Tracking Infections in Long-term Care Facilities (LTCFs) Using the National Healthcare Safety Network (NHSN) Overview

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Define the National Healthcare Safety Network (NHSN) and the different Components and Modules available for Long-term Care Facilities (LTCFs).

Describe how NHSN supports LTCFs and infection surveillance activities.

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NHSN at 14 Years:
Many More Uses and Users
Focus on Resident & Patient Safety Continues

Healthcare facilities: (1) Join NHSN, (2) complete an annual survey of their care capacities, (3) submit process and outcome data manually or electronically to one or more NHSN components, and (4) use their own data and NHSN statistical benchmarks for analysis and action.

CDC: Collects, analyzes, summarizes, and provides data on healthcare-associated infections (HAIs), other adverse healthcare events, antimicrobial use and resistance (AUR), adherence to infection prevention practices, and use of antimicrobial stewardship programs (ASPs).
NATIONAL HEALTHCARE SAFETY NETWORK (NHSN)

Reporting options specifically for LTCFs

- Standardizes surveillance definitions and data collection
- Data are secure, confidential and immediately available for analysis and use by the facility
- Data used by facilities for internal quality improvement
- Data used by CDC to establish risk-adjusted national benchmarks and set national HAI prevention targets
- Data used by CMS and state partners for public reporting and performance management
TWO NHSN Components Available for LTCFs

Long-term Care Facility: Resident Infections and Process Measures

Healthcare Personnel Safety: Influenza Vaccination

Surveillance for Healthcare Personnel Vaccination

The Advisory Committee on Immunization Practices (ACIP) recommends that all healthcare personnel (HCP) and persons in training for healthcare professions should be vaccinated annually against influenza. [1] Vaccination of HCP helps to reduce absenteeism of workers and safeguard patients. Although annual vaccination is recommended for all HCP, national survey data have demonstrated that vaccination coverage levels are only approximately 78% [2]. This is below the Healthy People 2020 target of 90% for HCP influenza vaccination [3].

References
3. Healthy People 2020. *Immunization and Infectious Diseases.*
LTCFs Eligible to Enroll in NHSN LTCF Component

Certified skilled nursing facilities (SNF) and nursing homes (NH)

Intermediate/chronic care facilities for the developmentally disabled

Assisted living facilities & residential care facilities

Note: limited to Prevention Process Measures Module
Standardized Surveillance Criteria and Analysis for the Following Modules

- **Healthcare-associated Infections (HAI)**
  - Urinary tract infections (UTI)
  - Catheter and non-catheter associated
  - **Planned**
    - Respiratory Tract infection
    - Skin and Soft Tissue Infection

- **Laboratory-identified (LabID) Event**
  - *C. difficile* Infection (CDI)
  - Multi-drug Resistant Organisms (MDRO)

- **Prevention Process Measures**
  - Adherence to Gown and Glove Use
  - Adherence to Hand Hygiene
Long-Term Care Facility Home Page

- Protocols
- Frequently Asked Questions
- Trainings
- Data Validation
- Archived newsletters and e-mail communications
- LTCF Component Manual

https://www.cdc.gov/nhsn/ltc/index.html
NHSN Long-term Care Facility Component Manual
Updated Annually

NHSN Forms and Instructions for Completion

- Include required data collection elements
- Customizable
- Available on NHSN website:

https://www.cdc.gov/nhsn/ltc/index.html
ENROLL Facility

MAP Resident Care LOCATIONS

ADD Additional Users

Complete ANNUAL FACILITY SURVEY

Complete MONTHLY REPORTING PLAN

Enter Resident EVENT DATA

Submit MONTHLY SUMMARY DATA

Data Quality Checks RESOLVE ALERTS

NHSN LONG-TERM CARE FACILITY CHECKLIST FOR NHSN PARTICIPATION
New To NHSN? Complete NHSN 5 Step Enrollment for LTCFs

- **Step 1**: Enrollment Preparation
- **Step 2**: Register Facility with NHSN
  - Read and accept "NHSN Rules of Behavior"
- **Step 3**: Register with Secure Access Management Services (SAMS)
  - Provide Identity Proofing Documentation
- **Step 4**: Access SAMS to Complete NHSN Enrollment
  - Complete and submit online Annual Facility Survey and Contact Information forms
- **Step 5**: Electronically Accept "NHSN Agreement to Participate and Consent"
  - Receive "NHSN Enrollment Approved" email

ENROLL Facility
ENROLL New Facility

- 5-steps to NHSN Enrollment
- A facility should only enroll ONE time
- Must have an individual e-mail account
- Use the LTCF Enrollment Training Guide as your resource through the enrollment process

5-Step Enrollment for Long-term Care Facilities

The below steps serve as a guide for Long-term Care Facilities (LTCFs) enrolling in the National Healthcare Safety Network (NHSN).

Once a facility is registered with NHSN, the Secure Access Management Services (SAMS) grid card must be used to continue with the NHSN enrollment process for the facility. If the designated facility NHSN user has not previously registered with SAMS and received a grid card, the user must complete the identity verification process with SAMS prior to gaining access to continue with the NHSN enrollment process for the facility.

A facility should only enroll once into the LTCF Component. Once a facility is enrolled, additional options become available such as adding additional users and enrolling in additional Components.

Step 1: Enrollment Preparation

1. Complete required LTCF Enrollment Training Guide [PDF - 6MB]
   Note: The Enrollment training slides serve as a detailed guide through the enrollment process.

2. Check trusted websites and spam blocker settings.
   - In Internet Explorer, add cdc.gov and verisign.com to your list of trusted websites and permit pop-ups for these sites.
   - Check spam-blocker settings to allow emails from NHSN@cdc.gov, SAMS-NO-REPLY@cdc.gov, and cdc.gov.

Time to complete Step 1: 40 minutes

https://www.cdc.gov/nhsn/ltc/enroll.html
Enrolled Facilities: Enter the SAMS Portal to Access NHSN

Log-in to SAMS

1. Go to https://sams.cdc.gov
2. Sign-in using your SAMS Grid card
Select “NHSN Reporting”
On the NHSN Landing page, select your facility and “Long Term Care Facility” as the component.

Click “Submit”
NHSN Homepage

use the left side navigation bar

ALERTS - outstanding issues that need to be resolved
Map resident care locations in the NHSN application immediately after enrollment and when there is a change, such as a new or closed unit.
LTCFs may have a different physical location where residents reside and receive care within the building – units, wards, floors, pods, etc.

Each resident care location in the facility should be mapped to a CDC location code/description.

- Provides information about the type of residents or care services in that specific location.

List available under Supporting Materials tab on LTCF page-
MAP Resident Care LOCATIONS

Instructions:
- To **Add** a record, fill in the form with the required fields and any desired optional values. Then click on the **Add** button.
- To **Find** a record, click on the **Find** button. One or more fields can be filled in to restrict the search to those values.
- To **Edit** a record, perform a *Find* on the desired record. Click on the desired record to fill in its values into the form and edit the values. To save the changes, click on the **Save** button.
- To **Delete** one or more records, perform a *Find* on the desired record(s). Check the corresponding box(es), then click on the **Delete** button.
- Press the **Clear** button to start over with a new form.

Mandatory fields to "Add" or "Edit" a record marked with *

- Your Code *
- Your Label *
- CDC Location Description *
- Status *: Active
- Bed Size: A bed size greater than zero is required for most inpatient locations.

Option to Find or Add Locations
MAP Resident Care LOCATIONS

ADD a new location

Instructions

- To Add a record, fill in the form with the required fields and any desired optional values. Then click on the Add button.
- To Find a record, click on the Find button. One or more fields can be filled in to restrict the search to those values.
- To Edit a record, perform a Find on the desired record. Click on the desired record to fill in its values into the form and edit the values. To save the changes, click on the Save button.
- To Delete one or more records, perform a Find on the desired record(s). Check the corresponding box(es), then click on the Delete button.
- Press the Clear button to start over with a new form.

Selects are facility specific. “Your Code” & “Your Label” best describe how units are identified in your facility.
ADD a new location, continued

Select **CDC Location Description** that best describes the resident population in the unit.

For a description of CDC locations for LTCFs, visit the CDC Locations document under Supporting Materials: [https://www.cdc.gov/nhsn/pdfs/pscmanual/15locationsdescriptions_current.pdf](https://www.cdc.gov/nhsn/pdfs/pscmanual/15locationsdescriptions_current.pdf) *(beginning on page 28)*
ADD a new location, continued

Instructions:
- To Add a record, fill in the form with the required fields and any desired optional values. Then click on the Add button.
- To Find a record, click on the Find button. One or more fields can be filled in to restrict the search to those values.
- To Edit a record, perform a Find on the desired record. Click on the desired record to fill in its values into the form and edit the values. To save the changes, click on the Save button.
- To Delete one or more records, perform a Find on the desired record(s). Check the corresponding box(es), then click on the Delete button.
- Press the Clear button to start over with a new form.

Mandatory fields to “Add” or “Edit” a record marked with ∗

<table>
<thead>
<tr>
<th>Your Code</th>
<th>Your Label</th>
<th>CDC Location Description</th>
<th>Status</th>
<th>Bed Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SOUTH</td>
<td>GENERAL</td>
<td>LTCF General Nursing Unit</td>
<td>Active</td>
<td>29</td>
</tr>
</tbody>
</table>

A bed size greater than zero is required for most inpatient locations.

[Image of a form with fields and options for adding a new location]
Click "find" to view all locations that have been set-up

Deactivate
Facilities are strongly encouraged to have at least two NHSN users
ADD Additional NHSN Users

- The NHSN Facility Administrator assigns rights to each user - enable users to view, add, edit, delete, analyze NHSN data
- Once a new user is added in NHSN, an email is automatically sent to the email address entered with instructions for registering with SAMS (required for all new users who do not already have a SAMS grid card)
ADD Additional NHSN Users

Tip: use first initial and last name ex. aanttila

User must use same email address for SAMS registration!
ADD Additional NHSN Users
Assign and Save Rights

User ID: MANTTILA (ID 238556)
Facility List: Fac: Angela LTCF Test Facility

<table>
<thead>
<tr>
<th>Rights</th>
<th>Patient Safety</th>
<th>Healthcare Personnel Safety</th>
<th>Biovigilance</th>
<th>Long Term Care</th>
<th>Dialysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Rights</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyze Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add, Edit, Delete</td>
<td></td>
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</tr>
<tr>
<td>View Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customize Rights</td>
<td></td>
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</tr>
</tbody>
</table>

[Buttons: Effective Rights, Save, Back, Advanced]
Survey is completed initially during NHSN enrollment and then annually each year thereafter - between January 1 and March 1
Complete ANNUAL FACILITY SURVEY

- Most survey questions are based on facility characteristics and practices during the previous calendar year.
- Some users find it helpful to use paper form to collect required information.
- Accuracy is important - responses in the annual survey may be used for risk adjustment of data!
COMPLETE Annual Facility Survey (Enrolled Facilities)
EDIT Annual Facility Survey

Remember to SAVE your edits
NHSN Monthly Reporting Plan (MRP) is required for each month facility will submit data to the NHSN.
MONTHLY REPORTING PLAN

- Informs CDC-NHSN which module(s) and events a facility is following during a given month.
- A facility must enter a Plan for every month in which surveillance and data submissions will occur.
- A plan must be in place before events can be entered into NHSN.
MONTHLY REPORTING PLAN

- A facility may complete plans for up to one calendar year in advance.

- A plan may be edited at any time to add or remove surveillance options, including retrospectively.
  
  - *Note: Surveillance options may only be deleted if no event or summary data has been entered for that event type and month.*
ADD Monthly Reporting Plan for LTCF
Monthly Reporting Plan for LTCF

➢ Three Surveillance Modules:
   1. HAI for urinary tract infection (UTI) events
   2. LabID Event for *C. difficile*; multi-drug resistant organisms
   3. Prevention Process Measures for hand hygiene; gown and glove use adherence
EDIT Monthly Reporting Plan

✓ Plans may be edited to add or remove surveillance selections.
   If event or summary data has already been entered for a selected month, associated module/event selections may not be deleted from the plan.
EDIT Monthly Reporting Plan, continued

- There is not an option to delete a previously saved Monthly Reporting Plan.
- Instead, edit the applicable plan and put a checkmark in the box-
  “No Long Term Care Facility Component Modules Followed this Month”

Remember to SAVE your edits
Let's Review 1: Based on this reporting plan, what modules and events will this facility report for April, 2018?

A. UTI only

B. UTI, LabID (CDI and MRSA), and Prevention Process Measures (hand hygiene and gown/glove use)

C. All Modules, all events
Identify and submit resident level HAI UTI and/or LabID event data to the NHSN.

Note: This step is dependent on which modules a facility is participating during a given month.
Two Modules for Reporting Infection Events

Healthcare-associated Infections (HAI)
- Urinary tract infections (UTI)
- Catheter and non-catheter associated
- Planned
  - Respiratory Tract infection
  - Skin and Soft Tissue Infection

Laboratory-identified (LabID) Event
- *C. difficile* Infection (CDI)
- Multi-drug Resistant Organisms (MDRO)

Prevention Process Measures
- Adherence to Gown and Glove Use
- Adherence to Hand Hygiene
Resources on the Long-Term Care Facility Home Page

- Protocols
- Forms and form instructions
- Frequently Asked Questions
- Trainings
- Data Validation
- Archived newsletters and e-mail communications
- LTCF Component Manual

https://www.cdc.gov/nhsn/ltc/index.html
Submit monthly summary data for each month under surveillance, even if no events were reported for that month.
Submit MONTHLY SUMMARY DATA to NHSN

- Referred to as denominator data

- At the end of the month, enter monthly total denominator data into the NHSN application
  - Unless otherwise stated, best practice is to have monthly events and summary data complete by the end of the following month!
  - *Example: have June data submitted by the end of July*

- Required even if no events were identified during the month

- Locate ‘Summary Data’ on left-hand navigation Bar, and then ‘ADD’
Submitting MONTHLY SUMMARY DATA in NHSN

Monthly Summary Page Pre-populates based on facility selections in the Monthly Reporting Plan
**Let's Review 2:** Based on the below Monthly Summary Data, what modules and events did the facility commit to participate on the Monthly Reporting Plan for March, 2018?

- **A.** All modules, all events
- **B.** MRSA and CDI LabID events (Correct Answer)
- **C.** CDI and all MDRO LabID events

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**Monthly Summary Data**

**Denominators for Long Term Care Locations**
- No long term care locations selected on monthly reporting plan

**MDRO & CDI LabID Event Reporting**

**Prevention Process Measures**
- No long term care locations selected on monthly reporting plan
Optional Data Collection Forms

1. **CDC 57.139: MDRO and CDI LabID Event Reporting Monthly summary Data for LTCF**
   - Resembles Summary Data page in the NHSN application
   - Specific to LabID Event reporting (CDI and/or MDRO)
   - Total counts only

2. **CDC 57.142: Denominators for LTCF**
   - Optional worksheet for the month to collect MDRO, CDI, and/or UTI denominator data
   - Daily counts that must be summed at the end of the month

Forms and Table of Instructions (TOIs) available under *Data Collection Forms* at: [https://www.cdc.gov/nhsn/ltc/cdiff-mrsa/index.html](https://www.cdc.gov/nhsn/ltc/cdiff-mrsa/index.html)
Resolve outstanding alerts to improve the quality of your data!

Note: Data are not considered as complete and will not be included in analysis reports until all alerts for the month are resolved.
Alerts

- Alerts remind users of outstanding issues that impact data quality.
- Alerts must be resolved each month for data analysis function to be accurate.
- Found on the Home Page, or by clicking on the ‘Alerts’ tab on the sidebar.
Alerts!

- When an alert category is selected all occurrences will be listed on a separate page for selection.
- Each occurrence will need to be resolved in order for alert category to clear.
Log-out of the NHSN application before closing your browser
LTCF Home Page

https://www.cdc.gov/nhsn/ltc/index.html
QUESTIONS?