

MFT High consequence Infectious Diseases Guidelines

27 May 2022: Including operational Guidance for Monkeypox

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Introduction

This guideline is designed to increase local readiness and response to possible high consequence infectious diseases. It has been updated following outbreak caused by domestic transmission of monkeypox, although much of the guidance is applicable to other HCIDs. **The situation is rapidly changing please ensure you follow the latest version of these guidelines and [national updates from UKHSA](#).**

Definition of HCID

In the UK, a high consequence infectious disease (HCID) is defined according to the following criteria:

- acute infectious disease
- typically has a high case-fatality rate
- may not have effective prophylaxis or treatment
- often difficult to recognise and detect rapidly
- ability to spread in the community and within healthcare settings
- requires an enhanced individual, population and system response to ensure it is managed effectively, efficiently and safely

List of high consequence infectious diseases

Argentine haemorrhagic fever (Junin virus)
 Andes virus infection (hantavirus)
 Bolivian haemorrhagic fever (Machupo virus)
 Avian influenza A H7N9 and H5N1
 Crimean Congo haemorrhagic fever (CCHF)
 Avian influenza A H5N6 and H7N7
 Ebola virus disease (EVD)
 Middle East respiratory syndrome (MERS)
 Lassa fever
Monkeypox
 Lujo virus disease
 Nipah virus infection
 Marburg virus disease (MVD)
 Pneumonic plague (Yersinia pestis)
 Severe fever with thrombocytopenia syndrome
 Severe acute respiratory syndrome (SARS)*

<https://www.gov.uk/guidance/high-consequence-infectious-diseases-hcid>

Monkeypox

Monkeypox is a rare infection caused by Monkeypox virus. The Transmission of monkeypox can occur when a person comes into close contact with an animal (rodents etc), human, or materials contaminated with the virus. The virus enters the body through broken skin (even if not visible), the respiratory tract, or the mucous membranes (eyes, nose, or mouth).

Person-to-person spread is thought to be uncommon, but may occur through:

- contact with objects (such as bedding or towels) used by an infected person
- direct contact with monkeypox skin lesions or scabs
- coughing or sneezing of an individual with a monkeypox rash

Clinical Features

- The infection is usually a mild self-limiting illness, and most people recover within several weeks. However, severe illness can occur in some individuals.
- The symptoms of monkeypox can begin 5-21 days (average 6-16 days) after exposure with initial clinical presentation of fever, malaise, lymphadenopathy, and headache.
- Within 1 to 5 days after the appearance of fever, a rash may develop, often beginning on the hands or face or genital area. It may then spread to other parts of the body. The rash changes and goes through different stages before finally forming a scab which later falls off.
- Treatment for monkeypox is mainly supportive. The illness is usually mild and most of those infected will recover within a few weeks without treatment.
- There is antiviral treatment for those at high risk or unwell
- The immunosuppressed, the very young or pregnant may be at increased risk
- Vaccines can be used for both pre and post exposure prophylaxis.

Case Definitions

Possible case

A person with a febrile prodrome[†] compatible with monkeypox infection where there is known prior contact with a confirmed case in the 21 days before symptom onset.

Or, a person with an illness where the clinician has a high suspicion of monkeypox (for example, this may include prodrome or atypical presentations with exposure histories deemed high risk by the clinician, or classical rash without risk factors).

[†] Febrile prodrome consists of fever $\geq 38^{\circ}\text{C}$, chills, headache, exhaustion, muscle aches (myalgia), joint pain (arthralgia), backache, and swollen lymph nodes (lymphadenopathy).

<https://www.gov.uk/guidance/high-consequence-infectious-diseases-hcid>

Probable case

A person with an unexplained rash on any part of their body plus one or more classical symptom or symptoms of monkeypox infection* since 15 March 2022 and any of:

- has an epidemiological link to a confirmed or probable case of monkeypox in the 21 days before symptom onset
- reported a travel history to West or Central Africa in the 21 days before symptom onset
- is a gay, bisexual or other man who has sex with men (GBMSM)

*Acute illness with fever ($>38.5^{\circ}\text{C}$), intense headaches, myalgia, arthralgia, back pain, lymphadenopathy.

Confirmed case

A person with a laboratory confirmed monkeypox infection (monkeypox PCR positive).

Confirmed cases will be actively managed with regional and national HCID/Infectious diseases team following notification. For local contact numbers: see box 1.

Actions on a possible or probable case

1. Isolate and assess (see Box 1, below)
2. Plan to test for monkeypox ([see testing of HCIDs](#), below)

Useful Reference / Guidance for health professionals

(Ctrl + click to follow the hyperlinks listed below)

[Monkeypox: case definitions](#)

[Monkeypox: contact tracing](#)

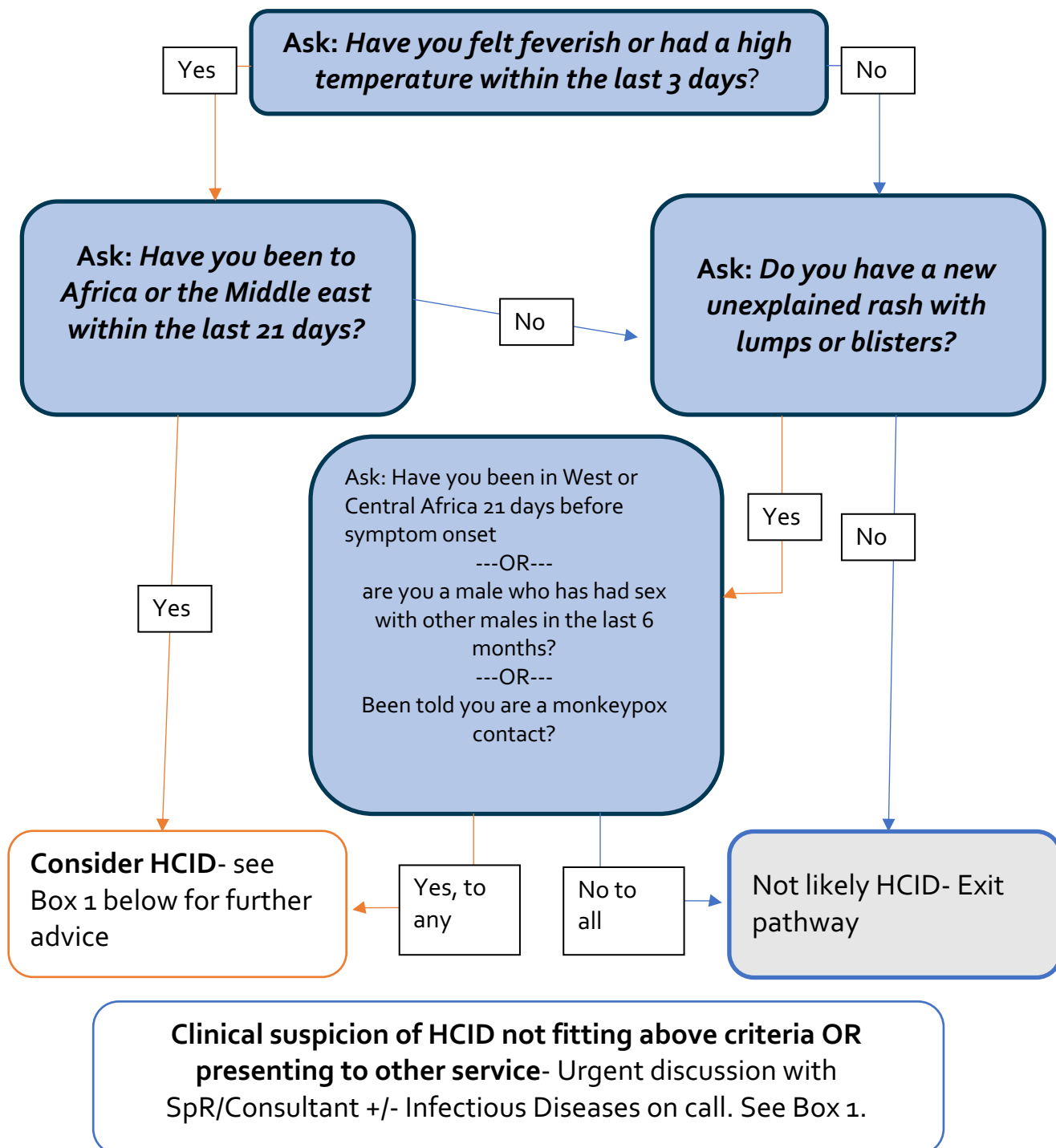
[Monkeypox: diagnostic testing](#)

[Monkeypox vaccination](#)

[Monkeypox: background information](#)

<https://www.gov.uk/guidance/high-consequence-infectious-diseases-hcid>

HCID Triage: Ask all patients presenting to MFT Emergency Department or other MFT acute service



Box 1: Isolate and Assess

- Immediately isolate patient in a sideroom (negative pressure if available).
- No non-essential visitors. Minimize staff seeing patient and record names of contacts.
- Use PPE (includes FFP3 mask, long sleeved gown, gloves, eye protection), minimize contact.
- Explain what is happening to the patient and what you expect to happen going forward, ask patient to wear surgical mask (if not vomiting).
- Clinician to assess (history, exam) including asking about exact locations, dates and relevant exposures (see Box 2 below to ask the relevant questions).
- Give essential treatment (observations, antibiotics, oxygen, fluids) only.
- Urgently contact:
 - Adults: Infectious diseases (ID) SpR on call (24/7) via NMGH switchboard (0161 624 0420), unless the patient has presented to Wythenshawe ED or Trafford Urgent Care Centre in which case contact Wythenshawe Hospital Infectious Diseases on call (24/7) via the switchboard (0161 998 7070)
 - Children: see separate paediatric pathway below
 - GUM clinic with possible Monkeypox: GUM consultant
- Inform local laboratory of possible/probable HCID case.
- **Notify the local IPC team in hours (out of hours Senior IPC team via switchboard).**

Box 2. Relevant exposures

Relevant exposures for patients with new pox-like rash (any of):

- Has an epidemiological link to a confirmed or probable case or possible case of monkeypox in the 21 days before symptom onset OR
- Travel to West or Central Africa in the 21 days before symptom onset OR
- Is a gay, bisexual or other man who has sex with men (GBMSM) AND any of: Acute illness with fever ($>38.5^{\circ}\text{C}$), intense headache, myalgia, arthralgia, back pain or lymphadenopathy

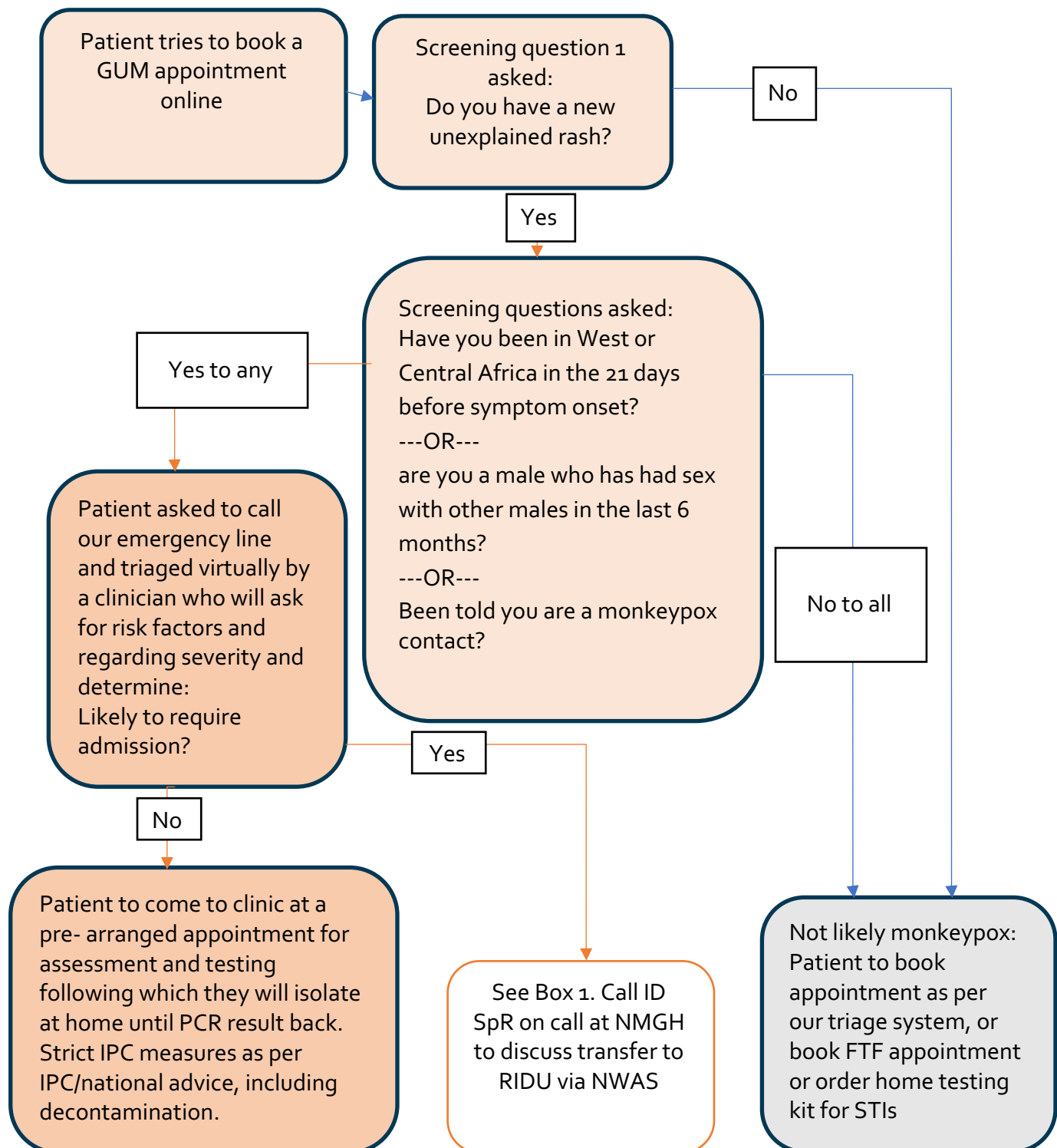
Relevant exposures in patients with fever (any of):

- Epidemiological link with known or suspected HCID case
- Travel to an area with current HCID epidemic
- Travel to Sub-Saharan Africa AND any of:
 - consumption of wild (bush) meat
 - easy bruising/bleeding
 - visits to caves, mines, funerals or hospitals in Africa
 - living in basic rural accommodation

Travel to the Middle East or North Africa AND any of (within the last 14 days)

- Contact with Camels/Camel meat
- Hospital admission
- Current respiratory infection requiring admission
- Travel outside of Europe AND tick-bite or animal slaughter

HCID Triage: Patient Requesting GUM appointment in Manchester Healthcare Organisation



<https://www.gov.uk/guidance/high-consequence-infectious-diseases-hcid>

Testing of HCIDs

Only arrange testing AFTER agreement with Infectious Diseases (all HCID) or GUM consultant (monkeypox only):

- For all HCID except MERs discuss with RIPL (01980 612 348) AND complete [RIPL P1 form](#) (present in the HCID transport bag)
- For MERs discuss with MRI virologist on-call on 01612768853 (9am-5pm mon-fri) or via switchboard on 01612761234 (out of hours).

Ensure local laboratory are aware that samples will be sent prior to collecting
Decide on tests and label samples prior to going into room. Samples should be sealed in bag in patient room and dropped into bubble wrap envelope within un3373 tube using non-touch technique to avoid contamination.

What tests to do:

Monkeypox:

- **2 × Lesion swab** (using any available sterile swab), preferably taken by de-roofing a lesion, placed into viral transport medium
DO use VTM tubes for the swab sample. DO NOT use Primestore or Cobas transport medium
- The second lesion swab will be used for local testing of other pathogens – please request HSV, VZV, Syphilis and enterovirus PCR electronically.
- **1 × throat swab** (using the same swabs as for COVID-19/Flu) placed into viral transport medium.
- **Serum sample** (biochemistry or clotted blood tube) for BBV (HIV, Syphilis (STS) +/- Hepatitis C and B) screen – please request electronically.

Other HCID tests:

- Other investigations for HCID pathogens as directed by ID/Virology/IFS. Please complete request form in HCID bag.

URGENT baseline investigations:

Dependent on presentation (e.g. Malaria screen, FBC, U&E's, LFT's, clotting, CRP, glucose and blood cultures) may be requested as appropriate – **it is essential that these are discussed with the relevant laboratory before sending to ensure safe processing of samples.** Please request electronically, with "HCID " as part of clinical information.

- All MFT samples (except NMGH) should be forwarded to Virology department at ORC
- All specimens laboratory specimens that are considered infectious to be processed in the CL3 (Cat 3) unless inactivated
- All other blood specimens to be processed as CL2
- NMGH call in advance (45389). Samples must be packaged as per guidance

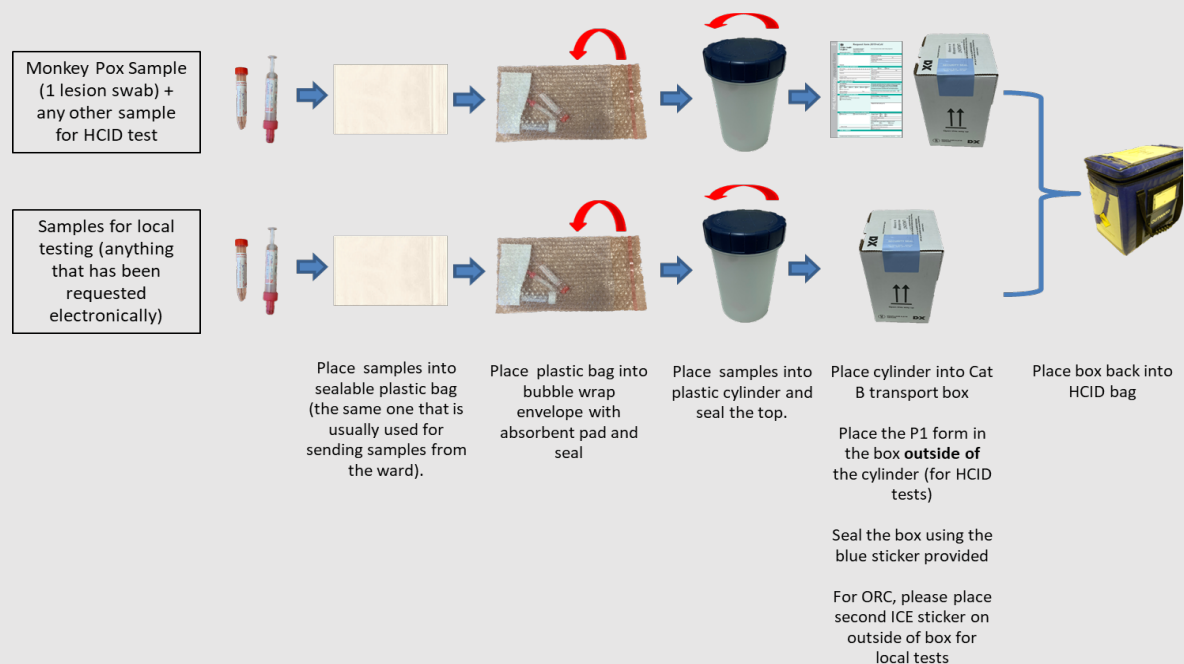
<https://www.nmgh.nhs.uk>

Packaging and Transport of samples from HCID patients:

- UN3373 and bag/red box are held at the following locations (if unavailable then contact Virology):
 - Wythenshawe Biochemistry
 - Trafford Biochemistry
 - MRI ED
 - RMCH ED
 - The Hathersage Centre
 - NMGH essential services Lab
- Packaged samples for HCID tests in separate box to samples for local tests – clearly label 'for HCID tests' and 'for local tests' on outside of box.
- **Do NOT send samples via the POD system.**
- **DO use viral transport medium for lesion swabs. DO NOT use Primestore, Cobas, charcoal or E-swab transport medium.**



Follow these instructions when packaging samples:



Once samples are packaged, contact:

Non-NMGH site: Virology BMS on 0161276553 (via MRI switchboard on 0161271234 out of hours) to arrange collection from the department

NMGH: contact 45389 in advance and take to lab in person.

Local Lab to arrange onward transportation for relevant testing.

PLEASE NOTIFY INFECTIOUS DISEASES TEAM FOR ALL HCID SAMPLES SENT (including GUM patients where consent is given)

Care after testing

If patients are unwell discuss with the infectious diseases team. Most patients have relatively mild illness and can be managed by isolating at home.

It is the responsibility of the testing team to follow up the patient if discharged, including monitoring for deterioration (e.g. a daily phone call to the patient to ask how they are). Communicating and acting on the test result is also the responsibility of the clinical team who sent the test. Results will be called out to the contact number written on the RIPL p1 form by the sender. Where the clinical team who sent the test cannot arrange follow up, or if concerned the patient is becoming unwell, please discuss with infectious diseases via 24/7 SpR on call at NMGH.

If admission of the patient is required for clinical reasons OR if the patient is unable to isolate at home, then admit them to single room isolation (preferably at negative pressure) in liaison with infectious diseases. For Adults this should be at North Manchester General Hospital Regional ID unit. For patients who are seriously unwell the consultant or registrar should contact the monkeypox clinical support line on 0344 225 0602 (24 hours a day, medical practitioners only).

Paediatric Pathway for Potential Monkeypox for RMCH/MCS

Urgently contact

- **Paediatric clinical:** Paediatric consultant on call (assessment and need for further advice)
- **Paediatric ID:** Dr Paddy McMaster - if unavailable discuss with Liverpool/London
- **Regional/National Paed ID:** Liverpool 0151 228 4811 or Imperial College 020 3312 6666
- **Local pathway logistics** (not clinical): Adult ID SpR / ID Consultant
- **Testing:** Virology
- **Infection control:** local IPC

1) Paediatric referral from GM community e.g. GP, NWS, Airport that meet “possible” or “probable” Monkeypox.

Patient transport to hospital with possible monkeypox

Prioritisation order (with advice to wear mask and cover any lesions):

1. Own transport
2. Family contact
3. Taxi
4. Public transport

RMCH

- Meet patient/family outside Triage in PPE
- Transfer immediately to orange cubicle 2
- Clinical assessment in orange cubicle 2
- If meets criteria for admission, transfer to Ward 85 isolation cubicles via mortuary lift

Wythenshawe

- In hours: Meet patient/family outside Entrance 10 in droplet PPE
- Out of hours – meet patient family outside ED in droplet PPE and escort via back route to Starlight isolation cubicle 1

NMGH

- Meet patient/family outside Entrance 1 in droplet PPE
- Escort to Cubicle 1 on Children’s Inpatients Ward

Other Hospitals across GM

- Isolate in designated cubicle as per local hospital plan

2) Unplanned Presentation of child to Emergency Department that meets criteria for “possible” or “probably Monkeypox

- PPE
- Triage in designated isolation cubicle (RMCH – orange cubicle 2, WTTA/NMGH – as per pathway). Clinical assessment in isolation cubicle
- If needs admission, transfer to designated cubicles as stated above

3) Highly probable case of Monkeypox (contact history)

- If child is clinically stable (Level 1) admit to NMGH negative pressure cubicles on J3/J4. Staffing should be provided by RMCH/MCS paediatric nursing team, medical cover from NMGH paediatric staff).
- If NMGH capacity is not available manage highly probable case in designated cubicles as stated above.

<https://www.gov.uk/guidance/high-consequence-infectious-diseases-hcid>

4) Confirmed Monkeypox case

- Liaise with National HCID teams (London/Newcastle/Liverpool) through imported fever service 0844778 8990. If local capacity is needed due to lack of designated HCID capacity and child is stable (Level 1) admit to NMGH negative pressure cubicles on J3/J4 (staffing should be provided by RMCH/MCS paediatric nursing team, medical cover from NMGH paediatric staff)
- **NO POSITIVE CASES SHOULD BE ADMITTED ANYWHERE OTHER THAN J3/J4 – DISCUSS WITH NATIONAL HCID.**

5) Patient requiring Paediatric Critical Care (L2/3) with “Possible” or “Probable” Monkeypox

- [AGP PPE](#)/ Avoid unnecessary AGPs
- All patients requiring L2/L3 care should be transferred in RMCH PCC (PICU cubicles 15/16)
- From Wythenshawe and NMGH call NWAS control room performance managers (01612277022/7023) who is likely to speak to advanced practitioner. Advise HCID transfer required
- For confirmed cases of Monkeypox liaise with National HCID teams to identify appropriate PCC bed in designated HCID centre.

5) Pregnancy and neonates

- Confirmed: transfer to national HCID centre (discuss with Imported fever Service)
- Probable: transfer to St Mary's/MRI ICU
- Possible: isolate and staff to wear droplet PPE

6) Delivery of baby in mother with suspected or confirmed Monkeypox

- Mother to be in designated isolation cubicle
- Obstetrics/Midwifery team to wear appropriate PPE
- Neonatal Team to wear appropriate PPE and follow SOP
- If baby well to be isolated
- If unwell to be admitted to isolation cubicle in NICU via designated transport incubator and following pathway detailed in SOP
- See Neonatal SOP for detailed management description

7) Parents/Visiting

- Single parent only allowed to stay and must not leave cubicle. They should wear droplet PPE if exposure from outside household and no swapping of visitors should occur. They must be escorted in/out of hospital by routes described above