

# Influenza in children: Recognising, preventing and responding to complications



## SAFETY ALERT SA:005/25

Issue date:	14 August 2025
Content reviewed by:	Clinical Excellence Commission Ministry of Health (MoH) Paediatric Infectious Disease Consultant NSW Chief Paediatrician MoH Communicable Diseases Branch
Distributed to:	Chief Executives; Directors of Clinical Governance
KEY MESSAGE:	Influenza cases are high among children in NSW in 2025, increasing the risk of serious complications such as myositis, encephalitis and myocarditis. Vaccination and early antiviral treatment are critical to reducing severe illness and hospitalisation.
ACTION REQUIRED BY:	Chief Executives, Directors of Clinical Governance
REQUIRED ACTION:	Distribute this Safety Alert to all relevant clinicians and clinical departments Include this Safety Alert in relevant handovers and safety huddles Confirm receipt of this Safety Alert by 15 August 2025 via return email to <a href="mailto:CEC-Paediatrics@health.nsw.gov.au">CEC-Paediatrics@health.nsw.gov.au</a>
DEADLINE:	15 August 2025
We recommend you also inform:	<p>Directors, Managers and Staff of:</p> <ul style="list-style-type: none"> <li>• Medical Services</li> <li>• Nursing and Midwifery Services</li> <li>• Pharmacy Departments</li> <li>• Paediatric Services</li> <li>• Community Child Health Services</li> <li>• Emergency Departments</li> <li>• Relevant outpatient clinics</li> <li>• Public Health Units</li> </ul> <p>Other relevant staff, departments and committees General Practitioners</p>
Website:	<a href="https://www.health.nsw.gov.au/sabs/Pages/default.aspx">https://www.health.nsw.gov.au/sabs/Pages/default.aspx</a> <a href="http://internal.health.nsw.gov.au/quality/sabs/index.html">http://internal.health.nsw.gov.au/quality/sabs/index.html</a>
Review date:	1 May 2026

## SA: SA:005/25

### Situation

NSW is currently at a peak of influenza transmission, with a notable increase in influenza B, which tends to be more severe in children. This has led to increased hospital admissions and serious complications including myositis, encephalitis and myocarditis, especially in school aged children.

### Background

The proportion of influenza due to influenza B viruses varies from year to year; in the last 5 weeks in NSW this has been high with around 35% of influenza notifications due to influenza B. Children with underlying medical conditions or who are immunocompromised are at increased risk of developing serious complications. School-aged children with **influenza B** face a higher risk of severe outcomes such as myositis, encephalitis, and myocarditis. Additionally, children under five years of age, especially those under two with influenza, continue to be at the greatest risk of serious illness requiring hospital admission. Despite these risks, vaccination coverage among children in NSW remains low.

### Assessment

Clinicians must be alert for serious complications relating to influenza in paediatric patients (especially in school aged children) including encephalitis; pneumonia; myocarditis; pericarditis; myositis, sepsis or secondary bacterial infections (for example, *S. aureus* and *S. pneumoniae*).

Signs of serious complications that require senior medical review may include:

- Altered level of consciousness
- Refusal or inability to walk
- Difficulty breathing or signs of cyanosis
- Abdominal pain in older children
- Severe unexplained pain
- Recurrence of symptoms after initial improvement
- Poor urine output or persistent tachycardia
- Family or carer concern they are getting worse

### Recommendations

- Ensure clinicians are aware of the current peak in influenza (particularly the increased prevalence of influenza B in school aged children) and associated complications.
- Commence antiviral treatment with oseltamivir ideally within 48 hours of symptom onset in accordance with recommendations outlined in the **Therapeutic Guidelines** (accessible via CIAP).
  - If influenza is confirmed, continue treatment; discontinue if testing is negative.
  - For children requiring hospital admission due to severity of illness, commence oseltamivir at any stage of illness.
- Ensure clinicians are aware that empirical treatment with oseltamivir, and testing for influenza is particularly important for children presenting to hospital with:
  - pneumonia or other lower respiratory tract infection
  - suspected encephalitis or myelitis
  - severe muscle pain
  - suspected myo-pericarditis.

- Educate families and carers of patients with mild influenza symptoms who do not require hospital admission on the warning signs of serious complications and when to represent to hospital.

#### **Vaccination specific recommendations**

- Promote annual influenza vaccination to reduce risk of serious illness and complications
- Encourage influenza vaccination for all patients, even if they have already had influenza A or B this year
- Ensure pregnant women are aware that influenza vaccination during pregnancy is the best way to protect infants under six months age from severe influenza
- Ensure awareness that it is not too late to vaccinate during the current peak
- Promote that the influenza vaccine is [free for people at highest risk of severe influenza](#):
  - Children aged 6 months to less than 5 years
  - Pregnant women
  - People aged 65 years and over
  - Aboriginal and Torres Strait Islander people aged 6 months and over
  - People aged 6 months and over with chronic disease

## **Further information**

### **Paediatric watch newsletters:**

Common misses and misconceptions in paediatric sepsis

Myocarditis in a 7-year -old

### **Links to websites**

<https://www.schn.health.nsw.gov.au/signs-serious-illness-children-factsheet>

[https://www.health.nsw.gov.au/Infectious/Influenza/Pages/families\\_and\\_individuals.aspx](https://www.health.nsw.gov.au/Infectious/Influenza/Pages/families_and_individuals.aspx)

[https://www.health.nsw.gov.au/Infectious/factsheets/Pages/influenza\\_factsheet.aspx](https://www.health.nsw.gov.au/Infectious/factsheets/Pages/influenza_factsheet.aspx)

[https://www.cec.health.nsw.gov.au/data/assets/pdf\\_file/0008/888947/Information-for-clinicians-Preparing-individual-doses-and-suspensions-of-oseltamivir-using-capsule-contents.pdf](https://www.cec.health.nsw.gov.au/data/assets/pdf_file/0008/888947/Information-for-clinicians-Preparing-individual-doses-and-suspensions-of-oseltamivir-using-capsule-contents.pdf)