

**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.

**ENCEPHALITIS, ARBOVIRAL, LAC  
Confidential Communicable Disease Report—Part 2  
NC DISEASE CODE: 96**

**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  
 Altered mental status  Y  N  U  
 Headache  Y  N  U  
 Stiff neck  Y  N  U  
 Meningitis  Y  N  U  
 Encephalitis  Y  N  U  
 Encephalomyelitis/meningoencephalitis  Y  N  U  
 Seizures/convulsions  Y  N  U  
 Ataxia  Y  N  U  
 Gait Disturbance  Y  N  U  
 Dyscoordination  Y  N  U  
 Myoclonus  Y  N  U  
 Acute onset of peripheral neuropathy  Y  N  U  
 Muscle weakness (paresis)  Y  N  U  
 Please specify  Localized  Generalized  
 Muscle paralysis  Y  N  U  
 Acute flaccid paralysis  Y  N  U  
 Asymmetric  
 Symmetric  
 Respiratory paralysis  Y  N  U  
 Did patient have CSF cell count?  Y  N  U  
 Result:  Elevated  Not elevated  Unknown

**CLINICAL FINDINGS**

EEG performed  Y  N  U  
 Date performed (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Result: \_\_\_\_\_

EMG performed  Y  N  U  
 Date performed (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Result: \_\_\_\_\_

Head CT performed  Y  N  U  
 Date performed (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Result: \_\_\_\_\_

MRI performed  Y  N  U  
 Date performed (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Result: \_\_\_\_\_

Other symptoms, signs, clinical findings, or complications consistent with this illness  Y  N  U  
 Specify: \_\_\_\_\_

**REASON FOR TESTING**

Why was the patient tested for this condition?  
 Symptomatic of disease  
 Screening of asymptomatic person with reported risk factor(s)  
 Screening of asymptomatic person with no risk factor(s)  
 Blood / organ / tissue donor screening  
 Other \_\_\_\_\_  
 Unknown

**PREGNANCY**

Is the patient currently pregnant?  Y  N  U  
 Estimated delivery date (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Is patient a post-partum mother (≤ 6 weeks)?  Y  N  U  
 Did patient experience onset of symptoms within 6 weeks of delivery?  Y  N  U

**MATERNAL INFORMATION**

Was the child breastfed?  Y  N  U  
 Did the biologic mother ever have evidence of serological IgG immunity?  Y  N  U  
 Test date (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Result:  Positive  Negative  Equivocal  Unknown

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

**HOSPITALIZATION INFORMATION**

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

Hospital name: \_\_\_\_\_

City, State: \_\_\_\_\_

Hospital contact name: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Admit date (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Discharge date (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

**HEALTH CARE FACILITY AND BLOOD & BODY FLUID EXPOSURE RISKS**

During the 15 days prior to onset, did the patient have any of the following health care exposures?

Blood or blood products (transfusion) - recipient

Donated ova, sperm, organ, tissue, or bone marrow

Transplant recipient (tissue/organ/bone/bone marrow)

No

Unknown

Type of donation/transplant \_\_\_\_\_

Date received (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Until date (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Frequency:

Once

Multiple times within this time period

Daily

Facility/provider name: \_\_\_\_\_

Contact name at facility: \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Country \_\_\_\_\_

**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:

**CLINICAL OUTCOMES**

Discharge/Final diagnosis: \_\_\_\_\_

Survived?  Y  N  U

Status at time of report:

Fully recovered

Survived but experiencing sequelae (residual deficit from illness) at time of report

Died?  Y  N  U

Died from this illness?  Y  N  U

Date of death (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

**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 15 days prior to onset?  Y  N  U

List travel dates and destinations:

From \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Additional travel/residency information:

**VECTOR EXPOSURES**

During the 15 days prior to onset, did the patient have an opportunity for exposure to mosquitoes?  Y  N  U

Exposed on (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Until (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Frequency:

Once

Multiple times within this time period

Daily

City/county of exposure \_\_\_\_\_

State of exposure \_\_\_\_\_

Country of exposure \_\_\_\_\_

**VACCINE**

Has patient/contact ever received vaccine related to this disease?  Y  N  U

Vaccine type \_\_\_\_\_

Unknown vaccine or immune globulin

Date of administration (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of this vaccine information \_\_\_\_\_

How many days prior to illness onset was vaccine received?

Fewer than 14 days

14 days or more

Vaccine date unknown

Yes  No

**CASE INTERVIEWS/INVESTIGATIONS**

Was the patient interviewed?  Y  N  U

Date of interview (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

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:

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## **Encephalitis or Meningitis, Arboviral (includes California serogroup, Eastern equine, St. Louis, Western equine, West Nile, Powassan)**

### **2001 CDC Case Definition**

#### **Clinical description**

Arboviral infections may be asymptomatic or may result in illnesses of variable severity sometimes associated with central nervous system (CNS) involvement. When the CNS is affected, clinical syndromes ranging from febrile headache to aseptic meningitis to encephalitis may occur, and these are usually indistinguishable from similar syndromes caused by other viruses. Arboviral meningitis is characterized by fever, headache, stiff neck, and pleocytosis. Arboviral encephalitis is characterized by fever, headache, and altered mental status ranging from confusion to coma with or without additional signs of brain dysfunction (e.g., paresis or paralysis, cranial nerve palsies, sensory deficits, abnormal reflexes, generalized convulsions, and abnormal movements).

#### **Laboratory criteria for diagnosis**

- Fourfold or greater change in virus-specific serum antibody titer, **OR**
- Isolation of virus from or demonstration of specific viral antigen or genomic sequences in tissue, blood, cerebrospinal fluid (CSF), or other body fluid, **OR**
- Virus-specific immunoglobulin M (IgM) antibodies demonstrated in CSF by antibody-capture enzyme immunoassay (EIA), **OR**
- Virus-specific IgM antibodies demonstrated in serum by antibody-capture EIA and confirmed by demonstration of virus-specific serum immunoglobulin G (IgG) antibodies in the same or a later specimen by another serologic assay (e.g., neutralization or hemagglutination inhibition).

#### **Case classification**

*Probable:* an encephalitis or meningitis case occurring during a period when arboviral transmission is likely, and with the following supportive serology: 1) a single or stable (less than or equal to twofold change) but elevated titer of virus-specific serum antibodies; or 2) serum IgM antibodies detected by antibody-capture EIA but with no available results of a confirmatory test for virus-specific serum IgG antibodies in the same or a later specimen.

*Confirmed:* an encephalitis or meningitis case that is laboratory confirmed