

**North Carolina Department of Health and Human Services
Division of Public Health • Epidemiology Section
Communicable Disease Branch**



ATTENTION HEALTH CARE PROVIDERS:

Please report relevant clinical findings about this disease event to the local health department.

Durham County Health Department
Communicable Disease Control
414 East Main Street
Durham, NC 27701

Telephone: (919) 560-7600
Fax: (919) 560-7716

**INFLUENZA, PEDIATRIC DEATH (< 18 YEARS OF AGE)
Confidential Communicable Disease Report—Part 2
NC DISEASE CODE: 73**

REMINDER to Local Health Department staff: If sending this form to the Health Care Provider, remember to attach a cover letter from your agency indicating the part(s) of the form the provider should complete.

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN

NC EDSS LAB RESULTS Verify if lab results for this event are in NC EDSS. If not present, enter results.

Specimen Date	Specimen #	Specimen Source	Type of Test	Test Result(s)	Description (comments)	Result Date	Lab Name—City/State
/ /						/ /	
/ /						/ /	
/ /						/ /	

NC EDSS PART 2 WIZARD COMMUNICABLE DISEASE

Is/was patient symptomatic for this disease? Y N U
If yes, symptom onset date (mm/dd/yyyy): ___/___/___
CHECK ALL THAT APPLY:

Fever Y N U
 Highest measured temperature: _____
 Temperature taken:
 Orally Rectally Other Unknown
 Fever onset date (mm/dd/yyyy): ___/___/___

Shock Y N U
Encephalitis Y N U
 Onset date (mm/dd/yyyy): ___/___/___

Encephalopathy Y N U
Seizures / convulsions Y N U
 New onset
 Exacerbation of underlying seizure disorder
 Other
 Unknown

Sore Throat Y N U
Bronchiolitis Y N U
Croup Y N U
Acute Respiratory Distress Syndrome (ARDS) Y N U
Pneumonia Y N U
 Confirmed by CT scan? Y N U
Bacteremia Y N U
 Date of positive blood culture ___/___/___

Septicemia / sepsis Y N U
Reye Syndrome Y N U
Another viral co-infection Y N U
 Please specify: _____

Was a specimen collected for bacterial culture from a normally sterile site (e.g., blood, cerebrospinal fluid [CSF], tissue, or pleural fluid)? Y N U
 If yes, please enter all positive and negative results in the laboratory package.

Were other respiratory specimens collected for bacterial culture (e.g., sputum, ET tube aspirate)? Y N U
 If yes, please enter all positive and negative results in the laboratory package.

Moderate to severe developmental delay Y N U
Diabetes Y N U
Cardiovascular/heart disease Y N U
 If yes, specify: _____

Chronic lung disease (including asthma) Y N U
 If yes, specify: _____

Metabolic disorder Y N U
 If yes, specify: _____

Pregnant Y N U
 If yes, specify gestational age: _____ weeks

Hematologic disorder Y N U
History of febrile seizures Y N U
Seizure disorder Y N U
Kidney disease Y N U
 If yes, specify: _____

Any immunosuppressive conditions Y N U
 If yes, specify: _____

Neuromuscular disorder Y N U
 If yes, specify: _____

Skin or soft tissue infection Y N U
 If yes, specify: _____

Other underlying illness Y N U
 If yes, specify: _____

Was the patient receiving any of the following therapies in the 7 days prior to illness onset or after illness onset? (check all that apply)
 Aspirin or aspirin-containing products
 NSAID or NSAID-containing products

Was the patient receiving any of the following therapies prior to illness onset? (check all that apply)
 Antibiotic therapy
 Antiviral therapy (specify _____)
 Chemotherapy or radiation therapy
 Steroids by mouth or injection
 Other immunosuppressive therapy (specify _____)

Did the patient receive an antiviral for this illness? Y N U
 Specify antiviral name:
 Amantadine (Symmetrel)
 Oseltamivir (Tamiflu)
 Rimantadine (Flumadine)
 Zanamivir (Relenza)
 Other _____
 Unknown
 Date antiviral treatment began: ___/___/___
 Number of days taken: _____

Did the patient receive medical care for this illness? Y N U
 Specify level(s) of care (check all that apply):
 Outpatient ICU
 Emergency department Other
 Inpatient Unknown

Did the patient require mechanical ventilation? Y N U
 Date started (mm/dd/yyyy): ___/___/___
 Number of days on mechanical ventilation: _____

(CONTINUED NEXT PAGE)

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN / /

NC EDSS PART 2 WIZARD (CONTINUED)
COMMUNICABLE DISEASE

Discharge/Final diagnosis: _____

Survived? Y N U
 Died? Y N U
 Died from this illness? Y N U

Date of death (mm/dd/yyyy): ____/____/____

Location of death:
 Home
 Emergency Department
 Hospital ICU
 Hospital inpatient
 En route to hospital
 Long-term care facility
 Other, specify: _____
 Unknown

Patient died in North Carolina? Y N U

County of death: _____

Died outside NC? Y N U

Specify where: _____

Autopsy performed? Y N U

Patient autopsied in NC? Y N U

County of autopsy: _____

Autopsied outside NC,
specify where: _____

Source of death information (select all that apply):
 Death certificate
 Autopsy report final conclusions
 Hospital/physician discharge summary
 Other

Pathology specimens sent to CDC? Y N U

Did cardiac or respiratory arrest occur outside the hospital? Y N U

Did the patient receive any influenza vaccine during the current season (before illness)? Y N U

If yes, vaccine type:
 Trivalent inactivated influenza vaccine (TIV) [injected]
 Live-attenuated influenza vaccine (LAIV) [nasal spray]
 Other, specify _____
 Unknown vaccine type

How many doses did the patient receive and what was the timing of each dose?
 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 illness onset
 2nd dose given ≥14 days prior to illness onset
 Date of 1st dose (mm/dd/yyyy): ____/____/____
 Date of 2nd dose (mm/dd/yyyy): ____/____/____

Did the patient receive any influenza vaccine in previous seasons? Y N U

TREATMENT

Was antiviral prophylaxis given prior to illness onset? Y N U

If yes, specify: _____

Did the patient require supplemental oxygen? Y N U

Date started (mm/dd/yyyy): ____/____/____

Did the patient require high frequency oscillatory ventilation? Y N U

Date started (mm/dd/yyyy): ____/____/____

Did the patient require extracorporeal membrane oxygenation (ECMO)? Y N U

Date started (mm/dd/yyyy): ____/____/____

CLINICAL FINDINGS

Fatigue or malaise or weakness Y N U
 Chills or rigors Y N U

Dehydration Y N U
 Altered mental status Y N U

Coma Y N U
 Meningitis Y N U

Muscle aches / pains (myalgias) Y N U
 Myositis Y N U

Cough Y N U
 Onset date (mm/dd/yyyy): ____/____/____

Apnea Y N U

Shortness of breath/difficulty breathing/respiratory distress Y N U

Did the patient have a chest x-ray? Y N U

If yes, describe (check all that apply)
 Normal Pleural effusion
 Infiltrate Other

Diffuse infiltrates/findings suggestive of ARDS

Cardiac arrhythmias or cardiac arrest Y N U
 Myocarditis Y N U

Nausea Y N U
 Vomiting Y N U

Abdominal pain or cramps Y N U
 Diarrhea Y N U

Elevated liver enzymes Y N U
 Leukopenia Y N U

Other symptoms, signs, clinical findings, or complications consistent with this illness Y N U

Please specify: _____

TRAVEL & IMMIGRATION

The patient is:
 Resident of NC
 Resident of another state or US territory
 Foreign Visitor
 Refugee
 Recent Immigrant
 Foreign Adoptee
 None of the above

Did patient have a travel history during the 10 days prior to onset of symptoms? Y N U

List travel dates and destinations:
 From ____/____/____ to ____/____/____

Does patient know anyone else with similar symptom(s) who had the same or similar travel history? Y N U

List persons and contact information: _____

Additional travel information: _____

OTHER EXPOSURE INFORMATION

Does the patient (or family) know anyone else with similar symptoms? Y N U

If yes, specify: _____

HOSPITALIZATION INFORMATION

Was patient hospitalized for this illness >24 hours? Y N U

1. Hospital name: _____

City, State: _____

Hospital contact name: _____

Telephone: (____) _____

Admit date ____/____/____

Discharge date ____/____/____

If applicable:
 2. Hospital name: _____

City, State: _____

Hospital contact name: _____

Telephone: (____) _____

Admit date ____/____/____

Discharge date ____/____/____

CASE INTERVIEWS/INVESTIGATIONS

Were interviews conducted with others? Y N U

Who was interviewed? _____

Were health care providers consulted? Y N U

Who was consulted? _____

Medical records reviewed (including telephone review with provider/office staff)? Y N U

Specify reason if medical records were not reviewed: _____

Notes on medical record verification: _____

GEOGRAPHICAL SITE OF EXPOSURE

In what geographic location was the patient MOST LIKELY exposed?

Specify location:
 In NC
 City _____
 County _____

Outside NC, but within US
 City _____
 State _____
 County _____

Outside US
 City _____
 Country _____

Unknown

Is the patient part of an outbreak of this disease? Y N

Notes: _____

Influenza, pediatric death

2004 CDC Case Definition

Clinical description:

An influenza-associated death is defined for surveillance purposes as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test. There should be no period of complete recovery between the illness and death. Influenza-associated deaths in all persons aged <18 years should be reported.

A death should not be reported if:

1. There is no laboratory confirmation of influenza virus infection.
2. The influenza illness is followed by full recovery to baseline health status prior to death.
3. The death occurs in a person 18 years or older.
4. After review and consultation there is an alternative agreed upon cause of death.

Laboratory criteria for diagnosis

Laboratory testing for influenza virus infection may be done on pre- or post-mortem clinical specimens, and include identification of influenza A or B virus infections by a positive result by at least one of the following:

- Influenza virus isolation in tissue cell culture from respiratory specimens;
- Reverse-transcriptase polymerase chain reaction (RT-PCR) testing of respiratory specimens;
- Immunofluorescent antibody staining (direct or indirect) of respiratory specimens;
- Rapid influenza diagnostic testing of respiratory specimens;
- Immunohistochemical (IHC) staining for influenza viral antigens in respiratory tract tissue from autopsy specimens;
- Four-fold rise in influenza hemagglutination inhibition (HI) antibody titer in paired acute and convalescent sera*.

Case classification

Confirmed - A death meeting the clinical case definition that is laboratory confirmed.

Laboratory or rapid diagnostic test confirmation is required as part of the case definition; therefore, all reported deaths will be classified as confirmed.

Comment

*Serologic testing for influenza is available in a limited number of laboratories, and should only be considered as evidence of recent infection if a four-fold rise in influenza (HI) antibody titer is demonstrated in paired sera. Single serum samples are not interpretable.