
Notification Timeline:

From Lab/Practitioner to Public Health: Within 48 hours

From Public Health to Ministry of Health: Within 24-48 hours

Public Health Follow-up Timeline: Initiate immediately¹

Public Health Purposes for Notification of Mpox (formerly known as monkeypox):

- To prevent transmission of mpox from imported cases and further local transmission.
- To rapidly stop the chains of transmission of mpox in the community by targeting public health measures to those highest risk for transmission.
- To prevent endemicity of mpox in Canada by preventing introduction in additional higher risk groups and the greater Canadian population through contact tracing.
- To protect public health and health care in Canada, including those services which can diagnose and manage cases, in the context of community transmission of mpox.
- Ensure the public health response and clinical management are evidence-based by enabling epidemiologic studies, research and evaluation activities that will address prioritized knowledge gaps.
- To track epidemiology trends of mpox in Saskatchewan including risk factors and distribution;
- To monitor the effectiveness of prevention and control measures;
- To take timely and evidence informed actions on outbreaks; and
- To inform the public and medical community about mpox.

¹Follow up should be initiated immediately for all probable, suspect and confirmed cases as prophylaxis for eligible contacts is time limited.

Table 1. Surveillance Case Definitions² (Adapted from Public Health Agency of Canada, September 19, 2023)

| | |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Confirmed Case | <ul style="list-style-type: none"> A person with laboratory confirmation of mpox virus at the National Microbiology Laboratory (NML) by detection of unique sequences of viral DNA either by real-time polymerase chain reaction (PCR) and/or sequencing. |
| Probable Case | <p>A person of any age who meets the suspect case definition</p> <p>AND</p> <ul style="list-style-type: none"> Has one or more of the following <ol style="list-style-type: none"> Has an epidemiological link^[a] to a probable or confirmed mpox case in the 21 days before symptom onset, such as <ul style="list-style-type: none"> face-to-face exposure, including health workers without appropriate personal protective equipment (PPE) Direct physical contact, including sexual contact; or contact with contaminated materials such as clothing or bedding <p>OR</p> <ol style="list-style-type: none"> Has an epidemiological link^[a] to a location/event where transmission of mpox is suspected or known to have occurred in the 21 days before symptom onset. <p>OR</p> <ol style="list-style-type: none"> Presumptive positive laboratory PCR initial screen result, pending NML confirmation (Saskatchewan Ministry of Health, January 2024). |
| Suspect Case | <p>A person of any age who presents with one or more of the following:</p> <ul style="list-style-type: none"> An unexplained^[b] acute rash^[c] AND has at least one of the following signs or symptoms: <ul style="list-style-type: none"> Headache Acute onset of fever (>38.5°C) Lymphadenopathy (swollen lymph nodes) Myalgia (muscle and body aches) Back pain Asthenia (profound weakness) Fatigue Pharyngitis (sore throat) Proctitis (rectal inflammation/pain) An unexplained^[b] acute genital, perianal, anorectal, and/or perioral, oral, or oropharyngeal rash or lesion(s)^[c] <p>AND</p> <ul style="list-style-type: none"> Pending, indeterminate, or invalid laboratory PCR result from NML (Saskatchewan Ministry of Health, January 2024). |

^[a] An epidemiological link can be: Face-to-face exposure, including health workers without appropriate personal protective equipment (PPE); or direct physical contact, including sexual contact; or contact with contaminated materials such as clothing or bedding.

^[b] Common causes of acute rash can include Varicella zoster, herpes zoster, measles, herpes simplex, syphilis, chancroid, lymphogranuloma venereum, hand-foot-and-mouth disease

^[c] Acute rash - mpox illness includes a progressively developing rash that can affect mucous membranes in the oropharynx and anogenital area. The rash or lesion(s) can also affect the face, trunk, limbs and palms of hands and soles of the feet. The rash or lesion(s) can last for 2 to 4 weeks and may appear as single or multiple lesions. Lesions in varying stages can be present simultaneously and progress through the following stages before falling off:

- Macules
- Papules
- Vesicles
- Pustules
- Scabs

Anorectal lesions can manifest as anorectal inflammation (proctitis), pain and/or bleeding.

² Surveillance case definitions ensure uniform reporting to allow comparability of surveillance data. The definition is not intended to be used for clinical or laboratory diagnosis or management of cases.

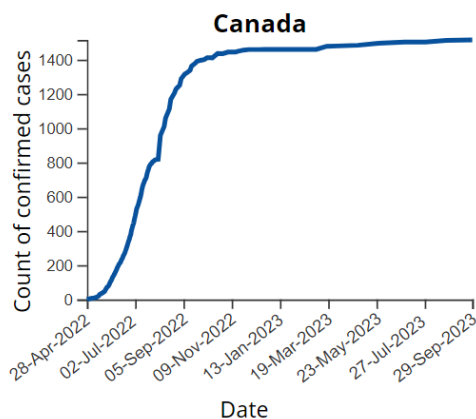
Epidemiology and Occurrence

Mpox is a viral zoonotic disease that occurs primarily in tropical rainforest areas of Central and West Africa. Since May 2022, cases have also been reported from countries without previously documented mpox transmission outside the African region (WHO, 2022).

As of July 23, 2022, more than 16,000 cases were reported from 75 countries and territories including five deaths, and the World Health Organization declared the mpox outbreak a public health emergency of international concern. During this outbreak, cases were concentrated among men who have sex with men, especially those with multiple partners. Mpox is transmitted through direct contact and although not known to be sexually transmitted, sexual exposure is high risk for transmission, due to direct contact involved.

As of September 29, 2023, the number of cases reported in Canada is 1,515 with the increase in cases plateaued by fall 2022 (see Figure 1). Saskatchewan reported a total of six cases with the last reported in October 2022. All were travel-related.

Figure 1. Total Count of Confirmed Cases of Mpox in Canada to September 29, 2023



Source: Health Infobase <https://health-infobase.canada.ca/mpox/#a6>

Clinician vigilance is required for timely diagnosis and mpox should be considered in the differential diagnosis of patients presenting with unusual rash, and other clinical signs consistent with mpox (e.g. fever, headache, and/or lymphadenopathy).

Additional information is available from the Government of Saskatchewan under [Emerging Public Health Issues](#). Refer to [Public Health Agency of Canada \(PHAC\)](#) and [World Health Organization \(WHO\)](#) for information.

Additional Background Information

Causative Agent

Mpox is a viral infection, caused by a virus of the *Orthopoxvirus* genus related to smallpox virus. There are two distinct genetic clades of the virus— clade one (I) (formerly known as the Congo Basin or Central African clade) and clade two (II) (formerly known as West African clade). The former is known to be more virulent and transmissible with case fatality rates have been reported at 10 to 14% in unvaccinated individuals (Heymann, 2022). Human infections with the clade II appear to cause milder illness and be associated with a case fatality rate (CFR) of approximately 1% to 3% in endemic countries. When outbreaks of the clade II have occurred in non-endemic countries previously, the CFR has been lower. A subtype of clade II was implicated in the 2022 outbreak (Public Health Agency of Canada, 2023).

Symptoms

Mpox typically presents clinically with fever, rash and swollen lymph nodes and may lead to a range of medical complications (Public Health Agency of Canada, 2023). The extent to which asymptomatic infection may occur is unknown.

Mpox is usually a self-limited disease with the symptoms lasting from 2 to 4 weeks (WHO, 2022).

- Typically*, the clinical presentation begins with a prodromal systemic illness consisting of one or more of the following symptoms: fever, headaches, intense fatigue, sweating, lymphadenopathy, myalgias and arthralgias. Also refer to [case definition](#) signs and symptoms.
- Within 1 to 3 days of the prodromal illness, skin or mucosal lesions (often painful) typically* appear which tend to be more concentrated on the face and extremities rather than on the trunk
- The rash evolves from macules to papules, vesicles, pustules, and crust which dry up and fall off.

*During the multi-country 2022 outbreak, not all cases presented in the typical fashion described above. Lesions may have appeared before/without systemic symptoms.

Complications

Severe illness can occur in some individuals.

Young children and immunocompromised individuals are at higher risk of severe disease and historically have a higher CFR in endemic countries. Potential complications include secondary infections, pneumonia, sepsis, encephalitis, keratitis with vision loss.

Reservoir/Source

The natural reservoir of mpox remains unknown. A number of animal species are susceptible to mpox, especially rodent species, but the full range of animals susceptible to mpox, particularly in North America, remains unknown at this time (PHAC, 2022).

Incubation Period

- Ranges from 3 to 21 days, usually 7 to 10 days (Public Health Agency of Canada, 2023).

Period of Communicability

- Cases are considered contagious from 4 days before onset of symptoms (Public Health Agency of Canada, 2024). This includes the prodrome and lasts until after the scabs have fallen off and new skin can be seen.

Mode of Transmission

- Mpox can be spread to humans in three ways; animal-to-human, human-to-human and via fomites.
- The virus can enter the body through broken skin, the respiratory tract, or through mucous membranes. Transmission can occur via direct contact with mpox skin lesions, non-intact skin or scabs, indirect contact with clothing or linens used by an infected person, or close contact with the respiratory tract secretions of an individual with mpox (Public Health Agency of Canada, May 27, 2022).
- Human-to-human transmission is increasing and occurs primarily through:
 - Direct contact with bodily fluids, skin lesions or lesion materials (including sexual contact), and this can occur through direct contact with lesion materials, such as contaminated clothing, linens or bedding.
 - Large respiratory droplets transmitted during prolonged face-to-face contact, which places infected individuals' household members and health care workers at greater risk.
- The secondary attack rate is 10%, with attack rates from 50% to 100% having been reported among contacts living with an infected person (Heymann, 2022).
- Placental mother-to-fetus transmission is also possible (congenital mpox) (Public Health Agency of Canada, 2023).
- Milder cases of mpox may sometimes go unnoticed and present a risk of person-to-person transmission.
- The longest documented chain of transmission in a community was nine successive person-to-person infections (Patel, et al., 2023).

Risk Factors

Risk factors associated with exposure to mpox include:

- History of travel in the past 21 days to areas experiencing mpox transmission
- Exposure to animals known to transmit mpox in an area endemic with mpox

-
-
- Contact to a known case of mpox
 - Exposure to settings where exposure to respiratory droplets of cases or where people may come into contact with or share personal items of a case (towels, bedding, linens, etc.) such as households, congregate living settings, daycares, health care settings, or mass gatherings
 - In the context of sexual behaviours that may pose a risk for acquisition or transmission, the following circumstance may require alternative contact tracing approaches:
 - Anonymous partnering in specific venues or via e-partnering sites.

Individuals with a history of smallpox vaccine may afford some protection to mpox.

Medical risk factors that compromise immune response may be associated with more severe disease. For example:

- Diabetes mellitus
- Immunocompromised related to underlying disease or treatment (cancer, chemotherapy, steroids, etc.)
- Organ or stem cell transplant recipients
- HIV or AIDS

Infection among pregnant women may result in congenital mpox.

Specimen Collection and Transport

Refer to the [RRPL Compendium of Tests](#) for up-to-date information³.

- RRPL is able to conduct initial screening for orthopoxvirus and mpox with a TAT of 24 hours.
- Samples will be forwarded from RRPL to the National Microbiology Laboratory (NML) in Winnipeg for confirmatory testing. The turnaround time (TAT) for testing is approximately 2 days once the sample is received at the NML.

Lab Reports and Interpretation

Initial screen results from RRPL will be available first. Refer to [Attachment-Preliminary interpretation of initial mpox screen results](#). Case definitions based on the initial screen are considered preliminary and subject to change based on results from NML confirmatory testing.

Once test results from NML are received, case definition can be confirmed. See **Table 2**.

³ <https://rrpl-testviewer.ehealthsask.ca/>

Table 2. Interpretation of Test Results**Treatment/Supportive Therapy (adapted from BCCDC, 2022)**

- Most diseases are self-limited and require only supportive treatment.
- A limited supply of treatment (i.e. TPOXX®) is available at RRPL (supplied through the National Emergency Strategic Stockpile). Refer to [Appendix D](#).
- Indications for use of TPOXX® for treatment of human mpox are outlined in Canada’s Drug and Health Technology Agency report [Tecovirimat \(Tpoxx\): Update \(July 2022\)](#).
- Indications for clinical use may be considered on a case-by-case basis in consultation with the infectious disease specialist and the Medical Health Officer.
- Access to treatment is via and subject to the requirements of the Special Access

| Results from NML | Interpretation as per Case Definition | Test Details: |
|------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Positive | Confirmed | Mpox virus detected. |
| Pending | Probable ^{a b} | Initial screen at RRPL presumptive positive. See Attachment—Preliminary interpretation of initial mpox screen results . |
| Indeterminate | Suspect ^{a b} | Virus detected close to the limit of detection of the assay. Recommend collection of new specimen for repeat testing. |
| Invalid | Suspect ^{a b} | Specimen failed Quality Control or exhibited non-specific amplification. Recommend recollection new specimen for repeat testing. |
| Negative | Not a case | Mpox virus is NOT detected |

^a Must consider presence of clinical signs and symptoms and epidemiological link as outlined in the Surveillance Case Definitions.

^b Supersedes preliminary case definition.

Source: RRPL January 30, 2024

Public Health Investigation**I. Case**

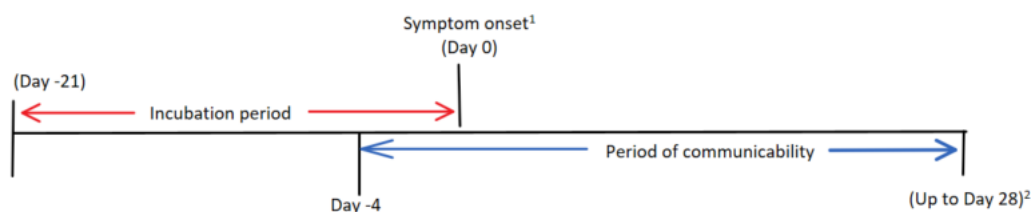
- All reports of **suspect, probable and laboratory-confirmed** mpox cases should be investigated as soon as possible so contact tracing and post-exposure prophylaxis, if appropriate, can be administered within the window (ideally, within four days).

History

- Refer to [Attachment – Mpox Data Collection Worksheet](#) to assist.
- Determine if there is an opportunity for acquisition in the 21 days before onset of the rash through:
 - contact to a case (confirmed, probable or suspect) while they were infectious;
 - exposure in a high risk setting;
 - exposure in the workplace – if so, see [Referrals](#)
 - history of travel (international or domestic)
 - Refer to [Attachment – Travel Protocol](#) for details required in the notification to the Ministry of Health to facilitate reporting obligations under the *International Health Regulations*.
- Identify contacts during the period of communicability (including persons, places and events)

Public Health Interventions**Assessment**

- Assess for known and unknown Contacts ([Table 3](#) and [Figure 2](#))
- History of smallpox vaccination (a smallpox vaccination scar is sufficient in the absence of documentation)
- Health conditions may render the individual more susceptible to severe illness; It is not known if the period of communicability is altered in these individuals (e.g. immunocompromised)

Figure 2 – Timeline for Investigation

¹ Onset of symptoms includes the onset of prodromal symptoms

² Communicability lasts until the scabs have all fallen off and the skin is healing- typically 2-4 weeks

Communication

- In the context of the 2022 outbreak of mpox in Canada, many of the contacts were unknown: outreach strategies with high-risk groups, event organizers, club owners, other stakeholders (shelters, CBOs, etc.) may be required in order to notify persons that may have had a high-risk exposure when at a particular location or event.

Education

- All cases should be provided disease information including period of communicability as well as information on measures to prevent and control the spread (see [Exclusion and Isolation](#)) and how to access medical care and supplies for daily needs if required.
- Provide general advice on steps to take if symptoms worsen, instruction on self-care, when to contact their health care provider and how/when to access medical care.
- Cleaning and disinfecting practices as well as proper hand hygiene and respiratory etiquette to reduce the spread in the household setting including laundry and dishes as well as appropriate handling and disposal of soiled items.

Exclusion and Isolation (Adapted from Alberta Public Health Disease Management Guidelines Mpox, July 2022)

- Ideally, cases should isolate in a separate space (e.g., private room for sleeping and washroom) whenever possible, especially if they have respiratory symptoms, weeping lesions or lesions that are hard to cover (e.g., on the face).
 - Cases should stay home and avoid close contact with others, especially vulnerable populations (e.g. children under 12 years of age, immunocompromised individuals, and pregnant women) until scabs have fallen off and a fresh layer of skin has formed (i.e. the wound has a light pink/shiny pearl appearance). This typically takes 2 to 4 weeks, but may take longer.
 - During this time:
 - Keep lesions covered;
 - Avoid direct physical contact with others, including sexual contact;
 - Wear a well-fitting medical mask whenever in the presence of others (including household members);
 - Avoid sharing clothes, linens, bedding, towels, utensils, toothbrush, razors, sex toys, needles or any other items that may be contaminated with infectious particles from lesions or body fluids;
 - Avoid contact with animals/pets when possible;
 - Avoid donating blood or body fluids including sperm and tissue (US CDC, 2023);
 - Canadian Blood Services provides recommendations for deferral periods for blood donations.
 - Cases may attend school, work or other settings deemed necessary for daily living (i.e. grocery, pharmacy, medically necessary appointment) if they can confirm they can do all of the above AND:
 - Have been afebrile for 24 hours without use of fever-reducing medication;
 - Other systemic symptoms (e.g. headache, muscle pain, fatigue) and respiratory symptoms (if any) have improved; AND
 - They feel well enough to resume these activities.
 - Assess if supports for self-isolation are required. Alternate isolation settings may be necessary based on the cases' individual circumstances (e.g. homeless, shelter, etc.).
-
-

-
-
- If needing immediate medical attention, call ahead to health care provider so they can prepare to provide care with appropriate measures.

Modified isolation should be designed to maintain the objective to rapidly stop chains of transmission, prevent endemicity and to protect public health and health care in Canada. In general, the least restrictive measures should be implemented to achieve public health goals.

Monitoring

- Active monitoring to support learning about the clinical evolution of the infection, address emerging issues and identify if supports are required for continued isolation.
- Monitoring (i.e., through regular communication) may be facilitated by self-report (i.e., case contacts public health) or outreach (i.e., public health contacts case, or in the context of providing assisted self-isolation or home care services).

Referrals

- To primary care provider or infectious disease specialist for clinical management.
- To community supports as needed while isolating.

Environmental Hygiene

- Clean and disinfect areas after use (especially high-touch surfaces and objects (e.g. toilets, door handles, light switches, etc)
- Unless cases are not able, they should handle and launder their own clothing, bedding, towels etc.
- Increase ventilation of the setting when possible (open windows, etc)

II. Contacts/Contact management

Identification of contacts and contact investigation should proceed immediately and should be re-evaluated once laboratory results are available. The Data Collection Worksheet should be used to support investigation.

The purpose of contact tracing is to:

- Ensure contacts are aware of:
 - their potential exposure,
 - any signs and symptom monitoring expectations,
 - risk mitigation measures to practice,
 - and what to do if they develop mpox symptoms (i.e., immediately isolate and notify public health)
- Provide information about post-exposure prophylaxis if eligible. See [Prophylaxis](#) to prevent the onset of disease and stop further transmission.
- Identify any symptomatic contacts as early as possible

- Facilitate prompt clinical assessment by a health care provider, laboratory diagnostic testing and treatment

Transmission of mpox requires prolonged close interaction with a symptomatic individual. Brief interactions and those conducted using appropriate PPE in accordance with Standard Precautions are not high risk and generally do not warrant PEP or public health follow-up (CDC, 2022).

Table 3. Contact Definition (Public Health Agency of Canada, 2024)

| Exposure Risk | Description | Examples |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High | <p>Prolonged ^a or intimate contact including any of the following:</p> <ul style="list-style-type: none"> • Skin/mucosa to skin contact with a case (regardless of the case’s lesion location) • Skin/mucosa contact with a case’s biological fluids, secretions, skin lesions or scabs • Skin/mucosa contact with surfaces or objects contaminated by a case’s secretions, biological fluids, skin lesions or scabs • Face-to-face interaction with a case, without the use of a medical mask by the case or contact | <ul style="list-style-type: none"> • Sexual partner of a case • Household members living with a case • Roommate of a case in a congregate living setting (such as a group home, student residence, shelter, correctional facility) • HCP without appropriate PPE as per IPAC guidance ^b • Person having skin/mucosa contact with a case’s used personal items (for example, bedding, linens, towels, clothing, lesion dressings, utensils, razors, needles, sex toys) • Person having close/intimate interactions with a case in a setting (such as a sex-on-premises venue) or gathering (such as Pride festivals) where there may be a higher likelihood of increased sexual activity |
| Intermediate | <ul style="list-style-type: none"> • Not meeting high-risk exposure criteria above AND: <ul style="list-style-type: none"> ○ Limited or intermittent close proximity^c exposure to a case without | <ul style="list-style-type: none"> • Sitting next to case on plane • Person sharing close proximity workspace for |

| | | |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>wearing adequate PPE for the type of exposure risk (i.e., medical mask and gloves)</p> <ul style="list-style-type: none"> ○ Shared living space where there are limited interactions with a case or their belongings | <p>long periods of time</p> |
| <p>Low or Uncertain</p> | <ul style="list-style-type: none"> ● Not meet the high- or intermediate-risk exposure criteria above AND: <ul style="list-style-type: none"> ○ Very limited exposures to a case ○ Wearing adequate PPE for the type of exposure risk (i.e., medical mask and gloves) | <ul style="list-style-type: none"> ● Brief social interactions with a case ● Colleagues not sharing a confined or close-proximity office space with a case ● HCP wearing appropriate PPE as per IPAC guidance ^b |

Acronyms:

- HCP: Health care provider
- PPE: Personal protective equipment
- IPAC: Infection prevention and control

^a United States Centers for Disease Control and Prevention (2022) considers prolonged exposure to be a total of 3 hours (cumulative).

^b This guidance is focused on community settings and does not replace point-of-care risk assessments by health care providers in health care settings, or a risk assessment conducted to determine the exposure risk for a health care provider. For health care providers who have had an exposure to mpox, follow occupational health and safety advice and/or refer to guidance available for [infection prevention and control of mpox cases in healthcare settings](#).

^c United States Centers for Disease Control and Prevention (2022) considers considers proximity to be within 6 feet (2 meters)

Public Health Interventions

For both high- and intermediate-risk contacts ([Table 3](#)) during the 21-day period since the contact’s last exposure to the case:

Assessment

- Assess for symptoms
- Assess if contacts live or work in high-risk settings or with vulnerable individuals.

Education

- Contacts of cases should be informed of their exposure (potential or actual).
- Explain any signs and symptoms and required monitoring expectations, risk mitigation measures and to isolate if they develop any symptoms and contact public health for further direction.
- Provide information about post-exposure prophylaxis and referral to health care provider where appropriate, to prevent the onset of disease and stop further transmission. Refer to [Prophylaxis](#).

Monitoring

- Contacts should monitor for symptoms for 21 days after their last exposure. (CDC, 2022)
 - Symptoms* of concern include:
 - Fever $\geq 100.4^{\circ}\text{F}$ (38°C)
 - Chills
 - New lymphadenopathy (periauricular, axillary, cervical, or inguinal)
 - New skin rash
- *Fever and rash occur in nearly all people infected with mpox virus.
- Contacts should be instructed to monitor their temperature twice daily.
- Individuals should be advised to avoid fever-reducing medications (acetaminophen, ibuprofen and ASA) that may mask early symptoms of mpox.
- Conduct active (or passive, where appropriate) public health monitoring for signs and symptoms and counselling.

Exclusion

- Self-isolate as quickly as possible should symptoms develop, and contact the local public health office for further direction.
- Contacts who remain asymptomatic can be permitted to continue routine daily activities (e.g., go to work, school). Contacts should not donate blood, cells, tissue, breast milk, semen, or organs while they are under symptom surveillance.
- High- or intermediate-risk exposures should avoid contact with high-risk settings and vulnerable people during their monitoring period if possible. Refer to [Table 4](#).

Immunoprophylaxis

- Imvamune[®] is an active immunizing agent approved for active immunization against smallpox, mpox and related Orthopoxvirus infections and disease in adults 18 years of age and older determined to be at high-risk for exposure. See Saskatchewan Immunization Manual for vaccine details.
- A limited supply of the vaccine is available through the National Emergency Strategic Stockpile (NESS).
- The National Advisory Committee on Immunization (NACI) released updated guidance on the use of Imvamune[®] (Modified Vaccinia Ankara - Bavarian Nordic [MVA-BN], a non-replicating smallpox vaccine) in the context of mpox outbreaks in Canada in September 2022. The following are the NACI recommendations for post-exposure prophylaxis:
 - Post-exposure prophylaxis (PEP) using a single dose of the Imvamune[®] vaccine may be offered to individuals with [high risk exposures](#)* to a probable or confirmed case of mpox, or within a setting where transmission is happening. PEP should be offered as soon as possible and preferably within 4 days of last exposure and can be considered up to 14 days since last exposure.
 - PEP **should not be offered** to individuals who are symptomatic and who meet the definition of suspect, probable or confirmed case.

- The use of vaccination after an exposure to mpox may prevent or attenuate the infection if given within four days of the last exposure (ACIP suggests it be offered up to 14 days following exposure as it may reduce the symptoms of disease though not preventing disease. Use between 4 to 14 days should be offered to those at high-risk of ongoing exposures. (United Kingdom, June 6, 2022)
- PEP dosing:
 - For individuals with a history of receiving a single dose of a live smallpox vaccine, a single dose of Imvamune® is recommended.
 - For individuals who have received a single dose of MVA-BN (i.e. Imvamune®) previously (at least 28 days ago, a second dose (i.e. a booster dose) is recommended if repeated or predictable ongoing risk of exposure. For individuals who have received a previous live smallpox vaccine and one MVA-BN vaccine, no further doses are recommended.
 - For individuals who have received 2 doses of MVA-BN within the last 2 years, no further doses are recommended.
- Imvamune® may prevent infection if it is administered within four days of exposure.

Table 4. Public Health Management of Contacts based on Exposure Risk (Public Health Agency of Canada, 2024)

| Risk Level | Education and Exclusion for Contacts | Public Health Action |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| All Exposures | For 21 days following last exposure to a case: <ul style="list-style-type: none"> ● Self-monitor for symptoms. Try to avoid medications that are known to lower fever as these medications could mask an early symptom; please advise the public health if acetaminophen, ibuprofen, acetylsalicylic acid have been taken. ● Practice proper hand hygiene and respiratory etiquette ● Reduce the risk of transmitting mpox by having fewer sexual partners and using barrier protection during sexual activity (i.e. condoms, dental dams, gloves, clothing)^b ● Alert any health care providers that provide medical care of the potential exposure ● Self-isolate as quickly as possible should symptoms develop, and contact the local public health office for further direction, which will include <ul style="list-style-type: none"> ○ where to go for care, ○ the appropriate mode of transportation to use, and ○ Infection prevention and control precautions | <ul style="list-style-type: none"> ○ Provide instructions on what to do if signs and symptoms develop. |

| Risk Level | Education and Exclusion for Contacts | Public Health Action |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>to be followed</p> <ul style="list-style-type: none"> • Be aware that travelling during the 21-day post-exposure period could lead to unforeseen consequences if symptoms were to develop (for example the need to isolate abroad, seek medical attention and/or reschedule transportation, as well as the potential for additional financial costs) | |
| Low Risk | <ul style="list-style-type: none"> • As above | <ul style="list-style-type: none"> • As above • PEP is not recommended |
| Intermediate Risk | <ul style="list-style-type: none"> • As above AND • Avoid high risk setting (e.g. congregate living settings) and vulnerable populations (children under 12 years of age, pregnant women, immunocompromised individuals) where possible <ul style="list-style-type: none"> ○ If this is unavoidable, consider wearing a well-fitting medical mask in these settings or around vulnerable populations ○ For contacts who work in high-risk settings, refer to occupational health and safety advice or defer to the advice of their local PHA, based on a risk assessment • As a precaution to prevent possible spread to animals, including pets and livestock, and until more is known, it is recommended that contacts: <ul style="list-style-type: none"> ○ Have another member of their household care for their animals <ul style="list-style-type: none"> ▪ If this is not possible, contacts should wear a well-fitting medical mask and gloves when near the animals, and clean and disinfect high-touch surfaces frequently ○ Avoid handling, feeding or working closely with wildlife to prevent any possible spread of the virus – this is to limit risk of creating a wildlife reservoir for this virus in Canada | <ul style="list-style-type: none"> • Active or passive Public Health monitoring • If symptoms develop, consider as a probable case and manage as a confirmed case. • Consult with MHO. |
| High Risk Exposures | <ul style="list-style-type: none"> • As above AND • Be especially vigilant when self-monitoring for symptoms if working or living with vulnerable populations • Wear a well-fitting medical mask whenever in the presence of others (including household members) | <ul style="list-style-type: none"> • Active public health monitoring for signs and symptoms • Determine if alternate approaches are needed to identify |

| Risk Level | Education and Exclusion for Contacts | Public Health Action |
|------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <ul style="list-style-type: none"> Refrain from sexual contact with others | <p>and notify high-risk contacts if not all exposed individuals are known to the case.</p> <ul style="list-style-type: none"> PEP with Imvamune® is recommended based on time since exposure and in consultation with MHO. Also refer to Saskatchewan Immunization Manual (SIM) Chapter 10. |

Table 5. Summary of NACI Recommendations for Vaccine Use (September 2022)

| Type of Individual | Vaccine Eligibility | Dosing |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Case | Do not use | N/A |
| High-Risk Exposure Contact | <p><i>Recommended within 4 days</i> Consult with MHO and CMHO</p> <p><i>Do not administer to individuals who are symptomatic and who meet the suspect, probable or confirmed case definition.</i></p> <p>Refer to SIM Chapter 10 for vaccine information</p> | <p>One dose should be offered as soon as possible and within 4 days.</p> <ul style="list-style-type: none"> <i>May be considered up to 14 days after last exposures.</i> <p>Some high-risk exposures may extend beyond 28 days. In situations where confirmed high-risk exposures are multiple (i.e., beyond a single case) and expected to be ongoing over a period of weeks, PEP recipients <i>may be offered</i> a second dose 28 days after the first dose.</p> |
| Intermediate Exposure Contact | Not recommended | N/A |
| Low-Risk Exposure | Not recommended | N/A |

| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Special Populations:</p> <ul style="list-style-type: none"> • Individuals who are: <ul style="list-style-type: none"> ○ Immunocompromised due to disease or treatment ○ pregnant or lactating ○ Children and youth <18 years of age ○ with atopic dermatitis | <p>Imvamune® vaccine <i>may be</i> offered to the following populations, if recommended to receive vaccine based on high-risk exposure</p> | <p>Refer to SIM and product monograph for additional details.</p> |
| <p>Pre-Exposure</p> | <p>PrEP as an outbreak measure should be offered to individuals with highest risk of mpox. Refer to SIM Chapter 10 and Epidemic Measures.</p> <p>Those with a prior documented history of mpox infection need not be vaccinated.</p> <p>PrEP may be offered to personnel working with replicating orthopoxviruses that pose a risk to human health (vaccinia or mpox) in laboratory settings and who are at high risk of occupational exposure.</p> <p>NOTE: This recommendation <i>does not apply to health care workers or clinical diagnostic laboratory workers</i> at this time, due to very low risk of transmission.</p> | <p>If Imvamune is used, <i>two doses should be given at least 28 days apart</i>.</p> <p>A booster dose may be offered after 2 years if the risk of exposure extends beyond that time. This recommendation does not apply to clinical diagnostic laboratory settings at this time, due to very low risk of transmission</p> |

Testing

- Individuals with symptoms should be advised to seek testing; consultation with the Medical Microbiologist should occur to determine what testing is recommended.
- If the exposure was associated with sexual behaviours (casual sex, anonymous partnering, etc.), individuals should also be assessed for other sexually transmitted and blood borne infections.

III. Environment

Routine [Cleaning and disinfecting](#), particularly of frequently touched surfaces, can kill viruses. Using water and regular household cleaning products or a diluted bleach solution (0.5% sodium hypochlorite) is sufficient.

- **Cleaning the home and co-living setting:** Clean frequently touched areas such as toilets, bedside tables, light switches and door handles frequently and after use. Use the same solution or an alcohol prep wipe to clean frequently touched electronics such as phones, computers and other devices. Place all disposable contaminated items in a lined container before disposing of them with other household waste.

IV. Setting-Specific Control Measures**A. Child care centres**

- Refer to the [Saskatchewan Ministry of Health Infection Control Manual for Child Care Facilities](#).

V. Epidemic Measures

- Immediate reporting (within 24 hours) of probable and suspect cases.
- Determine source and manner of spread.
- Determine extent of exposure and transmission.
- In the event of mpox outbreaks and pending availability of Imvamune[®], PrEP may be utilized. In the 2022 outbreak occurring within the network involving MSM, mpox vaccine has been expanded to include eligibility criteria among the at-risk population informed by the national and global epidemiology. Refer to the Mpox website for further details and [SIM Chapter 10](#)).

Prevention Measures

Refer to the [Respiratory and Direct Contact Introduction and General Considerations](#) section of the manual that highlights topics for client education that should be considered as well as provides information on high-risk groups and activities.

Immunization

Individuals with a history of smallpox vaccine may have some protection against mpox. Routine immunization with smallpox vaccine was discontinued in early 1980 when smallpox was considered eradicated. Individuals born in 1970s may not have been given smallpox vaccine based on the immunization program in their local area.

Education

- Good hygiene, especially hand washing and respiratory etiquette is important to prevent the spread of viruses and bacteria.
- Routine environmental hygiene including cleaning and disinfecting practices should be used as standard practices in home and workplace settings to reduce the risk of disease transmission.

Revisions

| Date | Change |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| February 2024 | <ul style="list-style-type: none"> ● Updated case definitions to align with PHAC: <ul style="list-style-type: none"> ○ Additions to Probable case: person who meets suspect case definition; epidemiologically linked ○ Additions to Suspect case: updated signs and symptoms to include fatigue, pharyngitis, proctitis; updates areas of unexplained rash/lesion to include anorectal and/or perioral, and oropharyngeal ● Clarified wording in case definitions to align with initial and confirmatory test results. ● Updated epidemiology section. ● Updated incubation period to 3 to 31 days (previously 5 to 21 days) ● Updated start of period of communicability to four days prior to onset of symptoms (previously from onset of symptoms). ● Updated Lab Reports and Interpretation section to reflect initial screening at RRPL includes orthopox and mpox. ● Added Attachment-- Preliminary Interpretation of Initial Mpox screen results. ● Updated Table 2 Interpretation of Lab Test Results, including intermediate NML results align with a suspect case (previously probable case). ● Updated Treatment/Supportive Therapy textbox to include limited supply of TPOXX® available at RRPL & linked CADTH’s indications for use. ● Updated Table 3 contact definition examples. ● Updated Table 4 education and exclusion for contacts. ● Updated Table 5 pre-exposure prophylaxis to align with NACI updated guidance. |
| June 5, 2023 | <ul style="list-style-type: none"> ● Changed “monkeypox” and “MPX” to the World Health Organization preferred term of “mpox”. ● Updated the language in the Epidemiology and Occurrence section and added a graph of Canadian cases. |
| August 18, 2022 | <ul style="list-style-type: none"> ● Updated epidemiology section ● Corrected grammatical and punctuation errors ● Included the use of PrEP in the Epidemic Measures including a link to the SK Immunization Manual for details. |
| July 28, 2022 | <ul style="list-style-type: none"> ● Corrected the error regarding fever-reducing medications – moved the statement “Individuals should be advised to avoid fever-reducing medications (acetaminophen, ibuprofen and ASA) that may mask early symptoms of Mpox” from case monitoring to contact monitoring. ● Amended Exclusion and Isolation section for cases. ● Amended Exclusion section for contacts to simplify when symptoms develop, |

| | |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| | to contact local public health for further direction. |
| June 27, 2022 | <ul style="list-style-type: none">• Added Figure 1 – Timeline for Investigation• Removed incomplete sentence - Immunoprophylaxis |
| June 16, 2022 | New |

References

- Alberta public health disease management guidelines: monkeypox July 2022
<https://open.alberta.ca/publications/monkeypox>
- Centers for Disease Control and Prevention (November 25, 2022). *Mpox monitoring and risk assessment for persons exposed in the community*. Retrieved January, 2024
<https://www.cdc.gov/poxvirus/monkeypox/clinicians/monitoring.html>
- Patel, M., Adnan, M., Aldarhami, A., Bazaid, A. S., Saeedi, N. H., Alkayyal, A. A., Saleh, F. M., Awadh, I. B., Saeed, A., & Alshaghдали, K. (2023). Current Insights into Diagnosis, Prevention Strategies, Treatment, Therapeutic Targets, and Challenges of Monkeypox (Mpox) Infections in Human Populations. *Life (Basel, Switzerland)*, 13(1), 249.
<https://doi.org/10.3390/life13010249>
- Public Health Agency of Canada (September 2022). *NACI Rapid Response – Updated interim guidance on the use of Imvamune in the context of ongoing monkeypox outbreaks*. Retrieved January 2024, <https://www.canada.ca/content/dam/phac-aspc/documents/services/immunization/national-advisory-committee-on-immunization-naci/rapid-response-updated-interim-guidance-ivmavune-monkeypox-outbreaks.pdf>
- Public Health Agency of Canada (September 19, 2023). *Monkeypox: For health professionals*. Retrieved January, 2024 <https://www.canada.ca/en/public-health/services/diseases/mpox/health-professionals.html>
- Public Health Agency of Canada (December 9, 2022). *Monkeypox virus: Infectious substances Pathogen Safety Data Sheet*. Retrieved January, 2024 <https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment/monkeypox-virus.html>
- Public Health Agency of Canada (January 4, 2024). Mpox (monkeypox): Public health management of cases and contacts in Canada. Retrieved January, 2024
<https://www.canada.ca/en/public-health/services/diseases/mpox/health-professionals/management-cases-contacts.html>
- Public Health Agency of Canada (September 19, 2023). *National case definition: Mpox (monkeypox)*. Retrieved January 2024, <https://www.canada.ca/en/public-health/services/diseases/mpox/health-professionals/national-case-definition.html>
-
-

United States Centers for Disease Control and Prevention (February 2, 2023). Science Brief: Detection and transmission of mpox (formerly monkeypox) virus during the 2022 Clade IIb outbreak. Retrieved June 2023, <https://www.cdc.gov/poxvirus/mpox/about/science-behind-transmission.html#samples>

United Kingdom Health Security Agency (June 2022). Monkeypox: Background information. <https://www.gov.uk/guidance/monkeypox#:~:text=a%20milder%20disease.-%2cInfection%20prevention%20and%20control%2c%2c%20clothing%2c%20and%20so%20on>

United Kingdom Health Security Agency (June 2022). Recommendations for the use of pre and post exposure vaccination during a monkeypox incident 6 June 2022 – retrieved June 2022 from: <https://www.gov.uk/government/publications/monkeypox-vaccination>

WHO monkeypox fact sheet May 19, 2022

Retrieved from <https://www.who.int/news-room/fact-sheets/detail/monkeypox>

Legend

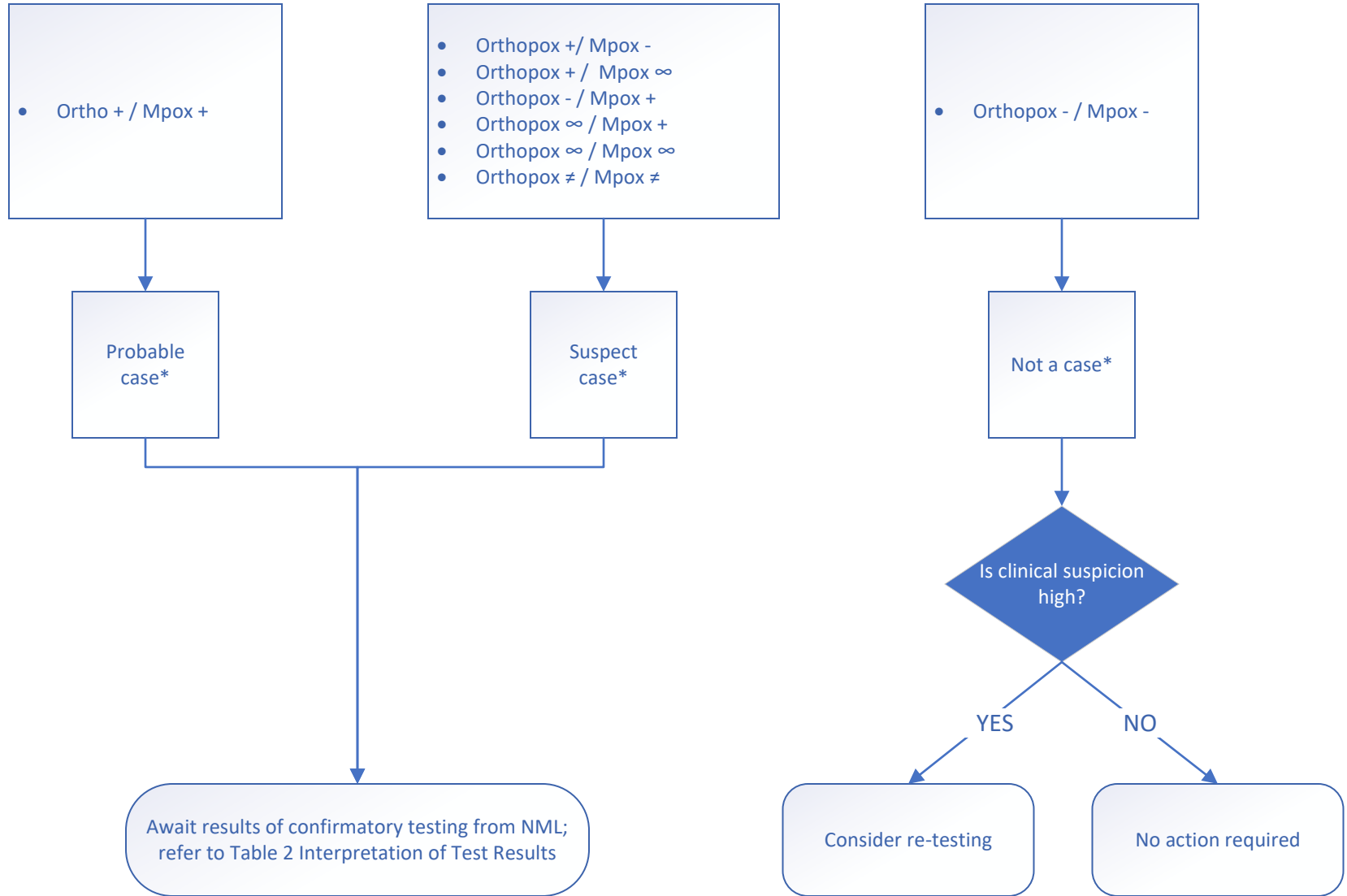
+ Presumptive Positive

- Negative

∞ Indeterminate

≠ Invalid

* Must consider presence of clinical signs and symptoms and epidemiological link as outlined in the Surveillance Case Definitions.



Mpox Data Collection Worksheet

Please complete all sections.

Panorama QA complete: Yes No
 Initials: _____

Panorama Client ID: _____
 Panorama Investigation ID: _____

A) CLIENT INFORMATION

LHN -> SUBJECT -> CLIENT DETAILS -> PERSONAL INFORMATION

| | | |
|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Name: | First Name: and Middle Name: | Alternate Name (Goes by): |
| DOB: YYYY / MM / DD Age: _____ | Health Card Province: _____ Health Card Number (PHN): _____ | Preferred Communication Method: (specify - i.e. home phone, text): Email Address: <input type="checkbox"/> Work <input type="checkbox"/> Personal |
| Phone #: <input type="checkbox"/> Primary Home: <input type="checkbox"/> Mobile contact: <input type="checkbox"/> Workplace: | | |
| Place of Employment/School: | Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/> Unknown | |
| Alternate Contact: _____ Relationship: _____ Alt. Contact phone: _____ | Address Type: <input type="checkbox"/> No fixed <input type="checkbox"/> Postal Address <input type="checkbox"/> Primary Home <input type="checkbox"/> Temporary <input type="checkbox"/> Legal Land Description Mailing (Postal address): Street Address or FN Community (Primary Home): Address at time of infection if not the same: | |

B) INVESTIGATION INFORMATION

LHN-> SUBJECT SUMMARY-> RESPIRATORY AND DIRECT CONTACT ENCOUNTER GROUP->CREATE INVESTIGATION

| Disease Summary Classification: | Date | Classification: | Date | LAB TEST INFORMATION: |
|-----------------------------------------------------|----------------|-----------------------------------------------------|----------------|-----------------------------------------|
| CASE | | CONTACT | | <i>Date specimen collected:</i> |
| <input type="checkbox"/> Confirmed | YYYY / MM / DD | <input type="checkbox"/> Contact | YYYY / MM / DD | YYYY / MM / DD |
| <input type="checkbox"/> Does Not Meet Case | YYYY / MM / DD | <input type="checkbox"/> Not a Contact | YYYY / MM / DD | <i>Specimen type:</i> |
| <input type="checkbox"/> Person Under Investigation | YYYY / MM / DD | <input type="checkbox"/> Person Under Investigation | YYYY / MM / DD | <input type="checkbox"/> Throat |
| <input type="checkbox"/> Probable | YYYY / MM / DD | | | <input type="checkbox"/> Nasopharyngeal |
| <input type="checkbox"/> Suspect | YYYY / MM / DD | | | <input type="checkbox"/> Lesion |
| | | | | <input type="checkbox"/> Blood |

Disposition:

FOLLOW UP:

- | | | | |
|--------------------------------------------------------|----------------|-----------------------------------------------------|----------------|
| <input type="checkbox"/> In progress | YYYY / MM / DD | <input type="checkbox"/> Complete | YYYY / MM / DD |
| <input type="checkbox"/> Incomplete - Declined | YYYY / MM / DD | <input type="checkbox"/> Not required | YYYY / MM / DD |
| <input type="checkbox"/> Incomplete – Lost contact | YYYY / MM / DD | <input type="checkbox"/> Referred – Out of province | YYYY / MM / DD |
| <input type="checkbox"/> Incomplete – Unable to locate | YYYY / MM / DD | (specify where) | |

Responsible Organization

REPORTING NOTIFICATION

Name of Attending Physician or Nurse:

Location:

Physician/Nurse Phone number:

Date Received (Public Health): YYYY / MM / DD

Type of Reporting Source: Health Care Facility Lab Report Nurse Practitioner Physician Other _____

Mpox Data Collection Worksheet

Please complete all sections.

C) DISEASE EVENT HISTORY

LHN-> INVESTIGATION->DISEASE SUMMARY (UPDATE)->DISEASE EVENT HISTORY

| | | | | |
|----------------------|----------------------------------|----------------------------------------|------------------------------------|--------------------------------------|
| Site / Presentation: | <input type="checkbox"/> Genital | <input type="checkbox"/> Extra-genital | <input type="checkbox"/> Localized | <input type="checkbox"/> Generalized |
|----------------------|----------------------------------|----------------------------------------|------------------------------------|--------------------------------------|

D) SIGNS & SYMPTOMS (Bold text = part of probable case definition)

INVESTIGATION->SIGNS & SYMPTOMS

| Description | No | Yes – Date of onset | Onset Symptom (v) | Description | No | Yes - Date of onset | Onset Symptom (v) |
|-----------------------------------------------------------------------------------------------------------------|----|---------------------|-------------------|-------------------------------------------|----|---------------------|-------------------|
| Arthralgia | | YYYY / MMM / DD | | Myalgia (muscle pain) | | YYYY / MMM / DD | |
| Chills | | | | Pneumonia | | | |
| Cough | | YYYY / MMM / DD | | Rash | | YYYY / MMM / DD | |
| Diaphoresis (e.g. night sweats, profuse sweating, etc.) | | YYYY / MMM / DD | | Rash - crusted lesions or scabs | | YYYY / MMM / DD | |
| Encephalitis | | | | Rash - macules | | | |
| Fever | | YYYY / MMM / DD | | Rash - papule - ulcerated | | YYYY / MMM / DD | |
| Headache | | YYYY / MMM / DD | | Rash - papules | | YYYY / MMM / DD | |
| Lesion less than 50 (mild) (Specify # of lesions in add'l info if <10) | | YYYY / MMM / DD | | Rash - pustules | | YYYY / MMM / DD | |
| Lesion 50 to249 (mild-moderate) | | YYYY / MMM / DD | | Rash - pustules - umbilicated | | YYYY / MMM / DD | |
| Lethargy (fatigue, drowsiness, weakness, etc) | | YYYY / MMM / DD | | Rash - vesicles | | YYYY / MMM / DD | |
| Lymphadenopathy - generalized | | YYYY / MMM / DD | | Sepsis (e.g. bactremia, septicemia, etc.) | | YYYY / MMM / DD | |
| Lymphadenopathy – regional (specify location in add'l info i.e. cervical, inguinal, submandibular, axillary) | | YYYY / MMM / DD | | | | | |

D) INCUBATION AND COMMUNICABILITY (manually calculate based on identified organism)

LHN-> INVESTIGATION->INCUBATION & COMMUNICABILITY

| | |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Incubation for Case (period for acquisition): 5-21 days | |
| Earliest Possible Exposure Date: YYYY / MM / DD | Latest Possible Exposure Date: YYYY / MM / DD |
| <i>Exposure Calculation details:</i> | |
| Communicability for Case (period for transmission): from onset of symptoms (prodrome) until scabs healed | |
| Earliest Possible Transmission Date: YYYY / MM / DD | Latest Possible Transmission Date: YYYY / MM / DD |
| <i>Exposure Calculation details:</i> | |

E) RISK FACTORS

INVESTIGATION-> SUBJECT->RISK FACTORS

| DESCRIPTION | Yes | N, NA, U | DESCRIPTION | Yes | N, NA, U |
|---------------------------------------------------------------------|-----|----------|-------------------------------------------------------------------------------------|-----|----------|
| Chronic Medical Condition - Diabetes Mellitus+ | | | Setting – Crowded living conditions (>1 person per room excluding bathrooms) | | |
| Chronic Medical Condition - Malignancies/Cancer+ | | | Special Population - Infant born to an infected mother | | |
| Chronic Medical Condition - Other (Add'l Info) | | | Special Population - Pregnancy | | |
| Immunocompromised - Related to underlying disease or treat't | | | Special Population - Homeless + | | |
| Medical History - Previous STI (Add'l info) | | | Behaviour – Lack of personal protective measures | | |
| Unknown Source | | | | | |

Mpox Data Collection Worksheet

Panorama Client ID: _____
Panorama Investigation ID: _____

Please complete all sections.

Exposure Risk Factors (in the 21 days prior to onset of illness)

| DESCRIPTION | Yes | N, NA, U | START DATE | END DATE | ADD'L INFO |
|----------------------------------------------------------------------------------------------|-----|-------------|--------------|--------------|--------------------------------------------------------------------------|
| Contact - Contact to a known case (Add'l Info) | | | YYYY / MM/DD | YYYY / MM/DD | Include INV ID # if known in add'l info Create an AE with details |
| Contact - Persons with similar symptoms | | | YYYY / MM/DD | YYYY / MM/DD | Create an AE with details |
| Lives in a communal setting | | | | | Enter facility/ residence in add'l info |
| Risk Behaviour - Sharing non-injection drug equipment | | | YYYY / MM/DD | YYYY / MM/DD | |
| Risk Behaviour - Sharing personal items (cigarettes, water bottles, sex toys, etc.) | | | YYYY / MM/DD | YYYY / MM/DD | |
| Sexual Behaviour - Casual sex | | | YYYY / MM/DD | YYYY / MM/DD | |
| Sexual Behaviour - E-partnering (internet or apps) (Add'l info) | | | YYYY / MM/DD | YYYY / MM/DD | Include name of app or website in add'l info |
| Sexual Behaviour - Events with multiple sexual partners (party and play) | | | YYYY / MM/DD | YYYY / MM/DD | |
| Sexual Behaviour – Goods received (food, shelter, money or drugs) in exchange for sex | | | YYYY / MM/DD | YYYY / MM/DD | |
| Sexual Behaviour – MSM+ | | | YYYY / MM/DD | YYYY / MM/DD | |
| Sexual Behaviour – Unknown/anonymous partner (Add'l info) | | | YYYY / MM/DD | YYYY / MM/DD | |
| Sexual Behaviour – More than 2 sexual partners in past 3 months | | | | | |
| Travel - Outside of Canada (Add'l Info) | | | YYYY / MM/DD | YYYY / MM/DD | Include name of country in add'l info |
| Travel - Outside of Saskatchewan, but within Canada (Add'l Info) | | | YYYY / MM/DD | YYYY / MM/DD | Include name of province in add'l info |
| Travel – Within Saskatchewan (Add'l Info) | | | YYYY / MM/DD | YYYY / MM/DD | Include name of community in add'l info. |
| Animal Exposure - Rodents/rodent excreta | | | YYYY / MM/DD | YYYY / MM/DD | |
| Animal Exposure - Wild animals (other than rodents) (Add'l info) | | | YYYY / MM/DD | YYYY / MM/DD | Enter type of animal in add'l info |
| Animal Exposure - Farms (Add'l info) | | | YYYY / MM/DD | YYYY / MM/DD | Enter type of animal in add'l info |
| Animal Exposure - petting zoos/zoos/special events/other (Add'l info) | | | | | |
| Animal Exposure - Infected animal (Add'l info) | | | YYYY / MM/DD | YYYY / MM/DD | Enter type of animal in add'l info |
| Animal Exposure - Other (Add'l info) | | | YYYY / MM/DD | YYYY / MM/DD | Enter type of animal in add'l info |
| Animal Exposure - Pets (only mammals) (Add'l info) | | | YYYY / MM/DD | YYYY / MM/DD | Enter type of animal in add'l info |
| Occupation - Health Care Worker – IOM use only | | | YYYY / MM/DD | YYYY / MM/DD | Include facility name Create AE or TE based on when worked if applicable |
| Occupation – LTC Staff + (Add'l info) | | | YYYY / MM/DD | YYYY / MM/DD | |
| Occupation – Personal Care Home Staff + (Add'l info) | | | YYYY / MM/DD | YYYY / MM/DD | |
| Other (add'l Info) | | | | | Include Outbreak number if investigation associated with an OB |

Mpox Data Collection Worksheet

Panorama Client ID: _____
Panorama Investigation ID: _____

Please complete all sections.

F) IMMUNIZATION HISTORY INTERPRETATION SUMMARY

LHN -> INVESTIGATION-> IMMUNIZATION HISTORY INTERPRETATION SUMMARY

Has the individual received smallpox vaccine in the past? NOTE – routine smallpox vaccine was administered prior to 1978 with travel recommendation until 1982; successful smallpox vaccination left a scar in deltoid region of the arm.

Interpretation Date: YYYY / MM / DD

Interpretation of Disease Immunity: IOM - Fully immunized (for age) (via documentation or scar) IOM – Unimmunized
 IOM - Unclear immunization history

Reason: IOM - Interpretation of history by investigator

G) TREATMENT

LHN -> INVESTIGATION-> MEDICATIONS->MEDICATIONS SUMMARY

Medication (*Panorama = Other Meds*): _____

Prescribed by: _____ Started on: YYYY / MM / DD

H) INTERVENTIONS

INVESTIGATION->TREATMENT & INTERVENTIONS->INTERVENTION SUMMARY

| Intervention Type and Sub Type: | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assessment: <input type="checkbox"/> Assessed for contacts YYYY / MM / DD Investigator name | Isolation: <input type="checkbox"/> Facility isolation YYYY / MM / DD <input type="checkbox"/> Home isolation YYYY / MM / DD Investigator name |
| General: Investigator name <input type="checkbox"/> Disease-Info/Prev-Control YYYY/ MM / DD <input type="checkbox"/> Disease-Info/Prev-Cont/Assess'd for Contacts YYYY/ MM / DD | Communication: <input type="checkbox"/> Letter- e.g. school outbreak (specify) YYYY / MM / DD Investigator name <input type="checkbox"/> Other communication (specify) YYYY / MM / DD Investigator name |
| Exclusion: Investigator name <input type="checkbox"/> Work YYYY / MM / DD <input type="checkbox"/> Preschool YYYY / MM / DD <input type="checkbox"/> School YYYY / MM / DD <input type="checkbox"/> Daycare YYYY / MM / DD | Symptom Monitoring: Investigator name <input type="checkbox"/> Symptom Monitoring, indirect active YYYY / MM / DD <input type="checkbox"/> Symptom Monitoring, indirect passive YYYY / MM / DD |
| Education/counseling: Investigator name <input type="checkbox"/> Prevention/Control measures YYYY / MM / DD | Other Investigation Findings <input type="checkbox"/> Investigator Notes YYYY/ MM /DD <input type="checkbox"/> See Document Management YYYY/ MM /DD |
| Immunoprophylaxis: Investigator name <input type="checkbox"/> Immunoprophylaxis YYYY / MM / DD Enter details in immunization module | Treatment <input type="checkbox"/> Treatment recommended (see Investigator Notes) YYYY / MM / DD |
| Testing: <input type="checkbox"/> Lab testing recommended YYYY / MM / DD Investigator name | Referral: <input type="checkbox"/> Infectious Disease Specialist YYYY / MM / DD <input type="checkbox"/> Primary Care Provider YYYY / MM / DD <input type="checkbox"/> Consultation with MHO YYYY / MM / DD Investigator name |
| Immunization: <input type="checkbox"/> Eligible Immunization recommended YYYY / MM / DD Investigator name | |

| Date | Intervention subtype | Comments | Next follow-up Date | Initials |
|----------------|----------------------|----------|---------------------|----------|
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |
| YYYY / MM / DD | | | YYYY / MM / DD | |

Mpox Data Collection Worksheet

Panorama Client ID: _____
Panorama Investigation ID: _____

Please complete all sections.

I) OUTCOMES (if applicable)

INVESTIGATION->OUTCOMES

| | | | | | |
|-------------------------------------------------------|----------------|-----------------------------------------------------|----------------|------------------------------------------|----------------|
| <input type="checkbox"/> Not yet recovered/recovering | YYYY / MM / DD | <input type="checkbox"/> ICU/intensive medical care | YYYY / MM / DD | <input type="checkbox"/> ER Visit | YYYY / MM / DD |
| <input type="checkbox"/> Recovered | YYYY / MM / DD | <input type="checkbox"/> Intubation /ventilation | YYYY / MM / DD | <input type="checkbox"/> Hospitalization | YYYY / MM / DD |
| <input type="checkbox"/> Fatal | YYYY / MM / DD | <input type="checkbox"/> Other _____ | YYYY / MM / DD | <input type="checkbox"/> Unknown | YYYY / MM / DD |

Cause of Death: (if Fatal was selected) _____

J) EXPOSURES – CONSIDER THE MODE OF TRANSMISSION

Acquisition Event

LHN-> INVESTIGATION-> EXPOSURE SUMMARY-> ACQUISITION QUICK ENTRY

| Exposure Name (use the most appropriate and most specific Key Descriptor check box as the name) | Location City/Town | Setting type (Consider the following settings for TE; if >1 select “multiple settings” in Panorama) | Start/End Date | Most likely source |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> Contact to a case <input type="checkbox"/> Contact to a person with similar symptoms | | <input type="checkbox"/> Household <input type="checkbox"/> Type of community contact | YYYY / MM / DD to YYYY / MM / DD | <input type="checkbox"/> |
| <input type="checkbox"/> Primary Care Center <input type="checkbox"/> Doctor’s office <input type="checkbox"/> Acute Care | City, name of facility | <input type="checkbox"/> Health care setting | YYYY / MM / DD to YYYY / MM / DD | <input type="checkbox"/> |
| <input type="checkbox"/> Provincial corrections <input type="checkbox"/> Federal corrections | | <input type="checkbox"/> Corrections Facility | YYYY / MM / DD to YYYY / MM / DD | <input type="checkbox"/> |
| <input type="checkbox"/> Shelter (e.g. lighthouse) <input type="checkbox"/> Rooming house/Residential hotel <input type="checkbox"/> Short term residential facility | | <input type="checkbox"/> Congregate/Communal Living settings | YYYY / MM / DD to YYYY / MM / DD | <input type="checkbox"/> |
| <input type="checkbox"/> Daycare/day home <input type="checkbox"/> Hotel/Motel <input type="checkbox"/> School <input type="checkbox"/> Nightclub | | <input type="checkbox"/> Public Facilities | YYYY / MM / DD to YYYY / MM / DD | <input type="checkbox"/> |
| <input type="checkbox"/> Massage <input type="checkbox"/> Personal care setting (e.g. hair salon, etc.) | | <input type="checkbox"/> Personal Service | YYYY / MM / DD to YYYY / MM / DD | <input type="checkbox"/> |
| <input type="checkbox"/> Fitness Center(gyms) <input type="checkbox"/> Exhibition ground <input type="checkbox"/> Park <input type="checkbox"/> Street festival <input type="checkbox"/> Sauna/bathhouse | | <input type="checkbox"/> Recreational Facility | YYYY / MM / DD to YYYY / MM / DD | <input type="checkbox"/> |
| <input type="checkbox"/> Sex party | | <input type="checkbox"/> Private Function | | |
| Name of workplace | | <input type="checkbox"/> Workplace | YYYY / MM / DD to YYYY / MM / DD | <input type="checkbox"/> |
| City, Province OR City, Country | | <input type="checkbox"/> Travel | YYYY / MM / DD to YYYY / MM / DD | <input type="checkbox"/> |

Transmission Events

LHN -> INVESTIGATION-> EXPOSURE SUMMARY -> TRANSMISSION EVENT SUMMARY -> QUICK ENTRY

| Exposure Name (use the most appropriate Key Descriptor as per the RF/AE Quick Reference as the name) | Location City/Town | Setting type (Consider the following settings for TE; if >1 select “multiple settings” in Panorama) | Date/Time |
|---------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Use key descriptor or the name of the setting | | <input type="checkbox"/> Congregate/Communal Living settings <input type="checkbox"/> Health care setting <input type="checkbox"/> Corrections Facility <input type="checkbox"/> Household <input type="checkbox"/> Workplace <input type="checkbox"/> Type of Community Contact <input type="checkbox"/> Public Facilities <input type="checkbox"/> Personal Service <input type="checkbox"/> Travel <input type="checkbox"/> Recreational Facility <input type="checkbox"/> Private Function | YYYY / MM / DD to YYYY / MM / DD |

Mpox Data Collection Worksheet

Panorama Client ID: _____
Panorama Investigation ID: _____

Please complete all sections.

| | | | |
|-----------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Use key descriptor or the name of the setting | | <input type="checkbox"/> Congregate/Communal Living settings <input type="checkbox"/> Health care setting <input type="checkbox"/> Corrections Facility <input type="checkbox"/> Household <input type="checkbox"/> Workplace <input type="checkbox"/> Type of Community Contact <input type="checkbox"/> Public Facilities <input type="checkbox"/> Personal Service <input type="checkbox"/> Travel <input type="checkbox"/> Recreational Facility <input type="checkbox"/> Private Function | YYYY / MM / DD to YYYY / MM / DD |
|-----------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|

I) Total number of contacts

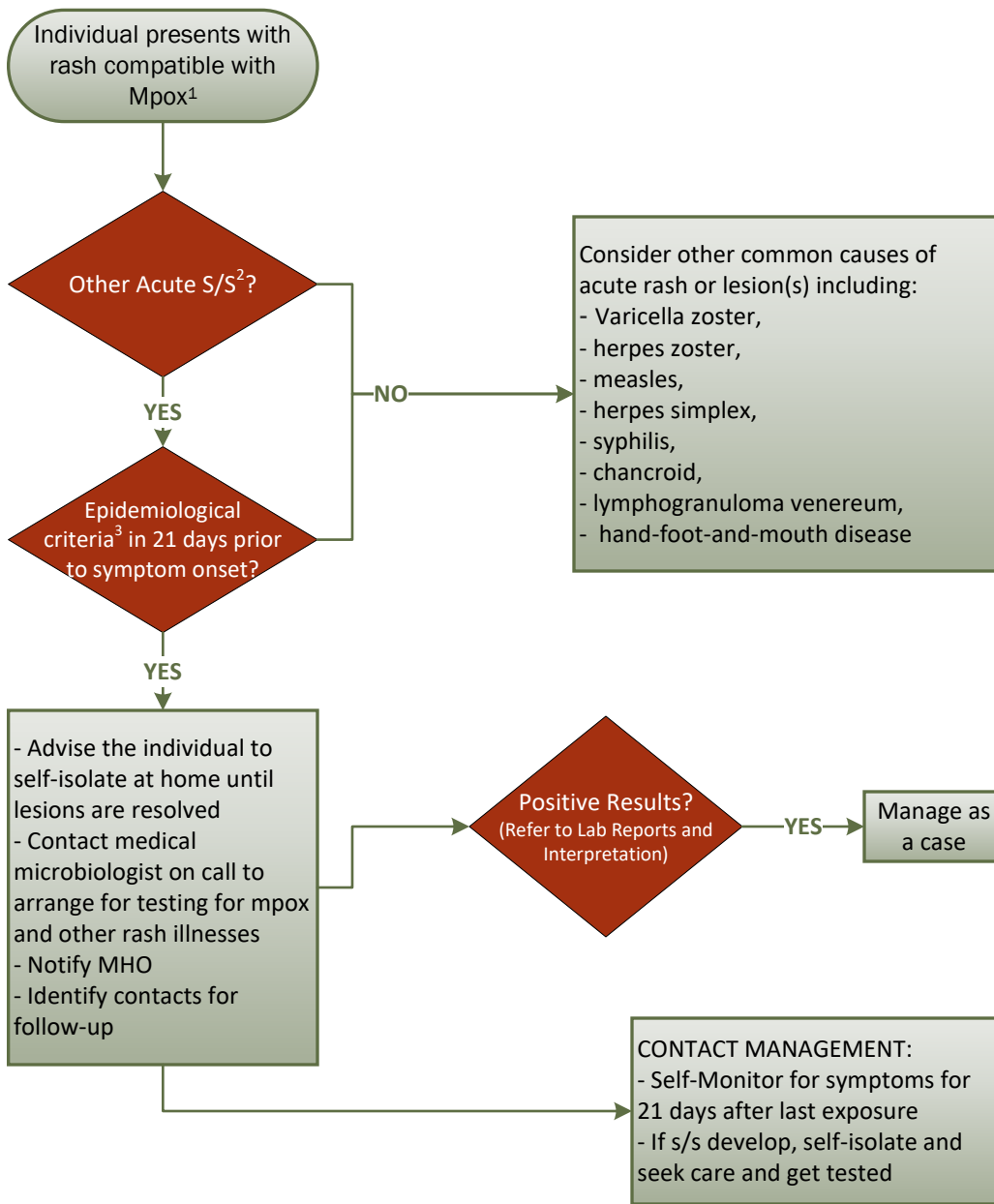
LHN -> INVESTIGATION-> EXPOSURE SUMMARY -> TRANSMISSION EVENT SUMMARY -> TE HYPERLINK

| |
|------------------------------------------------------------------|
| _____ (total number of <i>unknown</i> and <i>known</i> contacts) |
|------------------------------------------------------------------|

| | | |
|-------------------------------------|--|----------------------------------------------------------|
| Initial Report completed by: | | Date initial report completed: YYYY / MMM / DD |
|-------------------------------------|--|----------------------------------------------------------|

Revisions

| Date | Change |
|---------------|------------------------------------------------------------------------------------------|
| June 21, 2023 | Changed from Monkeypox to Mpox |
| June 20, 2022 | Aligned RF language with Panorama PROD and added prompt for imms history interpretation. |
| June 16, 2022 | New |



¹ Mpox illness

- includes progressively developing rash that usually starts on the face and then spreads elsewhere on the body. The rash can affect the mucous membranes in the mouth, tongue and genitalia. The rash can also affect the palms of the hands and soles of the feet. The rash can last for 2-4 weeks and progresses through the following stages before falling off: Macules, papules, vesicles, pustules and scabs.

There are case reports from North America of an atypical monkeypox virus rash that includes painful genital/oral lesions.

² Other Acute Signs or Symptoms of Mpox:

Fever, lymphadenopathy, chills and or sweats, headache, back pain/ache, sore throat, malaise/listlessness, prostration/distress.

³ Epidemiological Criteria:

- High-Risk Exposure to a probable or confirmed case of human mpox (i.e. Living in the same household, having direct physical contact including sexual contact and direct contact with a skin lesion or bodily fluid without appropriate personal protective equipment) **OR**
- Face-to-face exposure, direct physical contact (e.g. sexual contact), or contact with contaminated materials (e.g. clothing or bedding) at a location/event where transmission of mpox is suspected or known to have occurred **OR**
- A relevant zoonotic exposure