

MONKEYPOX



Monkeypox is a human poxvirus infection endemic in Central and West Africa. Monkeypox virus belongs to the genus Orthopoxvirus, that includes the variola virus (which causes smallpox) and the vaccinia virus used in the smallpox vaccine.

Cowpox and vaccinia are actually distinct and different viruses.

The natural reservoirs of monkeypox virus are likely small forest rodents, which also are suspected as the primary vector in most human infections. A variety of small mammals and monkeys may acquire the virus and infect people.



IDENTIFY

- Febrile rash illness, particularly with vesicles or pustules
- Travel to or contact with someone who traveled to central or west Africa
- Genital vesicular/pustular lesions

ISOLATE

- Private room – preferably negative pressure
- Droplet and contact precautions. Strongly consider airborne precautions if severe illness or respiratory symptoms.

INFORM

- Facility infection control and leadership
- State and local public health.
- CDC
- Consider the possibility of intentional release

MEDICAL COUNTER MEASURES

Although no FDA-approved therapeutics exist for monkeypox, there are experimental antiviral drugs and immune globulin that may be effective. Tecovirimat is a novel antiviral developed specifically for Orthopoxviruses that was approved by the FDA in 2018 for treatment of smallpox. This drug has shown efficacy against monkeypox in animal models. Brincidofovir is another antiviral drug with animal model efficacy data for monkeypox. Vaccinia immune globulin (VIG) is a polyclonal antibody product made from serum of humans immunized with vaccinia and has historical efficacy against multiple orthopox viruses.

Two currently FDA-approved smallpox vaccines also provide protection against monkeypox infection. ACAM 2000 is a modern version of the traditional smallpox vaccines that have well-documented efficacy in preventing monkeypox. Jynneos (modified vaccinia Ankara strain) has a better safety profile but less proven efficacy and requires two doses.

Smallpox vaccines appear to be effective as post-exposure prophylaxis against Orthopoxvirus infection when they are given soon after exposure (preferably within 72 hrs).



For monkeypox vaccine guidance, scan the QR code.

MONKEYPOX TRANSMISSION



Droplet Contact



Indirect Contact



Direct Contact

MONKEYPOX SYMPTOMS



Symptoms include flu-like symptoms (fever, headache, muscle aches), slowly progressing vesicular-pustular rash, and swollen lymph nodes.



Fever



Muscle aches



Headache



Swollen lymph nodes



Monkeypox is transmissible during onset of rash. Patients remain infectious until the crusting of skin lesions.



PPE & INFECTION CONTROL PRECAUTIONS

Appropriate protocol for contact/droplet, but strong consideration for airborne/N-95 precaution in settings of more severe disease or respiratory symptoms.

- Disposable gown
- Gloves
- NIOSH Certified N-95 Respirator
- Eye protection
- Perform meticulous hand hygiene
- Exercise caution when handling waste, laundry, bed linens and other items that may be contaminated..
- Clean then disinfect surfaces with EPA registered disinfectant.

MONKEYPOX SURVEILLIENCE TRANSMISSION

Monkeypox historically does not cause large and sustained human-to-human outbreaks, however, the epidemiology of recent outbreaks may be changing.

Healthcare workers should remain alert and consider a diagnosis of monkeypox in people who present with a febrile illness with rash and who may have risk factors for monkeypox, including travel to endemic areas, areas with current outbreaks, or sexual contact.



Once a person has been recognized as having signs and symptoms, conduct further screening in isolation utilizing the CDC Exposure Questionnaire: Scan QR code



Monkeypox is a rare disease that still poses very little risk in the U.S. It is very unlikely that people will encounter a person infected with monkeypox; however, it is still advisable at this time for the medical community to consider a diagnosis of monkeypox in people who present with a febrile illness followed by rash and who may have risk of exposure to the monkeypox virus.



CASE FATALITY



Human monkeypox mortality rates depend on the strain of monkeypox virus causing the infection. The West African strain (involved in the May 2022 outbreak) has a mortality rate of around 2%. The Central African strain causes more severe disease, with a mortality rates of approximately 10%.

