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To: U.S. State and Territorial Epidemiologists

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Subject: 2015 Changes to the National Notifiable Diseases Surveillance System and other relevant updates

This memo summarizes changes to the National Notifiable Diseases Surveillance System (NNDSS) based on the position statements approved by the Council of State and Territorial Epidemiologists (CSTE) at their annual meeting in June 2014, as well as other relevant updates. Please share this letter with the surveillance and informatics staff in your jurisdiction who are responsible for collection or submission of NNDSS data to CDC. The following list summarizes the topics covered in the six sections of this memorandum:

- Section I includes a list of new diseases and conditions that CSTE requests be made nationally notifiable by CDC as well as new and revised national surveillance case definitions for selected nationally notifiable infectious diseases and conditions. These case definitions should be used beginning January 2015 for new 2015 cases. We expect to post these updates to the NNDSS web site (<http://www.cdc.gov/nndss/>) on December 15, 2014 (or soon thereafter).
- Section II includes Office of Management and Budget (OMB) Paperwork Reduction Act (PRA) considerations for the NNDSS.
- Section III provides information about the changes in event codes for viral hemorrhagic fevers (VHF).
- Section IV provides an update about the current Message Mapping Guide (MMG) development effort for case notifications to the NNDSS, which is a component of the NNDSS Modernization Initiative

(http://wwwn.cdc.gov/nndss/script/NNDSS_Modernization_Initiative.aspx). The draft Message Mapping Guide website is available at:

<http://wwwn.cdc.gov/nndss/script/DraftMMG.aspx>.

- Section V provides a new condition code for acute flaccid myelitis and instructions for using this code. Do not send case notifications for acute flaccid myelitis to the NNDSS.
- Section VI provides a recommendation to begin using only one event code for each of the following conditions beginning in January 2015: a) Shiga toxin-producing *Escherichia coli* (event code 11563, aka STEC) and b) *Streptococcus pneumoniae*, invasive diseases (all ages) (11723, aka Invasive Pneumococcal Disease).

Section I. New nationally notifiable infectious diseases/conditions and revisions to national surveillance case definitions

A) To be added to NNDSS in January 2015:

- 1) Campylobacteriosis will be added to the NNDSS beginning in January 2015, since we already have Office of Management and Budget Paperwork Reduction Act approval to receive data for this condition. Provisional cases of campylobacteriosis will appear in *Morbidity and Mortality Weekly Report (MMWR)* NNDSS Table II (Provisional cases of selected notifiable diseases, United States). The event code for campylobacteriosis is 11020.

CSTE Position statement 14-ID-09 titled *Standardized Surveillance for Campylobacteriosis and Addition to the Nationally Notifiable Condition List* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2014PS/14_ID_09upd.pdf) requests campylobacteriosis be added to the list of nationally notifiable conditions. It also updates the existing standardized surveillance case definition, removing the “suspect” category and creating two classifications of probable cases: those cases diagnosed through culture-independent

diagnostic test methods, and those cases epidemiologically-linked to a confirmed or probable case.

B) To be added to NNDSS when we receive Office of Management and Budget Approval (OMB PRA) to receive data for these conditions:

- 1) Chikungunya virus neuroinvasive and non-neuroinvasive disease will be added to the list of nationally notifiable Arboviral diseases, when we receive OMB PRA approval. We are working with staff from CDC's National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) to submit an OMB PRA request for approval to designate these conditions as nationally notifiable. When approved, provisional data for these conditions will be included in *MMWR* NNDSS Table I (Provisional cases of infrequently reported notifiable diseases).

Position statement 14-ID-04 titled *Update to Arboviral Neuroinvasive and Non-neuroinvasive Diseases Case Definition*

(http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2014PS/14_ID_04upd.pdf) revises the case definition for Arboviral neuroinvasive and non-neuroinvasive disease by adding Chikungunya virus to the list of nationally notifiable Arboviral diseases in the United States.

- 2) Hantavirus infection, non-Hantavirus Pulmonary Syndrome will be added to the list of nationally notifiable diseases when we receive OMB PRA approval. When approved by OMB, provisional data for this condition will appear in *MMWR* NNDSS Table I in the following format:

Hantavirus infection
Hantavirus Pulmonary Syndrome (HPS)
Hantavirus infection, non-HPS

We are working with CDC staff from NCEZID to submit an OMB PRA request to make these conditions nationally notifiable. Data for these

conditions will be included in *MMWR* NNDSS Table I (Provisional cases of infrequently reported notifiable diseases).

Position statement 14-ID-08 titled *Public Health Reporting and National Notification for Hantavirus Infection*

(http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2014PS/14_ID_08upd.pdf) broadens national surveillance to include both “Hantavirus

Infection, non-Hantavirus Pulmonary Syndrome” and HPS so that all cases of laboratory-confirmed hantavirus infection would be nationally notifiable.

This position statement also updates the national case definition for HPS.

C. Summary of revisions to national surveillance case definitions for the NNDSS:

- 1) Position statement 14-ID-03 titled *Update to Public Health Reporting and National Notification for Congenital Syphilis* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2014PS/14_ID_03upd.pdf) requests the laboratory criteria for congenital syphilis be updated to reflect changes in available tests as well as new tests being used, and provides some parameters for what is considered abnormal cerebrospinal fluid values in congenital syphilis.
- 2) Position statement 14-ID-05 titled *Revision of the National Surveillance Case Definition for Invasive Haemophilus influenzae Disease* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2014PS/14_ID_05upd.pdf) updates the *Haemophilus influenzae* disease case definition adding polymerase chain reaction (PCR) as an acceptable laboratory test and classifying PCR-positive *Haemophilus influenzae* cases as confirmed.
- 3) Position statement 14-ID-06 titled *Revision of the National Surveillance Case Definition for Meningococcal Disease* (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2014PS/14_ID_06upd.pdf) updates the meningococcal disease case definition to classify

PCR positive meningococcal cases as “confirmed.” Additionally, the position statement modifies case ascertainment criteria to include medical examiner reporting of *N. meningitidis* to public health agencies.

- 4) Position statement 14-ID-10 titled *Revision of Case Definitions for National Notification of Dengue*

(http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2014PS/14_ID_10.pdf) updates the clinical and laboratory presentation of dengue to account for new disease classifications which include dengue-like illness*, dengue, and severe dengue, that replace the previous disease classifications (dengue fever, dengue hemorrhagic fever, and dengue shock syndrome). Additionally, it modifies the sources of data for case ascertainment to include school-based surveys in dengue endemic areas. Finally, the position statement deletes the "Asymptomatic Blood or Tissue Donor" reporting category and limits reporting to symptomatic (laboratory-positive) dengue virus infections.

*Dengue-like illness will be added to the list of nationally notifiable diseases when we receive OMB PRA approval. When approved, provisional data for this condition will be included with Dengue case counts in *MMWR* NNDSS Table II.

Section II. Office of Management and Budget Paper Work Reduction Act Considerations

CDC can receive data from reporting jurisdictions only for diseases/conditions and data elements that have Office of Management and Budget Paperwork Reduction Act approval. NNDSS has approval to receive the following:

- a) generic data for all the nationally notifiable diseases, except for diseases or conditions that CSTE recommends be made nationally notifiable and are still pending OMB PRA approval to become nationally notifiable;

- b) all data elements in Message Mapping Guides, except for those data elements marked “proposed”;
- c) National Electronic Telecommunications System for Surveillance (NETSS) core and disease-specific data elements, and
- d) National Electronic Disease Surveillance System Base System (NBS) data elements that represent either NETSS or Message Mapping Guide data elements.

A list of the nationally notifiable diseases/conditions and data elements included in the NNDSS consolidated OMB PRA package with control number 0920-0728 is available for review on the following web site:

<http://www.reginfo.gov/public/Forward?SearchTarget=PRA&textfield=0920-0728>

Please limit the data you transmit to the NNDSS to only those data elements and diseases/conditions that are OMB approved. We understand that this change is not one that you can implement immediately, but we would ask that you work toward it. As we develop new Message Mapping Guides, we will work with the CDC program areas to obtain OMB approval for any additional data elements for which they would like to receive data and will incorporate that information into the new guides.

Section III. Changes in event codes for viral hemorrhagic fevers

In response to the need to monitor viral hemorrhagic fevers separately, the VHF event code (11647) will be retired from the national notifiable disease list (NNDL) as of January 1, 2015 and replaced with disease-specific event codes for the respective VHF diseases. The new event codes should be used beginning January 2015 for new 2015 cases. Jurisdictions should continue immediate notification of these conditions as outlined in the 2010 position statement titled *Update to Viral Hemorrhagic Fever (VHF) Case Definition* (<http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/PS/10-ID-19.pdf>).

The following nine event codes will replace the event code for VHF (11647):

- Ebola hemorrhagic fever (11630)
- Marburg fever (11631)
- Lassa fever (11632)
- Crimean-Congo hemorrhagic fever (11640)
- Junin hemorrhagic fever (11638)
- Machupo hemorrhagic fever (11637)
- Lujo virus (11644)
- Guanarito hemorrhagic fever (11648)
- Sabia-associated hemorrhagic fever (11639).

Section IV. Update on the MMG Development Effort for HL7 NNDSS Case Notifications

As part of the NNDSS Modernization Initiative

(http://wwwnd.cdc.gov/nndss/script/NNDSS_Modernization_Initiative.aspx), we continue to work on development of the following six priority MMGs for submission of individual case notifications to the NNDSS using HL7 format: Generic version 2, hepatitis, sexually transmitted diseases (STD), congenital syphilis, mumps, and pertussis. These six draft priority MMGs are located on the draft MMG web site

(<http://wwwnd.cdc.gov/nndss/script/DraftMMG.aspx>). The following provides a status of the MMGs in development in 2014:

- 1) The draft Generic version 2 individual case notification MMG includes generic variables needed for each nationally notifiable infectious disease or condition and must be used with the five new disease-specific MMGs (i.e., hepatitis, sexually transmitted diseases, congenital syphilis, mumps, and pertussis) to create a complete case notification. Generic version 2 test scenarios and test messages have been posted to the draft MMG web site. The draft test-ready version of the Generic version 2 MMG is being pilot-tested by Michigan. The Generic v2 MMG will be updated in the future with instructions for

distinguishing unknown and missing values for selected data elements. Updated test scenarios and test messages will also be posted after the Generic v2 MMG is updated with instructions for handling unknown and missing values.

- 2) New disease-specific MMGs: All newly developed disease-specific MMGs contain only disease-specific data and thus must be used with the Generic v2 MMG to create a complete case notification message. In the future, disease-specific MMGs already published on the Public Health Information Network (PHIN) web site will need to be modified to remove generic variables and will need to be used with the new Generic version 2 MMG to send a complete case notification to the NNDSS. We are preparing test scenarios and HL7 test messages for all new MMGs.
 - a. The test-ready hepatitis MMG, test scenarios, test messages, and hepatitis annotated case report form have been posted to the draft MMG web site (<http://wwwnd.cdc.gov/nndss/script/DraftMMG.aspx>). Michigan is piloting the pilot-testing process for hepatitis case notification messages, which includes both generic and hepatitis-specific data elements. The hepatitis MMG covers the following conditions: acute hepatitis A, B, and C; perinatal hepatitis B, chronic hepatitis B and C; and acute hepatitis E (although this condition is not nationally notifiable).
 - b. The reconciled draft STD and congenital syphilis MMGs have been posted to the draft MMG web site (<http://wwwnd.cdc.gov/nndss/script/DraftMMG.aspx>). They will need to be updated with instructions for distinguishing unknown and missing values. The congenital syphilis MMG is being updated to reflect the infant as the subject of the investigation rather than the mother.
 - c. The draft mumps and pertussis MMGs will be posted for a second round of external vetting after they are updated with instructions for distinguishing missing and unknown values.

Section V: Reporting jurisdictions have requested an event code for use in their surveillance information systems for infections from enterovirus D68. In response, we have collaborated with the National Center for Immunization and Respiratory Diseases to create event code 11120 for acute flaccid myelitis. Acute flaccid myelitis is not nationally notifiable and should NOT be sent to CDC's NNDSS. The surveillance case definition for this condition and state guidance for investigation of this condition is available at: <http://www.cdc.gov/ncird/investigation/viral/sep2014.html#form>.

Section VI: Beginning January 2015, reporting jurisdictions should stop sending case notifications to CDC's NNDSS using two retired event codes 11717 (for *Streptococcus pneumoniae*, invasive disease in children younger than 5 years) and event code 11720 (for *Streptococcus pneumoniae* invasive disease, drug resistant, all age groups). All cases related to *Streptococcus pneumoniae* invasive disease should be reported to CDC using event code 11723. This change will help facilitate our ability to aggregate data for this condition from the NNDSS data-base and will reduce the complexity of having to combine data across event codes, using retired event codes and conditions.

We also request that beginning in January 2015, reporting jurisdictions stop sending case notifications to CDC's NNDSS using retired event codes 11562 (for Enterohemorrhagic *E coli* Shiga toxin positive [serogroup non-O157]), 11560 (for *E coli* O157-H7), and 11564 (for *E coli* Shiga toxin positive [not serogrouped]). All cases of Shiga toxin-producing *E coli* should be reported to CDC using event code 11563. This change will help reduce the need to recode the data to 11563 across all the reporting jurisdictions. In addition, when a disease-specific MMG for *E coli* is developed we will be able to use a data element to represent the serogroup.

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.

Attachments

2015 Event Code List

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