



To: Health Professionals in BC

From: Respiratory Surveillance – Public Health Response

Date: Originally issued 12/29/2023. Update issued **01/04/2024.**

Re: Update: Increased influenza activity and associated pediatric deaths in BC

Update 01/04/2024:

One additional influenza-related pediatric death was reported during epi-week 52 (Dec 24-30), for a cumulative total of three so far this respiratory season. Influenza-related pediatric deaths will be reported on the <u>Respiratory Virus Data (bccdc.ca)</u> webpage, which consists of surveillance dashboards and summary reports published weekly during the respiratory season.

Issued 12/29/2023:

Epidemiological summary

Two influenza-related deaths associated with secondary bacterial infection among children aged 5-9 years were reported to the BCCDC this week.

Death is a rare outcome of influenza among children, particularly otherwise healthy schoolaged children and teens. Secondary bacterial infections such as streptococcal infections, can result in rapid clinical deterioration and are important contributors to influenza-associated morbidity and mortality.

Influenza activity in BC has been increasing since November and is currently at the highest levels since the start of this respiratory season, predominated by influenza A(H1N1). Elevated influenza activity is expected to continue and there has been a <u>reported rise in invasive group A streptococcal infections</u> in children observed in BC, which underscores the importance of clinical vigilance, prevention and monitoring efforts for influenza, particularly among children at higher risk of severe outcomes. Prompt reporting of influenza-related pediatric deaths to Public Health is also critical for informing public health action.

What clinicians can do





Early antiviral treatment of children at-risk

Given the currently increased circulation of influenza in the community, the use of influenza antiviral treatments (i.e. oseltamivir [Tamiflu]) is particularly important right now for those presenting with compatible symptoms and at high risk for influenza complications. Prompt (i.e. within 48 hours of symptom onset) antiviral treatment with oseltamivir can help reduce severe outcomes of infection.

- Child Health BC and BC Children's Hospital provide guidance on the indications for use
 of Oseltamivir in children within the BC
 context https://www.childhealthbc.ca/file/indications-oseltamivir-usage-influenza-season-0.
- The Association of Medical Microbiology and Infectious Disease
 Canada provides additional guidance on the use of antiviral drugs for seasonal influenza for clinicians.

Recognize Sepsis: BC Provincial Pediatric Sepsis Guideline and Toolkit

Secondary bacterial infections such as streptococcal infections, can result in rapid clinical deterioration and are important contributors to influenza-associated morbidity and mortality. Early recognition of Sepsis is critical. The BC Provincial Pediatric Sepsis Toolkit is available on the Child Health BC website https://www.childhealthbc.ca/clinician-resources/pediatric-sepsis-0 and provides:

- Recommendations for best practice to recognize and treat pediatric sepsis, suspected sepsis or septic shock
- Clinical support tools for clinicians in Emergency Departments and Urgent Care Centers

Prevention through vaccination

Influenza vaccination is recommended and publicly available for all children 6 months of age and older in BC. Vaccination is particularly important for children at higher risk of severe influenza outcomes including:





- Children with chronic medical conditions such as: heart or lung disorders that require regular medical care, such as asthma, chronic obstructive pulmonary disease or cystic fibrosis.
- Children with kidney disease, chronic liver disease such as hepatitis, diabetes, cancer, anemia or weakened immune system.
- Children with health conditions causing difficulty breathing, swallowing or a risk of choking on food or fluids, such as people with severe brain damage, spinal cord injury, seizures or neuromuscular disorders. Children and teenagers required to take Aspirin® or ASA for long periods of time due to a medical condition.
- Children with body mass index assessed as ≥ 95th percentile adjusted for age and sex
- Infants and toddlers

The results of formal vaccine effectiveness analyses will be available later in the season. Based on <u>laboratory analysis of circulating influenza clades</u> with vaccine strains, this year's influenza vaccines appear to be well matched to circulating strains.

Reporting

Clinicians should report fatal outcomes associated with influenza virus in children to their local Medical Health Officer/Public Health for further investigation, as authorized under provisions of the Public Health Act. Below is a list of local health authority contact information:

Regional Public Health Contact Information (for health professionals only)

Fraser Health:

Business hours: 604-507-5471
 After hours: 604-527-4806

Interior Health

Business hours: 1-866-778-7736After hours: 1-866-457-5648

Island Health:

South Island: 1-866-665-6626
 Central Island: 1-866-770-7798
 North Island: 1-877-887-8835

Northern Health:

Business hours: 250-645-3794





BC Centre for Disease Control Provincial Health Services Authority

o After business hours: 250-565-2000, press 7, ask for the MHO on call

• Vancouver Coastal Health:

o Business hours: 604-675-3900

o After business hours: 604-527-4893



