What’s new with COVID-19 and Monkeypox

June 24, 2022

Dr. Allison McGeer
Dr. Darrell Tan
What’s new with COVID-19 and Monkeypox

Moderator: Dr. Tara Kiran
   Fidani Chair, Improvement and Innovation
   Department of Family and Community Medicine, University of Toronto

Panelists:
• Dr. Allison McGeer, Toronto, ON
• Dr. Darrell Tan, Toronto, ON

The COVID-19 Community of Practice for Ontario Family Physicians is a one-credit-per-hour Group Learning program that has been certified for up to a total of 32 credits.
Land Acknowledgement

We acknowledge that the lands on which we are hosting this meeting include the traditional territories of many nations.

The OCFP and DFCM recognize that the many injustices experienced by the Indigenous Peoples of what we now call Canada continue to affect their health and well-being. The OCFP and DFCM respect that Indigenous people have rich cultural and traditional practices that have been known to improve health outcomes.

I invite all of us to reflect on the territories you are calling in from as we commit ourselves to gaining knowledge; forging a new, culturally safe relationship; and contributing to reconciliation.
Changing the way we work

A community of practice for family physicians during COVID-19

At the conclusion of this series participants will be able to:

• Identify the current best practices for delivery of primary care within the context of COVID-19 and how to incorporate into practice.
• Describe point-of-care resources and tools available to guide decision making and plan of care.
• Connect with a community of family physicians to identify practical solutions for their primary care practice under current conditions.

Disclosure of Financial Support

This CPD program has received in-kind support from the Ontario College of Family Physicians and the Department of Family and Community Medicine, University of Toronto in the form of logistical and promotional support.

Potential for conflict(s) of interest:
N/A

Mitigating Potential Bias

• The Scientific Planning Committee has full control over the choice of topics/speakers.
• Content has been developed according to the standards and expectations of the Mainpro+ certification program.
• The program content was reviewed by a three-member national/scientific planning committee.

Planning Committee: Dr. Tara Kiran (DFCM), Dr. Elizabeth Muggah (OCFP); Kimberly Moran (OCFP) and Mina Viscardi-Johnson (OCFP)

Previous webinars & related resources:
https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessions
Dr. Allison McGeer—Panelist
Microbiologist, Infectious Disease Specialist, Mount Sinai Hospital

Dr. Darrell Tan—Panelist
Infectious Diseases Physician, Clinician Scientist, St. Michael’s Hospital

Dr. David Kaplan – Co-Host
Twitter: @davidkaplanmd
Family Physician, North York Family Health Team and Vice President, Quality, Ontario Health
Speaker Disclosure

• Faculty Name: **Dr. Allison McGeer**
  • Relationships with financial sponsors: Novavax, Medicago, Sanofi-Pasteur, GSK, Merck
    • Grants/Research Support: Sanofi-Pasteur, Pfizer
    • Speakers Bureau/Honoraria: Moderna, Pfizer, AstraZeneca, Novavax, Medicago, Sanofi-Pasteur, GSK, Merck
  • Others: N/A

• Faculty Name: **Dr. Darrell Tan**
  • Relationships with financial sponsors: N/A
    • Grants/Research Support: Abbvie, Gilead, Viiv Healthcare, Glaxo Smith Kline, Canada Research Chairs program
    • Speakers Bureau/Honoraria: N/A
    • Others: N/A
Speaker Disclosure

- Faculty Name: **Dr. David Kaplan**
  - Relationships with financial sponsors:
    - Grants/Research Support: N/A
    - Speakers Bureau/Honoraria: Ontario College of Family Physicians
    - Others: Ontario Health (employee)

- Faculty Name: **Dr. Tara Kiran**
  - Relationships with financial sponsors:
    - Grants/Research Support: St. Michael’s Hospital, University of Toronto, Health Quality Ontario, Canadian Institute for Health Research, Ontario Ministry of Health, Gilead Sciences Inc (re: Hepatitis C), Staples Canada (re: Patient Engagement)
    - Speakers Bureau/Honoraria: Ontario College of Family Physicians, Ontario Medical Association, Doctors of BC, Nova Scotia Health Authority, Osgoode Hall Law School, Centre for Quality Improvement and Patient Safety, Vancouver Physician Staff Association, University of Ottawa, Ontario Health, Canadian Medical Association
Outline for Today

• Latest on COVID, new variants, kids vaccine + more
• Monkeypox update
How to Participate

- All questions should be asked using the Q&A function at the bottom of your screen.

- Press the thumbs up button to upvote another guest's questions. Upvote a question if you want to ask a similar question or want to see a guest’s question go to the top and catch the panel's attention.

- Please use the chat box for networking purposes only.
Dr. Allison McGeer – Panelist
Microbiologist, Infectious Disease Specialist, Mount Sinai Hospital

Dr. Darrell Tan – Panelist
Infectious Diseases Physician, Clinician Scientist, St. Michael’s Hospital
• Release of mask mandates?
• Emergence of BA.4/BA.5
Emergence of BA.4 and BA.5 in Ontario

The chart illustrates the percentage of BA.4 and BA.5 cases over time in Ontario. The figure shows a significant increase in the BA.5 variant, especially after 19 June.
# Comparing vaccines for 6-59month old children

<table>
<thead>
<tr>
<th></th>
<th><strong>Pfizer</strong></th>
<th><strong>Moderna</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dose</strong></td>
<td>3 doses, each 3ug</td>
<td>2 doses, each 25ug</td>
</tr>
<tr>
<td><strong>Timing</strong></td>
<td>0, 3 weeks, 11 weeks</td>
<td>0, 4 weeks</td>
</tr>
</tbody>
</table>
| **Effectiveness**| 0 after 2 doses  
80% but with VERY wide confidence limits (FDA says unmeasured) | 50% ages 6-23 months  
37% ages 2-5 years |
| **Side effects** | 1-3%  
No difference in fever compared to placebo  | 8% fever  
0.9% swollen lymph nodes  
5% nausea/vomiting |
4 vs 3 doses Pfizer in residents LTC, Israel

A. Overall SARS-CoV-2 Infection

- VE 36%

B. Hospitalizations for mild to moderate COVID-19

- VE 66%

C. Hospitalizations for severe COVID-19

- VE 72%

D. COVID-19-related deaths

- VE 76%

NMTR-RIT in standard risk patients
(more science by press release)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alleviation of symptoms</td>
<td>Did not meet endpoint</td>
</tr>
<tr>
<td>Hospitalization/death</td>
<td>5/576 NMTR-RIT vs. 10/569 placebo</td>
</tr>
<tr>
<td>Hospitalization/death – high risk</td>
<td>3/362 NMTR-RIT vs. 7/366 placebo</td>
</tr>
<tr>
<td>Medical visits</td>
<td>62% reduction</td>
</tr>
</tbody>
</table>
A practical approach to monkeypox

Darrell H. S. Tan MD FRCPC PhD
June 24, 2022
Monkeypox fears could stigmatize LGBTQ2S+ community, expert says

Monkeypox: What We Know

May 20, 2022
Key messages

• **Suspect monkeypox** when seeing the combination of flulike symptoms ± skin lesions ± lymphadenopathy, especially in gay, bi, other MSM

• **Diagnose monkeypox** using PCR but ensure appropriate specimen types, IPAC considerations, and ability to safely transport specimens

• **Vaccine is available** through Toronto Public Health/local PHU for gay, bi, other MSM meeting risk criteria, and close contacts of cases
## Traditional teaching on natural history

<table>
<thead>
<tr>
<th>Stage</th>
<th>Incubation period</th>
<th>Fever stage</th>
<th>Rash stage</th>
<th>Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeline</td>
<td>5-21 days</td>
<td>1-4 days</td>
<td>2-4 weeks</td>
<td>Days to weeks</td>
</tr>
<tr>
<td>Clinical findings</td>
<td></td>
<td>Enanthem, Lymphadenopathy near end</td>
<td>Macule → Papule → Vesicle → Pustule</td>
<td>Crusted and healing</td>
</tr>
<tr>
<td>Infectivity</td>
<td>Nil</td>
<td>Low</td>
<td>High</td>
<td>Nil</td>
</tr>
</tbody>
</table>
Rash of Monkeypox
Lesions at site of inoculation
Lesions at site of inoculation
Local lymphadenopathy

- Cervical
- Inguinal
Disseminated rash – multiple stages at once
Disseminated rash – lesion evolution
Disseminated rash
Involvement of palms and soles
## Differential diagnosis

<table>
<thead>
<tr>
<th>Genital ulcer disease</th>
<th>Pharyngitis</th>
<th>Systemic manifestations + rash</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Primary syphilis</td>
<td>• Mononucleosis</td>
<td>• VZV</td>
</tr>
<tr>
<td>• HSV-1 or 2</td>
<td>• Group A Strep</td>
<td>• Enterovirus (Hand foot mouth)</td>
</tr>
<tr>
<td>• LGV</td>
<td>• HIV</td>
<td>• Disseminated gonococcus</td>
</tr>
<tr>
<td>• Chancroid (<em>H. ducreyi</em>)</td>
<td>• SARS-CoV-2</td>
<td>• HIV</td>
</tr>
</tbody>
</table>

- Consider co-infections: Gonorrhea, chlamydia, syphilis, HIV, hepatitis
Monkeypox specimen collection

• Main diagnostic test = PCR

• Febrile stage: Blood (red top), NP swab, urine

• **Skin lesions:**
  • Vesicle roof, & crusts into dry Falcon tube
  • Viral swabs: in 1mL viral transport media

• Serology NOT currently available
Logistics of seeing patients

- **IPAC:** Private rooms, appropriate PPE (N95, shield, gown, gloves), clean between patients

- Category B pathogen therefore staff performing specimen packaging should have training in *Transportation of Dangerous Goods*

- If site not set-up for this, then refer (remotely) to
  - Local infectious diseases
  - Toronto Public Health STI clinic
  - Other sites TBA – TPH/local PHU disseminating this info
Vaccine

What
• Imvamune®
• 3rd generation replication-deficient live virus vaccine against smallpox

Who
• Trans or cisgender individuals who self-identify as GBM and at least one of:
  • Have received a diagnosis of bacterial STI (i.e., chlamydia, gonorrhea, syphilis) in the past 2 months;
  • Have had 2 or more sexual partners within the past 21 days or may be planning to;
  • Have attended venues for sexual contact within the past 21 (e.g., bath houses, sex clubs) or may be planning to, or who work/volunteer in these settings;
  • Have had anonymous/casual sex in the past 21 days (e.g., using online dating/hookup apps) or may be planning to;
  • Engage in sex work or may be planning to, and their sexual contacts.

How
• Mass vaccination clinics organized by Toronto Public Health/local PHU
Key messages

• **Suspect monkeypox** when seeing the combination of flulike symptoms ± skin lesions ± lymphadenopathy, especially in gay, bi, other MSM

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• **Vaccine is available** through Toronto Public Health/local PHU for gay, bi, other MSM meeting risk criteria, and close contacts of cases
Expanding HIV/STI management & prevention

About

We are an interdisciplinary research team dedicated to bringing together community, academic, clinical, and policy partners to find and implement new and better options for HIV and STI treatment and prevention.
Thank you
Masking

• Provincial mandate lifted in most settings – June 11

• Required in long-term care and retirement homes, and recommended in congregate living settings

• Organizations have discretion to mandate masking by both staff and patients

• OCFP recommends continued masking in community practices given elderly, immunocompromised and other vulnerable patients
Masking: Resources

OCFP

• Masking in community practices – tips and resources:

• Masking poster for clinics:

• Summary IPAC/PPE guidelines:

OMA (log in to access)

• Adaptable template for staff masking policy:
# Outpatient Post-COVID Condition rehabilitation programs in Ontario

<table>
<thead>
<tr>
<th>North Ontario</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Health Sciences North – <a href="#">Community Care &amp; Rehabilitation</a></td>
<td>• St. Joseph’s Care Group (Thunder Bay) – <a href="#">Post-COVID-19 Outpatient Clinic</a></td>
</tr>
<tr>
<td>• St. Joseph’s Care Group (Thunder Bay) – <a href="#">Post-COVID-19 Outpatient Clinic</a></td>
<td></td>
</tr>
<tr>
<td>West Ontario</td>
<td></td>
</tr>
<tr>
<td>• Halton Healthcare: <a href="#">Post COVID-19 Syndrome Clinic</a></td>
<td>• Hamilton Health Sciences Centre – <a href="#">Regional Rehabilitation Centre</a></td>
</tr>
<tr>
<td>• Hôtel-Dieu Grace Healthcare – <a href="#">COVID Recovery Program</a></td>
<td>• Hotel Dieu Shaver Health and Rehabilitation Centre</td>
</tr>
<tr>
<td>• <a href="#">St. Joseph’s Health Care London</a> – Post-acute COVID-19 Program</td>
<td></td>
</tr>
<tr>
<td>East Ontario</td>
<td></td>
</tr>
<tr>
<td>• <a href="#">Providence Care Hospital (Kingston)</a></td>
<td>• The Ottawa Hospital – <a href="#">Rehabilitation Centre</a></td>
</tr>
<tr>
<td>• The Ottawa Hospital – <a href="#">Rehabilitation Centre</a></td>
<td></td>
</tr>
<tr>
<td>South Ontario</td>
<td></td>
</tr>
<tr>
<td>• <a href="#">Runnymede Healthcare Centre</a></td>
<td>• Sinai Health System – <a href="#">Hennick Bridgepoint Hospital</a></td>
</tr>
<tr>
<td>• Sinai Health System – <a href="#">Hennick Bridgepoint Hospital</a></td>
<td>• Toronto Grace Health Centre: <a href="#">Pulmonary Rehabilitation Clinic</a></td>
</tr>
<tr>
<td>• Toronto Grace Health Centre: <a href="#">Pulmonary Rehabilitation Clinic</a></td>
<td>• UHN – <a href="#">Toronto Rehabilitation Institute (TRI)</a></td>
</tr>
<tr>
<td>• Unity Health Toronto – Providence Healthcare: <a href="#">Outpatient Post-COVID Condition Rehabilitation Program</a></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Dr. Ashley Verduyn, Family Physician, Chief and Director of Medical Affairs, Providence Health Care, Toronto, ON (February 18, 2022 COVID-19 Community of Practice)
Source: Dr. Ashley Verduyn, Family Physician, Chief and Director of Medical Affairs, Providence Health Care, Toronto, ON (February 18, 2022 COVID-19 Community of Practice)
NEW: COVID-19 Vaccination Tool Kit for Health Care Providers

The Public Health Agency of Canada has launched a tool kit for health care providers designed to provide evidence-informed resources to support informed choices and constructive dialogue with patients about COVID-19 vaccines authorized for use in Canada.

More information:

Government of Canada: COVID-19: For health professionals
Shortage of infant formulas for infants with food allergies and certain medical conditions

Important information and resources below:

**Fact Sheet for Families and Caregivers:** Health Canada has recently updated their website with a fact sheet for families and caregivers during the shortage of formula for infants with food allergies: [https://www.canada.ca/en/health-canada/services/infant-care/infant-formula/shortage.html](https://www.canada.ca/en/health-canada/services/infant-care/infant-formula/shortage.html).

**Health Canada’s Interim Policy:** Health Canada published an Interim policy on the importation and sale of infant formulas, human milk fortifiers (HMF) and metabolic products for inborn errors of metabolism to mitigate shortages. - [Canada.ca](https://www.canada.ca) on March 10, 2022 to allow additional products to be imported from other countries to mitigate the effects of the shortage.

**National Clinical Decision Tree:** A national clinical decision tree entitled, “[Use of Specialized Infant Formula during a Shortage](https://www.canada.ca)" has recently been developed to support health care providers across the country to temporarily guide treatment decisions, and support families and caregivers to make appropriate formula choices while rationing the use of specialized infant formulas.

**Ontario’s Inherited Metabolic Diseases (IMD) Program:** Since March 2022, the Ontario Ministry of Health has added over 10 metabolic formula products to the list of products reimbursed through the Inherited Metabolic Diseases (IMD) Program, to provide patients with alternatives during this shortage.
Questions?

Webinar recording and curated Q&A will be posted soon
https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessions

Our next Community of Practice: **July 8, 2022**

**Contact us:**  ocfpcme@ocfp.on.ca

**Visit:**  https://www.ontariofamilyphysicians.ca/tools-resources/covid-19-resources

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