Z, Loo LH, Fong SW, Goh YS, Xu G, et al. Aerosol transmission risk of mpox relative to COVID-19 and smallpox. *Lancet Microbe*. 2025 June;6(6):101082.
48. Treutiger CJ, Filén F, Rehn M, Aarum J, Jacks A, Gisslén M, et al. First case of mpox with monkeypox virus clade Ib outside Africa in a returning traveller,

Sweden, August 2024: public health measures. *Euro Surveill.* 2024 Nov;29(48):2400740.

49. Alvi MI, Kliner M, Welfare W, Gordon NC, Thomas S, Padfield S, et al. Case series of the first five human infections with monkeypox virus clade Ib and report on the public health response, United Kingdom, October to November 2024. *Euro Surveill.* 2025 Mar;30(10):2500131.
50. World Health Organization. Mpox [Internet]. 2024. Available from: <https://www.who.int/news-room/fact-sheets/detail/monkeypox>
51. Nolen LD, Osadebe L, Katomba J, Likofata J, Mukadi D, Monroe B, et al. Extended Human-to-Human Transmission during a Monkeypox Outbreak in the Democratic Republic of the Congo. *Emerg Infect Dis.* 2016 June;22(6):1014–21.
52. Okoli GN, Van Caesele P, Askin N, Abou-Setta AM. Comparative evaluation of the clinical presentation and epidemiology of the 2022 and previous Mpox outbreaks: a rapid review and meta-analysis. *Infect Dis (Lond).* 2023 July;55(7):490–508.
53. Miura F, van Ewijk CE, Backer JA, Xiridou M, Franz E, Op de Coul E, et al. Estimated incubation period for monkeypox cases confirmed in the Netherlands, May 2022. *Euro Surveill.* 2022 June;27(24):2200448.
54. United Kingdom Health Security Agency. Guidance Principles for monkeypox control in the UK: 4 nations consensus statement [Internet]. Available from: <https://www.gov.uk/government/publications/principles-for-monkeypox-control-in-the-uk-4-nations-consensus-statement/principles-for-monkeypox-control-in-the-uk-4-nations-consensus-statement>
55. Brown K, Leggat PA. Human Monkeypox: Current State of Knowledge and Implications for the Future. *Trop Med Infect Dis.* 2016 Dec 20;1(1):8.
56. World Health Organization. Disease Outbreak News: Multi-country monkeypox outbreak in non-endemic countries [Internet]. Available from: <https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON393>
57. Pittman PR, Martin JW, Kingebeni PM, Tamfum JJM, Mwema G, Wan Q, et al. Clinical characterization and placental pathology of mpox infection in hospitalized patients in the Democratic Republic of the Congo. *PLoS Negl Trop Dis.* 2023 Apr;17(4):e0010384.
58. Ward T, Christie R, Paton RS, Cumming F, Overton CE. Transmission dynamics of monkeypox in the United Kingdom: contact tracing study. *BMJ.* 2022 Nov 2;e073153.
59. Miura F, Backer JA, van Rijckevorsel G, Bavalia R, Raven S, Petrignani M, et al. Time Scales of Human Mpox Transmission in The Netherlands. *J Infect Dis.* 2024 Mar 14;229(3):800–4.

60. Brosius I, Van Dijck C, Coppens J, Vandenhove L, Bangwen E, Vanroye F, et al. Presymptomatic viral shedding in high-risk mpox contacts: A prospective cohort study. *J Med Virol*. 2023 May;95(5):e28769.
61. Public Health England. Monkeypox: information for primary care [Internet]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850059/Monkeypox_information_for_primary_care.pdf
62. Di Giulio DB, Eckburg PB. Human monkeypox: an emerging zoonosis. *Lancet Infect Dis*. 2004 Jan;4(1):15–25.
63. Cho W, Park S, Kim HJ, Lee M, Choi YS, Yeo SG, et al. Clinical characteristics and outcomes of patients with mpox during the 2022 mpox outbreak compared with those before the outbreak: A systematic review and meta-analysis. *Rev Med Virol*. 2024 Jan;34(1):e2508.
64. Yon H, Shin H, Shin JI, Shin JU, Shin YH, Lee J, et al. Clinical manifestations of human Mpox infection: A systematic review and meta-analysis. *Rev Med Virol*. 2023 July;33(4):e2446.
65. Ramakrishnan R, Shenoy A, Madhavan R, Meyer D. Mpox gastrointestinal manifestations: a systematic review. *BMJ Open Gastroenterol*. 2024 Jan 6;11(1):e001266.
66. Ardila CM, Arrubla-Escobar DE, Vivares-Builes AM. Oral lesions in patients with human monkeypox: A systematic scoping review. *J Oral Pathol Med*. 2023 July;52(6):459–67.
67. Climate and Clean Air Coalition. Opportunities for Transition to Clean Household Energy in Democratic Republic of the Congo [Internet]. Available from: <https://www.ccacoalition.org/resources/opportunities-transition-clean-household-energy-democratic-republic-congo>
68. European Centre for Disease Prevention and Control. Transmission of monkeypox virus clade I: overall risk remains low in the EU/EEA [Internet]. Available from: <https://www.ecdc.europa.eu/en/news-events/transmission-monkeypox-virus-clade-i-overall-risk-remains-low-eueea>
69. Akingbola A, Abiodun A, Idahor C, Peters F, Ojo O, Jessica OU, et al. Genomic Evolution and Epidemiological Impact of Ongoing Clade Ib MPox Disease: A Narrative Review. *Glob Health Epidemiol Genom*. 2025;2025:8845911.
70. European Centre for Disease Prevention and Control. Mpox worldwide overview [Internet]. Available from: <https://www.ecdc.europa.eu/en/mpox-worldwide-overview>
71. UK Health Security Agency. Mpox technical assessment [Internet]. Available from: <https://assets.publishing.service.gov.uk/media/68ff9ece394b8c2a6ddf5dc3/mpox-technical-assessment-27-october-2025.pdf>

72. Mpox Tracker. Breakthrough Infection, Reinfection Rare but Possible After Mpox Infection or Vaccination [Internet]. Available from: <https://www.mpoxed.com/news/breakthrough-infection%2C-reinfection-rare-but-possible-after-mpox-infection-or-vaccination>
73. Li T, Li Z, Xia Y, Long J, Qi L. Mpox reinfection: A rapid systematic review of case reports. *Infectious Medicine*. 2024 Mar;3(1):100096.
74. Byrne J, Garcia-Leon A, Murphy A, Saini G, Banik I, Landay A, et al. Antibody Responses are Sustained 2 Years Post-Mpox Infection but not Following Modified Vaccinia Ankara–Bavarian Nordic Vaccination. *Open Forum Infectious Diseases*. 2025 Aug 29;12(9):ofaf536.
75. Vusirikala A, Charles H, Balasegaram S, Macdonald N, Kumar D, Barker-Burnside C, et al. Epidemiology of Early Monkeypox Virus Transmission in Sexual Networks of Gay and Bisexual Men, England, 2022. *Emerg Infect Dis*. 2022 Oct;28(10):2082–6.
76. Satapathy P, Mohanty P, Manna S, Shamim MA, Rao PP, Aggarwal AK, et al. Potentially Asymptomatic Infection of Monkeypox Virus: A Systematic Review and Meta-Analysis. *Vaccines (Basel)*. 2022 Dec 6;10(12):2083.
77. Nachega JB, Mohr EL, Dashraath P, Mbala-Kingebeni P, Anderson JR, Myer L, et al. Mpox in Pregnancy - Risks, Vertical Transmission, Prevention, and Treatment. *N Engl J Med*. 2024 Oct 10;391(14):1267–70.
78. UK Health Security Agency. Mpox: scenarios and technical elements of preparedness and response for clade I [Internet]. Available from: <https://assets.publishing.service.gov.uk/media/66e83b367f20ecc7ec3aa1db/mpox-technical-briefing-9.pdf>
79. Centers for Disease Control and Prevention. About Mpox [Internet]. Available from: https://www.cdc.gov/mpox/about/?CDC_AAref_Val=https://www.cdc.gov/poxvirus/mpox/about/index.html
80. Deputy NP, Deckert J, Chard AN, Sandberg N, Moulia DL, Barkley E, et al. Vaccine Effectiveness of JYNNEOS against Mpox Disease in the United States. *N Engl J Med*. 2023 June 29;388(26):2434–43.

Appendix 1: Information for cases and contacts

About mpox

Mpox (previously known as monkeypox) is a viral illness that has been found in Africa for some years. Since 2022, it has spread around the world, including in Australia.

It is usually mild and most people recover fully in 2-4 weeks, but some people can get very sick.

Mpox is spread through very close contact with other people, including sex and close touch.

For more information, see:

- [Mpox | Australian Centre for Disease Control](#)
- [Mpox \(Monkeypox\) - symptoms, treatment and prevention | healthdirect](#)

Information for cases

Symptoms

Symptoms may include flu-like symptoms such as fever, swollen lymph nodes, muscle aches and pains, fatigue, headache, back pain, and a rash.

The rash usually starts 1 to 4 days after the flu-like symptoms, but some people only get the rash. The rash can be very mild (only one or two pimples) through to being widespread (lots of bumps and pimples all over the body).

For symptoms of mpox and what to expect, refer to [Mpox | Australian Centre for Disease Control](#)

What do I need to do?

Public health officers may contact you to ask how you might have become infected and for contact tracing. They may contact you by phone, email or text message. To reduce the risk of spreading mpox to other people, follow the advice below until your doctor or local public health unit has cleared you of the infection.

Personal care

- Keep lesions covered when around other people, if you can – use a waterproof dressing or bandage and cover with clothing.

- Wear a surgical mask when around other people or animals if you have lesions in the mouth, sore mouth or throat, or respiratory symptoms (such as cough).
- Wash your hands regularly with soap and warm water.
- Cover your mouth and nose with a tissue when coughing or sneezing – dispose of used tissues in the waste yourself.
- Avoid touching your face or rubbing your eyes, especially if you have blisters on or near your eyes or hands.

Around the house

- Limit close contact with household members, where possible. Sleep in a separate room and use a separate bathroom.
- Do not share clothing, bedding or towels, and do your own laundry. When handling these items, carers should wear appropriate protective equipment.
- Do not share unwashed cutlery and crockery.
- Clean and disinfect any shared spaces (including bathrooms) and items immediately after use.
- Work from home, if possible. The public health unit will let you know whether you can go to your workplace. This will depend on what work you do, your symptoms and the risk of passing mpox on to others.

Avoid the following while you are infectious (able to pass on the illness to others)

- Avoid close or intimate contact with others, including all sexual activity.
- Do not enter early childhood education and care services, aged care or healthcare facilities – unless seeking medical attention or advised by the public health unit that you can attend for work purposes.
- Avoid places or contact with those at higher risk of severe disease. These include young children, older people, people with poor immunity, and pregnant people.
- Avoid close contact with animals, particularly dogs and rodents.
- Do not donate any human tissue, including blood, cells, tissue, breast milk, semen, or organs. Longer periods may apply, depending on the biological product – check with the relevant collection authority.

Do I need to stay at home?

Your local public health unit may advise you to stay at home. This will depend on how severe your symptoms are, location of rash/lesions and risk of passing mpox on to others.

It is recommended you do the following any time you leave home:

- cover any rash or lesions (e.g., waterproof dressing or bandage, long sleeves, long pants)

- avoid close contact with others, and
- wear a surgical mask if you have respiratory symptoms (cough, sore throat) or lesions in the mouth.

If you need to seek urgent medical attention, let the emergency department or general practice know beforehand that you have mpox.

In a medical emergency always seek immediate health care or phone 000.

How should I clean my house?

Bathrooms, toilets and surfaces that are frequently touched	Regularly clean with a household detergent and warm water followed by a disinfectant. Alternatively, you can use a 2-in-1 cleaner and disinfectant solution. Use single-use or washable cloths/wipes.
Dishes and eating utensils	Wash in a dishwasher (preferably set at 60°C or above) or by hand with hot water and detergent.
Linen, towels, and clothing	<p>Handle items yourself and keep separate from other people's items.</p> <p>Wash items with laundry detergent at the highest possible temperature on a regular cycle. Dry clothes as per normal.</p> <p>Clean and disinfect surfaces afterwards (e.g. the lid or handle of the washing machine) and wash your hands.</p> <p>Place coversheets, waterproof mattress covers or blankets over upholstered furniture and other porous materials that cannot be washed.</p> <p>If you need help with linen and laundry, the person helping should wear a surgical mask, gloves and protective eyewear. They should also avoid direct contact with items.</p>
Waste	Place waste in a plastic bag at the point of use (e.g. in the bathroom). Tie off and place it directly into the general waste bin. Wash hands with soap and hot water afterwards.

Getting back to normal

Public health officers, or your doctor, will let you know when you have cleared the mpox infection and are no longer infectious. It is important to thoroughly clean and disinfect your home and wash linen after you are cleared, to resume normal activities.

It is not known how long the mpox virus remains in semen and other genital fluids.

It is recommended that for **12 weeks** after clearance you:

- use condoms during sexual activity – this is to reduce the risk of spreading the infection to sexual partners
- do not donate semen.

For information about blood donation following mpox infection, see the [Lifeblood](#) website.

Re-infection in the future is possible. Speak to your doctor about how to reduce your risk.

Information for contacts

Symptoms

Mpox symptoms may include flu-like symptoms such as fever, swollen lymph nodes, muscle aches and pains, fatigue, headache, back pain, and a rash.

The rash usually starts 1 to 4 days after the flu-like symptoms, but some people only get the rash. The rash can be very mild (only one or two pimples) through to being widespread (lots of bumps and pimples all over the body).

For symptoms of mpox and what to expect, refer to [Mpox | Australian Centre for Disease Control](#)

Why am I a contact?

You are considered a contact because you have had close interaction with someone who has mpox, and you may be at risk of developing mpox.

What can I do to prevent mpox?

Vaccination is generally recommended to prevent mpox in people at higher risk of getting the infection because of lifestyle factors or possible exposures at work.

Vaccination is also recommended after exposure to a person with mpox. It is most effective at preventing mpox infection if given within 4 days of contact with the infected person. But it can still reduce the severity of infection if given within 5 to 14 days of contact.

Your public health unit will discuss the risks and benefits of vaccination. They will advise whether you should be vaccinated.

What do I need to do?

It can take up to 21 days for people to develop mpox symptoms after having close contact with someone with mpox. Your public health unit or doctor will advise when your monitoring period is over.

For 21 days from your last contact with a person who has mpox or until advised by your doctor or the public health unit:

- Monitor for symptoms of mpox.
- If you develop symptoms of mpox, including a temperature of 38°C or above, stay at home and avoid others. Call your public health unit for advice about getting tested for mpox.

- If you need urgent medical attention, phone ahead and let the emergency department or general practice know you are coming. Wear a surgical mask if you have any respiratory symptoms (like cough or sore throat) or lesions in the mouth. Cover any rash and lesions and take this fact sheet with you.

In a medical emergency always seek immediate health care or phone 000.

Sometimes people who are contacts of a person with mpox develop very mild symptoms or have no symptoms and don't realise they have mpox infection until later in their illness.

To reduce the risk of giving mpox to other people, for 21 days from your last contact with a person who has mpox, or until advised by your doctor or public health unit:

- Wash your hands frequently using soap and warm water or an alcohol-based hand rub.
- Cover your mouth and nose when sneezing and coughing with paper tissues. Put used tissues into a rubbish bag and wash hands.
- Your public health unit will advise about whether you can go to work, or in the case of children, attend school or childcare. This will on where you work, your risk, and what your job is. Do not go to work if you develop any symptoms until you have spoken with your doctor or public health unit.
- Do not have sex (including genital touching, vaginal, anal, and oral sex).
- Avoid childcare and aged care facilities (unless you work there and have been advised by your public health unit you can return to work). Avoid healthcare facilities unless seeking medical attention.
- Outside of work, avoid contact with young children, older people, people with poor immunity and pregnant people.
- Do not donate breast milk, organs, tissues, cells or semen. Longer periods may apply – check with the relevant collection authority.

For 28 days from your last contact with a person who has mpox, do not donate blood. For more information, see the [Lifeblood](#) website.

Your public health unit may provide additional advice on avoiding physical contact with others, working from home or wearing a surgical mask.

How will I be contacted by the public health unit?

You may be contacted regularly by public health staff to check on your temperature and any new symptoms. This may be by phone, email, or text message.

Who do I contact if I have symptoms or questions?

You should contact your local public health unit.

Appendix 2: Sample case investigation form

MPOX CASE INVESTIGATION FORM			
PHU	Completed by		Date completed
NOTIFICATION			
Date of notification	___/___/___	Date of initiation of response	___/___/___
First Notifier	Telephone	Fax	
Notifier type	<input type="checkbox"/> Laboratory <input type="checkbox"/> Doctor <input type="checkbox"/> Hospital (not laboratory) <input type="checkbox"/> Other – specify _____		
Treating doctor	Name	Address	
	Practice name	Fax	
	Telephone	Email	
CASE FOUND BY			
How case was identified	<input type="checkbox"/> Clinical presentation <input type="checkbox"/> Contact tracing / epidemiological investigation <input type="checkbox"/> Clinical and epidemiology <input type="checkbox"/> Antenatal screening <input type="checkbox"/> Screening (excluding antenatal) <input type="checkbox"/> Unknown		
CASE DEMOGRAPHICS			
Surname	Given name	DOB ___/___/___	Age at onset ___ yrs ___ mons
Sex at birth	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> X (another term) – specify _____ <input type="checkbox"/> Not stated		
Gender at diagnosis	<input type="checkbox"/> Man or male <input type="checkbox"/> Woman or female <input type="checkbox"/> Non-binary <input type="checkbox"/> Other – specify _____ <input type="checkbox"/> Not stated		
Address	Suburb	State/Territory	Postcode
Telephone	Mobile	Email	
Other contact	Telephone		
Indigenous status	<input type="checkbox"/> Aboriginal <input type="checkbox"/> Torres Strait Islander <input type="checkbox"/> Both Aboriginal/Torres Strait Islander <input type="checkbox"/> Not Indigenous <input type="checkbox"/> Not Stated		
Country of birth	<input type="checkbox"/> Australia <input type="checkbox"/> Other: specify _____	Primary language <input type="checkbox"/> English <input type="checkbox"/> Other: specify _____	
Interpreter required	<input type="checkbox"/> No <input type="checkbox"/> Yes: specify _____		
Occupation	Occupation location		
General Practitioner	Name	Address	
	Practice name	Fax	

Telephone	Email

CLINICAL DETAILS

Symptoms present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Onset of first symptoms	Date ____/____/____ Time: ____ AM / PM
Signs and symptoms	
Rash/Lesions <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Fever $\geq 38^{\circ}\text{C}$ <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Description of rash/lesion <input type="checkbox"/> macules <input type="checkbox"/> vesicles <input type="checkbox"/> pustules <input type="checkbox"/> scabs <input type="checkbox"/> healed	
Rash/lesion location	
<input type="checkbox"/> Face <input type="checkbox"/> Mouth <input type="checkbox"/> Arms <input type="checkbox"/> Hands <input type="checkbox"/> Feet <input type="checkbox"/> Legs <input type="checkbox"/> Thorax <input type="checkbox"/> Genital/perianal <input type="checkbox"/> All over body	
Headache <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Cough <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Lymphadenopathy <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Lymphadenopathy - location <input type="checkbox"/> Inguinal <input type="checkbox"/> Axillary <input type="checkbox"/> Cervical
Chills or sweats <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Itch <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Vomiting/nausea <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Oral ulcers <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Fatigue <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Conjunctivitis <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Myalgia <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Sore throat: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Other (specify) : _____	
Existing medical conditions	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, provide details _____
Pregnancy status	<input type="checkbox"/> Yes (number of weeks gestation ____) <input type="checkbox"/> No <input type="checkbox"/> Post-birth (infection detected at or after delivery) <input type="checkbox"/> Unknown

HOSPITAL ADMISSION

Hospitalised	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, hospital name _____
Date admitted ____/____/____	Date discharged ____/____/____
Treating doctor	Name _____ Position _____ Telephone _____
ICU admission	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, dates of ICU admission ____/____/____ to ____/____/____

TREATMENT DETAILS

Treatment	Frequency	Route	Commencement date	Completion date
-----------	-----------	-------	-------------------	-----------------

VACCINATION HISTORY

Vaccinations

Dose	Vaccination type	Vaccination date	Validation method
1			
2			

OUTCOME

Case recovered ☐ Yes ☐ No ☐ Unknown

Case died ☐ Yes ☐ No ☐ Unknown If Yes, was autopsy conducted ☐ Yes ☐ No ☐ Unknown

Assessment ☐ Died of notified condition ☐ Died of other cause

LABORATORY

Test type	Specimen type	Specimen body site	Specimen collection date	Test result
PCR	<input type="checkbox"/> Blood <input type="checkbox"/> Swab of lesion			<input type="checkbox"/> Detected
	<input type="checkbox"/> Swab other <input type="checkbox"/> Biopsy		____/____/____	<input type="checkbox"/> Not detected
	<input type="checkbox"/> Other, specify: _____			<input type="checkbox"/> Not done
Genotyping			____/____/____	<input type="checkbox"/> clade Ia <input type="checkbox"/> clade Ib
				<input type="checkbox"/> clade IIa <input type="checkbox"/> clade IIb

EXPOSURE HISTORY

Exposure Period

Date: ____/____/____ **to** ____/____/____
(21 days before onset date) (onset date)

Exposure to infectious case

Contact with an infectious case of mpox in 21 days before symptom onset ☐ Yes ☐ No ☐ Unknown

If Yes, Name _____ DOB _____ Date of last contact with a case ____/____/____

Exposure Type

Sexual partner Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	Household	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Travel Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	Healthcare worker	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Workplace Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	School/childcare	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown

Other exposure, specify _____

Sexual Exposure (Gender of sexual/intimate partners for the mpox case)**Cisgender male** ☐ Yes ☐ No ☐ Unknown**Cisgender female** ☐ Yes ☐ No ☐ Unknown**Transgender male to female** ☐ Yes ☐ No ☐ Unknown**Transgender female to male** ☐ Yes ☐ No ☐ Unknown**Non-binary contact** ☐ Yes ☐ No ☐ Unknown**No sexual contact** ☐ Yes ☐ No ☐ Unknown**TRAVEL HISTORY**

Location	Dates travelled	Country/state visited	Place visited (hotels stayed, etc.)
----------	-----------------	-----------------------	-------------------------------------

Contact with animalsDuring the exposure period, did the case have contact with animals/hunting in an mpox endemic country? ☐ Yes ☐ No ☐ Unknown

Type of animal _____ country of contact _____

Details _____

PLACE OF ACQUISITIONPlace infection acquired ☐ Overseas (countries _____)☐ Australia (State/Territory _____ Post code _____)**CONTACT TRACING**

Name	Sex	Age/DOB	Phone	Email	Type of contact	Risk assessment High/Medium	Actions/ comments
------	-----	---------	-------	-------	-----------------	--------------------------------	----------------------