



Influenza

Influenza is an acute respiratory illness caused by influenza A or B viruses, and occasionally influenza C viruses. Seasonal outbreaks occur every year, mainly in the late fall and winter months. Influenza A, which is most commonly seen, has high rates of mutation and gene re-arrangement, changing the virus from year to year and sometimes within the same season. Although influenza is generally an acute, self-limited and usually uncomplicated disease in healthy children, it can be associated with severe morbidity and mortality.

EQUAL OPPORTUNITY VIRUS:

- Approximately 10% of children per year have signs & symptoms of influenza
- Up to 2000 children in Canada are hospitalized for influenza each year
- 20% of those children require care in the ICU
- 5% require mechanical ventilation
- 0.5% die
- 50% of hospitalized children do not have a chronic illness



Populations at a **higher risk for complications** include children under 5 years of age (particularly those under 2), children with lung disease, obesity, diabetes, kidney disease, heart disease, and those who are immunocompromised.

TRANSMISSION:

- Easily spread via small droplets - contact with respiratory secretions and contaminated objects.
- Viral shedding occurs up to two days prior to the appearance of symptoms.

SYMPTOMS:

- Abrupt onset. High fever, cough, congestion, and sore throat.
- Headache, extreme fatigue, myalgias.
- Symptoms are often prolonged compared to viral URIs, lasting 1-2 weeks.
- NOT just a bad cold.

TESTING:

- Viral swab is not necessary. Recommended only if it affects clinical management.
- Patient is exhibiting severe symptoms, is being admitted to hospital or is at risk for complications.
- Labs: often show neutropenia. If influenza presents with an elevated white count, consider a secondary bacterial infection.

ADMISSION:

- Supplementary oxygen requirements, dehydration & respiratory distress.

Influenza

SUPPORTIVE MANAGEMENT:

- Management is largely supportive - rest, fluids, NSAIDs, acetaminophen.
- Avoid ASA (implicated in Reye's syndrome in combination with influenza).
- Cough & cold medications NOT recommended for any pediatric patients.

COMPLICATIONS:

- Respiratory - pneumonia is a major complication of influenza. Bacterial co-infection with *S. aureus* and *S. pneumoniae* may be particularly severe and potentially fatal. Exacerbation of underlying chronic pulmonary conditions (particularly asthma). Respiratory failure.
- CNS - febrile & non-febrile seizures and encephalopathy.
- Cardiac - myocarditis and pericarditis.

MYOSITIS:

- Mild, transient myositis is a common "complication" of influenza in pediatrics.
- Typically self-limited. Bilateral calf muscle pain - patients present not wanting to walk.
- Mild elevation in CK and myoglobin - does not cause myoglobinuria or kidney damage.
- Blood work, urinalysis and IV fluids not necessary if patient tolerating PO fluids.

ANTIVIRAL THERAPY:

- Recommended for children with suspected or confirmed influenza who are hospitalized, have severe or progressive symptoms, or have underlying conditions that increase the risk of complications (even if >48hr since onset of illness).
- Antiviral therapy reduces viral shedding, symptoms, complications, hospitalizations and death.
- If indicated, should be started as soon as possible after symptom onset, ideally within 48 hours.
- Oseltamivir (Tamiflu) is the recommended agent for pediatric patients.

INFLUENZA VACCINE:

- The National Advisory Committee on Immunization (NACI) and the Canadian Pediatric Society (CPS) recommend that everyone over 6 months of age receive an annual influenza vaccine. Children 6m-8y need 2 vaccines one month apart their first year.
- Due to frequent changes in circulating strains, the vaccine usually requires updating annually. Efficacy of the vaccine varies year by year.
- For maximum benefit, the vaccine should be given as soon as it is available, prior to the start of influenza season.

Influenza: Canadian Respiratory Virus Surveillance Report

Influenza highlights for the week ending December 13, 2025 (week 50)



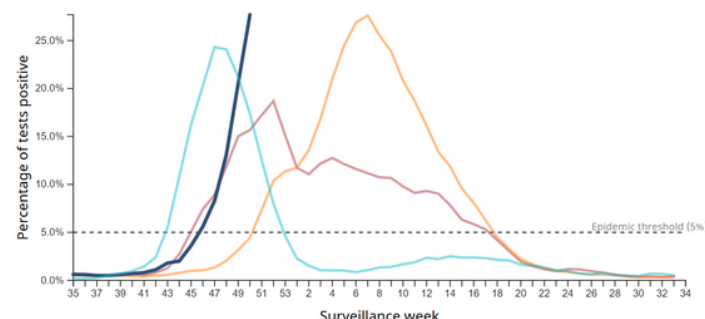
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Percent of tests positive 27.7% Trend: ↗	Detections 11,646 detections of influenza 99.4% influenza A 0.6% influenza B
Dominant subtype Influenza A(H3N2) most common subtype detected	Population affected ≤19 years age group with the most detections
Outbreaks 186 number of weekly outbreaks Trend: ↗	Hospitalizations 6.2 per 100,000 pop. weekly hospitalization rate Trend: ↗

Figure 3: Percentage of tests positive for influenza in Canada for surveillance period 2025-2026 compared to previous periods

Select seasons 2025-2026 2024-2025 2023-2024 2022-2023 Deselect all



IWK Pediatric Grand Rounds

January 14 0900-1000: Maritime Child Health

ZOOM: Meeting ID 817 1067 5567

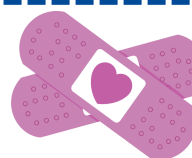
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January 28 0900-1000: A Review of Common Pediatric Neuroinflammatory Disorders

ZOOM: Meeting ID 817 1067 5567

Passcode: 443697

Comfort Corner



[Children's Healthcare Canada](#), in partnership with [Solution for Kids in Pain](#) have been working to reduce the research gap in children's pain assessment, treatment and management. They have built on the expertise in the Canadian child health community and have created a Pediatric Pain Management Practice and Policy Network. The network is designed to be multidisciplinary and inclusive of members across the continuum of care.

The Pediatric Pain Network provides a national forum for the child health community to come together and work on activities such as:

- Sharing information on current pain management processes.
- Collaborating on knowledge mobilization and project planning.
- Building awareness and uptake of the [Health Standards Organization \(HSO\) Pediatric Pain Management Standard](#).
- Facilitating national pain knowledge mobilization and alignment.
- Participating as Subject Matter Experts to rebrand, refresh and update resources such as the [Pediatric Pain Management Toolkit](#).

[Join the network!](#)



Procedural pain management in children & youth: A toolkit for health professionals

Medical procedures are common. They are amongst the most distressful and painful aspects of medical care for children and youth.

This toolkit shares evidence-based solutions so #ItDoesntHaveToHurt.



References

TREKK (2024). *Video for Healthcare Providers: Influenza in Children*. <https://trekk.ca/resources/video-influenza-in-children-virtual-education-session>

CPS (2024). *The Use of Antiviral Drugs for Influenza: Guidance for Practitioners*. <https://cps.ca/en/documents/position/antiviral-drugs-for-influenza>

Up to Date (2025). *Seasonal Influenza in Children*. <https://www.uptodate.com/contents/seasonal-influenza-in-children-clinical-features-and-diagnosis>

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