Mpox Remote Outbreak Management NT Health Plan

This document is current while being reviewed. Contact the Document Owner with all enquires.
Review extended to 6/09/2024.

NORTHERN TERRITORY GOVERNMENT

Contents

Acronyms	Full form
NT	Northern Territory

Introduction

Purpose

The purpose of this document is to provide all stakeholders with a concept of operations for the management of an outbreak of mpox in a remote setting in the Northern Territory (NT).

Objectives

The objectives of this Plan are to:

- Reduce morbidity and mortality from mpox on the Northern Territory population
- Early diagnosis and notification (within 24 hours) of mpox cases in any remote community of the Northern Territory
- Describe the activities to prevent transmission of mpox among people living in a remote community of the Northern Territory.
- Describe the pathways to clinical care to any mpox cases in a remote community in Northern Territory.

Legal Framework and/or Authority

The following legislation and/or authority govern the notification and management of mpox cases in the Northern Territory

- *Public and Environmental Health Act 2011*
- *Notifiable Diseases Act*

Public Health Outbreak Principles

The local outbreak arrangements are activated in the first instance to respond to a high risk suspected or positive case.

This plan represents a test, trace and isolate response. Supporting principles are:

- A rapid response to any possible outbreak of mpox in the Northern Territory.
- Rapid contact tracing utilising traditional contact tracing methodology.
- Isolate cases and high-risk close contacts.
- Compassionate and culturally appropriate communication with relevant stakeholders.
- Issues are escalated according to clear governance processes and parties work collaboratively to find solutions, with agreed mechanisms for appropriate information sharing.

Context

Risk

Mpox, previously known as Monkeypox, is caused by infection with the Monkeypox virus. Monkeypox virus is in the Orthopoxvirus genus, which also includes the variloa virus (smallpox) and vaccinia virus (used in smallpox vaccines).

Historically mpox has primarily occurred in central and west Africa, often in proximity to tropical rainforests. Since early May 2022, mpox virus transmission has been reported in multiple countries outside Africa, including Australia. The WHO declared the mpox outbreak a public health emergency of international concern on 23 July 2022. On 26 July 2022 Australia's Chief Medical Officer declared mpox to be a Communicable Disease Incident of National Significance (CDINS). On November 2022 the national response to mpox was stood down and the declaration of mpox as a CDINS was rescinded.

Australia has implemented measures aimed at slowing the spread of mpox into and within the country, and to prepare healthcare services and laboratories for a targeted response. The Mpox CDNA National Guidelines for Public Health Units provides an overview of the national approach, the operational plan and guidance for the health sector response.

The majority of cases in the global mpox outbreak in newly affected countries have been in sexual networks of gay, bisexual and other men who have sex with men. Currently, the highest risk of transmission if associated with direct and close skin-to-skin contact, including sexual contact.

If introduction of mpox occurs in an Aboriginal and Torres Strait Islander community, the risk of mpox transmission may be higher than the general community, due to inadequate and overcrowded housing. For this reason, as per the Mpox CDNA National Guidelines for Public Health Units, a low threshold should be used to initiate disease control measures, including consideration of communications and broader vaccination strategies.

Mpox can infect anyone and is of particular concern for vulnerable groups at higher risk of severe disease, including people with suppressed immune systems, people who are pregnant, and young children.

Key factors to be considered regarding mpox risk in Aboriginal communities include:

- Overcrowding, poor hygiene and other environmental conditions that can increase disease transmission and raise attack rates; and
- Access to health care is often reduced due to remoteness and lack of transport and electronic communications infrastructure, and most primary care services have limited service and staff capacity.

Identifying a Remote Community Mpox Outbreak

The definition of an outbreak of mpox is at least one confirmed case by laboratory testing amongst residents of a remote community within the Northern Territory.

CDC will declare the existence of an outbreak and declare an outbreak case definition.

Outbreak Status

Suspected Outbreak – Suspected Case in Community

Once the CDC has been notified of a suspected case in remote community the local Public Health Units (PHUs) should begin follow-up investigation on the day of notification to identify the source of exposure and any known contacts.

PHUs should ensure that action has been taken to:

- Conduct relevant pathology tests and confirm results
- Interview the case (see Appendix 1)

- Ensure infection control protocols are being followed as per Mpox CDNA National Guidelines for Public Health Units
- Ensure suspected cases isolate until a negative result as per Mpox (monkeypox) | Australian Government Department of Health and Aged Care
- Consider the need for alternative accommodation (e.g. supported accommodation in town or hospitalisation) if there is a high index of suspicion and if the person cannot isolate effectively with their own bedroom and bathroom).

Early Outbreak – Mpox First Identified in Community

Once the CDC has been notified of a positive case in remote community the local PHUs should begin follow-up investigation on the day of notification to identify the source of exposure and any known contacts.

PHUs should ensure that action has been taken to:

- Interview the case (see Appendix 1)
- Prioritise identification of high and medium-risk contacts (Appendix 3)
- Identify the likely source of infection
- Notify relevant stakeholders and nearby communities to be on standby
- Ensure infection control protocols are being followed as per Mpox CDNA National Guidelines for Public Health Units
- Ensure suspected cases isolate until a negative result as per Mpox (monkeypox) | Australian Government Department of Health and Aged Care
- Implement public health management of confirmed and probable cases and their contacts
- Focus on epidemiological surveillance to determine the mode of transmission (i.e. sexual transmission or otherwise)

Key Considerations

Clinical and Public Health Considerations

Efforts should be made to determine the cause of outbreaks in remote communities by ensuring appropriate diagnostic tests and thorough case interviews are performed early.

Clinical and public health response to suspected or confirmed mpox outbreaks in the remote community setting should aim to:

- Work in collaboration with local health services and community leaders;
- Encourage early presentation and identification of all rashes and lesions, particularly in vulnerable community members; and
- Until laboratory confirmation of the outbreak, test (if symptomatic), treat and isolate all suspected cases who fit the clinical case criteria and their close contacts.
- Closely monitor epidemiology and transmission risk.

Community Considerations

During outbreaks in Aboriginal communities, it is recommended that the identification of vulnerable community members should include all individuals with risk factors.

Response to designated Aboriginal communities demands careful consideration including:

- demographics of the impacted community including pre-existing co-morbidity;
- cultural sensitivities and language barriers;
- limited access to facilities, including medical and accommodation;
- limited access to specialist equipment and consumable stores (e.g. PPE);
- limited access to clinical and support staff (e.g. health care workers); and
- significant challenges associated with remoteness (travel distance and mode of transportation)

Local communities must be consulted and engaged to ensure that the appropriate personnel and equipment are deployed during the initial response. Support from Aboriginal Health agencies will be pivotal in ensuring the effective conduct of health-related operations during any potential outbreak.

Community Engagement

The success of public health interventions in remote communities is highly dependent on building trust between health authorities and affected communities. Inclusion of affected communities in planning a public health response is therefore essential.

Moreover, effective communication requires intentional and careful use of language, as well as community engagement and digital social listening analysis of community concerns. Rumours and misinformation also affect communities' ability to distinguish facts from mistruths and undermine their ability to protect themselves. It is critically important to rapidly identify and manage misinformation, and instead amplify facts in a manner that resonates with the community through credible and trusted sources. Local Aboriginal leaders and Aboriginal health staff will be pivotal to the success of this engagement.

Key areas to encourage community engagement:

- Plan for and implement interventions to avoid stigma and discrimination
- Engage key sexual health networks
- Community assistance with contact tracing and surveillance

Vaccination

If there is an outbreak of mpox in remote communities a low threshold should be used for vaccination strategies.

Targeted vaccination for high risk individuals are recommended.

At the time of writing this includes:

- high risk close contact of a confirmed case
- gay, bisexual and other men who have sex with men
- trans (binary and non-binary people) who have sex with men
- sex workers

- sistergirls
- any person who perceives themselves to be at increased risk of acquisition (e.g. because they are attending a high risk event as an advocate/allies)

Post-exposure vaccination is recommended for close contacts of cases, ideally within four days of first exposure (and up to 14 days in the absence of symptoms). Consideration will be given to community wide (within the parameters of age eligibility) vaccination in the event of an outbreak in a remote community.

Testing

Before testing, suspected cases should be notified to the relevant Public Health Unit (PHU) urgently via phone as per the Notifiable conditions in the NT guideline.

Subject to advice from the PHU, patients with symptoms who present with a history suggestive of exposure to mpox should have a specimen collected and be referred for laboratory testing.

The testing laboratory may be contacted to arrange receipt of specimens. General advice 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. Specific advice from the medical microbiologist at the testing laboratory may be sought to obtain advice on specimen collection, safe packaging and transport.

Specimen collection and handling

Appropriate personal protective equipment (PPE) should be worn while collecting samples from patients suspected of mpox infection as per Mpox (Monkeypox) Public Health and Clinical Management NT Health Guideline.DOCX

Personal Protective Equipment

As per the Interim guidance on monkeypox for health workers standard and transmission-based precautions, including contact and droplet precautions, are considered the minimum level of Personal Protective Equipment (PPE) when caring for a person with suspected, probable, and confirmed mpox.

This includes:

- Fluid repellent surgical mask
- Gloves
- Disposable fluid resistant gown
- Eye protection – face shields or goggles

When providing care which may include particulate dispersion for a patient with probable or confirmed monkeypox, a fit-checked particulate filter respirator (PFR) – P2/N95 or equivalent is recommended.

These activities include, but are not limited to:

- Showering patients (this may be of particular risk due to the creation of aerosols from oral secretions, skin lesions or resuspension of dried exudates)
- Handling contaminated linen, clothing, or towels
- Caring for patients with a cough
- Performing aerosol-generating procedures.

A fit check should be performed each time the PFR is applied.

Pathology Specimens

HCW in clinic room (in PPE) cleans specimen container with two in one detergent and disinfectant wipes (Clinell® wipes), then places specimens into pathology bag.

- HCW outside clinic room gathers 2nd specimen pathology bag and holds with two hands, turning top of bag outward over hands to receive specimen by double bagging.
- Pathology form is placed in the side pocket of the specimen collection bag, and clearly states 'Monkeypox specimen'.
- Pathology specimen is transported manually to pathology.

It is necessary to inform Territory Pathology on (08) 8922 8299, before sending samples.

Suspected Case Management

Response times

Urgent: immediately (within 24 hours).
Suspected cases should be notified to the relevant Public Health Unit (PHU) urgently via phone as per the Notifiable conditions in the NT guideline.

Special considerations

Keep the patient in a dedicated clinic room (if available) and provide an N95 mask while consulting clinic manager/ Sexual Health Physician/ Infectious Diseases clinician on call.

NT Infectious Disease Specialist is available through the Royal Darwin Hospital switchboard on (08) 8922 8888.

Isolation

Where possible, suspected cases should isolate in their own home or a place as close to home as possible with clinical support as determined by clinical assessment. If there is concern about the capacity of the person to isolate and be supported well, other options should be considered on a case by case basis. Local communities must be consulted and engaged to ensure that the isolation plans are appropriate for that community. Support from Aboriginal Health agencies will be pivotal in ensuring the effective conduct of health-related operations during any potential outbreak.

Special focus will be needed for those who meet the following criteria:

- Homeless/transient/long grassing
- Overcrowded accommodation
- Medically vulnerable
- Patient Safety
- Capacity for the person to understand the need to isolate and comply
- Overcrowded accommodation (unable to isolate at home)

Education will need to be provided to households and/or entire communities regarding the importance of isolation to prevent mpox transmission during an outbreak. Education campaigns focusing on simple hygiene and isolation messaging, such as not sharing a bed or bed linens with positive cases.

Positive Case Management

See Appendix A for positive case flow chart

Response times

Urgent: immediately (within 24 hours).
Positive cases should be notified to the relevant Public Health Unit (PHU) urgently via phone as per the Notifiable conditions in the NT guideline.

Clinical Process for Mpox Identification

A clinician who suspects an outbreak of mpox will immediately notify the Public Health Unit, Centre for Disease Control (CDC), NT Health. Laboratory confirmed case of mpox is a notifiable disease in the Northern Territory. The CDC is notified by the laboratory of all positive tests and contact tracing will need to be done immediately.

Clinical Considerations

Most patients can be managed at home with a telehealth review though their GP, sexual health clinic or PHU. In most cases mpox does not require treatment. Mpox is usually a self-limiting disease with symptoms lasting for 2-4 weeks.

Clinical situations that may require further review or treatment include:

- High risk of spread to other individuals – e.g. overcrowded housing , lack of capacity to isolate effectively.
- Severe pain not managed by simple analgesia
- Secondary bacterial infections, sepsis or abscesses
- Secondary infections including cellulitis, bronchopneumonia, encephalitis and infection of the cornea with subsequent scarring and loss of vision.

Active Case Finding

- Identify the likely source of infection (See Appendix A for case interview questions)
- Identify contacts and their risk category (See Appendix B for mpox risk categories)
- Implement public health management of probable contacts (See Appendix C)

Community Actions at High Risk Suspect or Confirmed Case

Implement a shift of focus in the remote outbreak response to managing mpox in communities, with a community-by-community approach to outbreak management. This approach is undertaken with community leaders and the primary health care, consisting of the following priorities:

- local health centre staff become aware of unwell community member(s)

- clinical assessment and contact with Remote Medical Practitioners and consultation with CDC
- health protocols activated (e.g. testing and close contact tracing)
- high risk suspect or positive case determined by clinical parameters
- isolation for positive cases and contacts
- identify vulnerable individuals
- vaccination rate of community
- ACCHO and local health centre capacity
- epidemiology – size of outbreak, pace of growth, whether cases are linked
- access to surge workforce
- welfare assessment
- community preferences
- other factors affecting response (e.g. recent floods cutting off access).

The outcome of this assessment will determine

- public health order requirement (e.g. development of a CHO direction)
- surge resource needs (human, equipment, supplies)
- the support required to keep people in community, where possible
- surge vaccination requirements (staffing, doses of vaccine)

Outbreak/Epidemiology

Closely monitor transmission in community and implement outbreak plan accordingly.

Vulnerable Individuals

If an outbreak occurs in remote community vulnerable community members should be identified. The following groups are considered vulnerable to mpox:

- Children are typically more prone to severe disease than adolescents and adults
- Available evidence suggests that contracting mpox during pregnancy can be dangerous for the fetus
- People with underlying immune deficiencies may be at risk of more serious illness from mpox
- People living with HIV may be at higher risk, if not on treatment. Many people living with HIV have become infected with mpox in the current outbreak, but there have been relatively few severe cases. This is most likely because their HIV was well controlled and/or virally supressed on treatment.

Where necessary, consider removal of those who are vulnerable or at risk including:

- Medical retrieval, if required and supported in the urban/regional areas
- Moving close contacts who are vulnerable from a house containing an infectious person (within community, if possible, otherwise to a regional/urban setting)

Isolation

Where possible cases should isolate in their own home or a place as close to home as possible with clinical support as determined by clinical assessment. Local PHUs to consider options for isolation in the community, with special focus for those who meet the following criteria:

Special focus will be needed for those who meet the following criteria:

- Homeless/transient/long grassing
- Overcrowded accommodation
- Medically vulnerable
- Patient Safety
- Capacity for the person to understand the need to isolate and comply
- Overcrowded accommodation (unable to isolate at home)

Education will need to be provided to households and/or entire communities regarding the importance of isolation to prevent mpox transmission during an outbreak. Education campaigns messages should focus on simple hygiene and isolation messaging, such as not sharing a bed or bed linens with positive cases. Communication collateral has been developed and can be expanded as needed.

Increase Community Awareness and Decrease Stigma

Support Aboriginal leaders and organisations to lead community and engagement with communities. Enhanced communications and community engagement with key messaging on:

- Encourage symptomatic people to attend for testing
- Encourage physical distancing and isolation for those with symptoms or contacts
- Encourage vaccination in vulnerable people/high risk groups
- Roll-out of public health campaigns

Workforce

Review and assessment of local capability and capacity

- Surge immunisation staff
- Staff vaccination
- Clinical staff to monitor positive cases in community
- Clinical staff available for testing and treating symptomatic cases and contacts

Welfare

Welfare support to help meet the public health objectives of the community outbreak plan.

Consider the resources requirements to support those who are in isolation or quarantine to do so effectively.

- Enable households in isolation to access essential supplies e.g. power and food
- Social and emotional wellbeing support to be provided
- Accommodation for those needing to isolate

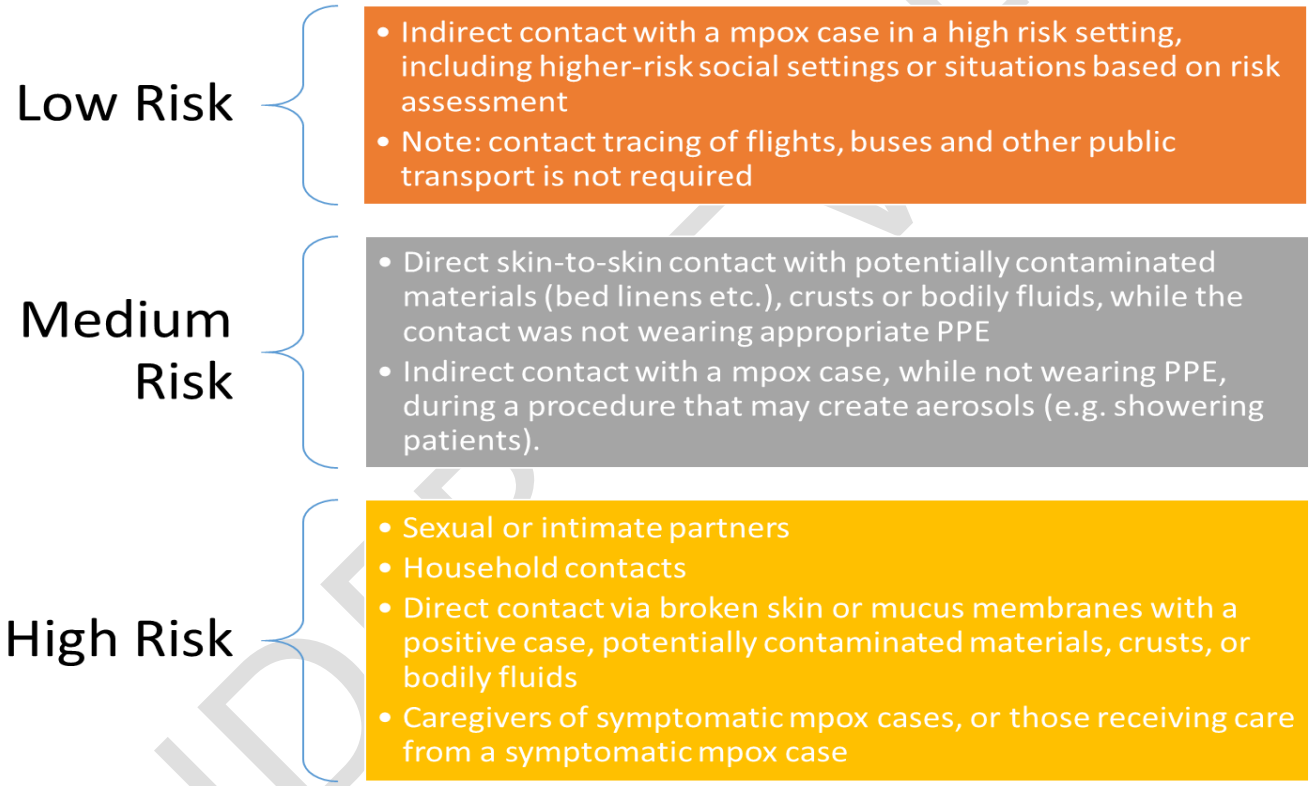
Residential and Aged Care

In the event there is either widespread MPX or an outbreak in a remote community consideration should be given to reinstating a joint Aged Care response team. This would require the CHO to write to the Commonwealth Department of Health's Chief Medical Officer to request establishment.

Appendices

Appendix A: Positive Case – Flow Chart

Appendix B: Risk categories for mpox contacts



Appendix C: Follow-Up of mpox contacts

Low Risk

- Low risk contacts do not require follow-up
- At their discretion, come PHUs may advise low-risk contacts to self-monitor for signs and symptoms, and if any signs or symptoms occur within 21 days of last exposure, to follow exclusion and restriction advice and report to public health officials.

Medium Risk

- Surveillance: Active monitoring on a case-by-case basis
- Consider post exposure vaccination
- Testing priority: High if a clinically compatible rash develops; intermediate if compatible prodromal symptoms develop

Additional recommendations:
For 21 days from last exposure:

- If working in a high-risk setting, ensure symptom free and wear a surgical mask
- Avoid childcare and aged care facilities, other than for work purposes; avoid healthcare settings unless seeking medical attention

High Risk

- Surveillance: Routine monitoring
- Consider Post-exposure preventative vaccination (ideally within 4 days)
- Testing priority: High if a clinically compatible symptoms develop
- Additional recommendations:
  From 21 days from last exposure:
- Avoid close physical contact with others; maintain a distance of 1.5 metres at all times including in the home
- Avoid contact with animals, particularly dogs and rodents (mice, rats, hamsters, gerbils, guinea pigs, squirrels etc)
- Abstain from sexual activity
- Do not visit high risk settings3 such as childcare and aged care facilities; avoid healthcare facilities unless seeking medical attention
- Avoid contact with those potentially at higher risk of severe infection (infants, older people, immunocompromised people, and pregnant women)
- Work from home, if possible, otherwise if unable to do so, in most circumstances, high risk contacts can go to work. Workers in settings such as healthcare, childcare and aged care facilities who need to attend work should be managed on a case-by-case basis in consultation with PHUs
- Wear a surgical mask when outside the home and when in the same room as other people in the home
- Do not donate blood, cells, tissue, breast milk, semen, or organs

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