

Monkeypox: A New Emerging Disease

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Monkeypox (MPV) is a rare viral zoonosis (a disease which can be transmitted from animals to humans) caused by infection with the MPV virus. This virus belongs to the Orthopoxvirus genus of the Poxviridae family – the same family of viruses as variola virus, the causative agent of smallpox. While MPV can cause symptoms like those seen historically in smallpox cases, they are often much milder, and the disease is rarely fatal. The natural history of MPV and how the virus circulation is maintained in nature is still not well-known.

A range of animals have been identified as hosts of MPV, including a variety of rodents such as rope and sun squirrels, Gambian pouched rats, and dormice, along with non-human primates. MPV largely occurs in central and west Africa, often near tropical rainforests, and is comprised of two distinct genetic clades: the central African (Congo Basin) clade and the west African clade. The Congo Basin clade has historically caused more severe disease and is thought to be more transmissible.

According to the CDC:

MPV spreads in a few ways.

- MPV can spread to anyone through close, personal, often skin-to-skin contact, including:
- Direct contact with rash, scabs, or body fluids from a person with MPV
- Touching objects, fabrics (clothing, bedding, or

towels), and surfaces that have been used by someone with MPV

- Contact with respiratory secretions
- This direct contact can happen during intimate contact, including:
- Oral, anal, and vaginal sex or touching the genitals (penis, testicles, labia, and vagina) or anus (butthole) of a person with MPV
- Hugging, massage, and kissing
- Prolonged face-to-face contact
- Touching fabrics and objects during sex that were used by a person with MPV and that have not been disinfected, such as bedding, towels, fetish gear, and sex toys
- A pregnant person can spread the virus to their fetus through the placenta

It's also possible for people to get MPV from infected animals, either by being scratched or bitten by the animal or by preparing or eating meat or using products from an infected animal.

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Practice Guidelines

The following practice guidelines have been developed by the Clinical Laboratory Advisory Council. They can be accessed at the [LQA website](#).

Acute Diarrhea	Lipid Screening
Anemia	PAP Smear Referral
ANA	Point-of-Care Testing
Bioterrorism Event Mgmt	PSA
Bleeding Disorders	Rash Illness
Chlamydia	Red Cell Transfusion
Diabetes	Renal Disease
Group A Strep Pharyngitis	STD
Group B Streptococcus	Thyroid
Hepatitis	Tuberculosis
HIV	Urinalysis
Infectious Diarrhea	Wellness
Intestinal Parasites	

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A person with MPV can spread it to others from the time symptoms start until the rash has fully healed and a fresh layer of skin has formed. The illness typically lasts 2-4 weeks.

Scientists are still researching:

- If the virus can be spread when someone has no [symptoms](#)
- How often MPV is spread through respiratory secretions, or when a person with MPV symptoms might be more likely to spread the virus through respiratory secretions
- Whether MPV can be spread through semen, vaginal fluids, urine, or feces

The first recorded human acquired MPV case occurred in the Democratic Republic of the Congo in 1970 (2 years after the eradication of smallpox). In 2003, the first MPV outbreak outside of Africa occurred in the United States which was found to be linked to infected pet prairie dogs that had been housed with Gambian pouched rats and dormice. Outbreaks across the globe have been reported throughout the years leading up to the current May 2022 outbreak. As of August 10, 2022, the CDC has reported 9,493 confirmed cases of MPV/orthopox in the United States and over 31,000 confirmed cases globally.

When responding to outbreak situations, surveillance and rapid identification are key. It is important to familiarize yourself with the signs and symptoms of MPV. Most notably, people with MPV typically develop a rash which may be located on or near the genitals or anus, but may be seen on the hands, feet, chest, face, or mouth. The rash will go through several stages, including scabs, before healing. The rash may initially look like pimples or blisters and can be painful and itchy. People with MPV are contagious from the time symptoms begin until the rash has fully healed, all scabs have fallen off, and a fresh layer of skin has formed.

Close contact is the greatest risk factor in MPV outbreaks. Health workers caring for patients with suspected or confirmed MPV virus infection, or handling specimens from them, should be practicing standard infection control precautions. Patient specimens must be safely prepared for transport with triple packaging in accordance with DOT/IATA guidance for transport of infectious substances. Avoid close, skin-to-skin contact with people who have a rash that looks like MPV. Wash your hands often with soap and water, or use alcohol-based sanitizer, especially before eating or touching your face after you use the bathroom. Consider vaccination options if you are eligible. If you have symptoms of MPV, talk to your healthcare provider, even if you don't think you had contact with someone who has MPV.

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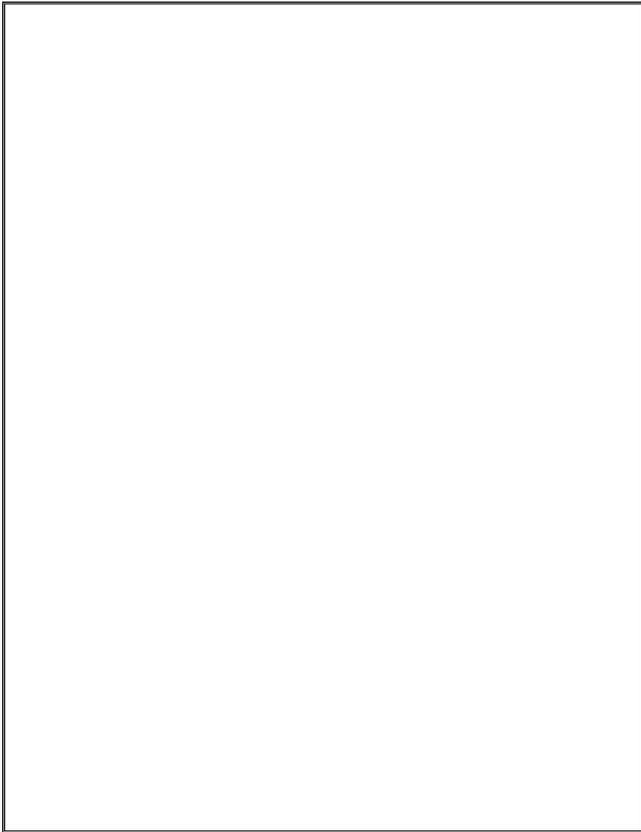
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Calendar of Events

Training Classes:

2022 NWMLS

**October 12-14, 2022
(VIRTUAL)**

2022 Clinical Laboratory Conference

November 14, 2022

Contact information for the events listed above can be found on page 2. The Calendar of Events is a list of upcoming conferences, deadlines, and other dates of interest to the clinical laboratory community. If you have events that you would like to have included, please mail them to ELABORATIONS at the address on page 2. Information must be received at least one month before the scheduled event. The editor reserves the right to make final decisions on inclusion.



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