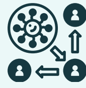
MPOX INFORMATION SHEET

Transmission

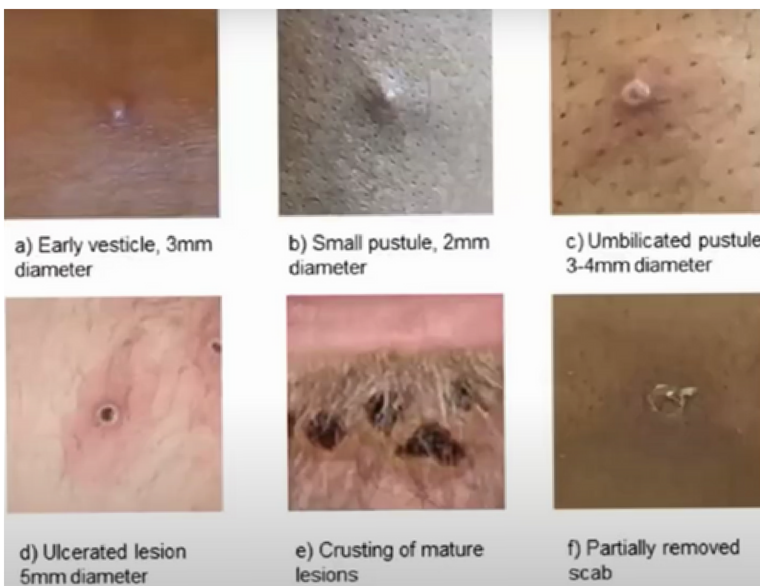


- Mpox is a virus. It can be transmitted to a person upon contact with the virus from an animal, human, or materials contaminated with the virus.
- Person-to-person transmission of the virus is through close contact.
- Entry of the virus is through broken skin, respiratory tract, or the mucous membranes.

Infectious period

- A person is infectious until scabs have all fallen off and there is a fresh layer of healthy skin underneath.
- Infectious period starts up to 4 days before symptoms do.
  - Modelling from the UK: about half of transmission occurs pre-symptomatically.

BMJ 2022;379:e073153
J Med Virol. 2023 May;95(5):e28769



a) Early vesticle, 3mm diameter
b) Small pustule, 2mm diameter
c) Umbilicated pustule 3-4mm diameter
d) Ulcerated lesion 5mm diameter
e) Crusting of mature lesions
f) Partially removed scab

Images showing the different stages

At point f) assuming the skin underneath is intact and there is a healthy new layer of skin, then a person is no longer infectious

Photo credit: NHS England High Consequence Infectious Diseases Network

Signs and symptoms

- The **incubation period** (time from infection to symptoms) for mpox is on average **7–14 days but can range from 5–21 days.**
- Initial symptoms include **fever, headache, muscle aches, backache, chills and exhaustion. Lymphadenopathy** is also noted.
- **Skin lesions (or rash)** develop between 1-3 days following onset. The lesions may be found spread over the body or localised. Lesions in genital or peri-genital areas have been often reported. The lesions progress through several stages before scabbing over and resolving (see above image). Notably, all lesions of the rash will progress through the same stage at the same time.

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- **Case fatality rate is very low and most cases will not need hospitalization** or specific treatment. More severe cases have been historically reported in children, pregnant women and individuals with untreated HIV disease.

Table showing enanthem through the scab stage*

This is taken from the 2022 mpox outbreak. The numbers are variable from patient to patient, but it gives a sense of the typical evolution. A quicker or slower evolution may be seen.

Stage	Stage Duration	Characteristics
Enanthem		•Sometimes, lesions first form on the tongue and in the mouth.
Macules	1 – 2 days	•Macular lesions appear.
Papules	1 – 2 days	•Lesions typically progress from macular (flat) to papular (raised).
Vesicles	1 – 2 days	•Lesions then typically become vesicular (raised and filled with clear fluid).
Pustules	5 – 7 days	•Lesions then typically become pustular (filled with opaque fluid) – sharply raised, usually round, and first to the touch. •Finally, lesions typically develop a depression in the centre (umbilication). •The pustules will remain for approximately 5 to 7 days before beginning to crust.
Scabs	7 – 14 days	•By the end of the second week, pustules have crusted and scabbed over. •Scabs will remain for about a week before beginning to fall off.

*This is a typical timeline, but the timeline can vary.

Source: CDC

Photos showing various stages from relatively small pustules to larger lesions with umbilication

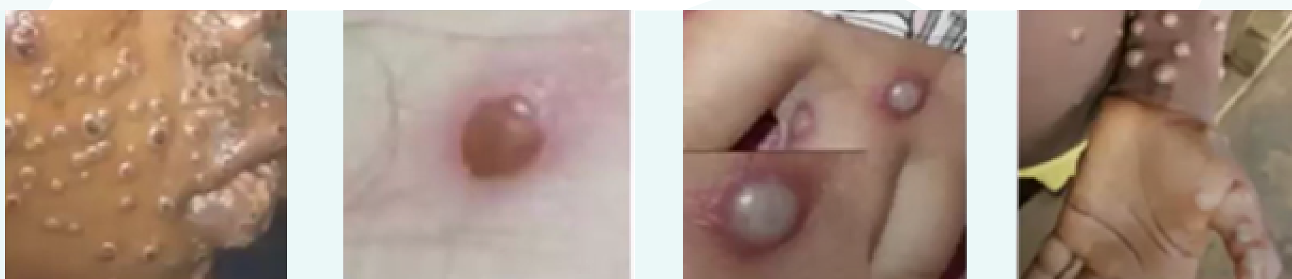

Photo credit: CDC

More Mpox rash photos

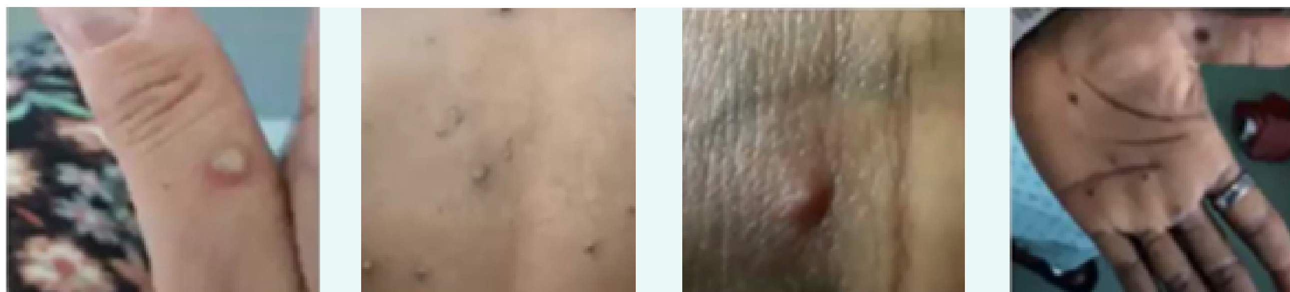

Photo credit: NHS England High Consequence Infectious Diseases Network

Precautions in a hospital setting

- Isolate in single-person room with a dedicated bathroom.
- Keep the door closed. CDC guidance is that special air handling is not required.
- Limit patient movement outside of their room. If unavoidable, cover any exposed lesions and get the patient to wear a medical mask.
- Perform aerosol-generating procedures like intubation/ extubation in airborne infection isolation room.
- Standard disinfection and cleaning procedures and soiled laundry practices.

Personal Protective Equipment (PPE)

For healthcare workers, the recommendation from CDC is gloves, gown, eye protection, and N95 mask or equivalent.

Response to a suspected case:

1. Establish that the patient meets the signs and symptoms for suspected mpox.
2. Observe appropriate infection control procedures (i.e. isolation with universal precautions). As soon as the decision is made to proceed on the basis of a presumptive diagnosis of mpox, measures should be applied to minimize exposure of HCWs, other patients and other close contacts.
3. Clinical management is supportive and will vary from case to case, but typically cases are self-resolving. Tecovirimat is an anti-viral agent that may be used for people with severe mpox disease.
4. Inform the NICD hotline (0800 212 552) and notify the local and provincial communicable disease control co-ordinator (CDCC) telephonically so that additional case finding and extensive contact tracing can be conducted.
5. Notify the case telephonically and through the NMC App – complete the Case Investigation Form (CIF-MPOX). Submit forms to provincial CDCC.
6. Submit samples to NICD for laboratory testing.

Additional resources:

- NICD – Mpox Frequently Asked Questions: https://www.nicd.ac.za/wp-content/uploads/2024/05/mpox-FAQ_May_24JW.pdf
- Webinar recording - Mpox: Clinical management and other considerations https://m.youtube.com/watch?v=SYHScnwuhJc