MonkeyPox

Research provided by the Kansas Association of Local Health Departments

This month, we will be talking about MonkeyPox which is having a moment in the United States this month. While there is a vaccine available for areas that have endemic monkeypox, it is not currently licensed in the United States.

What Is It?

MonkeyPox, which is a distant cousin of both Smallpox and Chickenpox, is a rare disease that is caused by being infected with the virus. While MonkeyPox is typically less severe than Smallpox, it causes similar symptoms, such as the trademark "pox" all over the body. MonkeyPox will begin with flu like symptoms and swollen lymph nodes. It's important to note that while MonkeyPox causes swollen lymph, Smallpox does not.

After a fever period of 1-3 days, a rash will begin to form on the face and throughout the body before healing and falling off, leaving scars. In total, the infection can last up to 4 weeks, and it can cause severe complications such as death.

A Brief Explanation of Zoonotic Diseases

You may have heard the term Zoonotic when discussing diseases. Zoonotic diseases typically refer to infections that spread from animals to humans through bacteria, viral infections, parasites, and fungi. The CDC predicts that every 6 out of 10 known infections in humans come from some sort of zoonotic disease. There are a few notable ways infections can spread to humans through animals, including direct or indirect contact (such as petting zoos, cooking, dirty fish tanks, etc.) vector born (like Zika or Dengue Fever), Foodborne (COVID-19) and waterborne (Typhoid Fever).

While most of us are with animals daily, it is important to keep pets and yourself healthy from spreading disease. Having good hygiene habits for both humans and animals makes the spread of zoonotic diseases less likely. In addition, avoiding eating raw or undercooked meat at mealtimes also encourages healthy behaviors.

History of MonkeyPox

There isn't much known about MonkeyPox. First discovered in 1958 during an outbreak of a pox-like disease in monkeys, hence the name given to the virus. The first human case was recorded in 1970 in the Democratic Republic of the Congo (DRC). This occurred during an intensified effort to eliminate smallpox, so a lot of research was put into figuring out how MonkeyPox spread. MonkeyPox is considered endemic in Western African countries such as DRC, Cameroon, Central African Republic, Liberia, and Nigeria, just to name a few. Because of international travel, MonkeyPox cases have traveled to other countries, including the United States, Singapore, and United Kingdom. While the current reason for the spread of disease remains unknown, it is believed that monkeys and rodents may harbor the virus and infect people.

2022 MonkeyPox Outbreak in the United States

In early May, the CDC identified multiple cases of MonkeyPox in the United States, both from travel and from close contact transmission. As of May 31, there are 15 confirmed cases in 7 states. The CDC continues to work with LHDs and state health departments on the disease. The CDC has released a 2022

MonkeyPox summary on their website. It includes information about the disease, current cases, and what to do if you believe you have contracted the disease.

Vaccination

A fun fact you may not know is that the most recent smallpox vaccine can also prevent MonkeyPox. According to the CDC, when properly administered, a smallpox vaccine is effective at protecting people from MonkeyPox as well. However, because of the lack of smallpox outbreaks, the vaccination is not widely available. However, due to the current outbreak, vaccinations may be re-licensed for healthcare providers and those at risk. In addition, scientists don't believe that MonkeyPox will become endemic or even a pandemic as it spreads via DNA rather than RNA and doesn't mutate – making the disease easier to treat and prevent.

Conclusion

In all, not much is known about how MonkeyPox spread to humans and how it became endemic. However, the good thing to note is that it is not as severe as Smallpox and is easily treated by a vaccination and antibiotics. We cannot know for certain, but it is likely that MonkeyPox will not enter a pandemic state like COVID-19. However, we can still work to prevent it's spread by vaccinating and promoting healthy behavior.

Resources & Further Reading

CDC MonkeyPox Landing Page: https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html
Recommendations for Health Departments:
https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html#healthdept
KHEL Testing Forms: https://www.kdhe.ks.gov/908/Laboratories
https://www.cdc.gov/poxvirus/monkeypox/clinicians/smallpox-vaccine.html
https://mb.com.ph/2022/05/31/monkeypox-and-future-pandemics/
https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html
https://www.who.int/news-room/fact-sheets/detail/monkeypox
https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html