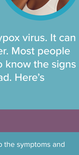
POLMED

MONKEYPOX (MPOX) UPDATE



Mpox is an infectious disease caused by the monkeypox virus. It can cause a painful rash, enlarged lymph nodes and fever. Most people fully recover, but some get very sick. It's important to know the signs and symptoms of this viral illness to prevent its spread. Here's everything you need to know about Mpox.

SELF-CARE AND PREVENTION

Most people with Mpox will recover within 2–4 weeks. Things to do to help the symptoms and prevent infecting others:

DO:

- Stay home and in your own room if possible
- Wash hands often with soap and water or hand sanitiser, especially before or after touching sores
- Wear a mask and cover lesions when around other people until your rash heals
- Keep skin dry and uncovered (unless in a room with someone else)
- Avoid touching items in shared spaces and disinfect shared spaces frequently
- Use saltwater rinses for sores in the mouth
- Take sitz baths or warm baths with baking soda or Epsom salts for body sores
- Take over-the-counter medications for pain, like paracetamol (acetaminophen) or ibuprofen

DON'T:

- Pop blisters or scratch sores. This can slow healing, spread the rash to other parts of the body, and cause sores to become infected.
- Shave areas with sores until scabs have healed and you have new skin underneath (shaving can spread the rash to other parts of the body)

To prevent the spread of Mpox to others, persons with Mpox should isolate at home or in the hospital if needed for the duration of the infectious period (from the onset of symptoms until lesions have healed and scabs fall off). Covering lesions and wearing a medical mask when in the presence of others may help prevent spread. Using condoms during sex will help reduce the risk of getting Mpox but will not prevent the spread from skin-to-skin or mouth-to-skin contact.

KEY FACTS

- Mpox is a viral illness caused by the monkeypox virus, a species of the genus Orthopoxvirus. Two different clades exist: clade I and clade II.
- Common symptoms of Mpox are a skin rash or mucosal lesions that can last 2–4 weeks and are accompanied by fever, headache, muscle aches, back pain, low energy, and swollen lymph nodes.
- Mpox can be transmitted to humans through physical contact with an infectious person, contaminated materials, or infected animals.
- Laboratory confirmation of Mpox is done by testing skin lesion material with a PCR test.
- Mpox is treated with supportive care. In some circumstances, vaccines and therapeutics developed for smallpox and approved in some countries can also be used.
- In 2022–2023, a global outbreak of Mpox was caused by a strain known as clade IIb.
- Mpox can be prevented by avoiding physical contact with someone with the illness. Vaccination can help prevent infection for people at risk.

ANYONE CAN GET MPOX. IT SPREADS FROM CONTACT WITH INFECTED:

- Persons, through touch, kissing, or sex
- Animals when hunting, skinning, or cooking them
- Materials, such as contaminated sheets, clothes or needles
- Pregnant persons, who may pass the virus on to their unborn baby

IF YOU HAVE MPOX:

- Tell anyone you have been in close contact with recently
- Stay at home until all scabs fall off and a new layer of skin forms
- Cover lesions and wear a well-fitting mask when around other people
- Avoid physical contact

EVERYTHING YOU NEED TO KNOW

Mpox (formerly monkeypox) is caused by the monkeypox virus (commonly abbreviated as MPXV), an enveloped double-stranded DNA virus of the Orthopoxvirus genus in the Poxviridae family, which includes variola, cowpox, vaccinia, and other viruses. The virus has two genetic clades: clades I and II.

The monkeypox virus was discovered in Denmark (1958) in monkeys kept for research, and the first reported human case of Mpox was a nine-month-old boy in the Democratic Republic of the Congo (DRC, 1970). It can spread from person to person or occasionally from animals to people. Following the eradication of smallpox in the 1980s and the end of smallpox vaccination worldwide, Mpox steadily emerged in central, east and west Africa, with a global outbreak occurring in 2022–2023. The natural reservoir of the virus is unknown – various small mammals such as squirrels and monkeys are susceptible.

HOW IS MPOX TRANSMITTED?

Person-to-person transmission of Mpox can occur through direct contact with infectious skin or other lesions, such as in the mouth or on the genitals; this includes contact with:

- face-to-face (talking or breathing)
- skin-to-skin (touching or vaginal/anal sex)
- mouth-to-mouth (kissing)
- mouth-to-skin contact (oral sex or kissing the skin)
- respiratory droplets or short-range aerosols from prolonged close contact

The virus then enters the body through broken skin, mucosal surfaces (e.g., oral, pharyngeal, ocular, genital, and anorectal), or the respiratory tract. Mpox can spread to other household members and sex partners. People with multiple sexual partners are at higher risk.

Animal-to-human transmission of Mpox occurs from infected animals to humans through bites or scratches or during activities such as hunting, skinning, trapping, cooking, exposure to carcasses, or eating animals. The extent of viral circulation in animal populations is unknown, and further studies are underway.

People can contract Mpox from contaminated objects such as clothing or linens, through sharps (needles, blades and other medical instruments) injuries in health care, or in community settings such as tattoo parlours.

WHAT ARE THE SIGNS AND SYMPTOMS OF MPOX?

Mpox causes signs and symptoms, which usually begin within a week but can start 1–21 days after exposure. Symptoms typically last 2–4 weeks but may last longer in someone with a weakened immune system.

COMMON SYMPTOMS OF MPOX ARE:

- rash
- fever
- sore throat
- headache
- muscle aches
- back pain
- low energy
- swollen lymph nodes

For Mpox, fever, muscle aches, and sore throat typically appear first. The rash begins as a flat sore that develops into a blister filled with liquid. It generally begins on the face and spreads over the body, extending to the palms of the hands and soles of the feet and evolves over 2-4 weeks in stages – macules, papules, vesicles, pustules.

It may be itchy or painful. As the rash heals, the lesions dry up, crust over, and fall off. Some people may have one or a few skin lesions, and others may have hundreds or more. These can appear anywhere on the body, such as:

- palms of hands and soles of feet
- face, mouth and throat
- groin and genital areas
- anus

Some people also have painful swelling of their rectum or pain and difficulty when peeing. Lymphadenopathy (swollen lymph nodes) is another classic feature of Mpox that you should be aware of. Some people can be infected without developing any symptoms.

People with Mpox are infectious and can pass the disease on to others until all sores have healed and a new layer of skin has formed. Children, pregnant people and people with weak immune systems are at risk for complications from Mpox.

In the context of the global outbreak of Mpox, which began in 2022 (caused mainly by the clade IIb virus), the illness starts differently in some people. In just over half of cases, a rash may appear before or at the same time as other symptoms and does not always progress over the body. The first lesion can be in the groin, anus, or in or around the mouth.

People with Mpox can become very sick. For example, the skin can become infected with bacteria, leading to abscesses or severe skin damage. Other complications include:

- Pneumonia
- Corneal infection with loss of vision
- Pain or difficulty swallowing
- Vomiting and diarrhoea, causing severe dehydration or malnutrition
- Sepsis
- Inflammation of the brain, heart, rectum, genital organs, urinary passages
- Death

Persons with immune suppression due to medication or medical conditions are at higher risk of severe illness and death due to Mpox. People living with HIV that is not well-controlled or treated more often develop severe disease.

DIAGNOSIS

Identifying Mpox can be difficult as other infections and conditions can look similar. It's important to distinguish Mpox from chickenpox, measles, bacterial skin infections, scabies, herpes, syphilis, other sexually transmissible infections, and medication-associated allergies. Someone with Mpox may also have another sexually transmissible disease, such as herpes.

Alternatively, a child with suspected Mpox may also have chickenpox. For these reasons, testing is key for getting treatment as early as possible and preventing further spread.

Detection of viral DNA by polymerase chain reaction (PCR) is the preferred laboratory test for Mpox. The best diagnostic specimens are taken directly from the rash – skin, fluid or crusts – collected by vigorous swabbing. In the absence of skin lesions, testing can be done on oropharyngeal, anal or rectal swabs. Testing blood is not recommended. Antibody detection methods may not be useful as they do not distinguish between different orthopoxviruses.

TREATMENT AND VACCINATION

The goal of treating Mpox is to control the rash, manage pain, and prevent complications. Early and supportive care is important to help manage symptoms and avoid further problems.

Getting an Mpox vaccine can help prevent infection. The vaccine should be given within four days of contact with someone with Mpox (or within 14 days if there are no symptoms). It's recommended that people at high risk get vaccinated to prevent infection with Mpox, especially during an outbreak. This includes:

- health workers at risk of exposure
- men who have sex with men
- people with multiple sex partners
- sex workers

Persons who have Mpox should be cared for away from other people. Several antivirals, such as tecovirimat, were initially developed to treat smallpox but have been used to treat Mpox, and further studies are underway.

Additional information is available on Mpox vaccination and case management

If you have any questions or need more information, please call POLMED on 0860 765 633 (select the option for the Disease Management Programmes), or send an email to polmeddiseasemanagement@discovery.co.za with your membership number and contact details.