# Monkeypox guidance 24 May 2022

**Overview:**

Monkeypox is a zoonotic orthopoxvirus with similar symptoms and presentation to smallpox – albeit with lower mortality. It primarily occurs in Central and West Africa although there have been exported cases linked to travel in recent years. The cases identified are from the West Africa clade which has a reported mortality of approximately 1%.

**Changes to this version include**

- *Amendment to PPE requirement. The current guidance no longer stipulates HCID PPE and the recommendation is now to use Level 3 PPE with suspected monkeypox cases. This is a small reduction in level from the previous version. The requirement to double glove, use headcover and wear boot covers has been removed.*

## Symptoms

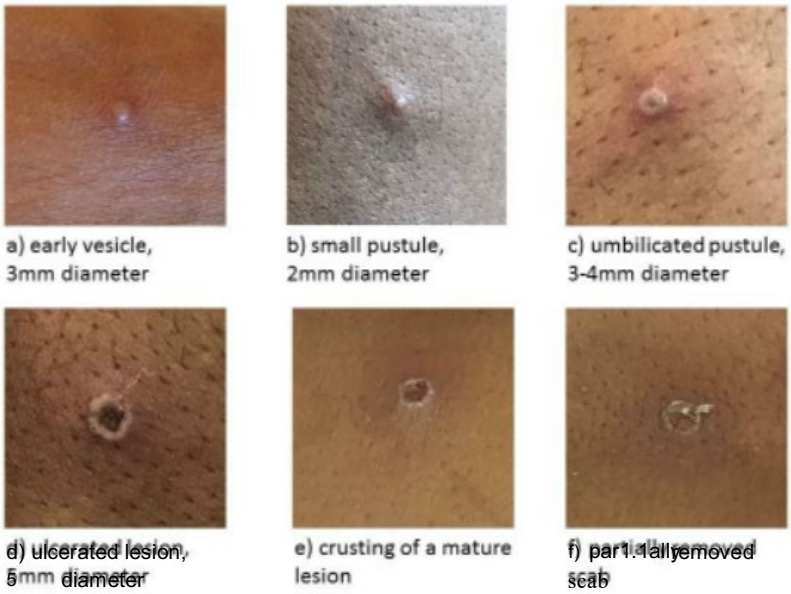
The symptoms of monkeypox begin 5-21 days (average 6-16 days) after exposure with initial clinical presentation of Monkeypox infection is usually a self-limiting illness and most people recover within several weeks. However, severe illness can occur in some individuals.

The illness begins with:

- fever
- headache
- muscle aches
- backache
- swollen lymph nodes
- chills
- exhaustion

Within 1 to 5 days after the appearance of fever, **a rash develops**, often beginning on the face or genital area then spreading 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.

An individual is contagious until all the scabs have fallen off and there is intact skin underneath. The scabs may also contain infectious virus material.



a) early vesicle, 3mm diameter

b) small pustule, 2mm diameter

c) umbilicated pustule, 3-4mm diameter

d) ulcerated lesion, 5mm diameter

e) crusting of a mature lesion

f) partially removed scab

**Notes**

Areas of erythema and/or skin hyperpigmentation are often seen around discrete lesions.

Lesions can vary in size and may be larger than those shown.

Lesions of different appearances and stages may be seen at the same point in time.

Detached scabs may be considerably smaller than the original lesion.

## Transmission

Monkeypox does not spread easily between people. Spread of monkeypox may occur when a person comes into close contact with an animal (rodents are believed to be the primary animal reservoir for transmission to humans but monkeypox is not found in UK rodents at present), 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 may occur through:**

- Direct contact with monkeypox skin lesions or scabs; contact with clothing or linens (such as bedding or towels) used by an infected person; or through respiratory transmission, such as coughing or sneezing of an individual with a monkeypox rash.
- The main risk for transmission would be from direct contact with skin lesions or through contact with a patient's clothing or linens that have been in contact with the lesions. Therefore, practitioners should avoid touching skin lesions with bare hands, wear disposable gloves and observe strict hand hygiene.

**Risk groups**

**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 ≥ 38°C, chills, headache, exhaustion, muscle aches (myalgia), joint pain (arthralgia), backache, and swollen lymph nodes (lymphadenopathy).

**Probable case**

A person with a monkeypox compatible vesicular-pustular rash plus at least one of the following epidemiological criteria:

- exposure to a confirmed or probable case in the 21 days before symptom onset
- history of travel to an area where monkeypox is endemic, or where there is a current outbreak in the 21 days before symptom onset (currently West and Central Africa, Spain, Portugal and USA)

Actions on a possible or probable case

Notify receiving unit in order to test for monkeypox

If admission of patient required for clinical reasons, notify the receiving unit in order to enable precautions to be put in place such as admission to single room isolation at negative or neutral pressure at local hospital site with RPE PPE (with appropriate IPC arrangements).

Or, if patient not requiring admission for clinical reasons: report case appropriately to the AOC and follow the correct PPE, decontamination and waste disposal procedures.

You will be required to relay details to the COVID team so please notify your manager/T&T team of the suspected case asap for follow up actions and reporting.

**Confirmed case**

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

You will be required to relay details to the COVID team so please notify your manager/T&T team of the suspected case asap for follow up actions and reporting.

## Infection Prevention and Control

Where possible patient assessment should take place at a distance of one metre or greater to ascertain the patient condition and determine the appropriate PPE level. Unless otherwise indicated the PPE level used during the care of all patients as standard should be level 2 (Surgical mask, gloves, apron). The Pre-entry Monkeypox screening (Appendix A) tool can be used to determine if upgrading PPE is appropriate and should be conducted at the earliest opportunity, prior to entering rooms or being in close contact to the patient.

At present any confirmed case that requires interfacility transfer should be undertaken by HART, however in the unlikely event of staff identifying a possible case in the community the following PPE the following IP&C advice should be followed.

**Personal Protective Equipment**

The current PPE requirement during the care of suspected monkeypox cases is ‘level 3’ PPE as described below.

- FFP3 or PAPR

- Eye protection (full face visor should be used if using valved FFP3)
- Coveralls
- Single use disposable gloves

Strict hand hygiene should be applied.

**Decontamination**

Decontamination of vehicle and equipment should be carried out using a detergent solution followed by 1000ppm chlorine based solution and left to air dry, as per the decontamination manual.

Decontamination of all direct and indirect contact areas, exposed surfaces and equipment is required as per the vehicle decontamination process for infectious patient exposure.

The PPE required for decontaminating vehicles exposed to potential monkeypox is

- FFP3
- Eye protection
- Coveralls
- Single use disposable gloves

Strict hand hygiene should be applied.

**Waste**

Any waste generated from a known or high risk monkeypox patient should be dealt with as Category A waste (Yellow bags). Waste be labelled as category A using the correct label and must be double bagged. Refer to the category A waste SOP for detailed instruction.

If any category A waste has been generated, and disposed of at a station, the local manager must be informed and must inform the estates department for a collection to be arranged (estateswaste@eastamb.nhs.uk).

## Laundry

If uniform was unprotected and became contaminated with bodily fluids or contaminated from contact with lesions during in care of a suspected monkeypox patient then the uniform should be removed and disposed of as cat A waste. Alternatively, if there is no suspected or known contact contamination and a minimum of an apron was worn then the uniform may be removed and washed at 60 degrees C as per the standard guidance. The crew in both cases should have a shower if incorrect PPE was used and uniform is removed.

If the correct PPE was used and uniform fully covered then normal practice should continue and uniform washed as per IPC guidance of 60 degrees C after following a shift as normal.

## Treatment

Treatment for monkeypox is mainly supportive. The illness is usually mild and most of those infected will recover within a few weeks without treatment.

The smallpox vaccine (Imvanex) is the recommended vaccine for postexposure prophylaxis against monkeypox in the UK. The vaccine is most effective if given within four days of exposure but it can be given up to 14 days post-exposure if required.

Smallpox vaccine, cidofovir, and tecovirimat can be used to control outbreaks of monkeypox.

Vaccination against smallpox can be used for both pre and post exposure and is up to 85% effective in preventing monkeypox. People vaccinated against smallpox in childhood may experience a milder disease.

## Resources

Resources on monkeypox are available at https://www.gov.uk/guidance/monkeypox, including epidemiology, clinical features, diagnostic testing and infection prevention and control.

## Appendix A: Monkeypox – Pre-entry screening tool

Assessment should be made at a distance of 1 metre or more and prior to entering the environment if possible, to ensure correct PPE can be donned prior to treatment if needed. If AOC have already given indication of monkeypox then appropriate PPE should be donned prior to attending the patient.

| Q | Question | Response | Action |
|---|---|---|---|
| A | Does the person have a blistering rash on any part of their body PLUS one or more of the symptoms to the right since 15th March 2022? | • Acute illness with fever (over 38.5c)<br>• Intense headaches<br>• Muscle aches, joint pain or back pain • Swollen glands | Yes/No<br><br>If yes, follow **PPE** guidance for **HCID** below |
| B | Has patient travelled internationally within the previous 21 days? | Record area of travel details for further assessment of likelihood of case. | Yes/No<br><br>If also presenting any symptoms in section A (including rash) don **Level 3 PPE**. |
| C | Has the person had contact with a confirmed or probable monkeypox case within 21 days of symptom onset | Record these details for further indication of likelihood of case. | Yes/No<br><br>If also presenting any symptoms in section A (including rash) don **Level 3 PPE.** |

*Table 1: Pre assessment screening*

If the screening questions or presentation of the patient indicate possibility of monkeypox then utilise the Level 3 PPE as indicated below in table 2.

| | Disposable gloves | Apron | Disposable coverall | Surgical mask | FFP3 / PAPR | Eye protection / face visor |
|---|---|---|---|---|---|---|
| **Droplet / Contact PPE** – Minimum for all direct patient care<br><br>**Level 2 PPE** | Single use | Single use | N/A | Type IIR | N/A | Risk assess as required<br><br>Single use / Reusable |
| **Airborne PPE**<br><br>(During AGPs or where a suspected airborne pathogen is present e.g. monkeypox)<br><br>**Level 3 PPE** | Single use | N/A | Single use | N/A | FFP3 / Hood PAPR | Single use / Reusable<br><br>Full face visor with FFP3 mask |

*Table 2: PPE requirements*

*The receiving unit should be notified of any suspect monkeypox cases prior to handover to ensure that provisions are made for isolation and testing by the local team. Any clinical waste/contaminated linen produced should be disposed of as CAT A waste at the receiving unit following local discussion.*

*Following conveyance the vehicle will require a decontamination clean using detergent followed by 1.000ppm of all equipment and surfaces as outlined in the main guidance. FFP3/Coveralls/gloves/eye protection are required for this task also and waste should be disposed of as cat A waste.*

**Reporting**

Where a potential case has been identified the EEAST COVID team needs to be informed to assess follow up actions and document the case for contact tracing purposes. Ensure AOC were informed where a potential case was identified whether they were conveyed or not. Datix any probable or confirmed HCID transfer.

Please refer to the main Monkeypox guidance for more detail - [Monkeypox Homepage (eastamb.nhs.uk)]