Sioux Lookout
First Nations
Health Authority

COMMUNITY WELLBEING ADVISORY

To: Sioux Lookout area Chiefs and Health Directors

From: Dr. Lloyd Douglas, Public Health Physician

Date: 21 August 2024

Re: **Situation Update on Mpox (Monkeypox) Outbreak**

Issue

The World Health Organization (WHO) has recently declared mpox a public health emergency of international concern (PHEIC). This is the second time when WHO declares mpox a PHEIC over the past two years. A PHEIC represents the highest level of alert under international health regulations, signifying a serious global threat (World Health Organization, 14 August 2024). Mpox is a viral disease that causes painful, pus-filled lesions and, in some cases, can lead to severe illness or even death. The first PHEIC for mpox was declared in 2022, following a sudden outbreak of mpox that spread rapidly worldwide (WHO, 2022).

This Community Wellbeing Advisory provides updated information on the latest developments related to mpox and recommends public health measures to protect against the disease.

What is Mpox?

Mpox (also known as monkeypox) is a viral disease caused by the monkeypox virus, commonly abbreviated as MPXV. There are two distinct clades of the virus: clade I and clade II. Clade I is associated with more severe clinical symptoms and a higher mortality rate compared to clade II. Symptoms typically begin within a week (ranges from 1 to 21 days) after exposure. The disease can cause a painful rash, enlarged lymph nodes. and fever. While most patients fully recover, some individuals become severely ill and could die (WHO, 18 April 2022).

Global Context

The virus was first detected in humans in the Democratic Republic of Congo (DRC) in 1970. The disease is endemic to countries in central and west Africa. During the 2022 outbreak caused by the clade IIb strain, the disease rapidly spread, primarily through sexual contact, across different non-endemic countries, including those in Europe and Americas. Since January 2022, cases of mpox have been reported to WHO from 116 Member States. The United States of America recorded the highest number of cases (33,191), followed by Brazil (11,212), Spain (8,084), and France (4,272). The DRC reported 2,999 cases during this period (WHO, 2024).

The emergence of a new mpox clade and its rapid spread in DRC along with several cases in other African countries led WHO to declare a Public Health Emergency of International Concern (PHEIC) on August 14, 2024.

Mpox in Canada

- Between May 19, 2022, and December 31, 2023, a total of 1,541 cases of mpox were reported in Canada including 46 hospitalized cases with two of those cases requiring admission to an ICU.
- No deaths were reported during this period (Government of Canada, 16 August 2024).
- Most cases were locally acquired within Canada through sexual or close intimate contact with known or suspected mpox cases. Only 8% of cases were linked to travel outside Canada in the 3 weeks prior to the onset of symptoms.

- Ontario had the highest number of cases (737) among provinces and territories, followed by Quebec (531 cases) and British Columbia (213 cases). (Government of Canada, 15 July 2024).

Following the WHO's declaration of a PHEIC on August 14, 2024, the Government of Canada issued a statement confirming that no cases of the clade I mpox virus have been reported in Canada to date. However, there has been an ongoing outbreak of clade II mpox in Canada since 2022. Current reports indicate that clade II mpox is less severe than clade I. Between January 1 and August 12, 2024, a total of 164 cases have been reported, including 162 confirmed and 2 probable cases. The statement also recommends a two-dose vaccination against mpox for adults at high risk of exposure, noting that the vaccine protects against both clade I and II. At this time, vaccination is not recommended for the general public in Canada (Government of Canada, 14 August 2024).

Current Situation in Ontario

- Ontario is experiencing an increase in mpox activity in 2024 with a total of 142 confirmed cases from January 1 to August 10, 2024. In comparison, only 33 confirmed cases were reported in 2023
- The vast majority of mpox cases in Ontario have occurred in the greater Toronto area amongst adult men who have sex with men
- More than half (88/142; 62.0%) of these cases have occurred since the beginning of June, likely coinciding with attendance at Toronto Pride or other Pride events taking place in the summer.
- All cases in Ontario have been the less severe clade IIb with only two cases being hospitalized. No deaths have been reported
- Close to 85% of case in Ontario are unvaccinated or have only received one dose of Imvamune vaccine
- A total of 965 people received vaccine in Ontario in 2024 till August 14
- For further details on mpox cases in Ontario, please refer to Public Health Ontario

How does it spread?

Mpox can be transmitted to humans through physical contact with an infectious person, infected animals, or contaminated materials.

- **Human to human transmission:** Transmission occurs through face to face talking, touching, kissing, or sexual contact. The virus can enter the body through broken skin, mucosal surfaces (e.g., oral, pharyngeal, ocular, genital, anorectal), or the respiratory tract. Mpox can spread to other members of the household and to sexual partners. Individuals with multiple sexual partners are at higher risk (WHO, 2022).
- **Animal to human transmission:** Transmission can occur during activities such as hunting, trapping, skinning, or cooking infected animals. Mpox can infect a wide range of mammal species, including monkeys, rodents (such as rats, mice, hamsters, gerbils, squirrels, chipmunks), rabbits, hedgehogs, and opossums. Pprecautions should be taken to prevent transmission of the virus to domestic animals as mpox has been reported in a dog that had close contact with its infected owners (Ontario Health, February 2024).
- **Objects to human transmission:** Transmission can occur when handling contaminated sheets, linens, and cloths, or through sharps injuries in healthcare or community settings such as tattoo parlors (WHO, 2022).
- **Vertical Transmission:** Pregnant individuals may pass the virus to their unborn baby (WHO, 2022).

Clinical signs and symptoms

Common symptoms of mpox include rash, fever, chills, sore throat, headache, muscle aches, back pain, fatigue, and swollen lymph nodes. For some people, the first symptom of mpox is a rash, while others may initially experience different symptoms. Mpox lesions (rash) can be painful and may become itchy during the healing phase. The mpox rash typically begins on the face and spreads across the body, extending to the palms of the hands and soles of the feet. The skin rash progresses through several stages: starting as macules (flat lesions), then becoming papules (raised lesions), followed by vesicles and pustules. In the final stage, the lesions will form ulcers that eventually scab over (Government of Canada, 04 June 2024).

Most patients fully recover within 2 to 4 weeks. However, some individuals may become very sick and develop complications such as secondary skin infections with bacteria, leading to abscesses or serious skin damage, pneumonia (lung infection), corneal infection with loss of vision, severe dehydration or malnutrition, sepsis (infection of the blood with a widespread inflammatory response in the body), brain damage (encephalitis), and heart damage (myocarditis) all of which can be life-threatening. Children, pregnant people, and people with weak immune systems are at higher risk for developing complications (WHO, 18 April 2023).

Who is at most risk?

Anyone can get and transmit mpox if they come into close contact with someone infected with the virus, regardless of sex, race, gender, and sexual orientation. People with mpox are infectious and can pass the disease on to others until all sores have healed and a new layer of skin has formed. The high-risk groups are:

- Health workers at high risk of exposure
- Men who have sex with men
- People with multiple sex partners
- Sex workers (WHO, 18 April 2023).

Most cases in Canada so far involve individuals who self-identify as gbMSM (gay, bisexual and other men who have sex with men), especially those with multiple sexual partners (Health Canada, 2024).

Treatment

Treatment for symptomatic mpox primarily includes wound care, pain control, and treating complications. There is limited data on the clinical effectiveness of specific antiviral treatments for mpox in people. Antivirals (such as tecovirimat) that were first developed to treat smallpox, may also be beneficial in treating mpox. Talk to your health care provider for advice on mpox treatment best suited to your need. Local public health workers may also require patient to isolate to prevent further spread (Government of Canada, May 2024).

Prevention

Getting an mpox vaccine can prevent infection. The World Health Organization recommends pre-exposure vaccination for people at high-risk, especially during the outbreak and post-exposure vaccination within 4 days of contact with someone who has mpox or within up to 14 days if there are no symptoms (WHO, 18 April 2023).

Health Canada has approved the Imvamune vaccine for immunization against mpox, smallpox and related Orthopoxvirus infections and diseases (Government of Canada, May 2024).

Ontario Health provides a 2-dose primary series of the vaccine with a minimum interval of 28 days for individuals at high risk of exposure including gbMSM (gay, bisexual, pansexual, and other men who have sex with men) especially those with multiple sexual partners, sex workers, and research laboratory employees. Post-exposure vaccination is offered for individuals who have had contact with a confirmed or probable case of mpox (Ontario Health, February 2024).

Recommendations

- To reduce risk of getting mpox you should:
  - avoid close physical contact with anyone who has mpox, including sexual contact
  - avoid sexual contact with anyone who may have had a high-risk exposure to mpox such as sexual partner or household member of someone with the disease.
  - avoid contact with personal items or objects used by someone with mpox
- Get vaccinated if eligible
- Use barrier protection during sexual activity including condoms, dental dams, gloves, and clothing
- Practice regular hand hygiene
- Clean and disinfect high-touch surfaces and objects in your home, especially after having visitors (Health Canada, 2024).

If you get sick

- Tell your healthcare provider if you think you have had contact with a person with mpox
- Stay home in a separate room and avoid contact with others unless it is essential
- Wear a medical mask
- Cover any rashes or sores as best as possible when you are unable to avoid close contact with others
- Avoid contact with those at higher risk of severe illness: people who are pregnant, immunocompromised, and children under the age of 12 years
- Clean your hands often with soap and water or an alcohol-based hand sanitizer, including after touching the rash or sores, or contaminated objects and surfaces
- Clean and disinfect contaminated surfaces (such as the bathroom, if shared) after use with regular household cleaning products and disinfectants according to the manufacturer's instructions
- Discard contaminated items directly into a waste container and avoid touching the outside of the waste container or other surfaces. Hands should be cleaned immediately after handling the waste.
- Have dedicated clothing, bed linens, and towels that are not shared with others. Handle laundry and linens with care and avoid shaking. Laundry can be cleaned in a washing machine with warm water and detergent (Ontario Health, February 2024).
- Do NOT pop blisters or scratch sores, which can slow healing, spread the rash to other parts of the body, and cause sores to become infected.
- Do NOT shave areas with sores until scabs have healed and you have new skin formed underneath, as this can spread the rash to other parts of the body (WHO, 18 April 2022).

SLFNHA is closely monitoring the situation to protect the health of the community members we serve.

We thank all community workers, healthcare providers, and community members for their support in preventing the transmission of preventable diseases.

If you have any questions, please contact:

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