What is Monkeypox?

Monkeypox is a rare zoonotic (transmitted from animals to humans) viral disease that is caused by the infection with monkeypox virus, part of the same family of viruses that causes Smallpox. The name monkeypox originates from the initial discovery of the virus in monkeys in a Danish laboratory in 1958.

Later tests also identified the virus in other African rodents including African squirrels. The first human case was identified in a child in the Democratic Republic of the Congo in 1970. This virus is enveloped and can also be transmitted between humans and produce symptoms very similar to Smallpox.

What are the symptoms and incubation period?

The symptoms of monkeypox are very similar to but milder than smallpox symptoms. The incubation period (time from infection to symptoms) for monkeypox is usually 7 to 14 days, but can range from 5 to 21 days. The initial symptoms of infection include the following:

- Headache
- Acute onset of fever (> 38.5°C),
- Lymphadenopathy (swollen lymph nodes) - swollen lymph nodes can occur in multiple areas of the body or just one or two areas
- Myalgia (muscle and body aches)
- Back pain
- Asthenia (profound weakness)

Within days of fever onset, if not concurrently, the person will also develop a rash which often begins on the face and then spreads to other parts of the body.

The rash is characteristic in that it passes through various stages including red patches, raised red areas, fluid-filled bumps, sores, and finally scabs which heal and fall off.

For most people, the illness lasts for 2-4 weeks and causes a mild illness. In central and west Africa, where the illness is endemic, it has been shown that 10% of the infections lead to death. Children, pregnant women and individuals with weakened immune systems may be at risk for more severe disease.

What I need to know

- Avoid contact with animals or humans that may be infected. This is the first step in preventing the spread of the Monkeypox virus.
- Monkeypox is transmitted through close interaction with infected animals and people including direct contact with infectious sores, scabs, or body fluids.
- Practice good hand hygiene by washing hands thoroughly with soap and water after interacting with people.
- Contact EHS@usc.edu or (323) 442-2200 for more information.
**How is Monkeypox spread?**

Humans can get Monkeypox if they come in contact with an infected animal (animal bite or direct contact with the animal’s lesions). The virus can enter the body through broken skin (even if not visible), respiratory tract, or the mucous membranes (eyes, nose, or mouth).

Human-to-human transmission is possible through respiratory droplets but requires prolonged face-to-face contact. Direct contact with body fluids and lesion materials (contaminated clothing and bedding) of infected people is another route of human-to-human infection. Recent cases have spread during sexual contact.

**Who is at risk?**

Anyone can be infected with Monkeypox virus regardless of age. The greatest risk factors include recent travels to endemic areas in central and western African countries and exposure to animals or humans carrying the disease.

**Prevention**

- Avoid handling materials (e.g., bedding) that were in contact with an infected animal/human.
- Practice proper hand hygiene regularly.
- Wear appropriate PPE to cover exposed areas and mucous membranes if you are caring for patients infected with Monkeypox.

**Treatment**

Many individuals infected with monkeypox virus have a mild, self-limiting disease course, but this is dependent on factors such as health status and vaccine status. According to the CDC, there is no proven, safe treatment for Monkeypox virus infection.

A smallpox vaccine (JYNNEOS™) approved by the CDC has shown to be 85% effective against Monkeypox infections. However, this vaccine is not widely available to the public.

**Reference**

CDC - Monkeypox