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1.0 PREAMBLE

The British Columbia Centre for Disease Control (BCCDC) has adapted the interim guidance from the Public Health Agency of Canada (PHAC) in consultation with regional health authorities (RHAs) for public health management of human illness caused by mpox. Previously known as monkeypox, the preferred term mpox was released by the World Health Organization (WHO) in November 2022.

This document intends to guide public health management of mpox in British Columbia (BC) in the community settings, including case management, contact identification and management, and the use of Imvamune® for post-exposure prophylaxis (PEP) and pre-exposure prophylaxis (PrEP). This guidance is based on currently available scientific evidence and expert opinion and is subject to change as new information on the clinical spectrum, transmissibility, epidemiology, and public health intervention effectiveness becomes available. This guidance builds upon relevant Canadian guidance developed for the current mpox outbreak, in addition to available guidance from the WHO (WHO, 2022d). It has been developed based on the Canadian and BC situation. It should be read in conjunction with relevant provincial and local legislation, regulations, and policies; therefore, may differ from guidance developed by other countries and provinces or territories. For information regarding current global status of mpox, visit the BCCDC, Canada.ca, WHO and other mpox websites (Adler et al., 2022; Antia et al., 2003; Beer & Bhargavi Rao, 2019; CDC, 2022a; Direction de Sante Publique de Montreal, 2022; European Centre for Disease Prevention and Control (ECDC), 2022a; PHAC, 2024; UK Government, 2022a, 2022b); furthermore, unique situations may require some discretion in adjusting these guidelines which are meant to be supportive, not prescriptive.

1.1 Authority

The authority for the control of communicable diseases, through case and contact management, including for mpox, exists under the BC Public Health Act (2008).

1.2 Public Health Goal

Mpox is an emerging infectious disease in Canada. The public health objectives are to stop the transmission chain (containment) (WHO, 2022d), to prevent endemicity, to protect and preserve health and health systems, and to reduce mortality and morbidity from mpox infections. In addition, reasonable measures should be taken to prevent spillover into animal populations, especially rodents, and to prevent establishment of an

animal reservoir. These guidelines intend to inform policy and practice in the community settings, e.g. non-health care settings, to limit the transmission of mpox.

Public health measures recommended in this document are informed by the following guiding principles:

- Current knowledge on the pathogen, the disease and the epidemiology of mpox in BC and elsewhere;
- Existence of a safe and effective vaccine to prevent infection, but with a limited access to vaccine supply;
- Proportionality of recommended measures with the disease severity and potential for transmission;
- Risk and benefits of interventions;
- Utilization of means considered least restrictive for achieving the public health goal;
- Perspectives of the affected population groups obtained through active community engagement.

2.0 THE PATHOGEN

Mpox is a deoxyribonucleic acid (DNA) virus belonging to the *Orthopox* genus, related to the smallpox virus. There are two circulating clades: clade one (I) and clade two (II). Clade two (II) is implicated in the current outbreak reported from countries outside of Africa and is associated with less severe disease and lower case-fatality.

2.1 Clinical Illness

Mpox resembles smallpox, but signs and symptoms are less severe (Huhn et al., 2005). Symptoms can vary depending on different factors, including exposure characteristics, age, presence of conditions that alter immune response, previous immunity from smallpox vaccination and viral strain. Individuals can present with a variety of signs and symptoms. People suspected of having mpox should be tested based on the BCCDC Mpox Diagnosis & Testing.

The BCCDC Mpox Symptoms page provides a list of key symptoms that are related to mpox.

Classic mpox infection has two clinical phases, lasting 2-4 weeks, described in Table 1 below. In this outbreak, lesions have occurred before or without the systemic symptoms.

Table 1: Signs and symptoms of mpox

Acute Phase	Symptoms
Prodromal Phase (Duration 1-5 days)	Frequent signs and symptoms: • Lymphadenopathy, mainly inguinal (Direction de Sante Publique de Montreal, 2022) • Fever • Fatigue • Intense headache • Myalgia • Back pain • Joint pain Other signs and symptoms: • Sore throat • Cough • Nausea/vomiting (seldom) • Diarrhea (seldom) (Huhn et al., 2005)
Skin Rash	Skin rash begins 1-3 (CDC, 2022b; WHO, 2022b), days after the prodromal phase. In the 2022 global outbreak, rash most frequently involves oral, inguinal and peri-anal regions. The rash generally progresses in the following order: • Macules; • Papules; • Vesicles; • Pustules; • Crusting of the pustules, which then scale off. Lesions are frequently painful and may be pruritic. The number of lesions and affected regions vary from few clustered lesions to a full disseminated rash. Both synchronous and asynchronous lesions have been described in the current global outbreak. Lesions have been found on all parts of the body, including palmar and plantar areas. Lesions frequently begin in the genital and anal areas, and the mouth. Some cases developed proctitis, which can present with

Acute Phase	Symptoms
	rectal pain and/or bleeding. Facial lesions can potentially lead to ocular involvement, affecting the conjunctivae and cornea.
Complications	Secondary skin infections and long-term skin effects, such as prolonged ulcer healing, scarring and changes in pigmentation (CDC, 2022c) have been reported. Mpox infection have required hospitalization in a small proportion of patients (Thornhill et al., 2022; UK Health Security Agency, 2022b). Among reported reasons for hospitalizations are pain control, particularly severe rectal pain, and soft tissue or oropharyngeal infections (ranging from severe pharyngitis to epiglottitis) that could impede oral intake. Data from previous outbreaks and cases in African countries also reported less common but serious complications, including: • Pneumonia • Sepsis • Encephalitis • Keratitis leading to vision loss • Fetal loss (Hughes et al., 2021)

3.0 DIFFERENTIAL DIAGNOSIS AND CO-INFECTIONS

Lesions associated with mpox can resemble other infections, including: herpesviruses (e.g. herpes simplex virus, varicella zoster virus [i.e. shingles and chicken pox]), syphilis (*Treponema pallidum*), chancroid (*Haemophilus ducreyi*), other poxviruses (e.g. molluscum contagiosum virus) and lymphogranuloma venereum (*Chalmydia trachomatis* serotypes L1, L2 and L3). Co-infection has been described with varicella (CDC, 2022c) and sexually transmitted infections (STIs) (for ex. gonorrhea, chlamydia and syphilis) (Thornhill et al., 2022).

3.1 Vulnerable Populations

Children, pregnant people and some immunocompromised individuals are considered at higher risk for severe disease (CDC, 2022g; WHO, 2022c). Cases identified in 2022 in Canada and western countries have been described as mild (ECDC, 2022b). As of September 2023, no deaths have been reported in Canada. However, mpox deaths have been reported in Europe and the United States (CDC, 2023; ECDC, 2023). The case-

fatality rate with the West African clade has previously been estimated at approximately 1% (WHO, 2022a).

In the 2022 outbreak, a high proportion of cases were in people who self-identify as gay, bisexual and other men who have sex with men (gbMSM) (ECDC, 2022c). Though the reported cases thus far have been primarily among gbMSM, it is important to note that anyone can become exposed and infected.

3.2 Immune Response from Previous Immunization

There may be cross-immunity with previous smallpox immunization. However, the effectiveness and durability of previous smallpox vaccination is not known. In BC, the smallpox immunization program ended in 1975. For immunocompetent individuals who had received a live replicating 1st or 2nd generation smallpox vaccine in the past and who sustain a high-risk exposure to a probable or confirmed case of mpox, a single dose of Imvamune® may be offered (i.e. as a booster dose) as per National Advisory Committee on Immunization (NACI) recommendations (PHAC, 2022c).

4.0 INFECTION PREVENTION AND CONTROL

The recommended personal protective equipment (PPE) is determined by the nature of interaction between the host and source of the pathogen (human, animal, or fomite). Typically, PPE in the community settings would consist of gloves and masks. Eye protection would be necessary if splashes of contaminated materials could occur, including respiratory droplets. Gowns and N95 respirators would be less commonly indicated in community settings. Gloves, in addition to hand hygiene, can prevent transmission by direct contact of a lesion or via fomites. Depending on the potential extent of the exposure, gowns may be required, albeit their use is uncommon outside health care settings. A well-fitting mask is expected to offer good protection against respiratory droplets and unintentionally dispersed infectious particles (e.g. handling contaminated clothing or linens). Airborne transmission has not been reported (CDC, 2022e). N95 respirators are not considered essential in community settings except for potentially aerosol-generating procedures (e.g. nebulization). More details on various types of masks are available on the BCCDC website.

Mpox-specific infection prevention and control guidance has been developed for health care settings and can be found on the Provincial Infection Control Network (PICNET) of BC website.

5.0 INCUBATION PERIOD

The incubation period is the time interval between initial contact with an infectious agent and the appearance of the first sign or symptom of the disease in question. The incubation period for mpox is 5-21 days (PHAC, 2022a; WHO, 2022b) with many cases in the current outbreak reporting initial symptoms at the lower end of the typical range.

6.0 EPIDEMIOLOGY

Since May 2022, mpox outbreaks have been identified in multiple non-endemic countries worldwide. All cases in non-endemic countries are of clade II (formerly the West African clade). This strain is related to previous outbreaks seen in Nigeria, United Kingdom (UK), United States (US), Israel, and Singapore prior to 2022. In Canada, the first case was confirmed on May 19, 2022 in Montreal. BC's first reported case was confirmed on June 6, 2022. Mpox was not known to be present in BC prior to the 2022 outbreak.

In BC, there were 190 cases during the 2022 outbreak. These cases of mpox have been among men who have sex with other men with a median age in the mid-30s. There have been reports of cases in women and children in Europe and US. Investigations of the 2022 global outbreak show that a high proportion of cases are people who self-identify as gay, bisexual and gbMSM. Though the reported cases as of June 2023 have been primarily among gbMSM, it is important to note that anyone can become exposed and infected. The recent cases among gbMSM are likely due in part to shared social networks, as well as large gatherings that may have facilitated transmission. Commonly reported activities in cases include having more than one sexual partner (Antinori et al., 2022; ECDC, 2022a), attending social events and meeting through dating applications. Fifteen percent of cases in BC reported a concurrent STI, and an increasing proportion of BC cases have been human immunodeficiency virus (HIV) positive. The latter finding may reflect lower vaccine effectiveness (Soucheray, 2023), difference in disease severity, and/or differences in health seeking behaviour in the HIV population. There have been no deaths related to mpox in BC. Since the end of the 2022 outbreak, there have been occasional travel-related cases in BC, as well as cases related to limited secondary transmission.

The Government of Canada has developed a Mpox Outbreak Update website that provides more information on additional cases in Canada as the investigation evolves.

7.0 TRANSMISSION

7.1 Human-to-Human Transmission

The global outbreak starting in 2022 involves human-to-human transmission in the community and is primarily facilitated by direct contact with cutaneous lesions or mucosal surfaces. Fomites have been reported to be implicated in some transmission events (Vaughan et al., 2020; WHO, 2022e). Respiratory droplets may play a role in transmission as the virus has been detected by PCR in respiratory secretions although respiratory route is unlikely to play a significant role in population transmission, if any at all (Adler et al., 2022).

Mpox is not known to linger in the air and is not transmitted during short periods of shared airspace (CDC, 2022e). Special air handling is not necessary. Activities that can suspend viral particles, such as shaking linens or clothing, should be avoided.

Mpox virus has been detected in many body sites and fluids including seminal fluid (Antinori et al., 2022). However, the significance of this finding on the potential for sexual transmission through semen is not yet known. Transmissions in the context of sexual activity are likely related to close contact, e.g. skin-to-skin contact as described above.

Mpox virus can cross the placental barrier (CDC, 2022e; Khalil et al., 2022). No case of vertical transmission has been reported in non-endemic countries. However, a case of fetal infection with pathological signs (Mbala et al., 2017) of mpox has been described from an endemic country, indicating the potential for vertical transmission (CDC, 2022e).

7.1.1 Zoonotic Transmission

Past transmissions in non-endemic countries were commonly zoonotic and acquired through close contact with infected live or dead rodents or non-human primates (bite, scratch, or ingesting meat) during travel. The 2003 mpox outbreak in humans in the Midwestern US was associated with contact with infected prairie dogs (*Cynomys* sp) acquired as personal pets from a common distributor that imported Gambian rats (*Cricetomys* sp.) and other exotic species (Reed et al., 2004). The current global outbreak, however, is facilitated by human-to-human transmission in the community. The UK joint Human Animal Infections and Risk Surveillance group conducted a qualitative assessment of the risk to the human population of mpox infection from various pet animal

species. PHAC is leading a human-animal interface working group that is compiling evidence of animal susceptibility and associated risks to humans and animals.

The appendix: Evidence summary regarding zoonotic transmission and mpox in animals provides more details, including information on the management of animals when an animal owner has been diagnosed with mpox, or when animals are visiting or residing in a facility affected by mpox.

7.1.2 Transmissibility

The preliminary estimates of the current outbreak suggest a basal reproduction rate (R_0) greater than 1 in gbMSM (Endo et al., 2022; Kwok et al., 2022; Office of Chief Science Advisor of Canada, 2022). In European countries with high transmission, models using May and June 2022 data estimate a R_0 range from 1.4 to 2.0. Previous estimates have been reported to be as high as 2.13 (CI 1.46 – 2.67) (Grant et al., 2020; Kwok et al., 2022).

7.1.3 Entry Points

Mpox can enter through the skin, respiratory tract and mucous membranes (eyes, nose, mouth, genitals, and anus).

7.1.4 Reservoir

The reservoir remains unknown, however it has been found that rodents (CDC, 2022e) and small mammals in central and western Africa may play a part in the mpox life cycle and transmission to people. A number of animal species are susceptible to mpox, especially rodent and non-human primate species, but the full range of animals that are susceptible to mpox remains unknown (CDC, 2022f; Hughes et al., 2021; The Center for Food Security & Public Health, 2022). It is now accepted in the scientific community that non-human primates are not a reservoir for mpox despite the name of the virus.

7.1.5 Period of Communicability

The period of communicability is the time during which an infectious agent may spread directly or indirectly from an infected person to another person; it is also known as the 'infectious period'.

Emerging evidence suggests that some mpox cases can transmit the virus up to 4 days prior to symptom onset (PHAC, 2024) and remain infectious until lesions have fully resolved, (i.e. crusts fall off and new skin is forming underneath).

8.0 DIAGNOSTIC TESTING

Mpox virus infection can be diagnosed by polymerase chain reaction (PCR), a type of nucleic acid testing (NAT) method to detect the presence of DNA in the patient sample. Mpox serology (IgG/IgM) is not currently available.

Mpox is considered a Category A pathogen. Appropriate biosafety and handling measures are required, however there is a temporary exemption to allow samples collected from suspect cases to be shipped to the laboratory in a routine manner (i.e. Category B).

Testing details can be found on the BCCDC Health Professionals page, Mpox Testing Guidelines or the eLab Handbook.

9.0 SAMPLING RECOMMENDATIONS FOR SUSPECT CASES

- For all individuals, if skin rash or mucosal lesions are present, it is recommended to collect lesion material (roofs, crusts, aspirate, exudate, tissue) If lesions are present on different areas of the body, use a different swab for different anatomic areas. Swab 2 to 3 lesions per area, unroof vesicles, and/or vigorously swab dry or crusted lesions using a single swab. Put sample into a sterile container or submit the aspirate or swab of a vesicular/pustular lesion in universal transport medium. Samples should be shipped refrigerated for mpox virus testing.
- For individuals who do not have skin lesions and are suspected to be in the first stage of illness (prodrome), oropharyngeal swabs, nasopharyngeal swabs, ethylenediaminetetraacetic acid (EDTA) blood, and urine can also be considered for testing.
- If there is localized pain/swelling in regions such as the throat or rectum but no evidence of skin lesions, collect a swab in or around the affected area with an oropharyngeal or a rectal swab. Where appropriate consult with a BCCDC Microbiologist on call (604-661-7033) and/or your local hospital microbiologist to ensure that the best sample types are collected to maximize test sensitivity and the wide differential of agents is considered.
- Analytic sensitivity and specificity of PCR for fluid-filled lesions (vesicles, pustules, ulcers) and tissues are very high (>98%).

- If mpox test results are negative or indeterminate, and the clinical suspicion remains high based on clinician/Medical Health Officer (MHO) assessment (e.g. collected sample was of suboptimal quality or collected outside of optimal diagnostic window), retesting should be considered.
- Testing is **not** recommended for individuals without symptoms, even for contacts to a confirmed mpox case, if they remain asymptomatic.

10.0 SURVEILLANCE AND REPORTING

Mpox is a reportable disease for clinicians and laboratories under the Public Health Act.

The PHAC updated its case definition in mid-2022, leading to development of the BC case definitions. These case definitions can be found on the BCCDC website on the Case Definitions page.

For more information regarding case counts, visit to the BCCDC Mpox webpage.

10.1 Reporting Requirements

Health professionals are expected to report all confirmed and probable cases to the MHO for which clinical presentation is highly suggestive of mpox as per clinical assessment.

Local public health should report confirmed and probable cases to BCCDC as follows:

1. **Confirmed** cases – report via the health authority's respective electronic public health reporting system within **24 hrs** The Mpox Case Report Form (CRF) should also be submitted electronically.
2. **Probable** cases:
    a. If **pending lab** results, report within 24 hours of receiving lab result.
    b. If **no pending lab** results (e.g. client could not be tested), then report via electronic public health reporting system within 24 hours and complete the Mpox CRF.

BCCDC Public Health Laboratory reports all positive results to the ordering provider, MHO and BCCDC.

BCCDC will report confirmed and probable cases as reported by health authorities to PHAC.

10.2 Inter-Jurisdictional Notification

Inter-jurisdictional notification (IJN) to other provinces, territories, or countries may be required in some situations, including but not limited to:

- Investigating a case with a home address in another jurisdiction; or
- Identifying a contact from another jurisdiction; or
- Flight notification if case investigation and contact tracing determine that a significant exposure has occurred.

BC RHAs are responsible for notifying other RHAs of cases or contacts identified in their area. BCCDC will facilitate IJN communication between provinces, territories and other countries about mpox cases and contacts. If an out of province case or contact is identified, an IJN must be sent via email to BCCDC at publichealthresponsenotifications@bccdc.ca using the British Columbia Mpox Inter-Jurisdictional Notification Form, available on the BCCDC Communicable Disease Manual, Chapter 1 webpage. If you are unable to send the British Columbia Mpox Inter-Jurisdictional Notification Form via email, you may send it via fax to BCCDC at 604-707-2516. These notifications will then be shared with the appropriate province, territory or country through the usual inter-jurisdictional notification channels.

Information required for case and contact management is included in the BC Mpox Inter-Jurisdictional Notification Form.

11.0 PUBLIC HEALTH MANAGEMENT OF CASES AND CONTACTS

11.1 Clinical Management of Cases

Guidance on the clinical management of people with mpox can be found at: http://www.bccdc.ca/health-professionals/clinical-resources/mpox#management

11.2 Case Management

Case investigation and management provides education and support to cases of mpox and is important to prevent transmission. In some situations, finding a source case can also identify other chains of transmission.

Strategies to prevent secondary transmission include:

1. Minimizing contact with susceptible individuals.
2. When contact is unavoidable, utilizing measures such as PPE to minimize risk of transmission.
3. Minimize the risk of transmission through fomites and the environment.
4. Minimizing the risk of a spillover into animal populations and potential establishment of an animal reservoir.

Specific recommendations for cases of mpox are listed in Table 2. Public Health Authorities can pursue active monitoring of cases at a frequency that is determined necessary to provide support to the case.

These recommendations apply to confirmed and probable cases for the duration of the period of communicability, as well as to suspect cases until the case is reclassified based on test results. If the test results are negative, restrictions should be removed unless clinical suspicion remains high and repeat testing is being considered.

As the duration of these restrictions could last a few weeks, emotional, and social support for the case may be required. Referral and collaboration with community organizations could help to alleviate unintended consequences of public health measures. In general, the least restrictive measures should be implemented to achieve public health goals. Recommendations are targeted to avoid direct contact, (for ex. coverage of lesions, frequent hand hygiene, avoidance of sharing objects), respiratory precautions (wearing a medical mask with other people) and avoiding high-risk persons.

Table 2: Recommendations for cases during the period of communicability. Period of communicability ends when the scabs fall off and new skin is present

Route	Recommendations
Prevent transmission by direct contact and by droplets	a) All sexual contact involving direct contact, sharing of objects, or face to face contact should be deferred. b) In-person social interactions that may result in close contact should be minimized. The following measures should be taken: i. Avoid any direct, unprotected close contact with others, particularly skin-to-skin contact. Cover lesions with clothing, bandage, or facial coverings to prevent direct contact as well as contamination of objects in the environment.

Route	Recommendations
	ii. Wear a mask when within 2 meters of other people. If this is not possible (e.g. a child with mpox), then others should wear a mask when in the presence of the mpox case. iii. Meet others in outdoor spaces. iv. If seeking health care, alert the health care team before arrival, whenever possible, or advise them at the time of arrival. c) Avoid indoor gatherings as much as possible. d) Avoid close contact with known immunocompromised persons, children less than 12 years old, and pregnant people. e) Apply respiratory hygiene: i. Cough or sneeze into a tissue or the bend of the arm, not the hand. ii. Throw any used tissues into a waste container that has a plastic bag in it, as soon as possible. iii. Perform hand hygiene immediately afterwards. f) In the situation of a breastfeeding case (suspect, probable and confirmed), a discussion should occur between the case and the appropriate health care provider. g) Do not donate blood or any other bodily fluid(s) (e.g. sperm) or tissue while infectious. h) Non-essential travel should be deferred. i) Do not share food, drinks, joints, etc. with others.
Prevent transmission by indirect contact, fomites, and the environment	a) Avoid sharing objects used or touched by the case (e.g. bedding, clothing, utensils, sex toys, etc.). Where feasible, the case should clean and disinfect the objects and surfaces. If another individual must clean, then they should avoid any

Route	Recommendations
	unprotected direct contact with these objects by using the appropriate PPE and apply hand hygiene afterwards. b) The following household-specific measures are recommended: i. Do not share a bed. ii. Avoid common areas (e.g. bathroom) in the home. iii. Remaining in a separate room as much as possible while you are contagious. iv. If (ii) and (iii) above are not possible, clean and disinfect common areas after contact by the case. c) Dishware and utensils can be cleaned in a dishwasher (standard cycle is sufficient) or by hand. d) Laundry can be performed in a standard washing machine using hot water with detergent and should be dried in a drying machine. Avoid shaking or handling contaminated laundry, including linens, in a way that may dispense infectious particles into the air. Any surfaces that come into contact with contaminated laundry should be cleaned and disinfected. e) It is recommended that surfaces and objects the case may come into contact with are frequently cleaned and disinfected, with particular attention paid to high-touch surfaces and objects (e.g. tabletops, countertops, toilets, door handles, light switches, computer keyboards, etc.) with soapy water and store-bought disinfectants. For more details on cleaning and disinfection, including the use of bleach, consult the BCCDC website. f) Dispose of masks or other contaminated materials in a manner that prevents access by pets or wild animals (rodents in particular). For example, trash should be contained in a high-quality garbage bag and kept in an animal-proof receptacle.

Route	Recommendations
Prevent potential transmission to animals	Refer to the Appendix

11.3 Contact Tracing

The purpose of contact tracing is to offer PEP, when indicated, to provide education on the symptoms of mpox, when and how to get a medical assessment, and appropriate measures to prevent further transmission. Symptomatic contacts should also be offered testing as soon as possible. Contact tracing should occur for confirmed and probable cases, and at the direction of the MHO for suspect cases.

Contacts who are adequately immunized (two previous doses of Imvamune®) at the time of exposure are at lower risk of developing disease. Vaccine efficacy is estimated to be about 85% (CDC, 2022d). Contacts who are using adequate PPE (see Infection Prevention and Control), and without known breaches, are considered to be at no additional risk. Transmission via the droplet route would be considered a lower risk in outdoor environments than indoor environments.

The following table aims to classify exposures into high, medium, and low risk categories. MHOs may exercise their discretion based on unique circumstances of a situation that may change the risk category described below in Table 3.

Table 3: Risk assessment for mpox exposures

Exposure Risk Level	Characteristics	Examples
High Risk	Direct contact between a person's skin or mucous membrane and the case's skin lesions, mucosal lesions or bodily fluids without appropriate PPE. Unprotected skin or mucous membrane contact with objects that have been in contact with infectious bodily fluid or lesions (i.e. clothing, bedding, sex toys).	• Sexual contact • People sharing the same bed • Household members

Exposure Risk Level	Characteristics	Examples
	Any procedure that may generate aerosols from bodily fluids, skin lesions, or dried exudates without the use of respirators (e.g., N95 or equivalent respirators) or a medical masks and other PPE (e.g., gloves, gowns, and eye protection).	
Medium Risk	Face-to-face contact within 2 meters for at least one hour AND does not meet the high-risk exposure characteristics.	• Co-workers within 2 meters for one hour or more
Low Risk	Brief close contact AND does not meet the high/medium-risk exposure characteristics.	• Brief social interactions

11.4 Contact Management

In order to achieve public health objectives of containment, contact tracing and monitoring recommendations are outlined in Table 4. Public health should conduct contact tracing to identify all high and medium risk contacts and assess unknown risk contacts.

Table 4: Contact tracing and monitoring modalities for mpox contacts

Contact Risk Level	Contact Education	Monitoring	Post-Exposure Prophylaxis (PEP)
High	By public health	Active monitoring (daily or other appropriate frequency) for 21 days after last exposure.	Recommended
Medium	By public health	Passive surveillance or modified active monitoring (initial contact with or without follow up at 21 days).	Generally not required unless recommended by MHO
Low	By case or public health	Passive surveillance or modified active monitoring.	Generally not required unless recommended by MHO

11.4.1 Public Health Recommendations for Asymptomatic Mpox Contacts, Including Caregivers

Early non-specific symptoms, such as fatigue, may not be easily recognized. Therefore, it is essential for contacts to be vigilant about monitoring for signs and symptoms of mpox. Contacts can go to work, school, and most regular activities as long as they are asymptomatic. In addition to offering PEP to eligible contacts, the following additional measures in Table 5 are recommended.

Table 5: Public health recommendations for contacts

Type of Contact	Recommendations

All Contacts	• Be aware of signs and symptoms of mpox.
	• Self-monitor for 21 days after last exposure.
	• Avoid taking any anti-pyretics, such as acetaminophen and ibuprofen, to avoid suppressing a fever. If these medications need to be taken, body temperature should be recorded prior to administration.
	• Be aware of where and how to seek clinical care should symptoms occur.
	• If symptoms occur, follow recommendations in Table 2 until clinical and/or lab assessment has ruled out mpox.
	• Follow respiratory etiquette and hand hygiene.
	  ○ Cough or sneeze into a tissue or the bend of their arm, not their hand.
	  ○ Throw any used tissues into a waste container that has a plastic bag in it, as soon as possible.
	  ○ Perform hand hygiene immediately afterwards.
	• Follow any site or facility-specific infection control protocols (e.g. health care settings).
	• Apply hand hygiene before and after any contact with a case or after touching surface/object within the case's environment, especially those that the case has had contact with (i.e., touched with hands, sat on, lay upon, skin has touched, mouth has touched, etc.). Hand hygiene involves one of:
	  ○ Washing one's hands regularly with soap and water for at least 20 seconds.
	  ○ Using hand sanitizer containing at least 60% alcohol.

Type of Contact	Recommendations
	○ If hands are visibly soiled, soap and water is the preferred method.
High Risk Contacts only	• All sexual contact involving direct contact, sharing of objects, or face to face contact should be deferred during the 21 days after last exposure to the case • Be vigilant with self-monitoring if working or living with people at higher risk of severe disease (children under 12, pregnant people and immunocompromised). • Avoid unnecessary contact with people at higher risk. Note, this measure does not restrict anyone's ability to work, including health care workers • For animal owners, specific advice is available in Table 7 (Appendix)

It is recommended that a single caregiver be identified for the case, where possible. Unless necessary, this person should not be at higher risk of severe disease (children, pregnant people, and immunocompromised people). The caregiver should receive specific advice on adequate PPE, symptoms to monitor, as repeated exposure is expected to occur during the period of communicability. PEP could be discussed even if no identifiable high-risk or medium-risk exposure occurred.

11.5 Post-Exposure Prophylaxis

Imvamune® vaccination is recommended for high-risk contacts of confirmed and probable cases if within 14 days of their last contact with the case while infectious. PEP may be offered to medium-risk contacts if risk assessment suggests a significant exposure that is compatible with current evidence of transmission. Imvamune® is not indicated for cases of mpox. If a contact shows symptoms that are highly suggestive of mpox, diagnostic testing can be considered before provision of vaccine. The decision to test before provision of PEP should be based on index of clinical suspicion based on exposure and symptoms, and potential reduction of PEP effectiveness as a result of delayed vaccine administration.

The vaccine is ideally administered within 4 days of exposure, but can be administered up to 14 days after exposure to an infectious case or to potentially infectious material. Data suggest that early immunization within four days is necessary to prevent infection.

Between 4 and 14 days, immunization may reduce the severity of the disease (UK Health Security Agency, 2022a). Vaccine efficacy against mpox was assessed through preclinical animal studies and clinical immunogenicity studies on humans that included people living with HIV. Based on current knowledge, one dose of Imvamune® provides adequate protection against the development of mpox infection. After 28 days, if an individual is assessed as having a predictable ongoing risk of exposure, a second dose may be offered (PHAC, 2022c).

Guidance on administration, indications, contraindications, precautions, and adverse effects is available in the BC Immunization Manual.

11.6 Pre-Exposure Prophylaxis

Contact tracing, although essential, can be limited when several contacts cannot be identified and reached. To help curb transmission and achieve public health goals, an additional PrEP approach, targeting people at high-risk of infection, has been implemented in BC. Imvamune® is approved as a two-dose series by Health Canada, with a minimum interval of 28 days between doses (PHAC, 2022c).

Eligibility criteria is outlined in Table 6. NACI guidelines, dated September 23, 2022, recommends PrEP series to lab workers who are at risk of occupational exposure to replicating orthopoxviruses in a research laboratory setting (PHAC, 2022b). This NACI recommendation is not intended for lab workers in contact with patients/clinical samples within a controlled healthcare/laboratory environment.

Table 6: Eligibility criteria for mpox PrEP with Imvamune®

Eligible individuals are Two-Spirit and transgender people and cisgender males who self-identify as belonging to the gay, bisexual and other men who have sex with men community and answer yes to any of the criteria below:
Has sex with more than one partner, **or**
Has sex with a partner who has more than one partner, **or**
Has casual sex (e.g. cruising), **or**
Engages in sex work or plan to, either as a worker or a client.

12.0 REFERENCES

Adler, H., Gould, S., Hine, P., Snell, L. B., Wong, W., Houlihan, C. F., Osborne, J. C., Rampling, T., Beadsworth, M. B., Duncan, C. J., Dunning, J., Fletcher, T. E., Hunter, E. R., Jacobs, M., Khoo, S. H., Newsholme, W., Porter, D., Porter, R. J., Ratcliffe, L., … Hruby, D. E. (2022). Clinical features and management of human monkeypox: a retrospective observational study in the UK. *The Lancet Infectious Diseases*, *22*(8), 1153–1162. https://doi.org/10.1016/S1473-3099(22)00228-6

Animal Health Act. (2014, May 29). https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/14016

Animal Health Act - Reportable and Notifiable Disease Regulation. (2022, July 19). https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/7_2015

Antia, R., Regoes, R. R., Koella, J. C., & Bergstrom, C. T. (2003). The role of evolution in the emergence of infectious diseases. *Nature*, *426*(6967), 658–661. https://doi.org/10.1038/nature02104

Antinori, A., Mazzotta, V., Vita, S., Carletti, F., Tacconi, D., Lapini, L. E., D'Abramo, A., Cicalini, S., Lapa, D., Pittalis, S., Puro, V., Capparuccia, M. R., Giombini, E., Gruber, C. E. M., Garbuglia, A. R., Marani, A., Vairo, F., Girardi, E., Vaia, F., … Vergori, A. (2022). Epidemiological, clinical and virological characteristics of four cases of monkeypox support transmission through sexual contact, Italy, May 2022. *Eurosurveillance*, *27*(2). https://doi.org/10.2807/1560-7917.ES.2022.27.22.2200421

Beer, E. M., & Bhargavi Rao, V. (2019). A systematic review of the epidemiology of human monkeypox outbreaks and implications for outbreak strategy. In *PLoS Neglected Tropical Diseases* (Vol. 13, Issue 10). https://doi.org/10.1371/journal.pntd.0007791

CDC. (2022a, May 22). *Monkeypox: Monitoring People Who Have Been Exposed*. https://www.cdc.gov/poxvirus/mpox/clinicians/monitoring.html

CDC. (2022b, May 22). *Monkeypox: Symptoms*. https://www.cdc.gov/poxvirus/mpox/symptoms/index.html

CDC. (2022c, May 23). *Monkeypox: Clinical Recognition*. https://www.cdc.gov/poxvirus/mpox/clinicians/clinical-recognition.html

CDC. (2022d, June 2). *Monkeypox and Smallpox Vaccine Guidance*. https://www.cdc.gov/poxvirus/mpox/clinicians/vaccines/vaccine-considerations.html

CDC. (2022e, June 9). *CDC Monkeypox Response: Transmission*. https://www.cdc.gov/media/releases/2022/0509-monkeypox-transmission.html

CDC. (2022f, June 24). *Monkeypox in Animals*. https://www.cdc.gov/poxvirus/mpox/veterinarian/mpox-in-animals.html

CDC. (2022g, June 30). *Clinical FAQs*. https://www.cdc.gov/poxvirus/monkeypox/clinicians/faq.html

CDC. (2023, April 14). *Epidemiologic and Clinical Features of Mpox-Associated Deaths — United States, May 10, 2022–March 7, 2023*. https://www.cdc.gov/mmwr/volumes/72/wr/mm7215a5.htm

Direction de Sante Publique de Montreal. (2022, May 19). *Outbreak of genital and oral lesions associated with the monkeypox virus in Montreal and other regions*. https://santemontreal.qc.ca/en/professionnels/directeur-de-sante-publique-de-montreal/appels-a-la-vigilance/ (French version available online)

Endo, A., Murayama, H., Abbott, S., Ratnayake, R., Pearson, C. A. B., Edmunds, W. J., Fearon, E., & Funk, S. (2022). Heavy-tailed sexual contact networks and the epidemiology of monkeypox outbreak in non-endemic regions, May 2022. *MedRxiv*. https://doi.org/10.1101/2022.06.13.22276353

European Centre for Disease Prevention and Control. (2022a, May 23). *Rapid Risk Assessment: Monkeypox multi-country outbreak*. https://www.ecdc.europa.eu/en/publications-data/risk-assessment-monkeypox-multi-country-outbreak

European Centre for Disease Prevention and Control. (2022b, June 15). *Epidemiological update: Monkeypox multi-country outbreak*. https://www.ecdc.europa.eu/en/news-events/epidemiological-update-monkeypox-multi-country-outbreak-15-june

European Centre for Disease Prevention and Control. (2022c, June 28). *Considerations for contact tracing during the monkeypox outbreak in Europe, 2022*. https://www.ecdc.europa.eu/en/publications-data/considerations-contact-tracing-during-monkeypox-outbreak-europe-2022

European Centre for Disease Prevention and Control. (2023, December 5). *Implications for the EU/EEA of the outbreak of mpox caused by Monkeypox virus clade I in the Democratic Republic of the Congo*. https://doi.org/10.2900/405228

Grant, R., Nguyen, L. B. L., & Breban, R. (2020). Modelling human-to-human transmission of monkeypox. In *Bulletin of the World Health Organization* (Vol. 98, Issue 9, pp. 638–640). https://doi.org/10.2471/BLT.19.242347

Hughes, C. M., Liu, L., Davidson, W. B., Radford, K. W., Wilkins, K., Monroe, B., Metcalfe, M. G., Likafi, T., Lushima, R. S., Kabamba, J., Nguete, B., Malekani, J., Pukuta, E., Karhemere, S., Tamfum, J. J. M., Wemakoy, E. O., Reynolds, M. G., Schmid, D. S., & McCollum, A. M. (2021). A tale of two viruses: Coinfections of monkeypox and varicella zoster virus in the Democratic Republic of Congo. *American Journal of Tropical Medicine and Hygiene*, *104*(2), 604–611. https://doi.org/10.4269/ajtmh.20-0589

Huhn, G. D., Bauer, A. M., Yorita, K., Graham, M. B., Sejvar, J., Likos, A., Damon, I. K., Reynolds, M. G., & Kuehnert, M. J. (2005). Clinical characteristics of human monkeypox, and risk factors for severe disease. *Clinical Infectious Diseases*, *41*(12), 1742–1751. https://doi.org/10.1086/498115

Khalil, A., Samara, A., O'Brien, P., Morris, E., Draycott, T., Lees, C., & Ladhani, S. (2022). Monkeypox and pregnancy: what do obstetricians need to know? *Ultrasound in Obstetrics and Gynecology*, *60*(1), 22–27. https://doi.org/10.1002/uog.24968

Kwok, K. O., Wei, W. I., Tang, A., Wong, S. Y. S., & Tang, J. W. (2022). Estimation of local transmissibility in the early phase of monkeypox epidemic in 2022. *Clinical Microbiology and Infection*, *28*(12), 1653.e1-1653.e3. https://doi.org/10.1016/j.cmi.2022.06.025

Mbala, P. K., Huggins, J. W., Riu-Rovira, T., Ahuka, S. M., Mulembakani, P., Rimoin, A. W., Martin, J. W., & Muyembe, J. J. T. (2017). Maternal and Fetal Outcomes among Pregnant Women with Human Monkeypox Infection in the Democratic Republic of Congo. *Journal of Infectious Diseases*, *216*(7), 824–828. https://doi.org/10.1093/infdis/jix260

Office of Chief Science Advisor of Canada. (2022). *Monkeypox OCSScan of Evidence #2 covering the Periods of June 4 to June 10 2022*.

Public Health Agency of Canada. (2022a, June 8). *Monkeypox: Symptoms and management*. https://www.canada.ca/en/public-health/services/diseases/mpox/symptoms-management.html

Public Health Agency of Canada. (2022b, June 10). *NACI Rapid Response - Interim guidance on the use of Imvamune® in the context of monkeypox outbreaks in Canada*. https://www.canada.ca/content/dam/phac-aspc/documents/services/immunization/national-advisory-committee-on-immunization-naci/guidance-imvamune-monkeypox/guidance-imvamune-monkeypox-en.pdf

Public Health Agency of Canada. (2022c, August 3). *An Advisory Committee Statement (ACS) National Advisory Committee on Immunization (NACI) – NACI Rapid Response - Interim guidance on the use of Imvamune® in the context of monkeypox outbreaks in Canada*. https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/guidance-imvamune-monkeypox.html

Public Health Agency of Canada. (2024, January 4). *Mpox (monkeypox): Public health management of cases and contacts in Canada*. https://www.canada.ca/en/public-health/services/diseases/mpox/health-professionals/management-cases-contacts.html

Reed, K. D., Melski, J. W., Graham, M. B., Regnery, R. L., Sotir, M. J., Wegner, M. V., Kazmierczak, J. J., Stratman, E. J., Li, Y., Fairley, J. A., Swain, G. R., Olson, V. A., Sargent, E. K., Kehl, S. C., Frace, M. A., Kline, R., Foldy, S. L., Davis, J. P., & Damon, I. K. (2004). The Detection of Monkeypox in Humans in the Western Hemisphere. *New England Journal of Medicine*, *350*(4), 342–350. https://doi.org/10.1056/nejmoa032299

Seang, S., Burrel, S., Todesco, E., Leducq, V., Monsel, G., Le Pluart, D., Cordevant, C., Pourcher, V., & Palich, R. (2022). Evidence of human-to-dog transmission of monkeypox virus. In *The Lancet* (Vol. 400, Issue 10353, pp. 658–659). https://doi.org/10.1016/S0140-6736(22)01487-8

Soucheray, S. (2023, May 18). *Studies show Jynneos protection against mpox ranges from 66% to 89%* | *CIDRAP*. https://www.cidrap.umn.edu/mpox/studies-show-jynneos-protection-against-mpox-ranges-66-89

The Center for Food Security & Public Health. (2022, November). *Monkeypox*. https://www.cfsph.iastate.edu/Factsheets/pdfs/monkeypox.pdf

Thornhill, J. P., Barkati, S., Walmsley, S., Rockstroh, J., Antinori, A., Harrison, L. B., Palich, R., Nori, A., Reeves, I., Habibi, M. S., Apea, V., Boesecke, C., Vandekerckhove, L., Yakubovsky, M., Sendagorta, E., Blanco, J. L., Florence, E., Moschese, D., Maltez, F. M., … Orkin, C. M. (2022). Monkeypox Virus Infection in Humans across 16 Countries — April–June 2022. *New England Journal of Medicine*, *387*(8), 679–691. https://doi.org/10.1056/nejmoa2207323

UK Government. (2022a, May 27). *Mpox: contact tracing*. https://www.gov.uk/government/publications/monkeypox-contact-tracing

UK Government. (2022b, May 30). *Principles for monkeypox control in the UK: 4 nations consensus statement*. https://www.gov.uk/government/publications/principles-for-monkeypox-control-in-the-uk-4-nations-consensus-statement/

UK Health Security Agency. (2022a, June 17). *Recommendations for the use of pre-and post-exposure vaccination during a monkeypox incident*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1083791/Recommendations-for-pre-and-post-exposure-vaccination-during-a-monkeypox-incident-17-june-2022.pdf

UK Health Security Agency. (2022b, July 28). *Investigation into Monkeypox Outbreak in England: Technical briefing 3*. https://www.gov.uk/government/publications/monkeypox-outbreak-technical-briefings/investigation-into-monkeypox-outbreak-in-england-technical-briefing-3

Vaughan, A., Aarons, E., Astbury, J., Brooks, T., Chand, M., Flegg, P., Hardman, A., Harper, N., Jarvis, R., Mawdsley, S., McGivern, M., Morgan, D., Morris, G., Nixon, G., O'Connor, C., Palmer, R., Phin, N., Price, D. A., Russell, K., … Dunning, J. (2020). Human-to-human transmission of monkeypox virus, United Kingdom, October 2018. *Emerging Infectious Diseases*, *26*(4), 782–785. https://doi.org/10.3201/eid2604.191164

World Health Organization. (2022a, May 16). *Monkeypox - United Kingdom of Great Britain and Northern Ireland*. https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON383

World Health Organization. (2022b, May 19). *Signs and Symptoms for Monkeypox: Newsroom*. https://www.who.int/news-room/fact-sheets/detail/monkeypox

World Health Organization. (2022c, May 21). *Multi-country monkeypox outbreak in non-endemic countries*. https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON385

World Health Organization. (2022d, May 22). *Surveillance, case investigation and contact tracing for monkeypox: interim guidance*. https://www.who.int/publications/i/item/WHO-MPX-Surveillance-2022.4

World Health Organization. (2022e, July 28). *2022-23 Mpox (Monkeypox) Outbreak: Global Trends*. https://worldhealthorg.shinyapps.io/mpx_global/#2_Global_situation_update

13.0 APPENDIX

EVIDENCE SUMMARY REGARDING ZOONOTIC TRANSMISSION AND MPOX IN ANIMALS

Species Susceptibility

At this time, there is evidence that a number of animal species are susceptible to mpox, especially rodent and non-human primate species, but the full range of animals that are susceptible to mpox remains unknown. (Reynolds, Doty, McCollum, Olson, & Nakazawa, 2019), (Parker & Buller, 2013) To date, there has been one reported canine case in the current outbreak (see below). The susceptibility of other companion and food-producing animal species is largely unknown.

Transmission Dynamics

The natural lifecycle of mpox is unknown but animal-to-animal transmission among rodent and non-human primate species is documented. Animal-to-human transmission from rodent species (e.g. squirrels) has, historically, been the suspected source of human mpox cases in endemic areas through bites, scratches or handling, preparing or eating wild animals. To date, in the 2022 global outbreak, animal-to-human transmission has not been documented. There has been a single report from France of a symptomatic mpox case in a dog residing in, and having close contact (co-sleeping) with, two human cases; human-to-dog transmission was the most likely route in this case (Seang et al., 2022).

In animals, mpox viruses have been detected in skin lesions, urine, feces, oral, nasal, and conjunctival exudates. Estimates of the incubation period in animals range from 3 to 18 days and possibly much longer in potential reservoir rodent species. Symptoms in animals include: fever, depression, anorexia, conjunctivitis, respiratory signs (ie. sneezing, nasal discharge), diarrhea, oral ulcers, and skin lesions. There is limited evidence that some rodent species may carry mpox virus asymptomatically (The Center for Food Security & Public Health, 2022).

Animal health goals

- Rapid detection of animal mpox cases and animal exposures to human mpox cases;

- Prevent subsequent animal transmission to humans (animal-to-human transmission has been recognized in African countries endemic with mpox and in the 2003 US outbreak associated with imported rodents and specialty pets) (Reed et al., 2004);
- Prevent infected domestic animals, or their waste, from transmitting the virus to wildlife or other domestic animals; and
- Prevent Canadian animal species becoming domestic reservoirs for the virus.

Animal health recommendations

To address these animal health goals, **mpox in any animal species is deemed a reportable disease in BC** under sections 10(3)(a) and (b) of Appendix I of the BC Reportable and Notifiable Diseases Regulation (*Animal Health Act - Reportable and Notifiable Disease Regulation*, 2022). This includes the requirement for a veterinarian or an animal owner to report any animal exposed to mpox, possibly infected with mpox, or testing positive to mpox. Reports must be made within 24 hours to BC's Chief Veterinarian at chief.veterinarian@gov.bc.ca. Reports should include animal and owner identification, location and contact information, animal signalment, history, clinical signs, diagnostic results, and any treatment, as per section 20(3) of the Animal Health Act (*Animal Health Act*, 2014).

The Chief Veterinarian or their delegate will report any confirmed animal cases of mpox to BC public health agencies.

If animals become ill after contact with a case, owners should contact their veterinarian for an assessment https://www.cdc.gov/poxvirus/monkeypox/veterinarian/index.html.

When an animal owner has been diagnosed with mpox or is a high-risk contact of a case, the following measures are recommended to protect animals, limit onward spread to other domestic or wild animals, and limit potential transmission back to humans:

Table 7: Measures to prevent transmission to animals for mpox cases and high-risk contacts

Prevent Transmission to Animals	
Avoid close contact with animals	If possible, have another member of their household care for their animals. Do not: • Let them lick you • Snuggle or kiss them • Share food with them • Let them sit on your lap • Let them sleep in your bed
Precautions cases should take when caring for animals	If you need to care for animals during your illness: • Practice good hand hygiene and respiratory etiquette. • Cover any rash that appears. • Wear gloves and a well-fitting mask when caring for your animal(s). • Wash or sanitize your hands regularly, especially before and after touching animals, their food, or their supplies. • Dispose of masks or other contaminated materials in a manner that prevents access by pets or wild animals (rodents in particular). For example, trash should be contained in a high- quality garbage bag and kept in an animal-proof receptacle.
Animal specific care	• Keep animals away from people and animals that reside outside of your household for 21 days after the end of your infectious period. • Wherever possible, pets should remain in the home and not be sent elsewhere. • Monitor animals closely for signs of illness including: fever, depression, anorexia, conjunctivitis, respiratory signs (ie. sneezing, nasal discharge), diarrhea, oral ulcers, and skin lesions. • Contact your veterinarian by phone for further guidance if you suspect illness in your animal(s). Do not transport your animal(s) to the veterinary facility without prior discussion with your veterinarian. • Keep your cat indoors at all times. • Keep your dog in a private fenced area or ensure

Prevent Transmission to Animals	

	they're on a leash when you take them outside to defecate or urinate.
	• Preferably dispose of pet waste (not the litter) by flushing it down a toilet.
	• Disposal of rodent litter and waste:
	  ○ Spray until saturated with diluted bleach (0.5% sodium hypochlorite): 2 parts bleach to 3 parts water
	  ○ Using 2 garbage bags, double bag the damp material and place in an animal-proof receptacle for pick-up and disposal.