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To: U.S. State and Territorial Epidemiologists

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Subject: 2021 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 interim position statements approved by the Council of State and Territorial Epidemiologists (CSTE) in 2020 and other relevant updates.

Please share this letter with surveillance and informatics staff in your jurisdictions responsible for collection or submission of NNDSS data to CDC.

CDC plans to post the 2021 event code list and the 2021 list of [nationally notifiable conditions](#) on the [NNDSS website](#) by December 31, 2020. The 2020 and 2021 lists of nationally notifiable conditions (NNC) are identical. Coronavirus disease 2019 (COVID-19) (event code 11065) is the only NNC added since 2019. In addition, in 2020, event code 11066 was assigned to multisystem inflammatory syndrome associated with coronavirus disease 2019 (MIS) to facilitate jurisdictions submitting case notifications for MIS to CDC. Two surveillance case definitions were also updated for 2020 and will also be applicable to 2021. These are detailed in Section I, below.

Section I, Part A: Revised national surveillance case definition for one nationally notifiable condition (COVID-19):

Position Statement "[Interim-20-ID-02](#)" titled "*Update to the standardized surveillance case definition and national notification for 2019 novel coronavirus disease (COVID-19)*" updates the standardized case definition for COVID-19 and retains it as an NNC. Interim-20-ID-02 **supersedes** the first CSTE COVID-19 interim position statement, "Interim-20-ID-01", which was approved on April 5, 2020. The COVID-19 surveillance case definition was effective August 5, 2020 and is posted on the [NNDSS website](#).

Interim-20-ID-02 includes specific updates to clarify clinical, laboratory, epidemiologic linkage, and vital records criteria for case ascertainment and case classification, based on the continued evolution of the COVID-19 pandemic. The position statement also updates probable case

classifications to classify the detection of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) antigen as a probable case and adds a new suspect case classification. The suspect case classification is intended solely for internal health department surveillance tracking purposes and not for official case counts at the state, local, or national level.

The event code for COVID-19 is 11065. When we start to publish COVID-19 case data in the NNDSS tables, we will publish confirmed and probable cases separately in the tables, along with a total case column. We do not plan to publish COVID-19 case data in the NNDSS tables while alternate methods for case notification and publication are in place within the CDC COVID-19 emergency response.

Section I, Part B: Revised national surveillance case definition for one condition placed under standardized surveillance, but not designated nationally notifiable:

Position Statement “[Interim-20-ID-04](#)” titled *Revision to the Standardized Case Definition, Case Classification, and Public Health Reporting for Acute Flaccid Myelitis (AFM)* updates the surveillance case definition for this condition previously defined in CSTE position statement [19-ID-05](#). This position statement proposes to improve case ascertainment and reporting consistency across jurisdictions with the following changes:

- modifies the suspect case classification criteria to include supportive laboratory/imaging criteria;
- adds additional criteria under case ascertainment to allow for reporting of suspect AFM cases identified post-mortem; and
- revises the confirmed case classification to include persons who died and did not have Magnetic Resonance Imaging performed but have evidence of myelitis on autopsy.

The new interim AFM case definition is expected to be posted to the [NNDSS website](#) by December 31, 2020. The CDC National Center for Immunization and Respiratory Diseases is interested in continuing to receive generic data for AFM through the NNDSS technical infrastructure using Generic v2 HL7 case notifications and legacy mechanisms (NETSS, NBS Master Message, Generic v1). The event code for AFM is 11120.

Section II: Revised publication date for the 2019 NNDSS annual data tables and country of usual residence in the tables:

The public health response to the COVID-19 pandemic delayed some jurisdictions from completing the data reconciliation process for the 2019 NNDSS annual tables by the September 30, 2020 deadline. Due to this delay, the proposed timeline for the publication of the 2019 NNDSS annual tables was re-scheduled from March 2021 to the end of May 2021.

Weekly publications of 2019 NNDSS data are stratified by country of usual residence (COUR), with out-of-country cases presented in a non-U.S. residents category instead of in the reporting jurisdiction counts. We originally planned to include the COUR stratification in the 2019 annual tables. However, this is not feasible because of resource limitations resulting from the pandemic and the need to prioritize work on the NNDSS data processing redesign. Therefore, we will not implement the COUR stratification in Table 2 (Annual reported cases of notifiable diseases, by region and reporting area) in the 2019 NNDSS annual tables. Instead, we will use the [Table 2 format used in the 2018 annual tables](#) and will exclude data on non-U.S. residents from this table. We expect to implement the COUR stratification in the 2020 NNDSS annual tables.

Section III: Update about the Message Mapping Guide (MMG) development and jurisdiction implementation process:

Despite the ongoing COVID-19 public health emergency, CDC has made progress with development or updating MMGs, and jurisdictions continue implementation and onboarding efforts, including with the COVID-19 MMG. See Appendix A for a full list of MMGs, jurisdictions in production and onboarding status. Twenty-five jurisdictions are in production with at least two MMGs and five jurisdictions are in production with five or more guides. The highest number of MMGs in production for a single jurisdiction is nine. There are now 17 finalized MMGs and 13 MMGs with at least one jurisdiction in production.

Three new or updated MMGs were published as final guides during 2020. The Arboviral v1.3.1 MMG, published in July, includes updated value sets for race and ethnicity. The Respiratory and Invasive Bacterial Diseases (RIBD) v1.1 MMG, published in March, contains several new data elements, data element descriptions, and value set updates. The COVID-19 MMG was published as a final guide in June of 2020 and is open for onboarding. The final MMGs and associated documents, including the implementation spreadsheet, test case scenario worksheets, and annotated case report forms for all published guides are available on the [MMG and Artifacts page](#) (final MMGs tab) of the HL7 Resource Center.

Several activities have been delayed due to the pandemic. Publication of final guides and onboarding of pilot jurisdictions for the Measles, Congenital Rubella, and Rubella MMGs has been delayed. Onboarding for Mumps, Pertussis, Varicella and RIBD MMGs is currently on hold. Piloting of the Carbon Monoxide Poisoning (CO) v1.0 MMG and external review of additional guides, including those for anthrax, brucellosis, Hansen's disease and leptospirosis, will take place in 2021, when CDC and jurisdiction resources are able to devote time to these efforts.

Section IV: Update on NNDSS data processing redesign:

CDC is continuing work to more fully use the Message Validation, Processing, and Provisioning System (MVPS) to automate NNDSS data processing from all data sources. This should provide greater transparency in processing of case notifications from HL7 and legacy data streams (NETSS, NBS master message, legacy HL7) through the MVPS dashboard. The MVPS dashboard technology and functionality was updated in October and now includes a view of case counts by classification for those received through HL7 case notifications. Additional functionality to be added in 2021 will include:

- the ability to manually delete or rescind a case or upload a table of cases to be deleted;
- workflow to confirm case notifications of low incidence conditions requiring verification by the reporting jurisdiction; and
- workflow to conduct data reconciliation, including viewing and downloading data tables, freezing data processing, and State and Territorial Epidemiologist sign-off.

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 diseases.

CC:

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Appendix A

Message Mapping Guides (MMG) and Jurisdiction Implementation Status

MMG	Guide	Open for Onboarding	Jurisdictions Onboarding*	Jurisdictions in Production
Anthrax	Planned			
Arboviral	Final	Open	7	27
Babesiosis	Final	Open	1	1
Brucellosis	Planned			
Carbon Monoxide	Planned			
COVID-19	Final	Open	2	0
Congenital Rubella Syndrome	Pilot			
Congenital Syphilis	Final	Open	2	6
Emergency Response	Planned			
Foodborne and Diarrheal Diseases (FDD)	Final	Pilots only	2	0
Generic v2	Final	Open	7	31
HAI-MDRO	Final	Open	1	1
Hansen's Disease	Planned			
Hepatitis	Final	Open	4	23
Lead	Planned			
Leptospirosis	Planned			
Listeriosis	Planned			
Lyme and Tickborne Rickettsial Diseases	Final	Open	1	2
Malaria	Final	Open	0	2
Measles	Pilot			
Multi-site Gram Negative Surveillance Initiative (MuGSI)	Planned			
Mumps	Final	On hold	0	1
Pertussis	Final	On hold	0	1
RIBD	Final	On hold		
Rubella	Pilot			
STD	Final	Open	2	6
TB/LTBI	Final	Pilots only	2	0
Trichinellosis	Final	Open	1	1
Varicella	Final	On hold	1	1

*These numbers may include jurisdictions where onboarding has been paused.