

# Influenza-Associated Pediatric Mortality Case Report Form

Form Approved  
OMB No. 0920-0004

**STATE USE ONLY – DO NOT SEND INFORMATION IN THIS SECTION TO CDC**

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_ County: \_\_\_\_\_  
 Address: \_\_\_\_\_ City: \_\_\_\_\_ State, Zip: \_\_\_\_\_

**Patient Demographics**

1. Country of Usual Residence: \_\_\_\_\_

2a. State:	2b. County:	3. State ID:	4. CDC ID:
5. Age: _____ <input type="radio"/> Days <input type="radio"/> Months <input type="radio"/> Years	6. Date of birth: ____/____/____ MM DD YYYY		7a. Is sex known? <input type="checkbox"/> Yes <input type="checkbox"/> No 7b. Sex: <input type="radio"/> Male <input type="radio"/> Female

8a. Is ethnicity known?  Yes  No

8b. Ethnicity:  Hispanic or Latino  Not Hispanic or Latino

9a. Is race known?  Yes  No

9b. Race:  White  Black  Asian  Native Hawaiian or Other Pacific Islander  American Indian or Alaska Native

**Death Information**

10. Date of illness onset: ____/____/____ MM DD YYYY	11. Date of death: ____/____/____ MM DD YYYY	12. Was an autopsy performed? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
13 a. Did cardiac/respiratory arrest occur outside the hospital? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		
13 b. Location of death: <input type="radio"/> Outside the Hospital (e.g. home or in transit to hospital) <input type="radio"/> Emergency Dept (ED) <input type="radio"/> Inpatient ward <input type="radio"/> ICU <input type="radio"/> Other (specify): _____		
13 c. If the death occurred in the hospital, what was the date of admission? ____/____/____ MM DD YYYY		

**CDC Laboratory Specimens**

14 a. Were pathology specimens sent to CDC's Infectious Diseases Pathology Branch?  Yes  No  Unknown  
 Please provide the lab ID No. if known \_\_\_\_\_

14 b. Were influenza isolates or original clinical material sent to CDC's Influenza Division?  Yes  No  Unknown  
 Please provide the lab ID No. if known \_\_\_\_\_

Public reporting burden of this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-0004).

Influenza Testing (check all that were used)		
Test Type	Result	Specimen Collection Date
15. <input type="checkbox"/> Commercial rapid diagnostic test	<input type="radio"/> Influenza A <input type="radio"/> Influenza B <input type="radio"/> Negative <input type="radio"/> Influenza A/B (Not Distinguished) <input type="radio"/> 2009 Influenza A (H1N1) <input type="radio"/> Influenza virus co-infection (specify) _____	____/____/____
<input type="checkbox"/> Viral culture	<input type="radio"/> Influenza A (Subtyping Not Done) <input type="radio"/> Influenza B <input type="radio"/> Negative <input type="radio"/> Influenza A (Unable To Subtype) <input type="radio"/> Influenza A (H1) <input type="radio"/> Influenza A (H3) <input type="radio"/> 2009 Influenza A (H1N1) <input type="radio"/> Influenza A (H3N2)v <input type="radio"/> Influenza virus co-infection (specify) _____	____/____/____
<input type="checkbox"/> Fluorescent antibody (IFA or DFA)	<input type="radio"/> Influenza A (Subtyping Not Done) <input type="radio"/> Influenza B <input type="radio"/> Negative <input type="radio"/> Influenza A (Unable To Subtype) <input type="radio"/> Influenza A (H1) <input type="radio"/> Influenza A (H3) <input type="radio"/> 2009 Influenza A (H1N1) <input type="radio"/> Influenza virus co-infection (specify) _____	____/____/____
<input type="checkbox"/> Enzyme immunoassay (EIA)	<input type="radio"/> Influenza A (Subtyping Not Done) <input type="radio"/> Influenza B <input type="radio"/> Negative <input type="radio"/> Influenza A (Unable To Subtype) <input type="radio"/> Influenza A (H1) <input type="radio"/> Influenza A (H3) <input type="radio"/> 2009 Influenza A (H1N1) <input type="radio"/> Influenza virus co-infection (specify) _____	____/____/____
<input type="checkbox"/> RT-PCR	<input type="radio"/> Influenza A (Subtyping Not Done) <input type="radio"/> Influenza B <input type="radio"/> Negative <input type="radio"/> Influenza A (Unable To Subtype) <input type="radio"/> Influenza A (H1) <input type="radio"/> Influenza A (H3) <input type="radio"/> 2009 Influenza A (H1N1) <input type="radio"/> Influenza A (H3N2)v <input type="radio"/> Influenza virus co-infection (specify) _____	____/____/____
<input type="checkbox"/> Immunohistochemistry (IHC)	<input type="radio"/> Influenza A <input type="radio"/> Influenza B <input type="radio"/> Negative <input type="radio"/> Influenza virus co-infection (specify) _____	____/____/____

**Culture confirmation of bacterial pathogens from STERILE (Invasive) SITES**

16 a. Was a specimen collected for bacterial culture from a normally sterile site (e.g., blood, cerebrospinal fluid [CSF], tissue, or pleural fluid)? **Specimens collected greater than 24 hours after death are not sterile.**  Yes  No  Unknown

16 b. If yes, please indicate the site from which the specimen was obtained and the result. *If more than one specimen type is positive and more than one organism is identified please indicate the organism cultured from each specimen type in the comments section.*

Specimen Type	Collection Date	Result
<input type="checkbox"/> Blood	Date ___/___/___	<input type="radio"/> Positive <input type="radio"/> Negative <input type="radio"/> Unknown
<input type="checkbox"/> Pleural fluid	Date ___/___/___	<input type="radio"/> Positive <input type="radio"/> Negative <input type="radio"/> Unknown
<input type="checkbox"/> CSF	Date ___/___/___	<input type="radio"/> Positive <input type="radio"/> Negative <input type="radio"/> Unknown
<input type="checkbox"/> Lung Tissue	Date ___/___/___	<input type="radio"/> Positive <input type="radio"/> Negative <input type="radio"/> Unknown
<input type="checkbox"/> Other _____	Date ___/___/___	<input type="radio"/> Positive <input type="radio"/> Negative <input type="radio"/> Unknown
<input type="checkbox"/> Unknown		

16 c. If positive, please check the organism cultured.

<input type="checkbox"/> <i>Streptococcus pneumoniae</i>	<input type="checkbox"/> <i>Staphylococcus aureus</i> , methicillin <b>sensitive</b> (MSSA)	<input type="checkbox"/> <i>Haemophilus influenzae</i> not-type b
<input type="checkbox"/> Group A <i>Streptococcus</i>	<input type="checkbox"/> <i>Staphylococcus aureus</i> , methicillin <b>resistant</b> (MRSA)	<input type="checkbox"/> <i>Haemophilus influenzae</i> type b
<input type="checkbox"/> Other bacteria: _____ <i>(If reporting another viral co-infection please do so in section 18 Clinical Diagnosis and Complications)</i>	<input type="checkbox"/> <i>Staphylococcus aureus</i> , <b>sensitivity not done</b>	<input type="checkbox"/> <i>Pseudomonas aeruginosa</i>

### Culture confirmation of bacterial pathogens from NON-STERILE SITES

16 d. Were other **respiratory** specimens collected for bacterial culture (e.g., sputum, ET tube aspirate)? O Yes O No O Unknown

16 e. If yes, please indicate the site from which the specimen was obtained and the result. *If more than one specimen type is positive and more than one organism is identified please indicate the organism cultured from each specimen type in the comments section.*

Specimen Type	Collection Date	Result
<input type="checkbox"/> Sputum	Date ___/___/___	O Positive O Negative O Unknown
<input type="checkbox"/> ET tube	Date ___/___/___	O Positive O Negative O Unknown
<input type="checkbox"/> Other _____	Date ___/___/___	O Positive O Negative O Unknown
<input type="checkbox"/> Unknown		

16 f. If positive, please check the organism cultured.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> <i>Streptococcus pneumoniae</i> | <input type="checkbox"/> <i>Staphylococcus aureus</i> , methicillin <b>sensitive</b> (MSSA) | <input type="checkbox"/> <i>Haemophilus influenzae</i> not-type b |
| <input type="checkbox"/> Group A <i>Streptococcus</i>    | <input type="checkbox"/> <i>Staphylococcus aureus</i> , methicillin <b>resistant</b> (MRSA) | <input type="checkbox"/> <i>Haemophilus influenzae</i> type b     |
| <input type="checkbox"/> Other bacteria: _____           | <input type="checkbox"/> <i>Staphylococcus aureus</i> , <b>sensitivity not done</b>         | <input type="checkbox"/> <i>Pseudomonas aeruginosa</i>            |

*(If reporting another viral co-infection please do so in section 18 Clinical Diagnosis and Complications)*

### Pathology confirmation of bacterial pathogens

16 g. Was a specimen (e.g., fixed lung tissue) collected from an autopsy for testing of bacterial pathogens by a local or state pathologist? *(If pathology results are available from CDC it is not necessary to input those results here, however please make sure to complete section 14 "CDC Laboratory Specimens")* O Yes O No O Unknown

*If yes please indicate the results of these tests in the comments section at the end of the form.*

### Medical Care

17. Was the patient placed on mechanical ventilation? O Yes O No O Unknown

## Clinical Diagnoses and Complications

18 a. Did complications occur during the acute illness?       Yes     No     Unknown

18 b. **If yes**, check all complications that occurred during the acute illness:

- |  |  |   |                                   |
|--|--|---|-----------------------------------|
| <input type="checkbox"/> Pneumonia (Chest X-Ray confirmed) | <input type="checkbox"/> Acute Respiratory Disease Syndrome (ARDS) | <input type="checkbox"/> Croup                      | <input type="checkbox"/> Seizures |
| <input type="checkbox"/> Bronchiolitis                     | <input type="checkbox"/> Encephalopathy/encephalitis               | <input type="checkbox"/> Reye syndrome              | <input type="checkbox"/> Shock    |
| <input type="checkbox"/> Sepsis                            | <input type="checkbox"/> Hemorrhagic pneumonia/pneumonitis         | <input type="checkbox"/> Cardiomyopathy/myocarditis |                                   |
| <input type="checkbox"/> Another viral co-infection: _____ |  | <input type="checkbox"/> Other: _____               |                                   |

19 a. Did the child have any medical conditions that existed before the start of the acute illness?     Yes     No     Unknown

19 b. **If yes**, check all medical conditions that existed before the start of the acute illness:

- |  |  |   |  |   |
|--|--|---|--|---|
| <input type="checkbox"/> Moderate to severe developmental delay  | <input type="checkbox"/> Hemoglobinopathy (e.g. sickle cell disease) | <input type="checkbox"/> Asthma/ reactive airway disease      |  |   |
| <input type="checkbox"/> Diabetes mellitus   | <input type="checkbox"/> History of febrile seizures                 | <input type="checkbox"/> Seizure disorder                     | <input type="checkbox"/> Cystic fibrosis |   |
| <input type="checkbox"/> Cardiac disease/congenital heart disease (specify) _____                        | <input type="checkbox"/> Renal disease (specify) _____               | <input type="checkbox"/> Skin or soft tissue infection (SSTI) |  |   |
| <input type="checkbox"/> Chromosomal Abnormality/Genetic Syndrome (specify) _____                        | <input type="checkbox"/> Mitochondrial Disorder (specify) _____      |   |  |   |
| <input type="checkbox"/> Chronic pulmonary disease (specify) _____                                       | <input type="checkbox"/> Immunosuppressive condition (specify) _____ |   |  |   |
| <input type="checkbox"/> Cancer (diagnosis and/or treatment began in previous 12 months) (specify) _____ | <input type="checkbox"/> Endocrine disorder (specify) _____          | <input type="checkbox"/> Obesity                              | <input type="checkbox"/> Cerebral Palsy  | <input type="checkbox"/> Premature at birth (specify gestational age) _____ weeks |
| <input type="checkbox"/> Neuromuscular disorder (e.g. muscular dystrophy) (specify) _____                | <input type="checkbox"/> Other Neurological disorder (specify) _____ |   |  |   |
| <input type="checkbox"/> Pregnant (specify gestational age) _____ weeks                                  | <input type="checkbox"/> Other (specify) _____                       |   |  |   |

## Medication and Therapy History

20 a. Was the patient receiving any of the following therapies *prior* to illness onset? **(if yes, check all that apply)**

- |   |  |  |   |
|---|--|--|---|
| <input type="checkbox"/> Yes                                    | <input type="checkbox"/> No                      | <input type="checkbox"/> Unknown                           |   |
| <input type="checkbox"/> Antiviral Prophylaxis                  | <input type="checkbox"/> Chronic aspirin therapy | <input type="checkbox"/> Chemotherapy or radiation therapy | <input type="checkbox"/> Steroids by mouth or injection |
| <input type="checkbox"/> Other immunosuppressive therapy: _____ |  |  |   |

20 b. Did the patient receive any of the following *after* illness onset? **(if yes, check all that apply)**

- |   |  |                                  |
|---|--|----------------------------------|
| <input type="checkbox"/> Yes                              | <input type="checkbox"/> No                              | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Antibiotic therapy specify _____ | <input type="checkbox"/> Antiviral therapy specify _____ |                                  |

## Influenza Vaccine History

21. Did the patient receive any influenza vaccine during the current season (before illness)  Yes  No  Unknown

22. **If YES\***, please specify the influenza vaccine received before illness onset:

Inactivated influenza vaccine (IIV3) *[injected]*  
 Quadrivalent inactivated influenza vaccine (IIV4) *[injected]*  
 Live-attenuated influenza vaccine (LAIV4) *[nasal spray]*  
 Unknown

23. **If YES\***, how many doses did the patient receive and what was the timing of each dose? (Enter vaccination dates if available)

O 1 dose  <14 days prior to illness onset  
**ONLY**  ≥14 days prior to illness onset

Date dose given: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
MM DD YYYY

O 2 doses  2<sup>nd</sup> dose given <14 days prior to onset  
 2<sup>nd</sup> dose given ≥14 days prior to onset

Date of 1<sup>st</sup> dose: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Date of 2<sup>nd</sup> dose: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
MM DD YYYY MM DD YYYY

23b. IF the patient received two doses of influenza vaccine during the current season, please specify the SECOND influenza vaccine received before illness onset:

Inactivated influenza vaccine (IIV3) *[injected]*  
 Quadrivalent inactivated influenza vaccine (IIV4) *[injected]*  
 Live-attenuated influenza vaccine (LAIV4) *[nasal spray]*  
 Unknown

24. Did the patient receive any influenza vaccine in previous seasons?  Yes  No  Unknown

24 a. **If YES**, and patient was ≤8 years of age at the time of death, did they receive 2 doses of vaccine during a previous season?  Yes  No  Unknown

Submitted By: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
Phone No.: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
E-mail Address: \_\_\_\_\_  
MM DD YYYY

Case Investigation Closed:  Yes  No