

Briefing on Human Monkeypox Virus

May 20, 2022

What is Monkeypox?

- Human monkeypox is a zoonotic viral disease caused by the *Monkeypox virus*, belonging to the *Orthopoxvirus* genus. It is endemic in certain areas of Central and West Africa.
- Monkeypox infection is typically mild and self-limiting, with most individuals recovering in 2 to 4 weeks. However, severe illness can occur in some individuals (case fatality rate historically has been 1-10%, depending on the clade).

Situational Update

- UK has confirmed 20 cases of monkeypox. The first UK case was reported on May 7, 2022.
- Cases have been reported in Europe (Italy, Sweden, Spain, Portugal, Belgium, France, and Germany), Australia, the United States (US) and Canada.
 - US has reported a confirmed case of monkeypox in an individual with travel history to Quebec in May.
 - Quebec has two lab-confirmed cases (18 suspect cases).
 - No cases confirmed in Ontario, but testing requested for at least one individual.
- Many cases have reported atypical symptoms, including skin lesions on the mouth and/or genitals.
- Some jurisdictions are reporting clustering of cases amongst men who report having sex with other men.

Symptoms

Typically, a prodromal systemic illness consisting of one or more of the following symptoms precedes the rash.

- Fever
- Headaches
- Intense fatigue
- Sweating
- Lymphadenopathy
- Myalgias and arthralgias

Within 1 to 3 days of the prodromal illness, a rash typically appears.

- Skin lesions, especially around the mouth and genital region.
 - typically maculopapular rash early in infection, then vesicular rash/lesions.

Transmission

- **Incubation period** averages seven to 14 days (range five to 21 days)
- **Primary mode of person-to-person transmission** is through respiratory secretions, direct contact with skin lesions, and/or contact with materials contaminated with the virus (e.g., clothing, bedding).
- **Period of communicability** is from onset of initial lesions (typically on the tongue/in the mouth), until lesions have resolved.
 - Some individuals may be contagious during their prodrome, before the rash develops, when they have nonspecific symptoms such as fever, malaise, and headache.

Case and Contact Management

- **Probable case management:** all symptomatic individuals are advised to self-isolate at home. If being seen for clinical care, they are advised to wear a medical mask and cover their skin lesions while test results are pending.
- **Case management:** Self-isolate until lesions are resolved.
- **Contact management:** Contacts should self-monitor for symptoms for 21 days and seek medical care/testing if symptoms present. They do not need to quarantine as long as they remain asymptomatic.
- Further guidance is being developed and will be forthcoming.

IPAC Precautions

- In addition to routine practices, follow additional airborne/droplet/contact precautions for suspected or confirmed cases:
 - Use airborne isolation rooms with negative pressure ventilation, where available.
 - If not available (e.g. in outpatient settings), patient can be placed in a single room with the door closed and with a dedicated bathroom.
 - If above options are not feasible, precautions should be taken to minimize exposure to surrounding individuals, such as having the patient don a medical mask and cover exposed skin lesions as best as possible.
- PPE for healthcare workers:
 - Fit-tested and seal-checked N95 respirator (or equivalent)
 - Gown
 - Gloves
 - Eye protection (e.g., face shields or goggles)

Actions taken by the Office of the Chief Medical Officer of Health/Public Health Ontario

- Chief Medical Officer of Health (CMOH) Order under section 77.6 of the *Health Protection and Promotion Act (HPPA)*
 - Health information custodians under the *HPPA* must provide to Public Health Ontario (PHO) the information outlined in the *Case Report Form* for any individual who meets the case definition.
- eCTAS has been posted alerting major emergency departments to the situation.
- Development of case definition and case reporting form by PHO.
- Developing FAQs and a website for public communication.
- Liaising with PHAC and other provinces.

Testing

- Public Health Ontario Lab's Testing Information Sheet will be released shortly.
- Clinicians are advised to consult with a PHOL microbiologist prior to specimen collection.
- All samples will be forwarded to the National Microbiology Laboratory (NML) in Winnipeg. Samples will be tested by PCR.
- Turnaround time is approximately 24-48 hours from receipt at NML.

Use of Vaccine or Therapeutics

- Treatment for monkeypox is mainly supportive.
- Ontario is working with the Public Health Agency of Canada (PHAC) to determine eligibility for vaccines and/or therapeutics.

Actions Local Public Health Units May Consider

- Alert on-call staff to CMOH Order.
- Communicate with health care providers in your jurisdiction for situational awareness and to support reporting.
- Consider outreach to sexual health clinics, bathhouses, and sex clubs in your jurisdiction.