Ministry of Health

Recommendations for the management of cases and contacts of monkeypox in Ontario

Effective: July 2022

Ontario

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Disclaimer

This guidance document provides basic information only. It is not intended to provide medical advice, diagnosis or treatment or legal advice. In the event of any conflict between this guidance document and any orders or directives issued by the Minister of Health or the Chief Medical Officer of Health (CMOH), the order or directive prevails.

This document provides information for public health management of cases and contacts in Ontario. The Ministry of Health (MOH) has developed this document with contributions from Public Health Ontario (PHO) based on the best available scientific evidence and expert opinion. This document is subject to change as new evidence emerges. This document is intended to provide broad guidelines only and cannot cover every scenario that may be encountered; therefore, local public health unit (PHU) decision-making is required. Nothing in this document is intended to restrict or affect the discretion of local medical officers of health to exercise their statutory powers under the *Health Protection and Promotion Act* (HPPA).

Background

Monkeypox virus is an orthopoxvirus, first discovered in monkeys used for research in 1958 when two outbreaks of a pox-like disease were identified.[1] In 1970 the first human case of the virus was identified in the Democratic Republic of the Congo (DRC).

Most infections continue to be reported from countries in central and Western Africa where the virus is considered to be endemic.[1,2]

Sporadic cases of monkeypox in humans have been reported in various countries outside of Africa, however, most of these were deemed to be related to travel to endemic areas or to contact with infected animals imported from endemic areas.[1,2]

Since May 2022, numerous cases of monkeypox have been reported from several European, American and Western Pacific countries, in which monkeypox is not endemic and where there are no identified associations with travel to monkeypox endemic countries.[3]

On June 16, 2022 monkeypox was designated as a Disease of Public Health Significance (DOPHS) requiring the reporting of monkeypox cases (see Appendix 1: Case Definitions

and Disease Specific Information, Disease: Smallpox and other Orthopoxviruses including Monkeypox) directly to the local medical officer of health in accordance with the reporting requirements in the Act, as per routine disease processes.

Public health considerations for case management in community settings

General information

- All individuals for whom monkeypox testing is being performed should be advised to self-isolate at home (or in the community) pending test results.
    - Clinicians may use their clinical judgement to determine whether an individual classified as a person under investigation (PUI) is required to self-isolate pending test results.
- Individuals for whom monkeypox is clinically suspected but testing is unavailable or not completed, should self-isolate at home (or in the community) until the end of the period of communicability.
- See Appendix A for Infection Prevention and Control (IPAC) practices for community settings.

Self-isolation

Self-isolation at home or in the community is indicated until monkeypox infection is ruled out or until the end of the period of communicability. PHUs should advise cases to:

- Not attend work, school, or public areas.
- Stay in a separate room/area away from other household members. Whenever possible, isolating in a separate room/area should be prioritized for persons with lesions that cannot easily be covered, draining/weeping lesions, or respiratory symptoms.
- Eat meals in a separate room and away from other household members. Where possible, cases should ask someone to bring their meals to them and use dedicated items for eating and drinking.
- Use a separate bathroom if available/feasible including using separate towels from others in the home.

- Avoid sexual contact.
- Avoid contact with animals, including household pets, poultry, and livestock. Refer to Precautions to take with animals for additional information.
- Discard contaminated items directly into a waste container and do not touch the outside of the waste container or other surfaces.
- Double bag waste using strong bags, securely tied, and storing the waste in a secure bin until municipal pick-up. Wear gloves if handling bags and wash hands after removing gloves.
- See Appendix A for IPAC practices in community settings.

To support adherence to self-isolation, PHUs should consider active monitoring of confirmed cases (e.g., regular phone calls/communication).

- Cases should not enter indoor spaces outside of their place of self-isolation (e.g., grocery store, restaurant, shopping centre).
- As much as possible, cases should have necessities (e.g., medication, groceries, etc.) delivered to the place of isolation. Items should be left outside of the place of isolation and picked up only after the individual delivering the items has left to avoid contact.
- PHUs should identify potential barriers to effective self-isolation and identify supports as needed and available (e.g., help with essentials such as groceries, providing instructions for hand washing laundry, access to home care laundry services, etc.; voluntary alternate isolation spaces), with attention to a non-stigmatizing, equitable and client-centred approach.

Recognizing the burden of a prolonged isolation period, PHUs may use their discretion in permitting a case to exit their place of self-isolation in limited situations and not during peak times to reduce contact with others (e.g., to pick up medications from a pharmacy, exercise outdoors and/or do laundry in a shared laundry facility). PHUs should assess this on a case-by-case basis and ensure that a case can adhere to risk mitigation measures such as:

- If the case lives somewhere with shared spaces (e.g., corridor/hallway, elevator, stairway) they should wear a medical mask to exit their place of self-isolation and keep lesions covered (e.g., wear bandages, long sleeve top, pants)

    - If a PHU determines that a case's lesions are not easily covered (e.g., face, hands) then they may decide as part of their assessment that a case should not leave their place of isolation.
- Cases should maintain a physical distance of at least two metres from others and avoid large crowds/public areas.
- Cases should avoid coming in contact with shared objects (e.g., benches, water fountains, furniture, etc.)
- If a shared object is touched, cases should use a household disinfectant wipe to disinfect the object (e.g., laundry machine buttons and handles)
- Cases should clean their hands often with alcohol-based hand rub or soap and water, including before exiting the place of self-isolation and upon return. Refer to PHO's Best Practices for Hand Hygiene in All Health Care Settings for additional information.

Case source control/reducing transmission risk

For individuals self-isolating at home, PHUs should provide counselling on how to reduce the risk of transmission to other household members or caregivers including:

- Avoid contact with those at higher risk of severe monkeypox illness including people who are immunosuppressed or pregnant, and/or children under 12 years of age.[9]
- A medical mask should be used for source control, especially if respiratory symptoms such as a cough or sore throat are present.
- Cover skin lesions as much as possible (e.g., bandages, long sleeves, long pants).
- Avoid areas commonly used by others in the household, if possible.
    - Surfaces/objects in common spaces that may be accessed by the case should be adequately cleaned and disinfected after use (see Appendix A).
- Avoid leaving the home unless necessary (e.g., to seek essential medical care) or at the discretion of the PHU (see considerations for permitting a case to exit their place of self-isolation above).
- Avoid non-essential household visitors.

Seeking medical care

PHUs should provide information to cases on risk mitigation measures when accessing urgent medical care such as:

- Using their own private vehicle where possible
    - If the case is not able to use their own vehicle, the PHU should consider assisting the case in transportation (e.g. private taxi) to avoid the use of public transportation (e.g. bus) and advise the case to use appropriate risk mitigation measures (e.g., use of a medical mask, keeping lesions covered, hand hygiene).
- Alerting health care providers of the infection prior to leaving isolation (if possible) and upon arrival to ensure appropriate infection control and prevention practices.
- While at the health care setting, wear a medical mask, perform hand hygiene, and keep lesions covered as feasible.

Cases should postpone elective medical visits and other elective procedures (e.g., elective dental visits, elective blood tests) until they have completed their self-isolation.

Treatment

Decisions regarding treatment of individual cases, including the use of antiviral medications, are at the discretion of the attending clinicians. In general, treatment is supportive as the infection is self-limiting in nature. Antivirals may be considered for individuals who are severely ill and/or at high risk for severe disease; for more information on antivirals, refer to the Ministry of Health's Monkeypox Antiviral Guidance for Health Care Providers document. For additional resources, visit Monkeypox Virus (gov.on.ca).

Breastfeeding

According to the WHO, it is not currently known if monkeypox virus and/or antibodies are present in breastmilk.

- The WHO recommends that continuing or stopping infant feeding practices should be assessed on a case-by-case basis.
- Cases who choose to breastfeed should take risk mitigation measures including performing hand hygiene before and after each feeding, wearing a medical mask, covering lesions which may have direct contact with the infant to the greatest extent possible (e.g., with clothing, a gown, bedding), and if only one breast has lesions, to feed from the non-affected breast, if possible.

Additional assessment and recommendations are to be made on a case-by-case basis, in collaboration with the PHU and/or a health care provider (e.g., consider physical status of mother, disease severity, risk of transmission from mother to infant).

Precautions to take with animals

Although no cases of monkeypox have been reported in animals in Canada, cases should avoid contact with animals, including household pets, poultry, and livestock:

- Keep your pets in the home. If possible, ask someone else in the home who is not sick and who has not been exposed to care for the pet. This is especially important for rodents, rabbits and non-human primates.
- Avoid close or prolonged contact with pets, for example, avoid direct contact, including touching, snuggling, and kissing animals, especially if the case has unhealed sores on the face, hands, or arms.
- Take precautions when providing care for pets, for example, wear a mask when in the same room as any pet, especially if the case has sores in the mouth or is coughing/sneezing. Wash hands with soap and water or use an alcohol-based hand rub immediately before and after touching pets, their food, or supplies; if the case has rash/sores on the hands and must touch an animal, they should be advised to wear disposable gloves to avoid potential disease transmission.
- Any person who may have been exposed to monkeypox should not work with wildlife, livestock, or poultry until they are advised by a health care provider or PHU that they don't pose any risk for onward transmission of the virus.
- PHUs with knowledge of a confirmed case with ongoing exposure to mammals (excluding dogs and cats) should report the animal details (no personal health information) to the Ontario Ministry of Agriculture, Food and Rural Affairs at 1-877-424-1300 for an animal health risk assessment.

Caregivers and household members

See Appendix A for more information on IPAC for caregivers and household members.

Ending the self-Isolation period

PHUs should assess when cases can end their self-isolation on a case-by-case basis and in consultation with a health care provider, if required. In general, cases are no longer considered infectious when all lesions have scabbed over, and new skin has formed underneath.

Adapted from the UKHSA, a phased approach on ending self-isolation is recommended. This includes:

Phase One:

- Criteria on ending self-isolation:
    - Absence of fever for at least 72 hours,
    - Absence of respiratory signs and symptoms (e.g., sore throat, cough),
    - No new lesions for at least 48 hours,
    - Lesions on the face/arms/hands have scabbed over and fallen off with a fresh layer of skin formed underneath,
    - No lesions in the mouth, and
    - All non-face/arms/hand lesions have scabbed over.
- PHUs should advise cases to adhere to the following recommendations until all lesions have scabbed over and fallen off with a fresh layer of skin formed underneath:
    - Wear a medical mask when leaving the place of self-isolation.
    - Continue to cover any remaining scabbed lesions when leaving their place of self-isolation or having close contact with others (e.g., genital or truncal lesions would be covered by clothing).
    - Continue to avoid close contact with those at higher risk for severe illness (young child, pregnant and/or immunosuppressed individuals).
    - Avoid shared water facilities (e.g., pool, hot tub).

Phase Two:

- The case can resume their usual activities, including sexual activity, once all lesions have scabbed over and fallen off with a fresh layer of skin formed underneath.

- As a cautious approach, it is recommended that cases use barrier methods (e.g., condoms) for at least 12 weeks during any sexual activity following symptom resolution. This is in line with recommendations from the Public Health Agency of Canada as well as the WHO and other jurisdictions.
    - There is currently no available evidence that monkeypox is transmitted via genital excretions (i.e., seminal or vaginal fluids) and guidance will be updated as additional evidence becomes available.
- Information on blood donations for those who have had Monkeypox is available from Canadian Blood Services.

Public health recommendations for contact management in community settings

General information

Table 1 provides advice on when to initiate management for confirmed, probable and suspect monkeypox cases and persons under investigation.

- Backward contact tracing (BCT) can be used to identify potential source cases or exposure venues/events, and support case detection (e.g., communication/outreach with populations at risk and their health care providers to promote awareness of signs/symptoms)

Table 2 provides advice on exposure risk assessment for contacts in community settings.

Contact monitoring can range from passive self-monitoring to active monitoring by the PHU (e.g., phone calls / other regular communication).

- Active monitoring involves regular communication between the PHU and the contact (e.g., daily communication by phone or another method).
- Passive monitoring involves providing education to the contact on how to self-monitor and when to self-isolate, call the PHU and seek clinical assessment.

Contact management recommendations outlined below applies regardless of an individual's history of receiving of a vaccine for smallpox or monkeypox.

Table 1: When to initiate contact follow up for confirmed, probable and suspect monkeypox cases and persons under investigation

Case classification	Contact tracing (forward/traditional)	[13] Backward contact tracing (BCT) considerations
Confirmed case	• Initiate contact tracing as soon as possible. • Prioritize high-risk contacts.	• Initiate BCT as soon as possible.
Probable and suspect cases	• Based on a PHU risk assessment, using a precautionary approach that favours timely initiation of contact follow up for persons with high-risk exposures.	• Consider initiating BCT based on PHU risk assessment, including consideration of index of suspicion for monkeypox, and using a precautionary approach
Persons Under Investigation (PUI)	• Await test result	• N/A

Table 2: Risk of exposure assessment for contacts of a person infected with monkeypox in community settings *

Risk of exposure	Description	Examples
High†	• Direct contact between the individual's skin/mucus membranes and a case's skin lesion(s)/scab(s), mucus membranes, respiratory secretions, or body/biological fluids • Direct contact with surfaces or objects contaminated by a case's skin lesion(s)/scab(s), mucus membranes, respiratory secretions, or body/biological fluids	• Intimate or sexual partner • Touching a case's skin lesion(s)/scab(s) without wearing gloves • Prolonged face-to-face interaction with a case, without the use of a medical mask by the case and the contact • Contact with a case's contaminated bedding, linens, towels, clothing, lesion dressings, utensils, razors, needles, sex toys, etc.
Intermediate§	Does not meet high-risk criteria, but interaction may result in an unprotected exposure to infectious materials such as: • Being within two metres of a case • Direct contact with case's intact skin-only (i.e., area of skin with no lesions/scabs)	• Sitting next to a case in a taxi or ride share • Sitting next to a case on a plane or train • Shaking a case's hand when there are no lesions/scabs on the hands • Shared living space where there are limited interactions with a case or their belongings

Risk of exposure	Description	Examples
Low**	Does not meet high or intermediate risk criteria, but a limited exposure may have occurred	Individuals in same room as a case but no close proximity (e.g., co-workers in nearby cubicles) Transient or brief social interactions that did not involve close or prolonged contact or risk of direct contact with an infectious lesion
No/very low‡‡	An exposure deemed not meeting criteria for other risk categories	Individual wearing appropriate PPE at all times when interacting with a case

* At the discretion of the local PHU, an exposure may be re-classified to a different risk level due to context-specific factors

‡ For high-risk contacts, PHUs should consider implementing active monitoring.

§ For intermediate contacts, PHU's should use their discretion to initiate active monitoring or passive monitoring based on context-specific risk assessment.

** For low-risk contacts, PHU's should use their discretion to initiate monitoring based on context-specific risk assessment.

‡‡ No/very low contacts do not require monitoring.

Self-isolation (quarantine) of contacts

Asymptomatic contacts are not considered infectious and therefore quarantine is not indicated.

PHUs should advise contacts to self-isolate immediately if any symptoms develop (including non-rash prodromal symptoms) and contact the PHU.

Monitoring for signs and symptoms

- Contacts should be advised to monitor for signs and symptoms for 21 days from last exposure including new skin rash/lesions, fever (advised to take temperature twice daily), chills, headache, myalgias, and lymphadenopathy.

- Contacts should self-isolate immediately if any symptoms (including prodromal symptoms) develop and contact the PHU and a health care provider (to facilitate clinical assessment and consideration of appropriate testing).[12]
- High-risk contacts of confirmed or probable cases who are unable to self-monitor (e.g., young children) should be monitored by their caregivers.
    - If the PHU is concerned about the ability of a contact or their caregiver to complete daily self-monitoring for monkeypox signs and symptoms or adhere to self-isolation if symptoms develop, the PHU may consider active monitoring / additional supports.
- Advise contacts to avoid regular or prolonged use of fever-reducing medications (e.g., acetaminophen, ibuprofen, acetylsalicylic acid) as these medications could mask an early symptom of monkeypox.

Pre-exposure and post-exposure prophylaxis

A ring vaccination strategy is used to contain the spread of monkeypox and limit ongoing transmission. For guidance on the eligibility and priority for administration of pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP), see Monkeypox Vaccine (Imvamune®) Guidance for Health Care Providers (gov.on.ca) (2022, or as current). For additional vaccine information and guidance, visit Monkeypox Virus (gov.on.ca).

Risk mitigation measures

- Asymptomatic high-risk school-aged and adult contacts who can self-monitor for signs and symptoms of monkeypox illness should generally be able to continue their ***essential*** activities (i.e., attend work, school, and day camps).
    - As a risk mitigation measure, asymptomatic high-risk contacts should consider wearing a medical mask when in enclosed indoor settings where close or direct contact with others is unavoidable.
    - School-aged children and adults who have been identified as high-risk contacts should conduct a self-assessment for signs and symptoms of monkeypox daily, before attending their essential activities.
- When possible, asymptomatic high-risk contacts should avoid ***non-essential*** interactions in enclosed indoor settings (e.g., visiting friends/family, indoor playgrounds) where close or direct contact with those at higher risk of severe

monkeypox illness [9] (including people who are immunosuppressed and/or pregnant, and children under 12 years old) is unavoidable.

- PHUs may use their discretion in advising an asymptomatic contact to avoid an activity. In their assessment, a PHU may consider the type of contact (e.g., greater concern for a high-risk contact), the contact's ability to adhere to risk mitigation measures (e.g., ability to wear a mask, conduct self-assessment for symptoms), type of setting, etc.
- For infants and young children (under 4 years of age and not attending school) who attend daycare/childcare settings, including licensed childcare centres and licensed or unlicensed home daycare settings, the following recommendations apply if they are identified as a high-risk contact and unable to self-monitor for signs and symptoms of monkeypox illness:
    - PHUs should consider excluding the child for 21 days from their last exposure if the daycare/childcare setting provides care for two or more unrelated children.
    - If the provider only cares for one child or children from the same household, PHUs may use their discretion in advising that an asymptomatic infant or young child can attend a daycare/childcare setting if the provider is counselled on utilizing recommended PPE (see Appendix A) and if the risk of potential transmission to other individuals is deemed to be low.
        - Parents, guardians, or caregivers should assess the infant or young child for signs and symptoms of monkeypox daily, and prior to attending a daycare/childcare setting (if applicable).

Other considerations

Information on donating blood by those who are contacts of a monkeypox case is available from Canadian Blood Services.

Public health considerations for contact management in health care settings

General information

Table 3 provides advice on exposure risk assessment for a healthcare worker (HCW) who is a contact of a patient monkeypox case in a health care setting.

Table 4 provides advice on exposure risk assessment for a patient who is a contact of a HCW monkeypox case in a health care setting.

See Public health considerations for case management in community settings (above) for case management considerations for individuals with confirmed or probable monkeypox.

- Contact management advice applies regardless of an individual's history of receiving of a vaccine for smallpox or monkeypox.

See PHO's Infection Prevention and Control (IPAC) Recommendations for Monkeypox in Health Care Settings for more information on IPAC in health care settings including hospitals and outpatient settings (e.g., primary care, sexual health clinics, and vaccine clinics).

Healthcare worker contacts

Any HCW who has cared for a patient with confirmed or probable monkeypox and has had a high, intermediate, or low risk exposure should monitor for signs and symptoms of monkeypox for 21 days after last date of exposure.

HCWs and essential caregivers in congregate living settings (e.g., long-term care) should report their exposure to their employer/setting/occupational health and follow any additional guidance and workplace policies (e.g., screening/monitoring).

HCW contacts should self-isolate immediately and contact their employer/setting/occupational health if any monkeypox signs and symptoms develop including prodromal symptoms (to facilitate clinical assessment and consideration of appropriate testing).[12]

Asymptomatic HCW contacts should generally be able to continue working with risk mitigation measures in place for the 21-day period from last date of exposure such as wearing a medical mask, twice daily temperature checks, daily active screening for signs and symptoms of monkeypox (e.g., daily contact with Occupational Health).

- PHUs and/or occupational health may use their discretion in advising an asymptomatic HCW contact to avoid working. In their assessment, a PHU and/or occupational health may consider the type of contact (e.g., greater concern for a high-risk contact), the contact's ability to adhere to risk mitigation measures (e.g., ability to wear a mask, conduct self-assessment for symptoms), types of patient population served (e.g., those at higher risk of severe monkeypox illness), etc.

Table 3: Risk of exposure assessment for health care worker (HCW) contacts of a person infected with monkeypox in health care settings *

Risk of exposure	Description	Examples
High	• Unprotected direct contact between a HCW's skin (i.e., no gloves) or mucus membranes (i.e., no eye protection, no N95 respirator or medical mask) and a patient's skin lesion(s)/scab(s), mucus membranes, respiratory secretions, or body/biological fluids • HCW is inside the patient's room during any procedures that may involve producing aerosols, without eye protection, N95 respirator or medical mask, gown and gloves • HCW has unprotected direct contact (i.e., no gloves) with surfaces or objects contaminated by a patient's skin lesion(s)/scab(s), mucus membranes, respiratory secretions, or body/biological fluids	• Accidental splash(es) of patient saliva to the unprotected eye(s) or oral cavity of a HCW • HCW had direct contact with a patient's skin lesions without wearing gloves • HCW was not wearing eye protection, N95 respirator or medical mask, gown and gloves during a procedure that may involve producing aerosols including oral secretions (e.g., intubation), or re-suspension of dried fluids (e.g., shaking or changing of soiled linens) • HCW was not wearing gloves and handled contaminated materials with the patient's respiratory secretions and/or body/biological fluids (e.g., linens, clothing)

Risk of exposure	Description	Examples
Intermediate	Does not meet high risk criteria, but interaction may result in an unprotected exposure to infectious materials such as: • Being inside the patient's room during any procedure that may involve producing aerosols while wearing eye protection, gown, gloves and medical mask (i.e., no N95 respirator) • Close face-to-face contact with an unmasked patient where HCW was not wearing an N95 respirator or medical mask • Actions that result in unprotected contact (i.e., gloves, but no gown) between sleeves or other parts of the HCWs' clothing and the patient's skin lesions, bodily fluids, or soiled linens	• HCW was not wearing a medical mask and was in the patient care area where they had non-transient close (within 2 metres) face-to-face contact with an unmasked patient • HCW was turning, bathing, or assisting with transfer of a case while wearing gloves and medical mask but not wearing a gown • HCW handled materials contaminated by the patient's respiratory secretions and/or body/biological fluids (e.g., linens, clothing) while wearing gloves and medical mask but not wearing a gown

Risk of exposure	Description	Examples
Low	Does not meet high or intermediate risk criteria, but a limited exposure may have occurred without appropriate PPE for the situation	• HCW was in a patient room without wearing eye protection and medical mask • HCW was not wearing a medical mask and was in the patient care area but they did not have face-to-face contact with an unmasked patient or contact was transitory (e.g., triage) • HCW conducted vitals on the patient without wearing a gown or gloves, and the only contact was with the patient's intact skin. Any lesions were covered during the assessment and hand hygiene is performed after the assessment (e.g., patient only had genital lesions that was covered and they had no other signs or symptoms of monkeypox illness)
No/very low	An exposure deemed not meeting criteria for other risk categories	HCW wore all PPE (eye protection, N95 respirator or medical mask, gown and gloves) during all visits in the patient care area or room

* At the discretion of the local PHU or hospital occupational health/IPAC, an exposure may be re-classified to a different risk level due to context-specific factors.

Patient contacts

Any patient who has had a high, intermediate, or low risk exposure should monitor for signs and symptoms of monkeypox for 21 days after last date of exposure.

- Staff should monitor patients who are unable to self-monitor for signs and symptoms of monkeypox at least twice a day or once per shift including temperature checks and skin assessment.
- PHUs may use their discretion in deciding that a high-risk contact patient who was scheduled to be discharged/transferred from hospital should remain in hospital during their self-monitoring period. In particular, a PHU should assess the ability of both the patient contact (e.g. dementia patient) and the setting for which the patient is being discharged/transferred to (e.g. staff capacity to complete an assessment for a new rash) to appropriately monitor for signs and symptoms monkeypox infection.

Asymptomatic patients who are contacts of a confirmed case of monkeypox in a health care setting are not required to be placed in additional precautions including if they are transferred to another unit within the hospital or to a different setting (e.g. transferred from hospital to a long-term care facility).

Patient contacts should be placed in additional precautions immediately if any monkeypox signs or symptoms develop including prodromal symptoms (to facilitate clinical assessment and consideration of appropriate testing).

Table 4: Risk of exposure assessment for a patient who is a contact of a health care worker monkeypox case in a health care setting ǂ

Risk of exposure	Description	Examples
High	Unprotected direct contact between a HCW case's skin lesion(s)/scab(s) (i.e., no gloves or gown) and a patient's unprotected skin	Patient had direct contact with HCW case's unprotected skin lesions (e.g., HCW had lesion on their hand and was not wearing gloves when in direct contact with patient or HCW had an uncovered lesion on their arm and they were not wearing a gown when the lesion came in direct contact with patient).
Intermediate	Does not meet high risk criteria, but interaction may result in an unprotected exposure to infectious materials such as: • Patient had non-transient close (within 2 metres) face-to-face contact with an unmasked HCW case (i.e., HCW was not wearing an N95 respirator or medical mask)	HCW case's lesions were covered, but HCW case was not wearing a medical mask and was in the patient care area where they had non-transient close (within 2 metres) face-to-face contact with an unmasked patient

Risk of exposure	Description	Examples
Low	Does not meet high or intermediate risk criteria, but a limited exposure may have occurred without appropriate PPE for the situation	HCW case was doing vitals without wearing gown or gloves, where only contact was with patient's intact skin and the HCW case's lesions were covered and were not located on exposed areas such as their hands, arms, or face (i.e., HCW case only had covered genital or truncal lesions and no other signs or symptoms of monkeypox illness).
No/very low	An exposure deemed not meeting criteria for other risk categories	HCW case was wearing all PPE (i.e., eye protection, N95 respirator or medical mask, gown, and gloves) during all visits in the patient contact's care area or room

ǂ At the discretion of the local PHU or hospital occupational health/IPAC, an exposure may be re-classified to a different risk level due to context-specific factors

Outbreak Management

Outbreak definitions

Declaring an outbreak in a hospital/health care settings:

- **Suspect outbreak**: a single probable case of nosocomially acquired monkeypox
- **Confirmed outbreak**: a single confirmed case of nosocomially acquired monkeypox

Declaring an outbreak in a long-term care home or congregate setting:

- **Suspect outbreak**: a single probable case of monkeypox acquired in the home/setting

- **Confirmed outbreak**: a single confirmed case of monkeypox acquired in the home/setting

Considerations for outbreak management

Case management

- Isolation:
    - Isolation of confirmed cases of monkeypox in single rooms with a door that closes, and if feasible, with access to a private bathroom.
    - If a single room is not available, the case should be placed in an area at least two metres away from others, given a medical mask to wear if it is safe for the client to do so, and exposed skin lesions covered as much as possible (e.g., by clothing, gown or bedding).
    - If a private bathroom is not available, care should be taken to ensure that no items which come into contact with skin lesions or their fluids will be shared between individuals (e.g., towels). Any surfaces/items that may come into contact with potentially infectious respiratory secretions, lesions or fluid from lesions (e.g. toilet seat, toilet handle) should be cleaned and disinfected after use and before use by another individual.
    - Cases who are isolating due to monkeypox should be provided with access to key services and supports, including medical care, routine medications, mental health supports/counselling, harm reduction supplies, addiction services and supports, nicotine replacement, and naloxone (for emergency response).
    - See Treatment section for information on the use of TPoxx®.
- Monitoring:
    - Cases should be monitored daily by staff for worsening of symptoms so medical care can be arranged quickly if needed.

Contact management

- Monitoring:
    - All contacts in the congregate setting should be advised to report any signs or symptoms of monkeypox illness to staff immediately.

- Staff should conduct daily active monitoring (including daily temperature checks) of all contacts for the duration of the outbreak.
- Staff contacts should also be aware of monkeypox signs and symptoms and advised to report these to their designated workplace contact if these develop.
- See Public health considerations for contact management in health care settings for additional information.
- See Pre-exposure and post-exposure prophylaxis section for ring vaccination guidance and resources.

Personal Protective Equipment

- Staff or visitors who will be within two metres of the case, or who will/may have contact with skin lesions or their fluid (e.g., during the provision of direct care) are to wear appropriate PPE (See PHO's Infection Prevention and Control (IPAC) Recommendations for Monkeypox in Health Care Settings)
- Additional precautions are to be maintained until all scabs have fallen off and new skin is present.
- Where possible, pregnant women or severely immunocompromised individuals should not provide direct care for confirmed cases of monkeypox.

Transportation

- If a monkeypox case must be transported off-site (e.g., for a medical appointment), the client should wear clean clothes/gown, wash their hands, wear a medical mask, and cover their lesions to the best extent possible for transport.
- Staff accompanying the monkeypox case are to wear appropriate PPE (as per that recommended for staff involved in provision of direct care).

Resources

See Appendix A for IPAC information in community settings.

See PHO's Infection Prevention and Control (IPAC) Recommendations for Monkeypox in Health Care Settings for more information on IPAC in health care settings including hospitals and outpatient settings (e.g., primary care, sexual health clinics, and vaccine clinics).

Declaring an outbreak over

An outbreak may be declared over by the PHU when there are no new cases in residents or staff linked to exposures in the setting after 42 days (two incubation periods have passed) from the last date that others were potentially exposed to an infectious case.

References

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Appendix A - Infection Prevention and Control in community settings

Recommendations for personal protective equipment

- Caregivers and household members should wear a medical mask when entering the case's isolation space (e.g., to deliver food, change linens, etc.).
- Caregivers should wear a medical mask and disposable gloves for direct contact with lesions. These should be disposed of after single-use.
- Caregivers should perform hand hygiene regularly, including after touching skin lesions or lesion material, before putting on and after removing gloves, or after handling clothing, linens, or environmental surfaces that may have come into contact with fluid from lesions.

Recommendations for handling soiled laundry/linens

- Avoid direct contact when handling contaminated laundry/linens (i.e., wear disposable gloves).
- Do not shake or otherwise agitate soiled laundry in a way that could disperse infectious particles.
- Washing laundry in a standard washing machine with warm water and detergent is acceptable.

Recommendations for cleaning/disinfection in the home environment

- Do not share dishes or utensils when eating; however, dishes/utensils can be used by others in the home if these are properly washed between uses either in a dishwasher or in a sink, using warm water and soap.
- Clean and disinfect contaminated surfaces (e.g., bathroom, if shared, after use by the person isolating).
- No special cleaning products are required; usual household cleaning and disinfecting products are sufficient to inactivate the virus. These should be used

as per manufacturer instructions, including following recommended contact times, where available.

Recommendations for waste disposal

- The risk to humans within the household who may directly handle contaminated domestic waste (e.g., gauze, wound dressings) generated within the home setting can be reduced through practices such as performing regular hand hygiene, wearing gloves, discarding contaminated items directly, and not touching the outside of the waste container or other surfaces with contaminated gloves.
- The risk to individuals who collect domestic waste (e.g. sanitation worker/collector) can be reduced by advising the case/household members to use strong bags, ensure bags are securely tied, double bag waste, and reinforce routine practices for management of waste (i.e., good hand hygiene, gloves if bags are handled).
- Measures to prevent transmission from domestic waste to susceptible animals at home (including pets), or to peri-domestic animals (especially rodents) can include double bagging waste, using strong bags, ensuring bags are securely tied, and storing the garbage in a secure bin prior to collection.