U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30329-4027

Date: December 14, 2016

To: U.S. State and Territorial Epidemiologists

From: Ruth Jajosky, D.M.D., M.P.H.; Surveillance and Data Branch; Division of Health Informatics and Surveillance; Center for Surveillance, Epidemiology, and Laboratory Services; Office of Public Health Scientific Services; Centers for Disease Control and Prevention (CDC)

Subject: 2017 Changes to the National Notifiable Diseases Surveillance System and other relevant updates

This memorandum summarizes changes to the National Notifiable Diseases Surveillance System (NNDSS) based upon position statements approved by the Council of State and Territorial Epidemiologists (CSTE) at their annual meeting in June 2016, as well as other relevant updates. Please share this letter with surveillance and informatics staff in your jurisdictions who are responsible for collection or submission of NNDSS data to CDC. The following list summarizes the topics covered in the four sections of this memorandum:

- Section I has two Parts:
  - Part A includes a list of seven conditions for which CSTE has approved revised national surveillance case definitions. These case definitions should be used beginning January 2017 for new 2017 cases. We expect to post these case definitions to the NNDSS web site (https://wwwn.cdc.gov/nndss/) by approximately December 16, 2016.

    - Part B includes two conditions that CSTE has placed under standardized surveillance that are not being added to the list of nationally notifiable conditions.
- Section II: Summarizes a change in the way the data will be displayed for Hepatitis C acute and chronic data presented in the *Morbidity and Mortality Weekly Report* (*MMWR*) NNDSS Table II and in the *MMWR Summary of Notifiable Infectious Diseases and Conditions*.
- Section III provides an update about the current Message Mapping Guide (MMG) development effort for Health Level 7 case notifications to the NNDSS, which is a component of the NNDSS Modernization Initiative (http://www.cdc.gov/nmi/). The draft MMG website is available at https://wwwn.cdc.gov/nndss/case-notification/.
- Section IV highlights a new page on the NNDSS web site; namely, the "NNDSS Data and Statistics" page (https://wwwn.cdc.gov/nndss/data-and-statistics.html).

Section I, Part A: Summary of 2016 CSTE Position Statements requesting revisions to national surveillance case definitions beginning in 2017 for 2017 cases:

a. Salmonellosis

Position Statement 16-ID-03 titled *Public Health Reporting and National Notification for Salmonellosis (non-typhoidal)* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2016PS/16_ID_03.pdf) indicates that positive culture-independent diagnostic testing (CIDT) results for *Salmonella* that are not culture-confirmed be reported as probable cases. In addition, illnesses among persons who are epidemiologically linked

to a confirmed case or a probable case with supportive laboratory evidence will be classified as probable cases.

b. Shigellosis

Position Statement 16-ID-04 titled *Public Health Reporting and National Notification for Shigellosis* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2016PS/16_ID_04.pdf) defines new standards for case identification and removes the suspected case classification. The laboratory criteria have been updated for a probable case of shigellosis to include detection of *Shigella spp*. or *Shigella/*Enteroinvasive *Escherichia coli* (EIEC) in a specimen using a CIDT. The position statement also defines the criteria to distinguish a new case from an existing case. A case should not be counted as a new case if laboratory results were reported within 90 days of a previously reported infection. In addition, when two or more different serotypes are identified in one or more specimens from the same individual, each should be counted as a separate case.

c. Vibriosis

Position statement 16-ID-05 titled *Public Health Reporting and National Notification for Vibriosis* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2016PS/16_ID_05.pdf) indicates that positive CIDT results for *Vibrio* that are not culture-confirmed be reported as probable cases. The criteria for epidemiologic linkage includes cases that are clinically compatible and meet either the supportive or confirmatory laboratory criteria for diagnosis. This position statement also defines criteria to distinguish a new case from an existing

one. A case should not be counted as a new case if laboratory results were reported within 30 days of a previously reported infection. In addition, when two or more different species of the family *Vibrionaceae* are identified in one or more specimens from the same individual, each should be reported as a separate case.

d. Perinatal Hepatitis B Virus Infection

Position statement 16-ID-06 titled *Public Health Reporting and National Notification of Perinatal Hepatitis B Virus Infection* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2016PS/16_ID_06.pdf) updates the criteria for diagnosis and case classification. The clinical criteria for diagnosis now includes a specific age range for the patient and the laboratory diagnosis has been updated to include additional testing methods. The position statement also adds 'Born to Hepatitis B virus infected mother' as epidemiologic linkage criteria. Case classification for confirmed cases was updated to include specific age ranges for the patient as well as time frames for positive testing. A definition for a probable case was introduced for case classification as well.

e. Invasive Pneumococcal Disease

Position statement 16-ID-08 titled *Revision of the Standardized Case Definition for Invasive Pneumococcal (Streptococcus pneumoniae) Disease or IPD* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2016PS/16_ID_08.pdf) revises case classifications for Invasive Pneumococcal (*Streptococcus pneumoniae*) Disease or IPD. The case classifications are now confirmed and probable. There is no longer a suspected case classification. The definition for a probable case has been added to include a case that meets the supportive laboratory evidence, which is the identification of *Streptococcus*

pneumoniae from a normally sterile body site by a CIDT without isolation of the bacteria. In addition, this position statement presents the criteria for distinguishing a new case from an existing case of IPD. A single case should be defined as a health event with a specimen collection date that occurs more than 30 days from the last known specimen with a positive lab finding.

f. Lyme disease

Position statement 16-ID-10 titled *A modification of the exposure criteria used as part of the case definition to help classify cases of acute Lyme disease* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2016PS/16_ID_10.pdf) includes updated laboratory criteria and removes reference to exposure in "endemic" counties. Instead, exposure is categorized based on whether it likely occurred in a state that consistently reports a high incidence of Lyme disease (>10 per 100,000 population) or in a state where Lyme disease is less frequently reported. The criterion to distinguish a new case from an existing case is based upon the case not previously being reported to public health authorities.

This position statement proposes that final Lyme disease case counts be included in the *MMWR* annual summary reports, but be omitted from the weekly NNDSS surveillance tables. As a result, beginning with the 2017 data, provisional Lyme disease case counts will be omitted from weekly *MMWR* Table II and will only be published in the *MMWR* early release tables of finalized data and in the *MMWR Summary of Notifiable Infectious Diseases and Conditions*.

g. Tularemia

Position statement 16-ID-11 titled *Revision of the Standardized Case Definition for Tularemia (Francisella tularensis)* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2016PS/16_ID_11.pdf) updates the supportive laboratory criteria to include detection of *F. tularensis* in a clinical or autopsy specimen using polymerase chain reaction (PCR), for a probable case. The confirmatory laboratory criteria has also been updated to include isolation of *F. tularensis* in an autopsy specimen in addition to a clinical specimen. Additionally, epidemiologic linkage has been added to support clinical diagnosis. The position statement also defines the criteria to distinguish a new case from an existing case of tularemia.

Section I, Part B: New conditions to be placed under standardized surveillance beginning in 2017, but not to be added to the NNDSS. Surveillance case definitions for these conditions will not be added to the NNDSS case definitions web site.

a. Histoplasmosis

Position statement 16-ID-02 titled *Standardized Surveillance Case Definition for Histoplasmosis* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2016PS/16_ID_02.pdf) establishes standardized criteria for case identification and classification for histoplasmosis.

CDC's National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) has indicated they would like to receive data for this condition using the Generic version 2 MMG. We will add this condition to the

NNDSS event code list after we obtain Office of Management and Budget Paperwork Reduction Act Approval (OMB PRA) to receive the data for this condition.

b. Free-living Amebae Infections

Position statement 16-ID-12 titled *Public Health Reporting and Standardized Surveillance for Free-living Amebae Infections including Acanthamoeba Disease, Balamuthia mandrillaris Disease, and Naegleria fowleri Causing Primary Amebic Meningoencephalitis*) (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2016PS/16_ID_12.pdf) identifies new standards for case identification to reflect increased use of advanced molecular diagnostics for Free-living Amebae infection and less reliance on visualization alone to identify amebae changes in testing practices.

CDC's NCEZID has indicated they would like to receive data for these conditions using the Generic version 2 MMG. Since we already have OMB PRA approval to receive the data, we have added the following three conditions to the 2017 event code:

- *Naegleria fowleri* causing Primary Amebic Meningoencephalitis (event code 50227)
- *Balamuthia mandrillaris* disease (event code 50226)
- Acanthamoeba disease (excluding keratitis) (event code 50225)

Section II: Change in the display of Hepatitis C acute and chronic data presented in the MMWR NNDSS Table II and the Annual Summary.

At the request of the CDC Hepatitis Program, beginning in January 2017, for provisional data in NNDSS Table II (weekly MMWR), we will replace what we currently display in Table II with separate columns for 'Hepatitis C, acute, confirmed' and 'Hepatitis C, acute, probable'. Further, we will continue not to publish Hepatitis C chronic data in Table II.

For finalized data in the NNDSS Annual Summary, for "Hepatitis C, acute" we will replace what we currently display in the Annual Summary with two rows—"Hepatitis C acute, confirmed" and "Hepatitis C acute, probable." The NNDSS Annual Summary is published approximately a year and a half after the end of the reporting calendar year.

Section III: Update about the MMG development efforts in 2016.

Earlier this year, we finalized the Generic version 2 and Hepatitis version 1 MMGs and shortly thereafter, we underwent a requirements reconciliation process to ensure that all the documentation and artifacts for HL7 messaging are consistent across the MMGs and the Messaging Validation, Processing and Provisioning System (MVPS). Based upon this reconciliation process, minor updates to finalized documents were needed and the following documents were updated and posted to the HL7 Case Notification Resource Center (at https://wwwn.cdc.gov/nndss/case-notification/):

- PHIN Messaging Guide for Case Notification Reporting, Version 3, Release 1, October 18, 2016, which represents an update to the document previously referred to as the PHIN Message Structure Specification.
- Generic version 2 MMG, Test Scenarios, and Test Messages
- Hepatitis version 1 MMG and Test Scenarios
- Methods for Conveying Unknown Values in Case Notifications
- FAQs for MMG Implementation

Section IV highlights the "NNDSS Data and Statistics" page which has been added to the NNDSS web site.

The NNDSS Data and Statistics page (https://wwwn.cdc.gov/nndss/data-and-statistics.html), which is now part of the NNDSS web site (https://wwwnd.cdc.gov/nndss/), was created for the following reasons:

- Explain the difference between provisional and finalized NNDSS data,
- Direct readers to the locations where provisional and finalized NNDSS data distributed by the Division of Health Informatics and Surveillance (DHIS) are available, and
- Provide guidance to readers to help them understand how to interpret the DHIS NNDSS data.

We will post additional information to this site, as it is developed.

The 2017 NNDSS Event Code List, both the full version and the version that only includes the list of conditions which should be sent using the Generic version 2 MMG (until disease-specific MMGs can be created), are located on the NNDSS web site in the HL7 Case Notification Resource Center at: https://wwwn.cdc.gov/nndss/case-notification/related-documentation.html

A copy of this memorandum will be available on the "Downloads and Resources" section of the NNDSS web site at: https://wwwn.cdc.gov/nndss/downloads.html

Thank you very much for your reporting efforts throughout the year. Your input is essential as we continue to work together to prevent and control these diseases.

Cc:

Kaitlin Benedict
Erin Burdette
Katie Fullerton
Scott Holmberg
Ruth Jiles
Mike Judd
Matt Karwowski
Kiersten Kugeler
Ben Kupronis
Paul Mead
Tamara Pilishvili
Sandy Roush
Amy Schwartz
Karen Wong
Jeffrey Engel (CSTE)
Joseph McLaughlin (CSTE)
Alfred DeMaria (CSTE)