COVID-19 Updates and Managing Respiratory Illness in Kids

Jan 19, 2024

Dr. Alon Vaisman
Dr. Tasha Stoltz
Dr. Daniel Warshafsky

COVID-19 Community of Practice for Ontario Family Physicians
COVID-19 Updates and Managing Respiratory Illness in Kids

Moderator:

• Dr. Ali Damji, Division Head, Primary Care, Trillium Health Partners and Family Physician, Credit Valley Family Health Team, Mississauga, ON

Panelists:

• Dr. Alon Vaisman, Toronto, ON
• Dr. Tasha Stoltz, Kitchener, ON
• Dr. Daniel Warshafsky, Toronto, ON

Host:

• Dr. Mekalai Kumanan, Cambridge, 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 recognizes 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 respects 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.
"I'm so grateful that I can speak even a little bit of my language, which I'm not fluent enough [in] here, because in this business, Native actors used to speak their lines in English and then the sound mixers would run them backwards to accomplish Native languages on camera," said Gladstone. "This is an historic [award]. It doesn't belong to just me."
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.

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.

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

Previous webinars & related resources:
https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessions
Dr. Alon Vaisman – Panelist
Infectious Diseases and Infection Control Physician, University Health Network

Dr. Tasha Stoltz – Panelist
Pediatrician, Kitchener, ON
Dr. Daniel Warshafsky – Panelist
Associate Chief Medical Officer of Health at the Office of the Chief Medical Officer of Health

Dr. Mekalai Kumanan – Host
Twitter: @MKumananMD
President, Ontario College of Family Physicians
Family Physician, Two Rivers Family Health Team
Chief of Family Medicine, Cambridge, ON
**Speaker Disclosure**

- **Faculty Name:** Dr. Alon Vaisman
- **Relationships with financial sponsors:**
  - Grants/Research Support: N/A
  - Speakers Bureau/Honoraria: Ontario College of Family Physicians
  - Membership on advisory boards: N/A
  - Others: N/A

- **Faculty Name:** Dr. Tasha Stoltz
- **Relationships with financial sponsors:** McMaster University (Regional Education Lead – Undergraduate Pediatrics)
  - Grants/Research Support: N/A
  - Speakers Bureau/Honoraria: Ontario College of Family Physicians
  - Membership on advisory boards: N/A
  - Others: N/A
Speaker Disclosure

- Faculty Name: **Dr. Daniel Warshafsky**
  - Relationships with financial sponsors:
    - Grants/Research Support: N/A
    - Speakers Bureau/Honoraria: N/A
    - Others: N/A

- Faculty Name: **Dr. Mekalai Kumanan**
  - Relationships with financial sponsors:
    - Grants/Research Support: N/A
    - Speakers Bureau/Honoraria: Ontario College of Family Physicians
    - Others: Chief of Family Medicine, Cambridge Memorial Hospital

- Faculty Name: **Dr. Ali Damji**
  - Relationships with financial sponsors:
    - Grants/Research Support: N/A
    - Speakers Bureau/Honoraria: Ontario College of Family Physicians
    - Others: N/A
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. Alon Vaisman – Panelist
Infectious Diseases and Infection Control Physician, University Health Network

Dr. Tasha Stoltz – Panelist
Pediatrician, Kitchener, ON
The Current State of COVID

Alon Vaisman MD MAS FRCPC

Hospital Epidemiologist, Infection Prevention and Control
Infectious Disease Specialist
University Health Network
OBJECTIVES

1. The current state of COVID variants, morbidity, treatments, and vaccines

2. No words, just pictures!
https://ourworldindata.org/coronavirus
Laboratory confirmed weekly case counts and rates of COVID-19 in Ontario

Week start date
NACI recommends that:

- Starting in the spring of 2024, the following individuals who are at increased risk of severe illness from COVID-19 may receive an additional dose of XBB.1.5 COVID-19 vaccine:
  - Adults 65 years of age and older
  - Adult residents of long-term care homes and other congregate living settings for seniors
  - Individuals 6 months of age and older who are moderately to severely immunocompromised (due to underlying conditions or treatment)
TREATMENT
<table>
<thead>
<tr>
<th>Severity Criteria</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>no new need for supplemental oxygen</td>
<td>receiving low-flow supplemental oxygen</td>
<td>oxygen via high-flow nasal cannula, non-invasive positive pressure ventilation, or invasive mechanical ventilation</td>
<td></td>
</tr>
<tr>
<td>Preferred Antiviral</td>
<td>nirmatrelvir/ritonavir x 5 days OR remdesivir x 3 days</td>
<td>remdesivir x 5 days</td>
<td>none</td>
</tr>
<tr>
<td>Alternative Antiviral</td>
<td>[none]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunomodulator</td>
<td>none</td>
<td>dexamethasone +/- IL-6 OR JAK inhibitor</td>
<td>dexamethasasone +/- IL-6 OR JAK inhibitor</td>
</tr>
</tbody>
</table>

https://www.antimicrobialstewardship.com/covid-19
Acute Bacterial Co-Infection in COVID-19
A Rapid Living Review and Meta-analysis

24 Studies included
3338 COVID-19 Patients
December 2019 to March 2020

3.5% Co-Infection
On presentation

14.3% Secondary Infection
After presentation

71.8% Antibiotic Prescribing

CONCLUSIONS

1. Omicron is highly transmissible, infection is highly probable
2. New variants are inevitable
3. Vaccines are less effective in the omicron era
Resources to support your practice

Writing Sick Notes

To help educate employers on changing their policies, the OCFP has created this resource for use in your EMRs and clinic workflows for sick notes.

Resources to support your practice

Changes to the CPSO Continuity of Care: Advice to the Profession

These updates provide greater clarity around administrative responsibilities for specialists and emphasize clear communication between consultants and family physicians.

What you need to know:

What you need to know:

Letter Templates

1. REFEERRALS
2. ORDERING TESTS
3. REVIEWING TESTS
4. REFEERAL TO SUB-SPECIALISTS
5. CONSULT NOTES & DISCHARGE SUMMARIES

Resources to support your practice

https://www.ontariofamilyphysicians.ca/supports-for-family-doctors/

Coughing, Wheezing and Sneezing:
Respiratory illnesses in children

Tasha Stoltz, MD FRCPC
Consultant Pediatrician
Grand River Hospital, Kitchener ON
Objectives

• Review pathophysiology of common pediatric respiratory illnesses
  • URTI
  • Croup
  • Bronchiolitis
  • Pneumonia
  • Asthma

• Discuss approach to diagnosis and evidence-based treatment strategies
Upper respiratory tract infections

• Sneezing, stuffy/runny nose, headache, sore throat, cough may be present
• Always viral in cause
• Diagnosis is clinical
  • NPS not necessary
• Treatment is supportive
  • No role for PO/inhaled/intranasal steroids, inhalers or antibiotics
Croup

• Acute-onset upper airway obstruction secondary to viral infection
• 6 months-3 years of age
• Barky cough +/- stridor
• Rule out: bacterial tracheitis, epiglottitis, retropharyngeal abscess, anaphylaxis, foreign body aspiration
  • Toxic-appearing, drooling, dysphagia is NOT croup

References: Acute management of croup in the emergency department (Canadian Pediatric Society)
Croup

- Diagnosis is clinical
  - CXR/lateral neck XR, swabs are NOT necessary for diagnosis
- Treatment:
  - PO dexamethasone 0.6 mg/kg x 1
  - NO antibiotics
- To ED if:
  - Stridor or WOB at rest, biphasic stridor
  - Hypoxia or cyanosis
  - Drooling or dysphagia
  - Lethargy or distress

References: [Acute management of croup in the emergency department (Canadian Pediatric Society)](http://www.cps.ca)
Bronchiolitis

• Viral LRTI in children <2 years
• Can be caused by any virus, including RSV
• Fever, cough and rhinorrhea, wheeze, crackles +/- respiratory distress
• Rule out: asthma, pneumonia, foreign body aspiration

Table 4

<table>
<thead>
<tr>
<th>Groups at higher risk for severe disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants born prematurely (&lt;35 weeks' gestation)</td>
</tr>
<tr>
<td>&lt;3 months of age at presentation</td>
</tr>
<tr>
<td>Hemodynamically significant cardiopulmonary disease</td>
</tr>
<tr>
<td>Immunodeficiency</td>
</tr>
</tbody>
</table>

References: Bronchiolitis: Recommendations for diagnosis, monitoring and management of children one to 24 months of age (Canadian Pediatric Society)
Bronchiolitis

• Diagnosis is clinical
  • X-rays not necessary for diagnosis, usually non-specific – only if severe or alternate diagnosis suspected
  • Labs not necessary
  • NPS not necessary

• Treatment:
  • Supportive – hydration, nasal suctioning?
  • No evidence for use of Ventolin, steroids, antibiotics, antivirals

• To ED if any concerns about RR, WOB, O2 saturations, mental status, apneas, or hydration concerns

• Symptoms usually peak on day 5

References: Bronchiolitis: Recommendations for diagnosis, monitoring and management of children one to 24 months of age (Canadian Pediatric Society)
Bacterial Pneumonia

• Fever, cough, appears ‘sicker’, +/- respiratory distress
• Focal crackles (not wheeze!) on examination
• Diagnosis:
  • CXR – focal lobar consolidation or worse (parapneumonic effusion, empyema, abscess, etc)
  • Atypical pathogens can have bilateral infiltrates
  • NPS, labs not indicated for outpatients

References: Uncomplicated pneumonia in healthy Canadian children and youth (Canadian Pediatric Society)
Bacterial Pneumonia

- Treatment:
  - Uncomplicated: Amoxicillin 90 mg/kg/day divided TID x 5 days
  - Atypicals – treatment with macrolides is controversial
- Improvement usually within 48 hours of antibiotics
- Repeat CXR after illness is not necessary in children if clinical improvement
- To ED if any concerns about RR, WOB, O2 saturations, mental status, apneas, or hydration concerns

References: Uncomplicated pneumonia in healthy Canadian children and youth (Canadian Pediatric Society)
Asthma

• Recurrent wheeze that is responsive to bronchodilator treatment
• Typically personal or family history of atopy

• Asthma guidelines:
  • Diagnosis and management of asthma in preschoolers
  • Diagnosis and management of asthma in preschoolers, children and adults
  • Managing an acute asthma exacerbation in children
  • ICS for asthma therapy in children
  • The management of very mild and mild asthma in preschoolers, children and adolescents
Asthma – Controller Therapy

- Trigger avoidance and manage comorbidities
- Common triggers: infection, physical activity, allergens, cold air, pollution, poor compliance
- Written asthma action plan
- Aerochambers!
- ICS use:
  - Ensure compliance
  - Need to use 3-4 weeks for any effect
  - Review side effects with parents

References: Managing an acute asthma exacerbation in children (Canadian Pediatric Society)
Asthma - Exacerbation

• Diagnosis is clinical – no CXR/other investigations required
• Use rescue puffer q4h routinely during an exacerbation
• Oral corticosteroids
  • PO dexamethasone 0.3-0.6 mg/kg x 1-2 days
  • PO prednisolone 1 mg/kg x 3-5 days
• NO evidence for:
  • Increasing ICS dose during illness
  • Short-term, intermittent use of ICS

References: Managing an acute asthma exacerbation in children (Canadian Pediatric Society)
Post-Viral Cough

• Manage expectations
• Cough can last 4-6 weeks post-viral infection
• No investigations required unless associated with other features or >6 weeks in duration in otherwise healthy children
• Avoid exacerbating factors (eg smoke, allergens)
• Avoid OTC cough suppressants, especially in kids <6 years
• Honey can be used >1 year of age
• Humidifiers
Vaccines

• COVID-19:
  • Recommended for all children ≥5 years
  • Recommended for all children 6 months to 4 years at high risk for severe illness, and other children MAY be vaccinated

• RSV:
  • Synagis (palivizumab) vaccine currently available
  • Stay tuned for some upcoming changes…

References: COVID-19 vaccine for children and adolescents (Canadian Pediatric Society)
SUMMARY

• The diagnosis is in the history and exam
• If you hear a wheeze, CXR usually not required
• If you hear crackles, CXR to diagnose bacterial pneumonia before antibiotics
<table>
<thead>
<tr>
<th>Presentation</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Viral URTI</strong></td>
<td>Sneezy, snuffy nose</td>
</tr>
<tr>
<td><strong>Croup</strong></td>
<td>Barky cough, inspiratory stridor</td>
</tr>
<tr>
<td><strong>Bronchiolitis</strong></td>
<td>Fever, cough, wheeze, crackles</td>
</tr>
<tr>
<td><strong>Bacterial pneumonia</strong></td>
<td>High-grade fevers, cough, crackles</td>
</tr>
<tr>
<td><strong>Asthma</strong></td>
<td>Recurrent wheeze</td>
</tr>
<tr>
<td><strong>Post-viral cough</strong></td>
<td>Persistent cough x 4-6 weeks</td>
</tr>
</tbody>
</table>
Are you a healthcare professional with a question about COVID-19 therapeutics?

Staffed by a registered pharmacist, OPA’s COVID-19 Therapeutic Support Line provides Ontario vaccinators and prescribers with a dedicated resource to assist with timely, evidence-based clinical decision-making support.

1-888-519-6069
10 am – 8 pm EST, 7 days per week

Contact Us Today!
opatoday.com/covid19support
To help Toronto's school-aged children and youth catch-up on routine vaccines, TPH will hold a number of community vaccine clinics beginning **Friday January 19th, 2024**. The clinics will offer vaccines for the nine Immunization of School Pupils Act (ISPA) diseases, as well as the human papillomavirus and hepatitis B vaccines.

**Beginning January 25th**, clinics will also offer:

- COVID-19 vaccines for children under five years of age

- Novavax XBB COVID-19 vaccine, a protein subunit vaccine for individuals 12 years of age and over who have been unable (i.e., due to allergy) or unwilling to receive an mRNA COVID-19 vaccine.

For the above mentioned COVID-19 vaccines, advise eligible patients that they may get these vaccines at a TPH community vaccine clinic. Appointments are required and can be booked online beginning **January 23rd**. A health card is not required.

- Remind parents **to report** their child’s immunizations to TPH.
New Toolkit

Choosing Wisely Canada's new toolkit features easy-to-use tools and resources to help clinicians and caregivers manage bronchiolitis appropriately.
PEDIATRIC VIRAL PRESCRIPTION

Provides other ways to help relieve symptoms to avoid unnecessary antibiotic prescriptions.

- Ensure they drink plenty of fluids and get rest
  - *For infants, smaller feeds more often to meet the same total daily amount of feeds*
- Wash hands often and stay home to avoid spreading the infection
- **Do not give Aspirin or over-the-counter cough and cold medicines.** Talk to your health care provider or pharmacist about using the following treatments and the right amount to give:
  - Acetaminophen (e.g., Tylenol) for fever and aches
  - Ibuprofen (e.g., Advil, Motrin) for fever and aches

Your child does not need antibiotics because they do not work on viral infections. Using antibiotics when not needed makes them less effective for potential future bacterial infections. They can cause side effects (like diarrhea, rash) and, in rare cases, allergic reactions, or kidney injury, or liver injury.
### RECENT SESSIONS

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 17</td>
<td>COVID-19 Updates and the New Ontario Structured Psychotherapy Program</td>
<td>Dr. Gerald Evans, Dr. Paul Kurdyak, Dr. Leah Skory</td>
</tr>
<tr>
<td>October 27</td>
<td>Respiratory and Flu Season: Counselling Kids &amp; Balancing Workload</td>
<td>Dr. Joan Chan, Dr. Janine McCready</td>
</tr>
<tr>
<td>October 6</td>
<td>Update on COVID-19, influenza and RSV vaccines</td>
<td>Dr. Zain Chagla, Dr. Elizabeth Muggah</td>
</tr>
<tr>
<td>September 15</td>
<td>Preparing for the fall</td>
<td>Dr. Kieran Michael Moore, Dr. Daniel Warshafsky</td>
</tr>
<tr>
<td>December 15</td>
<td>Winter virus season and Changes to breast cancer screening in Ontario</td>
<td>Dr. Allison McGeer, Dr. Jonathan Isenberg, Dr. Anna M. Chiarelli, Maggie Keresteci</td>
</tr>
</tbody>
</table>

**Previous webinars & related resources:**
Accessing Previous Sessions and Self Learning

Previous webinars & related resources
https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessionspast-sessions
Gain insights from over 30 family physician leaders! Topics include:

- Standing up for Family Doctors
- Tips and Tricks in Your EMR That Will Make You Very Happy
- Helping Reduce Administrative Burden Today: New Bots and AI at Your Service

Join us on January 26 & 27

View the agenda and register today www.ocfpsummit.ca

Earn up to 39 Mainpro+ Credits

Conference content available on-demand until April 30, 2024
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: February 9, 2024

Contact us: ocfpcme@ocfp.on.ca

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

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.

Post session survey will be emailed to you. Mainpro+ credits will be entered for you with the information you provided during registration.