

Mpox



What is mpox?

Mpox (previously referred to as monkeypox) is a viral infectious disease caused by a family of viruses called orthopoxviruses. This family of viruses includes smallpox and cowpox. These viruses can be spread from animals to people and between people.

In August 2024, the World Health Organization declared mpox a “public health emergency of international concern” for the second time in two years. This formal term describes a serious disease outbreak that can spread across countries and that requires urgent global action to protect people’s health.

The risk to people in Canada remains low. Currently, there are two main strains of mpox. Only the less severe strain has been detected in Canada, and hospitalizations have been rare.

Symptoms

People infected with mpox frequently develop a rash characterized by lesions. The lesions go through several stages before healing. At first, the lesions can look like pimples or blisters. They fill with fluid before drying up and falling off. The number of lesions varies from a few to several thousand.

Mpox lesions can be painful or itchy. They can appear on any part of the body. The mpox rash frequently begins 1-3 days after the development of a fever.

Other symptoms that may precede or follow the rash include:

- Headache (may be severe)
- Fatigue and exhaustion
- Muscle aches
- Swollen lymph nodes

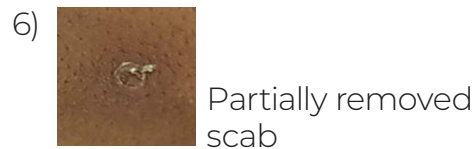
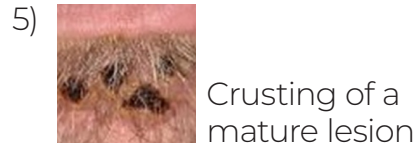
Less common symptoms include:

- Cough
- Vomiting
- Sore throat
- Diarrhea

Secondary complications from mpox infections include pneumonia, sepsis, encephalitis, keratitis, and/or vision loss.

Anyone can be infected with mpox. People who have had the smallpox vaccine are less likely to develop symptoms.

Mpox rash progression



Transmission

Mpox is primarily transmitted through **person-to-person contact**, including skin-to-skin contact and contact with bodily fluids. It can also be transmitted through touching contaminated surfaces, like clothing, towels, or bedding.

Mpox can also be spread through **respiratory secretions**. The extent of transmission from large droplets and fine particles remains unclear. Until further data is available, CUPE recommends treating mpox as if it can be spread through both large droplets and fine particles. **Large droplets** are expelled when an infected person coughs, sneezes, or talks near another person. Fine particles are created by medical procedures like intubations, open suctioning, or bronchoscopies. They can also be created when large droplets evaporate. **Fine particles** may remain suspended in the air for some time.

Transmission window

Mpox symptoms typically start within three weeks of exposure but can appear as early as five days after exposure.

The virus can be spread starting five days before the symptoms appear until the rash has completely healed.

Mpox usually lasts 2-4 weeks.

Prevention

Employers should implement an exposure control plan (including up to date risk assessments). This should be done with the input of CUPE members like the Joint Health and Safety Committee.

The goal of an exposure control plan must be to eliminate exposure to the infectious virus as much as possible.

The methods of control against mpox infection should be the same as for other occupational hazards, and should follow the hierarchy of controls:

- Engineering controls
- Administrative controls
- Personal protective equipment (PPE)
- Vaccination

Mpox exposure control plan – elements to consider

Engineering controls (changes to physical equipment and processes)

- Proper screening and management of suspected cases
- Using isolation and negative pressure rooms
- Ensuring proper ventilation with appropriate level filtration units
- Using source control masking
- Adopting droplet transmission precautions
- Adopting contact transmission precautions especially for handling linens, bedding, towels, clothing, etc.
- Practicing physical distancing when possible

Administrative controls (changes to work practices)

- Practicing regular and thorough hand hygiene
- Stocking and managing the distribution of personal protective equipment (PPE)
- Maintaining staffing that accommodates high rates of sick leave
- Educating workers and the public
- Adopting cleaning and laundering procedures to reduce the spread (including cleaning of high-traffic areas, use of hospital grade laundry detergent, water temperature at a minimum of 70 degrees Celsius, disinfectants for equipment)
- Ensuring infected or exposed persons are assessed by a health care professional and monitored for symptoms for 21 days
- In the case of infection, self-isolating for up to one month or as determined by regional health authorities
- In the case of infection, covering lesions with bandages when in contact with others

Personal protective equipment (PPE)

Workers must have the proper PPE. This should include:

- Fit-tested N95 respirators or more protective NIOSH-certified respirators
- Gloves, face shields, and gowns
- Annual fit-testing (or more often as required) droplet transmission precautions
- Training and testing of workers on how to put on and take off equipment safely

Mpox vaccine

The Imvamune® vaccine is authorized by Health Canada for immunization against mpox and orthopoxvirus infections in adults 18 years of age and older who are at high risk of exposure.

The National Advisory Committee on Immunization (NACI) recommends the Imvamune® vaccine be offered to people with high-risk exposures to a probable or confirmed case of mpox, or within a setting where transmission is happening.

The vaccine has been shown to significantly reduce symptomatic illness if received within four days of exposure to a person infected with the virus. It can be provided up to 14 days following exposure, which may lessen symptoms.

At the time of publication, most provinces experiencing mpox outbreaks are offering targeted vaccination campaigns. To find out if you are eligible, contact your local public health provider by calling 811 or by visiting your provincial health authority's mpox information page (tip: Search with keywords "mpox vaccine" and the name of your province).

FOR MORE INFORMATION, CONTACT:

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