



## NNDSS

National Notifiable Diseases  
Surveillance System

DECEMBER 2018

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### Overall Updates

#### NNDSS Publishes Finalized Annual Infectious Disease Data

- CDC is pleased to announce that finalized 2017 National Notifiable Diseases Surveillance System (NNDSS) annual infectious disease data are now available as tables on the [data and statistics section](#) of the NNDSS webpage. In addition to links to the tables, hosted by the CDC Wide-ranging Online Data for Epidemiological Research (WONDER), the website provides detailed information about the data themselves.
- Highlights of the [tables](#) include the following:
  - Table 1 displays reported infectious notifiable disease case counts and rates for the United States overall.
  - Tables 2a–2q display reported infectious notifiable disease state and territory specific case counts.
  - Table 3 displays reported infectious notifiable disease cases by month for the United States overall.
  - Tables 4–7 display reported infectious notifiable disease case counts and rates by age group, sex, race, and ethnicity, respectively, for the United States overall.
- The list of nationally notifiable diseases for 2017 is available on the NNDSS website along with the respective national surveillance case definitions.

#### Reminder: Public Health Jurisdictions Should Remove Retired Event Codes

- Public health jurisdictions should remove retired NNDSS event codes from their transmissions.
- Using the correct event codes for each year is essential for CDC to classify and count the cases appropriately.
- States should reference the current [NNDSS event code list](#). States can also contact the CDC Data Operations Team at the CDC Electronic Data Exchange inbox at [edx@cdc.gov](mailto:edx@cdc.gov) to determine if they are using outdated codes.

- Having a strategy in place to handle retired event codes is strongly recommended.
- By December 31, 2018, the following retired event codes should be resolved:

Retired Event Name	Retired Event Code	Date Retired	Current Event Name	Current Event Code
Salmonellosis	11000	12/31/2017	Paratyphoid fever	50236
			Salmonellosis (excluding paratyphoid fever and typhoid fever)	50242
<i>Streptococcus pneumoniae</i> , drug-resistant, all age groups	11720	2010	Invasive pneumococcal disease	11723
<i>Streptococcus pneumoniae</i> , non-drug resistant, <5 years	11717			
<i>Vibrio parahaemolyticus</i>	11541	2007	Vibriosis (any species of the family <i>Vibrionaceae</i> , other than toxigenic <i>Vibrio cholera</i> O1 or O139)	11545
<i>Vibrio spp.</i> , non-toxigenic, other or unspecified	11540			
<i>Vibrio vulnificus</i>	11542			

- The 2019 event code list will be published soon, retiring additional event codes.

### Tips for Public Health Jurisdictions to Monitor Routine NNDSS Transmissions

- For messages sent to the Message Validation, Processing, and Provisioning System (MVPS), verify that messages were received on the MVPS Dashboard.
- For messages sent through the PHIN Messaging System (PHINMS), ensure Acknowledgements (ACK) are received for all transmissions.
- Review case counts in the NNDSS Weekly Tables.
- Troubleshooting tips:
  - Check to see if the message was successfully sent out from your disease surveillance system.
  - For National Electronic Telecommunications System for Surveillance (NETSS) messages, verify that the message file has been placed in the appropriate folder for the Secure Access Management Services (SAMS) application to pick up.
  - If you use an integration engine (e.g., Rhapsody, Mirth) to generate/extract case notification messages from your disease surveillance system, check to make sure there are no filters in your route to prevent a case notification from being sent to CDC for the condition/disease in question.
  - Verify your access to view the appropriate conditions in the MVPS Dashboard. If you have questions about your MVPS Dashboard access, email [edx@cdc.gov](mailto:edx@cdc.gov).
  - Check PHINMS console to verify that nationally notifiable diseases (NND) message is present and being picked up and sent by PHINMS.
  - Verify that the PHINMS Service/Action pair is configured to send to the correct receiving system at CDC.
  - Check PHINMS certificates to ensure they are not expired.
  - If PHINMS is not running or not connecting, you may need to contact the PHIN Helpdesk at 800-532-9929 or [phintech@cdc.gov](mailto:phintech@cdc.gov).

- If you have done all the steps above and the issue has not been resolved, please contact CDC at [edx@cdc.gov](mailto:edx@cdc.gov).

### Alerts Regarding Expiring PHIN Digital Certificates

- The PHIN system sends expiration notices to the certificate owner at 90-, 60-, and 30-day intervals.
- The following additional communications will help improve the notification process and reduce/prevent dropped NNDSS transmissions:
  - Jurisdictions will receive an email from [edx@cdc.gov](mailto:edx@cdc.gov) forwarding the notice of expiring certificates.
  - The email will be:
    - sent for any certificates with health department or .state or .gov in the email address and
    - sent to NNDSS contacts and to Epidemiology and Laboratory Capacity Health Information Systems (ELC HIS) contacts.

### Summary of Changes to 2019 NNDSS Tables and Figures

- 2019 NNDSS Weekly Tables as of January 2019:
  - The current Table 1 will be retired.
    - The information will be incorporated into current Table 2.
    - Current Table 2 will be renamed Table 1.
  - New Table 1 will include the following:
    - It will be stratified to show non-resident cases using the Country of Usual Residence data element.
    - The previous 52-week median will not be shown.
    - The previous 52-week max and year to date cumulative counts will be retained.
  - Diphtheria will only be included in the annual tables.
  - Carbapenemase-Producing Carbapenem-Resistant Enterobacteriaceae (CP-CRE) *Klebsiella*, CP-CRE *E. coli*, and CP-CRE *Enterobacter* will be consolidated to CP-CRE.
  - 'Candida auris, clinical' will be added as a new nationally notifiable condition.
  - Paratyphoid fever and typhoid fever will be replaced with *S. Paratyphi* infection and *S. Typhi* infection, respectively.
  - Salmonellosis (excluding paratyphoid fever and typhoid fever) will be replaced with Salmonellosis (excluding *S. Paratyphi* infection and *S. Typhi* infection).
- Changes to Quarterly NNDSS Table 3 for Tuberculosis:
  - Quarterly Table 3 for tuberculosis will be renumbered to Table 2.
  - Country of Usual Residence stratification will not be applied to this table.
- Changes to Figure I:
  - Only includes data among U.S. Residents, excluding territories and non-U.S. Residents.

### NMI eSHARE Updates

- The November eSHARE on 11/27/18 at 3:00 PM ET provided helpful hints for maintaining and improving NNDSS transmissions and shared changes to the NNDSS data tables that are planned for 2019.
- Please mark your calendars for the next NMI eSHARE, scheduled in the new year on January 15 at 3:00 PM ET!
- Access past eSHARE presentations and details about future events at the NMI eSHARE website at <https://www.cdc.gov/nmi/eshare.html>.

### ELC HIS Recipients Onboarding Reminder

- ELC HIS Cooperative Agreement recipients must send production data for at least five more [MMGs](#) by 8/1/19.
- Please allow several weeks for onboarding.

- Onboard for these MMGs now:
  - arboviral 1.3
  - generic v2
  - hepatitis
  - STD
  - congenital syphilis.
- Onboard for these soon:
  - mumps
  - pertussis
  - varicella.

### SAMS Access Reminder

- The NMI team encourages all jurisdictions to complete the SAMS proofing process and confirm their access with the MVPS support team.
- More information about SAMS access and training may be found on the NMI website at <https://www.cdc.gov/nmi/ta-sams.html>.

## Production HL7 Case Notification Messages

### Arboviral v1.3

- There are 15 jurisdictions in production for arboviral. **Congratulations to Nebraska for being the latest state in production!**
- Illinois, Mississippi, Pennsylvania, Utah, and Washington are engaged in onboarding.
- Please see the chart below, "[Jurisdiction Implementation of NNDSS HL7 Case Notification Messages](#)," for more details.



### Generic v2

- There are 20 jurisdictions in production for generic v2.
- Arizona, Georgia, New Hampshire, New Jersey, and Virginia are engaged in onboarding.
- Please see the chart below, "[Jurisdiction Implementation of NNDSS HL7 Case Notification Messages](#)," for more details.

### Hepatitis

- There are 14 jurisdictions in production for hepatitis. **Congratulations to Massachusetts for being the latest state in production!**
- California and South Carolina are engaged in onboarding.
- Please see the chart below, "[Jurisdiction Implementation of NNDSS HL7 Case Notification Messages](#)," for more details.

## Developing HL7 Case Notification Messages

### Babesiosis MMG (Stage II—Pilot Test-ready)

- CDC has updated the Message Evaluation and Testing System (METS) with release 2.6.1, which includes processing validation for babesiosis. Details are available in METS [release notes](#).
- CDC has selected pilot states for the babesiosis MMG pilot process.
- The guide will be piloted in conjunction with the trichinellosis and malaria MMGs.

Valid Values	HL7 Message Context	HL7 Data Type
Uses FIPS Codes Country in codes for provinces and states.	OBX segment with OBX-3=INV503 OBX-5=Value from value Set	CWE
	OBX segment with OBX-3=INV504 OBX-5=String (up to 199 characters)	ST RE

### Congenital Syphilis and STD MMGs (Stage III—Final MMG)

- Final congenital syphilis and STD MMGs are available on the NNDSS HL7 Case Notification Resource Center at <https://www.cdc.gov/nndss/case-notification/message-mapping-guides.html>.
- Please use these guides to begin implementing your case notification messages in preparation for onboarding.
- Michigan and Oregon are engaged in onboarding.

### Foodborne and Diarrheal Disease (FDD) MMG (Stage II—Pilot Test-ready)

- CDC held MVPS user acceptance testing (UAT) for FDD from 10/15/18 to 10/25/18.
  - Oregon and New York state jurisdictions and internal CDC program representatives participated in UAT.
  - One minor system defect was identified, which will be resolved with a system update in an upcoming release.

### Healthcare Associated Infections, Multi-Drug Resistant Organisms (HAI MDRO) (formerly CP-CRE) MMG (Requirements Analysis)

- CDC recently renamed the CP-CRE MMG to Healthcare Associated Infections, Multi-Drug Resistant Organisms (HAI MDRO), to reflect the additional conditions being incorporated into the MMG.
- CDC completed the CP-CRE and *C. auris* sections of the MMG and is developing the Emerging Infections Program Multi-site Gram-negative Surveillance Initiative (MuGSI) section.
- CDC is considering the best strategy for representing these conditions with event codes.

### Listeriosis MMG (Stage I—Draft)

- The Council of State and Territorial Epidemiologists (CSTE) webinar to gather feedback from jurisdictions on the draft MMG is expected to be held in late January or early February 2019, with piloting to follow in the summer.

### Lyme and Tickborne Rickettsial Diseases (TBRD) (Stage I—Draft)

- CDC is finalizing the changes to the MMG based on the reconciled responses from the external review.

### Malaria MMG (Stage II—Pilot Test-ready)

- CDC has selected pilot sites for the MMG pilot process.
- The guide will be piloted in conjunction with the babesiosis and trichinellosis MMGs.

### Measles MMG (Stage II—Pilot Test-ready)

- No new updates at this time.

### Mumps and Pertussis MMGs (Stage III—Final)

- Final mumps and pertussis MMGs are available on the NNDSS HL7 Case Notification Resource Center at <https://wwwn.cdc.gov/nndss/case-notification/message-mapping-guides.html>.
- Please use these guides to begin implementing your case notification messages in preparation for onboarding.

### **Respiratory and Invasive Bacterial Disease (RIBD) MMG (Stage II—Pilot Test-ready)**

- METS release 2.6.1 includes processing validation for RIBD. Details are available in METS [release notes](#).
- MVPS development is in progress for the RIBD MMG.

### **Rubella and Congenital Rubella Syndrome (CRS) MMGs (Stage II—Pilot Test-ready)**

- MVPS is beginning development work on the rubella and CRS MMGs.

### **Trichinellosis (Stage II—Pilot Test Ready)**

- CDC has selected pilot sites for the MMG pilot process.
- The guide will be piloted in conjunction with the babesiosis and malaria MMGs.

### **Tuberculosis (TB) and Latent Tuberculosis Infection (LTBI) MMG (Stage II—Pilot Test-ready)**

- METS release 2.6.1 includes processing validation for TB and LTBI. Details are available in METS [release notes](#).
- Piloting is beginning this December.

### **Varicella MMG (Stage III—Final)**

- The final varicella MMG is available on the NNDSS HL7 Case Notification Resource Center at <https://wwwn.cdc.gov/nndss/case-notification/message-mapping-guides.html>.
- Please use this guide to begin implementing your case notification messages in preparation for onboarding.

## **Resources**

- NMI Technical Assistance and Training Resource Center: <https://www.cdc.gov/nmi/ta-trc/>
- NNDSS HL7 Case Notification Resource Center: <https://wwwn.cdc.gov/nndss/case-notification/>
- NMI Notes Monthly News Update: <https://www.cdc.gov/nmi/news.html>
- NMI eSHARE Monthly Webinar: <https://www.cdc.gov/nmi/eshare.html>
- NMI Newsroom: <https://www.cdc.gov/nmi/newsroom.html>
- NMI Internet Site (includes NMI fact sheets and FAQs): <https://www.cdc.gov/nmi/>



## **Jurisdiction Implementation of NNDSS HL7 Case Notification Messages**

## Jurisdiction Implementation of NNDSS HL7 Case Notification Messages

= Message in Production   
  = Onboarding   
  = Receiving TA   
  = Pilot  
 = Finalized Guide   
  = In Pilot

Jurisdiction	Arboviral	Generic Version 2	Hepatitis	Congenital Syphilis	STD	Mumps	Pertussis	Varicella	Foodborne Diarrheal Disease*	TB/LTBI*
Alabama										
Alaska										
Arizona										
Arkansas										
California										
Colorado										
Connecticut										
Delaware										
Florida										
Georgia										
Idaho										
Illinois										
Indiana										
Iowa										
Kansas										
Kentucky										
Louisiana										
Maine										
Maryland										
Massachusetts										
Michigan										
Minnesota										
Mississippi										
Nebraska										
New Jersey										
New York										
New York City										
North Carolina										
North Dakota										
Oregon										
Pennsylvania										
Rhode Island										
South Carolina										
South Dakota										
Tennessee										
Texas										
Utah										
Virginia										
Washington										
West Virginia										
Wisconsin										

\* These guides are currently being piloted by a small number of states and are not yet available to other states for implementation.

This chart shows the status of state public health departments who are piloting, receiving technical assistance, onboarding, or in production for HL7 case notification messages developed as part of the NNDSS Modernization Initiative.

## Upcoming Events

- NMI eSHARE; 1/15/19, 3:00PM ET;  
<https://www.cdc.gov/nmi/eshare.html>

**Have questions or feedback on NMI Notes? Email [edx@cdc.gov](mailto:edx@cdc.gov).**



*NMI Notes* provides monthly news updates about the National Notifiable Diseases Surveillance System (NNDSS) Modernization Initiative (NMI). It is a collaboration by the Centers for Disease Control and Prevention (CDC), Council of State and Territorial Epidemiologists (CSTE), and Association of Public Health Laboratories (APHL).

If a colleague forwarded this issue to you, we encourage you to [subscribe at this link](#) to ensure that you receive future issues of *NMI Notes*.

***Centers for Disease Control and Prevention | Council of State and Territorial Epidemiologists | Association of Public Health Laboratories***

Write: [edx@cdc.gov](mailto:edx@cdc.gov)      Visit: [www.cdc.gov/nmi](http://www.cdc.gov/nmi)

[www.cste.org](http://www.cste.org)