



## Australian Paediatric Surveillance Unit

### Severe Complications of Influenza Surveillance

(1<sup>st</sup> June 2019 to 30<sup>th</sup> September 2019)

The Department of Health has requested for APSU to conduct seasonal surveillance for severe complications of laboratory confirmed influenza in children aged < 15 years and admitted to hospital. This surveillance will inform future vaccination policy and improve our understanding of severe influenza disease in children.

Severe Complications of Influenza will be added to the routine monthly APSU report card. However, we ask that you report children that meet the case definition criteria as soon as possible by completing an online version of the case report form or by filling out the reverse of this page and returning it to the APSU by e-mail or fax.

**Aim:** To document the clinical features, medical and vaccination history, and outcome of children admitted to hospital with severe complications of influenza.

**Case Definition:**

Any child aged < 15 years with laboratory confirmed influenza **AND** admitted to hospital **AND** who have at least one of the following complications:

- Pneumonia (Confirmed on X-ray or microbiology)
- Oxygen requirement
- Mechanical ventilation
- Laboratory proven secondary bacterial co-infection; Bacteraemia; Septicaemia;
- Encephalitis / encephalopathy
- Seizures (including simple febrile seizure, prolonged or focal seizure or status epilepticus)
- Transverse myelitis
- Polyneuritis / mononeuritis
- Guillain-Barré syndrome
- Reye Syndrome
- Myocarditis; Pericarditis; Cardiomyopathy
- Rhabdomyolysis
- Purpura fulminans
- Disseminated coagulopathy
- Shock (requiring >40 ml/kg fluid resuscitation)
- Acute renal failure
- Death, including death at presentation to hospital

**Please do not report children hospitalised for influenza  
who do not have severe complications**

If you have seen a case of severe hospitalised influenza please report the child to the APSU as soon as possible by using this **secure web link to complete an online case report form:**

<https://redcap.sydney.edu.au/surveys/?s=M3FYAL93H>

OR please complete the case report form overleaf, scan and email to [schn-apsu@health.nsw.gov.au](mailto:schn-apsu@health.nsw.gov.au) or fax to (02) 9845 3082

Additional case report forms may be downloaded from: <http://apsu.org.au/studies/current/>

*If you require assistance with this surveillance study, please contact the APSU by phone (02) 9845 3005 or email [schn-apsu@health.nsw.gov.au](mailto:schn-apsu@health.nsw.gov.au)*

# Severe Complications of Influenza in Children < 15 Years (1<sup>st</sup> June 2019 to 30<sup>th</sup> September 2019)

## Australian Paediatric Surveillance Unit

Please ring the APSU on (02) 9845 3005 if you require assistance with this questionnaire. Additional questionnaires can be downloaded from [www.apsu.org.au](http://www.apsu.org.au)

**Instructions:** Please answer each question by ticking the appropriate box or writing your response in the space provided. DK= Don't Know

**REPORTING CLINICIANS** 1. Dr Name: \_\_\_\_\_ Ph: \_\_\_\_\_ Email: \_\_\_\_\_

2. Hospital: \_\_\_\_\_ APSU code (if have one) \_\_\_\_\_ 3. Date questionnaire completed: / /

**PATIENT DETAILS:** 4. First 2 letters of first name:   5. First 2 letters of surname:   6. Date of Birth: / /

7. Sex:  M  F Postcode of family:     9. Country of Birth:  Australia  Other (specify) \_\_\_\_\_  DK

10. Ethnicity:  Aboriginal  Torres Strait Islander  Both Aboriginal and Torres Strait Islander  Caucasian  Asian  
 Pacific Islander  Middle Eastern  African  Other (specify) \_\_\_\_\_  DK

### SECTION A: Diagnosis, Presentation and Treatment

11. Date of onset of symptoms: / /  12. Date of 1<sup>st</sup> admission to hospital: / /

13. Admitted to ICU?  Yes  No  DK 13(a). If yes, specify date of admission to ICU: / /

14. How was influenza confirmed?  Nose swab  Nasopharyngeal aspirate  Other (specify): \_\_\_\_\_

15. Which lab tests were +ve for influenza?  PCR  IF  Serology  Rapid Antigen Test

16. Results: Influenza type?  A  B 17. Was further sub-typing done?  Yes  No  DK

18. If Yes, Which sub-type was present? (e.g. H1N1-09, H3N2, Shanghai-like, Malaysia-like) \_\_\_\_\_

#### 19. Which of the following symptoms were apparent on presentation to hospital?

- Fever
- Cough
- Dyspnoea
- Sore throat
- Vomiting
- Diarrhoea
- Headache
- Malaise / lethargy
- Myalgia
- Confusion / disorientation
- Seizure / unconsciousness
- Rash
- Other (specify) \_\_\_\_\_

#### 20. Please tick all complications present during the hospital stay

- Pneumonia (X-ray confirmed)  Oxygen therapy needed?
- Mechanical Ventilation? If yes, for how long? \_\_\_\_\_ Days
- Encephalitis / encephalopathy
- Seizure (specify type): \_\_\_\_\_
- Myocarditis  Pericarditis  Cardiomyopathy
- Rhabdomyolysis
- Purpura fulminans  Disseminated coagulopathy
- Transverse myelitis  Polyneuritis  Mononeuritis
- Guillain-Barré syndrome
- Shock (requiring > 40 ml/kg fluid resuscitation)
- Acute renal failure  Reye Syndrome
- Laboratory proven **bacterial co-infection**; Specify organism and site: \_\_\_\_\_
- Laboratory proven **viral co-infection**; Specify organism and site: \_\_\_\_\_

21. Any other complications?  Yes  No  DK If Yes, specify: \_\_\_\_\_

22. Was the child treated with: (a)  Tamiflu  Relenza  Neither  DK Date Commenced: / /

(b)  Antibiotics If Yes, which ones? \_\_\_\_\_ (c)  Ibuprofen (e.g. Nurofen)  Other NSAIDS  Aspirin

### SECTION B: Underlying medical conditions and history

23. Is the child immunocompromised (e.g. HIV+ve, primary immunodeficiency, treated for malignancy)?  Yes  No  DK

If Yes, specify \_\_\_\_\_

24. Has the child any other chronic illness that might increase the risk of influenza complications?  Yes  No  DK

If yes, which one(s)?  Cystic fibrosis  Congenital heart disease  Neuromuscular disorder  Asthma

Other chronic lung disease  Other (specify) \_\_\_\_\_

25. Did the child receive the Flu vaccine in the last 12 months?  Yes  No  DK If yes, when? \_\_\_\_\_  DK

26. If yes which vaccine? \_\_\_\_\_  DK

27. Has the child been vaccinated against pneumococcus?  Yes  No  DK If yes, when? \_\_\_\_\_  DK

28. Prior to admission did the child have contact with a person with lab confirmed influenza?  Yes  No  DK

29. If yes, who was the contact person? (eg. Parent, sibling, friend) \_\_\_\_\_

30. Was the contact person a:  Child  Adult 31. Age of contact person? \_\_\_\_\_  DK

32. Did the child travel overseas in the 10 days before onset of symptoms?  Yes  No  DK If yes, where? \_\_\_\_\_

33. Has the child had close contact with farm animals in the past 10 days?  Yes  No  DK If yes, what type? \_\_\_\_\_

### SECTION C: Outcome

34. At the time of reporting, was the child  In ICU  Hospitalised  Discharged Alive  Died

35. Date of Discharge or Death / /  36. If died, autopsy performed?  Yes  No  DK

37. Were there any ongoing problems on discharge?  Yes  No  DK If yes, specify \_\_\_\_\_