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. State:	2. County:	3. State ID:	4. CDC ID:

5. Age: _____ ☐ Days ☐ Months ☐ Years

6. Date of birth: _____/_____/_____ MM DD YYYY

7a. Is sex known? ☐ Yes ☐ No

7b. Sex: ☐ Male ☐ 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? ☐ Yes ☐ No ☐ Unknown

13 a. Did cardiac/respiratory arrest occur outside the hospital? ☐ Yes ☐ No ☐ Unknown

13 b. Location of death: ☐ Outside the Hospital (e.g. home or in transit to hospital) ☐ Emergency Dept (ED) ☐ Inpatient ward ☐ ICU ☐ 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? O 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? O Yes O No O Unknown
Please provide the lab ID No. if known _____

Influenza Testing (check all that were used)

Test Type	Result	Specimen Collection Date
15. ☐ Commercial rapid diagnostic test	☐ Influenza A ☐ Influenza B ☐ Negative ☐ Influenza A/B (Not Distinguished) ☐ Influenza A (H1N1)pdm09 ☐ Influenza virus co-infection (specify)_____	____/____/____
☐ Viral culture	☐ Influenza A (Subtyping Not Done) ☐ Influenza A (H1N1)pdm09 ☐ Influenza A (H3) ☐ Influenza A (H3N2v) ☐ Influenza A (Unable To Subtype) ☐ Influenza B (Lineage Not Determined) ☐ Influenza B/Victoria lineage ☐ Influenza B/Yamagata lineage ☐ Influenza virus co-infection (specify)_____ ☐ Negative	____/____/____
☐ Fluorescent antibody (IFA or DFA)	☐ Influenza A (Subtyping Not Done) ☐ Influenza B ☐ Negative ☐ Influenza A (Unable To Subtype) ☐ Influenza A (H3) ☐ Influenza A (H1N1)pdm09 ☐ Influenza virus co-infection (specify)_____	____/____/____
☐ Enzyme immunoassay (EIA)	☐ Influenza A (Subtyping Not Done) ☐ Influenza B ☐ Negative ☐ Influenza A (Unable To Subtype) ☐ Influenza A (H3) ☐ Influenza A (H1N1)pdm09 ☐ Influenza virus co-infection (specify)_____	____/____/____
☐ RT-PCR	☐ Influenza A (Subtyping Not Done) ☐ Influenza A (H1N1)pdm09 ☐ Influenza A (H3) ☐ Influenza A (H1) (prior to 2010) ☐ Influenza A (H3N2v) ☐ Influenza A (Unable To Subtype) ☐ Influenza B (Lineage Not Determined) ☐ Influenza B/Victoria lineage ☐ Influenza B/Yamagata lineage ☐ Influenza virus co-infection (specify)_____ ☐ Negative	____/____/____
☐ Immunohistochemistry (IHC)	☐ Influenza A ☐ Influenza B ☐ Negative ☐ 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
☐ Blood	Date ___/___/____	☐ Positive ☐ Negative ☐ Unknown
☐ Pleural fluid	Date ___/___/____	☐ Positive ☐ Negative ☐ Unknown
☐ CSF	Date ___/___/____	☐ Positive ☐ Negative ☐ Unknown
☐ Lung Tissue	Date ___/___/____	☐ Positive ☐ Negative ☐ Unknown
☐ Other_____	Date ___/___/____	☐ Positive ☐ Negative ☐ Unknown
☐ Unknown		

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

☐ *Streptococcus pneumoniae*

☐ Group A *Streptococcus*

☐ Other bacteria:_____
(If reporting another viral co-infection please do so in section 18 Clinical Diagnosis and Complications)

☐ *Staphylococcus aureus,* methicillin **sensitive (MSSA)**

☐ *Staphylococcus aureus,* methicillin **resistant (MRSA)**

☐ *Staphylococcus aureus,* **sensitivity not done**

☐ *Haemophilus influenzae* not-type b

☐ *Haemophilus influenzae* type b

☐ *Pseudomonas aeruginosa*

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)? ☐ Yes ☐ No ☐ 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
☐ Sputum	Date ___/___/___	☐ Positive ☐ Negative ☐ Unknown
☐ ET tube	Date ___/___/___	☐ Positive ☐ Negative ☐ Unknown
☐ Other_____	Date ___/___/___	☐ Positive ☐ Negative ☐ Unknown
☐ Unknown		

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

☐ *Streptococcus pneumoniae*	☐ *Staphylococcus aureus,* methicillin **sensitive (MSSA)**	☐ *Haemophilus influenzae* not-type b
☐ Group A *Streptococcus*	☐ *Staphylococcus aureus,* methicillin **resistant (MRSA)**	☐ *Haemophilus influenzae* type b
☐ Other bacteria:	☐ *Staphylococcus aureus,* **sensitivity not done**	☐ *Pseudomonas aeruginosa*

_____

(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")* ☐ Yes ☐ No ☐ 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? ☐ Yes ☐ No ☐ 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:

☐ Pneumonia (Chest X-Ray confirmed) ☐ Acute Respiratory Disease Syndrome (ARDS) ☐ Croup ☐ Seizures

☐ Bronchiolitis ☐ Encephalopathy/encephalitis ☐ Reye syndrome ☐ Shock

☐ Sepsis ☐ Hemorrhagic pneumonia/pneumonitis ☐ Cardiomyopathy/myocarditis

☐ Another viral co-infection:_____ ☐ 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:

☐ Moderate to severe developmental delay ☐ Hemoglobinopathy (e.g. sickle cell disease) ☐ Asthma/ reactive airway disease

☐ Diabetes mellitus ☐ History of febrile seizures ☐ Seizure disorder ☐ Cystic fibrosis

☐ Cardiac disease/congenital heart disease (specify) _____ ☐ Renal disease (specify)_____ ☐ Skin or soft tissue infection (SSTI)

☐ Chromosomal Abnormality/Genetic Syndrome (specify) _____ ☐ Mitochondrial Disorder (specify) _____

☐ Chronic pulmonary disease (specify)_____ ☐ Immunosuppressive condition (specify) _____

☐ Cancer (diagnosis and/or treatment began in previous 12 months) (specify)_____ ☐ Endocrine disorder (specify) _____ ☐ Obesity ☐ Cerebral Palsy ☐ Premature at birth (specify gestational age) ____weeks

☐ Neuromuscular disorder (e.g. muscular dystrophy) (specify) _____ ☐ Other Neurological disorder (specify) _____

☐ Pregnant (specify gestational age)_____weeks ☐ 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)

☐ Yes ☐ No ☐ Unknown

☐Antiviral Prophylaxis ☐ Chronic aspirin therapy ☐ Chemotherapy or radiation therapy ☐ Steroids by mouth or injection

☐ Other immunosuppressive therapy:_____

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

☐ Yes ☐ No ☐ Unknown

☐ Antibiotic therapy specify_____ ☐ 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 (LAIV) [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)

☐ 1 dose **ONLY**	☐ <14 days prior to illness onset ☐ ≥14 days prior to illness onset	Date dose given:____/____/____ MM DD YYYY	
☐ 2 doses	☐ 2nd dose given <14 days prior to onset ☐ 2nd dose given ≥14 days prior to onset	Date of 1st dose:____/____/____ MM DD YYYY	Date of 2nd dose:____/____/____ 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 (LAIV) *[nasal spray]*
- ☐ Unknown

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

24 a. If YES, and the patient was ≤ 8 years of age at time of death, have they received a total of 2 or more doses of influenza vaccine (does need not have been received in the same season or consecutive seasons)? ☐ Yes ☐ No ☐Unknown

25a. Were immunization records or information about influenza vaccination available for this case? ☐ Yes ☐ No ☐ Unknown

25b. If yes, please check all sources of information on the patient's influenza vaccination history that were reviewed (please check all that apply).

- ☐ Patient's immunization record
- ☐ Immunization information system (registry)
- ☐ Other (specify):_____
- ☐ Medical records
- ☐ Parent report
- ☐ Coroner's report
- ☐ News/media report

Submitted By:_____ Date:____/____/____ MM DD YYYY

Phone No.: (____) ____ - ____

E-mail Address: _____

Case Investigation Closed: ☐ Yes ☐ No