Announcements

- All participants must register for the Monthly Disease Surveillance Trainings in order for us to provide CMEs:
  1. Log-on or Request log-on ID/password: https://tiny.army.mil/r/zB8A/CME
  2. Register for FY17 Epi-Tech Surveillance Training: https://tiny.army.mil/r/4TgNE/EpiTechFY17
- Confirm attendance for today's training:
  - Enter your full name/email address in the chat box; enter each individual's information if attending with a group
  - You will receive a confirmation email within 48 hours
  - Contact your Service Hub if you do not receive this email
- Please put your phones on mute when not speaking. Press *6 to mute/unmute your phone.

Armed Forces Reportable Medical Event Changes

Julie Kebisek, MPH

27 June 2017

Learning Objectives

At the end of the presentation, the learner will be able to:

Describe medical events that have been removed from the reportable events list

Identify medical events that have been added to the reportable events list

Understand other edits that have been made to the case definitions of existing DoD reportable medical events (RMEs)

Reportable Medical Events

Reportable Medical Events may represent an **inherent, significant threat** to public health and military operations. These events have the potential to affect large numbers of people, to be widely transmitted within a population, to have severe/life threatening clinical manifestations, and to disrupt military training and deployment.

Importance of Reporting

Timely, accurate reporting of probable, suspected, or confirmed cases ensures proper identification, treatment, control, and follow-up of cases.

Importance of Accurate and Timely Reporting

The reporting of important preventable medical events has long been a **cornerstone** of public health surveillance rooted in international and national regulations to **prevent** the **introduction**, **transmission**, and **spread** of communicable diseases.

Requirement to Report

- It is required to report medical events within the DoD as defined in Armed Forces Guide. Reference documents include:
  - DoD:
    - DODD 6490.02E “Comprehensive Health Surveillance”
    - DODI 6490.03 “Deployment Health”
    - Joint Publication 4-02 “Doctrine for Health Service Support for Joint Operations”
    - CJCS Memorandum MCM 0025-07 “Procedures for Deployment Health Surveillance”
  - Army:
    - Army Regulations 40-5 “Medical Services Preventive Medicine”
    - Department of the Army Pamphlet 10-11 “Medical Services Preventative Medicine”
  - Navy:
    - Navy Manual of the Medical Department p-117 articles and 2 and 19
    - BUMED INST 6220.12 series “Medical Surveillance and Medical Event Reporting”
  - Coast Guard:
    - Coast Guard Medical Manual COMDTINST M6000.1F “Chapter 7, Preventive Medicine”

Armed Forces Reportable Medical Events Guidelines & Case Definitions

SUMMARY OF PROPOSED CHANGES

Out With the Old, In With the New!

What's different?

- Focus on the local reporter as the primary user
- New introductory pages that provide more context for local reporting
- Case definitions in a new format designed to be more reader friendly
  - Combined laboratory criteria with case classification section
- Standardized language to be more congruent with wording found in AHLTA and CHCS
- Laboratory and clinical criteria for all diseases align with Nationally Notifiable Disease Surveillance System*

New Additions to AFRMEG

The following diseases have been newly **added** to this guide:

- **Chikungunya Virus Disease**
- **Novel and Variant Influenza**
- **Post-Exposure Prophylaxis (PEP) against Rabies***
- **Zika Virus**

Chikungunya

CONFIRMED

A case that meets the clinical description with **ANY** of the following:

- CHIK identified by culture
- CHIK (+) antigen
- CHIK RNA detected by PCR
- At least a 4-fold increase of antibody titer between acute and convalescent sera
- CHIK (+) IgM antibodies from serum followed by confirmatory virus-specific antibodies (ex: PRNT) in the same or later specimen

PROBABLE

A case that meets the clinical description with **ALL** of the following:

- CHIK positive IgM antibody from CSF or serum **AND**
- No other laboratory data

Novel and Variant Influenza

CONFIRMED

A case that meets the clinical description with **ANY** of the following:

- Novel or variant Influenza A (NoVIA) identified in culture or
- NoVIA nucleic acid (RNA) detected by PCR or gene sequencing or
- At least a four-fold increase of NoVIA antibody titer between acute and convalescent sera or
- NoVIA virus identified by another testing method as determined by DoD

PROBABLE

A case that meets the clinical description with no or inconclusive laboratory testing for novel or variant influenza A virus and that meets **ANY** of the following:

- Contact with a confirmed case of novel or variant influenza

OR

- Travel to an area with known cases of novel or variant influenza **and**
- Exposure to animals known to transmit novel or variant influenza (e.g. birds or pigs)

Post-Exposure Prophylaxis against Rabies

CONFIRMED

A case that meets the exposure criteria in which rabies PEP is initiated and a full rabies exposure* risk assessment is completed

*Exposure defined as one or more of the following:

- Any bite, scratch, or other situation in which saliva or CNS tissue of a rabid or potentially rabid animal
- Inadvertent bat contact
- Recipient of organ donation from suspected or known human case of rabies

PROBABLE

No probable case definition

Zika – non-congenital

CONFIRMED

ANY of the following:

- ZV identified by culture* or
- ZV (+) antigen* or
- ZV nucleic acid (RNA) detected* (ex. PCR, sequencing, NAAT) or
- ZV (+) IgM antibody from serum or CSF with a (+) PRNT titer against Zika **AND** a (-) PRNT titer against Dengue* (or other flaviviruses endemic to the region where exposure occurred)

*from any acceptable clinical specimen

PROBABLE

A case with **ALL** of the following:

- Meets the exposure criteria **AND**
- ZV (+) IgM antibody from serum or CSF **with any** of the following:
  - Dengue virus (-) IgM antibody and NO ZV PRNT test performed or
  - (+) PRNT titer against Zika and Dengue (or other flavivirus endemic to the region where exposure occurred)

Zika – congenital

CONFIRMED

ANY of the following:

- ZV identified by culture*
- ZV (+) antigen*
- ZV nucleic acid (RNA) detected (ex: PCR, sequencing, NAAT)*
- ZV (+) IgM antibody from umbilical cord blood, neonatal serum, or neonatal CSF* with a (+) PRNT titer against ZV and a (-) PRNT titer against Dengue (or other flaviviruses endemic to exposure region)

*from any acceptable neonatal clinical specimen within 2 days of birth

PROBABLE

A case with **ALL** of the following:

- Mother meets the exposure criteria or the laboratory criteria for ZV, non-congenital AND
- Zika virus (+) IgM antibody from neonatal serum or neonatal CSF collected within 2 days of birth with any of the following:
  - Dengue virus (-) IgM antibody and no Zika virus PRNT test performed or
  - (+) PRNT titer against Zika and Dengue (or other flaviviruses endemic to the exposure region)

Removed Diseases

The following diseases have been **removed** from this guide and **are no longer reportable**:

- **Rheumatic Fever**
- **Invasive Group A Streptococcus**

Updated Diseases

- Amebiasis
  - Probable case definition added
- Arboviral Diseases
  - Non-neuroinvasive arboviral disease added
  - Name changed to Arboviral diseases
- Cold Weather Injuries
  - Probable case classification added
- Cryptosporidiosis
  - Clinical symptoms are no longer required for reporting
- Dengue Virus Infection
  - Suspect case classification removed
- Filarial Infections
  - Probable case classification added
- Hantavirus Disease
  - Non-pulmonary disease added
- Heat Illness
  - Heat injury category removed
  - Probable case classification added for heat stroke
- Measles
  - Suspect case classification removed

Updated Diseases

- Pertussis
  - Probable case classification for infants added
- Rocky Mountain Spotted Fever
  - Reporting of other rickettsiosis species added
  - Name changed to Spotted Fever Rickettsiosis
- Salmonellosis
  - Suspect case classification added
- Shigellosis
  - Suspect case classification added
- Syphilis
  - Entire disease updated including laboratory criteria
- Trichinosis
  - Suspect and probable case classifications added
- Tuberculosis
  - Suspect case classification added
- Typhus Fever
  - Removed Rickettsia species which are now included in Spotted Fever Rickettsiosis
- Varicella
  - Reporting of all beneficiaries added

Arboviral Diseases

Arboviral diseases, neuroinvasive and non-neuroinvasive

(see page 14)

INCLUDES

- West Nile fever
- West Nile encephalitis
- Japanese encephalitis
- Western Equine encephalitis
- Eastern Equine encephalitis
- St. Louis encephalitis
- California virus encephalitis
- Powassan virus
- Tick-borne encephalitis

EXCLUDES

- Rift Valley Fever
- Dengue Virus Infections
- Zika Virus
- Chikungunya Virus Disease

(see respective case definitions)

Medical Event

Diagnosis: Arboviral Diseases, Neuroinvasive and Non-neuroinvasive

Date of Onset: Select

Reporting Unit: 00168 - WALTER REED NATL MIL MED CNTR

Method of Confirmation

Case Classification Status

MER Status

Date of Report: 6/6/2017

Case Classification Status should be classified as suspect, probable or confirmed according to the current Armed Forces Reportable Medical Events Guidelines Armed Forces Reportable Medical Events Guidelines.

Laboratory Tests

Clear Section Responses

Virus-specific IgM antibody	Positive Pending Negative
Virus identified by culture	Positive Pending Negative
Virus-specific antigen	Positive Pending Negative
Virus-specific nucleic acid (RNA)	Positive Pending Negative
At least a four-fold change of virus-specific antibody titers between acute and convalescent sera	Positive Pending Negative
Virus-specific neutralizing antibody	Positive Pending Negative
Other labs not listed	

Event Related Questions

Please specify whether the illness is neuroinvasive or non-neuroinvasive.

Please specify the etiologic/causative agent.

- California Virus Encephalitis
- Japanese Encephalitis
- Powassan Virus Disease
- St. Louis Encephalitis
- Tick-Borne Encephalitis
- West Nile Virus
- Western Equine Encephalitis
- Other (please specify in comments)

Was this exposure duty related? eployment related No

Pertinent travel?

If there was pertinent travel, please select the countries of travel. (use ctrl-key to click all that apply)

- Africa - XA
- Albania - AL
- Algeria - AG

Vaccine History: Has the case been vaccinated against the disease? Yes No

Please document exposure history (e.g., occupational exposures).

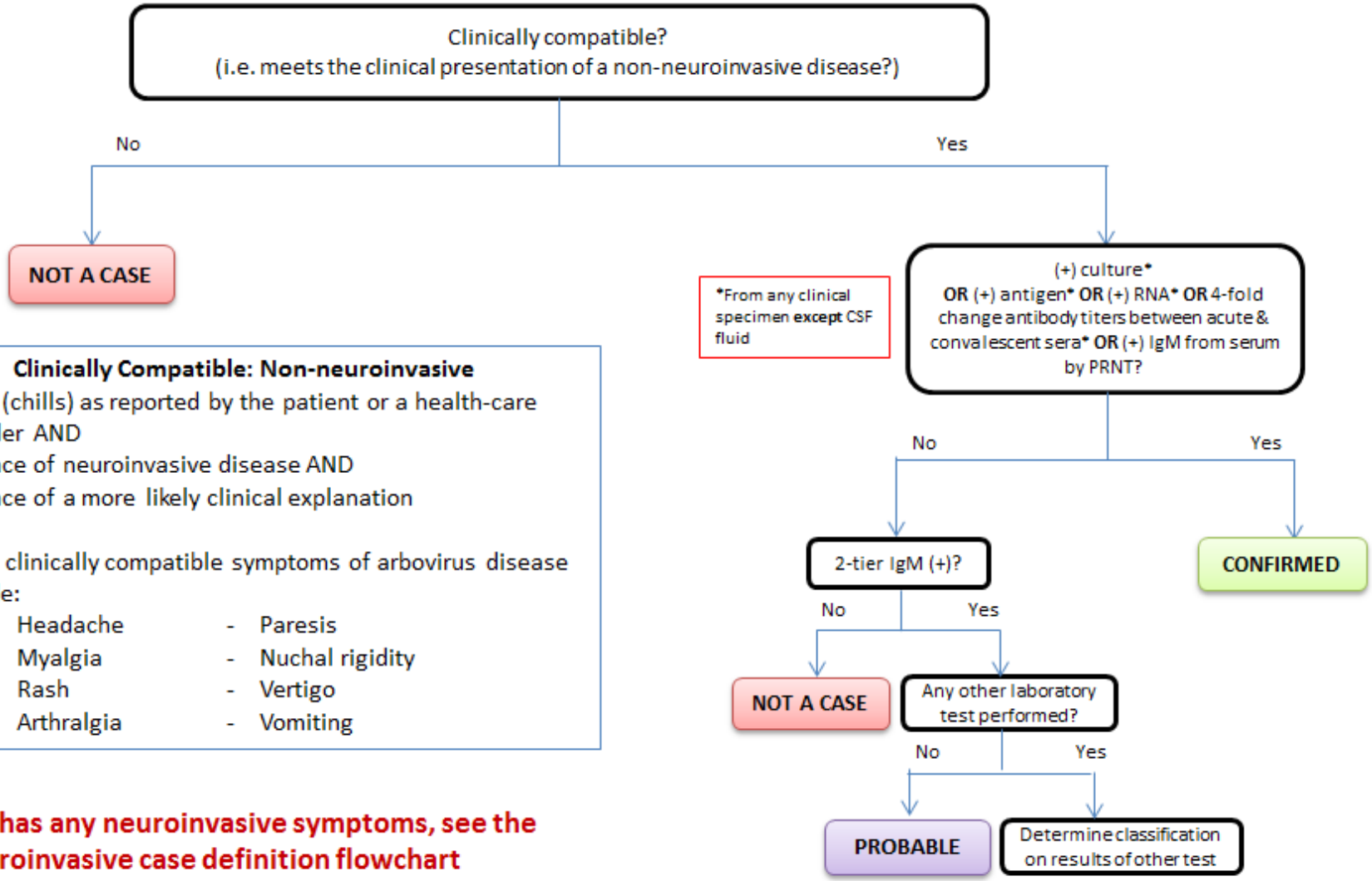
Comments

Comments *(2,000 characters maximum)*

Arboviral Disease: non-neuroinvasive

INCLUDES: West Nile fever, West Nile encephalitis, Japanese encephalitis, Western Equine encephalitis, Eastern equine Encephalitis, St. Louis encephalitis, California virus encephalitis, Powassan virus, tick-borne encephalitis

EXCLUDES: Rift Valley fever, dengue virus, Zika virus, and Chikungunya virus. See respective case definition



Clinically Compatible: Non-neuroinvasive

- Fever (chills) as reported by the patient or a health-care provider AND
- Absence of neuroinvasive disease AND
- Absence of a more likely clinical explanation

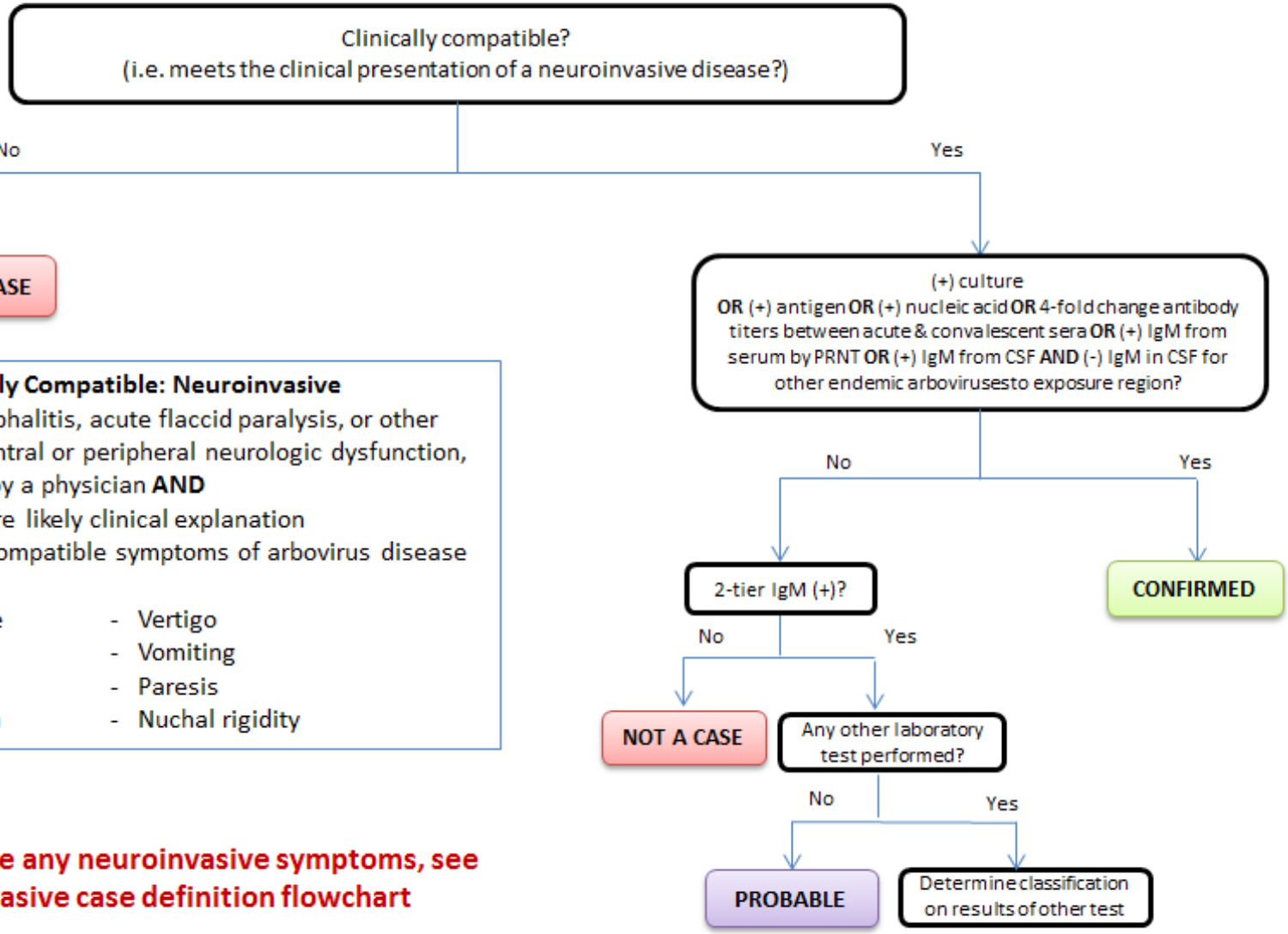
- Other clinically compatible symptoms of arbovirus disease include:
  - Headache
  - Myalgia
  - Rash
  - Arthralgia
  - Paresis
  - Nuchal rigidity
  - Vertigo
  - Vomiting

If patient has any neuroinvasive symptoms, see the neuroinvasive case definition flowchart

Arboviral Disease: Neuroinvasive

INCLUDES: West Nile fever, West Nile encephalitis, Japanese encephalitis, Western Equine encephalitis, Eastern equine Encephalitis, St. Louis encephalitis, California virus encephalitis, Powassan virus, tick-borne encephalitis

EXCLUDES: Rift Valley fever, dengue virus, Zika virus, and Chikungunya virus. See respective case definition

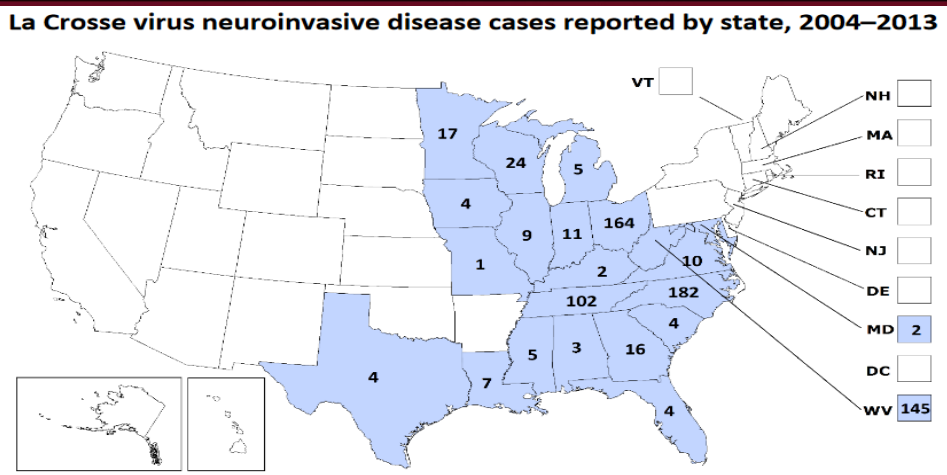


Clinically Compatible: Neuroinvasive

- Meningitis, encephalitis, acute flaccid paralysis, or other acute signs of central or peripheral neurologic dysfunction, as documented by a physician **AND**
- Absence of a more likely clinical explanation
- Other clinically compatible symptoms of arbovirus disease include:
  - Headache
  - Myalgia
  - Rash
  - Arthralgia
  - Vertigo
  - Vomiting
  - Paresis
  - Nuchal rigidity

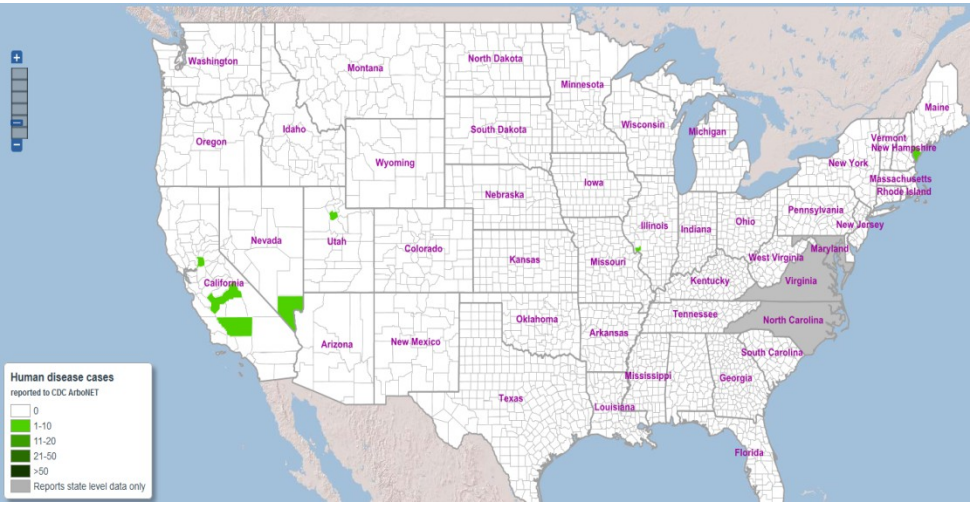
If patient does not have any neuroinvasive symptoms, see the non-neuroinvasive case definition flowchart

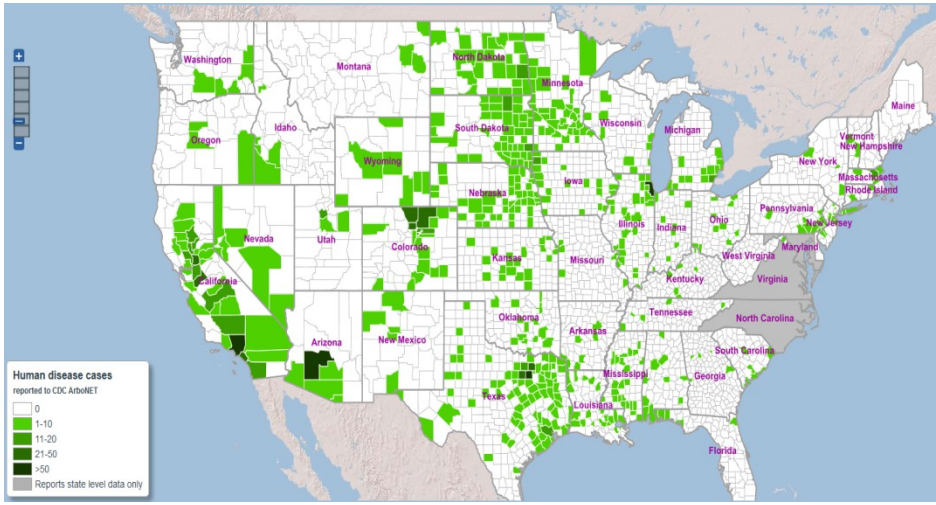
Arboviral Diseases



Japanese Encephalitis

La Crosse Encephalitis





St. Louis Encephalitis

West Nile Virus

Heat Exhaustion

CONFIRMED

Includes **ALL** of the following:

- Core body temperature > 100.5°F or 38°C and <104°F or 40°C (or evidence of elevated core body temperature if cooling was initiated in the field) **and**
- Short-term physical collapse or debilitation occurring during or shortly after physical exertion that rapidly resolves with minimal cooling intervention **and**
- No evidence of CNS dysfunction or only minor CNS symptoms (e.g. headache, dizziness, that rapidly resolves with minimal cooling intervention)

PROBABLE

No probable case definition for heat exhaustion

Heat Stroke

CONFIRMED

A case that meets the clinical description as described above occurring during/immediately after exertion or heat exposure with **ALL** of the following:

- Core body temperature ≥104°F or 40°C **and**
- CNS dysfunction (change in mental status, delirium, stupor, loss of consciousness, or coma)

PROBABLE

A case that meets the clinical description of heat stroke as described above occurring during/immediately after exertion or heat exposure with **ALL** of the following:

- Evidence of elevated core body temperature (even if cooling was initiated in the field) **and**
- CNS dysfunction (change in mental status, delirium, stupor, loss of consciousness, or coma)

Medical Event

Diagnosis: Heat Illness

Date of Onset: Select

Reporting Unit: 00168 - WALTER REED NATL MIL MED CNTR

Method of Confirmation

Case Classification Status

MER Status

Date of Report: 6/6/2017

Case Classification Status should be classified as suspect, probable or confirmed according to the current Armed Forces Reportable Medical Events Guidelines Armed Forces Reportable Medical Events Guidelines.

Event Related Questions

Was the patient hospitalized? ○ Yes ○ No

Date of hospital admission

Place of hospital admission

Indicate all clinical features present (ctrl-click to select more than one):
- Organ Damage
- Hypo/hyperkalemia
- Elevated AST or ALT
- Elevated CK

Please indicate the worst observed mental status of the case

Core Body temperature (maximum measured core temperature prior to cooling, in degrees F)

Specify the type of Heat illness
- Heat Exhaustion
- Heat Stroke

Activity at time of illness

Specify wet bulb globe temperature (WBGT, in degrees F)

Is the case symptomatic per the Armed Forces Reportable Medical Events Guidelines? ○ Yes ○ No

Comments

Comments *(2,000 characters maximum)*

How To Decide What is Reportable or Not?

1. Is there a clear case definition?
2. Are there control and/or prevention measures that can be put into place or need to be tracked within the DoD?
3. Is reporting of the event the only sufficient, timely source of the necessary information?
4. Does it represent an inherent, significant threat to military public health?
5. Does it represent a significant military operational threat?
6. Does it have the potential to inform military program guidance or policy?
7. Is the tactical burden of reporting worth the time and effort?
8. Is the event commonly reportable by state or federal laws, regulations, or guidelines?

Common Terminology

Case Definition:

Represents the specific clinical, laboratory, and other criteria that must be met for a disease or condition to be reportable

Reportable Medical Event (RME):

A medical event or condition mandatory for reporting

Common Terminology

Medical Event Reporting (MER):

The actual report containing information from the RME that is physically entered into the Disease Reporting System internet (DRSi)

Background:

This section of the case definition provides descriptive information about the RME. The background includes information about the causative agent, travel risks, and clinical description

Common Terminology

Clinical Description:

A brief description of clinical signs and symptoms. Unless the clinical description is explicitly referenced in the case classification section of the case definition, it is included only as background information

Clinical Reporting Elements:

Additional information is sometimes required for specific MERs. Ensure the information listed in the Required Comments section of the case definition is recorded in the MER. If the information is unavailable, indicate so

Common Terminology

Epidemiologically Linked (Epi-Link):

A case in which the patient:

a) Had **contact** with a confirmed or probable case, as defined by the case definition, or

b) Was **exposed** to the same source of infection as a probable or confirmed case, or

c) Is a member of a **risk group** as defined by Public Health during an outbreak

Incident Cases:

Only incident cases are reportable. Incident cases are **newly diagnosed cases** in a person, regardless of how long the person has been sick

Example:

A patient with chronic Heptatitis B that is being seen for follow-up and has already been reported through DRSi **does not** need to be reported, regardless of new laboratory results

Common Terminology

Case Classification:

A case classification specifies what is needed to meet the case definition of a reportable event. A case definition can be grouped into three classification categories

Suspected **Probable** **Confirmed**

Each case classification has **its own specific set** of clinical and/or laboratory criteria.

Not all RMEs have all three case classifications

Case Classifications - Expanded

Suspect

- Early identification of the disease is critical for disease control
- Case definition usually limited to clinical symptoms without lab results

NOTE: Some RMEs **do not** have a suspect case classification.

Example:

A patient with no symptomatic information available, but has a positive culture and/or positive IgG or IgM antibody for *Anaplasmosis phagocytophilum* and no other laboratory evidence of any other pathogen

Case Classifications - Expanded

Probable

- Case definition is usually more detailed than suspected classification

- Does not have all the required elements for confirmed case

Example:

A patient with a fever >101F and headache and a positive IgG or IgM (=1:64) antibody test for *Anaplasmosis phagocytophilum*

Case Classifications - Expanded

Confirmed

- Case definition is **the most specific**
- Usually requires laboratory support

Example:

A patient with a fever >101F and headache, AND an IgG antibody test with a fourfold increase (= 1:256+), or a +PCR, or +culture for *Anaplasma phagocytophilum*

What Not to Report

- **HIV** is not reportable through DRSi
- **Healthcare-associated infections**. Report healthcare associated infections to your Infection Control Practitioner (ICP)
- **Prevalent cases**. DRSi is a reporting tool for **incident** cases only

IDENTIFY AND CLASSIFY THE CASE!

A 23 year old patient is seen with complaints of a large round lesion. The patient mentions they were camping in Virginia last weekend and noticed several ticks on themselves. The provider diagnosed this as an erythema migrans, caused by Lyme disease, and no labs were ordered.

How should this be entered into DRSi?

(see page 52)

You receive a report of a positive PCR test for Salmonella from stool from a patient who reported having diarrhea and abdominal pain for several days. The provider diagnosed Salmonella and issued treatment. No other laboratory tests were ordered.

How should this be entered into DRSi?

(see page 72)

A male patient who recently returned from Puerto Rico has an acute onset of fever and conjunctivitis for “about a week”. They are tested for Zika, Chikungunya, and Dengue. The Zika RNA is positive, and the Dengue IgM is negative but the IgG is positive. The Chikungunya IgM is positive but IgG negative.

How should this be entered into DRSi?

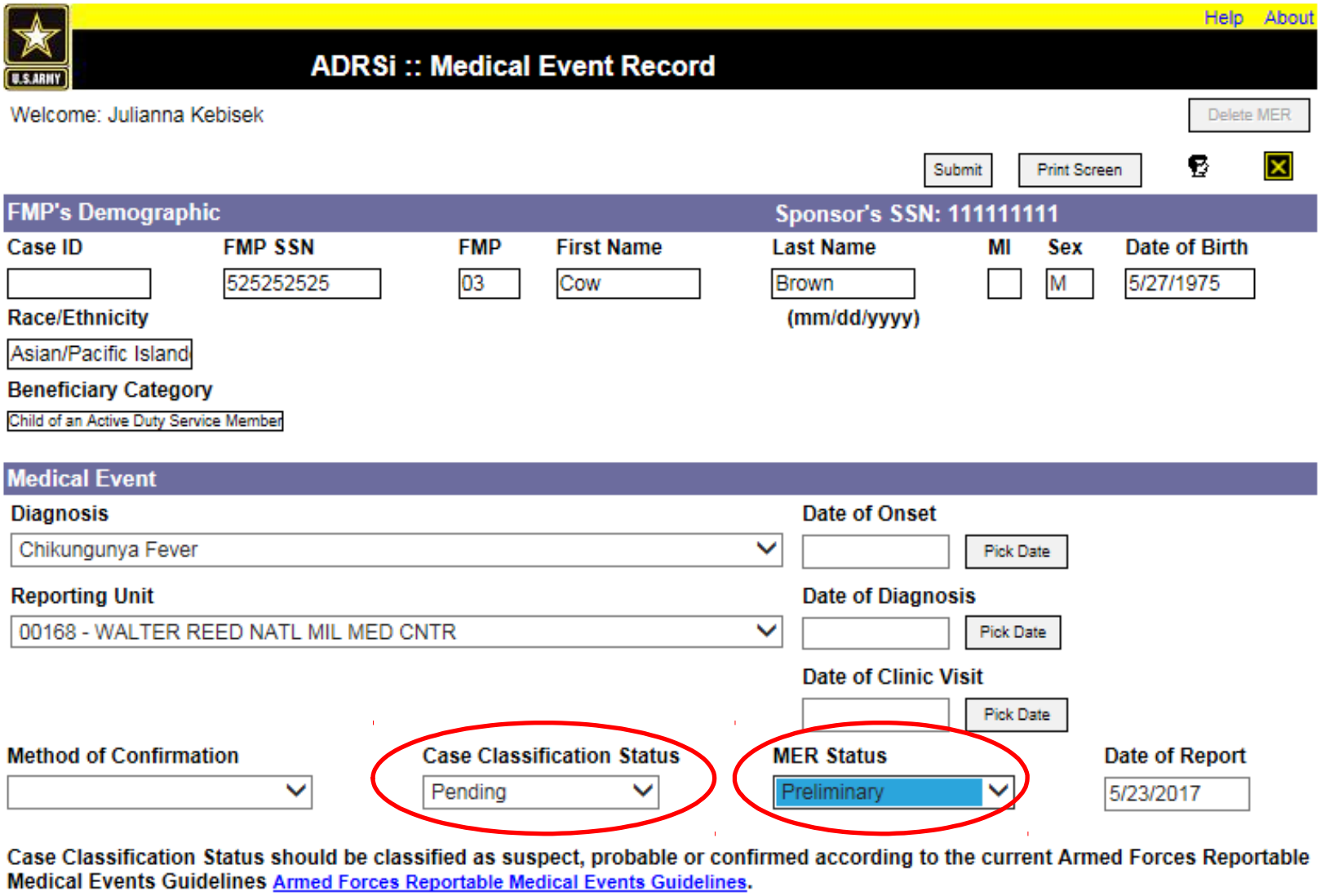
(see page 20, 28, and 97)

A patient that has just been attacked by an angry dog and is seen in ER for treatment. The provider recommends post-exposure prophylaxis against rabies, but the patient refuses, assuming the dog was just having a bad day. The dog and its owners cannot be found to determine its vaccination history.

How should this be entered into DRSi?

(see page 65)

What if some information is pending?



Questions/Service POCs

- **Army**: **APHC – Disease Epidemiology Division**
  Aberdeen Proving Ground, MD
  COMM: (410) 436-7605 DSN: 584-7605
  Email:
usarmy.apg.medcom-aphc.mbx.disease-epidemiologyprogram13@mail.mil

- **Navy**: **NMCPHC Preventive Medicine Programs and Policy Support Department**
  COMM: (757) 953-0700; DSN: (312) 377-0700
  Email:
usn.hampton-roads.navmcpubhlthcenpors.list.nmcphc-threatassess@mail.mil

  Contact your cognizant NEPMU:

  NEPMU2: COMM: (757) 950-6600; DSN: (312) 377-6600
  Email:
usn.hampton-roads.navhospporsva.list.nepmu2norfolk-threatassess@mail.mil

  NEPMU5: COMM: (619) 556-7070; DSN (312) 526-7070
  Email:
usn.san-diego.navenpvntmedufive.list.nepmu5-health-surveillance@mail.mil

  NEPMU6: COMM: (808) 471-0237; DSN: (315) 471-0237
  Email: usn.jbphh.navenpvntmedusixhi.list.nepmu6@mail.mil

  NEPMU7: COMM (int): 011-34-956-82-2230 (local): 727-2230; DSN: 94-314-727-2230
  Email: NEPMU7@eu.navy.mil

QUESTIONS?