



## NNDSS

National Notifiable Diseases  
Surveillance System

APRIL 2019

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### Overall Updates

#### NMI eSHARE Updates

- The NMI eSHARE special session, held on 3/4/19, covered guidance and resources for implementing arboviral v1.3 HL7 case notification messages.
- The regular March NMI eSHARE session, held on 3/19/19, featured what states need to know about the NNDSS data reconciliation process for 2019 and a walkthrough of the planned case count view in the Message Validation, Processing, and Provisioning System (MVPS) Dashboard.
- The April NMI eSHARE is scheduled for Tuesday, 4/16/19, at 3:00 PM ET.
- Access past eSHARE presentations and details about future events at the [NMI eSHARE website](#).

**Country of Usual Residence FAQs Now Available:** Frequently asked questions and answers about implementation of the “Country of Usual Residence” data element are now available on the [NNDSS website](#).

#### Message Evaluation and Testing Service Now Has All MQF Functionality

- CDC recently incorporated Message Quality Framework (MQF) validation tool functionality into the Message Evaluation and Testing Service (METS) tool.
- Jurisdictions should start using [METS](#) for validation of all HL7 NNDSS messages, including the arboviral v1.3 message.

**Join a Cohort to Jumpstart Your MMG Implementations!**

- The NMI APHL Technical Assistance team is launching a new type of technical assistance to help groups, or *cohorts*, of public health agencies build and implement NNDSS HL7 case notification messages.
- Cohorts of 4–6 public health agencies will focus on specific message mapping guides (MMGs).
- APHL subject matter experts will guide participants through planning, gap analysis, data extraction, HL7 message creation, and validation. At completion, public health agencies will be ready to begin onboarding.
- For those interested in joining a cohort for generic v2 or STD/congenital syphilis (kicking off in mid-March), or would like to propose a cohort for another MMG, please email the CDC Electronic Data Exchange mailbox at [edx@cdc.gov](mailto:edx@cdc.gov).

### Have You Upgraded to PHINMS 3.1?

- If you have not already done so, please upgrade to PHIN Messaging System (PHINMS) 3.1, the latest version of PHINMS.
- Due to security risks, PHINMS will be able to accept messages sent using TLS 1.2 only, which requires PHINMS 3.1.
- After June 30, 2019, the CDC PHINMS receiver will reject messages sent using TLS 1.0 or TLS 1.1.
- Many jurisdictions have already upgraded and are successfully using the new PHINMS software.
- Upgrading to TLS 1.2 is not complex; however, if you face challenges, both the PHINMS 3.1 installation guides and helpdesk support are readily available at the [PHINMS website](#).
- For help, contact the PHIN helpdesk at [phintech@cdc.gov](mailto:phintech@cdc.gov) or 1-800-532-9929.

### SAMS Access Reminder

- The NMI team encourages all jurisdictions to complete the Secure Access Management Services (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](#).

## Production HL7 Case Notification Messages

### Arboviral v1.3

- The MMG and artifacts are available on the [NNDSS HL7 Case Notification Resource Center](#).
- There are 17 jurisdictions in production for arboviral.
- Alaska, Illinois, Indiana, Mississippi, Virginia, and Washington are engaged in onboarding.
- Please see the chart below, “[Jurisdiction Implementation of NNDSS HL7 Case Notification Messages](#),” for more details.



### Congenital Syphilis (CS) and STD MMGs

- The MMG and artifacts are available on the [NNDSS HL7 Case Notification Resource Center](#).
- **Congratulations to Oregon for being the first jurisdiction in production for CS and STD! CDC is making final preparations to open production for all jurisdictions and will provide details when available.**
- Idaho, Michigan, and North Carolina are engaged in onboarding.
- Please see the chart below, “[Jurisdiction Implementation of NNDSS HL7 Case Notification Messages](#),” for details.

### Generic v2

- The MMG and artifacts are available on the [NNDSS HL7 Case Notification Resource Center](#).
- There are 24 jurisdictions in production for generic v2.
- Georgia, Indiana, Maine, and Montana are engaged in onboarding.
- Please see the chart below, "[Jurisdiction Implementation of NNDSS HL7 Case Notification Messages](#)," for more details.

### Hepatitis

- The MMG and artifacts are available on the [NNDSS HL7 Case Notification Resource Center](#).
- There are 15 jurisdictions in production for hepatitis.
- Colorado and Indiana 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 Message Mapping Guide (MMG) (Stage II—Pilot Test-ready)

- CDC is piloting this guide in conjunction with the trichinellosis and malaria MMGs.
- CDC is considering a value set update in the MMG.

| Valid Values   | HL7 Message Context  | HL7 Data Type |
|--|--|---------------|
| FIPS Codes<br>Country<br>codes for<br>Provinces and<br>States. | OBX segment with<br>OBX-3=INV503<br>OBX-5=Value from value<br>Set          | CWE           |
|  | OBX segment with<br>OBX-3=INV504<br>OBX-5=String (up to 199<br>characters) | ST RE         |

### Bacterial Special Pathogens MMG (Pre-work)

- CDC is developing a single MMG for case notification for brucellosis, anthrax, leptospirosis, and Hansen’s disease.
- CDC is engaged in pre-work prior to guide development.

### Carbon Monoxide Poisoning (CO) MMG (Requirements Analysis)

- CDC is reviewing the CO vocabulary and value sets in the Public Health Information Network Vocabulary Access and Distribution System (PHIN VADS).
- CDC is preparing the MMG test scenarios.
- CDC also is working on a presentation for the anticipated CSTE webinar to gather feedback from jurisdictions on the draft MMG. We will provide details for the webinar as soon as they are available.

### Foodborne and Diarrheal Diseases (FDD) MMG (Stage III—Final MMG)

- CDC is preparing a data element priority list for the FDD MMG to assist jurisdictions in their implementation and onboarding efforts and will make it available when final.
- The final FDD guide and artifacts are available on the [NNDSS HL7 Case Notification Resource Center](#).
- Please use this guide to begin implementing your case notification messages in preparation for onboarding.

### Healthcare Associated Infections, Multi-Drug Resistant Organisms (HAI MDRO) MMG (Stage I—Draft)

- CDC has updated the draft MMG, including addressing comments received during external review.
- CDC is working on related vocabulary for the MMG.

### Lead Poisoning MMG (Requirements Analysis)

- CDC is developing a plan for updating or combining the NNDSS and lead exposure Office of Management and Budget Paperwork Reduction Act packages.
- CDC continues to develop value sets in PHIN VADS for the lead poisoning MMG.
- CDC is discussing plans and options for data provisioning to the CDC program.

#### **Listeriosis MMG (Stage I—Draft)**

- CDC updated the 2019 NNDSS Event Code List and 2019 Conditions to Use Generic v2.0 Only List to reflect that the generic v2.0 MMG is the preferred mechanism for sending listeriosis HL7 case notifications until the condition-specific MMG for listeriosis is complete. CDC expects to post the documents soon on the [NNDSS HL7 Case Notification Resource Center](#).

#### **Lyme and Tickborne Rickettsial Diseases (TBRD) (Stage II—Pilot Test-ready)**

- Pre-piloting preparation work has begun.

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

- CDC is piloting this guide in conjunction with the babesiosis and trichinellosis MMGs. CDC identified two additional value sets that need updating.

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

- No new updates at this time.

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

- Utah is engaged in onboarding.
- Final mumps and pertussis MMGs are available on the [NNDSS HL7 Case Notification Resource Center](#).
- 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)**

- MVPS development is complete for the RIBD MMG.
- Piloting is underway.

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

- No new updates at this time.

#### **Trichinellosis (Pilot Test Ready—Accelerated Development Pilot)**

- CDC is piloting this guide in conjunction with the babesiosis and malaria MMGs.

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

- Piloting is underway.

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

- Utah is engaged in onboarding.
- The final varicella MMG is available on the [NNDSS HL7 Case Notification Resource Center](#).
- 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

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

| Jurisdiction   | Arboviral | GenV2 | Hepatitis | Congenital Syphilis | STD | Mumps | Pertussis | Varicella | Foodborne Diarrheal Disease | TB/LTBI* | Malaria* | Trichinellosis* | Babesiosis* | RIBD* |
|----------------|-----------|-------|-----------|---------------------|-----|-------|-----------|-----------|-----------------------------|----------|----------|-----------------|-------------|-------|
| Alabama        |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Alaska         |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Arizona        |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Arkansas       |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| California     |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Colorado       |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Connecticut    |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Delaware       |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Florida        |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Georgia        |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Idaho          |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Illinois       |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Indiana        |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Iowa           |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Kansas         |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Kentucky       |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Louisiana      |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Maine          |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Maryland       |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Massachusetts  |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Michigan       |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Minnesota      |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Mississippi    |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| Montana        |           |       |           |                     |     |       |           |           |                             |          |          |                 |             |       |
| 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; 4/16/19, 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***

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