NHS National Services Scotland

Mpox IPC advice for healthcare settings

Mpox (Previously known as Monkeypox): Management of possible, probable, and confirmed cases

Version 1.4

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ARHAI Scotland

Antimicrobial Resistance and Healthcare Associated Infection

Disclaimer: When an organisation, for example a health and care setting, uses products or adopts practices that differ from those stated in the National Infection Prevention and Control Manual, that individual organisation is responsible for ensuring safe systems of work including the completion of a risk assessment approved through local governance procedures.

This Guidance has been developed as part of an emergency response to the current mpox outbreak and therefore does not follow normal NIPCM methodology and process.

Version history

Version	Date	Summary of changes
V1.0	01/06/22	First publication
V1.1	06/06/22	Greater clarity on symptomology associated with PPE use – section 2.2 Clarity on cleaning and PPE requirements – section 2.3 Inclusion of PPE requirements for vaccinators when vaccinating contacts who do not meet possible/probable/confirmed case definition – section 2.7
V1.2	08/07/22	Updated to reflect changes to HCID categorisation of MPX outbreak clade. Changes throughout the document to refer to MPX outbreak clade. Updated to include Department of Transport Multilateral Agreement M347 on the re-categorisation of waste for MPX outbreak clade to Category B.
V1.3	18/08/22	Update to reflect agreed name changes to Monkeypox variants with current outbreak variant identified as Monkeypox (Clade IIb)
V1.4	15/03/23	Update to reflect UKHSA derogation from HCID for MPXV (organism that causes mpox) Update to change to terminology, monkeypox is now referred to as mpox.

Contents

1. General information 5

2. Patient management 7

2.1 Patient placement 8

2.2 Personal Protective Equipment 9

2.3 Decontamination 10

2.4 Waste 11

Linen management 11

2.5 Safe management of blood and body fluids 11

2.6 IPC advice for MPX vaccination teams 11

2.7 Visitors to an inpatient who is a possible, probable, or confirmed case of non-HCID mpox 12

1. General information

General information on mpox including case definitions, clinical pathways and contact tracing can be found in the Principles for control of non-HCID mpox in the UK: 4 nations consensus statement - GOV.UK (www.gov.uk) This document outlines the infection prevention and control advice for healthcare workers who may be involved in the care of possible, probable or confirmed cases of mpox. The guidance is based on the published Mpox Principles for control of non-HCID mpox in the UK: 4 nations consensus statement from the UK Health Security Agency (UKHSA) and associated UKHSA guidance documents.

Given the evolving nature of the current situation, content will be subject to frequent updates. The latest version should always be referred to for any updates. The guidance should be read in conjunction with the NIPCM and links to the appropriate sections of the NIPCM will be provided within this guidance.

Mpox is a viral zoonotic disease that is caused by the mpox virus (MPXV). Until May 2022, mpox was primarily identified in Central and West Africa. There are 2 historical clades of MPXV – Clade I (former Central African clade) with a reported mortality of 10%, and Clade II (former West African clade) with a reported mortality of 1% from epidemiological cluster and outbreak reports from Africa. Prior to 2022, it was occasionally identified in other countries related to travel from endemic areas in Central and West Africa.

Within the UK, mpox has previously been classified as a high consequence infectious disease (HCID). This is not a legal classification but agreed by the 4 nations public health agencies and the NHS to enable a consistent approach to public health and clinical management.

Initially, the rationale for classifying mpox as an HCID was that there were infrequent importations, limited information about the disease course and outcome, no confirmed availability of vaccine and unclear approaches to treatment. Therefore, it was reasonable to have a highly precautionary approach designed for complete containment around single cases in order to minimise the potential for spread.

Since 13 May 2022, cases of mpox have been reported in multiple countries that do not have endemic MPXV in animal or human populations, including countries in Europe, North America and Australasia. In the UK and other non-endemic countries, the vast majority of cases have

been domestically acquired, with only a small number of imported infections. This suggests significant community transmission in multiple non-endemic countries.

Since May 2022, over 3,700 cases of mpox have been identified in the UK, with community transmission leading to multiple generations of spread since May 2022. All reported UK cases where molecular testing results are available have been identified as Clade II.

The illness appears to be generally mild, though some individuals will require hospital admissions to manage secondary infections or complications from the illness. Pre- and post-exposure prophylaxis is now available.

Within Clade II, the World Health Organization (WHO) has designated two subclades, Clade IIa and Clade IIb. Whole genome sequencing further divides each subclade into multiple lineages. In July 2022, the UK Advisory Committee on Dangerous Pathogens (ACDP) advised derogation of the B.1 lineage of Clade IIb MPXV from HCID classification. Following consideration of additional information in January 2023, ACDP further advised that the whole of Clade II (a and b) MPXV should now no longer be classified as an HCID.

Importations of mpox from Central Africa, and/or mpox caused by Clade I MPXV remain classified as HCIDs, as the severity of mpox caused by Clade I remains unknown.

MPXV is a Hazard Group 3 organism (ACDP/HSE). Other organisms in this category include Salmonella typhi, HIV, Hepatitis B and C viruses, and Mycobacterium tuberculosis. These organisms can be handled safely by most clinical microbiology laboratories with appropriate biosafety facilities. Following international agreement, from July 2022 clinical waste from mpox cases is designated as category B, and samples containing MPXV (other than viral cultures) may be carried under UN3373 via category B transport.

Transmission of non-HCID mpox is consistent with close direct contact. There is currently no evidence that individuals are infectious before the onset of the prodromal illness. For individuals with infection who have evidence of lower respiratory tract involvement or severe systemic illness requiring hospitalisation, the possibility of airborne transmission has not been excluded.

2. Patient management

The derogation of HCID status therefore means a change in how mpox is defined. The operational definition going forward is therefore:

Confirmed or highly probable cases of mpox are considered an HCID if the lineage responsible is:

- confirmed Clade I MPXV

or

- not known and:
  - there is a travel history to Central Africa, or a link to a traveller from those regions and/or
  - there is an epidemiological link to a case of Clade I mpox and/or
  - the case results from a new zoonotic jump in any country or setting

All confirmed or highly probable cases must follow HCID guidance.

Mpox is not considered an HCID where:

- confirmed as Clade II MPXV

or

- not known, and **all** the following conditions apply:
  - there is no history of travel to Central Africa
  - there is no link to a traveller from Central Africa
  - the case has not resulted from a new zoonotic jump

When assessing a patient for possible mpox, ensure you assess the travel and contact history as above (see Mpox (monkeypox): case definitions - GOV.UK (www.gov.uk)).

This derogation of HCID status for mpox (Clade II MPXV) is to ensure a proportionate response to deliver on achievable strategic outcomes. These principles do not replace the need for local dynamic risk assessments which remain key.

In preparation, healthcare settings that may receive and care for probable, possible, or confirmed non-HCID mpox cases should ensure that staff are:

- aware of what actions to take if a possible, probable or confirmed case presents
- familiar with all IPC controls required as per this guidance

2.1 Patient placement

In line with the hierarchy of controls, efforts should be made to perform telephone triage/assessment to help establish symptoms present and risk associated with potential mpox in advance of any face-to-face contact where possible.

Possible, probable, or confirmed non-HCID mpox cases who require to be seen by healthcare staff within a healthcare facility should be placed in a negative pressure room (or a single neutral pressure room where negative pressure room is unavailable). Where there are minimal numbers of negatively pressurised rooms, these should be prioritised for confirmed cases.

All possible, probable, or confirmed patients should be provided with a Fluid Resistant Surgical Mask (FRSM) to wear where this can be tolerated and does not compromise their clinical care for example when receiving oxygen therapy.

2.2 Personal Protective Equipment

Table 1: Minimum PPE requirements for possible, probable, and confirmed non-HCID mpox

Definition categories	Minimum PPE required
Where symptoms are mild (this may include a localised rash) and there is no evidence of respiratory symptoms.	• **Gloves – single pair** Ensure hand hygiene is performed appropriately prior to and after removal of gloves. • Fluid Resistant Surgical Facemask (FRSM) • Apron
Possible, Probable and Confirmed – Where symptomology includes respiratory symptoms, widespread rash **AND/OR** clinically deteriorating as a direct result of mpox **AND/OR** prolonged close contact with a patient and their environment for example an overnight inpatient admission stay.	• **Gloves – single pair** Ensure hand hygiene is performed appropriately prior to and after removal of gloves. • FFP3 respirator[1] • Fluid resistant gown/coveralls • Eye/face protection

[1] A full face visor is required in addition to a FFP3 respirator where the respirator is not fluid resistant. HCWs must be fit tested prior to donning a respirator and perform a fit check each time it is donned.

Donning and doffing step-by-step instructions can be found in Appendix 6 of the NIPCM.

ARHAI Scotland recognise that some ID Units will have established processes and procedures for HCID PPE which will be clearly defined as 'standard practice' for that area, which may include the application of a high-level unified ensemble for all HCIDs. Should they choose to adopt these to prevent confusion they may do so.

2.3 Decontamination

Equipment in the room where a possible, probable or confirmed case is being managed should be kept to a minimum. Reusable patient care equipment should be dedicated to the patient as far as practicable. The non-HCID mpox virus will be destroyed by hospital detergents and disinfectants.

Decontamination of reusable patient care equipment after use on the possible, probable or confirmed case should be in line with Appendix 7 of the NIPCM.

Cleaning and decontamination of the patient room within healthcare settings should be undertaken using:

- a combined detergent/disinfectant solution at a dilution of 1,000 parts per million available chlorine (ppm available chlorine (av.cl.)); or
- a general-purpose neutral detergent in a solution of warm water followed by disinfection solution of 1,000ppm av.cl.

Manufacturers' guidance and recommended product "contact time" must be followed for all cleaning/disinfection solutions.

Increased frequency of decontamination/cleaning schedules should be incorporated into the environmental decontamination schedules for rooms occupied by possible, probable, or confirmed non-HCID mpox cases where there may be higher environmental contamination rates for example inpatient rooms. Staff cleaning the room should wear PPE in line with section 2.2 whist the patient is still present.

Inpatient rooms must be terminally cleaned following resolution of symptoms, discharge and/or transfer of the possible, probable, or confirmed non-HCID mpox case. Equipment should be cleaned, linen bagged, and waste removed by the clinical staff who have been caring for the patient wearing the PPE outline in section 2.2. Curtains and bed screens should also be removed for laundering. Where domestic staff are required to remove curtains/screens they should do so wearing PPE outlined in section 2.2. Subsequent cleaning of the empty room to complete the terminal clean thereafter may be undertaken whilst wearing an apron, gloves and FRSM.

In primary care settings where a consultation with a possible, probable, or confirmed non-HCID mpox case has taken place, ensure thorough cleaning using the same products stated above

once the patient leaves the room and wearing the PPE outlined in section 2.2. This must include all equipment and surfaces and as a minimum, a full floor clean at the end of the day.

2.4 Waste

By international agreement, samples and waste from **all** mpox cases are classified as Category B for transport and waste management. Infectious waste from these individuals can be treated as healthcare (clinical) category B waste and can be disposed of in an orange bag for alternative treatment and does not have to be sent for incineration. The waste will be assigned to UN3291, clinical waste, unspecified, n.o.s. if there is any chemical or pharmaceutical contamination, the waste must be consigned in a yellow container (or purple if cytotoxic/cytostatic) and incinerated or sent to a permitted site for disposal as per national regulation.

Laboratory cultures of MPXV remain classified as Category A.

Linen management

Contaminated clothing and linen are a potential source of transmission. Care must be taken not to shake the linen and prevent dispersal of skin scales. All linen generated during the care of a possible, probable, or confirmed case of non-HCID mpox must be managed as infectious linen in line with Appendix 8 of the NIPCM.

2.5 Safe management of blood and body fluids

Spillages of blood and/or other body fluids associated with a possible, probable or confirmed case of non-HCID mpox must be treated immediately in line with Appendix 9 of the NIPCM.

2.6 IPC advice for MPX vaccination teams

If vaccinating a possible, probable, or confirmed non-HCID mpox case, the content of this guidance document should be followed.

If vaccinating asymptomatic contacts who **do not** fit the possible, probable, or confirmed case definition or HCWs as part of a routine response where that HCW has not had any exposure to a case of non-HCID mpox, IPC requirements are those in line with standard IPC vaccination

protocols and there is considered no additional risk. Gloves are not routinely required for vaccination. An SBAR detailing the evidence around this is available.

2.7 Visitors to an inpatient who is a possible, probable, or confirmed case of non-HCID mpox

Visitors to possible, probable, or confirmed non-HCID mpox inpatients should be restricted. If essential, for example carer/parents/guardians, individual advice should be sought from IPCT/HPT regarding the safest way to arrange a visit.