

*epi*TRENDS

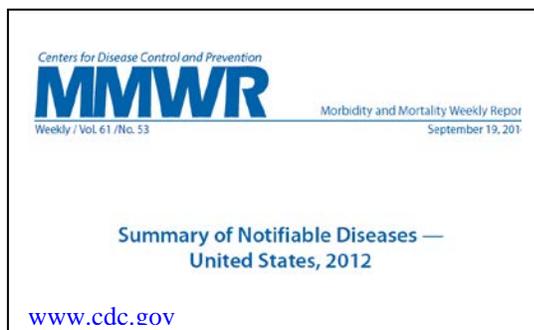
A Monthly Bulletin on Epidemiology and Public Health Practice in Washington

New Notifiable Conditions Case Definitions

Vol. 20 No. 1

Disease surveillance involves ongoing systemic collection of data about selected diseases. This surveillance requires uniformity in which cases are being counted over time. In this country, standard case definitions are used to ensure that reporting of notifiable conditions is consistent among the states.

Notifiable Conditions Reporting



In the United States, case definitions for surveillance of communicable conditions are established through national agreement at an annual meeting of the Council of State and Territorial Epidemiologists (CSTE). Representatives to the annual CSTE meeting present and

vote on proposed additional conditions or modifications to existing case definitions. States implement the approved changes the following surveillance year. Surveillance data are compiled annually at state and national levels.

Each state mandates its own reporting requirements for notifiable conditions. Washington State has decided not to include a small number of nationally-notifiable conditions, such as amebiasis, Hansen disease (leprosy), invasive drug-resistant *Streptococcus pneumoniae* disease, and toxic shock syndrome. In addition, a few diseases notifiable in Washington are not nationally notifiable including human prion disease, shellfish poisoning, and yersiniosis.

Changes for Reporting in 2015

Arboviral disease reporting in Washington State includes rare cases of both endemic and travel-associated conditions. Chikungunya virus will be

01.15



*epi*TRENDS
P.O. Box 47812
Olympia, WA 98504-7812

John Wiesman, DrPH, MPH
Secretary of Health

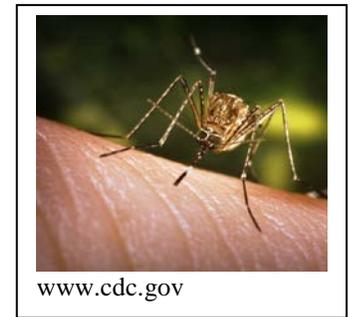
Kathy Lofy, MD
State Health Officer

Scott Lindquist, MD, MPH
State Epidemiologist,
Communicable Disease

Sherryl Terletter
Managing Editor

Marcia J. Goldoft, MD, MPH
Scientific Editor

added as nationally notifiable due to the recent introduction of Chikungunya virus to the Caribbean with the subsequent increased likelihood of imported and locally acquired infections being identified in the United States. Arthralgia will be added to the symptom list for non-neuroinvasive arboviral disease. The updated case definition will also have two additional confirmatory laboratory tests:



- detection of dengue antigens in the tissue of a fatal case by a validated immunofluorescence or immunohistochemistry assay
- detection in serum or plasma of dengue NS1 antigen by validated immunoassay

Additionally, detection of dengue-specific IgM antibodies in serum will be confirmatory rather than presumptive laboratory evidence if:

- the person is a resident of the US without evidence of non-dengue flavivirus transmission and without recent vaccination against a flavivirus; or
- the person is a traveler returning from a dengue-endemic area without ongoing transmission of another flavivirus, with no clinical evidence of co-infection with another flavivirus, and without recent vaccination against a flavivirus

***epi*TRENDS Monthly Posting Alert**

To receive monthly e-mail notification of *epi*TRENDS, please register at this website:

<http://listserv.wa.gov/cgi-bin/wa?SUBED1=epitrends&A=1>

Choose the option to join the listserv. Enter your name and email address.

No combination of signs or symptoms has been found to be diagnostically specific during the acute (febrile) phase of dengue. The new clinical case definition will include fever with at least one other sign or symptom (instead of two); new diagnostic symptoms have also been added: retro-orbital pain and abdominal pain or tenderness. Since surveillance began in 2010, no infected asymptomatic blood donors have been identified so this reporting category was deleted and only symptomatic dengue infections should be reported.

Campylobacteriosis is the most commonly reported enteric notifiable condition in Washington. Each year there are over a thousand cases, with 1631 reports in 2013. The new case definition changes detection of *Campylobacter* infection using a non-culture method from Suspect to Probable classification. There is also an expansion of options for unpasteurized milk exposures.

Cryptococcus gattii is an emerging infection in the US, associated with one-year mortality rates of ~25%. The geographic distribution of *C. gattii* infection is potentially widespread in the United States but remains largely unknown. Although infection with *C. gattii* has been reportable in Washington State since 2011, it is not a national notifiable condition. The CSTE position statement recommends the use of standardized sources for case ascertainment and classification

of *C. gattii* infection, but does not add *C. gattii* to the Nationally Notifiable Condition List at this time. To comply with the standardized national case definition, two confirmatory laboratory tests have been added to the report form: 1) detection of *C. gattii*-specific nucleic acid in a clinical specimen; and 2) Result of matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF), performed on a clinical specimen, specific for *C. gattii*. Additionally, travel history for the two years preceding symptom onset should be considered in the epidemiological evidence.

Hantavirus pulmonary syndrome was first recognized in the United States in 1993 with deer mice as the reservoir. Washington has zero to five cases reported annually with up to two deaths. The case definition will have three new case defining clinical findings: acute onset of illness, diagnosis of hantavirus in the healthcare record, and diagnosis of hantavirus on the death certificate. A laboratory observation will capture platelet count and present of immature myeloid white cells (e.g., myelocytes).



Invasive *Haemophilus influenzae* cases have decreased significantly in Washington with vaccination for the disease, dropping from a high of 319 cases in 1986 to current reports of under 12 cases annually. The new case definition for *H. influenzae* will include PCR as a confirmatory laboratory test. Isolation of *H. influenzae* from a normally sterile body site (e.g., cerebrospinal fluid, blood, joint fluid, pleural fluid, pericardial fluid) or detection of *H. influenzae*-specific nucleic acid in a specimen obtained from a normally sterile body site using a validated polymerase chain reaction (PCR) assay will

qualify a case to be classified as Confirmed. A case of meningitis where there is detection of *H. influenzae* antigen in cerebrospinal fluid qualifies for classification as Probable.

Invasive meningococcal disease cases have decreased significantly in Washington since a peak of 126 cases in 1996, dropping to fewer than 50 cases annually recently. The new case definition will classify PCR-positive meningococcal cases as Confirmed cases, so now either a positive culture or a positive polymerase chain reaction (PCR) result on a specimen obtained from a normally sterile body site (e.g., cerebrospinal fluid, blood, joint fluid, pleural fluid, pericardial fluid) meets the criteria for classifying a case as confirmed. A case will be classified as Probable if *Neisseria meningitidis* antigen is detected in cerebrospinal fluid by latex agglutination or in formalin-fixed tissue by immunohistochemistry. Either clinical purpura fulminans in the absence of a positive blood culture or gram-negative diplococci (not further identified) seen on a gram stain done on a normally sterile body fluid (e.g. blood or cerebrospinal fluid) will qualify a case for classification as a Suspect invasive meningococcal disease case.

Yersinia enterocolitica and ***Yersinia pseudotuberculosis*** cause febrile diarrhea sometimes complicated by skin, joint, or tissue involvement. There are 20-40 cases per year in Washington,

where the condition is notifiable although it is not nationally notifiable. Yersiniosis cases were increasingly being identified from the culture of an abscess, so Office of Communicable Disease Epidemiology added abscess as an anatomic site of organism isolation and as a clinical finding.

For the above conditions, cases with onset in 2014 will be reported using the old case definitions. PHIMS, the electronic disease reporting system in Washington, will introduce the changes for the 2015 case definitions around end of January, 2015. New case investigation forms will be posted on the Department of Health website at that time.

Resources

National Notifiable Diseases Surveillance System Case Definitions:

<http://www.cdc.gov/nndss/script/casedefDefault.aspx>

CDC Morbidity and Mortality Weekly Report (MMWR): <http://www.cdc.gov/mmwr/>

Washington annual reports

<http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/CommunicableDiseaseSurveillanceData/AnnualCDSurveillanceReports>

Notifiable Conditions Guidelines

<http://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/NotifiableConditions/ListofNotifiableConditions>