

Mpox (formerly known as Monkeypox)

Mpox (formerly known as Monkeypox) is a rare infectious disease caused by the mpox virus (**MPXV**), genus orthopox. Mpox virus is related to, but distinct from, the viruses that cause smallpox (variola virus) and cowpox. Cases of mpox are usually found in central and western Africa and it is uncommon to find cases outside of that geographic area. There are two genetically distinct clades (subgroups) of mpox virus, with different human clinical and epidemiological manifestations: **Clade I (formerly known as the Congo Basin or Central African clade)** is associated with human-to-human transmission and case fatalities historically reported of 10%. Clade II (**formerly known as the West African clade**) mpox, manifests with limited human-to-human transmission, and with a case fatality rate of 1%. **Clade II is further subdivided into subclades IIa and IIb.** [10.12](#)
In 2022, there was a multi-country outbreak of mpox cases including clade IIb cases detected in Canada. Since then, cases continue to be detected in Canada. [10.6](#)

Infection Prevention & Control (IP&C) Measures

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY	
			CLINIC SETTING	HOME SETTING
ROUTINE PRACTICES	Mpox transmission may be prevented by following good hand hygiene , and closely following other Routine Practices at all times. Refer to the Routine Practices section of the IP&C Manual and/or the Routine Practices Policy for specific information.			
CONTACT DROPLET AIRBORNE	✓	✓	✓	✓


Should be used for all **suspect, probable, and confirmed** cases of mpox

USE EYE OR FACE PROTECTION AS DIRECTED IN DROPLET PRECAUTIONS
 INSTEAD OF MEDICAL MASK, USE N95 RESPIRATOR OR BETTER, AS DIRECTED IN AIRBORNE PRECAUTIONS

SPECIFIC DISEASE PROTOCOL

2024 Updates in Red

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY	
			CLINIC SETTING	HOME SETTING
SIGNAGE			OPTIONAL	N/A
			<p>Signage available at: English https://professionals.wrha.mb.ca/old/extranet/ipc/files/351039-sh-precautions.pdf French https://professionals.wrha.mb.ca/old/extranet/ipc/files/351039-sh-precautions.pdf</p>	
DURATION OF ADDITIONAL PRECAUTIONS	<ul style="list-style-type: none"> • Maintain precautions until all lesions have crusted over and fallen off and new skin can be seen. • If patient is discharged or sent home from the emergency department, urgent care or clinic and still requires Additional Precautions, notify IP&C and your local Public Health office. 			

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY	
			CLINIC SETTING	HOME SETTING
HAND HYGIENE	<p>CLEAN YOUR HANDS according to the 4 moments of Hand Hygiene:</p> <p>Moment 1: BEFORE initial patient/resident/client (PRC) or PRC environment contact</p> <p>Moment 2: BEFORE aseptic/clean procedure</p> <p>Moment 3: AFTER body fluid exposure risk</p> <p>Moment 4: AFTER PRC or PRC environment contact</p>			
PERSONAL PROTECTIVE EQUIPMENT (PPE)	<p>PPE for Mpox includes:</p> <ol style="list-style-type: none"> 1. Long sleeved gown 2. N95 Respirator, equivalent or higher-level respirator <ul style="list-style-type: none"> ✓ Fit tested ✓ Seal checked before entry 3. Face or eye protection 4. Gloves <p>Requirements</p> <ul style="list-style-type: none"> • Hand hygiene must be performed before donning PPE, and during and after the doffing PPE process • Don all PPE prior to entering patient room, following established protocols (PPE Donning (English); PPE Donning (French)) • Doff all PPE (including N95 respirators) after each patient contact, following established protocols (PPE Doffing (English); PPE Doffing (French)). <div style="background-color: #e6f2ff; padding: 5px; display: flex; align-items: center;">  <p>Faith or cultural head coverings do not require covering or removing</p> </div>			

SPECIFIC DISEASE PROTOCOL

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ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY	
			CLINIC SETTING	HOME SETTING
TRIAGE	<p>Ask PRC to perform hand hygiene, and put on a medical mask</p> <p>Cover any lesions as best as possible with clothing, sheet gown, or a dressing 10.5 10.10</p> <p>Place them in an AIR or single room with the door closed with a dedicated toilet or commode as soon as possible</p> <p>An Airborne Isolation Room (AIR) is not necessary, but may be used while ruling out other infectious diseases (e.g., varicella or measles are part of the differential diagnosis). 10.10</p>	N/A	<p>If booking an appointment for suspected mpox, tell PRC to: Wear a well-made, well-fitting medical mask and cover any lesions with clothing or bandages 10.6</p> <p>Consider booking their appointment at the end of the day, if possible.</p> <p>PRC presents at clinic, and it is known they have mpox or states they may have mpox: On arrival immediately provide PRC with a medical mask. Ask them to perform hand hygiene, and change their mask to a medical mask if wearing one</p> <p>Place them in a clinic room with the door closed as soon as possible.</p>	<p>If PRC states they may have mpox or are confirmed to have mpox</p> <p>If known before visit: Ask PRC to wear a well-made, well-fitting mask and cover any lesions with clothing or bandages, prior to HCW arrival. 10.6</p> <p><u>Don appropriate PPE</u></p> <p>If not know until time of visit: Immediately excuse yourself from the room and perform hand hygiene and don PPE.</p>

SPECIFIC DISEASE PROTOCOL

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ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY	
			CLINIC SETTING	HOME SETTING
ADMISSION SCREENING	<p>Screening PRCs for signs and symptoms of any communicable disease (e.g., fever, chills, malaise, etc) is part of Routine Practices (e.g., PCRA). 10.5 10.10</p>			
ACCOMMODATION	<p>Place an PRC with suspect, probable or confirmed mpox infection in an AIR or a single room with the door closed with a dedicated toilet or commode</p> <p>An Airborne Isolation Room (AIR) is not necessary, but may be used while ruling out other infectious diseases (e.g., varicella or measles are part of the differential diagnosis) 10.3 10.10</p> <p>Note: Individuals with organisms known to spread via the airborne route (e.g., TB) as well as those with a respiratory viral illness needing AGMPs are prioritized for AIR placement.</p> <p>After the PRC has left, leaving the room empty to allow for air exchanges is not necessary with mpox. 10.10</p>		Single clinic room	<p>Stay home and, as much as possible, isolate in a separate area away from other household members (e.g. private room for sleeping and washroom)</p> <p>Where possible, avoid areas commonly used by others in the home</p> <p>If PRC does not have somewhere to isolate, have them contact Public Health 10.6</p> <p>Only leave isolation to access urgent medical care or for other similar emergencies. 10.6</p>

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<p>COHORTING</p>	<div style="border: 1px solid black; padding: 10px; background-color: white;"> <p>If a single room is not available, then precautions should be taken to minimize exposure to surrounding individual:</p> <ul style="list-style-type: none"> ✓ Have the PRC don a medical mask over their nose and mouth (and wear as tolerated) ✓ Maintaining spatial separation (i.e., seated away from others, maximizing the distance between beds) ✓ Covering exposed skin lesions with clothing, sheet or gown as best as possible 10.10 ✓ Contact your site, program, area's Infection Control Professional (ICP) or designate to determine the best options for cohorting. 10.10 </div>	
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SPECIFIC DISEASE PROTOCOL

2024 Updates in Red

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY	
			CLINICS	HOME VISITS
ENVIRONMENT/ EQUIPMENT CLEANING	<p>Be vigilant with routine Infection Prevention and Control (IP&C) practices, including hand hygiene, cleaning and disinfecting equipment, and cleaning and disinfecting the care environment according to usual protocols</p> <p>Use facility-approved disinfectants for equipment and environmental cleaning and disinfection (i.e., Accel Intervention)</p> <p>Follow manufacturer’s recommendations for concentration, contact time and care in handling. Accel Intervention requires a 1-minute wet contact time</p> <p>Avoid cleaning activities that could resuspend dried material from lesions:</p> <ul style="list-style-type: none"> ✓ dry dusting ✓ sweeping ✓ vacuuming 10.3 <p>Wet cleaning methods are preferred</p> <p>Increase frequency of cleaning and disinfection of high-touch surfaces to at least twice daily and when visibly soiled</p> <p>Dedicate non-critical patient care equipment to a single patient. Clean and disinfect all reusable equipment with facility-approved disinfectant prior to removal from isolation room. Equipment and supplies that cannot be cleaned/disinfected must be discarded</p> <p>On discontinuation of precautions/discharge of patient, privacy curtains must be changed.</p>		<p>Follow Routine Practices for cleaning and disinfecting of equipment that leaves the home/goes between homes</p>	<p>Avoid cleaning activities that could resuspend dried material from lesions:</p> <p>dry dusting sweeping vacuuming 10.3</p>
			<p>Wet cleaning methods are preferred.</p>	

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY		
			CLINICS	HOME VISITS	
Laundry	<p>Wear PPE as outlined above during collection and bagging of all linens at the point of use</p> <p>Handle soiled laundry/linen (e.g., bedding, towels, personal clothing) in a manner to avoid contact with lesion material that may be present on the laundry. Gently and promptly contain soiled linen; do not shake or handle in manner that may disperse infectious particles into the air and onto surrounding surfaces.</p> <p>Bag linen in a leak-proof bag, sealed, or tied and placed inside an impermeable bag for transport to laundry area. Only fill bag 2/3 full. Bags to be sealed in the room before removal.</p> <p>Use standard medical laundry facilities, whenever they are available. If not available, wash items in a standard washing machine with hot water (70°C) with detergent and completely dry in a commercial dryer.</p>				
					<p>Wear an N95, gown and disposable gloves to handle contaminated laundry</p> <p>The gloves and gown should be properly disposed of after each use. <i>Do not reuse PPE for any other tasks. Do not use same PPE to handle clean laundry</i></p> <p>Wash any exposed skin that may have come in contact with contaminated laundry with soap and water. 10.6</p>

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY	
			CLINICS	HOME VISITS
PATIENT TRANSPORT Transport within facilities Transport between facilities	<p>Notify Receiving Department, unit, program in advance, re: PRC on Additional Precautions (Contact, Droplet and Airborne) for contact, suspected or confirmed mpox.</p> <p>Follow steps i – vi in section directly below.</p>			
	<p>Notify Patient Transport Services/Emergency medical services (EMS) in advance, re: PRC on Additional Precautions (Contact, Droplet and Airborne) for contact, suspected or confirmed mpox.</p> <p>Notify receiving facility in advance, re: PRC on Additional Precautions (Contact, Droplet and Airborne) for contact, suspected or confirmed mpox.</p> <ol style="list-style-type: none"> i. PRC and staff to perform hand hygiene ii. PRC to wear a medical mask during transport, and when outside of isolation room (for medically essential purposes only) iii. Staff to wear <u>PPE as outlined above</u>. Staff shall not wear the same PPE they wore to enter and assist the PRC in their room to assist with transport. Once out of the room, staff shall doff the PPE they are wearing and don new PPE to assist with transport. iv. Cover skin lesions with a clean gown, clothes, sheet, or bandages. If lesions are weeping, bandages must be used. v. If the PRC’s bed or personal wheelchair is used for transport, wipe the steering handles and side rails with disinfectant and allow required wet contact time before removing it from the room. vi. Disinfected handles of the transport chair or stretcher or the PRC bed are considered clean until gloves have direct contact with the patient or patient equipment. 			

<p>PATIENT TRANSPORT cont'd</p> <p>Discharge</p>	<p>PRC to preform hand hygiene. Follow steps ii - iv in section directly above</p> <p>PRC and accompanying individuals should not take public transport with multiple passengers (e.g., bus).</p> <p>Preferred option: Use private vehicle with “previously exposed” contacts (e.g., family members) or immune individuals.</p> <ul style="list-style-type: none"> ○ If not possible, contact your site, program, area’s ICP or designate to discuss best options. 		<p>See “Discharge” direction under Acute Care</p>	
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ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY
PREVENTION	<p>Prompt identification and management of cases and contacts</p> <p>Vaccination can protect people, but no vaccine is 100% effective. It is important to let your PRC know other ways to reduce the risk of exposure, whether or not they have been vaccinated. See Discharge Teaching</p> <p>More information on the vaccine used to protect against mpox, can be found in the Mpxox Vaccine factsheet.^{10.6}</p>		
CONTACT FOLLOW-UP	<p>IP&C will perform facility-based contact tracing of those receiving care (i.e., not healthcare workers)</p> <p>All contacts exposed to the case from the onset of symptoms and until all the scabs have fallen off and there is intact skin underneath (about 3-4 weeks), should be followed-up^{10.8}</p> <p>IP&C will determine if the contact is high, intermediate, or low risk (see Appendix A)</p> <p>Where there are high risk contacts, in addition to monitoring for signs and symptoms for 21 days after last exposure, ID must be consulted to consider post-exposure prophylaxis with a vaccine effective against mpox</p> <p>Contacts of cases are monitored for 21 days for development of signs/symptoms consistent with mpox. Isolation is not required unless symptoms develop. Contacts who develop signs/symptoms compatible with mpox shall be immediately isolated, ICP/designate contacted, and Infectious Diseases consulted</p> <p>IP&C/designate will report patient contacts of cases/exposure to a case to Manitoba Health via the Clinical Notification of Reportable Diseases and Conditions form.</p>		<p>Public Health will conduct all the contact follow up in the community. Refer to Section 7.2: “Management of Contacts” in the Communicable Disease Management Protocol: Mpox (Orthopoxvirus) Infection. Province of Manitoba, Public Health Branch.</p> <p>https://www.gov.mb.ca/health/publichealth/cdc/protocol/mpox.pdf</p>

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY	
			CLINICS	HOME SETTING
DISCHARGE TEACHING Confirmed Case 10.7	<p><i>Mpox is currently being transmitted through close, sustained physical contact. This includes sexual contact.</i></p> <ul style="list-style-type: none"> ✓ Stay home and, as much as possible, isolate in a separate area from other household members (e.g. private room for sleeping and washroom) or facility residents ✓ Where possible, avoid areas commonly used by others in the home/residence ✓ Surfaces/objects in common spaces that may be accessed by the cases should be adequately cleaned and disinfected ✓ If case does not have somewhere to isolate, have them contact Public Health ✓ Only leave isolation to access urgent medical care or for other similar emergencies. When out of isolation, wear a well-made, well-fitting medical mask and cover any lesions with clothing or bandages ✓ Avoid directly touching other people, including through sexual contact ✓ After being deemed no longer contagious, cases should wear a condom during any sexual activity for 12 weeks ✓ Avoid contact with those at higher risk of severe mpox illness including immunosuppressed people, pregnant women, and children under 12 years of age ✓ Cover any lesions (e.g., long pants, sleeves, bandages) ✓ Avoid sharing items or objects or exposing other people to clothes, towels, bedding, linens, or other materials used or worn by the infected person. Unless unable to do so, cases should be responsible for handling and laundering their own clothing, bedding, towels, etc. instruct those responsible for laundry to clean their hands immediately after handling soiled laundry ✓ Cases should also be responsible for handling and washing their own utensils and dishes ✓ <u>Clean hands</u> often (washing with soap and water for at least 15 seconds or using alcohol-based hand sanitizer) 			

Confirmed Case
Cont'd

- ✓ Follow Respiratory Hygiene
- ✓ If breastfeeding, cases should seek advice from their healthcare provider
- ✓ Do not donate blood or any other body fluid (including sperm) or tissue
- ✓ Avoid contact with animals, including household pets as the virus can spread to animals
- ✓ Call ahead, if seeking health care, and let them know you have symptoms of mpox to avoid exposing other people. Wear a well-made, well-fitting medical mask and cover any lesions with clothing or bandages.

Close
Contacts^{10.7}

- ✓ Clean hands often (washing with soap and water for at least 15 seconds or using alcohol-based hand sanitizer)
- ✓ Follow Respiratory Hygiene
- ✓ Consider wearing a well-fitting medical mask around others in enclosed indoor spaces
- ✓ Do not donate blood, cells, tissue, breast milk, semen, or organs during the 21 days after the last exposure
- ✓ Avoid all sexual contact during the monitoring period
- ✓ Avoid non-essential interactions in enclosed indoor settings with those at higher risk of severe mpox illness including congregate settings (e.g., personal care home, assisted living facilities, etc.), immunosuppressed people, pregnant women, and young children. If this is unavoidable, consider wearing a well-fitting medical mask in these settings
- ✓ To prevent possible spread to animals, including pets, livestock, and wildlife, have someone else care for your animals. If this is not possible, wear a well-fitting medical mask and gloves when near the animals. Clean hand often (washing with soap and water for at least 15 seconds or using alcohol-based hand sanitizer) before and after contact with the animal or items they have had contact with, and before putting on and after talking off gloves
- ✓ If symptoms develop, isolate at home, and follow guidance above to prevent spread to others. Notify public health or Health Links – Info Santé (204-788-8200 or toll-free at 1-888-315-9257) of your symptoms. You should be assessed by your health care provider. Call ahead and let them know you have been exposed to mpox and have symptoms, to avoid exposing other people. Wear a well-made, well-fitting medical mask and cover any lesions.

Adapted from: Manitoba Health (2023). Mpox (monkeypox). <https://www.gov.mb.ca/health/publichealth/diseases/mpox.html>
Please periodically check MB Health mpox website for any updates or changes related to PRC education regarding mpox.

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY	
			CLINICS	HOME SETTING
VISITOR / ACCOMPANYING INDIVIDUAL/ DESIGNATED CAREGIVER MANAGEMENT	<p>As directed on the Additional Precautions sign, visitors are to report to the nursing station before entering the room</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p><i>Only close (essential) Visitors/Accompanying Individuals (AI)/Designated Caregivers (DC) should be allowed (close family members and those providing care, including essential emotional support as specified by the person or alternate decision maker)</i></p> <ul style="list-style-type: none"> ✓ All persons must clean their hands when entering and exiting the room ✓ Visitors/AI/DC should have access to the same PPE as staff ✓ Provide instruction on hand hygiene and use of PPE as necessary, including an N95 respirator ✓ N95 Respirators: <ul style="list-style-type: none"> ➤ Staff shall show visitor/AI/DC how to seal check an N95 Respirator ➤ Although this is an N95 respirator the protection afforded by this respirator is at a reduced level as it has not been FIT tested 10.8 ➤ Visitor/AI/DC must be made aware of this risk. ✓ Educate the visitor/AI/DC on: <ul style="list-style-type: none"> ➤ The risk to the health of the visitor/AI/DC ➤ The risk of the visitor to spread infection ➤ The ability of the visitor/AI/DC to follow precautions. </div>		<p>Discourage visitors</p> <p>Advise case to avoid contact with those at higher risk of severe mpox illness including immunosuppressed people, pregnant women, and children under 12years of age.</p>	

1. EPIDEMIOLOGY / CAUSE

Mpox is caused by the monkeypox virus (MPXV), an Orthopoxvirus related to vaccinia, cowpox, and variola (smallpox) viruses. [10.7](#)

2. DEFINITIONS

Confirmed Case: A person who is laboratory confirmed for mpox virus by detection of unique sequences of viral DNA either by real-time polymerase chain reaction (PCR) and/or sequencing.

Probable Case: A person of any age who presents with an unexplained rash or lesion(s), AND has one or more of the following:

1. An epidemiological link to a probable or confirmed mpox case in the 21 days before symptom onset, such as:
 - Face-to-face exposure, including health workers without appropriate personal protective equipment (PPE)
 - Direct physical contact, including sexual contact; or contact with contaminated materials such as clothing or bedding
2. Reported travel history to, or residence in, a location where mpox is reported in the 21 days before symptom onset.

Suspect Case: A person of any age who presents with one or more of the following:

1. An unexplained acute rash AND has at least one of the following signs or symptoms
 - Headache
 - Acute onset of fever (>38.5°C),
 - Lymphadenopathy (swollen lymph nodes)
 - Myalgia (muscle and body aches)
 - Back pain
 - Asthenia (profound weakness)

Note: It is not necessary to obtain negative laboratory results for listed common causes of rash illness in order to classify a case as suspected.

2. An unexplained acute genital, perianal or oral lesion(s).

3. CLINICAL PRESENTATION (SIGNS & SYMPTOMS)

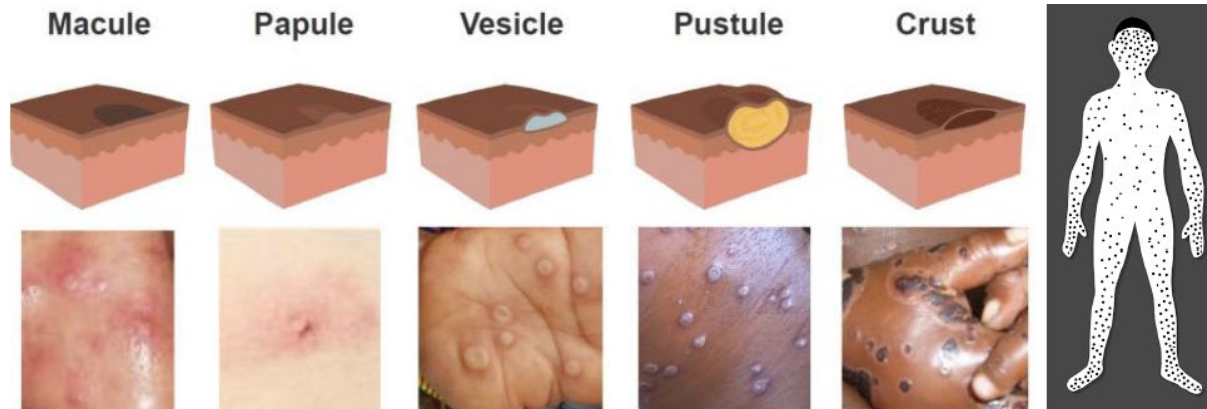
Symptoms [10.6](#) are typically “flu-like”. These typically occur 0 – 5 days before the appearance of rash (lesions) [10.5](#) and can include:

- fever
- headache
- muscle aches
- back aches
- chills
- exhaustion
- swollen lymph nodes

However, they may occur during or after the onset of rash (documented in the 2022 outbreak).

Several days after these symptoms appear, a rash may appear anywhere on the body, but is typically found on the face, palms of the hands and soles of the feet. The lesions progress through four stages (macular, papular, vesicular to pustular) before scabbing over and resolving, over a period of two to three (3) weeks. Close intimate contact during sex is known to be a risk factor, and the lesions may start and be localized to the sites of contact (e.g. genital lesions). [10.6](#)

Mpox illness is usually self-resolving within a period of 2 to 4 weeks. The severity of illness depends on the health of the infected individual, how they were exposed, and the strain of the infecting virus. There are two clades or strains. Clade II (formerly known as the West African strain), which had been identified in the global outbreak of 2022 (caused mostly by clade IIb virus), typically causes milder illness than clade I (formerly known as the Congo Basin or Central African strain). In previous outbreaks, mpox infection has caused death in between 0 to 10 percent of those infected, with the higher rate seen among those infected with clade I. [10.6](#)



Images courtesy of Sunnybrook Hospital Monkeypox Summary (2022)

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Treatment for mpox is mainly supportive. For severe cases, consult infectious diseases for consideration of antivirals.

COMPLICATIONS

Young children and immunocompromised individuals might be at increased risk of complications, which may include: [10.5](#)

- proctitis
- pharyngitis
- bacterial superinfection
- corneal infection (may lead to vision loss)
- sepsis
- pneumonia
- myocarditis
- encephalitis
- death

4. ROUTE OF TRANSMISSION

Mpox does not generally spread easily between people. Current evidence suggests that mpox spreads in 4 ways:

1. FROM PERSON TO PERSON including:

- i. Direct contact with an infected person's lesions or scabs on the skin (even if not visible) or mucous membranes (e.g., eyes, nose, mouth)
- ii. Contact with an infected person's body fluids such as blood, saliva, and semen
- iii. Through respiratory particles, such as from talking, breathing, coughing, or sneezing (usually requires prolonged (hours) close face-to-face contact)

2. **INDIRECT CONTACT** with contaminated objects used by or with an infected person (e.g., medical equipment, furniture, high touch surfaces, clothing, linens, towels etc)

3. **FROM ANIMALS TO HUMANS** e.g., via a bite or scratch or through meat preparation or consumption of undercooked infected meat

4. Transmission from mother to infant via vertical transmission across the placenta [10.2](#) [10.5](#) (which can lead to congenital mpox) or during close contact during or after birth.

5. INCUBATION PERIOD

The incubation period of monkeypox virus averages 6 to 13 days (range 5 to 21 days).

6. PERIOD OF COMMUNICABILITY

An individual with mpox infection is considered infectious from the start of their symptoms, including prodromal symptoms, and until the rash/lesions have scabbed, fallen off, and new skin is present. This also includes the healing of all mucosal surfaces (mouth, throat, eyes, vagina and anorectal area). At this time, it is not known with certainty if a person can transmit the infection before they become symptomatic. [10.5](#)

7. DIAGNOSIS

Clinical diagnosis of mpox can be difficult, and it is often confused with other infections such as syphilis, herpes simplex virus (HSV) infection, chancroid, varicella zoster and other common infections. Clinicians should be vigilant and consider mpox in their differential diagnosis if the individual reports travel and possible exposure to other cases including through sexual contact.

7.1 Screening/Specimen Collection

Routine laboratory testing should be performed to rule out other more common diagnoses.

Consult Infectious Diseases for further advice on laboratory testing, diagnosis, and treatment.

Following consultation with Infectious Diseases, if mpox is considered, send the following specimens to Cadham Provincial Laboratory (CPL) for mpox polymerase chain reaction (PCR), and notify CPL in advance of submitting specimens.

On the CPL requisition, clearly indicate the differential diagnosis and relevant exposures, and the request for “mpox PCR”. Before submitting specimens, notify the CPL physician on call by calling HSC paging at 204-787-2071. Note special packaging is required for transport of specimens.

- Flocked swab of the lesion fluid. Place the swab in a sterile 100 ml urine container or sterile 5-10 ml CSF conical bottom sample tube. Transport media is not required.
 - Please note: testing for other cutaneous or mucosal viruses requires another flocced swab in viral/universal transport medium (VTM). A swab submitted in VTM can be processed for mpox PCR as well as other viruses

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- Scab or crust material. Place in a sterile 100 ml urine container or sterile 5-10 ml CSF conical-bottom sample tube. Transport media is not required.
- Nasopharyngeal (flocked) swab in VTM (note this is optional as is not the mpox specimen of choice, however is quite useful for detecting other more common causes of similar presentations such as Coxsackievirus)
- Depending on the clinical presentation, other specimens may be recommended by Infectious Diseases
 - Note: serology for mpox is not available
- Specimen transport: Transport Canada requires shipping and transport of mpox specimens to follow Category B shipping and certification, as per the [temporary certificate](#). [10.11](#)

8. SPECIAL CONSIDERATIONS

8.1 Maternal and newborn

Data regarding mpox infection in pregnancy are limited. It is unknown if pregnant people are more susceptible to mpox or if infection is more severe in pregnancy. Mpox can be transmitted to the fetus during pregnancy (and result in congenital mpox) or to the newborn by close contact during and after birth. Adverse pregnancy outcomes, including spontaneous pregnancy loss and stillbirth, have been reported in cases of confirmed mpox during pregnancy. Preterm delivery and neonatal mpox have also been reported. The frequency and risk factors for severity and adverse pregnancy outcomes are not known. Women or persons with active mpox infection should not breastfeed. There is no evidence that cesarean delivery will prevent neonatal mpox in the context of maternal/parental mpox infection. For antenatal mpox resolved by the time of delivery, mode of delivery should be determined based on obstetrical factors exclusively. In the context of active isolated genital lesions, cesarean delivery is recommended [10.2 10.10 10.12](#)

If the baby is born through active lesions (either via vaginal or cesarean delivery) or during presumed/confirmed viremia, monitor infant for signs of compromise due to mpox infection.

8.1.1 Guidance Scenarios

Mother or birthing parent is positive and still considered to be actively infected:

- Isolate the infant AWAY from the mother or birthing parent, unless infant is also determined to be positive
- If the infant is also positive, they may be isolated with the mother or birthing parent

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Actively infected mother or birthing parent wanting to have supervised contact with the infant during the infectious period [10.2](#)

- Inform them about the risk of transmission and potential of severe disease in newborns
- Strict precautions should be followed:
 - No direct skin-to-skin contact
 - Newborn should be fully clothed or swaddled. After contact remove and replace newborn's clothing and blankets
 - Mother or birthing parent shall:
 - Perform hand hygiene before and after contact
 - Wear the following PPE:
 - Gown
 - Gloves
 - Mask
 - After contact period with the newborn:
 - Have mother or birthing parent immediately remove all PPE and perform hand hygiene
 - All linens used should be placed in laundry by staff wearing appropriate PPE

Mother or birthing parent is suspected due to suspicious lesions/illness and a history of potential exposure:

- Isolate infant AWAY from mother or birthing parent until after incubation period if mother or birthing parent remains negative

Mother or birthing parent is suspected due to compatible lesions and no history of exposure:

- Isolate infant AWAY from mother or birthing parent until diagnosis is determined as NOT mpox

Mother or birthing parent is asymptomatic and a history of exposure:

- Isolate infant AWAY from mother or birthing parent until after incubation period, if remains asymptomatic

Mother or birthing parent want to breast feed:

- Breast feeding should be delayed until mother or birthing parent is off additional precautions

Stillbirths and products of conception in from pregnancies affected by mpox should have PCR testing:

- Specimen(s) collected at the source before sending to Pathology.
- If there are lesions, they should be swabbed.

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- If no lesions, collect an appropriate tissue specimen.
- For non-placental products of conception, swabs of mucosal surfaces, lesions, or other affected surfaces should be submitted.

9. OCCUPATIONAL & ENVIRONMENTAL SAFETY AND HEALTH (OESH)

Contact Occupational and Environmental Safety and Health (OESH) for staff assessment and/or concerns.

10. REFERENCES

- 10.1** BC Centre for Disease Control (CDC). (2024). Mpox: Information for Healthcare Providers on Mpox. Accessed August 19, 2024: <http://www.bccdc.ca/health-professionals/clinical-resources/mpox#top>
- 10.2** Center for Disease Control (CDC) (June 2024). Clinical Considerations for Mpox in People who are pregnant or breastfeeding. Accessed August 19, 2024 <https://www.cdc.gov/poxvirus/mpox/clinicians/pregnancy.html#contact-breastfeeding>
- 10.3** Center for Disease Control (CDC) (August 2024). Infection Prevention and Control of Mpox in Healthcare settings. Accessed August 14, 2024 <https://www.cdc.gov/poxvirus/mpox/clinicians/infection-control-healthcare.html>
- 10.4** Health Canada (December, 2022). Interim Guidance on Infection Prevention and Control for Suspect, Probable or Confirmed Monkeypox within Healthcare Settings. Accessed August 13th, 2024: <https://www.canada.ca/en/public-health/services/diseases/mpox/health-professionals/interim-guidance-infection-prevention-control-healthcare-settings.html>
- 10.5** Health Canada (June 4, 2024). Mpox (monkeypox): For Health Professionals. Accessed August 13, 2024: <https://www.canada.ca/en/public-health/services/diseases/mpox/health-professionals.html#a2>
- 10.6** McCue, K.S., Legal Counsel – Health Law. (Memo March 23, 2023). Visitor use of N95 Respirators without fit test.
- 10.7** Manitoba Health (2023). Mpox (monkeypox). Province of Manitoba. Accessed August 14, 2024. <https://www.gov.mb.ca/health/publichealth/diseases/mpox.html>
- 10.8** Manitoba Health (January, 2024). Communicable Disease Management Protocol: Mpox (Orthopoxvirus) Infection. Province of Manitoba, Public Health Branch. Accessed August 14, 2024 <https://www.gov.mb.ca/health/publichealth/cdc/protocol/mpox.pdf>

2024 Updates in Red

- 10.9** Public Health Agency of Canada (January, 2024). Mpox (monkeypox): Public Health Management of Cases and Contacts in Canada. Accessed August 13, 2024: <https://www.canada.ca/en/public-health/services/diseases/mpox/health-professionals/management-cases-contacts.html#a3>
- 10.10** Public Health Ontario (June, 2022). Infection Prevention and Control (IPAC) Recommendations for Monkeypox in Healthcare settings. Accessed August 14th, 2024: https://www.publichealthontario.ca/-/media/Documents/M/2020/monkeypox-ipac-recommendations-healthcare-settings.pdf?sc_lang=en
- 10.11** Transport Canada (June, 2022). Temporary certificate TU 0886.2: Monkeypox samples. Accessed August 19, 2024: [Temporary certificate TU 0886.2: Monkeypox samples \(canada.ca\)](#)
- 10.12** World Health Organization (2024). Strategic Framework for Enhancing Prevention and Control of Mpox, 2024-2027. Accessed August, 14th, 2024 <https://www.who.int/publications/i/item/9789240092907>

Appendix A

Appendix I: Exposure Risk Levels

Risk of Exposure	Description	Examples
High	<p>Prolonged or intimate contact, including:</p> <ul style="list-style-type: none"> • Skin/mucosa to skin contact with a case (regardless of the case's lesion location) • Skin/mucosa contact with a case's biological fluids, secretions, skin lesions or scabs • Skin/mucosa contact with surfaces or objects contaminated by a case's secretions, biological fluids, skin lesions or scabs • Face-to-face interaction with a case, without the use of a medical mask by the case or contact 	<ul style="list-style-type: none"> • Household members (e.g., family member, roommate) • Intimate or sexual contact* • Providing direct physical care without appropriate personal protective equipment (PPE) • High risk environmental contact (e.g., cleaning potentially contaminated rooms without wearing appropriate PPE) • Skin/mucosa contact with a case's unwashed bedding, towels, clothing, lesion dressings, utensils, razors, needles, sex toys, etc.
Intermediate	<p>Not meeting high-risk exposure criteria above AND:</p> <ul style="list-style-type: none"> • Limited or intermittent, close proximity exposure to a case without wearing adequate PPE for the type of exposure risk (i.e., medical mask and gloves) • Shared living space where there are limited interactions with a case or their belongings. 	<ul style="list-style-type: none"> • Sitting next to case on plane • Person sharing close proximity workspace for long periods of time
Low	<p>Not meeting the high- or intermediate-risk exposure criteria above AND:</p> <ul style="list-style-type: none"> • Very limited exposures to a case (e.g., no direct contact, and not close, face-to-face interaction). • Wearing adequate PPE for the type of exposure risk (i.e., medical mask and gloves) 	<ul style="list-style-type: none"> • Brief social interactions • Colleagues not sharing a confined or close-proximity office space

Manitoba Health (January, 2024). Communicable Disease Management Protocol: Mpox (Orthopoxvirus) Infection. Province of Manitoba, Public health Branch. <https://www.gov.mb.ca/health/publichealth/cdc/protocol/mpox.pdf>

*Contacts with very high-risk interactions with the case (e.g., intimate or sexual contact) during the pre-symptomatic phase (up to 4 days prior to symptom onset), should also be identified for follow-up. [10.8](#)