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# National Notifiable Diseases Surveillance System (NNDSS)

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# Case Surveillance Modernization



As part of agency-wide efforts to overhaul the CDC.gov website and streamline content, CDC's OPHDST has put on hold updates to this page at this time. We expect to relaunch a revised website for case surveillance modernization in spring 2024.





#### Need more information?

Visit our Frequently Asked Questions page to find answers to common questions from state, local, and territorial jurisdictions.

Access archived NNDSS eSHARE webinars for monthly updates on case surveillance modernization.

Visit the current issue of Case Surveillance News for the latest news on this initiative.

CDC is implementing priority, near-term recommendations from a case surveillance discovery sprint led by a joint team from the United States Digital Service and CDC. This effort will work to enhance case surveillance and reduce burden on state, local, and territorial jurisdictions participating in the National Notifiable Diseases Surveillance System (NNDSS).

With the full support of the CDC Director, this effort supports the vision outlined in CDC Moving Forward, CDC's Public Health Data Strategy, and CDC's Data Modernization Initiative (DMI).

## Implementing the Sprint's recommendations

To implement the recommendations from the sprint, CDC is working to:

- 1. Onboard all jurisdictions to enable submission of a generic, core data feed that can be used for national disease notification
  - CDC is prioritizing having all jurisdictions onboard the generic version 2 (GenV2) message mapping guide (MMG) to be able to send core case data quickly to CDC for any condition during an emergency response and for the current GenV2 conditions. We are not asking jurisdictions to send all conditions through the GenV2 MMG.
  - CDC will continue to support and receive Health Level 7 (HL7) messages and legacy messages (NETSS, NBS, Master Message, GenV1). The intent is to maintain current data flow for condition-specific data while CDC further develops the "CDC Front Door" data exchange.
  - CDC is conducting a landscape analysis with MITRE that will outline barriers and challenges for sending core data elements to CDC and for using HL7 v2-based MMGs. New approaches to core case notification data will address challenges experienced with implementing the GenV2 MMG.
- 2. Expand the range of data formats for core data and other solutions jurisdictions can use to send their notifiable disease data to CDC
  - CDC is working to expand the range of available data formats beyond the HL7 v2 format, such as commaseparated values file (CSV), Fast Healthcare Interoperability Resources (FHIR), and other formats to help ease the burden on jurisdictions. GenV2 will be included in the data formats available to jurisdictions.
- 3. Develop agile, flexible solutions incorporating common data standards for supplemental case data
  - Using lessons learned from previous efforts and in collaboration with our internal and external partners, CDC will implement new solutions for jurisdictions to rapidly provide both core and supplemental data from their case investigations, including:
    - tools for jurisdictions to integrate and report electronic health data more effectively, including greater automation and alignment with electronic case reporting (eCR),
    - standardized data dictionaries that define supplemental sets of data elements that can be used across conditions,
    - expedited processes to help jurisdictions onboard for sending data to CDC,
    - more flexibility in receiving supplemental data from jurisdictions.
- 4. Pause most disease-specific (supplemental) MMG development and onboarding efforts due to the current high burden, resource intensive, unsustainable approach to disease-specific supplemental case data reporting
  - CDC will pause most disease-specific MMG development and onboarding efforts:
    - MMG development:
      - Development of new MMGs is paused.
      - Most MMGs in draft or with current development efforts will be paused; there may be a few exceptions and CDC is working to provide those details as soon as possible.
    - Onboarding:
      - Jurisdictional work on mapping/prepping in the early stages of pre-onboarding or work that has not

been started for published MMGs is paused.

- Jurisdictions who have initiated CDC onboarding for published MMGs can continue.
- Jurisdictions who are in the final stages of pre-onboarding (made system changes and created or validated test messages) for published MMGs can choose whether to continue onboarding.
- MMGs that will not be paused regardless of the jurisdiction implementation status are GenV2 (for the 72 GenV2-only conditions) AND Tuberculosis (TB)/latent TB infection (LTBI).
- This pause aims to ease the burden on jurisdictions posed by implementing current guides, as well as free up CDC resources to work on harmonizing data standards and create streamlined, resource-appropriate, and effective enhanced surveillance methods to support jurisdictions and CDC programs.
- CDC will work with programs and state, tribal, local, and territorial (STLTs) jurisdictions to understand implications and implementation challenges that need to be addressed.

#### 5. Leverage case data to provide clear value to public health action

- CDC will work with jurisdictions on developing options to automate the ability to share both core and supplemental case data using the same data pipeline so they can be pulled into the common operating picture, accessible to CDC programs, systems such as DCIPHER and ESSENCE, and the Center for Forecasting and Outbreak Analytics within hours.
- CDC will pilot a near real-time, national situational awareness process using case data, with data stewardship
  and security processes that would allow tiered access to jurisdictions, partners, and the public.

#### 6. Transition case notification to leverage the "one front door" approach

- CDC will create a flexible, efficient, and scalable data pipeline for both routine and emergency public health needs that is centered on providing value to the jurisdictions and the public.
- All data from STLTs will come to CDC through a single front door—regardless of condition, format, or solution—eliminating the need for jurisdictions to send the same data to multiple places.

### What You Can Do

We recognize that these recommendations will greatly impact the work of jurisdictions, and we are using your feedback to inform our implementation planning. CDC will provide regular updates as we move forward with this ongoing effort.

Here's how you can help:

- **Give input and feedback** on any barriers or obstacles your jurisdiction may face with these recommendations.
- Communicate the importance of this work to your staff; your support is critical to the success of this effort.

### **Contact Us**

If your jurisdiction has specific implementation questions or feedback for CDC to consider, please contact CDC using this form. ☑

If your jurisdiction has general questions, thoughts, or comments about this effort, please email the CDC DMI mailbox at dmi@cdc.gov with the subject line "Case Surveillance Enhancements."

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Source: Office of Public Health Data, Surveillance, and Technology