



NNDSS

National Notifiable Diseases
Surveillance System

MARCH 2019

[Subscribe to NMI Notes so you don't miss a thing!](#)

Table of Contents

[Overall Updates](#)

[Production HL7 Case Notification Messages](#)

[Developing HL7 Case Notification Messages](#)

[Resources](#)

[Upcoming Events](#)

Overall Updates

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.

NMI eSHARE Updates

- Please join us for a March NMI eSHARE special session, scheduled for Monday, 3/4/19, at 3:00 PM ET.
 - The webinar will cover guidance and resources for implementing arboviral v1.3 HL7 case notification messages.

- Two new resources for implementing arboviral v1.3 HL7 case notification messages will be reviewed on the special session call and are now available on the NNDSS MMGs and Artifacts webpage by using the links below:
 - [Arboviral MMG Data Element Priority List](#)
 - [Arboviral Disease Reporting Surveillance Guide](#).
- Please also join us for our regular March NMI eSHARE session, scheduled for Tuesday, 3/19/19, at 3:00 PM ET. This session will feature what states need to know about the NNDSS data reconciliation process for 2019 and a walkthrough of the case count view in the Message Validation, Processing, and Provisioning System (MVPS) Dashboard.
- Access past eSHARE presentations and details about future events at the [NMI eSHARE website](#).

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 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](#).
- Two new resources for implementing arboviral v1.3 HL7 case notification messages are now available on the NNDSS MMGs and Artifacts webpage:
 - [Arboviral MMG Data Element Priority List](#)
 - [Arboviral Disease Reporting Surveillance Guide](#).
- There are 16 jurisdictions in production for arboviral. **Utah is the latest state in production. Congratulations, Utah!**
- Illinois, Indiana, Mississippi, Pennsylvania, and Washington are engaged in onboarding.
- Please see the chart below, "[Jurisdiction Implementation of NNDSS HL7 Case Notification Messages](#)," for more 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. **Connecticut is the latest state in production. Congratulations, Connecticut!**

- Georgia and Indiana 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. **South Carolina is the latest state in production. Congratulations, South Carolina!**
- 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.

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

Bacterial Special Pathogens MMG (Pre-work)

- CDC is initiating development of a single MMG for case notification related to brucellosis, anthrax, leptospirosis, Hansen’s disease, and possibly melioidosis.
- The CDC Bacterial Special Pathogens program is engaged in pre-work for the MMG.

Carbon Monoxide Poisoning (CO) MMG (Requirements Analysis)

- CDC is reviewing the draft data element list for the MMG.
- CDC initiated LOINC and SNOWMED code requests for included data elements.

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

- Idaho, Michigan, North Carolina, and Oregon are engaged in onboarding.
- Final congenital syphilis and STD 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.

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

- CDC is addressing onboarding questions from pilot states.
- 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)

- The external review comment period for the draft MMG ended on 2/15/19. CDC is addressing the questions and comments.
- To facilitate cohesive messaging of cases from states to CDC for the multiple purposes in the HAI MDRO MMG, CDC developed two event codes: event code 50244 for Carbapenemase-

Producing Carbapenem-Resistant *Enterobacteriaceae* (CP-CRE) and event code 50120 for Carbapenem-Resistant *Enterobacteriaceae* (CRE).

- **Case definitions:**
 - National CP-CRE case definition: A carbapenemase producing carbapenem-resistant *E. coli*, *Enterobacter* species, or *Klebsiella* species isolated from any clinical specimen; including screening/surveillance swabs in a 12-month period.
 - Multi-site Gram-negative Surveillance Initiative (MuGSI) case definition: A carbapenem-resistant *E. coli*, *Enterobacter* species, or *Klebsiella* species isolated from normally sterile sites or urine from residents of the surveillance area in a 30-day period. The MuGSI catchment area includes selected metropolitan areas in California, Colorado, Connecticut, Georgia, Maryland, Minnesota, New Mexico, New York, Oregon, and Tennessee.
 - Difference in case definition for MuGSI vs. national surveillance: The MuGSI case definition is focused on antimicrobial susceptibility testing results for carbapenems, but the national case definition is focused on carbapenemase testing results. The MuGSI case definition is restricted to normally sterile sites and urine, but the national case definition is any clinical specimen, including screen/surveillance swabs. Lastly, the time period for a MuGSI incident case is every 30 days, but one year for national.
- **CP-CRE**
 - Use the CP-CRE event code for reporting all nationally notifiable cases that meet the case definition outlined in the CSTE position statement. In addition, classify these cases as “Confirmed present” for the Case Classification Status variable in the generic v2.0 MMG.
 - If a CP-CRE isolate meets the case definition for the Emerging Infections Program (EIP) MuGSI, but does not meet the nationally notifiable disease case definition outlined in the CSTE position statement, the case should be reported with the CP-CRE event code and categorized as “Not a Case” for the Case Classification Status variable in the generic v2.0 MMG.
- **CRE**
 - Use the CRE event code only for reporting CRE cases from a resident of the EIP catchment area that meet the MuGSI case definition. All MuGSI CRE cases should be categorized as “Confirmed present” for the Case Classification Status variable in the generic v2.0 MMG.

Lead Poisoning MMG (Requirements Analysis)

- CDC is refining the draft MMG based upon feedback from the CDC programs (childhood and adult exposure).

Listeriosis MMG (Stage I—Draft)

- CDC suspended development work on the MMG until the new CSTE position statement and case definition work has been completed.
- The program has approved the use of the generic v2.0 MMG to receive case notifications until the listeriosis MMG work is completed.

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

- No new updates at this time.

Malaria MMG (Stage II—Pilot Test-ready)

- CDC is piloting this guide 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](#).
- 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 in progress for the RIBD MMG.

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)

- 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

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*
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; 3/4/19, 3:00PM ET;
<https://www.cdc.gov/nmi/eshare.html>



Have questions or feedback on NMI Notes? Email 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 Visit: www.cdc.gov/nmi

www.cste.org