

NSSP UPDATE



October 2018

People

SUBSCRIBE NOW

COMMUNITY OF PRACTICE UPDATES

Trending Topics

Are you interested in using [social media](#) or [machine learning](#) to enhance surveillance activities? Join the National Syndromic Surveillance Program (NSSP) Community of Practice (CoP) as we discuss the options and work being done around both topics on the [Community Forums](#).

Member login, which is free, is required to access some links.

Workgroup and Committee Updates

[Overdose Surveillance Committee \(ODSC\)](#): During the September ODSC meeting, the Enhanced State Opioid Overdose Surveillance (ESOOS) program presented a new ESSENCE definition for stimulants. The Council of State and Territorial Epidemiologists (CSTE) ICD-10-CM Drug Poisoning Workgroup and representatives from the CSTE Overdose Subcommittee Methamphetamine Multi-Jurisdiction Study also provided updates. The ODSC has also reviewed the [MMWR article Vital Signs: Trends in Emergency Department Visits for Suspected Opioid Overdoses—United States, July 2016–September 2017](#), which is this month's spotlight article.

Key Activities

The International Society for Disease Surveillance (ISDS), facilitator of the NSSP CoP, recently joined the Florida ESSENCE User Group call to provide an overview of the NSSP CoP and share the benefits of membership. Director of Informatics Emilie Lamb highlighted the [NSSP CoP website](#), the [Surveillance Knowledge Repository](#), and other ways to connect with surveillance partners through the NSSP CoP and [2019 ISDS Annual Conference](#). If you have similar calls with your local and state public health partners and would like for ISDS to present a demonstration, please contact Emilie at elamb@syndromic.org.

IN THIS ISSUE

People

- [Community of Practice](#)
- [CDC Funding Recipients and Partnerships](#)
- [Upcoming Events](#)
- [Last Month's Technical Assistance](#)

Practice

- [Questions and Tips](#)
- [Data Quality Corner](#)
- [Spotlight Article on SyS Practice](#)

Program

- [Updates](#)
- [NSSP Participation](#)
- [Onboarding](#)

[Archived NSSP Update](#)



NSSP Community of Practice Call

Please join the monthly NSSP CoP Call. This call is powered by community members who want to share guidance, resources, and technical assistance. The call includes an open forum for discussion and questions. The next call will be held **October 16, 2018, 3:00–4:30 PM ET**. We will discuss **Domestic Violence Surveillance** in reference to Domestic Violence Awareness Month in October. Click [here](#) to register for the entire call series.

If you are unable to join the monthly NSSP CoP call or want to continue the conversation, **join Forum Fridays!** Held the third Friday of each month after the monthly CoP Call, Forum Fridays continues the conversation about surveillance practice via [Community Forums](#). This interactive event will take place all day, so you don't have to worry about joining at a particular time. The CoP presenters will return to share more of their expertise and be joined by other community members throughout the day. You can subscribe to forum and thread updates to be notified by email when comments are posted. If you need assistance with subscribing, view a short how-to video on our [FAQ page](#).



To access [slides](#) and [recordings](#) from previous calls, visit the [NSSP Community of Practice Group Page](#). You can also view a summary of the previous NSSP CoP Call from September 17, 2018, on [Suicide Surveillance here](#).

Implementation Guide for Syndromic Surveillance

ISDS, CDC, and the Message Guide Workgroup continue to work with the HL7 Public Health Workgroup to review and integrate comments. They are on schedule to resolve most comments by November 2018 before the guide is published as a standard for trial use.

Development Schedule	
Time Frame	Activity
2015	Version 2.0 Final RELEASE*
2016	Erratum and Clarification Documents Released for Version 2.0
2017 Summer	Version 2.2 Working Draft Released for Community Comment and Consensus
2017 Winter	Version 2.3 to be Released for Review and Community Comment
2018 March	Version .09
2018 Spring	HL7 Balloting; Guide Balloted is Implementation Guide for Syndromic Surveillance Release 1.0 Standard for Trial Use (STU) HL7 Version 2.5.1**
2018 Fall	Anticipated Completion of HL7 Balloting and Release of <i>HL7 2.5.1 Implementation Guide for Syndromic Surveillance for Trial Use Version 1</i>

* Version 2.0 is currently being used; subsequent versions are working drafts only.

** Added April 2, 2018.

CDC FUNDING RECIPIENTS AND PARTNERSHIP UPDATES

Save the Date

The Center for Surveillance, Epidemiology, and Laboratory Services (CSELS) will host a conference call from 3:00 to 4:30 PM ET on Monday, October 15, 2018, about the use of syndromic surveillance to address opioid overdoses through the Opioid Crisis Notice of Funding Opportunity (CDC-RFA-TP18-1802; Cooperative Agreement for Emergency Responses: Public Health Crisis Response 2018 Opioid Overdose Crisis Cooperative Agreement); Domain 3: Biosurveillance.



The call is for recipients of CSELS funding to clarify expectations for:

1. Division of State and Local Readiness (DSLRL) conference calls and reporting, and
2. CSELS conference calls and monitoring, including a demonstration and overview of the monitoring tool, and discussion on performance measures.

The goal is to help states and CDC use information to monitor progress and achieve performance goals. For information on this cooperative agreement, visit CDC's [website](#).

UPCOMING EVENTS

October 16	Scheduled vendor patches in staging environment: 6:00– 10:00 AM ET
October 18	Scheduled vendor patches in production environment: 6:00– 10:00 AM ET
January 29– February 1, 2019	17th Annual International Society for Disease Surveillance Conference: Harnessing Data Science to Improve Population Health and Public Health Surveillance; San Diego, California

LAST MONTH'S TECHNICAL ASSISTANCE

September 18	Vendor patches applied in staging environment
September 20	Vendor patches applied in production environment

Practice

Stop Violence Before it Occurs

New Syndrome Definitions Available

NSSP and CDC's Division of Violence Prevention are collaborating on a number of syndromes and public health surveillance projects. The collaboration recently yielded a sexual violence Chief Complaint/Discharge Diagnosis (CC/DD) category [version 2](#) and created an [intimate partner violence version 1](#) CC/DD category. The sexual violence category version 2 removed a discharge diagnosis code that captures history of sexual violence in childhood and added three chief complaint terms; the newly created intimate partner violence CC/DD category identifies cases of physical or sexual violence by a romantic partner. Both CC/DD categories are now in ESSENCE, and the syndrome definitions can be accessed in the NSSP Community of Practice [Knowledge Repository](#).

To promote the use of these data in the field, syndromic analysts and rape prevention coordinators were consulted in several states to learn more about their current surveillance systems used to monitor sexual violence, as well as syndromic surveillance in their specific state. These analysts and coordinators are commonly housed in the state health department but unaware of each other. Discussions included how to increase collaborations and how to make ESSENCE data available to more users to aid in efforts to monitor and prevent sexual violence. A similar process will be utilized for intimate partner violence state partners once ESSENCE users provide feedback on the syndrome definition.

Pre-diagnostic syndromic data, drawn in near real-time, are a great resource for those working in sexual violence and intimate partner violence prevention. The ability to quickly obtain local data is an advantage of ESSENCE that can strengthen awareness and prevention of these critical public health issues.

CDC's National Center for Injury Prevention and Control has posted an informative video about Intimate Partner Violence on its [website](#) along with other articles, surveys, and publications.

Drug Overdose-related CC and DD Category Updates

New versions of existing CC and DD categories have been added to NSSP-ESSENCE. We now have CDC Stimulant version 2, CDC Opioid Overdose version 2, and CDC Heroin Overdose version 4. The changes are based on feedback from the community and CDC staff and, although relatively minor, should improve overall results. To see how these changes affect your specific data, you can overlay the time series graphs of the different versions in ESSENCE. In addition, look for a new CC and DD category called CDC All Drug version 1, which should be available later this month.

Questions and Tips

Q. Why are most recent dates in the data quality portal marked “N/A” even when we have data for those dates?

A. Sometimes this is due to how numbers are calculated. Calculations are *not* done on the fly in the data quality portal when you pull data. There’s a backend process that needs to run periodically to calculate this information. Sometimes, for reasons such as data processing or server maintenance, that process might not run for a day or two. If you don’t see data for the most recent date, that’s probably why.



Q. Now that question marks can be searched as “free text,” what does that mean?

A. Before ESSENCE 1.21, you could not do a free-text search for question marks because the only queryable chief complaint field was the chief complaint *parsed* field, and it removed all punctuation. However, unlike some local versions of ESSENCE, NSSP-ESSENCE has made the chief complaint ORIGINAL field queryable. Now you can search this ORIGINAL field for question marks.

Q. Can you explain why sometimes text is highlighted in data details and sometimes not...even when the search has a positive hit?

A. The system should highlight search terms. Any time you do a free-text query on certain columns and go to the data details page, the word you free-text searched should be boldfaced and highlighted. For example, if you do a wildcard search on Fever, wherever Fever shows up in a free-text parsed field for the column being queried, Fever will be boldfaced and highlighted. Keep in mind that not all query logic will be applied to bolding. If you’re doing negations, partials, or complicated searches, the bolding will be affected. **Whenever you have concerns, please send the NSSP [Service Desk](#) a screen shot or URL so that we can try to replicate the problem and follow up.**

These are a few of the questions asked at the ESSENCE Q&A webinar held September 13, 2018. Aaron Kite-Powell (CDC) and Wayne Loschen (Johns Hopkins University Applied Physics Laboratory) shared tips and tricks and answered questions about ESSENCE functions and capabilities. This [webinar](#) is posted in the CoP Knowledge Repository.

Data—the foundation for making sound public health decisions—must be managed from collection through analysis and reporting. NSSP can work with sites to assess and improve data quality. Each month, NSSP provides site-specific reports on three essential and integrated measures of data quality: completeness, timeliness, and validity. Reports can be accessed in each site's secure shared folder and are available toward the end of the month. The Data Quality Corner can help you use these reports to bolster and maintain the integrity of your site's data quality.

“New Tabs on the Block”

Updates to the Onboarding Data Validation Report are Here!

Earlier this year on the recommendation of community members, we created two tabs for the Production environment Data Quality Completeness Reports: <Site>_Cells and <Site>_Cells_Red. Both tabs proved useful, and community members who onboard and test new facilities asked us to add both tabs to the completeness reports they use for Onboarding Validation in the Staging environment. These new tabs are now located in the Data Quality Completeness Report to filter data by feed or facility and to view Red cells only (cells with <90% completeness).



<Site>_Cells:

The <Site>_Cells tab includes everything in one report—from Overall (\$All) and specific feed to facility-level data completeness. Use the Feed_Name column to filter on \$All Feeds or on a specific feed.

Create feed-specific reports for vendors simply by filtering and copying data into a separate worksheet or new Excel file. You can also use the Priority field to filter on priority 1 fields and then filter on %visits to display cells highlighted in Red, which leads us to the next new tab.

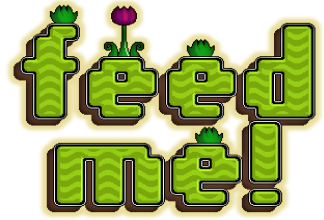
<Site>_Cells_Red:

The <Site>_Cells_Red tab opens a worksheet containing all Red highlighted cells found throughout the report. This tab is a one-stop shop for identifying completeness issues at a glance. The worksheet includes overall, specific feed, and specific facility-level information for all columns with <90% completeness. Use this new worksheet to identify potential problematic cells.

We thank NSSP's Analytic Data Management (ADM) Team for this explanation. Members of the ADM Team are available to answer questions and discuss data quality reports. To schedule a one-on-one discussion, please contact the [NSSP Service Desk](#).

Feed-specific Reports

We heard you! For your convenience, we've introduced "feed-specific" Onboarding Data Validation completeness reports. The reports have the same layout as the standard report but are limited to data from a *specific* feed. This separation of reports by feed will facilitate communication with facilities and vendors as you bring facilities onboard and work through data quality issues.



How are the reports named?

The naming convention follows:

<Site>_OB_Completeness_aWeek_<feed>_<week ending date> (Weekly report)

<Site>_OB_Completeness_aDay_<feed>_<specific day date> (Daily report)

Where can I find the feed reports?

The reports will be saved in two directories:

\<Site>admin\reports\staging (*houses all reports*)

\<Feed>\reports\staging (*houses only reports associated with the <Feed>*)

==Reminder about Week and Day Reports==:

Daily report (aDay): Report is based on data that arrived the previous day. For example, a report run October 10 at midnight will reflect data that arrived at the NSSP BioSense Platform on October 9 and would be named: <Site>_OB_Completeness_aDay_<feed>_20181009

Weekly report (aWeek): Report is based on data that arrived any time during a specific close-out week. For example, a report run October 10 at midnight will reflect data that arrived at the NSSP BioSense Platform during the week ending Saturday, October 13, and include data that arrived between Sunday, October 7, and Saturday, October 13. The name will include the close-out date: <Site>_OB_Completeness_aWeek_<feed>_20181013

Validity Reports for Onboarding

We are adding validity reports to the repertoire of onboarding resources. These reports should be in place by the end of October 2018. Use these reports to identify how well data content adheres to applicable standards.

Lower the Volume...please!

We heard you... again! Onboarding validation reports will be limited to **week** and **day**. Further, the process no longer copies over "previous week and day" reports. Only reports associated with the current week will be copied.

So, if you have been cleaning your report area only to find that older reports mysteriously reappeared, rest assured, because it's nothing you did. Moving forward, you should *not* see reports purposely deleted unless, of course, the reports are tied to the current week.



SPOTLIGHT ON SYNDROMIC SURVEILLANCE PRACTICE

Deaths from opioid overdoses have prompted public health practitioners to revisit the advantages of syndromic data. Syndromic data are timely, unlike data from traditional surveillance, and can be collected locally, which helps practitioners respond quickly to health problems in their communities. This article describes how syndromic data can be used effectively in the nation's response to the opioid epidemic.



[Vital Signs: Trends in Emergency Department Visits for Suspected Opioid Overdoses—United States, July 2016–September 2017¹](#)

Syndromic surveillance is a valuable tool that public health practitioners use to characterize emerging public health problems. As deaths from opioid overdoses have worsened to epidemic levels, syndromic surveillance proves to be one of the few ways to obtain timely snapshots of the epidemic's effect on local communities. Syndromic surveillance also enables public health practitioners to quickly assess whether targeted interventions work effectively and as planned.

Much of what is known about the epidemic, including staggering statistics that show that drug overdose deaths have never been higher, comes from billing data that, although useful, can in no way inform a *quick* response. Syndromic data, on the other hand, can serve as an early warning system. Localized responses can be identified, ED visits can present opportunities to link patients with treatment, and response impacts can be monitored.

The authors analyzed data from NSSP–ESSENCE for patients age 11 years and older in suspected unintentional or undetermined opioid overdoses. They explain how they aggregated and analyzed data, filtered chief complaint text and discharge diagnostic codes, accounted for changes across time and region, controlled for seasonal affects, and tested for significance. Their findings across age, gender, state, region, and urbanization level *exceeded* those from the 2016 National Survey on Drug Use and Health, and they call into question the survey's suggestion that heroin use and opioid misuse might have stabilized.²

Near real-time data that show trends can facilitate response efforts involving collaboration across geographic areas; allow targeting of timely health alerts and messages to the public and to health practitioners; support allocation of supplies (including naloxone); and target education and intervention when and where it is most needed.

Resources



The podcast [CDC Vital Signs—Opioid Overdoses Treated in Emergency Departments](#) is based on this *Vital Signs* report. As opioid overdoses continue to increase, learn what can be done to help prevent opioid overdose and death.

CDC website: [Connecting Data Helps Combat the Opioid Crisis](#)

¹ Vivolo-Kantor AM, Seth P, Gladden RM, Mattson CL, Baldwin GT, Kite-Powell A, Coletta MA. Vital Signs: Trends in Emergency Department Visits for Suspected Opioid Overdoses—United States, July 2016–September 2017. *MMWR Morbidity and Mortality Weekly Report* [Internet]. 2018;67(9):279–85. Available from: <http://dx.doi.org/10.15585/mmwr.mm6709e1>

² Substance Abuse and Mental Health Services Administration. Key substance use and mental health indicators in the United States: Results from the 2016 National Survey on Drug Use and Health. HHS publication no. SMA 17–5044, NSDUH Series H-52. Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration; 2017.

Program

UPDATES

Technology Update

In late October, NSSP plans to release a new version of the **Access & Management Center (AMC)**. This AMC version will include updates to the **Master Facility Table**.

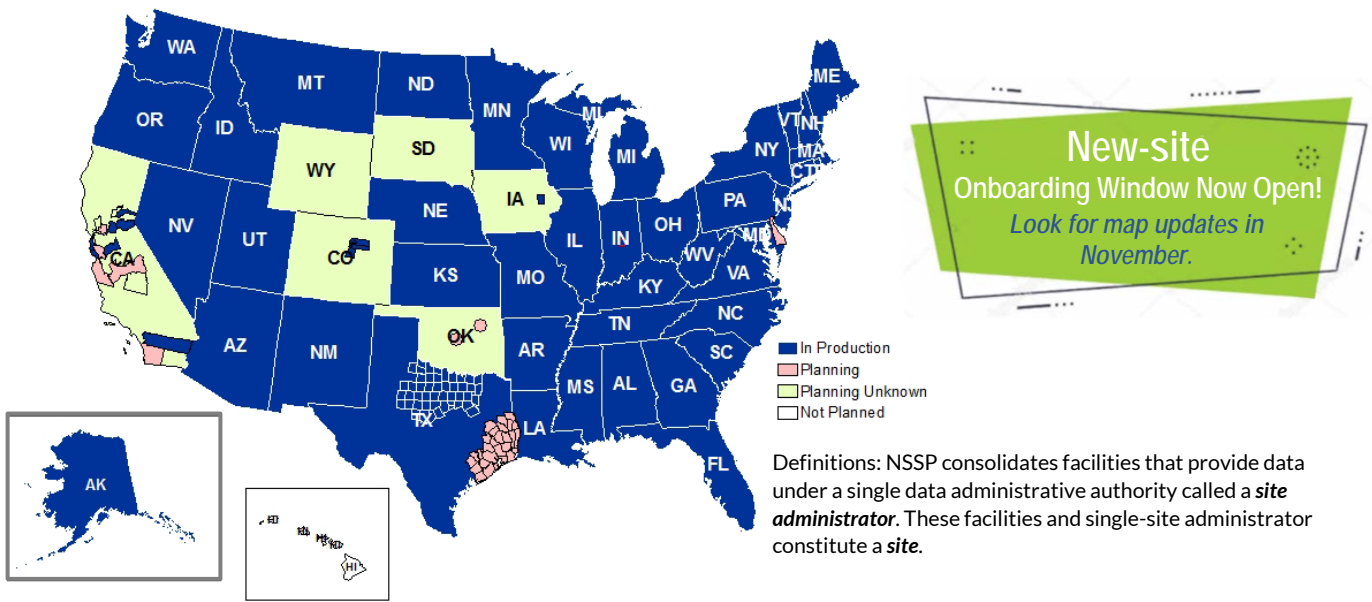
We are still working on the **SAS Studio rollout**. We anticipate its release either late October or early November. Stay tuned for October communications about the rollout date.

NSSP Progress Toward Transitioning Legacy Data

NSSP has converted legacy data into the production environment for 95% of the 43 sites that requested legacy migration. Two sites are being reviewed in the staging environment. If you have questions, please contact the [NSSP Service Desk](#).

NSSP PARTICIPATION

NSSP receives data from more than 4,000 facilities. Of these, about 2,567 are emergency departments (EDs) that actively submit data, which means that about 60% of all ED visits in the country are being represented (based on American Hospital Association data). At least 55 sites in 45 states, including the District of Columbia, participate in NSSP. Although NSSP is pleased with participation to date, sites with data in production do not always translate into sites with broad ED coverage.



Fall Onboarding in Progress

NSSP staff are excited to announce that four new sites are participating in this fall's NSSP New-site Onboarding Window. During this window, NSSP will configure BioSense Platform tools and applications for the new sites and provide webinars and introductory training on how to use Adminer, ESSENCE, Data Validation and Quality Reports, new [Master Facility Table Data Reference Guide](#), and Access & Management Center (AMC). Sites that successfully complete these activities during the New-site Onboarding Window can continue onboarding their facilities beginning November 21, 2018, and will be added to NSSP's participation map.

Data Validation Support

Conference calls are held the first Wednesday of each month, 3:00–4:00 PM ET, to assist with data validation compliance. For more information, contact the [NSSP Service Desk](#).