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

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LEARNING OBJECTIVE 1

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

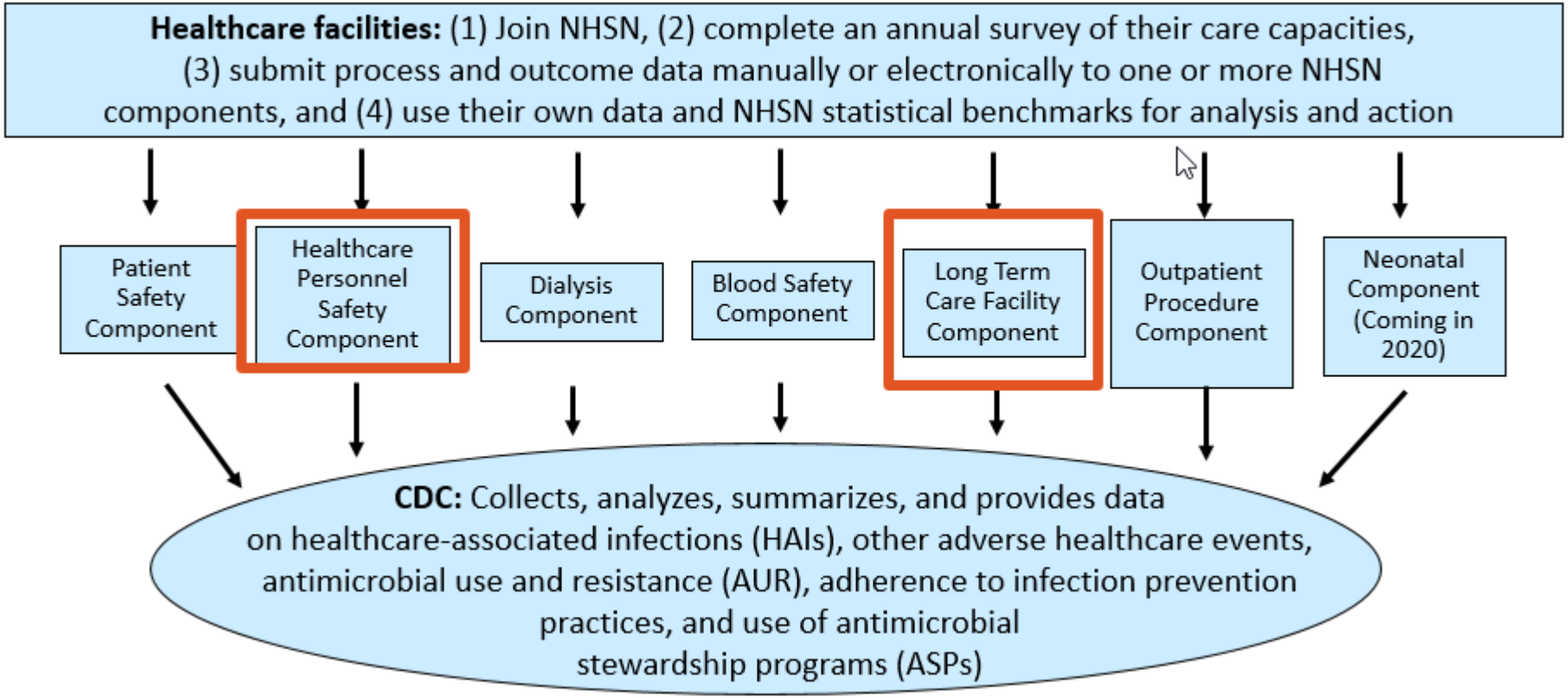
LEARNING OBJECTIVE 2

Describe how NHSN supports LTCFs and infection surveillance activities.

LEARNING OBJECTIVE 3

Describe how NHSN supports LTCFs and infection surveillance activities.

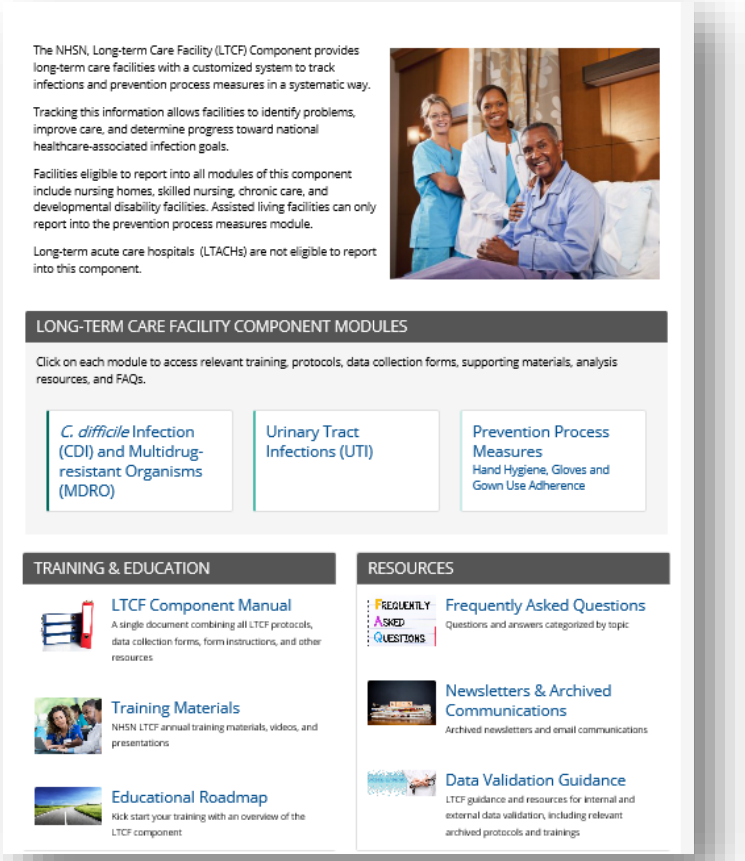
NHSN at 14 Years:
Many More Uses and Users
Focus on Resident & Patient Safety Continues



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

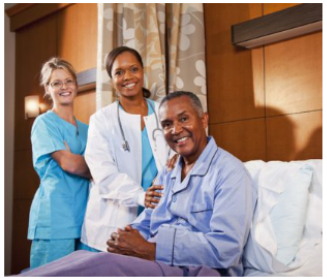
Long-term Care Facilities

The NHSN, Long-term Care Facility (LTCF) Component provides long-term care facilities with a customized system to track infections and prevention process measures in a systematic way.

Tracking this information allows facilities to identify problems, improve care, and determine progress toward national healthcare-associated infection goals.

Facilities eligible to report into all modules of this component include nursing homes, skilled nursing, chronic care, and developmental disability facilities. Assisted living facilities can only report into the prevention process measures module.

Long-term acute care hospitals (LTACHs) are not eligible to report into this component.



LONG-TERM CARE FACILITY COMPONENT MODULES

Click on each module to access relevant training, protocols, data collection forms, supporting materials, analysis resources, and FAQs.

- *C. difficile* Infection (CDI) and Multidrug-resistant Organisms (MDRO)
- Urinary Tract Infections (UTI)
- Prevention Process Measures
  Hand Hygiene, Gloves and Gown Use Adherence

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

1. Centers for Disease Control and Prevention. "Prevention and control of seasonal influenza with vaccines: Recommendations of the Advisory Committee on Immunization Practices – United States, 2018-19 Influenza Season. 2018. MMWR 67 (RR-3); 1-20.
2. Centers for Disease Control and Prevention. "Influenza Vaccination Coverage Among Health-Care Personnel — United States, 2017–18 Influenza Season." MMWR 67(38);1050-1054.
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

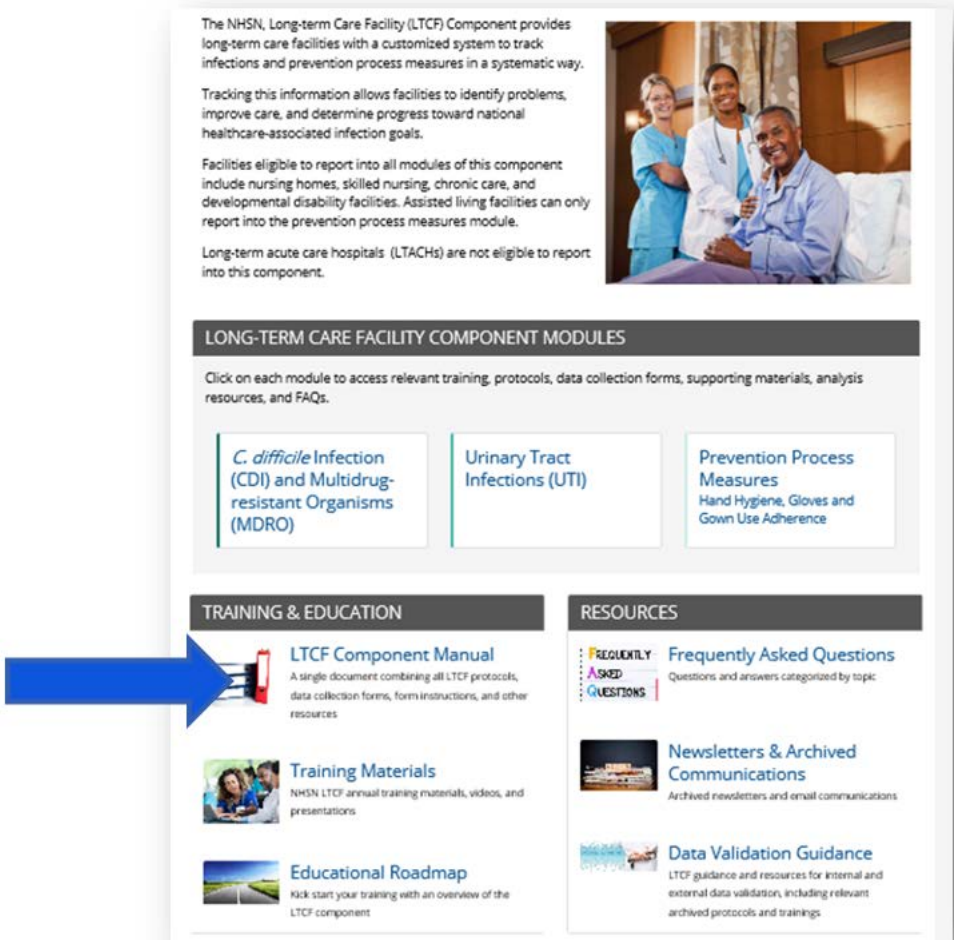
- *C. difficile* Infection (CDI)
- Multi-drug Resistant Organisms (MDRO)

Prevention Process Measures

- Adherence to Gown and Glove Use
- Adherence to Hand Hygiene

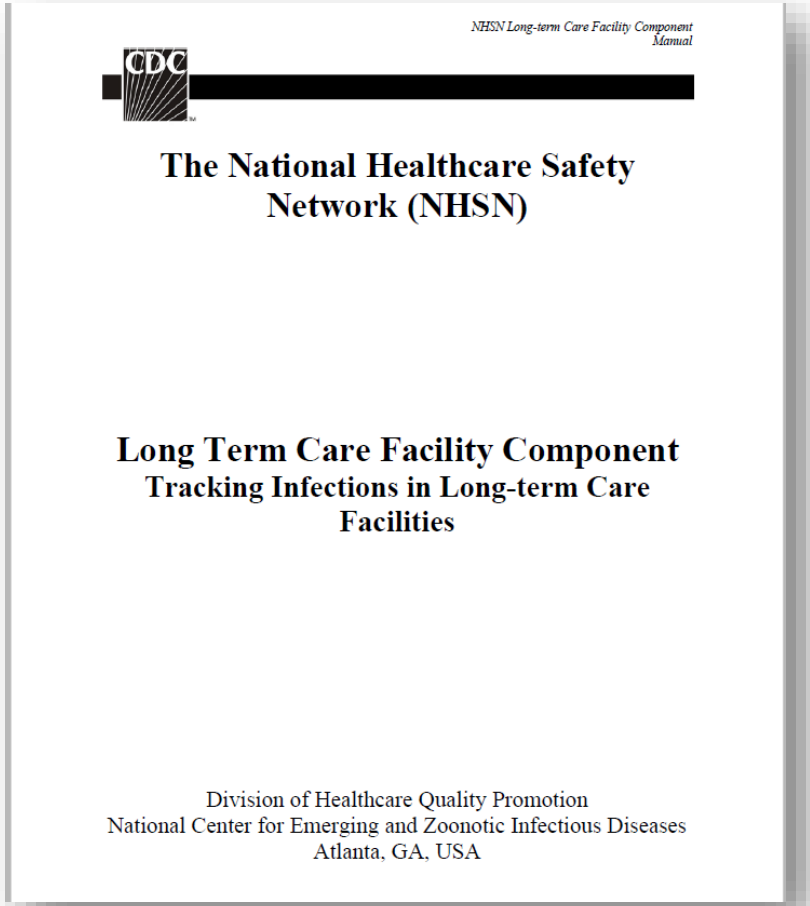
Long-Term Care Facility Home Page

- 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



https://www.cdc.gov/nhsn/pdfs/ltc/ltcf -manual-508.pdf

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

NHSN National Healthcare Safety Network

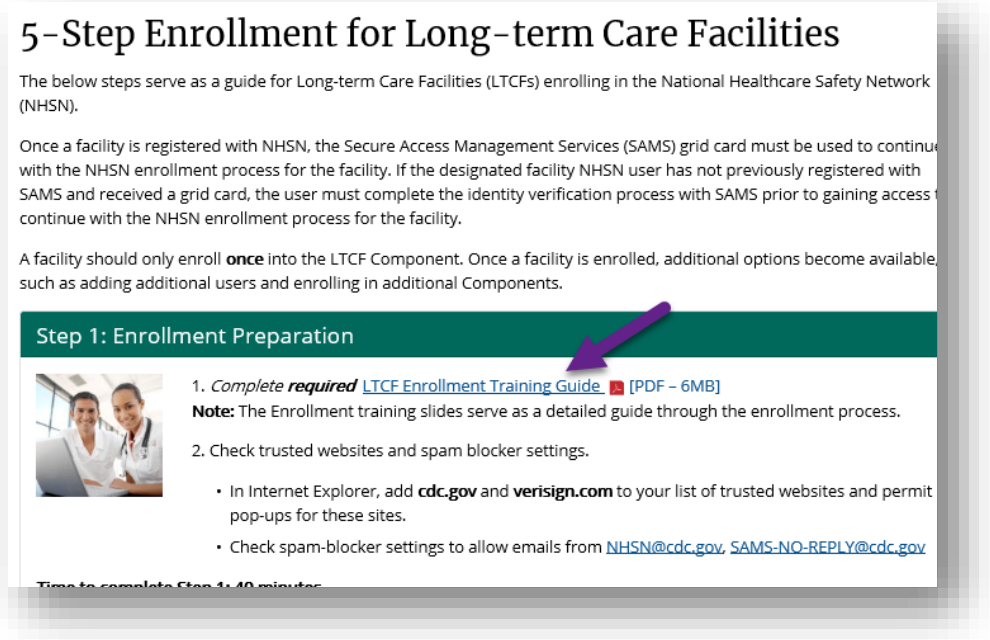
ENROLL Facility

New To NHSN? Complete NHSN 5 Step Enrollment for LTCFs

NHSN National Healthcare Safety Network

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 continu 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 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.

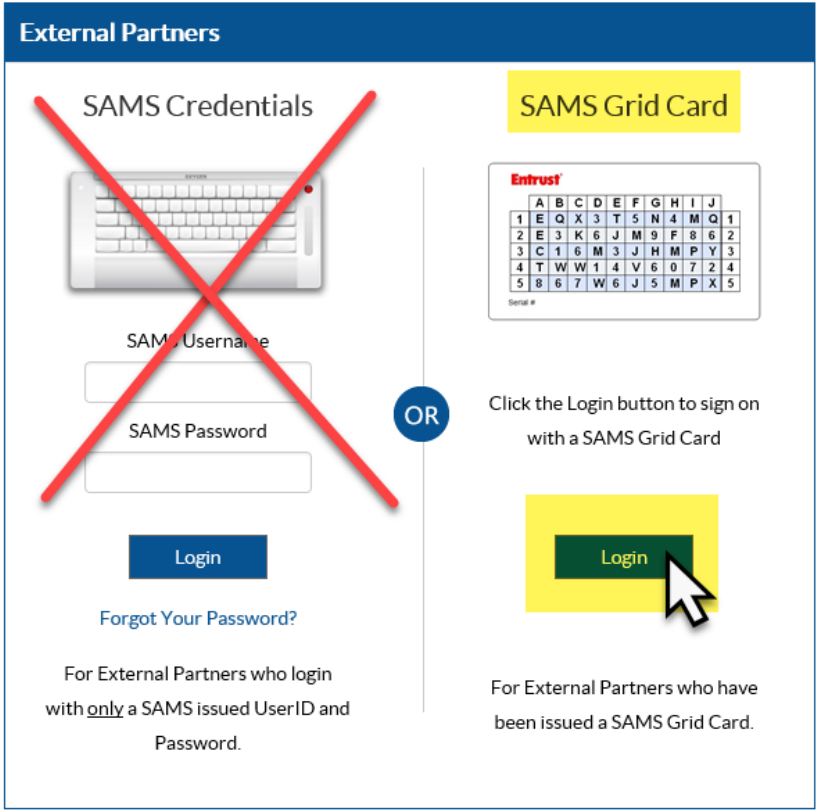
- In Internet Explorer, add **cdc.gov** and **verisign.com** to your list of trusted websites and permit pop-ups for these sites.
- Check spam-blocker settings to allow emails from NHSN@cdc.gov, SAMS-NO-REPLY@cdc.gov

https://www.cdc.gov/nhsn/ltc/enroll.html

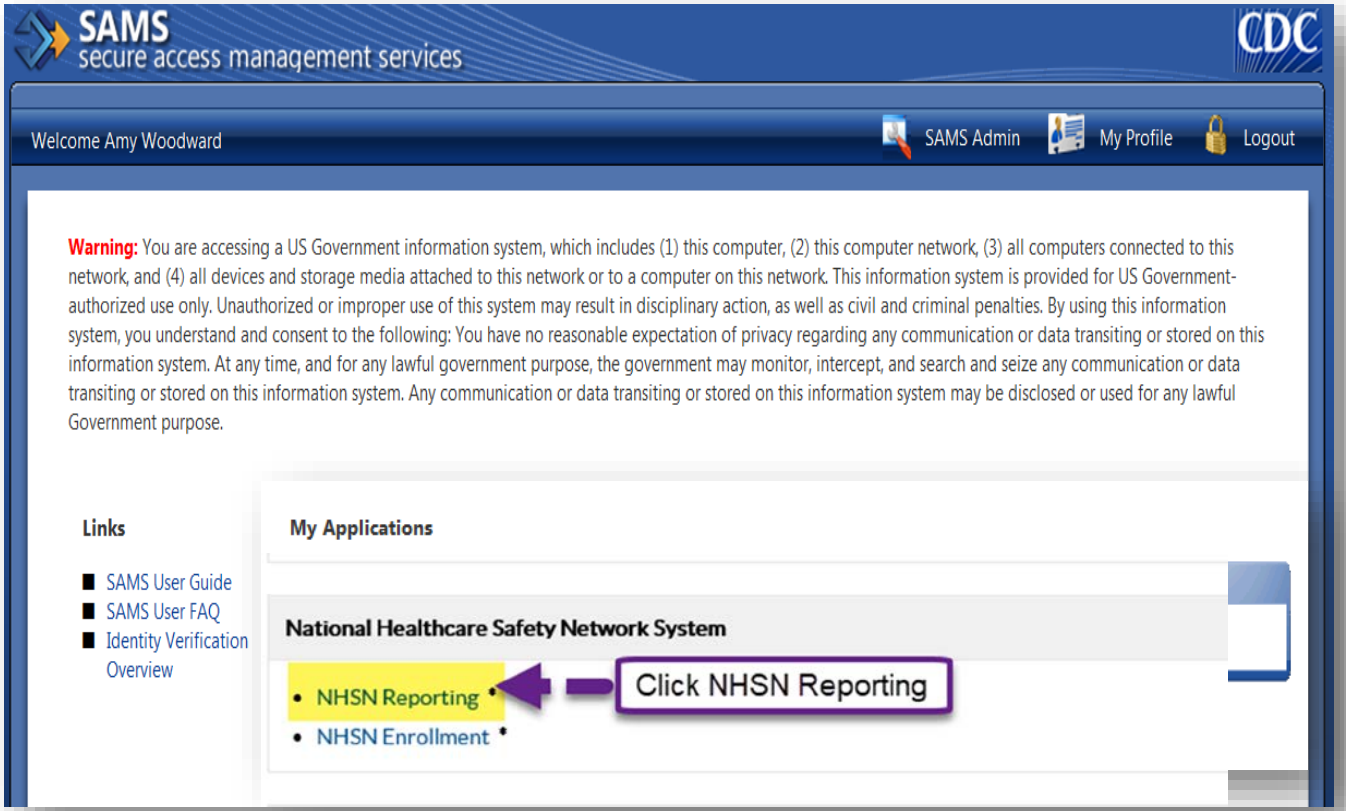
Enrolled Facilities: Enter the SAMS Portal to Access NHSN

Log-in to SAMS

1. Go to https://sams.cdc.gov
2. Sign-in using your SAMS Grid card

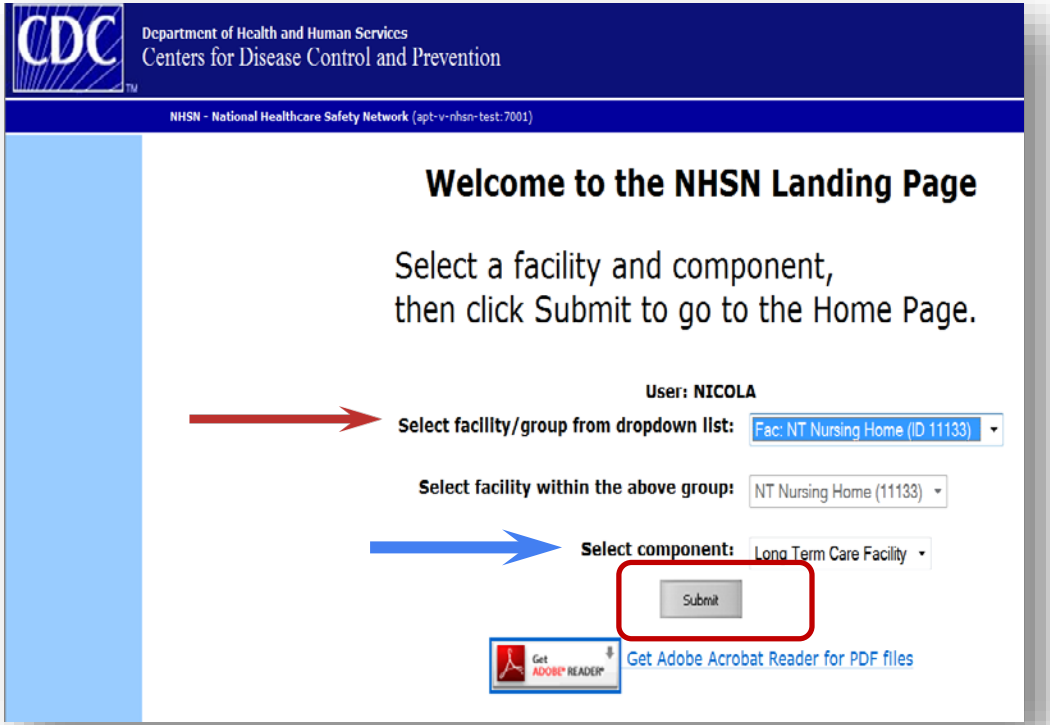


Select “NHSN Reporting”



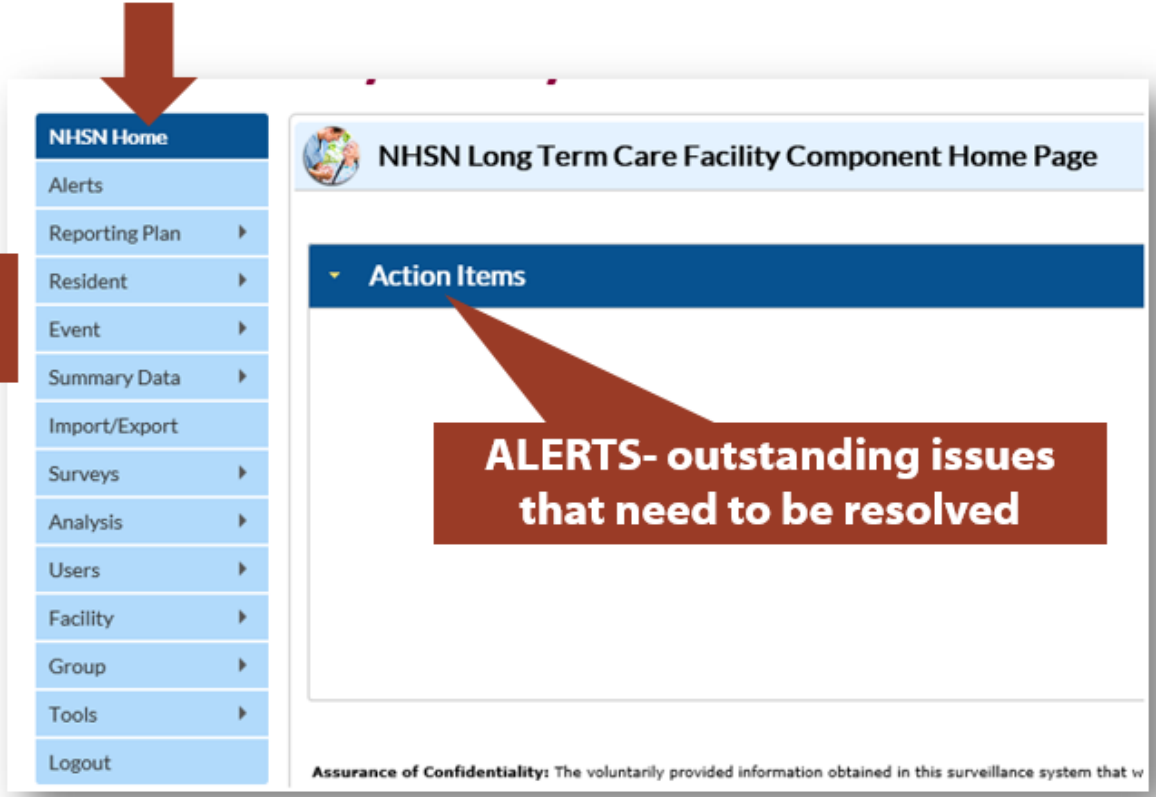
NHSN Landing Page

- **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



MAP Resident Care Locations

Map resident care locations in the NHSN application immediately after enrollment and when there is a change, such as a new or closed unit.

NHSN National Healthcare Safety Network

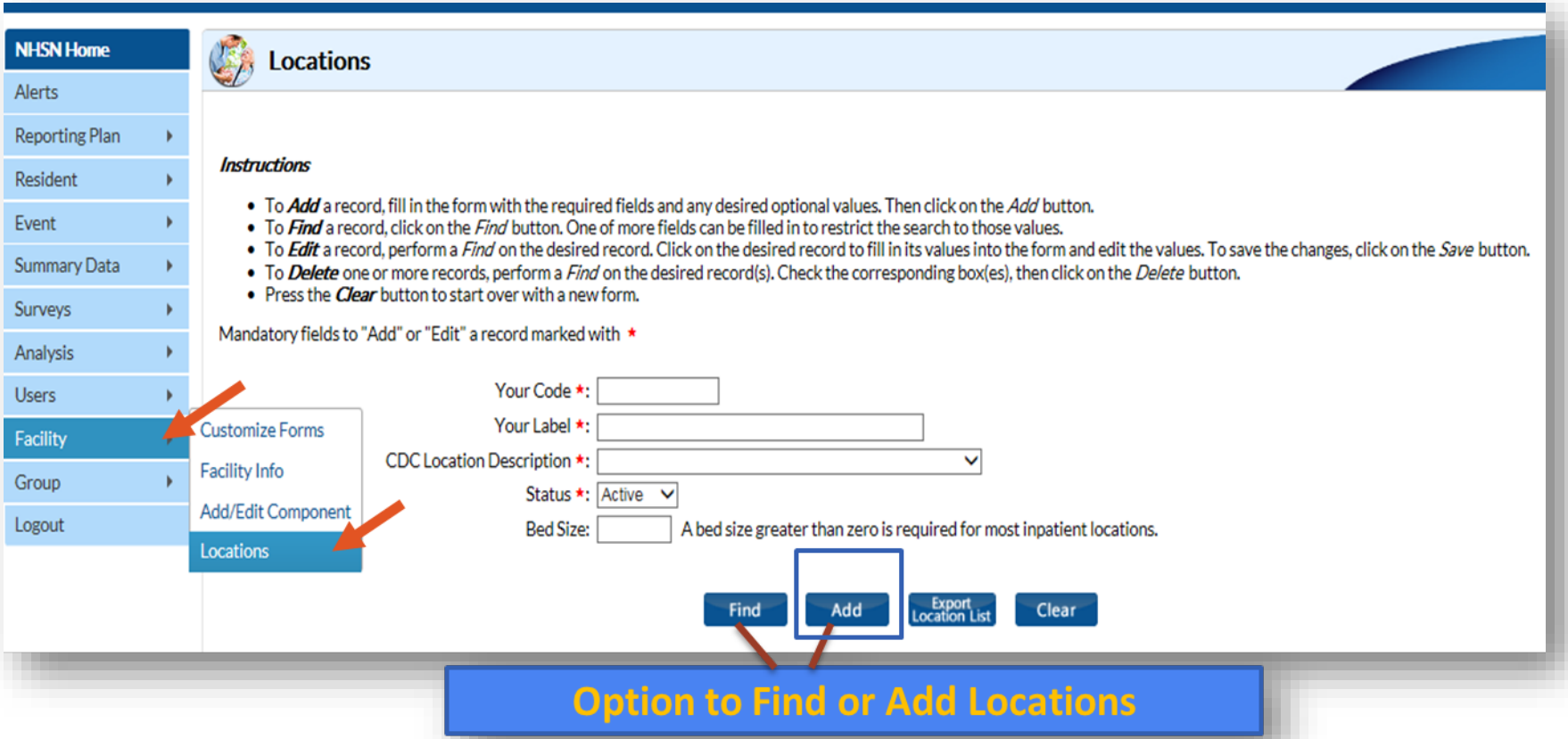
MAP Resident Care LOCATIONS

- 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.*

CDC Location Label	NHSN Healthcare Service Location Code	CDC Location Code	Location Description
Skilled Nursing/ Short Term Rehabilitation	1257-5	IN:NONACUTE:LTCF: REHAB	A unit or designated area which primarily provides short term (<90 days), medical, skilled nursing or rehabilitation services to individuals requiring restorative care following recent hospitalization.
General Nursing Unit	1258-3	IN:NONACUTE:LTCF:GEN	A unit or designated area which primarily provides nursing, rehabilitative or custodial services to individuals with varying levels of chronic conditions or disability requiring long term (>90 days) support
Ventilator Dependent Unit	1259-1	IN:NONACUTE:LTCF:VEN	A unit or designated area which provides nursing and respiratory care to individuals who require mechanical ventilation.
Bariatric Unit	1260-9	IN:NONACUTE:LTCF:BAR	A unit or designated area which provides specializing care for individuals who are preparing for or have undergone bariatric surgery.
Dementia Unit	1255-9	IN:NONACUTE:LTCF:DEM	A unit or designed area which provides specialized care for individuals diagnosed with dementia or related conditions, including Alzheimer's disease.
Psychiatric Unit	1256-7	IN:NONACUTE:LTCF: REHAB	A unit or designated area which provides specialized care for individuals diagnosed with psychiatric or behavioral disorders.

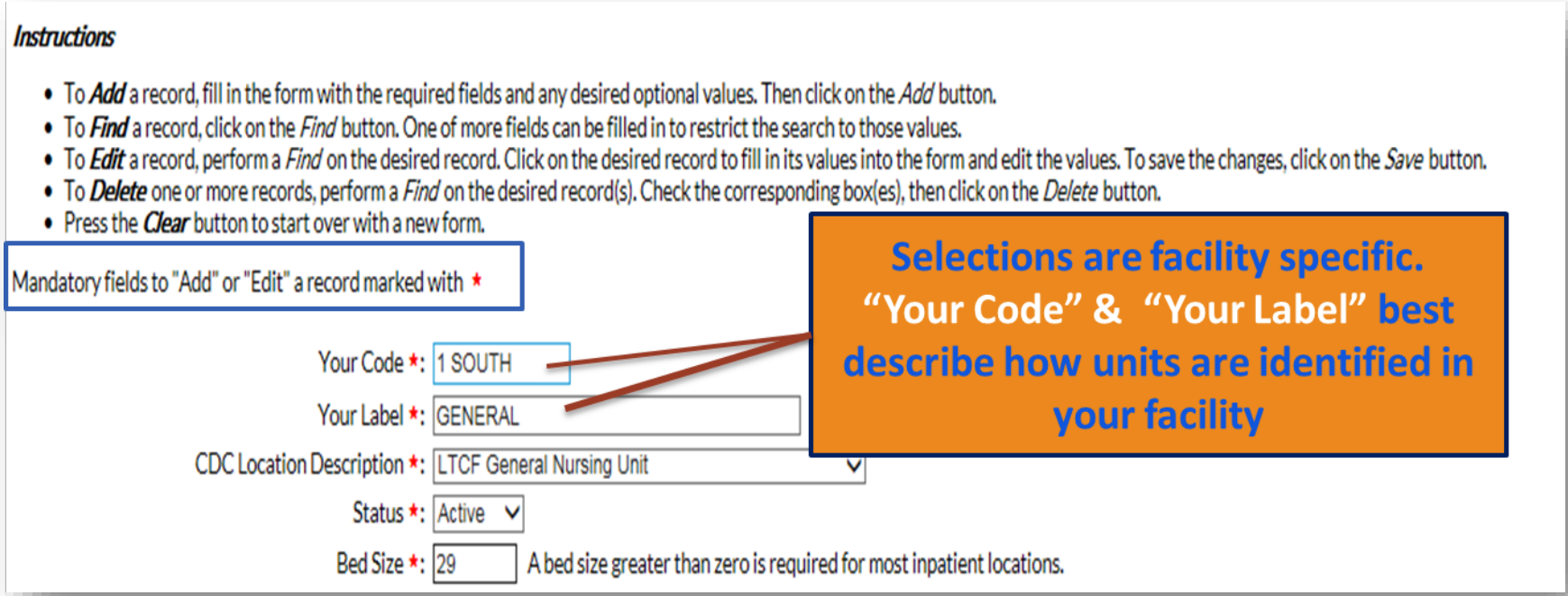
List available under *Supporting Materials* tab on LTCF page-
https://www.cdc.gov/nhsn/pdfs/pscmanual/15locationsdescriptions_current.pdf

MAP Resident Care LOCATIONS



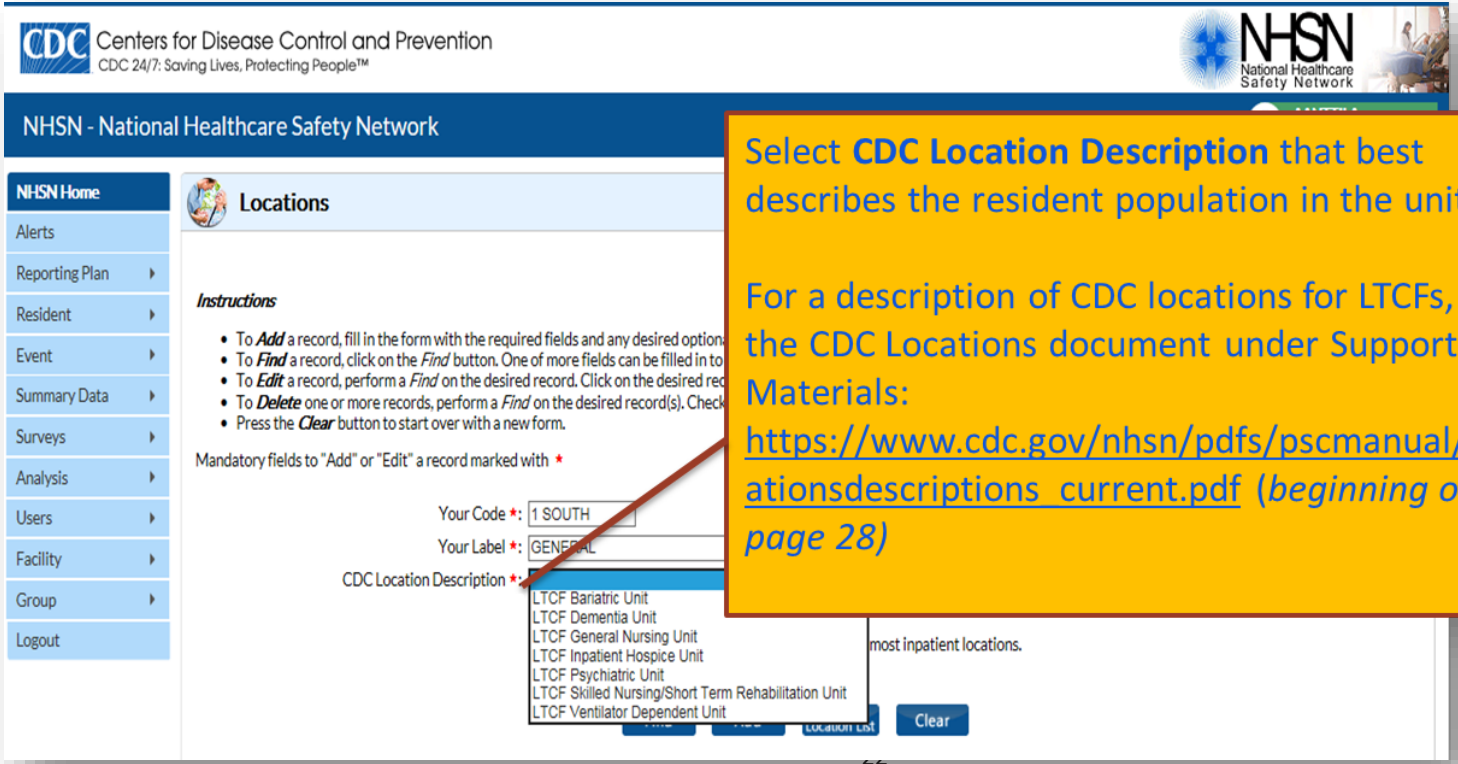
MAP Resident Care LOCATIONS

ADD a new location



MAP Resident Care LOCATION

ADD a new location, *continued*

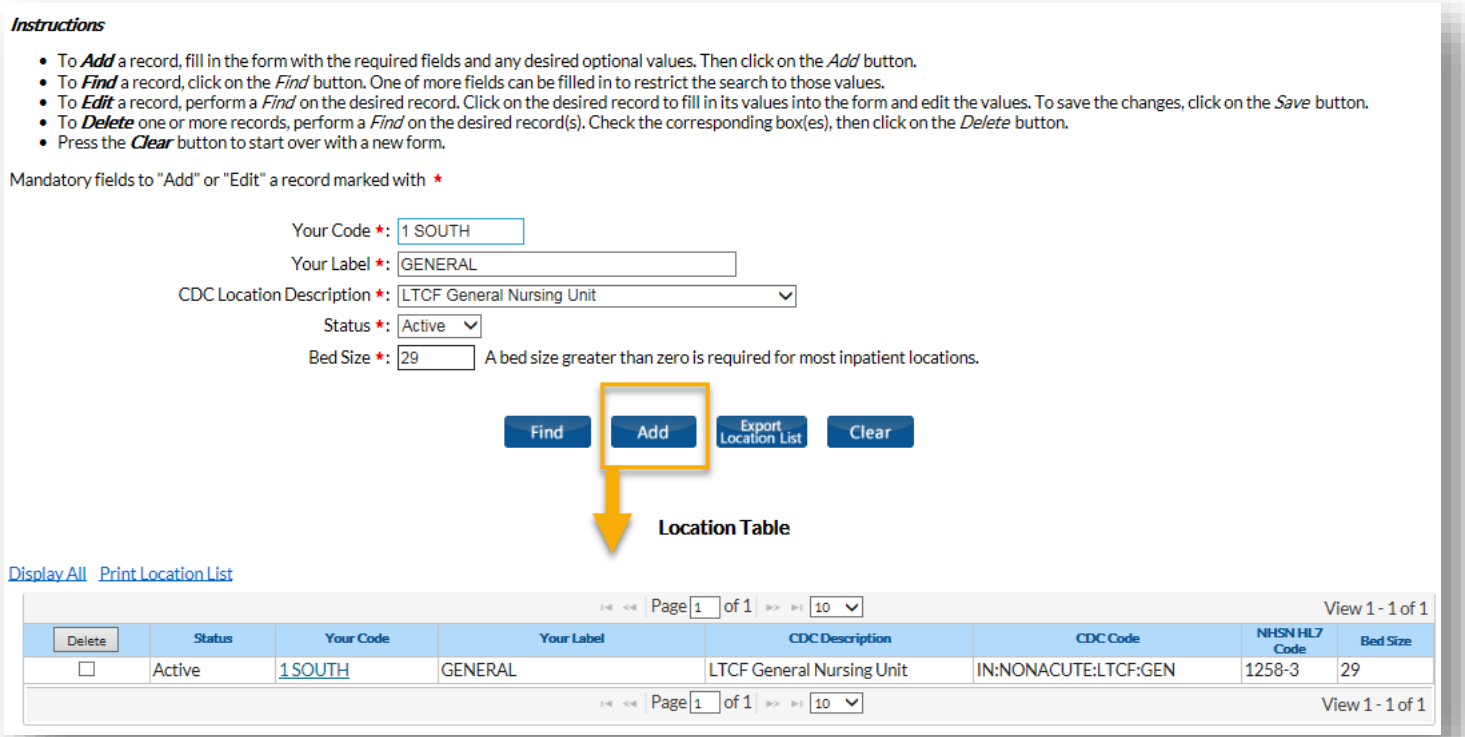


Select **CDC Location Description** that best describes the resident population in the unit.

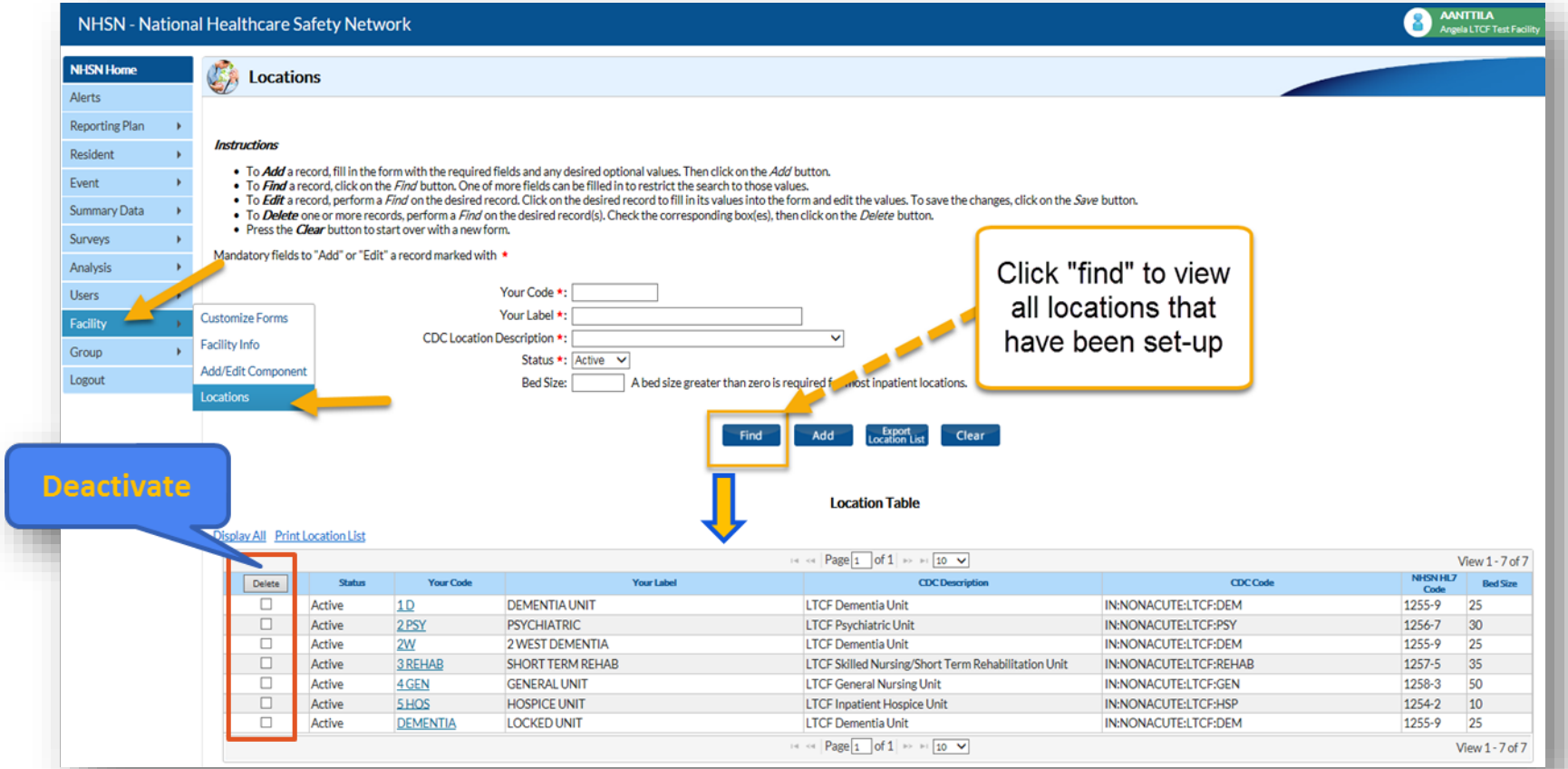
For a description of CDC locations for LTCFs, visit the CDC Locations document under Supporting Materials: https://www.cdc.gov/nhsn/pdfs/pscmanual/15locationsdescriptions_current.pdf (*beginning on page 28)*

MAP Resident Care LOCATIONS

ADD a new location, *continued*



MAP Resident Care LOCATIONS: FIND/DEACTIVATE



ADD Additional Users

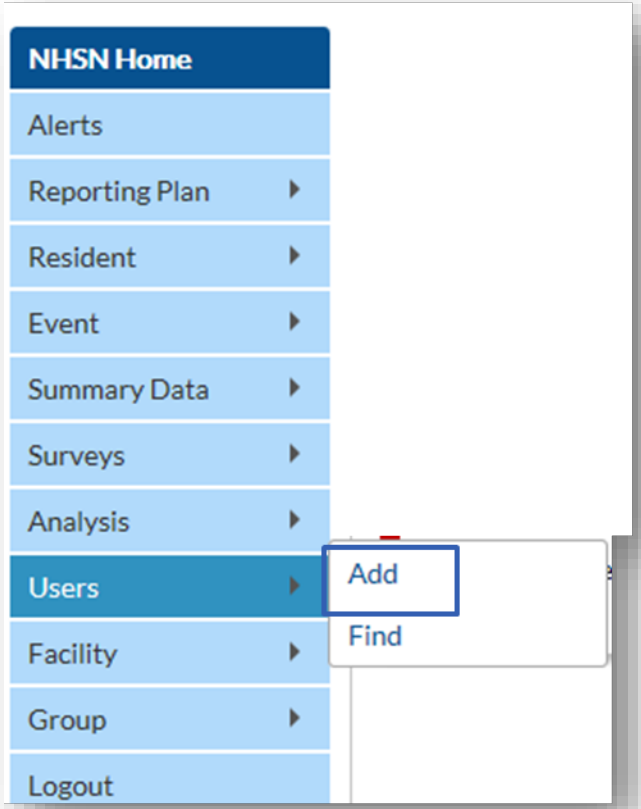
Facilities are strongly encouraged to have at least two NHSN users

NHSN National Healthcare Safety Network

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

Mandatory fields marked with *

User ID *: Up to 32 letters and/or numbers, no spaces or special characters

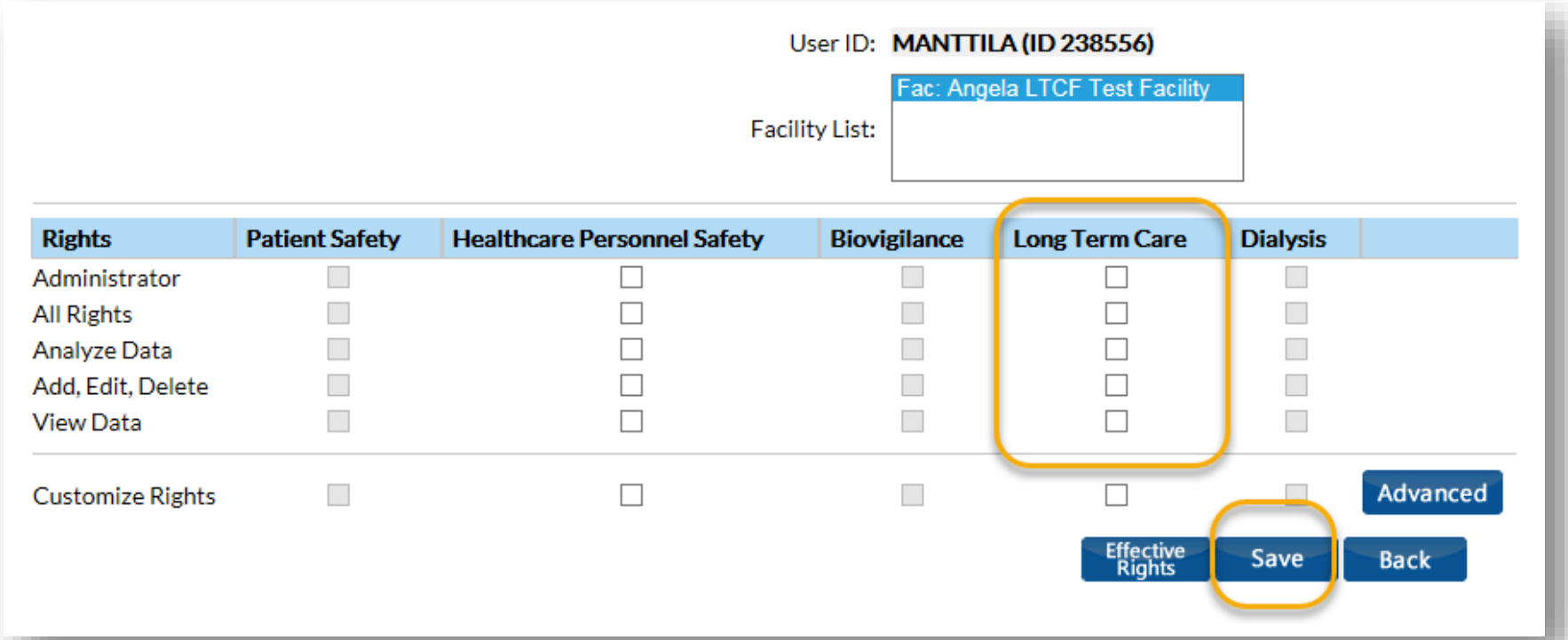
Prefix:
First Name *:
Middle Name:
Last Name *:
Title:
User Active: Y - Yes
User Type:
Phone Number *:
Fax Number:
E-mail Address *:

Address, line 1:
Address, line 2:
Address, line 3:
City:
State:
County:
Zip Code:
Home Phone Number:
Beeper:

Save Back

User must use same email address for SAMS registration!

ADD Additional NHSN Users
Assign and Save Rights



Complete ANNUAL FACILITY SURVEY

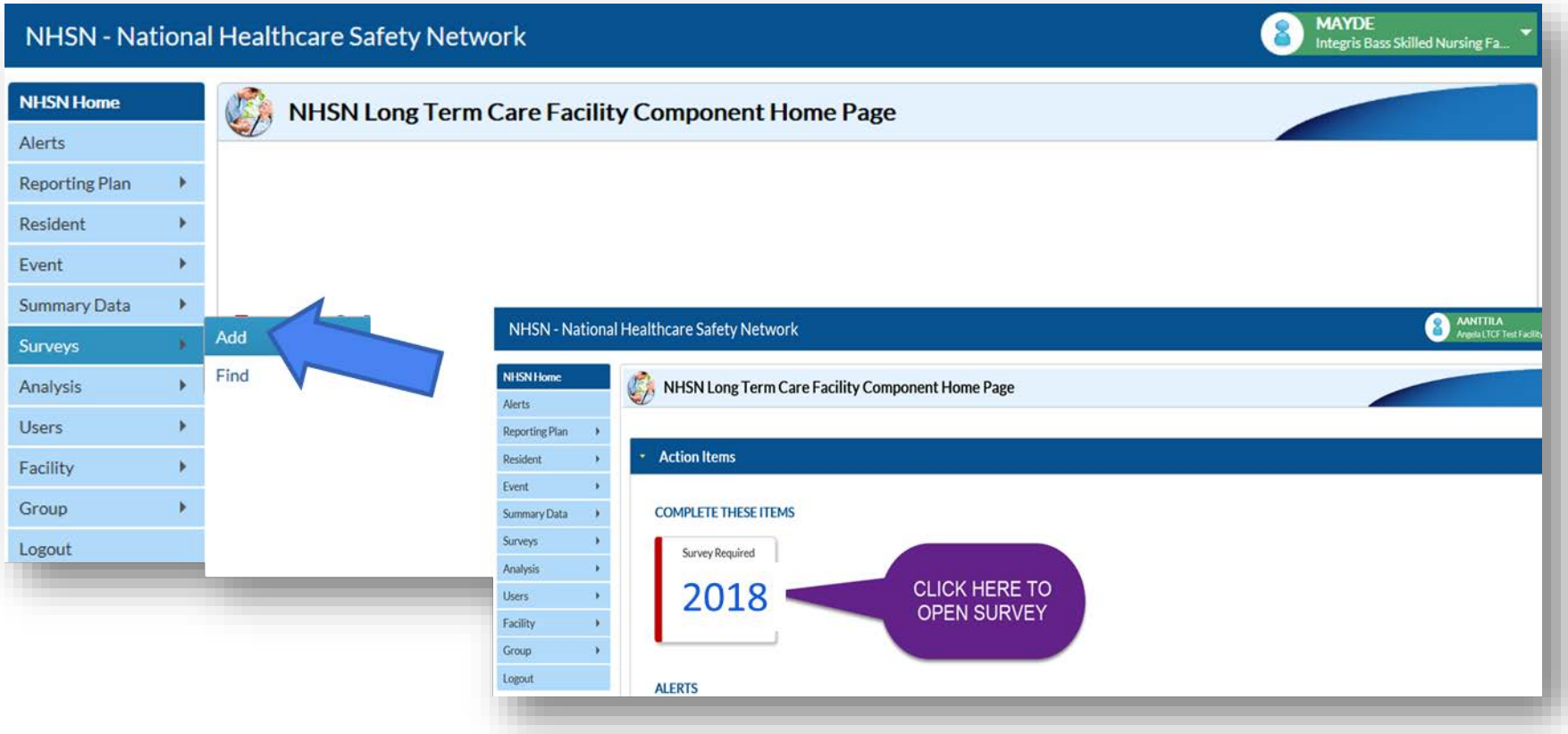
Survey is completed initially during NHSN enrollment and then annually each year thereafter- *between January 1 and March 1*

NHSN National Healthcare Safety Network

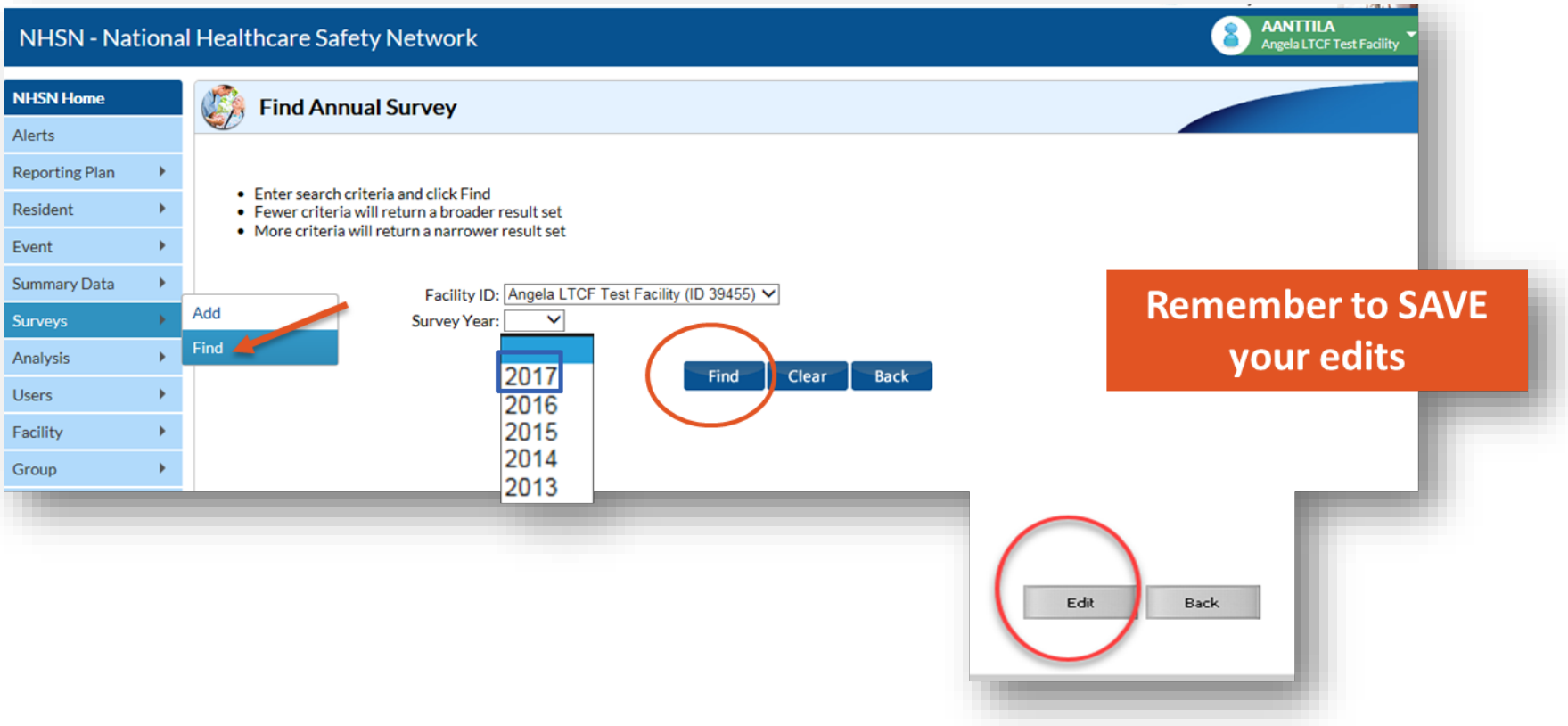
Complete ANNUAL FACILITY SURVEY

- 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



MONTHLY REPORTING PLAN

NHSN Monthly Reporting Plan (MRP) is required for each month facility will submit data to the NHSN

NHSN
National Healthcare Safety Network

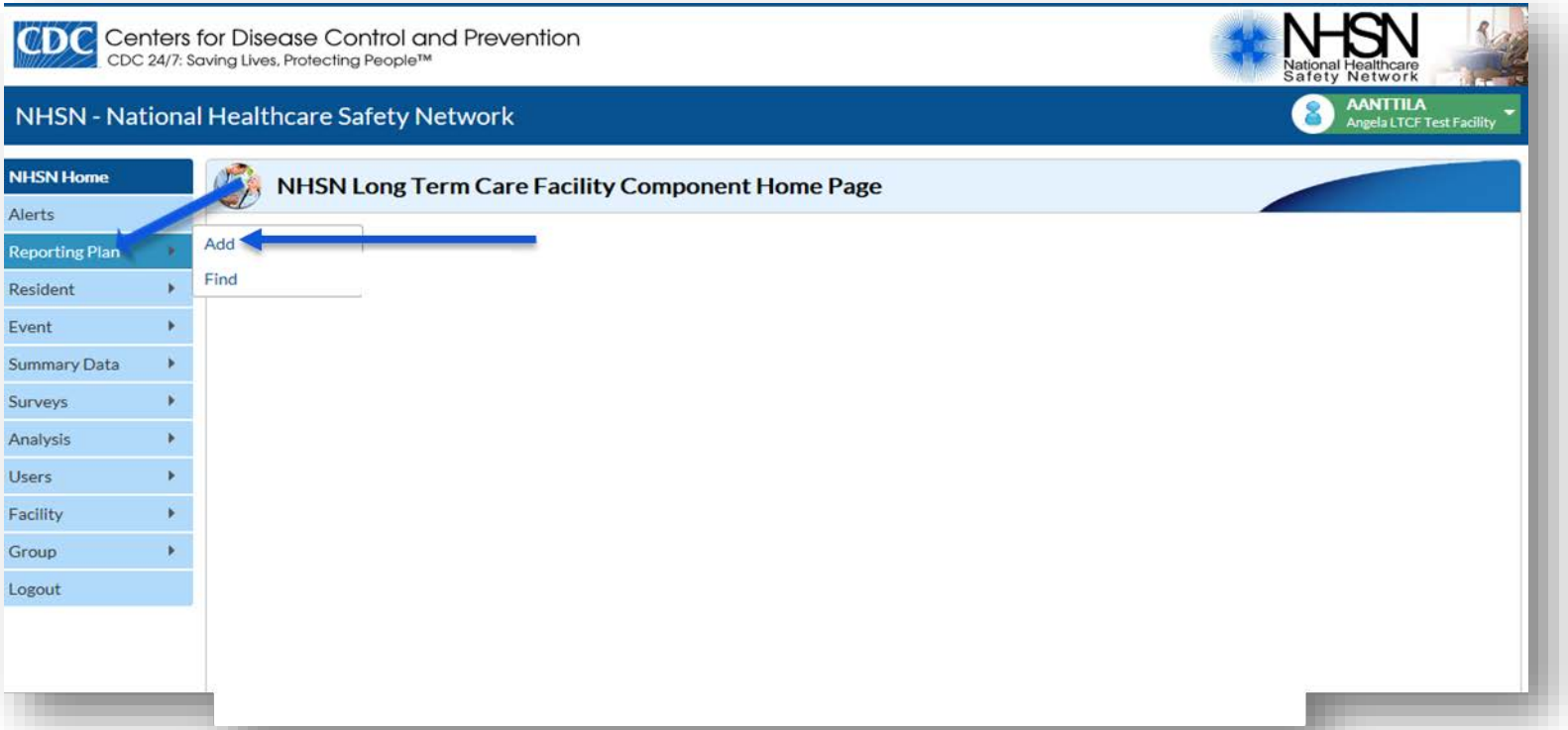
MONTHLY REPORTING PLAN

- 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

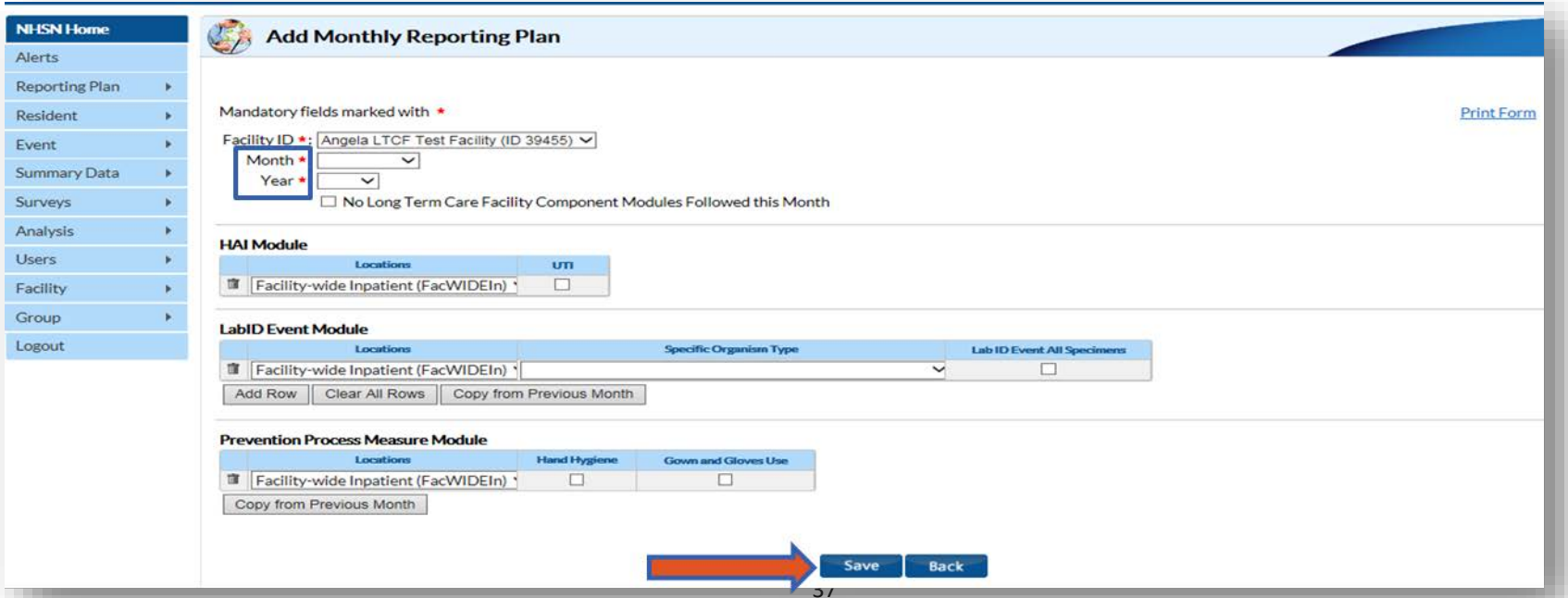
- A facility may complete plans for up to one calendar year in advance.
- A plan may be edited at any time to add or remove surveillance options, including retrospectively.
  - *Note: Surveillance options may only be deleted if no event or summary data has been entered for that event type and month.*

ADD Monthly Reporting Plan for LTCF



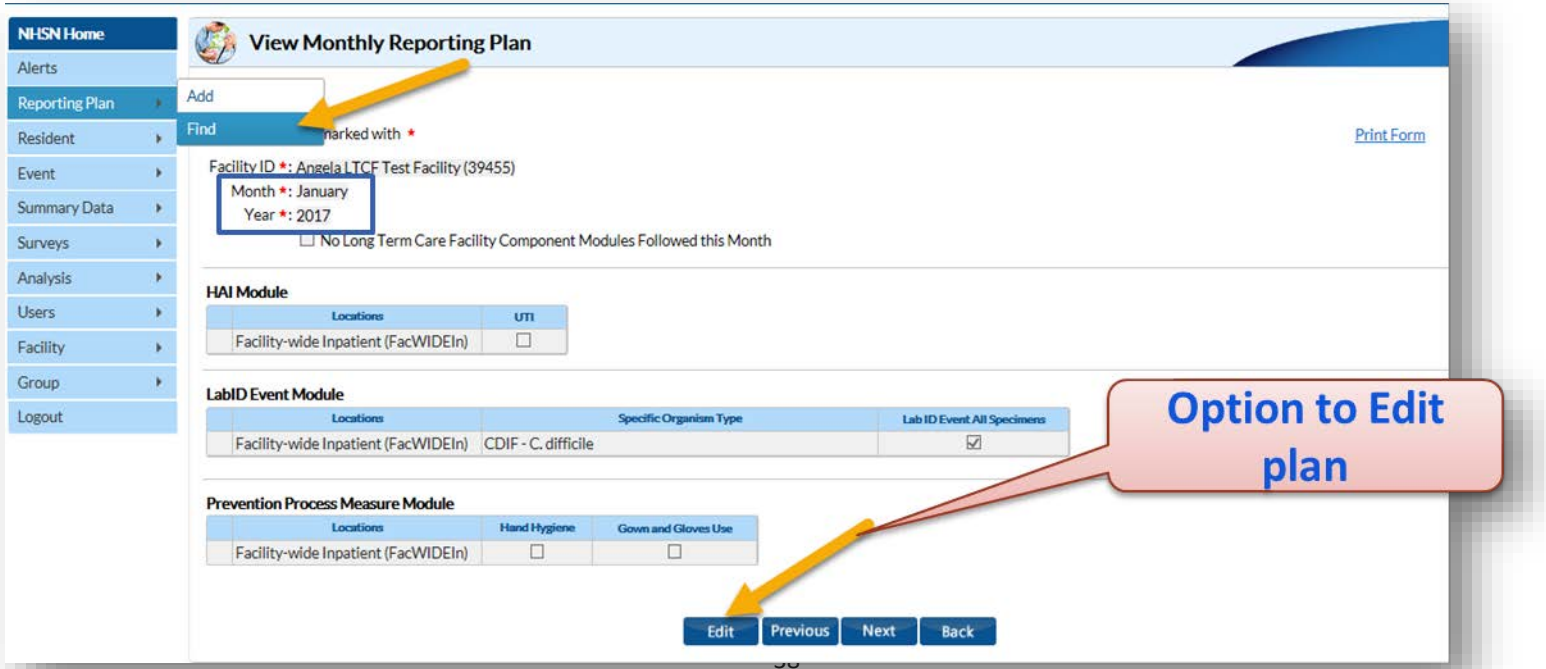
Monthly Reporting Plan for LTCF

- 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

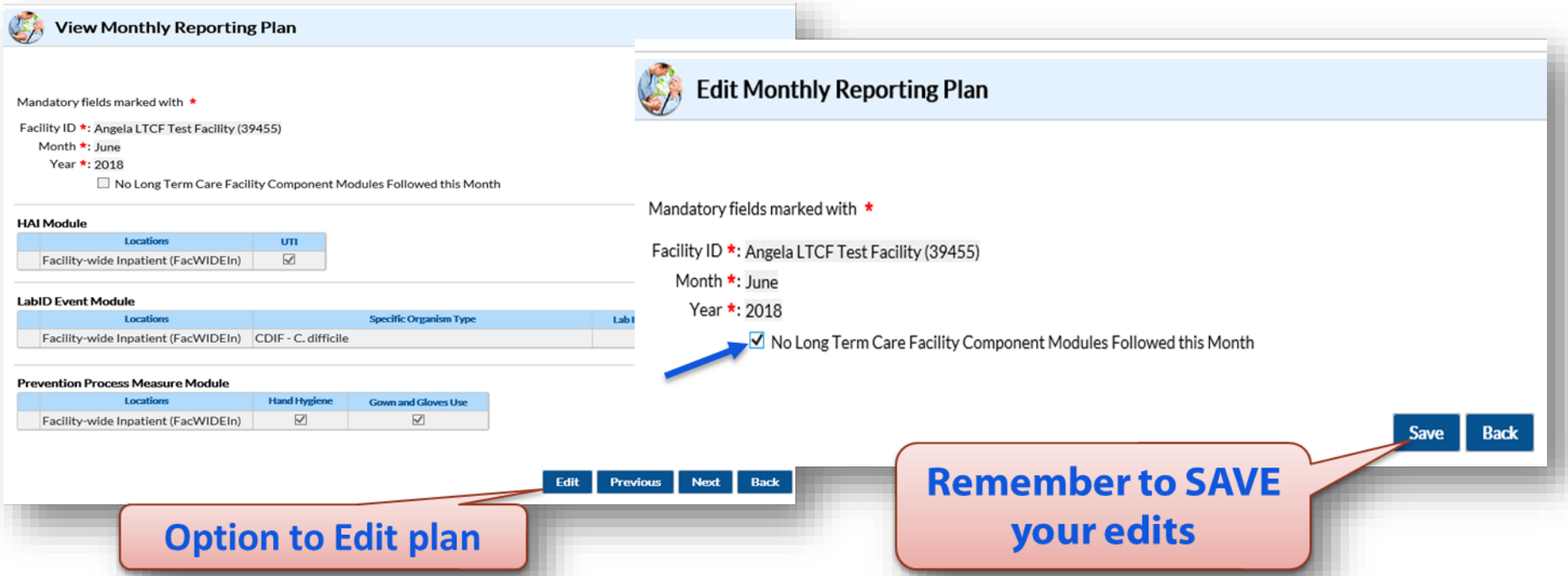
- ✓ Plans may be edited to add or remove surveillance selections.
  If event or summary data has already been entered for a selected month, associated module/event selections may not be deleted from the plan.



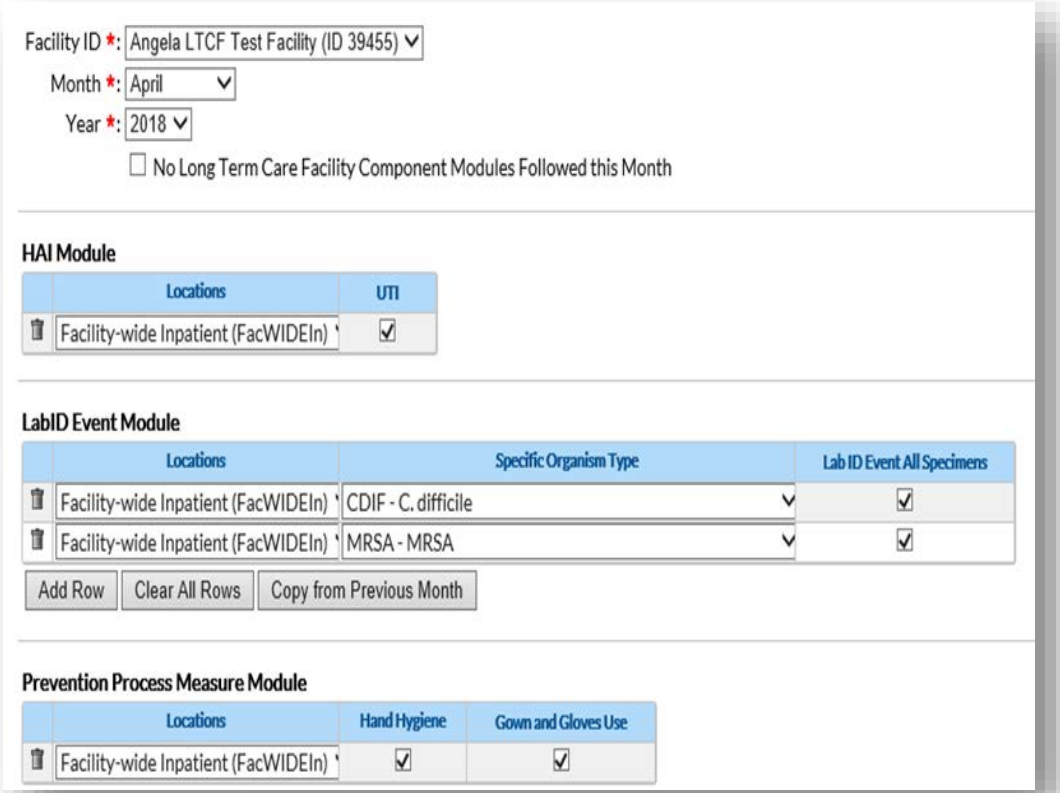
EDIT Monthly Reporting Plan, *continued*

- ✓ 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"



Lets Review 1: Based on this reporting plan, what modules and events will this facility report for April, 2018?


Facility ID *: Angela LTCF Test Facility (ID 39455)
Month *: April
Year *: 2018
No Long Term Care Facility Component Modules Followed this Month

HAI Module

	Locations	UTI
	Facility-wide Inpatient (FacWIDEIn)	☑

LabID Event Module

	Locations	Specific Organism Type	Lab ID Event All Specimens
	Facility-wide Inpatient (FacWIDEIn)	CDIF - C. difficile	☑
	Facility-wide Inpatient (FacWIDEIn)	MRSA - MRSA	☑

Add Row | Clear All Rows | Copy from Previous Month

Prevention Process Measure Module

	Locations	Hand Hygiene	Gown and Gloves Use
	Facility-wide Inpatient (FacWIDEIn)	☑	☑

A. UTI only

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

C. All Modules, all events

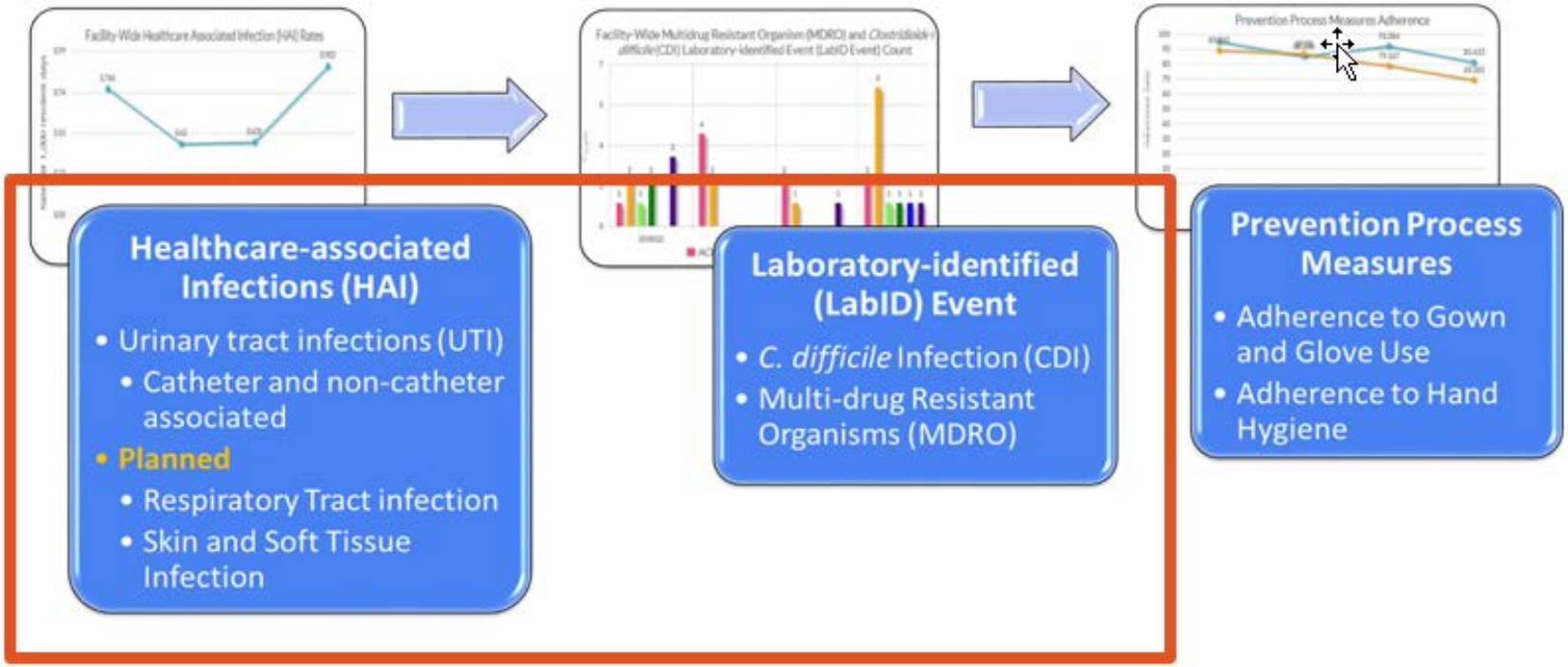
Submit Resident Infection EVENT DATA

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.

NHSN National Healthcare Safety Network

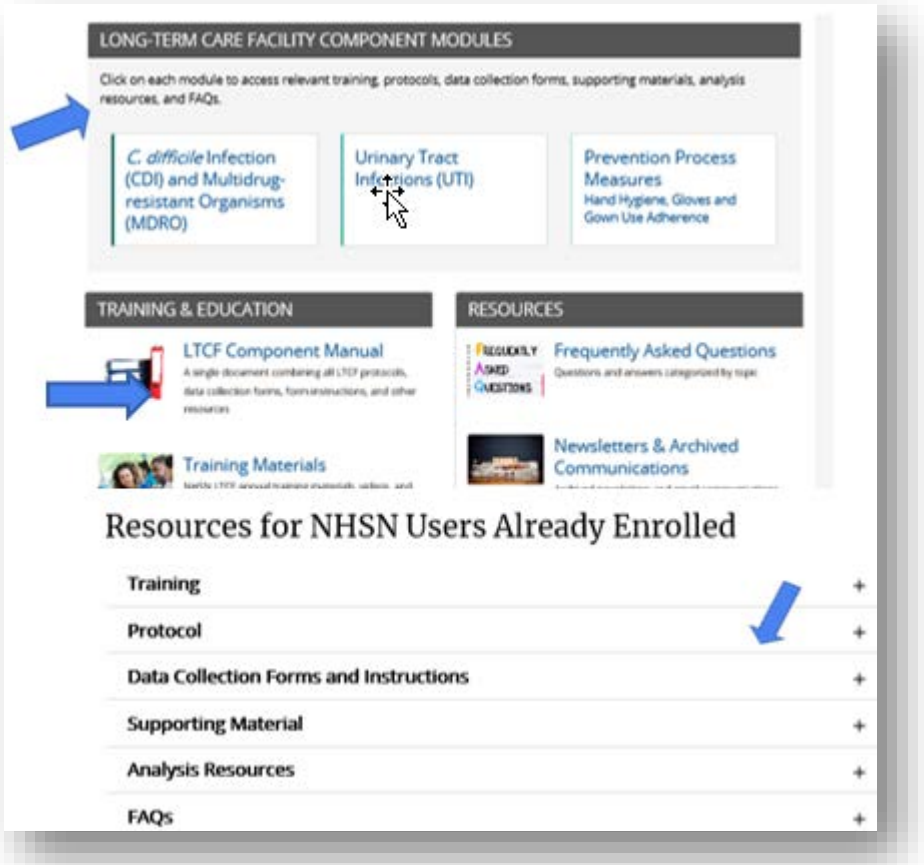
Two Modules for Reporting Infection Events



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

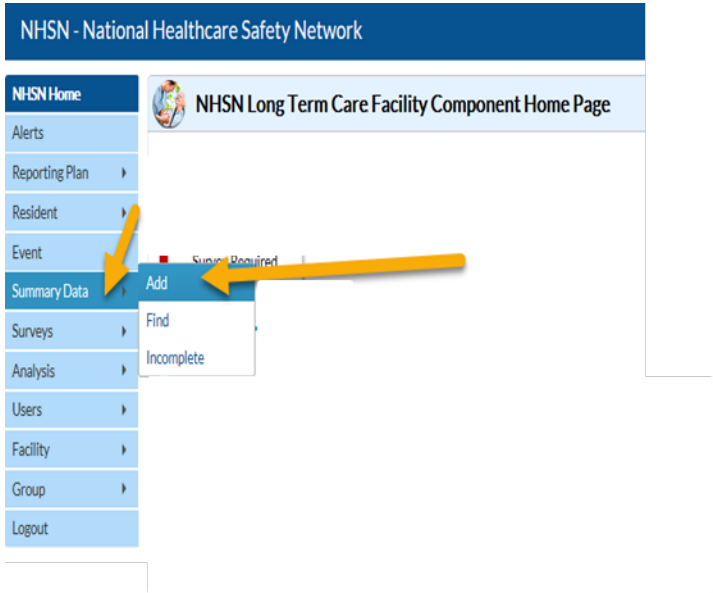


Submit MONTHLY SUMMARY DATA

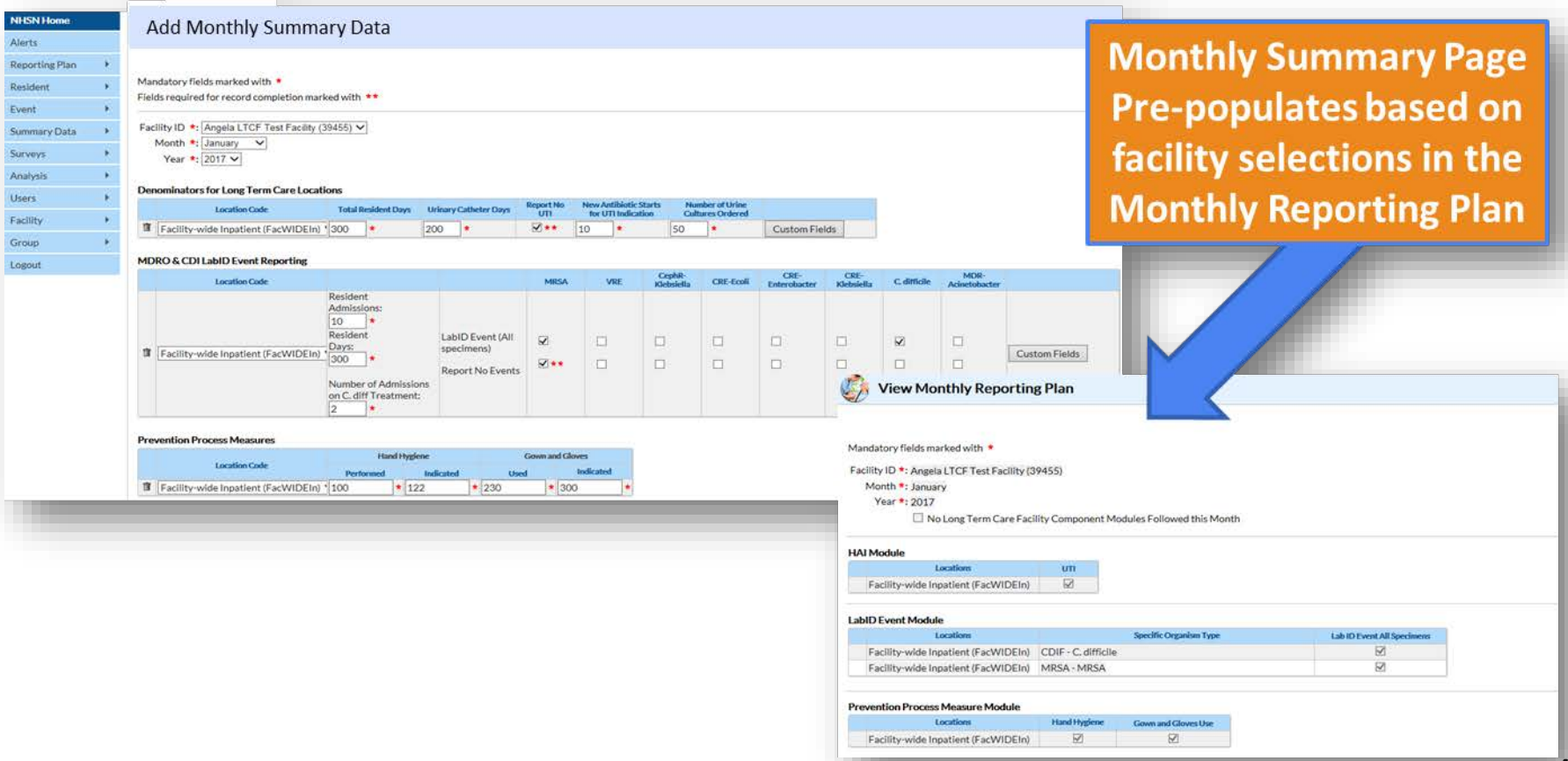
Submit monthly summary data for each month under surveillance, even if no events were reported for that month.

Submit MONTHLY SUMMARY DATA to NHSN

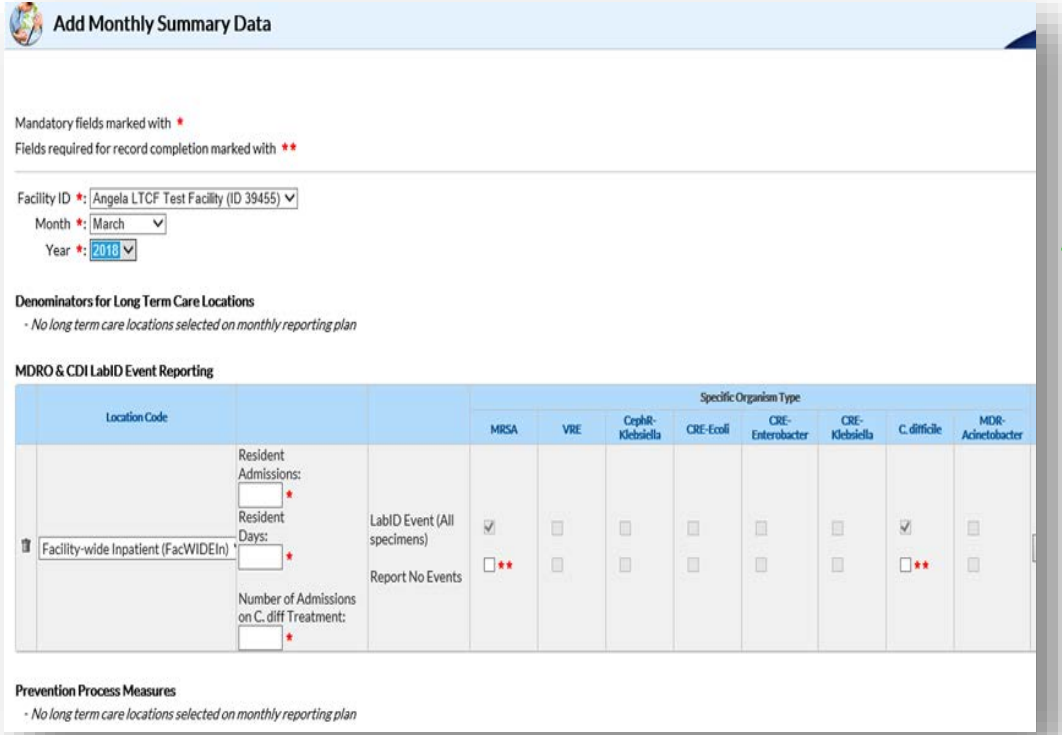
- **Referred to as denominator data**
- **At the end of the month, enter <u>monthly total</u> denominator data into the NHSN application**
  - Unless otherwise stated, best practice is to have monthly events and summary data complete by the end of the following month **!**
  - *Example: have June data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



Lets 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?



Add Monthly Summary Data

Mandatory fields marked with *
Fields required for record completion marked with **

Facility ID *: Angela LTCF Test Facility (ID 39455)
Month *: March
Year *: 2018

Denominators for Long Term Care Locations

- *No long term care locations selected on monthly reporting plan*

MDRO & CDI LabID Event Reporting

Location Code			Specific Organism Type							
			MRSA	VRE	CephR-Klebsiella	CRE-Ecoli	CRE-Enterobacter	CRE-Klebsiella	C. difficile	MDR-Acinetobacter
Facility-wide Inpatient (FacWIDEIn)	Resident Admissions: *	LabID Event (All specimens)	☑	☐	☐	☐	☐	☐	☑	☐
	Resident Days: *	Report No Events	☐**	☐	☐	☐	☐	☐	☐**	☐
	Number of Admissions on C. diff Treatment: *									

Prevention Process Measures

- *No long term care locations selected on monthly reporting plan*

A. All modules, all events

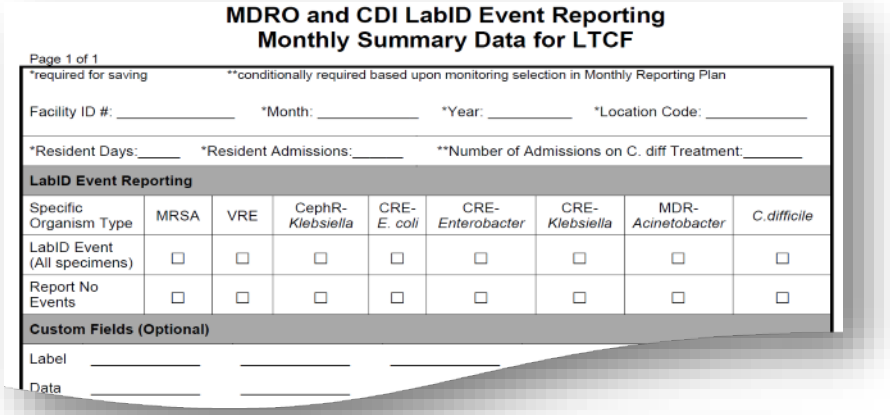
B. MRSA and CDI LabID events

C. CDI and all MDRO LabID events

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**



MDRO and CDI LabID Event Reporting
Monthly Summary Data for LTCF

Page 1 of 1

*required for saving **conditionally required based upon monitoring selection in Monthly Reporting Plan

Facility ID #: _____ *Month: _____ *Year: _____ *Location Code: _____

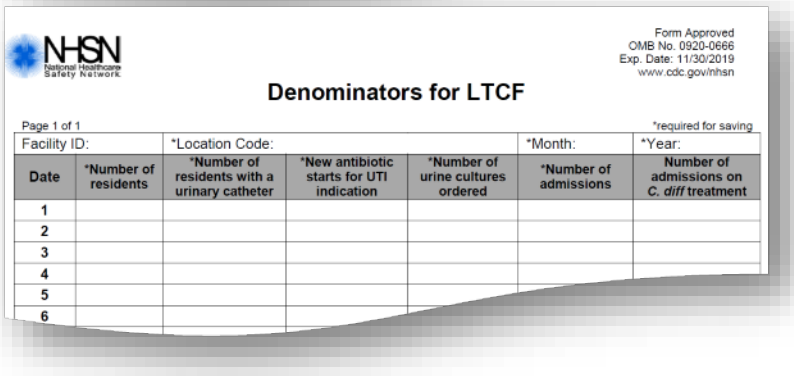
*Resident Days:_____ *Resident Admissions:_____ **Number of Admissions on C. diff Treatment:_____

LabID Event Reporting								
Specific Organism Type	MRSA	VRE	CephR-*Klebsiella*	CRE-*E. coli*	CRE-*Enterobacter*	CRE-*Klebsiella*	MDR-*Acinetobacter*	*C.difficile*
LabID Event (All specimens)	☐	☐	☐	☐	☐	☐	☐	☐
Report No Events	☐	☐	☐	☐	☐	☐	☐	☐

Custom Fields (Optional)

Label _____ _____ _____

Data _____ _____



NHSN National Healthcare Safety Network

Form Approved
OMB No. 0920-0666
Exp. Date: 11/30/2019
www.cdc.gov/nhsn

Denominators for LTCF

Page 1 of 1 *required for saving

Facility ID:	*Location Code:				*Month:	*Year:
Date	***Number of residents**	***Number of residents with a urinary catheter**	***New antibiotic starts for UTI indication**	***Number of urine cultures ordered**	***Number of admissions**	**Number of admissions on *C. diff* treatment**
1						
2						
3						
4						
5						
6						

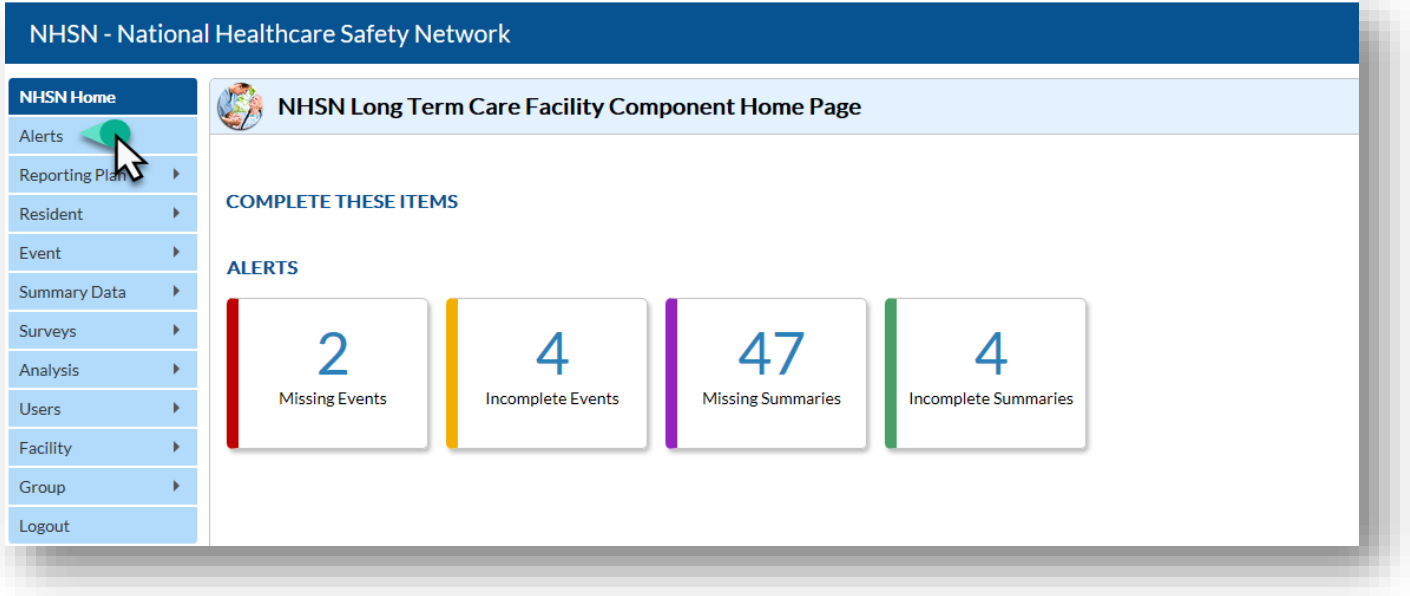
Resolve outstanding alerts to improve the quality of your data!

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

NHSN
National Healthcare Safety Network

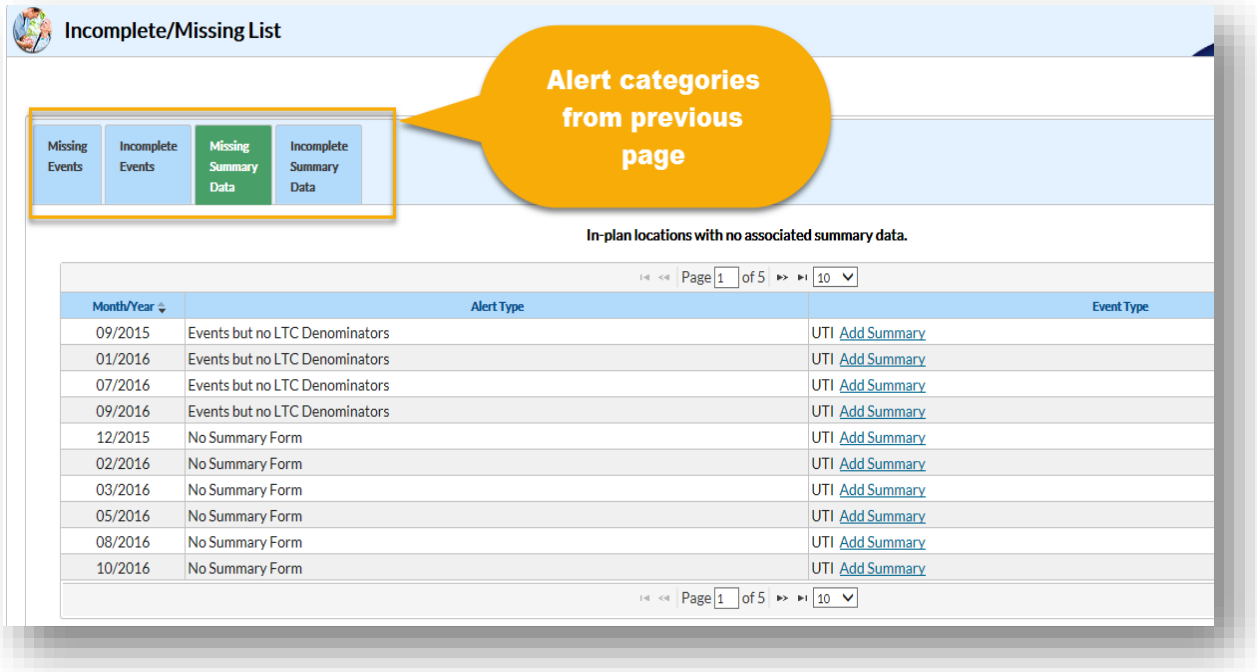
Alerts !

- 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.

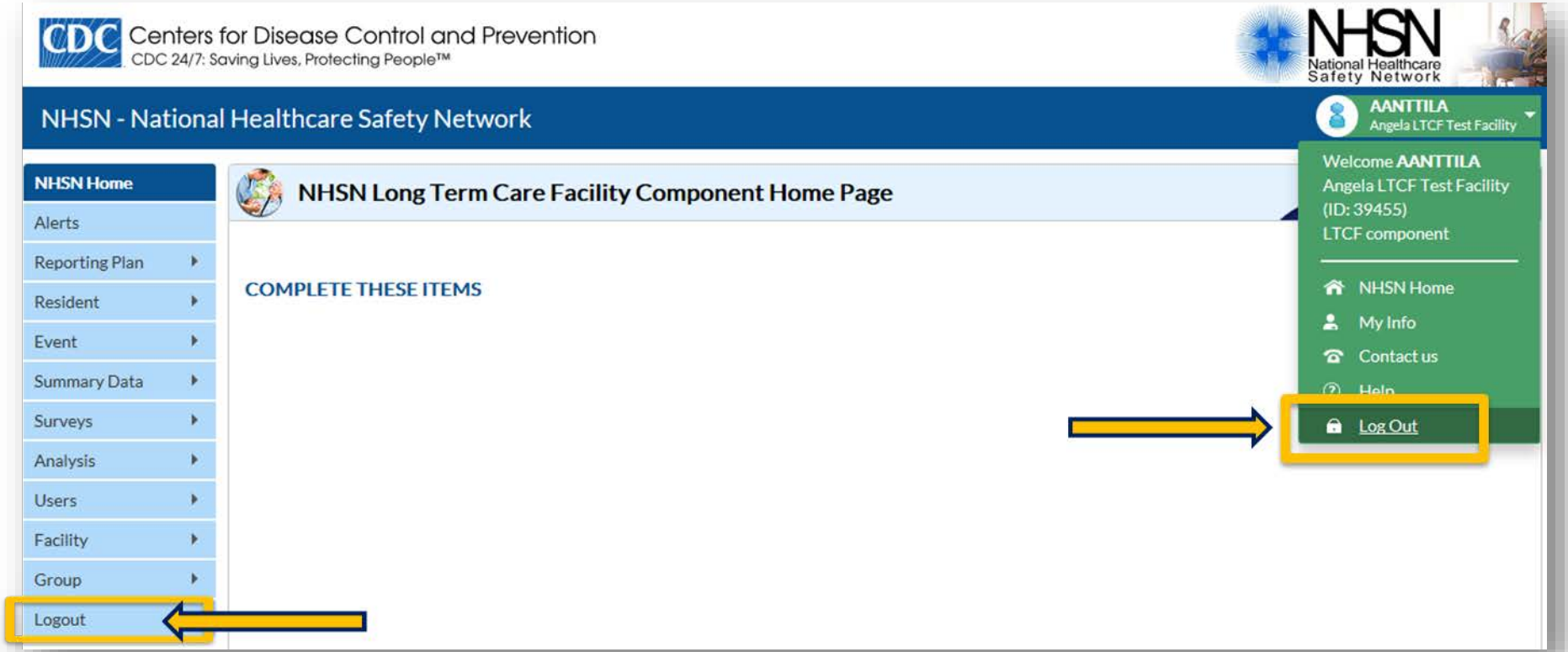


Alerts !

- 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

LONG-TERM CARE FACILITY COMPONENT MODULES

Click on each module to access relevant training, protocols, data collection forms, supporting materials, analysis resources, and FAQs.

- *C. difficile* Infection (CDI) and Multidrug-resistant Organisms (MDRO)
- Urinary Tract Infections (UTI)
- Prevention Process Measures
  Hand Hygiene, Gloves and Gown Use Adherence

TRAINING & EDUCATION

LTCF Component Manual
A single document combining all LTCF protocols, data collection forms, form instructions, and other resources

Training Materials
NHSN LTCF annual training materials, videos, and presentations

Educational Roadmap
Kick start your training with an overview of the LTCF component

RESOURCES

Frequently Asked Questions
Questions and answers categorized by topic

Newsletters & Archived Communications
Archived newsletters and email communications

Data Validation Guidance
LTCF guidance and resources for internal and external data validation, including relevant archived protocols and trainings

HEALTHCARE PERSONNEL VACCINATION COMPONENT

Long-term facilities are also eligible to report to the Healthcare Personnel Vaccination Component. The component allows facilities to monitor influenza vaccination coverage of personnel.

View enrollment information and resources.

LTCF ENROLLMENT

New to NHSN? Enroll here
Enrollment for nursing homes, assisted living and residential care, chronic care facilities and skilled nursing facilities.

Additional Resources

- NHSN Manual: Biovigilance Component Protocol April 2018 [PDF – 1 MB]
- Healthcare Personnel Safety Component Manual [PDF – 1 MB]
- Long-term Care Facility Manual 2019 [PDF – 4 MB]
- 2019 NHSN Patient Safety Component Manual

QUESTIONS?