

ABOUT MONKEYPOX¹

Monkeypox, a member of the *Orthopoxvirus* genus in the Poxviridae family, is a rare virus transmitted to humans from animals that occurs sporadically in central and western parts of Africa's tropical rainforest.

Identification of Monkeypox

2. In Africa, monkeypox infection has been found in many animal species such as rope squirrels, tree squirrels, Gambian rats, striped mice, dormice and primates. Human monkeypox was first identified in humans in 1970 in the Democratic Republic of Congo (then known as Zaire).

3. Since 1970, human cases of monkeypox have been reported from 10 African countries – Democratic Republic of the Congo, Republic of the Congo, Cameroon, Central African Republic, Nigeria, Ivory Coast, Liberia, Sierra Leone, Gabon and South Sudan. In 2017, Nigeria experienced the largest documented outbreak, approximately 40 years since the country had last confirmed cases of monkeypox.

4. In 2003, monkeypox cases were confirmed in the United States of America, marking the first reported occurrence of the disease outside of the African continent. Most of the patients then were reported to have had close contact with pet prairie dogs that were infected by African rodents that had been imported into the country. In 2018, three cases of monkeypox were reported in the United Kingdom and one case was reported in Israel.

Transmission

5. Animal-to-human infection results from direct contact with the blood, bodily fluids, or cutaneous or mucosal lesions of infected animals. In Africa, human infections have been documented through the handling of infected monkeys, Gambian giant rats and squirrels, with rodents being the most likely reservoir of the virus. Eating inadequately cooked meat of infected animals is a possible risk factor too.

6. Human-to-human transmission can result from close contact with infected respiratory tract secretions, skin lesions of an infected person or objects recently contaminated by patient fluids or lesion materials. Transmission occurs primarily via droplet respiratory particles, and usually requiring prolonged face-to-face contact, which puts household members of active cases at greater risk of infection. There is no evidence, to date, that person-to-person transmission alone can sustain monkeypox infections in the human population.

Signs, symptoms and diagnosis

¹ Source: Adapted from World Health Organization

7. Monkeypox can only be diagnosed definitively in the laboratory where the virus can be identified by a number of different tests that need to be conducted in specialised laboratories.

8. The incubation period (interval between infection to onset of symptoms) of monkeypox is usually from 6 to 16 days but can range from 5 to 21 days. The infection can be divided into two periods:

- Between 0-5 days: characterised by fever, headache, swelling of the lymph node, back pain, muscle ache and lack of energy;
- Within 1-3 days after onset of fever: rash appears, often beginning on the face and then spreading elsewhere on the body. The face (in 95% of cases), and palms of the hands and soles of the feet (in 75% of cases) are most affected. Evolution of the rash from lesions with a flat base to small fluid-filled blisters, pustules, followed by crusts occurs in approximately 10 days. Three weeks might be necessary before the complete disappearance of the crusts.

9. Monkeypox is usually a self-limited disease with the symptoms lasting from 14 to 21 days. In some cases, however, the virus can cause serious complications such as pneumonia, sepsis, encephalitis (brain inflammation) and eye infection with ensuing loss of vision. There have been reported mortality rates of 1% to 10% during outbreaks, with most deaths occurring in younger age groups.

Reducing risks of transmission

10. There are no specific treatments or vaccines available for monkeypox infection, but outbreaks can be controlled. Vaccination has been proven to be 85% effective in preventing monkeypox.

11. During human monkeypox outbreaks, close contact with other patients is the most significant risk factor for monkeypox virus infection. To reduce the risk of human-to-human transmission, avoid close physical contact with people infected with monkeypox or contaminated materials. Gloves and protective equipment should be worn when taking care of ill people. Regular hand washing should be carried out after caring for or visiting sick people. Isolation of patients either at home or in health facilities is recommended.