



What is the Scoop? All Things Data for the NHSN LTC Component - How data is used, dashboards, where data goes

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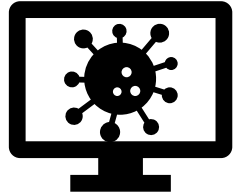
June 7, 2024

Goldbelt C6¹ and CACI² contractors
Surveillance Branch | Post-Acute Care Team
Division of Healthcare Quality Promotion (DHQP)
Centers for Disease Control and Prevention (CDC)

NHSN overview

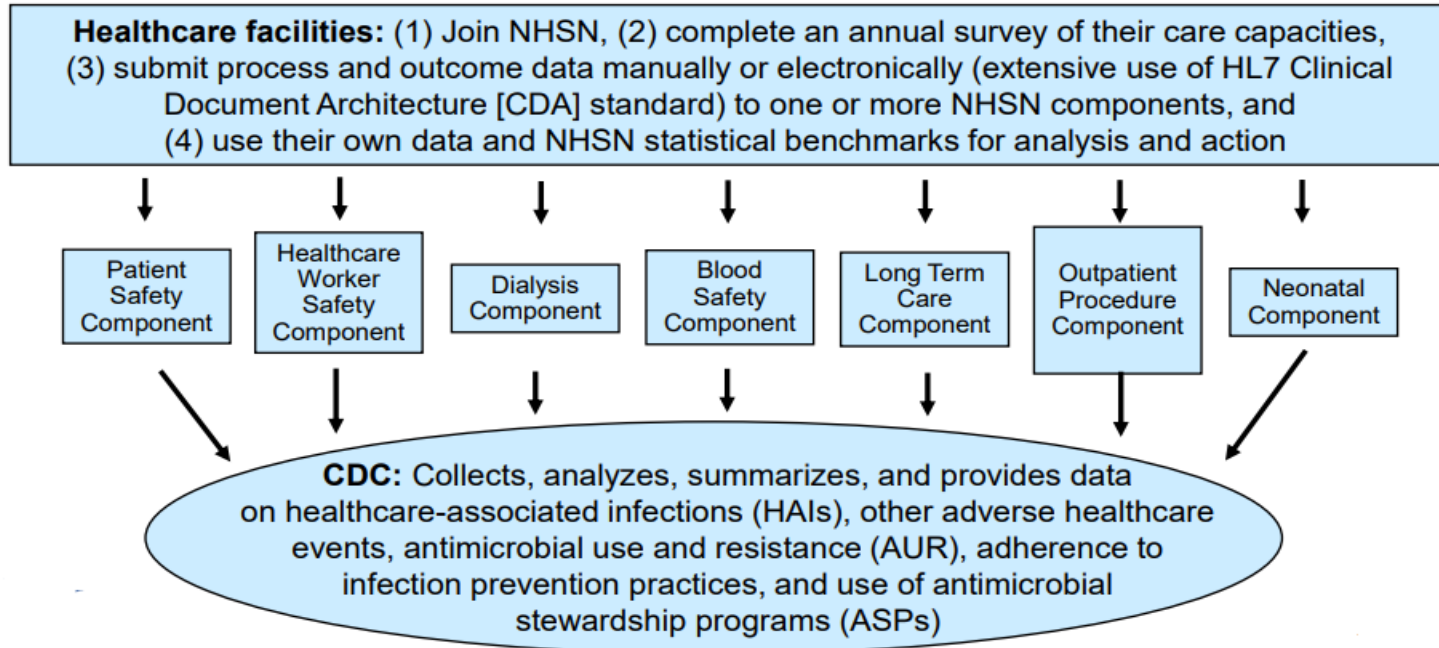
What is the National Healthcare Safety Network (NHSN)?

- A secure, internet-based system for monitoring healthcare-associated adverse events and practices
- Participating healthcare facilities use the NHSN web application to enter, analyze, and share data
- Data entry can be manual by users in the healthcare facility or electronic via file submission or uploads
- NHSN fulfills CMS and state requirements for HAI-AR reporting, and CMS nursing home COVID-19 reporting requirements



What is the National Healthcare Safety Network (NHSN)?

CDC's National Healthcare Safety Network (NHSN) – A Healthcare Surveillance System



Long-term Care Facilities (LTCF) Component

Modules of the LTCF Component

- COVID-19/Respiratory Pathogens
- Multidrug-Resistant Organism & *Clostridioides difficile* (MDRO/CDI) Infection Event Reporting
 - Also called LabID Event module
- Healthcare-Associated Infections (HAIs)
 - UTI Event Reporting
- Prevention Process Measures

The screenshot shows a navigation menu for the LTCF Component. The menu items are:

- COVID-19/Respiratory Pathogens (highlighted with a blue box and a blue arrow pointing to the first bullet point)
- Vaccination Summary
- Import/Export
- Surveys
- Analysis
- Users
- Facility
- Group
- Logout

Below the menu, there is a table with two columns and two rows. The first row contains the numbers '09' and '10'. The second row is empty.

Below the table, there is another menu with the following items:

- Event (highlighted with a red box and a red arrow pointing to the second bullet point)
- Summary Data
- COVID-19/Respiratory Pathogens
- Vaccination Summary
- Import/Export
- Surveys

Below the second menu, there is a third menu with the following items:

- Summary Data (highlighted with a green box and a green arrow pointing to the fourth bullet point)
- COVID-19/Respiratory Pathogens

On the right side of the screenshot, there is a vertical list of links: Dashboard, Pathway Data Reporting, POC Test Result Reporting, COVID-19 Vaccination - HCP, Vaccination - Residents, Person-Level COVID-19 Vaccination Form - HCP, and Person-Level COVID-19 Vaccination Form - Residents.

At the bottom right, there are three buttons: Add, Find, and Incomplete.

Reporting to the LTCF Component Modules

- Public health surveillance activity
- What is public health surveillance?
 - Ongoing and systematic health data collection, management, analysis, and interpretation for public health action

Use of the Data Reported to LTCF Component Modules

- Perform data quality check
 - Data validation activity
- Create **weekly** and **monthly** reports
- Feed our weekly dashboards
- Conduct facility outreach activities

Data Reported Weekly:

COVID-19 Data

Data Reported Monthly:

LabID Event

UTI Event

Prevention Process Measures

Use of the Data Reported to LTFC Component Modules: Example of a Weekly Data Report

The weekly data report includes the following:

- ✓ Confirmed cases among residents and staffs
- ✓ Variability of the COVID-19 rates (stable, increase, or decrease)
- ✓ Change in incident rates of confirmed COVID-19 cases among residents and staff in skilled nursing facilities
- ✓ Visualizations including maps, epi curve, and tables

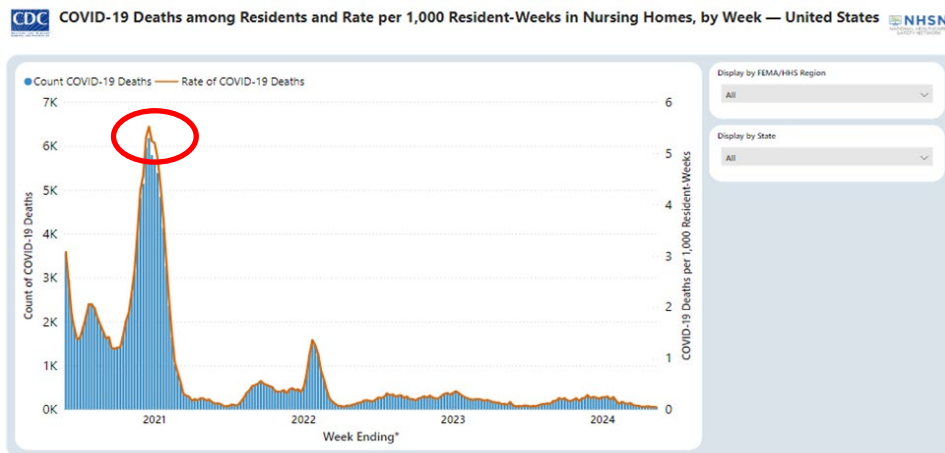
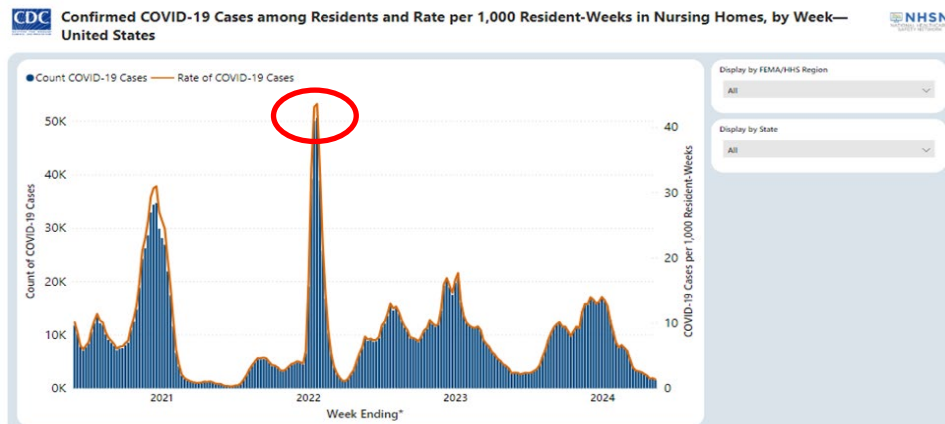
Use of the Data Reported to LTFC Component Modules: Example of the Weekly State Report

- Number of skilled nursing facilities (SNF) reporting into the NHSN Long-term Care COVID-19 module
- COVID-19 cases and deaths among SNF residents
- COVID-19 national resident case rate
- Hospitalization coverage for residents
- Vaccination coverage for residents and staff
- COVID-19 potential outbreak alert

Examples of Created Reports: the Dashboard

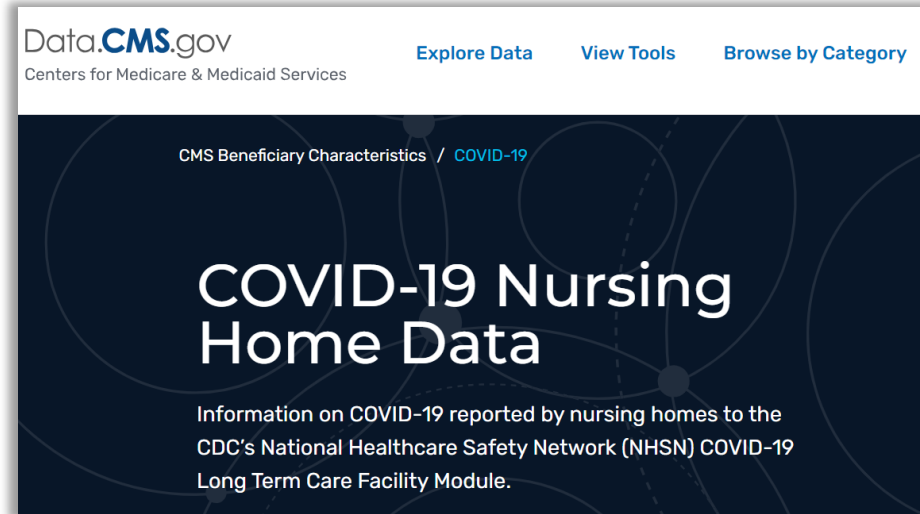
Residents and staff information, including:

- COVID-19 case count
- Case rate
- Death rate in SNFs



Data Dissemination

- CDC staff review and presentations
- Sharing of reports with partners
- Publication of CDC's NHSN data on CMS's website
- Participation in conference presentations
 - Posters/abstracts
- Submission of manuscripts to scientific/peer-reviewed journals



<https://data.cms.gov/covid-19/covid-19-nursing-home-data>

Recent Publication by the Post-Acute Care Team

- Article published in MMWR
 - COVID-19 data
 - Pathway data reporting
- Attention received on the internet
 - Altmetric Attention Score: 81
 - Article cited by 6 news outlets, including Yahoo

The screenshot shows the top portion of a CDC MMWR article page. The header includes the CDC logo, the title 'Morbidity and Mortality Weekly Report (MMWR)', a search bar, and a magnifying glass icon. The main title of the article is 'COVID-19 Vaccination Coverage, and Rates of SARS-CoV-2 Infection and COVID-19-Associated Hospitalization Among Residents in Nursing Homes — National Healthcare Safety Network, United States, October 2023–February 2024'. Below the title, it indicates the issue: 'Weekly / April 18, 2024 / 73(15):339–344'. There is a 'Print' link. The author list includes: David Franklin, MPH^{1,2}; Kira Barbre, MPH^{1,3}; Theresa A. Rowe, DO¹; Hannah E. Reses, MPH¹; Jason Massey, MPH^{1,4}; Lu Meng, PhD¹; Philip Dollard, MPH¹; Heather Dubendris, MSPH^{1,5}; Molly Stillions, MSN¹; Lindsay Robinson, MSPH¹; Jacques W. Clerville, MD^{1,3}; Kara Jacobs Stifka, MD¹; Andrea Benin, MD¹; Jeneita M. Bell, MD¹. A link for 'VIEW AUTHOR AFFILIATIONS' is provided.

Article Metrics

Altmetric:



Data as of June 4, 2024

Pulling Data from NHSN for Facility Specific Analysis

Demonstration from the SAMS portal

1.) Login to the NHSN application

2.) Hover over “Analysis” under the “NHSN Home” tab and click
"Generate Data Sets"

The screenshot displays the NHSN Long Term Care Facility Component Home Page. On the left is a navigation menu with the following items: NHSN Home, Alerts, Dashboard, Reporting Plan, Resident, Event, Summary Data, COVID-19/Respiratory Pathogens, Vaccination Summary, Import/Export, Surveys, Analysis, Users, and Facility. The 'Analysis' item is highlighted, and a sub-menu is open showing 'Generate Data Sets' and 'Reports'. A mouse cursor is pointing at 'Generate Data Sets'. The main content area on the right is titled 'NHSN Long Term Care Facility Component Home Page' and includes a 'Long Term Care Dashboard' and an 'Action Items' section. Under 'Action Items', there is a 'COMPLETE THESE ITEMS' section with 'ALERTS' and three summary cards: '9 Pending Events', '3 Incomplete Events', and '79 Missing Summary Data'.

Alert Category	Count
Pending Events	9
Incomplete Events	3
Missing Summary Data	79

Pulling Data from NHSN for Facility Specific Analysis (continued)

3.) Click “Generate Reporting Data Sets”

4.) Alert showing that the data has been generated

The screenshot displays the NHSN Home interface. On the left is a navigation menu with the following items: Alerts, Dashboard, Reporting Plan, Resident, Event, Summary Data, COVID-19/Respiratory Pathogens, Vaccination Summary, Import/Export, Surveys, Analysis, and Users. The main content area is titled 'Generate Data Sets (Long Term Care Facility)'. It features a 'Reporting Data Sets' section with a gear icon and the text 'Datasets will be generated to include all data'. A blue button labeled 'Generate Reporting Data Sets' is highlighted with a red box and a red arrow. To its right, a yellow box indicates 'Last Generated: May 29, 2024 2:26 PM to include all data'. An alert box in the top right corner displays the message 'Reporting Data Sets successfully generated.' with an 'OK' button.

Pulling Data from NHSN for Facility Specific Analysis (con't)

5.) View Report

6.) Run Report, Modify Report and Export Data under "Analysis" and "Reports" tabs

NHSN Home

- Alerts
- Dashboard
- Reporting Plan
- Resident
- Event
- Summary Data
- COVID-19/Respiratory Pathogens
- Vaccination Summary
- Import/Export
- Surveys
- Analysis**
- Users
- Facility
- Group

Analysis Reports

Expand All Collapse All Search

- MDRO/CDI Module - LABID Event Reporting
- HAI Module
 - All UTI Events
 - Line Listing - All UTI Events**
 - Run Report
 - Modify Report
 - Export Data Set
 - Rate Table - SUTI Incidence Rate
 - Rate Table - Total Urine Culture Rate
 - Process Measures
 - CMS Reports
 - COVID-19/Respiratory Pathogen Module
 - Advanced
 - My Custom Reports
 - Published Reports

NHSN Home

- Alerts
- Dashboard
- Reporting Plan
- Resident
- Event
- Summary Data
- COVID-19/Respiratory Pathogens
- Vaccination Summary
- Import/Export
- Surveys
- Analysis**
- Reports**
- Users

Generate Data Sets (Long Term Care Facility)

Reporting Data Sets

Datasets will be generated to include all data from enrollment forward

Generate Reporting Data Sets

Last Generated: May 29, 2024 2:26 PM to include all data

References

Centers for Disease Control and Prevention (CDC). National Healthcare Safety Network (NHSN). <https://www.cdc.gov/nhsn/about-nhsn/index.html>.

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Franklin D, Barbre K, Rowe TA, et al. COVID-19 Vaccination Coverage, and Rates of SARS-CoV-2 Infection and COVID-19–Associated Hospitalization Among Residents in Nursing Homes — National Healthcare Safety Network, United States, October 2023–February 2024. MMWR Morb Mortal Wkly Rep 2024;73:339–344.DOI: <https://www.cdc.gov/mmwr/volumes/73/wr/mm7315a3.htm>

US Department of Health and Human Services (DHHS). Healthy People 2030. National Healthcare Safety Network (NHSN). <https://health.gov/healthypeople/objectives-and-data/data-sources-and-methods/data-sources/national-healthcare-safety-network-nhsn>

Questions?

Thank you

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 [cdc.gov](https://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U.S. Centers for Disease Control and Prevention.

