



Monkeypox (hMPXV) Guidance for Emergency Medical Services

The New Jersey Department of Health, Office of Emergency Medical Services has received inquiries regarding precautions that should be taken by EMS personnel when treating and transporting patients with suspected monkeypox (hMPXV) infection.

Monkeypox (hMPXV) is a disease caused by infection with the monkeypox virus. The monkeypox virus is part of the same family of viruses as the variola virus, the virus that causes smallpox. Monkeypox (hMPXV) symptoms are similar to smallpox symptoms but milder, and monkeypox (hMPXV) is rarely fatal. Monkeypox (hMPXV) is not related to chickenpox.

Monkeypox (hMPXV) was discovered in 1958 when two outbreaks of a pox-like disease occurred in colonies of monkeys kept for research. In 1970, the first human case was recorded. Until the 2022 outbreak, monkeypox (hMPXV) cases in people outside of Africa were linked to international travel to countries where the disease commonly occurs. The source of the disease remains unknown.

You should suspect Monkeypox (hMPXV) if your patient:

- Presents with a new characteristic rash¹ **OR**
- Meets one of the epidemiologic criteria and has a high clinical suspicion for monkeypox (hMPXV)

Epidemiologic Criteria (within 21 days of illness onset)

- Reports having contact with a person or people with similar appearing rash or who received a diagnosis of confirmed or probable monkeypox (hMPXV) **OR**
- Had close or intimate in-person contact with individuals in a social network experiencing monkeypox activity, this includes men who have sex with men who meet partners through an online website, digital application, or social event (e.g., a bar or party) **OR**
- Traveled outside the US to a country with confirmed cases of monkeypox or where the monkeypox (hMPXV) virus is endemic **OR**
- Had contact with a dead or live wild animal or exotic pet that is an African endemic species or used a product derived from such animals (e.g., game meat, creams, lotions, powders, etc.)

Signs and Symptoms of Monkeypox

- Early flu-like symptoms of monkeypox (hMPXV) can include fever, headache, muscle aches, backache, swollen lymph nodes, chills, and exhaustion
- Rash appears within 1 to 3 days (sometimes longer) after fever, which may begin on the face and then spread to other parts of the body
 - In the current outbreak:
 - The rash is often localized to a more limited area of the body and may appear on other parts of the body first
 - Flu-like symptoms may not always appear first
 - The rash is sometimes the first symptom the person notices
- Illness usually lasts 2-4 weeks

Transmission

- Monkeypox (hMPXV) can spread through
 - Direct contact with monkeypox (hMPXV) rash, sores, or scabs
 - Contact with objects, clothing, bedding, towels, or surfaces used by someone with monkeypox (hMPXV)
 - Respiratory droplets or oral fluids from a person with monkeypox (hMPXV) during prolonged close contact (within 6 feet) for more than 3 hours when both individuals are not wearing a mask or respirator
- Monkeypox (hMPXV) can spread from the time symptoms start until all sores have healed, which can take several weeks

Protective Equipment and Procedure

All EMS providers should use standard precautions during all patient encounters. Monkeypox (hMPXV) is a highly contagious viral infection spread through direct contact, droplet, and airborne. To minimize the risk of transmission, the following is recommended:

- EMS personnel should wear PPE including a NIOSH-approved particulate respirator equipped with N95 filters or higher, a gown, gloves, and eye protection (i.e., face shield that covers the front and sides of the face or goggles)
- Limit the number of EMS personnel making patient contact
- Use PPE checklists for donning and doffing, ideally with a trained observer
- Apply a well-fitting surgical mask to the patient if tolerated and cover any exposed skin lesions or rash, if present on the patient, with an impervious sheet or gown.
- Activities that could resuspend dried material from lesions (e.g., use of portable fans, dry dusting, sweeping, vacuuming) should be avoided
- Clean and disinfect all surfaces of the ambulance and equipment per manufacturer's instructions for use (IFU) with an EPA-registered hospital-grade disinfectant with a label claim against emerging viral pathogens, which can be found on EPA's [List Q](#).

Exercise caution when performing aerosol-generating procedures (Ex: endotracheal intubation, airway suctioning, CPAP/BiPAP, CPR). Only perform these procedures if medically necessary and cannot be postponed.

Symptom monitoring after exposure to a confirmed monkeypox (hMPXV) case

EMS personnel should refer to the CDC's [Assessing Risk of HCP with Monkeypox Virus Exposures](#) to understand potential exposure risks. Correct and consistent use of PPE when caring for a patient with monkeypox (hMPXV) infection is highly protective and prevents transmission to healthcare providers (HCP). However, unrecognized errors during the use of PPE (e.g., self-contaminating when removing contaminated PPE) may create opportunities for transmission to HCP. Therefore, in the absence of a defined exposure, HCPs, including EMS personnel who enter a contaminated patient room or care area while wearing recommended PPE, should be aware of the signs and symptoms of monkeypox (hMPXV); if any signs or symptoms of monkeypox (hMPXV) occur, staff should notify occupational health services for further evaluation and should not report to work (or should leave work, if signs or symptoms develop while at work).

Notification to Receiving Facility

Receiving facilities must be notified **PRIOR** to the arrival of known or suspected monkeypox (hMPXV) patients to facilitate the implementation of appropriate infection prevention procedures. In hospital and healthcare settings, patients should be placed in a single-person room; special air handling is not required unless procedures that are likely to spread oral secretions are being performed, in which case an airborne infection isolation room is recommended. Additional information can be found here:

<https://www.cdc.gov/poxvirus/monkeypox/clinicians/infection-control-healthcare.html>

Transportation

- Separate the driver compartment from the patient compartment
- Driver of the ambulance should wear a NIOSH-approved particulate respirator equipped with N95 filters or higher if isolation of driver compartment is not verified
- Apply a well-fitting surgical mask to the patient if tolerated and cover any exposed skin lesions or rash, if present on the patient, with an impervious sheet or gown
- Turn the exhaust fan on high, and adjust air handling to introduce fresh air in both compartments

Resources

<https://www.nj.gov/health/cd/topics/monkeypox.shtml>

<https://www.cdc.gov/poxvirus/monkeypox/clinicians/index.html>

<https://netec.org/2022/05/19/ems-response-to-the-current-outbreak-of-monkeypox/>

ⁱ *The characteristic rash associated with monkeypox lesions involve the following: deep-seated and well-circumscribed lesions, often with central umbilication; and lesion progression through specific sequential stages—macules, papules, vesicles, pustules, and scabs.*