

# **Severe Influenza-Associated Pediatric Illness/Death**

## **Reporting Instructions**

This document is to guide hospital infection control professionals (ICPs) or their designee(s) in completing the case report form, which is available at <http://www.state.nj.us/health/flu/CaseReportForm.shtml>. Please note that the link to this form will no longer be available from the NJDHSS website. In order to reach this form, you will need to type in the web address listed above.

### **I. Patient Demographics**

- State: case-patient's state of residence (New Jersey is set as default value)
- County: case-patient's county of residence
- Age: the age of the patient at the time of death. Age may be entered as days, months, or years. By definition, all cases should be <18 years old.
- Date of birth
- Sex
- Ethnicity
- Race: select all that apply
- Daycare attendance: indicate if the child attends daycare and if so did he/she attend in the week prior to illness onset

### **II. Death/Discharge Information**

- Choose the condition being reported (required field for reporting).
- If reporting a case of **severe illness**, complete the following fields:
  - Date of illness onset: earliest date of symptom onset associated with influenza illness
  - Date of discharge
- If reporting a **death**, complete the following fields:
  - Date of illness onset: earliest date of symptom onset associated with influenza illness
  - Date of death
  - Indicate if an autopsy was performed and the date it occurred
  - Location of death: select answer that best describes the last location where pulse was present. If "Other", please specify location in text field.

### **III. Influenza Testing**

The purpose of the influenza testing section is to collect information on diagnostic influenza testing. Multiple testing methods may be recorded, and negative results as well as positive results can be entered. For example, if the patient tested negative by rapid test then positive by viral culture, both tests could be entered. It is not necessary to enter all laboratory results obtained during the child's illness. All reported cases are required to

have at least one positive diagnostic test for influenza along with a corresponding result. Result values are specific to the test type that is listed.

- Commercial rapid diagnostic test – any commercially available rapid test by any manufacturer. This will include tests that differentiate influenza A from B and those that do not differentiate.
- Viral culture: any test results obtained from inoculating cell culture with a specimen obtained from the patient. Specimens can include nasal/pharyngeal swabs.
- Immunofluorescent antibody (DFA) or (IFA): Staining of cells from patient specimen. Specific for influenza virus type A or B.
- Enzyme immunoassay (EIA) – often, but not always, synonymous with rapid antigen testing.
- RT-PCR: any test results obtained by amplifying the genetic material obtained from a patient specimen. Specimens can include nasal/pharyngeal swabs.
- Immunohistochemistry (IHC): this method is performed in a limited number of laboratories and involves immunohistochemical staining to detect influenza viral antigens in tissue specimens. Tracheal and bronchial airway tissues provide the highest yield. States may request CDC to perform this testing in questionable cases.

#### **IV. Culture confirmation of INVASIVE bacterial pathogens**

“Was an INVASIVE bacterial infection confirmed by culturing an organism from a specimen collected from a normally sterile site (e.g., blood, cerebrospinal fluid [CSF], tissue, or pleural fluid)?”

The purpose of this question is to collect data on bacterial infections that may have been complicating factors of influenza illness and potentially led to severe illness. It is important to include information about bacterial organisms that were only cultured from normally sterile sites, examples of which are given in the question. Select any of the species listed or select other and indicate which species was isolated. If *Neisseria meningitidis* is isolated, indicate serogroup, if known. If *Staphylococcus aureus* is isolated, indicate its susceptibility to methicillin, if known.

#### **IVb. Culture confirmation of bacterial pathogens NON-STERILE SITES**

“Were other respiratory specimens collected for bacterial culture (e.g., sputum, ET tube aspirate)?”

The purpose of this question is to collect data on bacterial infections that may have been complicating factors of influenza illness and potentially led to severe illness but were collected from non-sterile sites.

## V. Medical Care

- Did the patient receive medical care for this illness?
- If “YES”, indicate level(s) of care received (check all that apply). NOTE: An urgent care visit should be classified as outpatient.
- Did the patient require mechanical ventilation?

## VI. Clinical Diagnoses and Complications

- Check all the complications that occurred during the acute illness.
  - NONE: If the patient did not have any pre-existing medical conditions, select NO.
  - Acute Respiratory Distress Syndrome (ARDS)
  - Another viral co-infection: specify diagnosis if available
  - Bronchiolitis
  - Croup
  - Encephalopathy/encephalitis
  - Other
  - Pneumonia (chest X-ray confirmed)
  - Reye syndrome
  - Seizures
  - Shock
  - Sepsis
  - Hemorrhagic pneumonia/pneumonitis
  - Cardiomyopathy/myocarditis
- Check all medical conditions that existed before the start of the acute illness:
  - NONE: If the patient did not have any medical conditions that existed before the start of the acute illness, select NO
  - .
  - Asthma/reactive airway disease
  - Cardiac disease (specify)
  - Chronic pulmonary disease (specify): specify any underlying chronic pulmonary disease that existed before the acute illness, other than asthma.
  - Cystic fibrosis
  - Diabetes mellitus
  - Metabolic disorder (specify): includes endocrine disorders
  - Hemoglobinopathy (e.g., sickle cell disease): does not include sickle cell trait.
  - Immunosuppressive condition (specify): includes HIV infection, immunosuppressive therapy
  - Pregnant (specify gestational age in weeks)
  - Renal disease (specify)
  - History of febrile seizures
  - Seizure disorder: includes disorders other than febrile seizures
  - Moderate to severe developmental delay
  - Neuromuscular disorder (including cerebral palsy)

- Cancer (diagnosis and/or treatment began in previous 12 months)
- Endocrine disorder
- Obesity
- Skin or soft tissue infection (SSTI)
- Other Neurologic Disorder (specify)
- Prematurity (specify gestational age)
- Chromosomal Abnormality (specify)
- Mitochondrial Disorder (specify)
- Other: Use this selection if there is an underlying condition that is not available for selection. Be as specific as possible about the condition.

### **VII a. Medication and Therapy History**

- Check any of the provided therapies give in the 7 days prior to illness onset or after illness onset
- Check if the patient was receiving any of the following therapies prior to illness onset (check all that apply)
  - Systemic steroids: taken orally or by injection, does not include inhaled steroid therapy
  - Chemotherapy treatment for cancer
  - Radiation therapy
  - Any other immunosuppressive therapy
- Indicated in the patient was taking any antiviral or antibiotic medications.

### **VII b. Treatment**

- Did the patient receive treatment with an antiviral medication for influenza at any time during the course of this illness? (yes or no)
- If yes: select appropriate drug from the list
- Respond to secondary question on when antiviral treatment began

### **VIII. Influenza vaccine history**

- Indicate if any influenza vaccine was given during the current or previous influenza season

### **IX. Epidemiologic Risk Factors**

- Indicate if any travel occurred within the 10 days prior to illness onset.
- Indicate if illness occurred with 24 or 72 hours after admission to an acute care facility.

### **X. Submitting Information**

The person submitting the form should include his/her name (required field for reporting), hospital (required field for reporting), phone number (required field for

reporting), and email address in this section. Every effort should be made to report information to NJDHSS within 24 hours of patient discharge or death.

**NOTE: Please remember to print the form prior to hitting the submit button.**