

Monkeypox

DISEASE IN ANIMALS

Monkeypox is caused by an orthopox virus that is known to infect monkeys, apes, rodents and rabbits. Pustular skin lesions predominate, although cases also exhibit fever, lethargy, conjunctivitis, anorexia, nasal discharge or cough. Outbreaks in the U.S. have primarily been associated with the exotic pet trade or primate laboratories.

Reporting: This is a reportable animal disease in Ohio and all suspected cases must be reported to the Ohio Department of Agriculture (ODA), Division of Animal Industry at (614) 728-6220 or (800) 300-9755 or the USDA APHIS Veterinary Services at (614) 856-4735 or (800) 536-7593. Voluntary reporting to the [local health department](#) (LHD) of lab-confirmed animal cases with potential transmission to humans is encouraged.

Transmission: The routes of transmission among animals are incompletely understood, but the virus might be transmitted in aerosols, through skin abrasions or by the ingestion of infected tissues.

Diagnostics (CDC, 2003)

- Demonstration of monkeypox virus DNA by polymerase chain reaction testing in a clinical specimen
- Demonstration of virus morphologically consistent with an orthopoxvirus by electron microscopy in the absence of exposure to another orthopoxvirus
- Demonstration of presence of orthopox virus in tissue using immunohistochemical testing methods in the absence of exposure to another orthopoxvirus
- Virus isolation

Case classification (CDC, 2003):

- Suspected: Animal with a rash or two or more clinical signs of monkeypox and potential exposure to an infected human or animal.
- Probable: Animal with a rash and two or more clinical signs of monkeypox and potential exposure to an infected human or animal.
- Confirmed: a probably case that meets confirmatory testing criteria determined by a state or federal diagnostic laboratory.

DISEASE IN HUMANS

Reporting: Reporting of a single human case is voluntary, but encouraged. Two or more human cases (e.g. outbreak) are required to be reported to the LHD.

Human Illness: Monkeypox in humans resembles a mild case of smallpox. Initial symptoms include flu-like illness and enlarged lymph nodes, followed by fever and a blister-like rash. The rash often starts on the face and spreads. It takes between 2 and 4 weeks before resolution. The fatality rate is low. There is no specific treatment, although those who got smallpox vaccine in the past have a lower risk of illness. Exposed persons can be vaccinated up to 14 days after exposure.

Personal Protection: Isolate the animal. Contact and droplet precautions should be applied. In addition, because of the theoretical risk of airborne transmission, airborne precautions should be utilized whenever possible. Clean and disinfect all areas where the animal was kept. Bleach and water solution of ¼ cup bleach to one gallon of water is adequate. Wash and dry clothing and other washable materials used to handle the animal and use good hand hygiene (e.g., hand washing). Bedding and objects that are discarded should be thorough soaked in disinfectant and bagged for disposal with other household waste.

FOR MORE INFORMATION

Reportable Animal Diseases in Ohio

[ODA Division of Animal Industry](#)

[OAC Chapter 901:1-21 Dangerously Contagious or Infectious and Reportable Diseases](#)

Disease in Animals

[Iowa State University Center for Food Security and Public Health Animal Disease Factsheets](#)

[Monkeypox, AVMA Public Health Information](#)

Disease in Humans

[CDC--Monkeypox](#)