

Mpox: What you need to know



Mpox (formerly known as monkeypox) is a viral zoonotic infectious disease caused by an *Orthopoxvirus*. There are 2 known subtypes (clades) of Monkeypox virus:

- Clade I (formerly known as Congo Basin or Central African clade)
- Clade II (formerly known as West African clade), further subdivided into Clade IIa & Clade IIb

Clade II is associated with relatively less severe symptoms and outcomes.

Mpox is endemic to Central and West Africa. However, since 2022, 116 countries outside of endemic areas have reported cases, leading the World Health Organization (WHO) to declare mpox a public health emergency of international concern in August 2024.

Transmission

Human-to-human contact:

- Contact with sores, scabs, body fluids (e.g., saliva, semen, blood) followed by touching one's own mucus membranes
- Sexual or intimate contact (kissing, vaginal/anal/oral sex)
- Contact with respiratory droplets (airborne transmission is unknown)



Contact with contaminated objects:

- e.g., clothing, linens, needles (such as those from lesion sample collection, drug use, tattoos and piercings)



Animal-to-human contact:

- Contact with an infected animal through provision of care, receiving bites or scratches, skinning or handling flesh, eating undercooked meat



Vertical transmission during pregnancy

Incubation period

Typically **7-10 days**, but can range from **3-21 days**. Some patients may be infectious for up to 4 days before they begin having symptoms (presymptomatic transmission).



Symptoms

- Can present as systemic, skin/mucosal or both
- Can last 2-4 weeks from start of infection; self-limiting

week 1

week 2

week 3

week 4

• Systemic symptoms usually appear first (0-5 days prior to rash):



- o Fever, chills
- o Low energy, fatigue
- o Local or generalized lymphadenopathy (helps distinguish mpox from chickenpox)

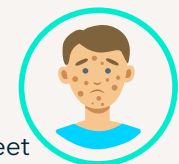


- o Sore throat, rectal pain, headache, myalgia, back pain
- o Vomiting, diarrhea
- o Proctitis
- o Pharyngitis



- Skin rash or mucosal lesions (flat sore later developing into a blister filled with yellow or clear liquid), which may be painful and last 2-4 weeks:

- o Usually appear on the face, palms of hand or soles of feet
- o Can also appear on genitals or anus/perianal area



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Complications

Mpox is usually self-limiting, with symptoms lasting 2–4 weeks, but some may develop severe complications

- Bacterial superinfection, corneal infection and vision loss, sepsis, pneumonia, myocarditis, encephalitis, urinary retention due to genital pain, death
- At-risk populations:
 - Pregnant patients—increased maternal and fetal morbidity and mortality
 - Young children (more severe illness, complications)
 - Immunocompromised patients (more severe illness, complications), including those with advanced human immunodeficiency virus disease
 - Individuals who self-identify as GBMSM (gay, bisexual and other men who have sex with men)
 - Patients with multiple partners

Diagnosis

- Polymerase chain reaction (PCR) testing for Orthopoxvirus DNA on lesion samples
- Serological testing to support the diagnosis, if viral testing is unavailable



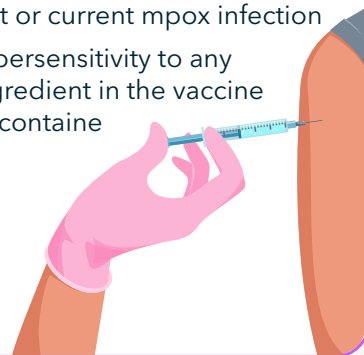
Treatment

- Supportive care:
 - Pain relief
 - Saltwater rinses for sore mouth
 - Warm baths with baking soda or Epsom salt for body sores
 - Nonprescription pain medications, e.g., ibuprofen, acetaminophen
 - Stool softeners and sitz baths for proctitis
 - Hydration

Prevention

- Vaccine: Imvamune (Canada), Jynneos (US), Imvanex (EU/EEA/UK).
 - Indicated for active immunization against smallpox, mpox and related orthopoxvirus infection and disease in adults ≥ 18 years of age determined to be at high risk for exposure
 - National Advisory Committee on Immunization (NACI) recommends Imvamune for:
 - Men (self-identifying as transgender, cisgender, Two-Spirit, queer, intersex or nonbinary) who have sex with men who meet one or more of the following criteria:
 - Have more than one sexual partner
 - Are in a relationship where at least one of the partners has other sexual partners
 - Have had a confirmed sexually transmitted infection acquired in the past year
 - Have engaged in sexual contact in sex-on-premises venues
 - Sexual partners of individuals who meet the criteria above
 - Sex workers regardless of gender, sex assigned at birth or sexual orientation
 - Staff or volunteers in sex-on-premises venues where workers may have contact with fomites potentially contaminated with mpox
 - People who engage in sex tourism regardless of gender, sex assigned at birth or sexual orientation
 - Individuals who anticipate experiencing any of the above scenarios

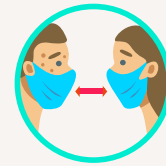
- Pre-exposure prophylaxis:
 - 2×0.5 mL doses at least 28 days apart, subcutaneous
- Postexposure prophylaxis:
 - Dose 1: within 4 days or within 14 days of exposure if no symptoms
 - Dose 2: at least 28 days after first dose—only if mpox infection did not develop
- Contraindications:
 - Past or current mpox infection
 - Hypersensitivity to any ingredient in the vaccine or container



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Other prevention strategies

- Avoid sharing sex objects, bedding, towels and clothing with those at risk
- Avoid close physical and sexual contact with known cases of mpox or those with high-risk exposure to mpox (household or sexual contacts of a known case of mpox)
- Avoid contact with objects handled by someone with a known case of mpox
- Reduce the number of sexual contacts
- Limit skin contact during sexual encounters by using condoms, dental dams, gloves, clothing
- Disinfect surfaces frequently, especially after having guests
- Practice frequent hand hygiene
- If you have symptoms:
 - Stay home
 - Cover lesions
 - Wear a well-fitted mask



References:

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