

National monkeypox webinar: Overview of the public health response

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- Conflicts of interest
 - None to declare

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 - Ministère de la Santé et des Services sociaux, Québec
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Public health response

- 1** Case detection and reporting
- 2** Case management
- 3** Contact tracing and immunization strategy
- 4** Intervention in potentially exposed settings
- 5** Communications

1

Case detection and reporting

Health alert to clinicians

- Investigate patients with symptoms consistent with monkeypox
- Test suspect cases
- Implement IPC measures
- Report suspected cases to local public health authorities
- Counsel suspected cases and their contacts

DIRECTION RÉGIONALE DE SANTÉ PUBLIQUE
MONTRÉAL

APPEL À LA VIGILANCE
Merci de diffuser largement à vos collègues

Écllosion de lésions ulcéreuses génitales et buccales d'étiologie indéterminée à Montréal

19 mai 2022

La Direction régionale de santé publique (DRSP) de Montréal a reçu depuis le 12 mai 2022 15 déclarations de lésions génitales et buccales inhabituelles d'étiologie indéterminée. Les symptômes des patients ont débuté entre les 29 avril et 13 mai 2022. Les lésions sont décrites comme des éruptions papuleuses ou pustuleuses progressant vers le développement d'ulcères douloureux localisés principalement au niveau de la langue, des genècives, de l'anus, du pénis, du scrotum ou du pubis. La majorité des patients pour lesquels l'information est disponible ont présenté des adénopathies localisées et des symptômes systémiques légers survenant avant ou après l'apparition de l'éruption cutanée (sensation de fièvre, frissons, diaphorèse nocturne, fatigue, myalgies, arthralgies, céphalées). Aucun cas sévère n'a été observé. Tous les cas déclarés jusqu'ici touchent des hommes ayant des relations sexuelles avec d'autres hommes.

Au moment de l'évaluation des premiers patients, les cliniciens déclarants ont évoqué l'infection par la bactérie *Haemophilus ducreyi* (chancres mous) comme la cause la plus probable des signes et symptômes observés. Cette infection est très rare au Canada; les résultats des analyses particulières permettant d'en confirmer la présence seront disponibles sous peu.

Dans le contexte des éclussions et cas d'orthopoxvirus simien du clade ouest africain (le monkeypox ou variole du singe) récemment rapportés au Royaume-Uni, en Espagne, au Portugal, aux États-Unis et en Suède, il est également probable que cet agent pathogène soit en cause dans l'écllosion en cours à Montréal. Ce virus n'est pas une infection transmissible sexuellement; il se transmet principalement par contact direct, indirect et gouttelettes. Des spécimens prélevés chez certains patients sont en cours d'analyse au laboratoire national de microbiologie et les résultats devraient être disponibles sous peu. Aucun cas confirmé n'a été déclaré chez des résidents montréalais.

À cette étape de l'enquête épidémiologique, la DRSP formule les recommandations suivantes aux professionnels du réseau de la santé susceptible d'évaluer des personnes présentant des lésions génitales ou buccales inhabituelles.

RECOMMANDATIONS INTÉRIEURES

1. **Évaluer et assurer la prise en charge des personnes présentant des ulcérations génitales ou buccales :**
 - Envisager les étiologies les plus communes, soit l'herpès simplex, la syphilis, le virus varicello-zostère ou la lymphogranulomatose vénérienne. Se référer aux [liens directes canadiens sur les infections transmissibles sexuellement](#) et les [guides d'usage optimal de l'INESSS](#) pour connaître les tests diagnostiques et les recommandations de prise en charge.
 - Les personnes répondant aux **définitions de cas probables** présentées dans le tableau de la page suivante devraient faire l'objet de prélèvements pour la recherche d'une infection à *H. ducreyi* ou à orthopoxvirus simien.
 - Se référer à la correspondance émise par le Laboratoire de santé publique du Québec le 19 mai 2022 pour connaître les particularités liées aux prélèvements, spécimens et analyses requis pour la recherche de ces agents pathogènes (en annexe).
 - Si des prélèvements sont réalisés, en aviser le ou la microbiologiste-infectiologue de garde au laboratoire afin de s'assurer de leur traitement prioritaire.
 - Pour les **cas d'infection à orthopoxvirus simien** correspondant à la définition de cas probable et pour d'éventuels cas confirmés par laboratoire :
 - Recommander à la **personne symptomatique** de s'isoler à domicile, de porter un masque et de couvrir ses lésions cutanées. Son isolement pourra être levé à la résolution des lésions (formation de croûtes) ou avant si un diagnostic alternatif est posé.
 - Identifier les **personnes ayant eu un contact significatif** avec le cas pendant sa période de contagiosité :
 - Période de contagiosité : de 5 jours avant le début des symptômes (incluant les symptômes systémiques) jusqu'à la résolution des lésions cutanées ;
 - Exposition significative : personne vivant sous le même toit que le cas ou ayant eu des contacts sexuels avec ce dernier ; *noter que cette définition d'exposition est spécifique à la situation épidémiologique en cours à Montréal.*
 - Recommander aux personnes ayant eu un contact significatif de surveiller leurs symptômes pendant les 21 jours suivant leur dernière exposition à risque, notamment en mesurant leur température quotidiennement ;
 - Recommander aux personnes ayant eu un contact significatif et ayant des symptômes de consulter un professionnel de la santé pour une évaluation clinique, de porter un masque et de couvrir leurs lésions. Demander à la personne d'aviser le milieu clinique avant de s'y présenter et de privilégier une modalité de transport vers le milieu clinique qui minimise les contacts directs avec d'autres personnes dans la mesure du possible.

Pour joindre le professionnel de garde en maladies infectieuses de la Direction régionale de santé publique de Montréal : 514 528-2400, 24 h/7 jours

Centre intégré
de santé
et de services sociaux
de l'île de Montréal
Québec

Preliminary surveillance case definitions, Canada, June 15, 2022

SUSPECTED CASE

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

An unexplained acute rash AND has at least one of the following signs or symptoms

1. Headache
2. Acute onset of fever ($>38.5^{\circ}\text{C}$),
3. Lymphadenopathy (swollen lymph nodes)
4. Myalgia (muscle and body aches)
5. Back pain
6. Asthenia (profound weakness)

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

PROBABLE CASE

A person of any age who presents with an unexplained acute rash or lesion(s)-AND

Has one or more of the following:

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

CONFIRMED CASE

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

2

Case management

Public health case management

- Isolation of cases until no longer contagious
 - At home if feasible or alternate safe settings with supports
 - **From the onset of symptoms until skin lesions have healed (once scabs have fallen off, and the wound is epithelialized and has a light pink / shiny pearl appearance)**
- Information on public health measures to the person who is a case, their caregiver and household members
 - Avoid contact with others, including sexual contact
 - Avoid contact with vulnerable populations (e.g., children under 12 years of age, immunocompromised individuals, pregnant women), where possible
 - Do not share personal objects
 - Cover all lesions with clothing or bandages
 - Wear a well-fitting mask when around others
 - Take precautions when handling potentially contaminated objects such as bandages, bedding, towels or clothing.
 - Perform hand hygiene before and after contacts with skin lesions or potentially contaminated objects
 - Clean regularly used surfaces frequently
- Instructions for self-care and how to seek health care if necessary
 - Alert health care providers of their infection in advance of seeking medical care if possible

3

Contact tracing and
immunization strategy

Risk assessment of contacts



Exposure risk	Description	Examples
High	<p>Prolonged 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 in a group home or student residence living with a case• Skin/mucosa contact with a case's unwashed bedding, towels, clothing, lesion dressings, utensils, razors, needles, sex toys, etc.
Intermediate	<ul style="list-style-type: none">• Not meeting high-risk exposure criteria above AND any of the following:<ul style="list-style-type: none">◦ Limited or intermittent, close proximity exposure to a case without wearing adequate PPE for the type of exposure risk (i.e., medical mask and gloves)◦ Shared living space where there are limited interactions with a case or their belongings	<ul style="list-style-type: none">• Sitting next to case on plane• Person sharing close proximity workspace with a case for long periods of time
Low or Uncertain	<ul style="list-style-type: none">• Not meeting the high- or intermediate-risk exposure criteria above AND any of the following:<ul style="list-style-type: none">◦ Very limited exposures to a case◦ Consistently and appropriately using recommended 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

For further detail: <https://www.canada.ca/en/public-health/services/diseases/monkeypox/health-professionals/management-cases-contacts.html>

Public health management of contacts

- Ensure contacts are aware of:
 - their potential exposure,
 - expectations of monitoring for any signs and symptoms for 21 days,
 - risk mitigation measures to practice,
 - what to do if they develop MPX symptoms (i.e., immediate isolation, advising public health authorities)
- Identify any symptomatic contacts as early as possible
 - Facilitate prompt clinical assessment by a health care provider, laboratory diagnostic testing and treatment if indicated
- If eligible, provide information about **post-exposure prophylaxis**
 - High-risk/significant exposure with a confirmed or probable case in the last 14 days

Vaccine background

- Modified Vaccinia Ankara-Bavarian Nordic
 - Imvamune® in Canada, Jynneos® in the US, Imvanex® in Europe
- Third-generation non-replicating live attenuated smallpox vaccine
- Approved in Canada in November 2020
 - for active immunization against smallpox, monkeypox and related Orthopoxvirus infections in adults determined to be at high risk for exposure
 - Approved based on clinical immunogenicity or indirect protection from vaccinia (virus used for 1st/2nd generation smallpox vaccines) but no data on efficacy against monkeypox.
 - Primary series of 2 doses at least 28 days apart
 - Good immunity response after the first dose
- Contraindications
 - History of anaphylaxis
- Precautions
 - Risk/benefit evaluation for people less than 18 and pregnant/lactating women
 - Generally well tolerated, no signals of concern (20 trials, 7414 subjects) but low occurrence events possible

National Advisory Committee on Immunization (NACI)

Recommendation for the use of Imvamune® as **Post-Exposure Prophylaxis (PEP)** for asymptomatic adults with high-risk exposure (asap within 4 days, up to 14 days since last exposure)

may be offered to the special populations based on exposure risk
Second dose after 28 days if ongoing risk of exposure

Recommendation for **Pre-Exposure Prophylaxis (PrEP)** for adults at high risk of occupational exposure in a laboratory research setting

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

Comité sur l'immunisation du Québec (CIQ)



Pre-exposure prophylaxis allowed

- Under exceptional circumstances, as defined by public health authorities, could allow the use of the vaccine in pre-exposure prophylaxis. Given the scarcity of vaccines available, **post-exposure prophylaxis should be preferred.**

Pre-exposure prophylaxis not recommended in healthcare workers

- As health care workers all wear personal protective equipment (PPE) and are at very low risk, the CIQ does not recommend pre-exposure vaccination for these. Workers in research laboratories at high risk of exposure to a replicative orthopoxvirus (human smallpox, vaccinia virus, monkeypox) should be vaccinated.

Immunization strategy in Montreal

- Objective
 - **Control monkeypox outbreak in hotspot (Montreal) to limit further spread, avoid new endemicity and protect those at high-risk of complications**
- Principles
 - Evidence-based decision making
 - Immunization indications iteratively developed based on local epidemiology data
 - Maximizing community engagement and avoiding stigmatization
 - Vaccine delivery sites geographically close to affected communities
 - Accessibility of vaccines via STI clinics
 - Targeted vaccine promotion in collaboration with community organizations and local actors
 - Maximizing public health gains in context of limited vaccine availability
 - 1 dose per person to reach more people

Immunization strategy timeline

- May 30th
 - Post-exposure prophylaxis of traceable contacts but > **80% non-traceable**
- June 3rd
 - "**Extended**" post-exposure prophylaxis
- June 14th
 - **Pre-exposure prophylaxis** for at-risk population in Montreal

Post-exposure prophylaxis (as of May 30th, 2022)

Exposure in the last 14 days:

High-risk:

- **Direct contact of the skin or mucous membranes with the lesions** of a probable or confirmed symptomatic case of monkeypox, for example, having had sexual contact;
- **Direct contact of the skin or mucous membranes with bodily fluids** (salivary or respiratory droplets, exudate wound) of a probable or confirmed symptomatic case of monkeypox, for example a splash in eye;
- **Direct contact of the skin or mucous membranes with surfaces and objects contaminated** by the biological fluids of a case probable or confirmed, symptomatic of monkeypox, including clothing, towels, bedding and soiled dressings;

Intermediate-risk:

- **Close contact within one meter for at least 3 hours** (cumulative over 24 hours) face to face without wearing a mask.

Regional indications for “extended PEP” (June 3-13, 2022)

- Post-exposure prophylaxis (as previous slide) +
- Men (cis or trans) who had sex with men (cis or trans) in a social and sexual venue/space in Montreal in the last 14 days
- Men (cis or trans) who gave or received money or other goods/services in exchange for sex with another man (cis or trans) in Montreal in the last 14 days
- Worker/volunteer who came into contact with potentially contaminated objects or bedding in a social and sexual venue/space in Montreal in the last 14 days
- **Men (cis or trans) who had sex with 2 male (cis or trans) partners or more in Montreal in the last 14 days**

Quebec indications for vaccination (as of June 14)

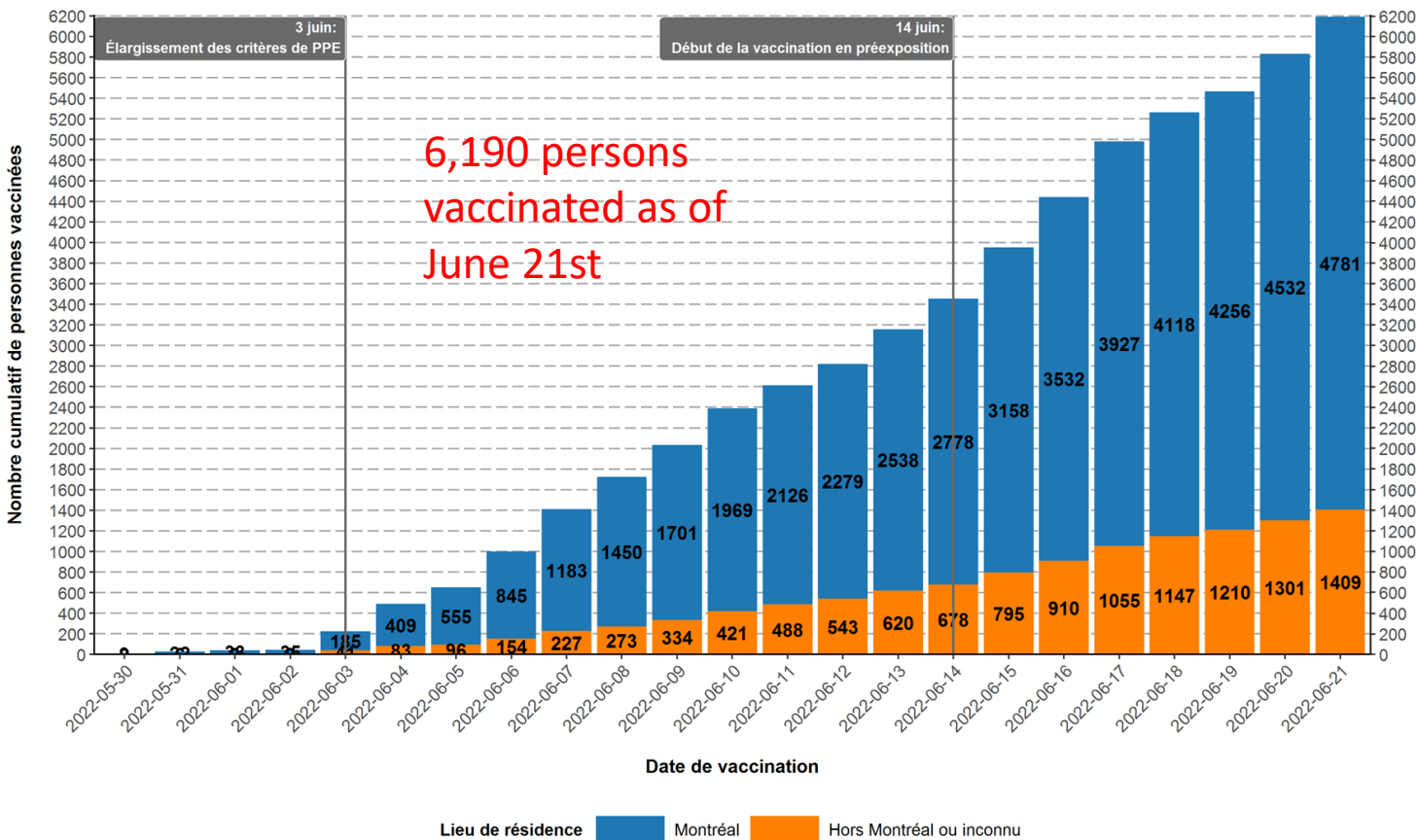
- Post-exposure prophylaxis (as previous slides) +
- **Preexposure prophylaxis**
 - **Any man (or person trans or queer) who has or plans to have sexual encounters in Montreal with another man (or person trans or queer) :**
 - **Who isn't a unique stable sexual partner** (i.e. with a agreement of sexual exclusivity),
 - At a social venue/space with sexuality-on-premises between men,
 - In exchange for money or other goods/services (received or given).
 - Any worker/volunteer at social venue/space with sexuality-on-premises between men.

Goal of the preexposure vaccination campaign : vaccinate 25,000 persons in the next few weeks

Vaccine delivery strategy

- Vaccine sites
 - 3 mass vaccination sites (with or without appointment)
 - Screening for indications for vaccination at entry
 - 4 sexual health clinics offering the vaccine
 - Pediatric hospital for children under 18 years
- Vaccine promotion
 - via community organizations and outreach workers working with MSM communities
 - Qualitative study (survey) of barriers and facilitators (upcoming)

Progression of vaccination in Montreal



Vaccine strategy evaluation

- Efficacy evaluation
 - Under development
 - So far:
 - 5 people became cases who were vaccinated 1 to 7 days before symptom onset (median 4 days)
- Vaccine safety evaluation
 - Passive surveillance of adverse events following immunization (AEFIs)
 - So far, 3 AEFIs:
 - 1 anesthesia/paresthesia of the vaccinated arm
 - 1 local reaction (2.5 inch painless induration without erythema)
 - 1 probable leukocytoclastic (hypersensitivity) vasculitis of lower limbs ; could be linked to either vaccine or antibiotics (levofloxacin, ceftriaxone) given same day for gonorrhoea treatment

4

Interventions in potentially exposed settings

Interventions in potentially exposed settings

- In-depth evaluation of any potentially exposed setting
 - Setting-specific evaluation and IPC recommendation
 - Healthcare setting
 - 1 healthcare worker (HCW) case worked while symptomatic and exposed 2 other HCWs; no significant exposure of patients
 - Homeless shelter
 - Occupational settings
- No documented transmission in those settings in Montreal to date

5

Communications

Communications

- Communication plan
 - Timely and transparent
 - Inclusive and non-stigmatizing approach
- Adapted material development on various platforms
- Partnership with community organizations and governmental actors

Nouvelle
2022.06.05 - POPULATION PROFESSIONNEL

CE QU'IL FAUT SAVOIR SUR LA VARIOLE SIMIENNE À MONTRÉAL

APPEL À LA POPULATION

Ce qu'il faut savoir sur la variole simienne à Montréal

Les données sur le nombre de cas seront dorénavant accessibles sur Québec.ca

HABITUELLES POUR LA BONNE, LES PRATIQUES GÉNÉTALES OU AILLEURS SUR TON CORPS ?

En ce moment, **la variole du singe** (ou le monkeypox) circule dans nos communautés, notamment par les contacts sexuels.

Période de contagion : 2 à 4 semaines

AGIS AVEC VIGILANCE ET PARLES-EN AVEC TON ENTOURAGE.

Par prudence, informe-toi pour en savoir plus (811) et n'hésite pas à consulter une personne professionnelle de la santé en cas de doute. Nos équipes d'intervention sont là pour toi!

sanitemontreal.qc.ca

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Maison Plein Coeur
ACCM

In summary: what clinicians should know

- **Report and test suspect cases**
- Recommend **isolation for cases**, offer risk reduction strategy if isolation not possible
- Recommend **self-monitoring of symptoms** and **post-exposure prophylaxis for contacts**
- Recommend **pre-exposure prophylaxis** for at risk individuals (in Montreal)

THANK YOU