

The monkeypox virus

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1 Monkeypox is a viral infection with person-to-person transmission through direct contact or fomites

The virus is endemic to West and Central Africa.¹ Animal-to-human transmission may initiate outbreaks, and person-to-person transmission occurs through direct, close contact with a person during their infectious stage through droplets, contact with infectious bodily fluids or via fomites (e.g., linens). Airborne transmission is thought to be less common.^{1,2}

2 A rash with distinct skin lesions is typically preceded by fever, myalgia and lymphadenopathy

The incubation period ranges between 5 and 21 days.² Lesions begin as macules or papules, which progress to pustules and umbilicated vesicles and ulcers, and eventually to crusted scabs.^{2,3} Lesions typically erupt and recede in unison and in 1 anatomic area, unlike varicella. Differential diagnoses include syphilis, chancroid, varicella zoster, herpes simplex, hand-foot-and-mouth disease, mulloscum contagiosum and cryptococcus. Patients are likely to be infectious from the onset of symptoms until all scabs have resolved.

3 Health care providers should follow airborne, droplet and contact precautions and notify public health authorities when testing for monkeypox, including for sample collection²

Diagnosis is by real-time polymerase chain reaction (PCR) of samples collected via dry swabs of unroofed lesions or ulcers, those collected via nasopharyngeal swabs or serum samples; scab and tissue samples can also be used for diagnosis via PCR or pathology. Provincial public health laboratories provide details on sample collection and transport. As with any newly emergent infection with changing epidemiology, consultation with infectious disease specialists or microbiologists is advised to support clinical assessment.

4 Most patients with monkeypox can be managed as outpatients

Few patients have severe disease requiring hospital admission. For severe infections, consultation with an infectious disease specialist is advised for consideration of experimental antiviral therapies, such as tecovirimat, cidofovir or brincidofovir.^{2,4}

5 Ring vaccination and contact tracing can help contain spread

Smallpox vaccination of high-risk contacts (i.e., ring vaccination) may help reduce spread.^{5,6} Those with previous vaccination to smallpox (e.g., many people born before 1970) have some cross-protective immunity to monkeypox. Public health authorities should be contacted for suspected and probable cases to initiate and facilitate contact tracing and vaccination.

References

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