

Mpox Virus Fact Sheet

What is mpox?

Mpox is an infectious disease formerly known as Monkeypox and is caused by a virus that spreads between animals and people or person to person. Mpox is caused by the mpox virus, which belongs to the Orthopoxvirus group of viruses. Other Orthopoxviruses that cause infections in humans include variola (smallpox), vaccinia (used for smallpox vaccine), and cowpox viruses. There are two distinct strains of the mpox virus: the Central African strain and the West African strain. The West African strain is usually associated with less severe illness. This viral disease was discovered in Demark in 1958 when two outbreaks of a pox-like disease happened in colonies of monkeys kept for research. Mpox symptoms are similar to smallpox symptoms, but milder, and mpox is rarely fatal.

Why are we concerned about the mpox outbreak that began in 2022?

Person-to-person transmission of the mpox virus was first found in the Democratic Republic of the Congo in 1970. Since then, multiple mpox cases have occurred annually, mainly in central and western African countries. Mpox transmission trends changed in May 2022 globally new cases occurred in 105 locations that have not historically reported mpox. Almost all of the 2022 mpox cases were linked to international travel to countries where the disease commonly occurs or through imported animals. From May 2022 to July 2023, 30,637 mpox cases and 45 deaths have been reported in the United States. Data from February 2023 show that some people can spread mpox to others from 1 to 4 days before their symptoms appear. Current mpox case counts can be found in the U.S. Map & Case Count.

What are the clinical features of mpox?

In humans, mpox is similar to smallpox, although infection is usually mild, and many patients may have no symptoms at all. The incubation period (i.e., the time from exposure to when symptoms appear) for mpox is about 12 days with a range from 3 to 17 days. The illness often begins with fever, headache, muscle aches, backache, swollen lymph nodes, a general feeling of discomfort, and exhaustion. Typically, within 1 to 3 days after the fever occurs, the patient develops a papular rash (i.e., raised fluid-filled bumps), often first on the face but sometimes initially on other parts of the body, especially the genital and perianal (groin) areas. The sores usually develop through several stages before crusting and falling off over the next 2-4 weeks. Sometimes, people get a rash first, followed by other symptoms. Others only experience a rash.

How do people get mpox?

The mpox virus can spread from **person-to-person** through direct contact with an infectious rash, scabs, or body fluids. It also can be spread by respiratory secretions (saliva or spit) during steady, face-to-face contact (within a 6-foot radius for more than 3 hours), including household contacts, or during intimate physical contact, such as kissing, cuddling, or sex. In addition, pregnant people can spread the virus to their fetus through the placenta or to newborns through close contact during and after birth. is Another way that mpox spreads is by **touching items** (such as clothing or linens) that earlier touched the infectious rash or body fluids (though the risk is considered low). It's also possible for people to get mpox from infected animals. Also, the transmission of **mpox from infected animals to** people can happen through direct contact with the infectious rash, scabs, crusts, or fluids from sores, saliva, or infected bodily fluids, including respiratory secretions. Urine and feces that contain infectious viral particles may also be a source of infection. People with mpox can also spread the virus to animals through close contact, including petting, cuddling, hugging, kissing, licking, sharing sleeping areas, and sharing food. Anyone in close personal contact with a person or animal with mpox can become infected and should take steps to protect themselves. The virus enters the body through broken skin (cuts, scrapes, rash, or dry/cracked skin), mucosal surfaces (mouth, nose, eyes, genitals or rectum) or the respiratory track.

Who is at greatest risk of getting mpox?

Mpox does not spread easily between people; however, anyone in close contact with a person with mpox can get it and should take steps to protect themselves. There is currently no evidence showing that people who never develop symptoms have spread the virus to someone else. People with mpox from May 2022 until July 2023 generally report having close, sustained physical contact with other people with mpox. While many of those affected in 2022-2023 cases are gay, bisexual, or other men who have sex with men, anyone who has been in close contact with someone who has mpox can get the illness.

What action should I take if I have been exposed to mpox?

If you have been in contact with a person who has mpox, you should monitor your health and check your temperature twice daily. People exposed should check for symptoms for 21 days. If symptoms develop, you should immediately self-isolate (stay away from other people) and contact your healthcare provider or the health department for further guidance and to find an mpox test site near you. If you receive a positive test for mpox, visit the CDC's <u>What to Do If You Are Sick page</u> for tips on how to take care of yourself, manage your symptoms, and notify close contacts.

Deciding to be vaccinated after being exposed to mpox mostly depends upon the type of your exposure. Ideally, people who have been exposed to mpox should be vaccinated within 4 days after exposure for the best chance of preventing the onset of the disease. Vaccination may be considered but might be less effective if the first dose is given between 4 and 14 days after exposure. In some clinical situations and based on a person's risk factors, it may still be beneficial to give the vaccine even if more than 14 days have passed since exposure. If you are a contact and don't feel sick or have a rash, you can continue to do your routine daily activities (e.g., go to work or school). Contacts should not donate blood, cells, tissue, breast milk, semen, or organs while they are checking to see if they get sick with mpox, for the next 2-3 weeks.

How do I get tested for mpox?

If you have a rash or other signs of being sick, see a medical provider. If you don't have a medical provider or health insurance, visit a <u>public health clinic</u> near you.

Several commercial laboratories and the state public health laboratory are offering testing for mpox. A person must be seen by a healthcare provider to determine if their symptoms appear to be mpox and require testing. The healthcare provider can collect specimens for testing and arrange for testing directly with a commercial laboratory or can contact the state or local health department to arrange for testing at the state public health laboratory.

How long does mpox last?

Mpox can spread 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.

Is mpox fatal?

Deaths in the United States due to the mpox virus have been rare. Up-to-date statistics are available at <u>2022 Outbreak Cases and Data | Mpox | Poxvirus | CDC</u>. Studies of human mpox infections in rural Central and West Africa – where people live in remote areas and are medically underserved – have reported the proportion of persons with mpox that die from mpox is 1% to 10%. Additionally, the mpox virus detected during the 2022-2023 outbreak belongs to the West African strain, associated with fewer deaths than the Central African strain.

The fatality rate of mpox in the US during the 2022-2023 outbreak is low, about .001 or 1 death per 1,000 cases. People living with HIV are over-represented in current mpox cases. At this time, we do not know if having HIV increases the likelihood of getting infected with the mpox virus if exposed; however, we do know that people with advanced HIV (immunocompromised), particularly people with low CD4 counts (<350 cells/ml) or who are not virally suppressed, are at increased risk of severe mpox and death compared to people without HIV.

Is there a treatment for mpox?

Most patients have mild illness and require no treatment. Some people may need support to control pain or other symptoms. There is a medicine available called Tecovirimat (TPOXX) that can treat mpox. Treatment may be considered for use in people at high risk of getting very sick, such as individuals with immunocompromising conditions. Individuals are recommended to speak with their medical provider about the best treatment option.

Is there a vaccine for mpox?

JYNNEOS is the approved vaccine for the prevention of mpox disease in people 18 years of age and older at high risk for mpox infection. JYNNEOS may be given to children under 18 years of age who are at high risk for mpox under certain circumstances, please consult with a physician. The JYNNEOS vaccine may also be used for post-exposure vaccination. Post-exposure vaccination prevents infection in exposed persons such as those persons who have had close or intimate contact with an infected person or animal. These exposed persons may be vaccinated for up to 14 days after exposure, but the earlier the better. JYNNEOS is a 2-dose vaccine. The highest level of protection is expected to be reached 14 days after the second dose of the JYNNEOS vaccine. Although early findings suggest that the first dose of the JYNNEOS vaccine gives some protection, two doses are recommended to provide the strongest protection against mpox. The second dose should be given four weeks (28 days) after the first dose. If a person has not yet or is unable to get their second dose on time, they should get it as soon as possible to complete the series.

What to expect when being vaccinated?

The vaccine may be administered in one of two ways: 1) subcutaneously (Subcut), which involves injecting the vaccine into the fatty tissue underneath the skin on the back of the upper arm (triceps); or 2) intradermally (ID), which involves injecting the vaccine superficially between the top layers of the skin. It can be placed in the forearm, upper back just below the shoulder blade, or the skin of the shoulder just above the deltoid muscle. If an individual has ever had keloid scars (thick, raised scars) or is under 18 years of age, ask for the vaccine to be given Subcut. The dosing regimen is interchangeable so an individual may receive both doses either as Subcut, ID, or a combination of both. Currently, the data suggests that getting the vaccine ID or Subcut appears to be equally effective against mpox. Those interested in being vaccinated are encouraged to discuss administration options with their medical provider to determine what is best for them.

An individual should NOT get the vaccine if they had a severe allergic reaction (such as anaphylaxis) after getting their first dose of the JYNNEOS vaccine. They should also take extra caution if they had an allergic reaction to any vaccine. Individuals may still be vaccinated with JYNNEOS, but their provider may

need to observe them for 30 minutes after vaccination to make sure they don't develop an allergic reaction. Individuals should talk to their healthcare provider if they have had an allergic reaction to the antibiotics gentamicin or ciprofloxacin, or chicken or egg protein.

For more information about the mpox vaccine: <u>CDC | Your Health | Mpox Vaccination Basics</u>

Vaccination against mpox is recommended if:

- You had known or suspected exposure to someone with mpox
- You had a sex partner in the past two weeks who was diagnosed with mpox
- You are gay, bisexual, or a man who has sex with men, or a transgender, nonbinary, or gender-diverse person who in the past 6 months has had any of the following:
 - \circ $\,$ A new diagnosis of one or more sexually transmitted diseases
 - (e.g., chlamydia, gonorrhea, or syphilis)
 - More than one sex partner
- You have had any of the following in the past 6 months:
 - Sex at a commercial sex venue (like a sex club or bathhouse)
 - Sex related to a large commercial event or in a geographic area (city for example) where mpox virus transmission is occurring
 - Sex in exchange for money or other items
- You have a sex partner that had any of the above risks or scenarios
- You are living with HIV or other causes of immune suppression and have had recent or anticipated future risks of mpox exposure from any of the above scenarios
- You work with orthopoxviruses in a laboratory

People from racial and ethnic minority groups, including those who are also gay, bisexual, other men who have sex with men (MSM), and people from gender minority groups have been disproportionately impacted by mpox. Many social, geographic, political, economic, and environmental factors create challenges to health equity and vaccination access. Individuals unsure about their risk or whether they should get vaccinated against Mpox should contact 1-877-PA-HEALTH.

If I am recommended for the mpox vaccine, how do I get it?

Individuals who think they are at risk for mpox can use the <u>mpox vaccine locator</u> to find vaccines near them and find more information about mpox vaccines and medical providers from the CDC. Individuals may also contact 1-877-PA-HEALTH or their local health department to determine where to receive the vaccine. JYNNEOS is a 2-dose vaccine. It was developed to protect against both mpox and smallpox. The second dose of JYNNEOS should be given 4 weeks after the first dose. The highest level of protection is expected to be reached 14 days after the second dose of the JYNNEOS vaccine.

Currently, Mpox vaccines are being provided to the community at no charge regardless of an individual's insurance status or ability to pay.

For more information about mpox: Mpox | Poxvirus | CDC

This fact sheet provides general information. Please contact your physician and/or veterinarian for specific clinical information related to you or your animal.

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