

# Mpox

The report has been updated with the term "mpox" to reduce stigma and other issues associated with prior terminology. This change is aligned with the recent World Health Organization decision.

December 9, 2022

## PROBLEM

### What is Mpox? Why is everyone talking about it? <sup>(1-3)</sup>

Mpox is a rare disease caused by the mpox virus (MPV) related to variola virus (smallpox). Two main strains of MPV are normally contained in Central and West Africa, but, as of May 2022, an unusually high number of cases have spread to the US and other countries outside of Africa.



As of December 2022, more than 29,000 mpox cases have been reported in every state in the U.S., including more than 2,800 in Texas.



Most cases are not associated with travel linked to Africa, suggesting community spread of the virus.

**On July 23, 2022, the World Health Organization (WHO) declared the mpox outbreak a public health emergency of international concern.** <sup>(2,4)</sup>

## DATA

### Signs & Symptoms <sup>(1-3,5-9)</sup>

Typically, the first mpox symptoms, including fever, intense headache, swollen lymph nodes, tiredness, and muscle aches appear 3 weeks following mpox exposure. One to four days after fever onset, extremely itchy and painful blisters will begin to appear on the skin, inside the mouth, hands, feet, chest, and genitals. The number of blisters can range from a few to several thousand. Symptoms are often painful due to pus-filled lesions.

Symptoms typically last 2-4 weeks but can be longer and more severe in children and people who are immunocompromised. There is currently limited evidence on mpox in children and adolescents. <sup>(6)</sup>

Possible complications of mpox range from severe blindness to brain swelling (encephalitis), blindness, infection of the skin, eye problems. Previous evidence suggests that death from mpox occurs in less than 3% of cases. As of September 13, 2022, 19 people across the world have died from the current mpox outbreak, including one severely immunocompromised person in Texas. <sup>(8-9)</sup>



### How is Mpox Transmitted? <sup>(1-3,10-14)</sup>

Those at the highest risk of infection include men who have sex with men **and** have had multiple or anonymous sex partners. Children younger than 8 years, anyone who is pregnant or immunocompromised, and those with history of atopic dermatitis or eczema are at highest risk for severe infection from mpox. Mpox can spread from the onset of symptoms until the rash is fully healed and a fresh layer of skin has formed.

Transmission can occur by:

- Direct skin-to-skin contact with mpox rash, scabs, or body fluids, such as pus from the rash
- Intimate contact, including kissing and sex. In the current outbreak, most of the transmission has been through same-sex sexual contact
- Respiratory secretions during prolonged face-to-face contact
- Direct contact with contaminated objects such as clothing or bedding
- Placental transmission between infected pregnant woman and fetus
- Direct contact with infected animals (scratching or biting) or through preparation or consumption of meat or other products from an infected animal



If you have been exposed to mpox, monitor your health for signs and symptoms of mpox for 21 days. If you develop a rash or any other signs or symptoms during this time, reach out to your healthcare provider.

## Testing & Treatment <sup>(16,17)</sup>

If you have mpox, the CDC recommends staying isolated for the duration of illness if possible.

As of August 23, 2022, testing is only recommended if you have a mpox-like rash. Those that believe to have been exposed to mpox should contact their healthcare provider and take precautions such as avoiding sex and intimate contact with anyone, avoiding gatherings, wear a mask, and washing their hands frequently.

There is no current approved mpox treatment, but antiviral drugs and vaccines used to protect against smallpox may be used to prevent and treat mpox infections. Anyone with symptoms or known exposure of mpox should reach out to their healthcare provider.



Most people fully recover from mpox in 2-4 weeks without the need for medical treatment.

## Preventing the Spread of Mpox <sup>(1-3,18-20)</sup>

- Avoid close, skin-to-skin contact in large crowds where people are wearing minimal clothing, such as nightclubs, festivals, raves, saunas, and bathhouses
- Avoid close, skin-to-skin contact with anyone who has a rash that looks like mpox
- Avoid touching bedding, laundry, and other objects that have been touched by someone with mpox
- Wash your hands often
- Practice safe sex
- Isolate if you develop signs and symptoms
- Get vaccinated if you are eligible



## Can I get Vaccinated? <sup>(21,22)</sup>

There are two vaccines available: JYNNEOS and ACAM2000. Both vaccines can be given pre-exposure (PrEP) to prevent future infection, or after exposure to prevent or lower severity of infection.



**JYNNEOS**, which is approved for mpox prevention and smallpox disease, is preferred. It is a two-dose vaccine that reaches maximum protection two weeks after the second dose.

**ACAM2000** is a single-dose vaccine that takes four weeks after vaccination to reach maximum protection that is approved for immunization against smallpox and has been made available for use in the 2022 mpox outbreak. However, it is not recommended for anyone that is severely immunocompromised due to the possibility of more side effects and adverse events than JYNNEOS.

On June 28, 2022, the U.S. national mpox vaccine strategy, which aims to provide vaccines to individuals identified as high risk to exposure and communities with high transmission was announced.

As of August 5, 2022, the CDC recommends vaccination for anyone who has been exposed to mpox and those who are at higher risk of getting mpox such as:

- Those identified by public health as a contact of a confirmed mpox case
- Those aware that one of their sexual partners in the past 2 weeks has been diagnosed with mpox
- Those with multiple sexual partners in the past 2 weeks in an area with confirmed cases
- Those with jobs that puts them at higher risk of exposure (laboratory workers, health professionals, public health workers)

# EXPERTS

## What if I have already been vaccinated for smallpox? <sup>(23-25)</sup>

The smallpox vaccine has been successful in preventing infection in 95% of those vaccinated and is proven to prevent, as well as severely lessen infection when given shortly after exposure. In 1972, after smallpox was eradicated in the U.S., routine smallpox vaccination was stopped. Protection from the vaccine lasts approximately 3-5 years. A booster may be needed for additional protection. Talk with your healthcare provider to make the best decision for you.

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# NEXT STEPS

Connect with our team for more information on how TX RPC can help you.



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