The National Healthcare Safety Network (NHSN)

Long-Term Care Facility Component Manual

Tracking Healthcare-Associated Infections (HAIs) in Long-term Care Facilities

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CDC Locations and Descriptions

** Important: This document is used to set-up locations for all facility types used by NHSN. LTCFs should only use the locations listed in the "Long Term Care Facilities" section, beginning on page 28 of the document.*

IMPORTANT: The embedded protocols, forms, table of instructions, and supporting website documents retain their individual page numbers as shown on the LTCF webpage. Additionally, the embedded hyper-links will redirect users to the documents posted on the LTCF website.

Section 1: LTCF Version History

Release Year	Summary of Revisions
2012	NHSN LTCF Component launched
2015	• Denominator: two new variables, "new antibiotic starts for UTI indication" and "number of admissions on *C. difficile* treatment." • Ertapenem added as antimicrobial agent for MDR-*Acinetobacter.*
2016	• Generalized use of "with no alternate source" no longer applicable to all signs and symptoms in UTI protocols. • Fever and hypotension no longer excluded from UTI protocol if resident has another potential infection source. • Yeast and non-bacteria organisms removed as acceptable UTI pathogens. • "Has resident been discharged from an acute care facility in the previous 3 months" changed to 4 weeks in LabID Event protocol. • Analysis: new group-level and facility-level LO CDI Incident Rate tables.

2017	• UTI event protocol: "has resident been discharged from an acute care facility in the previous 3 months" changed to 4 weeks.
	• Annual survey: three additional questions added to antimicrobial stewardship section.
	• Denominator: new variable added, "number of urine cultures ordered."
	• Following clarifications made to LabID Event protocol
	  ○ CDI testing on loose/unformed stool only
	  ○ Qualifying specimens include specimens collected while resident is housed in the LTCF and specimens collected from emergency department or outpatient setting during the resident's
	• Clarification foot notes added to CDI LabID Event rate table.
	• Organism lists updated (impacts UTI reporting)
	  ○ NHSN All Organisms list updated
	  ○ Common Commensal list- 13 general added

2018	• Events: The entry of the resident's social security number changed from "required" to "optional." • Annual survey: optional water management program section added to the survey to address Legionella and waterborne pathogen prevention. • Annual survey: PCR added as an example of Nucleic acid amplification test (NAAT) (e.g., PCR, LAMP) on question #3. • Analysis: business rules added to improve denominator reporting accuracy. • Analysis: facility name added as a variable to allow group users to produce a report with the facility name. • Analysis: custom field variable name table added to analysis to allow users to efficiently map their custom fields when producing a report.

Release Year	Summary of Revisions
	• UTI event page: updates made to UTI event section of the NHSN application to improve language consistency between event form and NHSN application. • General: e.g., replaced with "for example" and i.e., replaced with "specifically" throughout protocols. • Enrollment: updated language and consent process for NHSN Agreement to Participate. • Analysis: participation alerts line list and frequency table added to provide a summary of the NHSN alerts specific to LTC facilities (April 2018) • Analysis: "facility name" variable has been added as a selection to facility and group analysis reports (April 2018)
2019	• *Annual Facility Survey*: To assist in improving data quality, a pop-up message will appear as a reminder to verify the primary testing method for *C. difficile* when: (1) An uncommon *C. difficile* testing method is selected (specifically, culture or cell cytotoxicity neutralization assay); or (2) "Other" is selected and the testing method that is manually typed in the space is equivalent to one of the provided testing methods. • *Summary Data*: Added a new required variable called "CDI Treatment Starts" to enable an estimate of CDI burden in a facility when empiric treatment for CDI occurs in the absence of confirmatory testing. • *General: Clostridium difficile* infection (CDI), also known as *C. difficile* infection, has been reclassified as *Clostridioides difficile* (CDI), also known as *C. difficile* infection. Note: Currently, the update is only reflected in the NHSN protocols, forms, and table of instructions. • *Event Reporting-All Modules*: To assist in improving data quality, a pop-up message will appear on the Event Page if the selected Resident Type (Short Stay [SS] or Long Stay [LS]) does not meet the NHSN definition based on the date of first admission and the event date. • *UTI Event*: Updates to urine culture requirements – removed collection method specific criteria. Instead, to be considered a qualifying urine culture, the positive culture must contain no more than 2 species of microorganisms, at least one of which is a bacterium of ≥ 105 CFU/ml. • *Analysis and Reporting*: In the NHSN line listing and rate tables, the column titles were updated to reflect the descriptive variable names as the default instead of the variable names. • *Analysis and Reporting*: The following additional variables added as columns to the default Line Listing - All CDI LabID Events: (1) CDI Assay; (2) Onset; Onset Description; and (4) Days: Admit to Event. Definitions for

Release Year	Summary of Revisions
	incident and recurrent CDI added as footnotes to Line Listing - All CDI LabID Events. • NHSN interactive dashboard released. (April 2019) • Facilities have option to import resident demographic data using a comma separated file. (April 2019) • Facilities planning to withdraw from NHSN will be able to export Facility Data to a comma separated file or to other NHSN approved formats. (April 2019) • Facilities now have the functionality to self-identify as "Indian Health Services" (IHS). (April 2019) • The .pdf version of updated Annual Surveys is available in the application. (April 2019)
2020	• UTI Event: Specimen collection type removed from form and NHSN interface. Only one option for urine culture laboratory selection. • *Resident type* (short-stay verses long-stay) will auto-populate on all event reporting based on date of first admission and event date • All positive *C. difficile* LabID Events must be reported when participating in CDI LabID Event reporting • All positive MDRO LabID Events must be reported when participating in MDRO LabID Event reporting • MSSA column added to interface Monthly Summary Data for LTCF form (CDC 57.139). The MDRO & CDI LabID Event Reporting section of the summary form allows facilities to specify the specific organism type and corresponding report now infections for a given month. Each MDRO/CDI organism is listed as a separate column, except MSSA. Adding MSSA as a separate column will improve accuracy of LabID event reporting and allow for MSSA-specific data analysis. • New form (CDC 57.104) - *NHSN Facility Administrator Change Request Form* may be used in place of submitting a letter when the NHSN Facility Administrator is no longer able to gain access to the NHSN application to add the new NHSN Facility Administrator. This online form may be accessed on the following website- https://www.cdc.gov/nhsn/facadmin/index.html • Frequently Asked Questions document for LTCFs updated

Release Year	Summary of Revisions
2023	• UTI Event: For the pathogen Staphylococcus aureus: ADDED drug susceptibility "N" (Not Tested) to drug CEFTAR (Ceftaroline); • UTI Event: For the pathogen Enterococcus species (not specified): ADDED drug susceptibility "I" (Intermediate) to drug DAPTO (Daptomycin); • UTI Event: For the question 'othCathType': REMOVED the option 'COND-Condom' and ADD the option 'External drainage (male or female) • Monthly Reporting Plan for LTCF: Removal of Weekly COVID-19 Vaccination Module section • Annual Facility Survey: The word "antibiotic" was updated to "antimicrobial" for questions (12 - 21) to make terminology consistent. • Annual Facility Survey: For question 12 - Added "Infection Preventionist" to the list of potential individuals • Annual Facility Survey: For question 14 - Removed emphasis on antibiograms (local susceptibility) which are not commonly available. • Annual Facility Survey: For question 16 - Removed the "type of feedback" check boxes • Annual Facility Survey: For question 17 - Four check boxes were added for the following types: Pharmacy services, Electronic Health Records, Manual reporting (i.e., facility infection control log), Other (please specify) • Frequently Asked Questions document for LTCFs updated
2024	• UTI Event: Acute Dysuria added to CA-SUTI criteria. • UTI Event: Addition of **optional** data fields for reporting gender identity and sex at birth. • LabID Event: Addition of **optional** data fields for reporting gender identity and sex at birth. • Annual Facility Survey: Questions (2; 6-9) were modified to (1) include pathogens that affect nursing home populations and (2) align with CDC considerations for use of enhanced barrier precautions (EBP) in skilled nursing facilities for MDRO's: Reviews, Products & Recommendations | HICPAC | CDC

Section 2: National Healthcare Safety Network (NHSN) Overview

The National Healthcare Safety Network (NHSN) is a secure, Internet-based surveillance system that expands and integrates patient and healthcare personnel safety surveillance systems managed by the Division of Healthcare Quality Promotion (DHQP) at the Centers for Disease Control and Prevention. In addition, facilities that participate in certain reporting programs operated by the Centers for Medicare and Medicaid Services (CMS) can do so through use of NHSN. Furthermore, some U.S. states use NHSN as a means for healthcare facilities to submit data on healthcare-associated infections (HAIs) and transfusion-related adverse events mandated through their specific state legislation.

NHSN enables healthcare facilities to collect and use data about HAIs, adherence to clinical practices known to prevent HAIs, the incidence or prevalence of multidrug-resistant organisms within their organizations, trends and coverage of healthcare personnel safety and vaccination, and adverse events related to the transfusion of blood and blood products.

The NHSN includes seven components: Patient Safety, Long-term Care Facility, Healthcare Personnel Safety, Biovigilance, Outpatient Dialysis, Outpatient Procedure, and Neonatal Component. (Figure 1)

Figure 1: NHSN Components

Options for Long-term Care Facilities

Long-term care facilities have two options for participating in the NHSN, which include the Long-term Care Facility (LTCF) Component and the Healthcare Personnel Safety (HPS) Component. The focus of this manual is on participation in the LTCF Component. If users are

interested in learning more about reporting options for healthcare worker influenza vaccinations, the Healthcare Personnel Vaccination Module can be found here Weekly HCP & Resident Flu Vaccination | LTCF | NHSN | CDC

Section 3: Surveillance

Surveillance Overview

Surveillance is defined as the ongoing systematic collection, analysis, interpretation, and dissemination of data. A facility infection prevention and control (IPC) program should use surveillance to identify infections and monitor performance of practices to reduce infection risks among residents, staff, and visitors. Information collected during surveillance activities can be used to develop and track prevention priorities for the facility.

When conducting surveillance, facilities should use clearly defined surveillance definitions that are collected in a consistent way. This method ensures accurate and comparable data regardless of who is performing surveillance. The NHSN LTCF modules provide standard surveillance definitions, allowing participating facilities to consistently apply well defined data elements to ensure accurate, reproducible, and comparable data.

Data collection requires active, resident-based, prospective surveillance of events and their corresponding denominator data by someone trained in surveillance, such as an Infection Preventionist (IP). This means the IP shall seek out infections during a resident's stay by screening a variety of data sources, such as laboratory, pharmacy, medication regimen review, and admission/discharge/transfer reports, as well as resident charts, including history and physical exam notes, nurses/physicians' notes, temperature charts, and more. This method incorporates the use of these data sources to monitor for signs and/orsymptoms of an infection event (for example, urinary tract infection event) using the surveillance criteria. To minimize burden on the IP, other healthcare personnel may be trained to screen data sources for these infections (for example, Foley catheter days), but the IP should make the final determination of the event. This practice ensures consistent application of the surveillance criteria, even if different individuals are involved in the data collection process.

Laboratory-based surveillance should not be used alone, unless all possible criteria for identifying an infection are solely determined by laboratory evidence (for example, LabID event detection in the CDI/MDRO Module). NHSN provides paper forms and instructions that may be useful when collecting the required data.

Surveillance Measures and Techniques

Surveillance may include process surveillance and outcome surveillance. Process surveillance includes reviewing practices by healthcare workers directly related to resident

care to identify whether facility infection prevention and control policies are being followed. Examples may include hand hygiene adherence, appropriate use of personal protective equipment such as gowns, gloves, and facemasks, adherence to safe injection practices, and infection prevention and control practices used during wound care. Using outcome surveillance, facilities incorporate infection criteria, such as those provided to NHSN users, to identify and report evidence of suspected or confirmed healthcare associated infection or communicable disease. Examples of outcome surveillance include monitoring staff and residents for infection events, which may be indicative of an outbreak or a complication as a result of care received in the facility, such as *C. difficile* infection or urinary tract infection.

There are different methods for performing outcome surveillance. The two most common methods are comprehensive and targeted. When determining which method to implement for a facility, one should consider staff time and available resources, the frequency of events being monitored, and the facility IPC program surveillance goals.

Comprehensive surveillance, also referred to as facility-wide surveillance, is an approach that involves tracking all infections among all residents in the facility. The benefit of this surveillance method is that a facility is likely to identify all infections occurring among the residents in that facility. However, comprehensive surveillance can be time and resource consuming, particularly for larger facilities, thereby limiting opportunities for analyzing data and implementing prevention activities.

A facility that conducts targeted surveillance, also referred to priority directed surveillance, focuses surveillance activities on high risk, preventable, and/or high consequence infections significant to their resident population. For example, by focusing on device associated infections in high-risk units, such as skilled nursing or ventilator-dependent, facilities are able to implement prevention measures to reduce infection risks among residents in those units. Another example of targeted surveillance is monitoring epidemiological significant organisms, such as multi-drug resident organisms (for example, MRSA, VRE, and CRE) or *C. difficile* among residents in the facility. By focusing staff time and resources on a smaller number of clinically important events, more time is available for detailed data collection and analysis to identify trends and opportunities for prevention. Since targeted surveillance methods may result in missed infections and potential outbreaks, facilities should have a facility-wide process in place to detect outbreaks and multi-drug resistant organisms.

Section 4: Introduction to Long-term Care Facility Component of NHSN

Nursing homes (NH), skilled nursing facilities (SNF), and assisted living facilities, collectively known as long-term care facilities (LTCFs) provide a variety of services to people who are unable to manage independently in the community. These services may include both medical and personal care. It is estimated that over 3 million Americans

receive care in U.S. NHs and SNFs each year and nearly one million persons reside in assisted living facilities. Data about infections in LTCFs are limited, but it has been estimated in the medical literature that:

- 1 to 3 million serious infections occur every year in these facilities.
- Infections include urinary tract infection, diarrheal diseases, antibiotic-resistant staph infections, and many others.
- Infections are a major cause of hospitalization and death; as many as 380,000 people die of the infections in LTCFs every year.

Eliminating infections, many of which are preventable, is a significant way to improve care and decrease costs. CDC's NHSN provides LTCFs with a customized system to track infections in a streamlined and systematic way. When facilities track infections, they can identify problems and track progress toward stopping infections. On the national level, data entered in NHSN will gauge progress toward national HAI goals.

The NHSN LTCF Component provides LTCFs with standardized surveillance methods and definitions. The Component is ideal for use by nursing homes, skilled nursing facilities, chronic care facilities, and assisted living and residential care facilities. The Component consists of three modules: (1) Healthcare-associated Infection-Urinary Tract Infections; (2) Laboratory-identified Event - *Clostridioides difficile* Infection and Multidrug-resistant Organism (CDI/MDRO); and (3) Prevention Process Measures. The LTCF surveillance protocols, training materials, data collection forms, instructions, and other supporting materials are provided on the Long-term Care Component website: Long-term Care Facilities (LTCF) Component | NHSN | CDC

Training

A variety of online training options are available for users on the NHSN LTCF Component training website, including presentations and recorded webinars. Additional trainings may be provided through scheduled webinars. Training opportunities are communicated to NHSN users through the NHSN quarterly newsletter and emails from the LTCF Team.

ServiceNow

CDC-NHSN is available to answer your questions about the surveillance protocols and to help navigate the NHSN web application. CDC-NHSN is available to answer your questions about the surveillance protocols and to help navigate the NHSN web application. Please use NHSN-ServiceNow to submit questions to the NHSN Help Desk. The new portal can be accessed here. Users will be authenticated using CDC's Secure Access Management Services (SAMS), the same way you access NHSN. If you do not have a SAMS login, or are unable to access ServiceNow, you can still e-mail the NHSN Help Desk at: nhsn@cdc.gov.

Long-term Care Facility Component Modules

1. Healthcare-Associated Infection Module for Urinary Tract Infection Events

The urinary tract is one of the most common sites of healthcare-associated infections, accounting for up to 20% of infections reported by long-term care facilities (LTCFs). Risk factors for developing bacteriuria and UTI include age-related changes to the genitourinary tract, comorbid conditions resulting in neurogenic bladder, and instrumentation required to manage bladder voiding. Though the prevalence of indwelling urinary catheter use in LTCFs is lower than the acute care setting, catheter-associated symptomatic UTI (CA-SUTI) can lead to complications such as cystitis, pyelonephritis, bacteremia, and septic shock. These complications can then lead to declined resident function and mobility, acute care hospitalizations, and increased mortality.
NHSN enables facilities to monitor infectious complications associated with the use of indwelling urinary catheter devices and also to monitor processes related to their use, which might increase infection risk.

Urinary device-associated denominator data should be collected at the same time each day. When denominator data are available from electronic databases, these sources may be used as long as the counts are not substantially different (+/- 5%) from manually collected counts that have been validated for a minimum of three months. See the respective device-associated event protocols for detailed surveillance instructions.

Web Page: Urinary Tract Infections (UTI) | LTCF | NHSN | CDC

2. Laboratory-identified Event Module for *Clostridioides difficile* Infection and Multidrug Resistant Organism Events

The Laboratory-identified (LabID) Event Module of the NHSN LTCF Component is a tool designed for use in Nursing Homes/Skilled Nursing Facilities (LTC:SKILLNURS); Intermediate Care Facilities for Individuals with Intellectual Disabilities (LTC:ICF/IID); Psychiatric Residential Treatment Facility (LTC:PSYCH); Skilled Nursing Facility for State Veteran's Homes (LTC:SVHSNF) to help meet criteria outlined in guidelines for the prevention, control, and surveillance of multidrug resistance organisms (MDRO) and *C. difficile* infection (CDI). As outlined in these guidelines, these pathogens may require specialized monitoring to evaluate if intensified infection control efforts are required to reduce the occurrence of these organisms and related infections. The goal of this module is to provide a mechanism for facilities to collect, report, and analyze data that will inform infection prevention and control staff of the impact of prevention efforts. This module contains two options, one focused on CDI and the second on select MDROs.
Web Page: MDRO & CDI | LTCF | NHSN | CDC

3. Prevention Process Measures Module

The Prevention Process Measures Module is a tool that allows long-term care facilities to measure the following practices: (1) adherence to hand hygiene; and/or (2) adherence to gown and glove use when caring for patients infected or colonized with a multi-drug resistant organisms or *C. difficile.*

Web Page: Prevention Process Measures (PPM) | LTCF | NHSN | CDC

Section 5: Long-Term Care Facility Annual Facility Survey

Participating facilities must complete the LTCF Annual Facility Survey at the time that they enroll in NHSN to activate the LTCF Component, and at the beginning of each calendar year thereafter. The survey is used by CDC to classify facilities for appropriate comparisons in aggregate data analyses and to learn more about common practices among LTCFs. Most survey questions are based on facility characteristics and practices during the previous calendar year. There is one exception to this rule, and that is the question about primary service type, which is based on current activities ON the day the survey is completed. For example, if the facility is enrolling in NHSN for the first time in March of 2024, report information for January 2023-December 2023 on the first LTCF Annual Facility Survey. In January 2025, complete a new survey with data from January 2024-December 2024.

The NHSN recommends that users collect all survey information using the paper form before attempting to enter data into the web application, as the survey will not save until all of the required questions are answered.

The *Instructions for Completion of Long-term Care Facility Annual Facility Survey* includes brief instructions for collection and entry of each data element on the form/web-page.

Form: 57.137_LTCF Survey (cdc.gov)

Form Instructions: Instructions for Completion of LTCF Component Annual Facility Survey (cdc.gov)

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Long Term Care Facility Component—Annual Facility Survey

Instructions for this form can be accessed: https://www.cdc.gov/nhsn/forms/instr/57.137-toi-annual-facility-survey.pdf

*Required for saving	Tracking #:
Facility ID:	*Survey Year:
*National Provider ID:	State Provider #:

Facility Characteristics

*Ownership (check one):

☐ For profit ☐ Not for profit, including church ☐ Government (not VA) ☐ Veterans Affairs

*Certification (check one):

☐ Dual Medicare/Medicaid ☐ Medicare only ☐ Medicaid only ☐ State only

*Affiliation (check one): ☐ Independent, free-standing ☐ Independent, continuing care retirement community

☐ Multi-facility organization (chain) ☐ Hospital system, attached ☐ Hospital system, free-standing

In the previous calendar year:

*Average daily census: _____

*Total number of short-stay residents: _____ Average length of stay for short-stay residents: _____

*Total number of long-stay residents: _____ Average length of stay for long-stay residents: _____

*Total number of new admissions: _____

*Number of Beds: _____ *Number of Pediatric Beds (age <21): _____

*Indicate which of the following primary service types are provided by your facility. On the day of this survey, indicate the number of residents receiving those services (list only one service type per resident, i.e. total should sum to resident census on day of survey completion):

Primary Service Type	Service provided?	Number of residents
a. Long-term general nursing:	☐	_____
b. Long-term dementia:	☐	_____
c. Skilled nursing/Short-term (subacute) rehabilitation:	☐	_____
d. Long-term psychiatric (non-dementia):	☐	_____
e. Ventilator:	☐	_____
f. Bariatric:	☐	_____
g. Hospice/Palliative:	☐	_____
h. Other:	☐	_____

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Long Term Care Facility Component—Annual Facility Survey

Facility Microbiology Laboratory Practices

*1. Does your facility have its own laboratory that performs microbiology/antimicrobial susceptibility testing?

☐ Yes ☐ No

If No, where is your facility's antimicrobial susceptibility testing performed? (check one)

☐ Affiliated medical center, within same health system ☐ Medical center, contracted locally

☐ Commercial referral laboratory

*2. Indicate whether your facility screens new admissions for any of the following multidrug-resistant organisms (MDROs): (check all that apply)

☐ We do not screen new admissions for MDROs

☐ Methicillin-resistant *Staphylococcus aureus* (MRSA)

If checked, indicate the specimen types sent for screening: (check all that apply)

☐ Nasal swabs ☐ Wound swabs ☐ Sputum ☐ Other skin site

☐ Vancomycin-resistant *Enterococcus* (VRE)

If checked, indicate the specimen types sent for screening: (check all that apply)

☐ Rectal swabs ☐ Wound swabs ☐ Urine

☐ Multidrug-resistant gram-negative rods (includes carbapenemase resistant Enterobacteriaceae; multidrug-resistant *Acinetobacter*, etc.)

If checked, indicate the specimen types sent for screening: (check all that apply)

☐ Rectal swabs ☐ Wound swabs ☐ Sputum ☐ Urine

☐ Candida Auris (C. Auris)

If checked, indicate the specimen types sent for screening: (check all that apply)

☐ Skin (axilla/groin) ☐ Nares ☐ Other site

*3. What is the primary testing method for *C. difficile* used most often by your facility's laboratory or the outside laboratory where your facility's testing is performed? (check one)

☐ Enzyme immunoassay (EIA) for toxin

☐ Cell cytotoxicity neutralization assay

☐ Nucleic acid amplification test (NAAT) (e.g., PCR, LAMP)

☐ NAAT plus EIA, if NAAT positive (2-step algorithm)

☐ Glutamate dehydrogenase (GDH) antigen plus EIA for toxin (2-step algorithm)

☐ GDH plus NAAT (2-step algorithm)

☐ GDH plus EIA for toxin, followed by NAAT for discrepant results

☐ Culture (*C. difficile* culture followed by detection of toxins)

☐ Other (specify): _____

("Other" should not be used to name specific laboratories, reference laboratories, or the brand names of *C. difficile* tests; most methods can be categorized accurately by selecting from the options provided. Please ask your laboratory, refer to the Tables of Instructions for this form, or conduct a search for further guidance on selecting the correct option to report.)

*4. Does your laboratory provide a report summarizing the percent of antibiotic resistance seen in common organisms identified in cultures sent from your facility (often called an antibiogram)?

☐ Yes ☐ No

If Yes, how often is this summary report or antibiogram provided to your facility? (check one)

☐ Once a year ☐ Every 2 years ☐ Other (specify): _____

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Long Term Care Facility Component—Annual Facility Survey

Infection Prevention and Control Practices

*5. Total staff hours per week dedicated to infection prevention and control activity in facility: _____
a. Total hours per week performing surveillance: _____
b. Total hours per week for infection prevention and control activities other than surveillance: _____

*6. Is it a policy in your facility to routinely use gown/gloves for care of residents infected or colonized with a multidrug-resistant organism (MDRO)? □ Yes □ No (***If "No", continue to question #7***)

If yes, please select the option that is applicable to your facility for each MDRO. (***"No" should only be selected if your facility does not have a policy for the MDRO listed.)***

Multidrug-resistant organism (MDRO)	All infected or colonized with?	Certain characteristics that make them high risk for transmission (e.g., wounds, presence of an indwelling device	No
a. MRSA:	☐	☐	☐
b. VRE:	☐	☐	☐
c. CRE:	☐	☐	☐
d. ESBL or extended spectrum cephalosporin resistant Enterobacteriaceae	☐	☐	☐
Novel and/or CDC-targeted MDROs			
e. Pan-resistant organisms	☐	☐	☐
f. Carbapenemase-producing organisms (e.g., Carbapenemase-producing Enterobacterales)	☐	☐	☐
g. Candida auris	☐	☐	☐

*7. Is it a policy in your facility to use gowns/gloves for care of residents with certain characteristics that make them high-risk for transmission or acquisition of an MDRO (e.g., wounds, presence of an indwelling device) regardless of MDRO status? □ Yes □ No

*8. When a resident colonized or infected with an MDRO is transferred to another facility, does your facility communicate the resident's MDRO status to the receiving facility at the time of transfer? □ Yes □ No

*9. Among residents with an MDRO admitted to your facility from other healthcare facilities, what percentage of the time does your facility receive information from the transferring facility about the resident's MDRO status? _____%

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Long Term Care Facility Component—Annual Facility Survey

Antibiotic Stewardship Practices

*10. Are there one or more individuals responsible for the impact of activities to improve use of antimicrobials at your facility? ☐ Yes ☐ No

If Yes, what is the position of the individual(s)? (select all that apply)

☐ Medical director ☐ Director of Nursing ☐ Infection Preventionist

☐ Consultant Pharmacist ☐ Other (please specify): _____

*11. Does your facility have a policy that requires prescribers to document an indication for all antimicrobials in the medical record or during order entry? ☐ Yes ☐ No

If Yes, has adherence to the policy to document an indication been monitored? ☐ Yes ☐ No

*12. Does your facility provide treatment recommendations for common infections based on national guidelines to assist with antimicrobial decision making ? ☐ Yes ☐ No

If Yes, has adherence to facility-specific treatment recommendations been monitored? ☐ Yes ☐ No

*13. Is there a formal procedure for performing a follow-up assessment 2-3 days after a new antimicrobial start to determine whether the antimicrobial is still indicated and appropriate (e.g. antibiotic time out)? ☐ Yes ☐ No

*14. Is there a formal procedure for reviewing courses of antimicrobial therapy and communicating with prescribers on antimicrobial selection, dosing, or duration of therapy (i.e., audit and feedback) at your facility? ☐ Yes ☐ No

*15.Does your facility have a system for tracking antimicrobial use? ☐ Yes ☐ No

If yes, what is the source of the antimicrobial use report provided?

☐ Pharmacy services ☐ Electronic Health Records

☐ Manual reporting (i.e., facility infection control log) ☐ Other (please specify): _____

*16. Has your facility provided education to clinicians and other facility staff on improving antimicrobial use in the past 12 months? ☐ Yes ☐ No

*17. Does your facility have a written statement of support from leadership that supports efforts to improve antimicrobial use? ☐ Yes ☐ No

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Long Term Care Facility Component—Annual Facility Survey

Antibiotic Stewardship Practices (continued)

*18. Are antimicrobial use and resistance data reviewed by leadership in quality assurance/performance improvement committee meetings? ☐ Yes ☐ No

*19. Does your facility have access to individual(s) with antimicrobial stewardship expertise (e.g., consultant pharmacist trained in antimicrobial stewardship, stewardship team at referral hospital, external infectious disease/stewardship consultant)? ☐ Yes ☐ No

Electronic Health Record Utilization

*20. Indicate whether any of the following are available in an electronic health record (check all that apply):

- ☐ Microbiology lab culture and antimicrobial susceptibility results
- ☐ Medication orders
- ☐ Medication administration record
- ☐ Resident vital signs
- ☐ Resident admission notes
- ☐ Resident progress notes
- ☐ Resident transfer or discharge notes
- ☐ None of the above

Facility Water Management and Monitoring Program

21. Have you ever conducted a facility risk assessment to identify where *Legionella* and other opportunistic waterborne pathogens (e.g. *Pseudomonas, Acinetobacter, Burkholderia, Stenotrophomonas*, nontuberculous mycobacteria, and fungi) could grow and spread in the facility water system (e.g., piping infrastructure)? ☐ Yes ☐ No

If Yes, when was the most recent assessment conducted? (Check one)

- ☐ ≤ 1 year ago
- ☐ >1 and ≤ 3 years ago
- ☐ > 3 years ago

22. Does your facility have a water management program to prevent the growth and transmission of *Legionella* and other opportunistic waterborne pathogens? ☐ Yes ☐ No

If Yes, who is represented on the team? (Check all that apply)

- ☐ Facility Administrator
- ☐ Nursing Leadership (e.g., DON or ADON)
- ☐ Consultant
- ☐ Facilities Manager/ Engineer
- ☐ Maintenance Staff
- ☐ Infection Preventionist
- ☐ Risk/Quality Management Staff
- ☐ Medical Director
- ☐ Equipment/ Chemical
- ☐ Other (specify): _____

23. Do you regularly monitor the following parameters in your building's water system? (Check all that apply)

Disinfectant (such as residual chlorine) ☐ Yes ☐ No

If Yes, do you have a plan for corrective actions when disinfectant levels are not within acceptable limits as determined by your water management program? ☐ Yes ☐ No

Continued >>

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Long Term Care Facility Component—Annual Facility Survey

Temperature	☐ Yes ☐ No	
If Yes, do you have a plan for corrective actions when temperatures are not within acceptable limits as determined by your water management program?		☐ Yes ☐ No
Heterotrophic plate counts	☐ Yes ☐ No	
If Yes, do you have a plan for corrective actions when heterotrophic plate counts are not within acceptable limits as determined by your water management program?		☐ Yes ☐ No
Specific tests for *Legionella*	☐ Yes ☐ No	
If Yes, do you have a plan for corrective actions when specific tests for *Legionella* are not within acceptable limits as determined by your water management program?		☐ Yes ☐ No

Table 1. Instructions for Completion of the Long-term Care Facility Component - Annual Facility Survey (CDC 57.137)

Note: Unless otherwise stated, the responses to this Annual Facility Survey should be based on the facility characteristics and practices during the previous calendar year (2023).

Data Field	Instructions for Form Completion
Facility ID	**Required**. The NHSN-assigned facility ID will be auto-populated.
Survey Year	**Required**. Select the calendar year for which this survey was completed. The survey year should represent the last full calendar year, unless otherwise stated. For example, in 2024, a facility would complete a 2023 survey.
National Provider ID	**Required**. Enter your facility National Provider ID (10-digit number).
State Provider ID	*Optional.* If available, enter your facility State Provider ID.
Facility Characteristics	
Ownership	**Required**. Select the appropriate ownership of this facility (*check one*). ☐ For profit ☐ Not for profit, including church ☐ Government (Not Veterans Affairs [VA]) ☐ Veterans Affairs
Certification	**Required**. Select the appropriate certification of this facility (*check one*). ☐ Dual Medicare/Medicaid ☐ Medicare only ☐ Medicaid only ☐ State only
Affiliation	**Required**. Select the appropriate affiliation for this facility (*check one*): ☐ Independent, free-standing - The facility does not share a building, staff, or policies (such as infection control) with any other healthcare institution. ☐ Independent, continuing care retirement community – This facility is not affiliated with any other healthcare system but is part of a campus containing other levels of elder care services. ☐ Multi-facility organization (chain) - The facility is part of a regional or national network of specialty facilities. Facilities share policies (such as infection control), corporate leadership, and a common business structure. ☐ Hospital system attached - The facility is affiliated with a local healthcare system. Facility shares policies (such as infection control) with other institutions within the hospital system. The facility is physically connected to the hospital within the system. ☐ Hospital system, free-standing - The facility is affiliated with a local healthcare system. Facility shares policies (such as infection control) with other institutions within the hospital system. The facility is not physically connected to the hospital within the system.

Data Field	Instructions for Form Completion
Average daily census	**Required**. Enter the average daily census for your facility during the last full calendar year (12 months).
Total number of short-stay residents	**Required**. Enter the total number of unique residents who stayed **100 days or less** in the previous calendar year. **Note:** If a person starts off as short stay but converts to long-stay, then count the resident in the total number of long-stay.
Total number of long-stay residents	**Required**. Enter the total number of unique residents who stayed **more than 100** days in the previous calendar year.
Average length of stay for short-stay residents	*Optional.* Enter the average length of stay for short-stay residents for your facility during the last full calendar year.
Average length of stay for long-stay residents	*Optional.* Enter average length of stay for long-stay residents for your facility during the last full calendar year.
Total number of new admissions	**Required**. Enter the total number new admissions to your facility during the last full calendar year. A new admission is defined as a new resident entering the facility for the first time or a readmission if the resident was out of the facility more than 2 calendar days (specifically, a change to the *Current Admission Date*)
Number of beds	**Required**. Enter the total number of beds (including any pediatric beds) for your facility.
Number of pediatric (age less than 21) beds	**Required**. Enter the number of pediatric beds for your facility. Pediatric beds are defined as those beds dedicated to residents that are less than 21 years of age. If your facility has no pediatric beds report zero.
Indicate which of the following primary service types are provided by your facility. For each service indicated: ***On the day of this survey***, how many residents are receiving care in your facility by the following primary service types	**Required**. For each primary service type listed, check the box only if your facility provides this primary service type. For the primary service types your facility provides (those with boxes checked), indicate the number of residents primarily receiving that service ***on the day this survey is completed***. Only list one service type per resident and this should be the primary service (or most specialized care) the resident is receiving. For example, a resident may be admitted for skilled care while on a ventilator. That resident would be counted as "ventilator care". A resident who is long-stay but on a specialized dementia unit would be listed as "long-term dementia". The total sum of residents per service type reported should be equal to the resident census on the day the survey is completed. ☐ Long-term general nursing: ☐ Long-term dementia: ☐ Skilled nursing and/or short-term (sub-acute) rehabilitation: ☐ Long-term psychiatric (non-dementia): ☐ Ventilator: ☐ Bariatric: ☐ Hospice/Palliative: ☐ Other:

Facility Microbiology Laboratory Practices *Completion of this section may require the assistance from the microbiology laboratory.*	
1. Does your facility have its own laboratory that performs antimicrobial susceptibility testing? If 'No', where is the facility's antimicrobial susceptibility testing performed? *(Check One)*	**Required**. Select 'Yes' if your laboratory performs antimicrobial susceptibility testing. Otherwise, select 'No'. *Conditionally Required*. If 'No' is selected, select the location where your facility's antimicrobial susceptibility testing is performed (*check one*): ☐ Affiliated medical center, within same health system ☐ Commercial referral laboratory ☐ Medical center, contracted locally **Note:** If multiple laboratories are used, select the laboratory that performs most of the bacterial susceptibility testing.

2. Indicate whether your facility screens new admissions for any of the following multidrug-resistant organisms (MDROs). *(Check all that apply)* For each MDRO selected, indicate the specimen type(s) sent for screening. *(Check all that apply)*	**Required.** Indicate, by checking the appropriate box(es), if your facility obtains screening cultures (Active Surveillance Testing) on newly admitted residents for the following multidrug-resistant organisms (MDROs): (*check all that apply*) ☐ **We do not screen new admissions for MDROs**: Select this box if your facility does not obtain screening cultures on new admissions for any of the MDROs listed. **NOTE:** if this box is checked, no other boxes should be selected. ☐ **Methicillin-resistant *Staphylococcus aureus* (MRSA)**: *Conditionally Required*. If checked, indicate the specimen type(s) that are sent for screening. (*Check all that apply*) ☐ Nasal swabs ☐ Wound swabs ☐ Sputum ☐ Other skin site ☐ **Vancomycin-resistant *Enterococcus* (VRE)**: *Conditionally Required*. If checked, indicate the specimen type(s) that are sent for screening. (*Check all that apply*) ☐ Rectal swabs ☐ Wound swabs ☐ Urine ☐ **Multidrug-resistant gram-negative rods** (includes carbapenemase-resistant *Enterobacteriaceae*; multidrug-resistant *Acinetobacter*, etc.): *Conditionally Required*. If checked, indicate the specimen type(s) that are sent for screening. (*Check all that apply*) ☐ Rectal swabs ☐ Wound swabs ☐ Sputum ☐ Urine ☐ **Candida Auris (C. Auris)**: *Conditionally Required*. If checked, indicate the specimen type(s) that are sent for screening. (*Check all that apply*) ☐ Skin (axilla/groin) ☐ Nares ☐ Other Site

3. What is the primary testing method for *C. difficile* used most often by your facility's laboratory or the outside laboratory where your facility's testing is performed? (*Check one)*	**Required.** Select, from the choices listed, the testing methods used to perform *C. difficile* testing by your facility's laboratory or the outside laboratory where your facility's testing is done. If 'Other' is selected, please specify. ☐ Enzyme immunoassay (EIA) for toxin ☐ Cell cytotoxicity neutralization assay (CCNA): **this option is an uncommon testing method. Verify with the laboratory before selecting this method.** ☐ Nucleic acid amplification test (NAAT): Includes Polymerase Chain Reaction (PCR) and loop-mediated isothermal amplification (LAMP) ☐ NAAT plus EIA, if NAAT positive (2-step algorithm) ☐ Glutamate dehydrogenase (GDH) antigen plus EIA for toxin: two step testing method ☐ GDH plus NAAT: two step testing method ☐ GDH plus EIA for toxin, followed by NAAT for discrepant results: three step testing method ☐ Culture: **this option is an uncommon testing method. Verify with the laboratory before selecting this method.** ☐ Other: **this is an uncommon choice, as most methods can be categorized accurately by selecting from the options provided**. **Notes:** **1.** 'Other' should not be used to name specific laboratories, reference laboratories, or the brand names of C. *difficile* tests; most methods can be categorized accurately by selecting from the options provided. Please ask your laboratory or conduct a search for further guidance on selecting the correct option to report. **2.** If your facility uses more than one laboratory, you are encouraged to contact the diagnostic laboratory where most of the resident samples/specimens are sent. In discussion with that laboratory, facilities can identify the primary diagnostic testing method for *C. difficile* used by that laboratory.
4. Does your laboratory provide a report summarizing the percent of antibiotic resistance seen in common organisms identified in cultures sent from your facility (often called an antibiogram)? If 'Yes', indicate how often this summary report is provided.	**Required.** Select 'Yes' if your laboratory provides your facility with a summary report of antibiotic resistance patterns in common bacterial organisms identified in cultures sent from your facility. This report may be called a facility antibiogram. Otherwise, select 'No'. **Note:** This summary is NOT the same as antibiotic susceptibility testing provided on culture reports for individual residents. ***Conditionally required***. If 'Yes' is selected, indicate whether the summary report or antibiogram is provided once a year, every two years, or Other. If 'Other' is selected, specify the frequency.

Infection Prevention and Control Practices	
5. Total staff hours dedicated to infection prevention and control activities in the facility.	**Required**. Enter estimated hours per week that are dedicated to ALL infection prevention and control activities in your facility. If multiple staff members are responsible for parts of the infection prevention and control program, combine the hours spent per week by each person.
a. Total hours per week performing surveillance	**Required**. Based on the total hours dedicated to all program activities, enter the estimated number of hours per week engaged in identifying and reporting healthcare-associated infections and the appropriate denominators.
b. Total hours per week for infection prevention activities other than surveillance	**Required.** Based on the total hours dedicated to all program activities, enter the estimated number of hours per week spent on infection prevention and control activities other than surveillance. These activities include, but are not limited to, education, prevention, meetings, etc.
6. Is it a policy in your facility to routinely use gown/gloves for care of residents infected or colonized with a multidrug-resistant organism (MDRO)? □ Yes □ No (If "No", continue to question #7) If yes, please select the option that is applicable to your facility for each MDRO. ("No" should only be selected if your facility does not have a policy for the MDRO listed.)	**Required.** Select the MDRO option/s from the choices listed that are applicable to your facility's policy of routinely using gowns/gloves for care of residents infected or colonized with a multidrug-resistant organism (MDRO) at your facility. Select 'No' if your facility does not have a policy that requires the use of gowns/gloves during care of residents infected or colonized with the listed MDRO. **Note:** For further information regarding barrier precaution, please visit the CDC's Consideration for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities.
7. Is it a policy in your facility to use gowns/gloves for care of residents with certain characteristics that make them high-risk for transmission or acquisition of an MDRO (e.g., wounds, presence of an indwelling device) regardless of MDRO status?	**Required.** Select 'Yes' if your facility has a policy to use gowns/gloves during the care for residents with certain characteristics that make them high-risk for transmission or acquiring a MDRO regardless of MDRO status. Otherwise, select 'No' if your facility does not have a policy that requires the use of gowns/gloves during care of residents with certain characteristics that make them high-risk for transmission or acquisition of an MDRO regardless of MDRO status. **Note:** For further information regarding barrier precaution, please visit the CDC's Consideration for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities.

8. When a resident colonized or infected with an MDRO is transferred to another facility, does your facility communicate the resident's MDRO status to the receiving facility at the time of transfer?	**Required.** Select 'Yes' if your facility **routinely** communicates the status of a patient known to be colonized or infected with a multidrug-resistant organism (MDRO) to the receiving facility at the time of patient transfer; otherwise, select 'No'.
9. Among residents with an MDRO admitted to your facility from other healthcare facilities, what percentage of the time does your facility receive information from the transferring facility about the resident's MDRO status?	**Required.** Enter the estimated percentage of the time that your facility receives information from a transferring facility about the status of a resident known to be colonized or infected with a multidrug-resistant organism (MDRO).
Antibiotic Stewardship Practices. *Completion of this by section may require assistance from the consultant pharmacist, director of nursing, and/or medical director who focus on efforts to improve antimicrobial use and monitoring (known as Stewardship) for your facility.*	
10. Are there one or more individuals responsible for the impact of activities to improve use of antimicrobials at your facility?	**Required.** Select 'Yes' if there are one or more individuals who have been identified as being responsible for antimicrobial stewardship activities as evidenced by responsibility for improving antimicrobial use in the job description or performance review, authority to coordinate activities of staff from multiple departments (for example, laboratory, pharmacy, information technology), and/or responsibility to report to facility administration/senior leaders on the antimicrobial stewardship program planning and outcomes. Select 'No' if the facility leadership has not specifically given one or more individuals the responsibility, support, and authority to oversee antimicrobial use and stewardship efforts in the facility.
If 'Yes', what is the position of the individuals? *(select all that apply)*	***Conditionally required***. If 'Yes', specify the qualification or job title of the leader(s). More than choice one may be selected. If 'Other' is selected, please specify the position.

11. Does your facility have a policy that requires prescribers to document an indication for all antimicrobials in the medical record or during order entry? If 'Yes', has adherence to the policy to document an indication been monitored?	**Required.** Select 'Yes' if your facility has a policy requiring documentation of an indication for all antimicrobials in the medical record or during order entry; otherwise, select 'No'. ***Conditionally required.*** If 'Yes' to question 13, select 'Yes' if charts or other medical record documentation are routinely reviewed to confirm documentation of an indication; otherwise, select 'No'.
12. Does your facility provide treatment recommendations for common infections based on national guidelines to assist with antimicrobial decision making? If 'Yes', has adherence to facility-specific treatment recommendations been monitored?	**Required.** Select 'Yes' if there are facility-specific recommendations for antimicrobial treatment selection based on national guidelines for ANY common clinical infections diagnosed and treated (for example, urinary tract infections, community required pneumonia, or skin and soft tissue infections); otherwise, select 'No'. ***Conditionally required.*** If 'Yes' to question 14, indicate if charts have been audited to confirm adherence to facility-specific treatment guidelines for ANY of the common clinical conditions listed above by selecting 'Yes' or ' No'.
13. Is there a formal procedure for performing a follow-up assessment 2-3 days after a new antimicrobial start to determine whether the antimicrobial treatment is still indicated and appropriate (for example, antibiotic time out)?	**Required.** Select 'Yes' if your facility has developed a standardized way for clinicians or nurses caring for a resident to reassess the continuing need and choice of antimicrobial treatment when the clinical picture is clearer and more diagnostic information is available in order to determine the following: confirm indication, review microbiology results, and review antibiotic choice, dose, and duration; Otherwise, select 'No'.

14. Is there a formal procedure for reviewing courses of antimicrobial therapy and communicating with prescribers on antimicrobial selection, dosing, or duration of therapy (i.e., audit and feedback) at your facility?	**Required.** Select 'Yes' if your facility has a physician, nurse or pharmacist knowledgeable in antimicrobial use, review courses of antimicrobial therapy **and** provides suggestions to optimize use to the providers caring for the resident; otherwise, select 'No'.
15. Does your facility have a system for tracking antimicrobial use? If 'Yes', what is the source of the antimicrobial use report provided? (select all that apply)	**Required.** Select 'Yes' if your facility tracks antimicrobial use measures (e.g., antimicrobial courses, days of therapy, antimicrobial starts) a; Antimicrobial use measurement is critical to identify opportunities for improving antimicrobial use and to assess the impact of stewardship interventions. Select 'No' if the facility does not track antimicrobial use. ***Conditionally required***. If 'Yes', specify the source of the antimicrobial use report provided. Facilities can use different data sources to track antimicrobial prescribing practices. More than one choice may be selected. If 'Other' is selected, please specify the source.
16. Has your facility provided education to clinicians and other facility staff on improving antimicrobial use in past 12 months?	**Required.** Select 'Yes' if your facility has provided specific education on ways to improve antimicrobial use to prescribers, nurses, and other facility staff (for example, in-service training, workshops, direct instruction, etc.); Otherwise, select 'No'.
17. Does your facility have a written statement of support from leadership that supports efforts to improve antimicrobial use?	**Required.** Select 'Yes' if your facility has a written statement of support from leadership that supports efforts to improve antimicrobial use; Otherwise, select 'No'.
18. Are antimicrobial use and resistance data reviewed by leadership in quality assurance / performance improvement committee meetings?	**Required.** Select 'Yes' if antimicrobial use and resistance data are reviewed by leadership in quality assurance/performance improvement committee meetings; Otherwise, select 'No'.

19. Does your facility have access to individual(s) with antimicrobial stewardship expertise (for example, consultant pharmacist trained in antimicrobial stewardship, stewardship team at referral hospital, external infectious disease/stewardship consultant)?	**Required.** Select 'Yes' if your facility has access to individual(s) with antimicrobial stewardship expertise (for example, consultant pharmacist trained in antimicrobial stewardship, stewardship team at referral hospital, external infectious disease/stewardship consultant); Otherwise, select 'No'.
Electronic Health Record Utilization	
20. Indicate whether any of the following are available in an electronic health record. (*Check all that apply*)	**Required***.* Indicate by checking the appropriate box(es) whether any of the following are available in an electronic health record at your facility. (*Check all that apply*). ☐ Microbiology lab culture and antimicrobial susceptibility results ☐ Medication orders ☐ Medication administration record ☐ Resident vital signs ☐ Resident admission notes ☐ Resident progress notes ☐ Resident transfer or discharge notes ☐ None of the above

Facility Water Management and Monitoring Program	
21. Have you ever conducted a facility risk assessment to identify where *Legionella* and other opportunistic waterborne pathogens could grow and spread in the facility water system?	*Optional.* Select 'Yes' if your facility has conducted a facility risk assessment to identify where *Legionella* and other opportunistic waterborne pathogens (for example, *Pseudomonas, Acinetobacter, Burkholderia, Stenotrophomonas*, nontuberculous mycobacteria, and fungi) could grow and spread in the facility water system (for example, piping infrastructure); Otherwise, select 'No'
If Yes, when was the most recent assessment conducted? *(Check one)*	***Conditionally required***. If 'Yes', specify the time period in which the most recent assessment was conducted. If 'Other' is selected, please specify the time period.
22. Does your facility have a water management program to prevent the growth and transmission of *Legionella* and other opportunistic waterborne pathogens?	*Optional.* Select 'Yes' if your facility has a water management program to prevent the growth and transmission of *Legionella* and other opportunistic waterborne pathogens; Otherwise, select 'No'
If Yes, who is represented on the team? *(Check all that apply)*	***Conditionally required***. If 'Yes', specify the roles of the team members represented on the water management program team. If 'Other' is selected, please specify the role of the team member.
23. Do you regularly monitor the following parameters in your building's water system? *(Check all that apply)*	*Optional.* Select 'Yes' if your facility regularly monitors the following parameters in your building's water system; Otherwise, select 'No' ☐ Disinfectant (such as residual chlorine) ☐ Temperature ☐ Heterotrophic plate counts ☐ Specific tests for *Legionella*
If Yes, do you have a plan for corrective actions when disinfectant levels are not within acceptable limits as determined by your water management program?	***Conditionally required***. For each parameter, if 'Yes', specify if your facility has a plan for corrective actions when the specific parameter is not within acceptable limits as determined by your water management program?

NHSN
NATIONAL HEALTHCARE SAFETY NETWORK

Monthly Reporting Plan for LTCF

Form Approved
OMB No. 0920-0666
Exp. Date: 01/31/25
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*required for saving

Facility ID: _____ *Month/Year:_____/_____

Healthcare Associated Infection (HAI)

+Locations	UTI
FacWideIN	☐

LabID Event

+Locations	Specific Organism Type	±LabID Event All Specimens
FacWideIN	_____	☐
FacWideIN	_____	☐
FacWideIN	_____	☐
FacWideIN	_____	☐
FacWideIN	_____	☐
FacWideIN	_____	☐
FacWideIN	_____	☐

Prevention Process Measures

+Location	Hand Hygiene	Gown and Gloves Use
FACWIDEIN	☐	☐

+ FacWideIN = Facility-wide Inpatient
± LabID Event = Laboratory-identified Event

Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 308(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

Table 2. Instructions for Completion of the Monthly Reporting Plan for LTCF form (CDC 57.141)

Data Field	Instructions for Form Completion
Facility ID	**Required.** The NHSN-assigned facility ID will be auto-populated by the system.
Month/Year	**Required.** Enter the month and year for the surveillance plan being recorded; use MM/YYYY format.
Healthcare-Associated Infection (HAI) Surveillance	
Locations	***Conditionally required.*** The location under surveillance will always be FacWideIN (Facility-wide Inpatient) for Long-term Care Facilities. This means surveillance and reporting must be performed for all resident care locations in the facility.
UTI	***Conditionally required.*** Check this box if you plan to follow urinary tract infection (UTI) Events. You will collect and report UTI event data and the corresponding denominator data for the month. **Note:** Surveillance and reporting includes UTI events in residents with and without an indwelling urinary device.
LabID Event Surveillance	
Locations	***Conditionally required.*** The location under surveillance will always be FacWideIN (Facility-wide Inpatient) for Long-term Care Facilities. This means surveillance and reporting must be performed for all resident care locations in the facility.
Specific Organism Type	***Conditionally required***. Select each organism you plan to perform LabID event surveillance: MRSA, MRSA/MSSA (if tracking MRSA & MSSA), VRE, CephR-*Klebsiella* species, CRE (CRE-*E. coli*, CRE-*Enterobacter*, and CRE-*Klebsiella),* MDR-*Acinetobacter* species, or *C. difficile*. Users may select one or more from the list. **Note:** If performing surveillance for CRE, the facility must include in the monthly reporting plan and conduct surveillance for all three organisms (CRE-*E.coli,* CRE-*Enterobacter*, and CRE-*Klebsiella*).
LabID Event All Specimens	***Conditionally required*.** Check the box to indicate that you plan to perform LabID event surveillance for each specific organism type(s) selected. You will collect and report LabID event data and the corresponding denominator data for the month. **Note:** For *C. difficile*, only loose stool specimen sources are included in surveillance and reporting. For MDROs, all specimen sources in which the organism is identified must be included in surveillance and reporting.
Prevention Process Measures	
Hand Hygiene	***Conditionally required.*** Select this option if the facility plans to monitor hand hygiene adherence in the facility.
Gown and Glove Use	***Conditionally required.*** Select this option if the facility plans to monitor gown and gloves use adherence in the facility.

Healthcare-associated Infection Surveillance Protocol for Urinary Tract Infection (UTI) Events for Long-term Care Facilities

Background

The urinary tract is one of the most common sites of healthcare-associated infections (HAI), accounting for up to 20% of infections reported by long-term care facilities (LTCFs).[1] Risk factors for developing bacteriuria and urinary tract infections (UTI) include age-related changes to the genitourinary tract, comorbid conditions resulting in neurogenic bladder, and instrumentation required to manage bladder voiding. The point prevalence (specifically, the number during a specific time period) of asymptomatic bacteriuria in LTCF residents can range from 20-50%. Although the incidence of symptomatic UTI is lower, it still comprises a significant proportion of infections manifesting in LTCF residents and results in a large amount of antibiotic use.[5]

Though the prevalence of indwelling urinary catheter use in LTCFs is lower than the acute care setting, catheter-associated UTI (CA-UTI) can lead to complications such as cystitis, pyelonephritis, bacteremia, and septic shock. These complications can then lead to declined resident function and mobility, acute care hospitalizations, and increased mortality. Prevention of CASUTIs is discussed in the CDC/HICPAC document, *Guideline for Prevention of Catheter-associated Urinary Tract Infections.*[2]

Efforts to examine antibiotic use for UTI have demonstrated a discrepancy between the number of UTI events identified through the application of evidence-based surveillance criteria and the numbers of clinically identified and treated UTI.[3,4] Consistent tracking and reporting of symptomatic UTIs using surveillance criteria will help identify opportunities to examine, understand, and address differences between surveillance events and clinically identified events.

References:

1. Genao L, Buhr G. T. Urinary Tract Infections in Older Adults Residing in Long-Term Care Facilities. *Annals of Long-term Care*, vol. 20, no. 4, 2012, pp. 33-38.
2. Healthcare Infection Control Practices Advisory Committee (HICPAC) Approved Guidelines for the Prevention of Catheter-associated Urinary Tract Infections, 2009. Available at www.cdc.gov/hicpac/pdf/CAUTI/CAUTIguideline2009final.pdf
3. Juthani-Mehta M., et al. Diagnostic Accuracy of Criteria for Urinary Tract Infection in a Cohort of Nursing Home Residents. *Journal of the American Geriatrics Society*, vol. 55, 2007, pp. 1072-77.
4. Wang L., et al. Infection Rate and Colonization with Antibiotic-resistant Organisms in Skilled Nursing Facility Residents with Indwelling Devices. European *Journal of Clinical Microbiology & Infectious Diseases*, vol. 31, no. 8, 2012, pp. 1797-804.
5. Nace D. A., et al. Clinical Uncertainties in the Approach to Long Term Care Residents with Possible Urinary Tract Infection. *Journal of American Medical Directors Association*. vol. 15, no. 2014, 2014, pp. 133-39.

Settings

UTI Event reporting is currently available for Nursing Homes/Skilled Nursing Facilities (LTC:SKILLNURS); Intermediate Care Facilities for Individuals with Intellectual Disabilities (LTC:ICF/IID); Psychiatric Residential Treatment Facility (LTC:PSYCH); and Skilled Nursing Facility for State Veteran's Homes (LTC:SVHSNF).

Surveillance for UTIs must be performed facility wide inpatient (FacWideIN), which means all resident care locations in the reporting facility. Unit/location/pod specific UTI surveillance is not an option in the LTCF HAI UTI Event module.

Methods

Facilities may choose to monitor UTIs using healthcare-associated infection (HAI) surveillance. This surveillance method incorporates the use of laboratory data and clinical evaluation of the resident for signs and symptoms to monitor for both catheter and non-catheter-associated urinary tract infection events.

NHSN Data collection forms and form instructions are available for users to collect the required data prior to submitting the information to the NHSN application. Please note, one event form shall be used for each UTI event and these forms are to be used for data collection only and not to be sent to CDC NHSN.

Definitions

Date of Event: The date when the **first** clinical evidence (signs/symptoms) of the UTI appeared or the date the specimen used to meet the infection criteria was collected, **whichever comes first**.

Indwelling urinary catheter: A drainage tube that is inserted into the urinary bladder *through the urethra*, is left in place, and is connected to a drainage bag/collection system (including leg bags); also called a Foley catheter. Indwelling urinary catheters do not include straight in-and-out catheters or suprapubic catheters.

External urinary drainage devices: A urinary drainage device that is not inserted into the bladder through the urethra. Examples may include suprapubic, external drainage and intermittent straight catheter. UTIs in residents with external urinary drainage devices will be captured as SUTIs, not CA-SUTIs.

Urinary tract infections (UTI): are defined using Symptomatic UTI (SUTI) criteria for residents *without* an indwelling urinary device, Catheter-Associated Symptomatic UTI (CA-SUTI) criteria for residents *with* an indwelling urinary device, or Asymptomatic Bacteremic UTI (ABUTI) criteria for residents *with or without* an indwelling urinary device.

Symptomatic UTI (SUTI): Events that occur when the resident manifests signs and symptoms, such as acute dysuria, new and/or marked increase in urinary frequency, suprapubic tenderness, etc., which localize the infection to the urinary tract. These events can occur in residents without urinary devices or those managed with urinary devices other than indwelling urinary catheters, such as suprapubic catheters, female external urinary collection devices, straight in-and-out catheters, condom catheters, and other male external urinary collection devices. Events occurring in residents with indwelling urinary catheters (defined

below) are a sub-set of SUTIs referred to as Catheter-Associated SUTI (CA-SUTI) events. (See Figure 1 and Table 2).

Catheter-associated SUTIs (CA-SUTI): Events that occur when a resident develops signs and symptoms of a UTI while having an indwelling urinary catheter in place for more than 2 calendar days on the date of event (day of device placement is considered as Day 1) or removed within the 2 calendar days prior to the date of event, where day of catheter removal is considered as day 1 (*urinary catheter is in place on the day of event or the day before the event*). (See Figure 2 and Table 3).

> *EXAMPLE*: Mr. T, is a resident in your facility. On March 1st, he developed an increase in incontinence and new suprapubic pain. Later that day, a Foley catheter was inserted. The following day, on March 2nd, a specimen collected from the Foley catheter was sent to the lab and subsequently tested positive for greater than 100,000 ($\geq 10^5$) CFU/ml of *E. coli*. Mr. T does meet criteria for a SUTI, but it is not considered as a CA-SUTI because the Foley catheter had not been in place >2 calendar days on the date of event (March 1st).

Asymptomatic Bacteremic UTI (ABUTI): Events that occur when the resident has NO signs or symptoms localizing to the urinary tract but has matching urine and blood cultures positive for at least one organism (see Table 1) regardless of whether a catheter is in place or not. (See Figure 3 and Table 4).

Table 1. Examples of "sameness" by organism speciation

Culture	Companion Culture	Report as…
S. epidermidis	Coagulase-negative *staphylococcus*	*S. epidermidis*
Klebsiella oxytoca	*Klebsiella* spp.	*K. oxytoca*
S. salivarius	*Streptococcus viridans*	*S. salivarius*

NHSN surveillance for UTIs must include:

1. Both catheter and non-catheter associated UTI events meeting NSHN criteria.
2. Only NHSN defined UTI events where the *date of event* is **more than 2 calendar days after admission** to the reporting LTCF (date of admission is equal to day 1) are considered facility onset events that must be submitted to NHSN.

- For example, a resident transferred to your LTFC develops acute dysuria on the day of transfer. A urine culture is collected on day three of admission and returns positive for *Proteus mirabilis.* This resident does not meet criteria for a HAI SUTI for the reporting LTCF since the date of event (specifically, when the **first** clinical evidence (signs/symptoms) of the UTI appeared or the date the specimen used to meet the infection criteria was collected, **whichever comes first**.) occurred within the first 2 calendar days of admission. Instead, the UTI event is considered as present on admission and the transferring facility should be contacted with the details of the UTI.

Example: NHSN Classification of reportable LTCF UTI Events for New Admissions				
Admission date June 4th	June 5th	June 6th	June 7th	June 8th
day 1	day 2	day 3	day 4	day 5
Not a LTCF reportable UTI event		**LTCF reportable UTI event**		

3. Surveillance for UTI after the resident is transferred or discharged from the reporting LTCF is not required. However, if discovered, a NHSN UTI event with an event date on the day of discharge or the next calendar day is attributable to the discharging LTCF and should be included in UTIs reported to NHSN for that LTCF. No indwelling urinary catheter days are reported for discharged or transferred residents.

- For example, a resident is discharged from your nursing home to an assisted living facility. Later that week, you receive a phone call from the assisted living facility informing you that the discharged resident developed a fever and burning during urination on the second calendar day after discharge from your facility (the day of discharge is calendar day 1). The resident was subsequently sent to the urgent care where she was treated for a UTI (with a positive urine culture for *E. coli*). Since the event date (date of onset) occurred within the first 2 calendar days after discharge from the nursing home, and NHSN criteria are met for SUTI, the event must be reported to NHSN by the discharging nursing home.

Requirements

- A ***NHSN Monthly Reporting Plan*** for the LTCF (CDC 57.141) must be completed for each calendar month in which a facility plans to enter data into the NHSN. A user will not be able to save entered event data in the NHSN application without a corresponding monthly reporting plan.
    - For UTI surveillance, add a check in the *UTI* box located under the HAI Module section. As a reminder, the location box will auto-populate to *Facility-wide Inpatient (FacWideIN),* which means surveillance must occur for all resident care locations in the facility.
- For each participating calendar month, facilities must report numerator (catheter-associated and non-catheter-associated UTI events) and denominator data for the entire facility, referred to as facility-wide inpatient (FacWideIN), for the entire calendar month. See Numerator and Denominator Section.
    - Submit complete UTI event data for each resident meeting HAI-UTI criteria. When entering a UTI event, the *Specific Event* Type will auto populate once the correct UTI event criteria

have been entered for a resident. If the *Specific Event* field remains blank after entering all criteria, review the NHSN criteria entered to verify that the resident met NHSN UTI criteria. A blank field means criteria for a NHSN UTI event have not been entered in the application. **Important:** Only NHSN defined UTI events shall be reported to NHSN. Non-UTI events (as indicated by a blank *Specific Event* field on the UTI event page) will not be included in NHSN analysis and should be removed/excluded/deleted from the application.

- Facilities are encouraged to perform UTI surveillance and reporting for at least 6 consecutive months to provide meaningful measures for analysis, but there is not a minimum reporting requirement.

Key Points

1. An indwelling urinary catheter should be in place for more than 2 calendar days on the date of event (where day of catheter insertion = Day 1) in order for the SUTI to be catheter-associated.
2. If a resident is transferred to the facility with an indwelling urinary catheter in place, and the facility replaces the catheter with a new one while the resident is in the care of the facility, then the date of insertion of the device will correspond with to the date the new catheter was placed in the reporting LTCF.
3. UTIs in residents managed with suprapubic, external urinary drainage devices (for example, male or female external urinary drainage devices), or in and out straight catheters will be captured as SUTIs, not CA-SUTIs.

Table 2. Criteria for Symptomatic Urinary Tract Infection (SUTI)

Criterion	*For residents **without** an indwelling catheter in place or removed >2 calendar days prior to the date of event, where day of catheter removal is equal to day 1:*
1	**Either** of the following (Signs & Symptoms): 1. Acute dysuria 2. Acute pain, swelling, or tenderness of the testes, epididymis, or prostate **AND** A positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of $\geq 10^5$ CFU/ml
2	**Either** of the following: 1. Fever$^+$ [Single temperature ≥ 37.8°C (>100°F), or >37.2°C (> 99°F) on repeated occasions (more than once), or an increase of >1.1^{O}C (>2^{O}F) over baseline] 2. Leukocytosis [defined by NHSN as > 10,000 cells/mm^3, or Left shift (> 6% or 1,500 bands/mm^3)] **AND** **One or more** of the following (New and/or marked increase): 1. Costovertebral angle pain or tenderness 2. Suprapubic tenderness 3. Visible (Gross) hematuria 4. Incontinence 5. Urinary urgency 6. Urinary frequency **AND** A positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of $\geq 10^5$ CFU/ml
3	**Two or more** of the following (New and/or marked increase): 1. Costovertebral angle pain or tenderness 2. Incontinence 3. Urinary urgency 4. Urinary frequency 5. Suprapubic tenderness 6. Visible (gross) hematuria **AND** A positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of $\geq 10^5$ CFU/ml **Footnote:** +Since fever is a non-specific symptom, it should be used to meet SUTI criteria even if the resident has another possible cause for the fever (for example, pneumonia).

Table 3. Criteria for Catheter-associated Symptomatic Urinary Tract Infection (CA-SUTI)

Criterion	For residents **with** an indwelling catheter in place, or removed within 2 calendar days prior to event onset, where day of catheter removal is equal to day 1:
	One or more of the following (Signs and Symptoms and Laboratory and Diagnostic Testing): 1. Fever[+][Single temperature ≥ 37.8°C (>100°F), or >37.2°C (> 99°F) on repeated occasions (more than once), or an increase of >1.1°C (>2°F) over baseline] 2. Rigors 3. New onset hypotension, with no alternate non-infectious cause 4. New onset confusion/functional decline with no alternate diagnosis **AND** Leukocytosis [defined by NHSN as > 10,000 cells/mm^3, or Left shift (> 6% or 1,500 bands/mm^3)] 5. New or marked increase in suprapubic tenderness 6. New or marked increase in costovertebral angle pain or tenderness 7. Acute pain, swelling, or tenderness of the testes, epididymis, or prostate 8. Purulent discharge from around the catheter insertion site 9. Acute Dysuria* **AND** A positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of ≥10^5 CFU/ml. **Footnote:** [+] Since fever is a non-specific symptom, it should be used to meet CA-SUTI criteria even if the resident has another possible cause for the fever (for example, pneumonia). *Only when "REMOVE" has been selected for catheter status will the system populate CA-SUTI for a selection of acute dysuria and a positive urine culture.

Table 4. Criteria for Asymptomatic Bacteremic Urinary Tract Infection (ABUTI)

Criterion	*Resident **with or without** an indwelling urinary catheter.*
	No qualifying fever or signs or symptoms (specifically, no urinary urgency, urinary frequency, acute dysuria, suprapubic tenderness, or costovertebral angle pain or tenderness). *If no catheter is in place, fever alone would not exclude ABUTI if other criteria are met.* **AND** A positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of ≥10^5 CFU/ml. **AND** A positive blood culture with at least 1 matching bacteria to the urine culture.

Key Reminders

1. "Mixed flora" is not available in the pathogen list within NHSN. Therefore, it cannot be reported as a pathogen to meet the NHSN UTI criteria. Additionally, "mixed flora" often represents contamination and likely represents presence of multiple organisms in culture (specifically, at least two organisms).

2. Yeast and other microorganisms, which are not bacteria, are not acceptable UTI pathogens, and therefore, cannot be used to meet NHSN UTI criteria without the presence of a qualifying bacterium.

   As an example, the following excluded organisms cannot be used to meet the NHSN UTI definition:

   - Any *Candida* species as well as a report of "yeast" that is not otherwise specified
   - mold
   - dimorphic fungi or
   - parasites

   An acceptable urine specimen may include these organisms as long as one bacterium of > 100,000 CFU/ml is also present. Additionally, these non-bacterial organisms identified from blood cannot be deemed secondary to a UTI since they are excluded as organisms in the UTI definition.

3. To remove the subjectivity about whether a fever is attributable to a UTI event, the presence of a fever, even if due to another cause (for example, pneumonia), must still be counted as a criterion when determining if the NHSN UTI definition is met.

Numerator and Denominator Data

NHSN provides users with data collection forms and accompanying form instructions (referred to as Table of Instructions) that can be used to collect the required UTI event data (numerator data), as well as the required monthly summary data (denominator data). The forms include all required data elements that must be submitted in the NHSN application. While manual data collection using the forms is optional, users shall be familiar with the required data elements that must be submitted in the NHSN application in order for the data to be considered as complete. Facilities may also choose to customize these forms to better accommodate individual surveillance programs, keeping in mind that only UTIs meeting NHSN UTI criteria shall be submitted to NHSN as UTI events.

The UTI form includes resident demographic information and information on whether a catheter (or another urinary device) was present. Additional data include the specific clinical criteria evidence (signs and symptoms) and laboratory and diagnostic testing that were used for identifying the NHSN defined UTI; whether the resident developed a secondary bloodstream infection; whether the resident was transferred to an acute care facility for any reason or died from any cause within 7 days of the UTI event; and the organisms isolated from cultures and their antimicrobial susceptibilities.

Numerator

The *Urinary Tract Infection (UTI*) *for LTCF* form (CDC 57.140) is used to collect required data for each NHSN defined UTI event identified during the surveillance month. A separate data collection form shall be used for each UTI event. NHSN also provides users with detailed form instructions in the *Table of Instructions for Completion of a Urinary Tract Infection for LTCF form.*

Reporting Instructions:
If no UTIs are identified during the month of surveillance, the "Report No Events" box must be checked on the appropriate denominator summary screen.

Denominator

Referred to by NHSN as *Monthly Summary Data.* Includes **monthly totals** for total resident-days, urinary catheter-days, new antibiotic starts for UTI indication, and number of urine cultures ordered.

The *Denominator for LTCF* form (CDC 57.142) is available for use to collect denominator data for the entire calendar month. If the form is used to document daily counts, only the sum of the counts (also referred to as monthly total) shall be submitted to the NHSN application. Detailed instructions for completing this form are available in the *Table of Instructions for Completion of the Long-term Care Facility Component-Denominators for LTCF.* This document also includes brief instructions for collection and entry of each data element on the form.

Definitions and Key Points for UTI Denominator Data

- *Catheter-days* are calculated using the daily count of residents in the facility with an indwelling urinary device each day of the month. When counting catheter days, it is important that counts are done at the same time each day.

  Key Points about *Catheter-Days*:
  1. None of the following urinary management devices are to be included when counting indwelling catheter-days: suprapubic catheters, straight in-and-out catheters, or external urinary drainage devices.
  2. If a resident is transferred to an acute care facility, no additional indwelling catheter-days are reported after the day of transfer.

- *Resident-days* are calculated using the daily census of residents in the facility each day of the month. The monthly total is submitted to NHSN. The daily total is added at the end of the calendar month and the total number is then submitted to NHSN as Resident Days.

- *New antibiotic starts for UTI indication* refers to a new prescription for an antibiotic ordered for a resident who is suspected of having or diagnosed with a UTI, either catheter-associated or non-catheter associated, regardless of whether that UTI meets the NHSN event definition.

Key Points about *New Antibiotic Starts for UTI Indication*:

1. There is no minimum number of doses or days of therapy that define a new antibiotic start—count all new orders. Meaning, a new antibiotic shall be counted even if the resident did not complete the entire dose.
2. Include only antibiotics that are started while the resident is receiving care by your facility. This includes antibiotics started after a resident returns from a brief outpatient visit (excludes admissions) where the antibiotic was ordered in the OP setting (for example, an outpatient clinic or emergency department).
3. Do not include antibiotic courses started by another healthcare facility prior to the resident's admission or readmission back to your facility, even if the antibiotic is continually administered upon readmission to your facility.
4. Data may be collected daily or summarized at the end of each month.

- *Number of urine cultures* ordered refers to new urine cultures ordered for a resident regardless of whether the resident has a UTI meeting the NHSN event definition. Include only urine culture orders that are placed while the resident is receiving care by your facility. This includes urine culture orders by clinical providers working in the facility or by outside physicians who see the resident during a brief outpatient visit (for example an outpatient clinic or emergency department) when the resident returns to the reporting LTCF on the calendar day of the visit or the next calendar day. Do not include urine cultures ordered during an admission in another facility or by another healthcare facility prior to the resident's admission or readmission back to your facility.

Key Points about *Number of Urine Cultures Ordered:*

1. Include only urine culture orders that are ordered while the resident is receiving care by your facility, either by clinical providers working in the facility or by outside physicians who see the resident during a brief outpatient visit (for example, an outpatient clinic or emergency department) when the resident returns to the reporting LTCF on the calendar day of the visit or the next calendar day.
2. Do not include urine cultures ordered during an admission in another facility.
3. Do not include urine cultures ordered by another healthcare facility prior to the resident's admission or readmission back to your facility.
4. Data collection forms may be used to collected data daily (for summary at the end of the month) or summarized at the end of each month.

HAI-UTI Data Analyses

All event (numerator) and monthly summary (denominator) data submitted to NHSN can be analyzed. After a user generates analysis datasets in the application, all data entered for the facility up until that time are made available within the analysis reports. These data can be visualized and analyzed in various ways. For example, line listing reports provide detailed line by line listing of events reported by catheter status and rate table reports provide summarized monthly data with calculated rates and denominator data. Users can also generate frequency tables, bar charts, and pie charts. Additionally, the LTCF Dashboard, located on the NHSN Home Page, allows users to quickly visualize data found in the rate tables and line listings in the form of interactive bar charts and line graphs. For additional information about the LTCF Dashboard, please review the CDC Guidance Document – Dashboard. Below are measures and calculations that are incorporated into the analytics output.

Calculated UTI Metrics

The following section describes the various metrics calculated for UTI Event surveillance that are generated as part of the reports within the analysis section of NHSN.

Calculated Metrics	Calculations	Comments
Total UTI incidence rate per 1,000 resident-days	$\frac{\text{Total Number of UTI Events}}{\text{Total resident days}} x\ 1{,}000$	Includes: SUTI, CA-SUTI, and ABUTI
• *Percent* that are SUTI	$\frac{\text{Number of SUTI Events}}{\text{Total number of UTI Events}}$ x 100	
• *Percent* that are CA-SUTI	$\frac{\text{Number of CA} - \text{SUTI Events}}{\text{Total number of UTI Events}} x\ 100$	
SUTI incidence rate per 1,000 non-catheter days	$\frac{\text{Number of SUTI Events}}{\text{Total non} - \text{catheter days}} x\ 1{,}000$	Only SUTIs that are NOT catheter-associated will be included in the SUTI incidence rate. Non-catheter days is equal to Resident Days *minus* Catheter Days
CA-SUTI incidence rate per 1,000 catheter-days	$\frac{\text{Number of CA} - \text{SUTI Events}}{\text{Total catheter} - \text{days}} x\ 1{,}000$	
Urinary Catheter Utilization Ratio	$\frac{\text{Total urinary catheter} - \text{days}}{\text{Total resident} - \text{days}}$	
Urine Culture Rate per 1,000 total resident days	$\frac{\text{Number of urine cultures order}}{\text{Total resident} - \text{days}} x\ 1{,}000$	

Calculated Metrics	Calculations	Comments
UTI treatment ratio	$\frac{\text{New antibiotic starts for UTI}}{\text{Total number of UTI events}}$	When the UTI treatment ratio is **<1**, there are **fewe**r reported antibiotic starts for UTI than symptomatic UTI events submitted. When the UTI treatment ratio **equals 1**, there are the same number of new antibiotics starts for UTI events submitted. When the UTI treatment ratio is **>1**, there are **more** reported antibiotic starts for UTI than UTI events submitted.

NHSN Group Analysis:

NHSN Group Users can perform the same analysis as facility level users in NHSN. A few helpful tools in NHSN for groups are listed in the resources below. These tools are guides on how to start and join a Group; how to create a template to request data from facilities; how to determine the level of access granted by the facility following the previous steps, and how to analyze the facilities data.

Group Analysis Resources:

NHSN Group Users Page: https://www.cdc.gov/nhsn/group-users/index.html

Group User's Guide to the Membership Rights Report: https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/GroupAnalysisWebinar.pdf

Group User's Guide to the Line Listing- Participation Alerts: https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/group-alerts.pdf

Figure 1: Criteria for Defining Non-Catheter Associated Symptomatic Urinary Tract Infection (SUTI):

Resident *without* an indwelling catheter (Meets criteria 1 **OR** 2 **OR** 3)**:**

SUTI – Criteria 1

Either of the following:

1. Acute dysuria
2. Acute pain, swelling, or tenderness of the testes, epididymis or prostate

OR

SUTI - Criteria 2

Either of the following:

1. Fever[+ a]
2. Leukocytosis[b]

AND

ONE or more of the following:

- ❑ Costovertebral angle pain or tenderness
- ❑ New or marked increase in suprapubic tenderness
- ❑ Gross hematuria
- ❑ New or marked increase in incontinence
- ❑ New or marked increase in urgency
- ❑ New or marked increase in frequency

OR

SUTI - Criteria 3

TWO or more of the following:

- ❑ Costovertebral angle pain or tenderness
- ❑ New or marked increase in suprapubic tenderness
- ❑ Gross hematuria
- ❑ New or marked increase in incontinence
- ❑ New or marked increase in urgency
- ❑ New or marked increase in frequency

↓

AND

↓

A positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of $\geq 10^5$ CFU/ml

NOTE: Yeast and other microorganisms, which are not bacteria, are not acceptable UTI pathogens

↓

SUTI

[+] Fever must be used as a criterion for SUTI even if the resident has another possible cause for the fever (for example, pneumonia)

[a] Fever: Single temperature ≥ 37.8°C (>100°F), or > 37.2°C (>99°F) on repeated occasions, or an increase of >1.1°C (>2°F) over baseline

[b] Leukocytosis: defined by NHSN as > 10,000 cells/mm^3, or Left shift (> 6% or 1,500 bands/mm^3)

Figure 2: Criteria for Defining Catheter Associated Symptomatic Urinary Tract Infection (CA-SUTI)

Resident with an indwelling urinary catheter or removed within 2 days of event onset:

ONE or more of the following:

- ❑ Fever[+ a]
- ❑ Rigors
- ❑ New onset hypotension, with no alternate noninfectious cause
- ❑ New onset confusion/functional decline with no alternate diagnosis **AND** Leukocytosis[b]
- ❑ New costovertebral angle pain or tenderness
- ❑ New or marked increase in suprapubic tenderness
- ❑ Acute pain, swelling or tenderness of the testes, epididymis or prostate
- ❑ Purulent discharge from around the catheter
- ❑ Acute Dysuria*

↓

AND

↓

A positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of $\geq 10^5$ CFU/ml

NOTE: Yeast and other microorganisms, which are not bacteria, are not acceptable UTI pathogens

↓

CA-SUTI

[+] Fever must be used as a criterion for SUTI even if the resident has another possible cause for the fever (for example, pneumonia)

[a] Fever: Single temperature ≥ 37.8°C (>100°F), or > 37.2°C (>99°F) on repeated occasions, or an increase of >1.1°C (>2°F) over baseline

[b] Leukocytosis: defined by NHSN as > 10,000 cells/mm^3, or Left shift (> 6% or 1,500 bands/mm^3)

*Only when "REMOVE" has been selected for catheter status will the system populate CA-SUTI for a selection of acute dysuria and a positive urine culture.

Figure 3: Criteria for Defining Asymptomatic Bacteremic Urinary Tract Infection (ABUTI)

Resident *with* or *without* an indwelling catheter:

Resident has **no qualifying fever or localizing urinary signs or symptoms** (specifically, no urgency, frequency, acute dysuria, suprapubic tenderness, or costovertebral angle pain or tenderness). *If no catheter is in place, fever as only sign would not exclude ABUTI if other positive culture criteria are met.*

↓

AND

↓

A positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of ≥ 10^5 CFU/ml

NOTE: Yeast and other microorganisms which are not bacteria, are not acceptable UTI pathogens

↓

AND

↓

Positive blood culture with at least 1 matching organism in urine culture

↓

ABUTI

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NHSN
NATIONAL HEALTHCARE SAFETY NETWORK

Urinary Tract Infection (UTI) for LTCF

*Required for saving

*Facility ID:	Event #:
*Resident ID:	
Medicare number (or comparable railroad insurance number):	
Resident Name: Last: First: Middle:	
*Gender: M F Other	*Date of Birth: ___/___/_____
Sex at Birth: M F Other	Gender Identity (Specify):
*Ethnicity (specify): □ Hispanic or Latino □ Not Hispanic or Latino □ Declined to respond □ Unknown	*Race (specify): □ American Indian/Alaska Native □ Asian □ Black or African American □ Native Hawaiian/Other Pacific Islander □ White □ Declined to respond □ Unknown
*Date of First Admission to Facility: __/__/____	*Date of Current Admission to Facility: __/__/____
*Event Type: **UTI** *Resident Care Location: _____	*Date of Event: __/__/____

*Primary Resident Service Type: (check one)

☐ Long-term general nursing ☐ Long-term dementia ☐ Long-term psychiatric

☐ Skilled nursing/Short-term rehab (subacute) ☐ Ventilator ☐ Bariatric ☐ Hospice/Palliative

*Has resident been transferred from an acute care facility to your facility in the past 4 weeks? ☐ Yes ☐ No

If Yes, date of last transfer from acute care to your facility: __/__/____

If Yes, did the resident have an indwelling urinary catheter at the time of transfer to your facility? ☐ Yes ☐ No

*Indwelling Urinary Catheter status at time of event onset (check one):

☐ In place ☐ Removed within last 2 calendar days ☐ Not in place

If indwelling urinary catheter status in place or removed within last 2 calendar days:

Indicate site where indwelling urinary catheter was Inserted (check one): ☐ Your facility ☐ Acute care hospital ☐ Other ☐ Unknown

Date of indwelling urinary catheter Insertion: ___/___/_____

If indwelling urinary catheter not in place, was another urinary device type present at the time of event onset? □Yes □No

If Yes, other device type: ☐ Suprapubic ☐ External Drainage (male or female) ☐ Intermittent straight catheter

Event Details

*Specify Criteria Used: (check all that apply)

Signs & Symptoms

☐ Fever: Single temperature ≥ 37.8°C (>100°F), or > 37.2°C (>99°F) on repeated occasions, or an increase of >1.1°C (>2°F) over baseline

☐ Rigors ☐ New onset hypotension

☐ New onset confusion/functional decline

☐ Acute pain, swelling, or tenderness of the testes, epididymis, or prostate

☐ Acute dysuria ☐ Purulent drainage at catheter insertion site

New and/or marked increase in (check all that apply):

☐ Urgency ☐ Costovertebral angle pain or tenderness

☐ Frequency ☐ Suprapubic tenderness

☐ Incontinence ☐ Visible (gross) hematuria

Laboratory & Diagnostic Testing

☐ Positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of ≥ 10^5 CFU/ml

☐ Leukocytosis (>10,000 cells/mm^3), or Left shift (> 6% or 1,500 bands/mm^3)

☐ Positive blood culture with at least 1 matching organism in urine culture

*Specific Event (Check one): *Auto-populated in NHSN application*

☐ Symptomatic UTI (SUTI) ☐ Symptomatic CA-UTI (CA-SUTI) ☐ Asymptomatic Bacteremic UTI (ABUTI)

Secondary Bloodstream Infection: Yes No	Died within 7 days of date of event: Yes No
*Transfer to acute care facility within 7 days: Yes No	
*Pathogens identified: Yes No *If Yes, specify on page 3	

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Urinary Tract Infection (UTI) for LTCF

Pathogen #	Gram-positive Organisms							
_____	*Staphylococcus* coagulase-negative (specify species if available):	**CEFOX/OX** S R N	**VANC** S I R N					
_____	____*Enterococcus faecium* ____*Enterococcus faecalis* ____*Enterococcus* spp. (Only those not identified to the species level)	**DAPTO** S S-DD NS R I N	**GENTHL**[§] S R N	**LNZ** S I R N	**NIT** S I R N	**VANC** S I R N		
_____	*Staphylococcus aureus*	**CIPRO/LEVO/MOXI** S I R N	**CEFOX/METH/OX** S R N	**CEFTAR** S S-DD I R N	**CLIND** S I R N	**DAPTO** S NS N	**DOXY/MINO** S I R N	
		GENT S I R N	**LNZ** S R N	**RIF** S I R N	**TETRA** S I R N	**TMZ** S I R N	**VANC** S I R N	
Pathogen #	Gram-negative Organisms							
_____	*Proteus mirabilis*	**AMP** S I R N	**AMOX** S I R N	**CEFUR** S I R N	**CEFTRX** S I R N	**CEFIX** S I R N	**CIPRO** S I R N	**LEVO** S I R N	**ERTA/IMI/MERO** S I R N
_____	*Acinetobacter* (specify species) _____	**AMK** S I R N	**AMPSUL** S I R N	**CEFTAZ/CEFOT/CEFTRX** S I R N		**CEFEP** S I R N			**CIPRO/LEVO** S I R N
		COL/PB S R N	**DORI/MERO** S I R N	**DOXY/ MINO** S I R N		**GENT** S I R N	**IMI** S I R N	**PIPTAZ** S I R N	**TMZ** S I R N	**TOBRA** S I R N
_____	*Escherichia coli*	**AMK** S I R N	**AMP** S I R N	**AMPSUL/AMXCLV** S I R N		**AZT** S I R N	**CEFAZ** S I R N	**CEFTAZ** S I R N	**CEFOT/CEFTRX** S I R N	
		CEFEP S I/S-DD R N	**CEFTAVI** S R N	**CEFUR** S I R N	**CEFTOTAZ** S I R N		**CIPRO/LEVO/MOXI** S I R N		**COL/PB**[†] I R N	
		DORI / IMI / MEDRO S I R N		**DOXY / MINO / TETRA** S I R N		**ERTA** S I R N	**GENT** S I R N	**IMIREL** S I R N	**MERVAB** S I R N	
		NIT S I R N	**PIPTAZ** S I R N	**TIG** S I R N	**TMZ** S I R N	**TOBRA** S I R N				
_____	*Enterobacter* (specify species) _____	**AMK** S I R N	**AZT** S I R N	**CEFTAZ** S I R N	**CEFOT/CEFTRX** S I R N		**CEFEP** S I/S-DD R N	**CEFTAVI** S R N	**CEFTOTAZ** S I R N	
		CIPRO/LEVO/MOXI S I R N		**COL/PB**[†] I R N	**DORI/IMI/MERO** S I R N		**DOXY/MINO/TETRA** S I R N		**ERTA** S I R N	
		IMIREL S I R N	**MERVAB** S I R N	**NIT** S I R N	**PIPTAZ** S I R N	**TIG** S I R N	**TMZ** S I R N	**TOBRA** S I R N		
		CEFTAVI S R N	**CEFTOTAZ** S I R N	**CIPRO/ LEVO/ MOXI** S I R N	**COL/PB**[†] I R N		**DORI/IMI/MERO** S I R N		**DOXY/MINO/TETRA** S I R N	
		GENT S I R N	**IMIREL** S I R N	**MERVA B** S I R N	**NIT** S I R N	**PIPTAZ** S I R N	**TIG** S I R N	**TMZ** S I R N	**TOBRA** S I R N	

Urinary Tract Infection (UTI) for LTCF

Pathogen #	Gram-negative Organisms (*continued*)							
_______	*Pseudomonas aeruginosa*	**AMK** S I R N	**AZT** S I R N	**CEFTAZ** S I R N	**CEFEP** S I R N	**CEFTAVI** S R N	**CEFTOTAZ** S I R N	**CIPRO/LEVO** S I R N
		COL/PB S I R N	**DORI/IMI/MERO** S I R N		**GENT** S I R N	**PIPTAZ** S I R N		

Pathogen #	Other Organisms									
_______	Organism 1 (specify) _______	____ Drug 1 S I R N	____ Drug 2 S I R N	____ Drug 3 S I R N	____ Drug 4 S I R N	____ Drug 5 S I R N	____ Drug 6 S I R N	____ Drug 7 S I R N	____ Drug 8 S I R N	____ Drug 9 S I R N
_______	Organism 1 (specify) _______	____ Drug 1 S I R N	____ Drug 2 S I R N	____ Drug 3 S I R N	____ Drug 4 S I R N	____ Drug 5 S I R N	____ Drug 6 S I R N	____ Drug 7 S I R N	____ Drug 8 S I R N	____ Drug 9 S I R N
_______	Organism 1 (specify) _______	____ Drug 1 S I R N	____ Drug 2 S I R N	____ Drug 3 S I R N	____ Drug 4 S I R N	____ Drug 5 S I R N	____ Drug 6 S I R N	____ Drug 7 S I R N	____ Drug 8 S I R N	____ Drug 9 S I R N

Result Codes

S = Susceptible I = Intermediate R = Resistant NS = Non-susceptible S-DD = Susceptible-dose dependent
N = Not tested
§ GENTHL results: S = Susceptible/Synergistic and R = Resistant/Not Synergistic
† Clinical breakpoints are based on CLSI M100-ED30:2020, Intermediate MIC ≤ 2 and Resistant MIC ≥ 4

Drug Codes:			
AMK = amikacin	CEFTAR = ceftaroline	GENTHL = gentamicin –high level test	PB = polymyxin B
AMP = ampicillin	CEFTAVI = ceftazidime/avibactam	IMI = imipenem	PIPTAZ = piperacillin/tazobactam
AMPSUL = ampicillin/sulbactam	CEFTOTAZ = ceftolozane/tazobactam	IMIREL = imipenem/relebactam	RIF = rifampin
AMXCLV = amoxicillin/clavulanic acid	CEFTRX = ceftriaxone	LEVO = levofloxacin	TETRA = tetracycline
ANID = anidulafungin	CIPRO = ciprofloxacin	LNZ = linezolid	TIG = tigecycline
AZT = aztreonam	CLIND = clindamycin	MERO = meropenem	TMZ = trimethoprim/sulfamethoxazole
CASPO = caspofungin	COL = colistin	MERVAB = meropenem/vaborbactam	TOBRA = tobramycin
CEFAZ= cefazolin	DAPTO = daptomycin	METH = methicillin	VANC = vancomycin
CEFEP = cefepime	DORI = doripenem	MICA = micafungin	VORI = voriconazole
CEFIX = cefixime	DOXY = doxycycline	MINO = minocycline	
CEFOT = cefotaxime	ERTA = ertapenem	MOXI = moxifloxacin	
CEFOX= cefoxitin	FLUCO = fluconazole	NIT = nitrofurantoin	
CEFTAZ = ceftazidime	GENT = gentamicin	OX = oxacillin	

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Urinary Tract Infection (UTI) for LTCF

Custom Fields			
Label		Label	
_____	____/____/____	_____	____/____/_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Comments

Table 4. Instructions for Completion of the Urinary Tract Infection for LTCF form (CDC 57.140)

Data Field	Instructions for Form Completion
Resident information	
Facility ID	**Required**. The NHSN-assigned facility ID number will be auto populated by the system.
Event ID	Event ID number will be auto populated by the system.
Resident ID	**Required**. Enter the alphanumeric resident ID. This is the resident identifier assigned by the facility and may consist of any combination of numbers and/or letters. This should be an ID that remains the same for the resident across all admissions and stays.
Medicare number	*Optional*. Enter the resident Medicare number or comparable railroad insurance number.
Resident Name	*Optional.* Enter the name of the resident (last, first, middle).
Gender	**Required**. Select **M** (Male), **F** (Female) or **Other** to indicate the gender of the resident.
Sex at Birth (Birth Sex)	*Optional***.** Select Female, Male, or Unknown, to indicate the sex assigned at birth of the individual.
Gender Identity	*Optional*. Select Male, Female, Female-to-male transgender, Male-to-female transgender, identifies as non-conforming, Other, or Asked but unknown, to indicate the gender identify which most closely matches how the resident self-identifies.
Date of Birth	**Required**. Select the date of the resident's birth using the drop-down calendar.

Data Field	Instructions for Form Completion
Ethnicity (specify)	**Required.** Enter the resident's ethnicity: Hispanic or Latino; Not Hispanic or Not Latino; Declined to Respond; Unknown. Hispanic or Latino is defined as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.* The resident should always be asked to identify their race and ethnicity. If the resident is not a good historian, then check with a reliable family member. **NOTE:** Collecting race and ethnicity is important for understanding trends and ensuring the wellbeing of racial and ethnic minority groups. However, if after all attempts it is not possible to obtain ethnicity information, the appropriate response below, may be chosen: • Declined to respond • Unknown * https://www.census.gov/topics/population/hispanic-origin/about.html
Race (specify)	**Required.** Specify one or more of the choices below to identify the individual's race. **NOTE**: Collecting race and ethnicity is important for understanding trends and ensuring the wellbeing of racial and ethnic minority groups. • American Indian/Alaska Native • Asian • Black or African American • Native Hawaiian/Other Pacific Islander • White • Declined to respond • Unknown This data should be based upon the individual respondent's self-identification with regards to race. If the resident is a poor historian, solicit information from a reliable family member. **NOTE:** Hispanic or Latino is not a race, a person may be of any race while being Hispanic or Latino.

Data Field	Instructions for Form Completion
Resident Type	**Non-editable. Auto-populated by NHSN system** as short stay or long-stay based on the date of first admission to the facility and the event date. Specifically, the definitions are: ☐ ***Short stay***: Resident has been in facility for 100 or less days from date of **first** admission. In other words, if the Event Date minus the First Admission Date is less than or equal to 100; then resident type should be "SS" ☐ ***Long stay***: Resident has been in facility for more than 100 days from date of **first** admission. In other words, if the Event Date minus the First Admission Date is greater than 100 then the resident type should be "LS" **Important:** Users are **NOT** permitted to edit the auto-populated resident type.
Date of First Admission to Facility	**Required**. The date of first admission is defined as the date the resident **first** entered the facility. This date remains the same even if the resident leaves the facility (for example, transfers to another facility) for short periods of time (less than 30 consecutive days). If the resident leaves the facility and is away for 30 or more consecutive days, the date of first admission should be updated to the date of return to the facility. Select the *Date of First Admission* using the drop-down calendar.
Data Field	**Instructions for Form Completion**
Date of Current Admission to Facility	**Required**. The date of current admission is the most recent date the resident entered the facility. *If the resident enters the facility for the first time and has not left, then the date of current admission will be the same as the data of first admission.* Select the date of current admission using the drop-down calendar. **Notes:** • If the resident leaves the facility for more than 2 calendar days (the day the resident leaves the facility is equal to day 1) and returns, the date of current admission should be updated to the date of return to the facility. • If the resident has not left the facility for more than 2 calendar days, then the date of current admission should not change. • Date of current admission must occur BEFORE the date of event. *Example*: A resident is transferred from your facility to an acute care facility on June 2, 2023, and returns on June 5, 2023, the current admission date would be 06/05/2023. One week later, the same resident goes to the ED for evaluation on June 12, 2023, and returns on June 13, 2023. The date of current admission stays 06/05/2023.
Event Information	
Event Type	**Required**. Event type = UTI

Data Field	Instructions for Form Completion
Date of Event	**Required**: Enter the date when the first clinical evidence (signs or symptoms) of infection were documented **or** the date the specimen used to meet the infection criteria was collected, *whichever comes first*. **Note**: Date of event must occur AFTER the current admission date. Select the date of event using the drop-down calendar. *Example*: A resident had an indwelling urinary catheter (also called a Foley catheter) in place and had documentation of new suprapubic pain on June 1st. The resident had a urine specimen collected and sent for culture June 3rd. The Date of Event would be June 1st since this is the date of symptom onset and occurred before the date of culture collection.
Resident Care Location	**Required**. Enter the location where the resident was residing on the Date of Event.
Primary Resident Service Type	**Required**. Check the single primary service that best represents the type of care the resident is receiving on the Date of Event: Long-term general nursing, long-term dementia, long-term psychiatric, skilled nursing/short-term rehab (subacute), ventilator, bariatric, or hospice/palliative.
Has resident been transferred from an acute care facility in the past 4 weeks?	**Required**. Select "YES" if the resident has been an inpatient of an acute care facility (hospital, Long-term acute care hospital, or acute inpatient rehabilitation facility only) and was directly admitted to your facility in the past four weeks (specifically 28 days, with the day of specimen collection being day 1) prior to the current event date. Otherwise, select "NO." **Note**: A transfer from an outpatient setting, such as an emergency department or clinic is excluded since these settings visits do not represent an inpatient admission.
If yes, date of last transfer from acute care to your facility?	***Conditionally required***: If the resident was transferred from acute care to your facility in the past 4-weeks, select the most recent date of transfer using the drop-down calendar.
If yes, did resident have an indwelling urinary catheter at the time of transfer to your facility?	***Conditionally required***: Select "YES" if the resident was transferred from acute care to your facility with an indwelling urinary catheter (also called a Foley catheter); otherwise, select "NO."

Data Field	Instructions for Form Completion
Indwelling urinary catheter status at time of event onset	**Required**. Select one of the three options below: ☐ Check: NEITHER -Not in place if: ➢ Resident has/had an indwelling urinary catheter, but it has/had not been in place for more than 2 consecutive days on the date of event **OR** ➢ Resident did not have an indwelling urinary catheter in place on the date of event or the calendar day before the date of event **Note**: Check "*Not in Place*" even if a non-indwelling urinary device is/was in place (for example, suprapubic catheter, external collection devices) ☐ Check: INPLACE (In place) only if an indwelling urinary catheter (also called a Foley catheter) had been in place in for more than 2 consecutive calendar days and was present for any portion of the calendar day of the date of event. **Note**: This question is not referring to how the specimen was collected. ☐ Check: REMOVE - Removed within last 2 calendar days if an indwelling urinary catheter that had been in place in for more than 2 consecutive calendar days was removed within the 2 calendar days prior to Date of Event (where date of catheter removal = day 1). *Examples:* ➢ A resident had an indwelling urinary (Foley) catheter in place for the past four days and had documentation of new suprapubic pain on June 1. The resident had a urine specimen collected and sent for culture June 3rd. The culture was positive for *E. coli* at 100,000 CFU/ml. Check In place as the urinary catheter status on the Date of Event. ➢ If the indwelling catheter from the above example had been removed on May 31, check Removed within last 2 calendar days since the May 31, the date of removal, is day 1 and June 1 (Date of Event) is day 2. ➢ If the indwelling catheter from the above example was removed on May 30 (May 30 = day 1, May 31 = day 2), then check Not in place since the catheter was removed > 2 calendar days prior to June 1 (Date of Event). ➢ A resident had an indwelling urinary (Foley) catheter placed on June 1. On June 2 she complained of new suprapubic tenderness and had new onset of hypotension without another non-infectious cause. The resident had a urine specimen collected and sent for culture June 3rd. The culture was positive for *E. coli* at 100,000 CFU/ml. Check **Not in Place** since the urinary catheter had not been in place for **more** than two consecutive calendar days on the Date of Event. Calendar day 1 of placement = June 1; Calendar day 2 = June 2, which was also the day of symptom onset (date of event). So, the indwelling catheter had only been in place two calendar days on the Date of Event.

Data Field	Instructions for Form Completion
If indwelling urinary catheter status ***In place*** or ***Removed*** *within last 2 calendar days*: Site where device inserted (check one)	***Conditionally Required***. If an indwelling urinary catheter was in place or removed within last 2 calendar days, select one of the four options below: ☐ Check "FAC-Your facility" if the catheter present on the Date of Event was placed or changed in your LTCF; ☐ Check "AC-Acute care hospital" if the catheter present on the Date of Event was placed in an acute care facility (Hospital, Long-term acute care hospital, or acute inpatient rehabilitation facility only) *and not changed in your facility*; ☐ Check "OTH-Other" if the catheter present on the Date of Event was placed in another non-acute care facility *and not changed in your facility*; ☐ Check "UNK-Unknown" if it is not known where the catheter present on the Date of Event was inserted. **Note***:* Site of device insertion corresponds to the site of insertion or replacement of the indwelling urinary catheter in place at the time of the UTI event.
Date of indwelling urinary catheter insertion	*Optional*. If available, use the calendar drop down menu to select the date the device was placed using this format. **Note:** if the resident was transferred into the facility with an indwelling urinary catheter in place, and the LTCF replaces the catheter with a new one, then the date of device insertion should represent the date the new catheter was inserted.
If indwelling urinary catheter was not in place, was another urinary **device** type present at the time of event onset?	***Conditionally required.*** Select "YES" if another urinary management device was used. Specifically, a SUPRA-Suprapubic catheter, external drainage device for males or females (for example, condom catheter), or INTER- Intermittent Straight Catheter (in and out catheter). Otherwise, select "NO."
If "YES," select other device type	***Conditionally required.*** If a device other than an indwelling urinary catheter was being used, specifically a SUPRA-Suprapubic, External Drainage, or INTER-Intermittent Straight, select the option from the drop-down menu.
Specific Criteria Used: Check all that apply	
Important: Before submitting a UTI event to NHSN, verify that NHSN specific UTI criteria are met. Only UTIs meeting NHSN criteria will be accepted in the application. For example, the selected UTI event criteria **must meet the NHSN criteria** for: ☐ **SUTI-symptomatic UTI** when *indwelling urinary catheter status at the time of even onset* was answered as "NEITHER-Not in place". ☐ **CA-SUTI-Catheter-associated symptomatic UTI** when *indwelling urinary catheter status at the time of even onset* was answered as "REMOVE- Removed within last 2 calendar days" or "INPLACE-In place". ☐ **ABUTI-Asymptomatic bacteremia** if the resident did not have signs or symptoms of a UTI, but did have a positive urine culture with at least one matching positive blood culture **or** a fever was selected **and**	

Data Field	Instructions for Form Completion
	indwelling urinary catheter status at the time of event onset was answered as "NEITHER-Not in place" *(note-* a fever is not considered a symptom in a resident without an indwelling urinary device in place at the time of event onset)
Signs and Symptoms	**Required**. Check **all** the clinical criteria identified and documented in the resident record that were used to identify the UTI being reported. Please refer to the flow diagram in the protocol to determine which criteria are needed to qualify as a specific event type. ☐ Fever: Single temperature above 100°F or repeated temperature readings (more than one reading) above 99°F or an increase of more than 2°F over the residents' baseline temperature (temperature when resident is well). **Note**: Since fever is a non-specific symptom, if present, fever must be used to meet UTI criteria even if resident has another infection, such as pneumonia, that may be the cause of the fever. ☐ Rigors (a sudden feeling of cold with shivering accompanied by a rise in temperature). ☐ New onset of hypotension (low blood pressure) with no alternate non-infectious cause (for example, medication known to cause low blood pressure). **Note**: since hypotension is a non-specific symptom, it should be used to meet CA-SUTI criteria even if resident has another source of infection, such as pneumonia, that could be the cause of the hypotension. ☐ New onset of confusion or functional decline with no alternate diagnosis. **Note**: resident must also have leukocytosis to meet this criteria for CA-SUTI. ☐ Acute pain, swelling, or tenderness of the testes, epididymis, or prostate. ☐ Acute dysuria (painful urination). ☐ Purulent (milky, pus-like) drainage/discharge from around the catheter insertion site. ☐ New or marked increase in urinary urgency. ☐ New or marked increase in urinary frequency. ☐ New or marked increase in incontinence. ☐ New or marked increase in acute costovertebral (CV) angle pain or tenderness. **Note**: CV angle is one of the two angles that outline a space over the kidneys; the angle is formed by the lateral and downward curve of the lowest rib and the vertical column of the spine. ☐ New or marked increase in suprapubic (lower, center part of the abdomen) tenderness. ☐ New or marked increase in visible (also referred to gross) hematuria (visible blood in the urine).

Data Field	Instructions for Form Completion
Laboratory and Diagnostic Testing	**Required**. Check **all** the laboratory and diagnostic testing obtained and documented in the resident record that were used to confirm the UTI being reported. **Note**: A positive urine culture with at least one bacterium of ≥ 10^5 CFU/ml (≥100,000 CFU/ml) is required to meet criteria for UTI. ☐ Positive urine culture with no more than 2 species of microorganisms, at least one of which is a bacterium of ≥ 10^5 CFU/ml (≥100,000 CFU/ml). ☐ Leukocytosis [defined by NHSN as > 10,000 cells/mm^3, or Left shift (> 6% or 1,500 bands/mm^3)]. ☐ A positive blood culture with at least one matching organism to an organism identified in the urine culture. **Note:** The microorganisms must be identified to the genus and species level. If the culture reports "mixed flora" or "contamination", this would **NOT** meet criterion.
Specific Event	NHSN will auto-populate the specific UTI Event Type based on the event information selected. If the Specific Event Type does not auto-populate, please verify that entered criteria meet one of the NHSN UTI criteria. If NHSN UTI criteria are not met, you must delete the event from NHSN, or your data will be considered as incomplete. Incomplete data will trigger Alerts on the NHSN homepage and prevent data from populating in the LTCF dashboard.
Secondary bloodstream infection?	*Optional*. Check "YES" if resident has a microorganism reported in a urine culture and has the same microorganism reported from a blood culture. Otherwise, check "NO."
Died within 7 days of event date?	*Optional*. Check "YES" if resident died from any cause *within 7 days* after the Date of Event, otherwise check "NO."
Transfer to acute care facility within 7 days?	**Required**. Check "YES" if resident was transferred to an acute care facility (hospital, long-term acute care hospital, or acute inpatient rehabilitation facility only) for any reason *in the 7 days* after Date of Event, otherwise check "NO."
Pathogens identified	**Required**. Enter "YES" and specify organism name(s) and sensitivities listed on the paper form. For SUTI with secondary BSI and ABUTI, enter **only** the matching organism(s) identified in both urine and blood cultures.
Custom fields and labels	*Optional*. Up to 50 fields may be customized for local or group use in any combination of the following formats: date (MMDDYYYY), numeric or alphanumeric. **Note:** Each Custom Field must be set up in the Facility/Custom Options section of NHSN before the field can be selected for use.
Comments	*Optional*. Enter any information on the event. Entered information is for facility internal use only and is not analyzed by NHSN.

Laboratory-identified Event Surveillance for Multidrug Resistant Organisms (MDROs) and *Clostridioides difficile* Infection (CDI) Events in Long-term Care Facilities (LTCFs)

Background

Multi-drug resistant bacteria including methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant Enterococci (VRE), and multi-drug resistant Gram-negative bacilli (for example, *Carbapenem-resistant Enterobacterales*) have increased in prevalence in U.S. long-term care facilities (LTCF) over the past several decades.[1] For example, over 35% of nursing home residents are colonized with a multi-drug resistant organism (MDRO).[1] This has important public health implications as MDRO infections are associated with increased number of hospitalizations, hospital readmissions, higher healthcare costs, increased mortality due to more severe illnesses, and increased use of broad-spectrum antibiotics.[1]

The Healthcare Infection Control Practices Advisory Committee (HICPAC) has approved guidelines for the control of MDROs.[3] These guidelines are available at Multidrug-resistant Organisms (MDRO) Management Guidelines | Infection Control | CDC.). The MDRO and *Clostridioides difficile* (*C. difficile*) module of NHSN can provide a tool to assist facilities in meeting some of the criteria outlined in the guidelines. In addition, many of the metrics used in this module are consistent with "Recommendations for Metrics for Multidrug-Resistant Organisms in Healthcare Settings: SHEA/HICPAC Position Paper."[6]

Clostridioides difficile (*C. difficile*) infection (CDI) is one of the most common healthcare-associated infections in LTCFs and often a consequence of antibiotic overuse.[7] The clinical presentation of CDI ranges from uncomplicated diarrhea to severe pseudomembranous colitis, toxic megacolon, and even death. CDI represents an important subset of gastrointestinal tract infections impacting residents in LTCFs in the current CDC definitions for HAIs. It is recommended that specific, standard definitions for CDI [4,5] should be incorporated to obtain a more complete understanding of how *C. difficile* is being transmitted in LTCFs.

The use of standardized surveillance definitions to monitor MDROs and CDIs within a healthcare facility enables a more complete understanding of how these organisms manifest and are transmitted. The Laboratory-identified (LabID) Event Module within the NHSN LTCF Component is a less labor-intensive surveillance method in which laboratory testing data combined with limited admission, discharge, and transfer information are used without the clinical evaluation of the resident. Analysis of these data elements provide proxy infection measures of MDRO and *C. difficile* healthcare acquisition, exposure burden, and infection burden that will be useful in the implementation of recommended infection prevention and control strategies. [1-6]

References:

1. Cassone, M., et al. Colonization with Multi-drug Resistant Organisms in Nursing Homes: Scope, Importance, and Management. *Current Geriatrics Report,* vol. 4, no. 1, 2015, pp. 87-95.
2. Smith et al. SHEA/APIC Guideline: Infection Prevention and Control in the Long-Term Care Facility. Infection Control and Hospital Epidemiology, vol.29, 2008, pp. 785-814.
3. Healthcare Infection Control Practice Advisory Committee (HICPAC) Approved Guidelines for the Control of Multidrug Resistant Organism (MDRO). Available at www.cdc.gov/hicpac/pdf/MDRO/MDROGuideline2006.pdf
4. McDonald, C., et al. Clinical Practice Guideline for *Clostridium difficile* Infection in Adults and Children: 2017 Update by Infectious Disease Society of America (IDSA) and Society for Healthcare Epidemiology of America (SHEA). *Clinical Infectious Diseases*, vol. 44, no. 77, 2018, pp. e1-e48.
5. Simor, A. E., et al. *Clostridium difficile* in Long-Term Care Facilities for the Elderly. SHEA Position Paper. *Infection Control and Hospital Epidemiology*, vol. 23, no. 11, 2002, pp. 696-703.
6. Cohen, A. L., et al. Recommendations for Metrics for Multidrug-Resistant Organisms in Healthcare Settings: SHEA/HICPAC Position Paper. *Infection Control and Hospital Epidemiology*, vol. 29, no. 10, 2008, pp. 901-13.
7. Antibiotic Resistance Threats in the United States, 2019. Atlanta, GA: U.S. Department of Health and Human Services, CDC; 2019.

Section 1: MDRO LabID Event Reporting

The use of standardized surveillance definitions to monitor MDROs within a healthcare facility enables a more complete understanding of how these organisms manifest and are transmitted. The LabID Event Module within the NHSN LTCF Component is a less labor-intensive surveillance method in which laboratory tested data combined with limited admission, discharge, and transfer information are used without the clinical evaluation of the resident. This method provides proxy measures of MDRO infection burden and exposure that will be useful in the implementation of recommended MDRO infection prevention and control strategies. [1-6]

Settings

The MDRO LabID Event Module is available for use by Nursing Homes/Skilled Nursing Facilities (LTC: SKILLNURS); Intermediate Care Facilities for Individuals with Intellectual Disabilities (LTC: ICF/IID); Psychiatric Residential Treatment Facility (LTC: PSYCH); and Skilled Nursing Facility for State Veteran's Homes (LTC: SVHSNF).

MDRO surveillance in the above settings requires surveillance to be performed in all resident care locations within the facility, which is referred to as facility-wide inpatient or FacWideIN. Unit/location/pod specific MDRO surveillance is not an option in the LTCF MDRO LabID Event module.

Methods

Using the NHSN MDRO definitions listed below, LabID event surveillance methodology is used to monitor one or more of the following MDROs: *Staphylococcus aureus,* both methicillin-resistant (MRSA) and methicillin-susceptible (MSSA), vancomycin-resistant *Enterococcus* spp. (VRE), cephalosporin-resistant *Klebsiella* spp., Carbapenem-resistant *Enterobacterales* (CRE), and multidrug-resistant *Acinetobacter* spp.

NHSN data collection forms and form instructions are available for users to collect the required data prior to submitting the information to the NHSN application. Please note that one event form must be used for each LabID event. These forms are to be used for data collection only, and not to be sent to CDC NHSN.

MDRO LabID Event Definitions

- MDRO Positive Isolate**:** Any specimen, obtained for clinical decision making, testing positive for a MDRO (*as defined below*). Excludes positive isolates collected for active surveillance testing.
- MDRO LabID Event: (1) MDRO positive isolate from **any** specimen source collected while the resident is under the care of the reporting LTCF, which includes residents physically housed and cared for in the reporting LTCF, as well as residents being cared for during a brief outpatient visit (OP) in which the resident returns to the reporting LTCF on the day of the OP visit or the following calendar day.
- Facility-wide Inpatient (FacWideIN): All resident care locations in the facility.
- LabID Event Date: Specimen collection date.

MDROs included in this module are defined below:

Gram-stain positive organisms:

- **MRSA:** Includes ***S. aureus*** cultured from any specimen source that tests oxacillin-resistant, cefoxitin-resistant, or methicillin-resistant by standard susceptibility testing methods, or any laboratory finding of MRSA (includes but not limited to PCR or other molecular based detection methods).
- **MSSA:** Includes ***S. aureus*** cultured from any specimen source testing **susceptible** to oxacillin, cefoxitin, or methicillin by standard susceptibility testing methods. **Note:** MSSA is only an option when surveillance includes MRSA.
- **VRE:** ***Enterococcus faecalis, Enterococcus faecium, or Enterococcus species unspecified*** *(only those not identified to the species level)* that are resistant to vancomycin, by standard susceptibility testing methods or a laboratory finding of VRE (includes, but not limited, to PCR or other molecular based detection methods).

Gram-stain negative organisms:

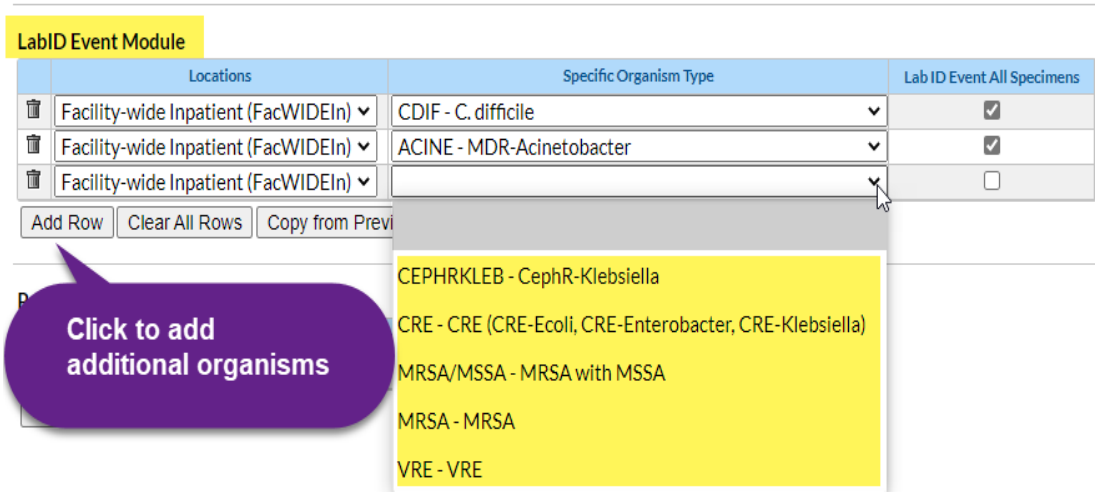
- **CephR-Klebsiella:** *Klebsiella oxytoca* or *Klebsiella pneumoniae* testing non-susceptible (specifically, either resistant or intermediate) to ceftazidime, cefotaxime, ceftriaxone, cefepime, ceftazidime/avibactam, or ceftolozane/tazobactam.
- **CRE**: Any ***Escherichia coli, Klebsiella oxytoca, Klebsiella pneumoniae, Klebsiella aerogenes or Enterobacter* spp**. testing **resistant** to imipenem, meropenem, doripenem, ertapenem, meropenem/vaborbactam, or imipenem/relebactam by standard susceptibility testing methods (specifically, minimum inhibitory concentrations of ≥4 mcg/mL for doripenem, imipenem, meropenem, meropenem/vaborbactam, and imipenem/relebactam or ≥2 mcg/mL for ertapenem) OR by production of a carbapenemase (specifically, KPC, NDM, VIM, IMP, OXA-48) demonstrated using a recognized test (examples: polymerase chain reaction, metallo-β-lactamase test, modified-Hodge test, Carba-NP). **Note:** CRE surveillance requires facilities perform surveillance for all three organisms CRE-*E.coli*, CRE-*Enterobacter*, **and** CRE-*Klebsiella (Klebsiella oxytoca, Klebsiella aerogenes* and *Klebsiella pneumoniae*).
- **MDR-Acinetobacter:** Any ***Acinetobacter*** species testing non-susceptible (specifically, either resistant or intermediate) to at least one agent in at least 3 antimicrobial classes of the following 6 antimicrobial classes:

Antimicrobial Class	Antimicrobial Agents
Aminoglycosides:	Amikacin, Gentamicin, Tobramycin
β-lactam/β-lactam β-lactamase inhibitor combination	Piperacillin and tazobactam
Carbapenems:	Imipenem, Meropenem, Doripenem
Cephalosporins:	Cefepime, Ceftazidime, Cefoxitin, Ceftriaxone
Fluoroquinolones:	Ciprofloxacin, Levofloxacin
Sulbactam:	Ampicillin/sulbactam

Requirements for MDRO LabID Event Reporting

1. A **NHSN Monthly Reporting Plan** for the LTCF must be completed for each calendar month in which a facility plans to submit data to NHSN. A user will not be able to save entered event data in the NHSN application without a corresponding monthly reporting plan.

   - For MDRO surveillance, one or more MDROs must be selected from the *Specific Organism Type* drop-down menu under the LabID Event Module section. As a reminder, the *Location* box will auto-populate Facility-wide Inpatient (FacWideIN), which means surveillance must occur for all resident care locations in the facility. The *LabID Event All Specimens* box will auto check, indicating MDRO surveillance must include all specimen sources. Click "Add Row" to select more than one specific organism type. Facilities may opt to include *C. difficile* infection in the monthly LabID Event surveillance plan.



2. Submit **ALL MDRO LabID events for <u>all</u> specimen sources** to NHSN. Exceptions are **not** made for duplicate isolates, location, or admission/transfer dates, as all events must be submitted for accurate categorization and analyses. In return, NHSN will categorize the submitted MDRO LabID events based on the MDRO categories described in this protocol.

3. Perform surveillance for all resident care locations in the facility, referred to as FacWideIN. Surveillance includes positive isolates collected during an OP visit, such as an emergency department (ED) or clinic/office visit, when the resident returns to the LTCF on the day of the visit or the following calendar day (specifically, these residents remain under the care of the LTCF, and the *current* admission date does not change due to the OP visit).

   - **NOTES ABOUT SPECIMEN COLLECTION AND SURVEILLANCE**
     - When submitting a LabID event for a specimen collected in an OP setting, the *Resident Care Location* and *Primary Resident Service Type* should reflect the resident's primary LTCF location and service type on the day of the outpatient visit.
     - Specimens collected prior to admission to the LTCF or during an admission in another facility are NOT included in data submission for the reporting LTCF.
     - *Results from positive isolates collected as part of active surveillance are excluded.*
     - There is not an option to perform surveillance on select or individual units/pods within the facility. However, users will be able to review resident and location level data and trends in line lists, analysis reports, including the LTCF Data Dashboard.

4. Submit **complete event and monthly summary data** (specifically, numerators and denominators) for each calendar month in which the facility has a monthly reporting plan. Incomplete data will result in errors in data analysis, including the LTCF Data Dashboard (see Numerator and Denominator Data section).
5. Facilities are encouraged to perform surveillance and reporting for at least 6 consecutive months to provide meaningful measures for analysis, but there is not a minimum reporting requirement.

Case Scenarios:

1. Mr. G is a resident in your LTCF. On March 1st, he was transferred to the local emergency department (ED) for evaluation of a foot ulcer. While in the ED, the wound was cultured and tested positive for MRSA. Antibiotics were ordered and Mr. G was transferred back to the LTCF on the same calendar day. Since the MRSA positive wound culture was collected in an outpatient setting and Mr. T returned to the LTCF on the same calendar day of the visit (or the next calendar day), the LTCF submitted a MRSA LabID event.
2. Mr. G is a resident in your LTCF. On March 1st, he was transferred to the local ED for evaluation of a foot ulcer. While in the ED, the wound was cultured and tested positive for MRSA. He was admitted to the hospital for IV antibiotics. Since Mr. G was admitted to the hospital and did not return to the LTCF within 2 calendar days of the OP visit, the LTCF did not submit a MRSA LabID event.

Key Points for MDRO LabID Event Reporting

- All MDRO LabID events for selected MDRO(s) must be submitted to NHSN. Exceptions are **not** made for duplicate specimens, collection date, admission, etc. since these submitted events are required for accurate categorization and analyses.
- LabID events must be monitored at the overall facility-wide level for inpatient areas (FacWideIN).
- Location specific surveillance is not available for LabID Event reporting. Although, facilities are able to organize and view location specific LabID events submitted to NHSN.
- Laboratory results obtained before a resident's admission to the LTCF or during an admission in another facility are excluded from LabID event reporting.
- LabID event rules apply to specimens collected while the resident is under the care of the reporting LTCF, which NHSN defines as being physically housed/bedded in the reporting LTCF or during a brief outpatient visit in which the resident returns to the reporting LTCF on the day of the OP visit or the following calendar day. **Note:** When submitting a LabID event for positive isolates collected in an OP setting, the selected *Resident Care Location* and *Primary Resident Service Type* should reflect the resident's primary LTCF location and service type on the day of the OP visit.
- Surveillance must occur for all specimen sources for each of the selected MDROs in the *Monthly Reporting Plan*.
- The date of specimen collection is considered the event date.
- Incomplete event or denominator data will be excluded from analysis, including the LTCF Data Dashboard.

Case Scenarios:

1. Mr. T is a long-term resident in your facility. On December 2nd, he developed a fever and complained of pain during urination. A urine culture was collected on 12/2 and subsequently returned positive for MRSA. A MRSA LabID event was submitted to NHSN for 12/2 (date of specimen collection). Over

the next week, Mr. T seemed to improve, and the pain resolved. On December 25th, he had purulent discharge around his penis. A urine culture was collected on the same day and subsequently tested positive for MRSA. The second MRSA was also entered in NHSN as a MRSA LabID event for 12/25. *Hint: **All** MDRO LabID events for selected MDRO(s) must be submitted to NHSN. Exceptions are not made for duplicate specimens.*

2. Ms. Smith was admitted to your LTCF today, on May 1. According to her chart, she was recently treated for VRE in a surgical wound but continues to have episodes of pain and copious discharge. The attending physician ordered a culture of the wound, and the specimen was collected on the following day, on May 2. The results were positive for VRE. The LTCF submitted a VRE LabID Event to NHSN for Ms. Smith. *Hint: **All** MDRO LabID events for selected MDRO(s) must be submitted to NHSN. Exceptions are not made based on when the resident was transferred or admitted to the LTCF.*

    2a. Over the next several days, Ms. Smith's condition seemed to worsen, and she developed a fever that would not respond to medication. A blood, urine, and wound culture were ordered. The specimens were collected on May 10th and came back with the following results: Blood +VRE; Wound +VRE and +MRSA; Urine +VRE. The LTCF submitted a separate LabID event for each positive MDRO: (1) VRE-blood; (2) VRE–wound; (3) MRSA-wound; and (4) VRE-urine. *Hint: **All** MDRO LabID events for selected MDRO(s) must be submitted to NHSN. Exceptions are **not** made for duplicate results or specimens. A new LabID event must be submitted for each positive MDRO isolate.*

3. Mrs. A was transferred from an acute care facility to your skilled nursing facility (SNF) for rehab following a motor vehicle accident. According to her chart, immediately prior to transfer to your SNF, the acute care facility collected a wound culture, which returned as positive for multidrug resistant *Acinetobacter*. She transferred to your facility on antibiotics for a wound infection. Your LTCF does NOT submit this positive MDRO isolate as an MDR-*Acinetobacter* LabID event since Mrs. A was tested prior to admission to your SNF. *Hint: if she is tested again, after admission to your SNF, a positive MDR-Acinetobacter would be submitted as an* MDR-*Acinetobacter* LabID event.

    3a. While reviewing her chart, you also notice that a nasal swab was collected as part of the SNF's MRSA active surveillance program. The culture was positive. Since the positive MRSA was collected as part of your active surveillance program, A MRSA LabID event is not submitted for Mrs. A. *Hint: NHSN defines a MDRO Positive Isolate as any specimen, obtained for clinical decision making, testing positive for a MDRO. Results from positive isolates collected as part of active surveillance are excluded.*

Numerator and Denominator Data

NHSN provides users with data collection forms and accompanying form instructions (referred to as Table of Instructions) that can be used to collect the required LabID event data (numerator data), as well as the required monthly summary data (denominator data). While manual data collection using the forms is optional, users should be familiar with the required data elements that must be submitted in the NHSN application in order for the data to be considered as complete. Facilities may also choose to customize these forms to better accommodate individual surveillance programs.

Numerator

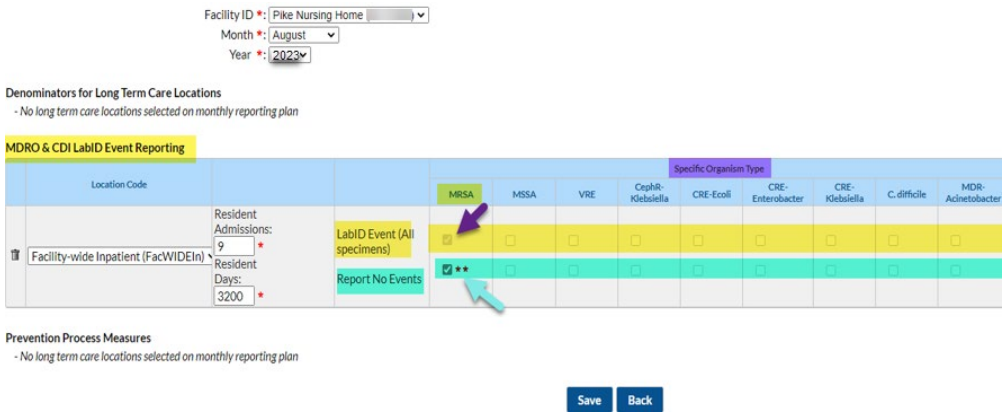
The *Laboratory identified MDRO or CDI Event for LTCF* form (CDC 57.138) is used to collect required data for each NHSN defined MDRO LabID event. A separate data collection form is the be used for each LabID

event. NHSN also provides users with detailed form instructions in the *Table of Instructions for Completion of the LTCF Laboratory- identified (LabID) MDRO or CDI Event form*.

Denominator

Referred to by NHSN as *Monthly Summary Data.* After selecting the month and year for which monthly summary data will be submitted, the NHSN application will auto-populate the form with the required data elements based on the selections made in the NHSN Monthly Reporting Plan for the corresponding month. For MDROs only, the monthly summary requires users to enter **monthly totals** for resident admissions and resident days, as well as confirm if no LabID events were submitted for the selected organisms during the month.

The following example represents the Monthly Summary Data requirements for a facility with a Monthly Reporting Plan indicating that MRSA LabID event surveillance will be the only NHSN surveillance completed for the month of August 2023. In this example, the *Report No Events* box is active with two red asterisks, under MRSA (Specific Organism Type), indicating that no MRSA LabID events were submitted to NHSN during the month of August 2023. If this is correct, the facility must put a check mark in the box to confirm that no MRSA isolates were identified during this month. If, after saving the Monthly Summary Data form, a MRSA positive isolate is submitted as a MRSA LabID event, the form will auto-update without additional action from the user.



NHSN provides two form options for collecting monthly summary data for LabID events. One form should be used for the entire calendar month.

1. The *MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF* form (CDC. 57.139) may be used to document total required denominator counts for the calendar month. Detailed instructions for completing this form are available in the *Table of Instructions for Completion of the MDRO and CDI Monthly Monitoring for Long-term Care Facility*.
2. A second form option includes the *Denominators for LTCF* form (CDC 57.142), which may be used to document daily denominator counts, keeping in mind that only the monthly totals are submitted to NHSN. This optional form provides users with the option to document daily counts for MDRO and/or CDI LabID events, as well as for urinary tract infections (UTI). Detailed form instructions are available in the *Table of Instructions for Completion of the LTCF Component Denominators for LTCF* document.

Definitions and Key Points for MDRO LabID Event Denominator Data

- *Resident Admissions* refers to total number of residents admitted to the facility including both new and re-admissions (specifically, a resident who was out of the facility for more than two (2) calendar days and then returned). The total number of new and re-admissions is added for the complete calendar month and submitted to NHSN as Resident Admissions.
- *Resident-Days* are calculated using the daily census of residents in the facility each calendar day of the month. The daily total is added at the end of the calendar month and the total number is then submitted to NHSN as Resident Days.

MDRO Data Analyses

All event (numerator) and monthly summary (denominator) data submitted to NHSN can be analyzed. Prior to calculating MDRO LabID event metrics, NHSN categorizes submitted MDRO LabID events. The below sections will first describe how MDRO LabID Events are categorized, followed by the calculated metrics that are incorporated into the analytics output.

Categorizations of Submitted MDRO LabID Events

Based on the surveillance and reporting options selected in the NHSN Monthly Reporting Plan, **ALL** selected positive MDRO isolates collected while the resident is under the care of the reporting LTCF are to be submitted as a MDRO LabID event, including those collected in an OP setting when the resident returns to the LTCF on the day of the OP visit or the following calendar day. In return, NHSN removes duplicate MDRO LabID events and categorizes remaining non-duplicate events based on event date (specifically specimen collection date), specimen source (specifically blood sources), current admission date, and date of last transfer from an acute care facility to the reporting LTCF. Calendar days are used for all categorizations.

NHSN removes duplicate events prior to categorizing and analyzing submitted MDRO LabID events. Duplicate MDRO LabID events are defined as: (1) the same organism subsequently collected from any non-blood source in the same calendar month; and (2) the same organism collected from a second blood source in the subsequent 14 calendar days. While these events are not further analyzed by NHSN, a facility user may opt to review a NHSN line list to view all submitted MDRO LabID events, including duplicate and non-duplicate events.

Categorization applied by NHSN to MDRO LabID events are defined below:

After removing duplicate MDRO LabID events, NHSN categorizes nonduplicate events as one of the following: 1). Community-onset (CO); 2). Long-term Care Facility-onset (LO); or 3). Acute Care Transfer-Long-term Care Facility-onset (ACT-LO)

1. **Community-onset (CO) LabID Event:** LabID event date (specifically, specimen collection date) occurs in 3 calendar days or less after date of current admission to the facility. For example, days 1 (current admission date), 2, or 3 are considered as CO LabID events.
2. **Long-term Care Facility-onset (LO) LabID Event:** LabID event date (specifically, specimen collection date) is more than 3 calendar days after the date of current admission to the facility. For example, day 4 or after.

    2a. **Acute Care Transfer-Long-term Care Facility-onset (ACT-LO):** A LTCF-onset (LO) LabID event with date specimen collected 4 weeks or less following the date of last transfer from

an acute care facility (specifically, a hospital, long-term acute care hospital, or acute inpatient rehabilitation facility only) to the LTCF.

Case Scenarios to Demonstrate How NHSN Classifies Submitted LabID Events:

Example: NHSN Classification of Lab ID Events as **Community-onset or LTCF-onset**				
Admission date June 4th	June 5th	June 6th	June 7th	June 8th
day 1	day 2	day 3	day 4	day 5
Community-onset (CO)			**Long-term Care Facility-onset (LO)**	

For the following case scenarios, the LTCF submitted an NHSN Monthly Reporting Plan indicating that all NHSN MDROs would be included in LabID Event surveillance for the year.

1. Ms. T was first admitted to the LTCF on June 4th. On June 5th, a CNA documented a foot ulcer with purulent drainage and redness around the borders. On June 7th, the foot ulcer tested positive for MRSA. A MRSA LabID event was submitted to NHSN for June 7th (date of specimen collection). NHSN categorized the LabID event as **Long-term Care Facility onset (LO)** since the specimen was collected after the 3rd calendar day of the current admission to the facility. Later, Ms. T had a urine culture collected on June 29 that also tested positive for MRSA. The positive isolate was submitted to NHSN as a MRSA LabID event. NHSN identified the specimen as a duplicate MRSA LabID event and excluded the event from additional analysis. After reviewing the lab reports and NHSN line listing for all submitted LabID events, the infection preventionist (IP) realized a positive MRSA blood culture collected from Ms. T on June 12 was not submitted to NHSN, so a MRSA blood specimen was submitted to NHSN as a MRSA LabID event for June 12. Since no other blood source MRSA LabID events were entered in NHSN for the previous 14 calendar days, the MRSA blood specimen was considered as a non-duplicate MRSA LabID event. NHSN recategorized the previously submitted non-blood MRSA LabID events submitted for June as duplicate events and excluded those events from further NHSN analyses.

    a. NHSN identified the first submitted MRSA LabID event for the month as a non-duplicate. NHSN then categorized the nonduplicate MRSA LabID event as **Long-term Care Facility onset (LO)** since the specimen was collected more than 3 calendar days after the current admission date. *Hint: LabID event methodology is a less labor-intensive surveillance method for providing proxy measures of infection burden and exposure. This methodology does not incorporate clinical criteria and is instead based on laboratory testing data and admission, discharge, and transfer information. This means the onset of signs and symptoms documented on June 5 were not considered when categorizing the LabID event. This scenario represents a trade-off between reduced surveillance burden associated with LabID event methodology and decreased specificity.*

    b. A blood specimen LabID event with the same organism will always triumph submitted non-blood LabID events for the same month.

2. Ms. Smith was transferred to your SNF from an acute care facility on July 1st. A urine culture was collected on July 10th that tested positive for VRE. The SNF submitted a VRE LabID event to NHSN for July 10th.

    a. First, NHSN identified the submitted event as a non-duplicate since the application did not detect a prior VRE LabID event submitted for Ms. Smith in the month of July.

b. Next, NHSN categorized the nonduplicate VRE LabID event as **Acute Care Transfer-Long-term Care Facility-onset (ACT-LO)** since the specimen was collected more than 3 calendar days after her current admission and the submitted event indicated a transfer from an acute care facility to your SNF in the previous 4 weeks.

3. Mr. Tom was transferred to your LTCF from home on August 5th. He was on treatment for a MRSA urinary tract infection at the time of admission. The LTCF does not submit a MRSA LabID event since the positive MRSA isolate was collected prior to admission to the LTCF. Later, on August 10th, the on-call doctor ordered a urine culture and the results returned positive for MRSA and VRE. The LTCF must submit two separate MDRO LabID events for 8/10, one MRSA LabID event and a VRE LabID event.

   a. First, NHSN identified each the submitted LabID event as a non-duplicate since the application did not detect a prior MRSA or VRE LabID event submitted for Mr. Tom in the month of July.

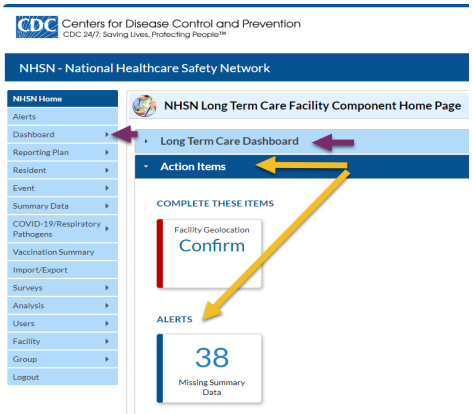
   b. Next, NHSN categorized each event as **Long-term Care Facility-onset (LO)** since the specimen were collected more than 3 days after the current admission date. If no other positive MDRO isolates were identified during July, the LTCF NHSN line list would show LO MRSA LabID event and a LO VRE LabID event for July.

Calculated MDRO LabID Event Metrics

After a user generates analysis datasets in the application, all data entered for the facility up until that time are immediately available for users to visualize and analyze. For example, line listing reports provide detailed, line by line listing of events submitted to NHSN, including how submitted MDRO events are categorized (refer to the "Onset" variable in the NHSN Line List). Additionally, rate tables provide users with summarized monthly data using NHSN calculated rates and denominator data. Examples include calculated incidence and prevalence rates, as well as rate tables for submitted MDROs. Users can also generate frequency tables, bar charts, and pie charts.

Additionally, the LTCF Dashboard, located on the NHSN Home Page, allows users to quickly visualize data found in the rate tables and line listings in the form of interactive bar charts and line graphs. For additional information about the LTCF Dashboard, please review the CDC Guidance Document – Dashboard. As a reminder, only NHSN identified non-duplicate LabID events are included in calculated metrics.

Important: Incomplete events and/or summary data will trigger an "Alert" on the facility's NHSN homepage. All records identified by an "Alert" will be excluded from the rate tables and the LTCF Dashboard until the Alert is resolved by a facility user.



The following table describes the various NHSN calculated metrics for MDRO LabID event surveillance.

Calculated Metrics	Calculations	Comments
Total MDRO Rate per 1,000 resident days	$\frac{\textbf{Number of MDRO LabID Events}}{\textbf{Total resident} - \textbf{days}} \boldsymbol{x\ 1,000}$	Includes CO **and** LO LabID events per month
• *Percent* of MDRO CO LabID events	$\frac{\textbf{Number of CO MDRO LabID Events}}{\textbf{Total number of MDRO LabID Events}} \boldsymbol{x\ 100}$	
• *Percent* of MDRO LO LabID events	$\frac{\textbf{Number of LO MDRO LabID Events}}{\textbf{Total number of MDRO LabID Events}} \boldsymbol{x\ 100}$	
• *Percent* of LO MDRO LabID events that are ACT-LO LabID events	$\frac{\textbf{Number of ACT} - \textbf{LO MDRO LabID Events}}{\textbf{Total number of LO MDRO LabID Events}} \boldsymbol{x\ 100}$	
MDRO LO Rate per 1,000 resident days	$\frac{\textbf{Number of LO MDRO LabID Events}}{\textbf{Total resident} - \textbf{days}} \boldsymbol{x\ 1,000}$	

Section 2: CDI LabID Event Reporting

The use of standardized surveillance definitions to monitor *C. difficile* infection (CDI) within a healthcare facility enables a more complete understanding of the burden and transmission of this spore-forming, Gram-positive anaerobic bacterium. The LabID Event Module within the NHSN LTCF Component is a less labor-intensive surveillance method in which laboratory testing data combined with limited admission, discharge, and transfer information are used without the clinical evaluation of the resident for signs and symptoms. This method provides proxy measures of CDI and healthcare exposure that can be useful in the implementation of recommended CDI prevention and control strategies. [1-6]

Settings

The CDI LabID Event Module is available for use by certified skilled nursing facilities and nursing homes (LTC: SKILLNURS) and intermediate/chronic care facilities for the developmentally disabled (LTC: DEVDIS), which may also be referred to by the Centers for Medicare and Medicaid Services (CMS) as Intermediate Care Facilities for Individuals with Intellectual Disabilities (IDF/IIDs).

CDI surveillance in the above settings requires surveillance to be performed in all resident care locations within the facility, which is referred to as facility-wide inpatient or FacWideIN. Unit/location/pod specific CDI surveillance is not an option in the LTCF MDRO & CDI LabID Event module.

Methods

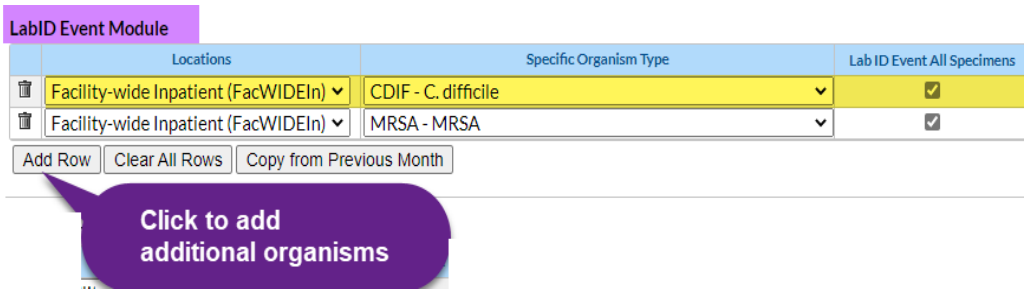
Using LabID event surveillance methodology, LTCFs have the option to monitor CDI alone or in conjunction with one or more of the MDROs available in the reporting module. NHSN data collection forms and form instructions are available for users to collect the required data elements prior to submitting the information to the NHSN application. Keeping in mind that one form should be used per LabID event and forms must not be sent to CDC-NHSN.

CDI LabID Event Definitions

- *C. difficile* positive laboratory assay: (1) An unformed/loose stool that tests positive for *C. difficile* toxin A and/or B. This includes molecular assays (PCR) and/or toxin assays; or (2) A toxin-producing *C. difficile* organism detected in an unformed/loose stool sample by culture or other laboratory means.
- CDI Laboratory-identified (LabID) Event: (1) *C. difficile* positive laboratory assay collected while resident is under the care of the reporting LTCF, which includes residents physically housed and cared for in the reporting LTCF, as well as residents being cared for during a brief outpatient visit (OP) in which the resident returns to the reporting LTCF on the day of the OP visit or the following calendar day.
- Facility-wide Inpatient (FacWideIN): All resident care locations in the facility.
- LabID Event Date: Specimen collection date.

Requirements for CDI LabID Event Reporting

1. A **NHSN Monthly Reporting Plan** for the LTCF must be completed for each calendar month in which a facility plans to submit data to NHSN. A user will not be able to save entered event data in the NHSN application without a corresponding monthly reporting plan.
   - For CDI surveillance, *C. difficile* must be selected as the *Specific Organism Type* from the drop-down menu under the LabID Event Module section. As a reminder, the *Location* box will auto-populate Facility-wide Inpatient (FacWideIN), which means surveillance must occur for all resident care locations in the facility. The *LabID Event All Specimens* box will auto check, although CDI surveillance is specific to *loose stool specimens* only. Click "Add Row" to select additional organism types, such as specific MDROs (optional).



2. Perform surveillance for all resident care locations in the facility, referred to as FacWideIN. Surveillance includes *C. difficile* positive laboratory assays collected during an OP visit, such as an emergency department (ED) or clinic/office visit, when the resident returns to the LTCF on the day of

the visit or the following calendar day (specifically, these residents remain under the care of the LTCF, and the *current* admission date does not change due to the OP visit).

- **NOTES ABOUT SPECIMEN COLLECTION AND SURVEILLANCE**
  - When submitting a LabID event for a specimen collected in an OP setting, the *Resident Care Location* and *Primary Resident Service Type* should reflect the resident's primary LTCF location and service type on the day of the outpatient visit.
  - Specimens collected prior to admission to the LTCF or during an admission in another facility are NOT included in data submission for the reporting LTCF.
  - There is not an option to perform surveillance on select or individual units/pods within the facility. However, users will be able to review resident and location level data and trends in line lists and analysis reports, including the LTCF Data Dashboard.

3. Submit **ALL CDI LabID Events** to NHSN. Exceptions are **not** made for duplicate *C. difficile positive laboratory assays*, location, or admission/transfer dates, as all events must be submitted for accurate categorization and analyses. In return, NHSN will categorize the submitted CDI LabID events based on the CDI categories described in this protocol.
4. Submit **complete Event and Monthly Summary Data** (specifically, numerators and denominators) for each calendar month in which the facility has a monthly reporting plan. Incomplete data will result in errors in data analysis, including the LTCF Data Dashboard (see Numerator and Denominator Data section).
5. Facilities are encouraged to perform surveillance and reporting for at least 6 consecutive months to provide meaningful measures for analysis, but there is not a minimum reporting requirement.

Case Scenarios:

1. Mrs. A was admitted to your skilled nursing facility (SNF) for rehab following a motor vehicle accident. According to her chart, she had a *C. difficile* PCR positive test result during her admission in the acute care facility. She is admitted to your facility on treatment. Your SNF does NOT submit the *C. difficile* positive laboratory assay to NHSN as a CDI LabID event since the specimen was collected during an admission in another facility. *Hint: if she is tested again, after admission to your SNF, a C. difficile positive laboratory assay would be submitted as a CDI* LabID event.

2. Mr. G is a resident in your LTCF. On March 1st, he was transferred to the local emergency department (ED) for evaluation of copious diarrhea for 3 days. While in the ED, he tested positive for *C. difficile*. After receiving IV fluids and a prescription for medication, Mr. G was transferred back to the LTCF the next calendar day, on March 2. Since the *C. difficile positive laboratory assay* was collected in an outpatient setting and the resident returned to the LTCF within 2 calendar days (day of OP visit or next calendar day), the LTCF submitted a CDI LabID event.

Key Points for CDI LabID Event Reporting

- All CDI LabID events must be submitted to NHSN. Exceptions are **not** made for duplicate specimens, collection date, admission, etc. since these submitted events are required for categorization and analyses.
- LabID events must be monitored at the overall facility-wide level for inpatient areas (FacWideIN).
- Location specific surveillance is not available for LabID event reporting. Although, facilities are able to organize and view location specific LabID events submitted to NHSN.

- Laboratory results obtained before a resident's admission to the LTCF or during an admission in another facility are excluded from LabID event reporting.
- LabID event rules apply to specimens collected while the resident is under the care of the reporting LTCF, which NHSN defines as being physically housed/bedded in the reporting LTCF or during a brief outpatient visit in which the resident returns to the reporting LTCF on the day of the OP visit or the following calendar day. **Note:** When submitting a LabID event for positive isolates collected in OP setting, the selected *Resident Care Location* and *Primary Resident Service Type* should reflect the resident's primary LTCF location and service type on the day of the OP visit.
- Surveillance must occur for loose stool specimen sources.
- The date of specimen collection is considered the event date.
- Incomplete event or denominator data will be excluded from analysis, including the LTCF Data Dashboard.

Case Scenarios:

1. Mr. T is a long-term resident in your facility. On December 10th, he had 4 episodes of copious diarrhea and a fever that continued through the next day. A loose stool specimen was collected on 12/11, and subsequently returned positive for *C. difficile* toxin. A CDI LabID event was submitted to NHSN for 12/11 (date of specimen collection). Over the next week, Mr. T seemed to improve, and the diarrhea and fever resolved with treatment. On December 20th, the diarrhea returned and after several episodes of diarrhea, a loose specimen was collected on the same day and tested positive for *C. difficile* toxin. A second CDI LabID event was submitted to NHSN for 12/20. *Hint: All CDI LabID events must be submitted to NHSN. Exceptions are not made for duplicate specimens.*

2. Ms. Smith was admitted to your LTCF today, on May 1st. According to her chart, she was recently treated for CDI while in the acute care facility but continues to have episodes of diarrhea and abdominal pain. The attending physician ordered a *C. difficile* assay, and a loose stool specimen was collected on the following day, May 2nd. The results were positive for *C. difficile* toxin A. The LTCF submitted a CDI LabID event to NHSN for Ms. Smith. *Hint: All CDI LabID events submitted to NHSN. Exceptions are not made for based on when the resident was admitted or readmitted to the LTCF.*

3. Mrs. A was transferred from an acute care facility to your skilled nursing facility (SNF) for rehab following a motor vehicle accident. According to her chart, immediately before transfer to your SNF, she tested positive for CDI and was ordered to start medication. Your LTCF does NOT submit a CDI LabID event since Mrs. A was tested prior to admission to your SNF. *Hint: if she is tested again, after admission to your SNF, a positive C. difficile toxin result would be submitted as a CDI* LabID event.

Numerator and Denominator Data

NHSN provides users with data collection forms and accompanying form instructions (referred to as Table of Instructions) that can be used to collect the required LabID event data (numerator data), as well as the required monthly summary data (denominator data). While manual data collection using the forms is optional, users should be familiar with the required data elements that must be submitted in the NHSN application for the data to be considered as complete. Facilities may also choose to customize these forms to better accommodate individual surveillance programs.

Numerator

The *Laboratory identified MDRO or CDI Event for LTCF* form (CDC 57.138) is used to collect required data for each NHSN defined CDI LabID event. A separate data collection form is to be used for each LabID event. NHSN also provides users with detailed form instructions in the *Table of Instructions for Completion of the LTCF Laboratory-identified (LabID) MDRO or CDI Event Form*

Denominator

Referred to by NHSN as *Monthly Summary Data.* After selecting the month and year for which monthly summary data will be submitted, the NHSN application will auto-populate the denominator form with the required data elements based on the selections made in the NHSN Monthly Reporting Plan for the corresponding month. For CDI, the monthly summary requires **monthly totals** for resident admissions, resident days, number of admissions on *C. difficile* infection treatment, and number of residents on antibiotics (or other CDI treatment) for *C. difficile* infection.

The following example represents the Monthly Summary Data requirements for a facility with a Monthly Reporting Plan indicating that MRSA LabID and *C. difficile* LabID event surveillance will be the only two NHSN surveillance options completed for the month of August 2023. In this example, the *Report No Events* box is active with two red asterisks for MRSA, but not for *C. difficile*, indicating that no MRSA LabID events were submitted to NHSN during the month of August 2023, but at least one CDI LabID event was submitted. If correct, the facility must put a check mark in the box to confirm that no MRSA isolates were identified during this month. If, after saving the Monthly Summary Data form, a MRSA positive isolate is submitted as a MRSA LabID event, the form will auto-update without additional action from the user.

NHSN provides two form options for collecting monthly summary data for LabID events. One form should be used for the entire calendar month.

3. The *MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF* form (CDC. 57.139) may be used to document total required denominator counts for the calendar month, specifically for MDRO and CDI LabID events. Detailed instructions for completing this form are available in the *Table of Instructions for Completion of the MDRO and CDI Monthly Monitoring for Long-term Care Facility*.

4. A second form option includes the *Denominators for LTCF* form (CDC 57.142), which may be used to document daily denominator counts, keeping in mind that only the monthly totals are submitted to NHSN. This optional form provides users with the option to document daily counts

for MDRO and/or CDI LabID events, as well as for urinary tract infections (UTI). Detailed form instructions are available in the *Table of Instructions for Completion of the LTCF Component Denominators for LTCF* document.

Definitions and Key Points for CDI LabID Event Denominator Data

- *Resident Admissions* refer to total number of residents admitted to the facility including both new and re-admissions (specifically, a resident that was out of the facility for more than two (2) calendar days and then returned). The total number of new and re-admissions is added for the complete calendar month and submitted to NHSN as Resident Admissions.
- *Resident-Days* are calculated using the daily census of residents in the facility each calendar day of the month. The daily total is added at the end of the calendar month and the total number is then submitted to NHSN as Resident Days.
- *Number of Admissions on C. difficile Treatment* is calculated by counting the number of residents who were receiving antibiotic therapy for *C. difficile* infection at the time of admission to your facility during the current calendar month.
- *Number of Residents Started on Antibiotic Treatment for C. difficile* is the total count of new prescriptions for an antibiotic/medication given to residents suspected or diagnosed with having a *C. difficile* infection in the facility for the calendar month and includes treatment with or without a positive laboratory test.

CDI Data Analyses

All event (numerator) and monthly summary (denominator) data submitted to NHSN can be analyzed. Prior to calculating CDI LabID event metrics, NHSN categorizes submitted CDI LabID events. The below sections will first describe how CDI LabID events are categorized, followed by the calculated metrics that are incorporated into the analytics output.

Categorizations of Submitted CDI LabID Events

Based on the surveillance and reporting options selected in the NHSN Monthly Reporting Plan, **ALL** *C. difficile* positive laboratory assays collected while the resident is under the care of the reporting LTCF must be submitted as a CDI LabID event, including those collected from the resident in an OP setting when the resident returns to the LTCF on the day of the OP visit or the following calendar day. Otherwise, data categorization and analysis will not be accurate. Based on submitted data, NHSN categorizes CDI LabID events to populate different measures. Because of the variability in documenting "time," calendar days are used to categorize LabID events.

Categorization applied by NHSN to CDI LabID events are defined below:

A. CDI LabID events are initially categorized by NHSN as *Duplicate, Incident,* or *Recurrent* based on the specimen collection date of the most recent CDI LabID event submitted for an individual resident in the reporting LTCF. **Note:** The date of specimen collection is considered as day 1. The following definitions are applied in the initial categorization of CDI LabID events.

a. **Duplicate CDI LabID Event:** Any CDI LabID event submitted by the reporting LTCF for the

same resident in the facility following a previous CDI LabID Event within the past two weeks (<15 days). Important: Duplicate CDI LabID events will be excluded from rate calculations.

b. **Incident CDI LabID Event:** Either the first CDI LabID event ever submitted by the reporting LTCF for an individual resident in the facility, or a subsequent CDI LabID event submitted more than 56 days (8 weeks) after the most recent CDI LabID event reported by the LTCF for the individual resident.

c. **Recurrent CDI LabID Event:** Any CDI LabID event submitted by the reporting LTCF more than 14 days (2 weeks) and less than 57 days (8 weeks) after the most recent CDI LabID event submitted by the reporting LTCF for an individual resident.

Case Scenarios to Demonstrate How NHSN Classifies CDI LabID Events:

Example: NHSN Classification of CDI Lab ID Events as **Incident or Recurrent**			
Resident ID	**Current Admit Date**	**CDI Event Date (Specimen collection date)**	**NHSN Categorization**
1111	09/01/2023	09/02/2023	Incident
1111	09/01/2023	09/10/2023	Duplicate -no further categorization
1111	09/01/2023	09/25/2023	Recurrent
1111	09/01/2023	11/28/2023	Incident

B. Incident and recurrent CDI LabID events are further categorized by NHSN based on the following: (1) date of *current admission to the facility;* (2) *date specimen was collected (event date)*; and (3) *date of last transfer from an acute care facility directly to the reporting LTCF*. Note: duplicate CDI LabID events are excluded from additional categorization and analyses.

1. **Community-onset (CO) LabID Event**: Date specimen collected ≤ 3 calendar days after the date of current admission to the facility (specifically, days 1, 2, or 3 of current admission).
2. **Long-term Care Facility-onset (LO) LabID Event**: Date specimen collected > 3 calendar days after current admission date (specifically, on or after day 4).

2a. **Acute Care Transfer-Long-term Care Facility-onset (ACT-LO)**: LTCF-onset (LO) LabID event with date specimen collected 4 weeks or less following the date of last transfer from an acute care facility (specifically, a hospital, long-term acute care hospital, or acute inpatient rehabilitation facility) to the LTCF.

Scenarios to Demonstrate How NHSN Classifies CDI LabID Events:

Example: NHSN Classification of Lab ID Events as **Community-onset or LTCF-onset**				
Admission date June 4th	June 5th	June 6th	June 7th	June 8th
day 1	day 2	day 3	day 4	day 5
Community-onset (CO)			**Long-term Care Facility-onset (LO)**	

For the following case scenarios, the LTCF submitted an NHSN Monthly Reporting Plan indicating that CDI would be included in LabID Event surveillance for the year.

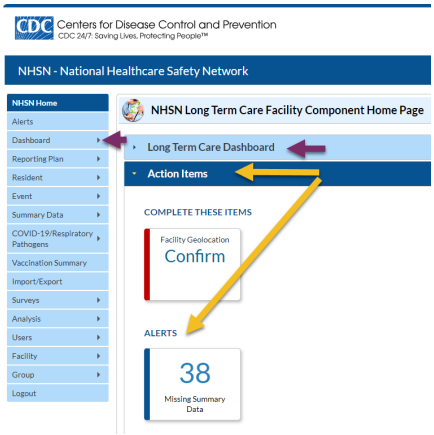
1. Ms. T was first admitted to the LTCF on June 4th. On June 5th she developed diarrhea, and on June 6th a loose stool specimen was collected and tested positive for *C. difficile* toxin. A CDI LabID event was entered for June 6th (date of specimen collection). This event was considered a non-duplicate event and categorized as **Community-onset (CO)** since the specimen was collected within the first 3 days of her current admission into the facility. If the specimen had been initially collected four or more days (June 7th or later) after her current admission date, the NHSN application would have categorized the LabID event as **Long-term Care Facility-onset (LO).**
2. Ms. Smith was transferred to your facility from an acute care facility on July 1st and had a loose stool collected on July 10th that tested positive for *C. difficile* toxin. A CDI LabID event was submitted to NHSN and subsequently categorized as incident, **Acute Care Transfer-Long-term Care Facility-onset (ACT-LO)** since the specimen was collected more than 3 days after her current admission and she was transferred to your facility from an acute care facility in the previous 4 weeks.
3. Mr. T was transferred to your facility from home on August 5th. He was on treatment for a *C. difficile* infection at the time of admission but seemed to be doing well. On August 10th, the on-call doctor ordered a *C. diff* stool test that subsequently returned positive for *C. difficile* toxin. You submit a CDI LabID event for Mr. T and NHSN categorized the event as **Incident, Long-term Care Facility Onset CDI LabID** event. This scenario represents a trade-off between reduced surveillance burden associated with LabID Event reporting and decreased specificity.

Calculated CDI LabID Event Metrics

After a user generates analysis datasets in the application, all data entered for the facility up until that time are immediately available for users to visualize and analyze. For example, line listing reports provide detailed line by line listing of events reported and rate table reports provide summarized monthly data with calculated rates and denominator data. Users can also generate frequency tables, bar charts, and pie charts.

Additionally, the LTCF Dashboard, located on the NHSN Home Page, allows users to quickly visualize data found in the rate tables and line listings in the form of interactive bar charts and line graphs. For additional information about the LTCF Dashboard, please review the CDC Guidance Document – Dashboard. As a reminder, only NHSN identified non-duplicate LabID events are included in calculated metrics.

Important: Incomplete events and/or summary data will trigger an "Alert" on the facility's NHSN homepage. All records identified by an "Alert" will be excluded from the rate tables and the LTCF Dashboard until the Alert is resolved by a facility user.



The following table describes the various NHSN calculated metrics for CDI LabID event surveillance.

Calculated Metrics	Calculations	Comments
Total CDI Rate per 1,000 resident days	$\frac{\text{Number of CDI LabID Events}}{\text{Total resident} - \text{days}} x\ 1{,}000$	Includes CO and LO LabID events
• *Percent* of CO CDI LabID Events	$\frac{\text{Number of CO CDI LabID Events}}{\text{Total number of CDI LabID Events}} x\ 100$	
• *Percent* of LO CDI LabID Events	$\frac{\text{Number of LO CDI LabID Events}}{\text{Total number of CDI LabID Events}} x\ 100$	Includes incident and recurrent CDI LabID events
○ *Percent* of ACT-LO CDI LabID Events	$\frac{\text{Number of ACT} - \text{LO CDI LabID Events}}{\text{Total number of LO CDI LabID Events}} x\ 100$	
CDI LO Incidence Rate per 1,000 resident-days	$\frac{\text{Number Incident LO CDI LabID Events}}{\text{Total resident} - \text{days}} x\ 1{,}000$	Excludes recurrent CDI LabID events
CDI Treatment Prevalence on Admission	$\frac{\text{Number of residents on CDI treatment on admission to facility}}{\text{Total number of admissions}}$	
CDI Treatment Ratio	$\frac{\text{Number of CDI medication treatment starts for CDI}}{\text{Total number of CDI LabID Events}}$	When the CDI treatment ratio is **less than 1**, there are **fewer** reported medication starts for CDI than CDI events submitted to NHSN; When the CDI treatment ratio **equals 1**, there are the **same** number of new medication starts for CDI events submitted. When the CDI treatment ratio is **greater than 1**, there are **more** reported medication starts for CDI than CDI events submitted to NHSN.

NHSN
NATIONAL HEALTHCARE SAFETY NETWORK

Form Approved
OMB No. 0920-0666
Exp. Date: 12/31/2026
www.cdc.gov/nhsn

Laboratory-identified MDRO or CDI Event for LTCF

*Required for saving *Facility ID:	Event #:
*Resident ID:	
Medicare number (or comparable railroad insurance number):	
Resident Name: Last: First: Middle:	
*Gender: M F Other	*Date of Birth: ___/___/____
Sex at Birth: M F Other	Gender Identity (Specify):
*Ethnicity (specify): □ Hispanic or Latino □ Not Hispanic or Latino □ Declined to respond □ Unknown	*Race (specify): □ American Indian/Alaska Native □ Asian □ Black or African American □ Native Hawaiian/Other Pacific Islander □ White □ Declined to respond □ Unknown
*Date of First Admission to Facility: __/__/____	*Date of Current Admission to Facility: __/__/____

Event Details

*Event Type: **LabID**	*Date Specimen Collected: __/__/____

*Specific Organism Type: (check one)

☐ MRSA ☐ MSSA ☐ VRE ☐ *C. difficile* ☐ CephR-*Klebsiella*

☐ CRE-*E. coli* ☐ CRE-*Enterobacter* ☐ CRE-*Klebsiella* ☐ MDR-*Acinetobacter*

*Specimen Body Site/System:	*Specimen Source:
*Resident Care Location:	

*Primary Resident Service Type: (check one)

☐ Long-term general nursing ☐ Long-term dementia ☐ Long-term psychiatric

☐ Skilled nursing/Short-term rehab (subacute) ☐Ventilator ☐ Bariatric ☐ Hospice/Palliative

*Has resident been transferred from an acute care facility in the past 4 weeks?	Yes	No
If Yes, date of last transfer from acute care to your facility: __/__/____		
If Yes, was the resident on antibiotic therapy for this specific organism type at the time of transfer to your facility?	Yes	No

Custom Fields

Label		Label	
_____	____/____/_____	_____	____/____/_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Comments

CDC 57.138, rev 7, v 12.0

Table 5. Instructions for Completion of the LTCF Laboratory-identified (LabID) MDRO or CDI Event form (CDC 57.138)

Data Field	Instructions for Form Completion
Resident Information	
Facility ID	**Required**. The NHSN-assigned facility ID number will be auto populated by the system.
Event ID	Event ID number will be auto populated by the system.
Resident ID	**Required**. Enter the alphanumeric resident ID. This is the resident identifier assigned by the facility and may consist of any combination of numbers and/or letters. This should be an ID that remains the same for the resident across all visits and admissions.
Medicare number	*Optional*. Enter the resident Medicare number or comparable railroad insurance number.
Resident Name	*Optional*. Enter the name of the resident (Last, First, Middle)
Gender	**Required**. Select **M** (Male), **F** (Female), or **Other** to indicate the gender of the resident.
Sex at Birth (Birth Sex)	*Optional.* Select Female, Male or Unknown, to indicate the sex assigned at birth of the individual.
Gender Identity	*Optional.* Select Male, Female, Female-to-male transgender, Male-to-female transgender, identifies as non-conforming, Other, or Asked but unknown, to indicate the gender identity which most closely matches how the individual self-identifies.
Date of Birth	**Required**. Select the date of the resident's birth using the drop-down calendar.
Ethnicity (specify)	**Required.** Enter the resident's ethnicity: Hispanic or Latino; Not Hispanic or Not Latino; Declined to Respond; Unknown. Hispanic or Latino is defined as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.* The resident should always be asked to identify their race and ethnicity. If the resident is not a good historian, then check with a reliable family member. **NOTE:** Collecting race and ethnicity is important for understanding trends and ensuring the wellbeing of racial and ethnic minority groups. However, if after all attempts it is not possible to obtain ethnicity information, the appropriate response below, may be chosen: • Declined to respond • Unknown * https://www.census.gov/topics/population/hispanic-origin/about.html

Race (specify)	**Required.** Specify one or more of the choices below to identify the individual's race. **NOTE**: Collecting race and ethnicity is important for understanding trends and ensuring the wellbeing of racial and ethnic minority groups. • American Indian/Alaska Native • Asian • Black or African American • Native Hawaiian/Other Pacific Islander • White • Declined to respond • Unknown This data should be based upon the individual respondent's self-identification with regards to race. If the resident is a poor historian, solicit information from a reliable family member. **NOTE:** Hispanic or Latino is not a race, a person may be of any race while being Hispanic or Latino.
Resident Type	**Non-editable. Auto-populated by NHSN** as short stay or long-stay after user enters the *Date of First Admission to the Facility* and the *Date Specimen Collected* (specifically for LABID events). The following resident types and definitions include: ☐ ***Short stay***: Resident has been in the facility for 100 or less days from date of **first** admission. In other words, if the Event Date minus the First Admission Date is less than or equal to 100; then resident type should be "SS". ☐ ***Long stay***: Resident has been in the facility for more than 100 days from date of **first** admission. In other words, if the Event Date minus the First Admission Date is greater than 100 then the resident type should be "LS". **Important:** Users are **NOT** permitted to edit the auto-populated resident type.
Date of First Admission to Facility	**Required**. The date of first admission is defined as the date the resident first entered the facility. This date remains the same even if the resident leaves the facility (for example, transfers to another facility) for short periods of time (less than 30 consecutive days). If the resident leaves the facility and is away for 30 or more consecutive days, the date of first admission should be updated to the date of return to the facility. Select the Date of First Admission using the dropdown calendar.

Data Field	Instructions for Form Completion
Date of Current Admission to Facility	**Required**. The date of current admission is the most recent date the resident entered the facility. *If the resident enters the facility for the first time and has not left, then the date of current admission will be the same as the date of first admission.* Select the date of current admission using the drop-down calendar. **Notes:** • If the resident leaves the facility for more than 2 calendar days (the day the resident leaves the facility is equal to day 1) and returns, the date of current admission should be updated to the date of return to the facility. • If the resident has not left your facility for more than 2 calendar days, then the date of current admission should not be changed. • Date of current admission must occur BEFORE the date of event. *Example:* A resident is transferred from your facility to an acute care facility on June 2, 2023, and returns on June 5, 2023. The current admission date would be 06/05/2023. One week later, the same resident goes to the emergency department (ED) for evaluation on June 12, 2023, and returns on June 13, 2023. The date of current admission stays 06/05/2023.
Event Information	
Event Type	**Required**. For Event Type, select LABID-Laboratory-identified MDRO or CDI Event.
Date Specimen Collected	**Required**. Enter the date the specimen was **collected** for this event using the drop-down calendar. **Notes:** Date *Specimen Collected* must occur AFTER the current admission date. For LabID events, the date of specimen collection is equivalent to the event date.
Specific Organism Type	**Required**. Using the drop-down menu, select the specific organism type (*C. difficile* or a MDRO) being reported for the LabID event. Only one organism may be reported per event entered. MDR-*Acinetobacter;* CDIF-C. difficile; CephR-*Klebsiella*, CRE-*E. coli,* CRE- *Enterobacter,* CRE-*Klebsiella*, MRSA, MSSA (if tracking MRSA & MSSA together), or VRE **Notes:** • If multiple MDROs are identified from the same culture**, create a new Event report for each MDRO** (specifically, 1 form for each MDRO pathogen).

	• If conducting surveillance for CRE, the facility must include all three CRE organisms (*E. coli*, *Klebsiella*, and *Enterobacter*) in the monthly reporting plan and conduct surveillance for all three organisms.

Data Field	Instructions for Form Completion
Specimen Body Site/System	**Required.** Select the main body site/system from which the specimen was taken using the description that is most specific. **Note:** If CDIF-C. difficile was selected as the *Specific Organism Type,* the *Specimen Body Site/System and Specimen Source* will auto-populate to *Digestive System* and *Stool Specimen*, respectively. Otherwise, the user must select the correct Specimen Body Site/System to reflect specimen collection site. For example, if MRSA was identified in a urine specimen, user should select Genitourinary (GU). If MRSA was identified in a blood specimen, Cardio/Circulatory/Lymph (CARD) should be selected. If the MDRO was identified in a wound specimen, Skin/Soft Tissue (SST) may be selected. Cardio/Circulatory/Lymph (CARD); Central Nervous System (CNS); Digestive System (DIGEST); Eyes, Ears, Nose, and Throat (EENT); Endocrine (ENDCRN); Genitourinary (GU); Musculoskeletal (MSC); Reproductive Female (REPRF); Reproductive Male (REPRM); Respiratory (RESP); Skin/Soft Tissue (SST); Unspecified

Specimen Source	**Required**. Enter the specific source from which the specimen was taken using the most accurate from the available choices. Examples of specimen source by each specimen body site/system include: *Cardio/Circulatory/Lymph (CARD)*: Blood, Lymph node, Vein, Spleen *Central Nervous System (CNS):* Brain, CSF, Spinal Cord *Digestive System (DIGEST)*: Stool, Rectal Swab, Liver, Stomach *Eyes, Ears, Nose, and Throat (EENT*): Mouth, Throat, Eye fluid *Endocrine (ENDCRN):* Thyroid, Thymus *Genitourinary (GU):* Urine, Genital swab, Perineal, Urethral swab, *Musculoskeletal (MSC)*: Fat, Bone, Muscle, Synovial fluid *Reproductive Female (REPRF)*: Amniotic fluid, Ovary, Vaginal fluid *Reproductive Male (REPRM):* Prostatic fluid, Sperm *Respiratory (RESP)*: BAL, Lung, Nasopharyngeal wash, Pleural fluid *Skin/Soft Tissue (SST):* Wound, Abscess, Skin, Soft tissue biopsy For example, if MRSA was identified in a urine specimen and the user selected *Genitourinary (GU)* for "specimen body site/system," *Urinary Specimen* may be selected for "specimen source." As another example, if MRSA was identified in a blood specimen and *Cardio/Circulatory/Lymph (CARD)* was selected as "specimen body site/system," *Blood Specimen* may be selected as the "specimen source." As another example, if VRE was identified in a wound specimen and user selected "*Skin/Soft Tissue (SST)"* "specimen body site/system," *Wound"* may be selected as the "specimen source."

Data Field	Instructions for Form Completion
Resident Care Location	**Required**. Enter the location where the resident was residing on the date the specimen was collected. If a specimen was collected while the resident was receiving care from an ED or OP location, the *Resident Care Location* should indicate the resident's primary LTCF location prior to visiting the outpatient setting.
Primary Resident Service Type	**Required**. Check the single primary service that best represents the type of care the resident is receiving on the date the specimen was collected: Long-term general nursing, long-term dementia, long-term psychiatric, skilled nursing/short-term rehab (subacute), ventilator, bariatric, or hospice/palliative. **Note**: If a specimen was collected while the resident was receiving care from an ED or OP setting, the Primary Resident Service Type should indicate the resident's primary service type prior to visiting the outpatient setting.

Has resident been transferred from an acute care facility in the past 4 weeks?	**Required**. Select "YES" if the resident has been an inpatient of an acute care facility (hospital, long-term acute care hospital, or acute inpatient rehabilitation facility only) and was directly admitted to your facility in the past four weeks (specifically 28 days, with the day of specimen collection being day 1) prior to the current positive specimen collection date. Otherwise, select "NO". **Note**: Previous emergency department and/or outpatient visits (physician's office) are excluded since these outpatient visits do **not** represent an inpatient admission.
If yes, date of last transfer from acute care to your facility	***Conditionally required***. If "YES" was selected for the previous question, "has resident been transferred from acute care to your facility in the past four weeks," select the most recent date of transfer using the drop-down calendar.
If yes, was the resident on antibiotic therapy for this specific organism type at the time of transfer to your facility?	***Conditionally required***. If "YES" was selected for the question, "has resident been transferred from acute care to your facility in the past four weeks, select "YES" if the resident was on antibiotic therapy for this specific organism at the time of transfer to your facility or select "NO" if the resident was not on antibiotic therapy for this specific organism at the time of transfer to your facility.
Documented prior evidence of infection or colonization with this specific organism type from a previously reported LabID Event?	**Non-editable. NHSN will auto populate the response to this question based on prior months LabID Events submitted to NHSN by your facility for this resident.** If there is a previous LabID event submitted by your facility for the resident for the same organism type in a **prior month**, NHSN will auto-populate with a "YES." **Important**: This question is not used in the categorization of *C. difficile* LabID Events.
Data Field	**Instructions for Form Completion**
Custom Fields	
Labels	*Optional*. Up to 50 fields may be customized for local or group use in any combination of the following formats: date (MMDDYYYY), numeric, or alphanumeric. **Note:** Each Custom Field must be set up in the Facility/Custom Options section of the NHSN application before the field can be selected for use.
Comments	*Optional.* Enter any information on the event. Entered information is for facility internal use only and is not analyzed by NHSN.

Prevention Process Measures Surveillance Protocol for Long-term Care Facilities

Background

Healthcare-associated infections (HAIs) can be reduced with adherence to infection prevention measures. The CDC's Healthcare Infection Control Practices Advisory Committee (CDC/HICPAC) *Guidelines for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings*[1] recommends practices known to reduce the risk of HAIs. These practices include hand hygiene, glove use, and gown use. Despite evidence supporting these prevention measures, adherence to these practices is sub-optimal. Several facilities have found it useful to monitor adherence to these prevention practices as a method for identifying quality improvement opportunities and strategically targeting interventions. Feedback of adherence data has been a component of multifaceted interventions that have successfully reduced HAI rates[2].

Participation in NHSN Prevention Process Measures Surveillance is open to all types of long-term care facilities (LTCF), including Nursing Homes/Skilled Nursing Facilities (LTC:SKILLNURS); Intermediate Care Facilities for Individuals with Intellectual Disabilities (LTC:ICF/IID); Assisted Living Facilities and Residential Care Facilities (LTC:ASSIST); Psychiatric Residential Treatment Facility (LTC:PSYCH); Skilled Nursing Facility for State Veteran's Homes (LTC:SVHSNF); and Assisted Living Facility for State Veteran's Homes (LTC:SVHALF). Participation enables facilities and the CDC to:

- Monitor practices in facilities and provide aggregate adherence data for all participating facilities.
- Facilitate quality improvement by identifying specific gaps in adherence to recommended prevention practices, thereby helping to target intervention strategies for reducing HAI rates.

References:

1. Healthcare Infection Control Practices Advisory Committee (HICPAC) Guidelines for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Setting. Available at www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf.
2. Smith et al. SHEA/APIC Guideline: Infection Prevention and Control in the Long-Term Care Facility. Infection Control and Hospital Epidemiology, vol.29, 2008, pp. 785-814.

1. Monitoring Adherence to Hand Hygiene

Introduction: This surveillance option will allow LTCFs to monitor adherence to hand hygiene (HH) after healthcare personnel (HCP) have a resident or objects/surfaces in the immediate vicinity of a resident (for example, within resident's room or equipment handled during therapy). For the purposes of monitoring, HCP include all staff members providing direct care for residents (for example: physicians, nurses, certified nursing assistants, and therapists), as well as staff members who perform services in resident care areas (for example, environmental services and meal delivery personnel). Research data suggests that improved after-contact HH is associated with reduced HAI transmission. While there are multiple opportunities for proper HH during resident care, the focus of this option is to observe and report HH adherence only after contact with a resident or the objects/surfaces in the immediate vicinity of the resident. (www.cdc.gov/handhygiene/)

Settings: Participation in NHSN Prevention Process Measures Surveillance is open to all types of long term care facilities (LTCF), including Nursing Homes/Skilled Nursing Facilities (LTC:SKILLNURS); Intermediate Care Facilities for Individuals with Intellectual Disabilities (LTC:ICF/IID); Assisted Living Facilities and Residential Care Facilities (LTC:ASSIST); Psychiatric Residential Treatment Facility (LTC:PSYCH); Skilled Nursing Facility for State Veteran's Homes (LTC:SVHSNF); and Assisted Living Facility for State Veteran's Homes (LTC:SVHALF).

Requirements: Facilities must indicate their reporting for the calendar month in the *Monthly Reporting Plan for LTCF* (CDC 57.141). Surveillance for hand hygiene adherence in the LTCF must be reported for at least 6 consecutive months to provide meaningful measures.

Perform ***at least 30*** different unannounced observations after contact with residents for as many individual HCPs as possible. For example, try to observe all types of HCPs (physicians, nurses, technicians, aides, etc.) performing a variety of resident care tasks during the month. No personal identifiers will be collected or reported.

Hand hygiene process measure data are reported using the *Prevention Process Measures Monthly Monitoring for LTCF* form (CDC 57.143). (See *Table of Instructions* for instructions on how to complete this form).

Definitions:

Antiseptic hand rub: Applying an antiseptic hand-rub product to all surfaces of the hands to reduce the number of organisms present.

Antiseptic hand wash: Washing hands with water and soap or other detergents containing an antiseptic agent.

Hand hygiene: A general term that applies to either: hand washing, antiseptic hand wash, antiseptic hand rub, or surgical hand antisepsis.

Hand washing: Washing hands with water and plain (specifically, non-antimicrobial) soap.

Numerator: Hand Hygiene Performed = Total number of observed contacts during which an HCP touched either a resident or objects/surfaces in the immediate vicinity of a resident and appropriate hand hygiene was performed.

Denominator: Hand Hygiene Indicated = Total number of observed contacts during which an HCP touched either a resident or objects/surfaces in the immediate vicinity of a resident where appropriate hand hygiene was indicated.

Data Analysis: Data are stratified by time (for example, month, quarter, etc.).

Hand Hygiene Percent Adherence = Number of contacts for which hand hygiene was performed / Number of contacts for which hand hygiene was indicated X 100.

II. Monitoring Adherence to Gown and Gloves Use as Part of Contact Precautions

Introduction: Transmission-based Contact Precautions are additional infection prevention measures implemented to limit the transmission of pathogens by direct or indirect contact with a resident or a resident's immediate environment. This option will allow facilities to monitor adherence to gown and glove use when an HCP has contact with a resident or objects/surfaces within a resident's room when that resident is on Transmission-based Contact Precautions. While numerous aspects of adherence to Contact Precautions could be monitored, this surveillance option is only focused on gown and glove use. Isolation Precautions Guideline | Infection Control | CDC

Settings: Participation in NHSN Prevention Process Measures Surveillance is open to all types of long term care facilities (LTCF), including Nursing Homes/Skilled Nursing Facilities (LTC:SKILLNURS); Intermediate Care Facilities for Individuals with Intellectual Disabilities(LTC:ICF/IID); Assisted Living Facilities and Residential Care Facilities (LTC:ASSIST); Psychiatric Residential Treatment Facility (LTC:PSYCH); Skilled Nursing Facility for State Veteran's Homes (LTC:SVHSNF); and Assisted Living Facility for State Veteran's Homes (LTC:SVHALF).

Requirements: Facilities must indicate their reporting for the calendar month in the *Monthly Reporting Plan for LTCF* (CDC 57.141). Surveillance for gown and glove use adherence in the LTCF must be reported for at least 6 consecutive months to provide meaningful measures.

Perform ***at least 30*** different unannounced observations for as many individual HCP as possible. An observable contact would be the entry of an HCP into a room to interact with a resident on Transmission-based Contact Precautions. Try to observe all types of HCPs (physicians, nurses, therapists, aides, etc.) performing a variety of resident care tasks during the month (for example, not only nurse observations, or not only during catheter or wound care). Both gown and gloves must be donned prior to contact for compliance. No personal identifiers will be collected or reported.

Gown and glove use process measure data are reported using the *Prevention Process Measures Monthly Monitoring for LTCF* form (CDC 57. 143). (See *Table of Instructions* for instructions on how to complete this form).

Definitions:

Gown and glove use**:** In the context of Transmission-based Contact Precautions, the donning of both gown and gloves prior to contact with a resident or objects/surfaces within the resident's room. Both gown and gloves must be donned prior to contact for compliance.

Numerator: Gown and Gloves Used = Total number of observed contacts between an HCP and a resident or objects/surfaces within a resident's room, when that resident is on Transmission-based Contact Precautions, for which gown and gloves were donned prior to contact.

Denominator: Gown and Gloves Indicated = Total number of observed contacts between an HCP and a resident or objects/surfaces within a resident's room on Transmission-based Contact Precautions, for which gown and gloves were indicated.

Data Analysis: Data are stratified by time (for example, month, quarter, etc.).

Prevention Process Measure data submitted to NHSN can be analyzed. After a user generates analysis datasets in the application, all data entered for the facility up until that time are made available within the analysis reports. These data can be visualized and analyzed in various ways. For example, the LTCF Dashboard, located on the NHSN Home Page, allows users to quickly visualize data found in the rate tables and line listings in the form of interactive bar charts and line graphs.

Gown and Glove Use Percent Adherence = Number of contacts for which gown and gloves were used / Number of contacts for which gown and gloves were indicated X 100.

Facilities may choose to monitor urinary tract infections (UTIs) using healthcare-associated infection (HAI) surveillance. This surveillance method incorporates the use of laboratory data and clinical evaluation of the resident for signs and/or symptoms to monitor for catheter and non-catheter-associated urinary tract infection events. NHSN data collection forms should be used to collect all required data, using the definitions of each data field as indicated in the accompanying Table of Instructions.

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Prevention Process Measures Monthly Monitoring for LTCF

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

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

Prevention Process Measures

Hand Hygiene

**Performed: _____

**Indicated: _____

Gown and Gloves

**Used: _____

**Indicated: _____

Custom Fields

Label _____ _____ _____ _____ _____

Data _____ _____ _____ _____ _____

Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 308(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

Public reporting burden of this collection of information is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0666).

CDC 57.143 v.11.0

Table 6. Instructions for Completion of the Prevention Process Measures Monthly Monitoring for LTCF form (CDC 57.143)

Data Field	Instructions for Form Completion
Facility ID #	The NHSN-assigned facility ID number will be auto-populated by the system.
Month	**Required.** Enter the 2-digit month during which prevention process measures monitoring was performed.
Year	**Required.** Enter the 4-digit year during which prevention process measures monitoring was performed.
Location Code	**Required.** For Long-term Care Facilities this code will be FacWideIN (Facility-wide Inpatient).
Process Measures: Hand Hygiene	
Performed	***Conditionally required.*** If enrolled in hand hygiene adherence process measures. Enter the total number of observed contacts during which healthcare personnel touched either a resident or inanimate object in the immediate vicinity of a resident and appropriate (*based on facility policy and procedures and/or recommended guidelines*) hand hygiene was performed.
Indicated	***Conditionally required***. If enrolled in hand hygiene adherence process measures. Enter the total number of observed contacts during which healthcare personnel touched either a resident or inanimate object in the immediate vicinity of the resident and therefore, appropriate (*based on facility policy and procedures and/or recommended guidelines*) hand hygiene was indicated.
Process Measures: Gown and Gloves	
Used	***Conditionally required***. If enrolled in gown and gloves use adherence process measures. Among residents on Transmission-based Contact Precautions, enter the total number of observed contacts between healthcare personnel and a resident or an inanimate object in the immediate vicinity of the resident for which gown and gloves were donned *prior* to contact.
Indicated	***Conditionally required***. If enrolled in gown and gloves use adherence process measures. Among residents on Transmission-based Contact Precautions, enter the total number of observed contacts between healthcare personnel and a resident or an inanimate object in the immediate vicinity of the resident and therefore, gown and gloves were indicated.
Custom Fields	
Label	***Optional.*** Up to 50 fields may be customized for local or group use in any combination of the following formats: date (MMDDYYYY), numeric, or alphanumeric. **Note:** Each Custom Field must be set up in the Facility/Custom Options section of NHSN before the field can be selected for use.
Comments	***Optional.*** Enter information for internal facility use.

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MDRO and CDI LabID Event Reporting
Monthly Summary Data for LTCF

*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:_____

**Number of C. diff Treatment Starts: _____

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 _____ _____ _____ _____ _____

Table 7. Instructions for Completion of the MDRO or CDI Monthly Monitoring for Long-term Care Facility form (CDC 57.139)

Note: *This form aligns with what the user will see in the NHSN application when entering denominator data for the* ***MDRO and/or CDI LabID event module****. A facility may choose to use this form (CDC 57.139) to record the aggregate MDRO and/or CDI monthly data that will be submitted to NHSN or form (CDC 57.142) to manually record daily counts in which only the total for the calendar month is to be submitted to NHSN.*

Data Field	Instructions for Form Completion
Facility ID	The NHSN-assigned facility ID number will be auto populated by the system.
Month	**Required.** Using the drop-down menu, select the correct month during which the data were collected.
Year	**Required.** Using the drop-down menu, select the correct year during which the data were collected.
MDRO & CDI Event Reporting	
Location Code	**Required**. NHSN will auto populate the code for the location where the monthly monitoring data was collected. Since Long-term Care Facilities are required to perform surveillance for all resident care locations, the code will populate as *Facility-wide Inpatient (FacWideIN).* There is not an option to change the code.
Resident Admissions	**Required**. For each day of the month, count, and record the number of residents admitted or readmitted to the facility and submit only the total count for the calendar month and year. **Important Note:** • A re-admission is defined as a resident that was out of the facility for more than two (2) calendar days and then returned.
Total Resident Days	**Required.** For each day of the month, record the number of residents in the facility and record the **total count** for the calendar month and year. Do not include residents for whom a bed is being held but are not actually present in the facility. **Important Notes:** • To calculate resident days, for each day of the month, at the same time each day, record the number of residents in the facility. At the end of the month, sum the daily counts and enter the total into NHSN. • When resident days are available from electronic databases (for example, ADT-admission, discharge, transfer records), these sources may be used if the counts are not substantially different (+/- 5%) from manually collected counts.

Data Field	Instructions for Form Completion
Number of Admissions On *C .diff* Treatment	***Conditionally required***. Complete only if the facility performed CDI LabID event surveillance for the selected calendar month and year. Record the total number of residents who were receiving antibiotic therapy for *C.difficile* infection at the time of admission or readmission to your facility. **Important Notes:** • Re-admission is defined as a resident that was out of the facility for more than two (2) calendar days and then returned. • A resident admitted on CDI treatment should be included in this count even if they did not have an NHSN defined CDI LabID event or a positive *C. difficile* test result. • Medications used to treat *Clostridioides difficile* infection may include oral (PO) vancomycin and/or oral (PO) metronidazole (Flagyl); and Fidaxomicin. ○ In the absence of CDI documentation, users are encouraged to consult with the physician or nurse to verify treatment for *C. difficile* since these medications could be prescribed for other conditions.
Number of Residents Started on Antibiotic Treatment for C. diff (*C. difficile)*	***Conditionally required*.** Complete only if the facility performed CDI LabID event surveillance for the selected calendar month and year. Record the total calendar month count of new prescriptions for a medication (for example, antibiotic) given for residents suspected or diagnosed with having a *C. difficile* infection in the facility. Capture all new medication orders (see important notes below). **Important Notes:** • Include all new CDI medication/treatment orders regardless if the resident had a positive *C. difficile* test result or met NHSN CDI LabID event criteria. • Include all new CDI medication/treatment orders (for example, antibiotic orders) regardless of how many doses the resident received or how many days the resident was on the medication. • Include new CDI medication/treatment orders (for example, antibiotic orders) even if the resident did not complete the antibiotic or switched to a new antibiotic. • If resident was switched to a new antibiotic, include the first and new order in the count (count as two new orders). • Include only CDI medications that were started while the resident received care in your facility or by outside providers who saw the resident during a brief outpatient visit (for example, an outpatient clinic or emergency department) when the resident returned to the reporting LTCF on the calendar day of the visit or the next calendar day (not admitted to another facility).

Data Field	Instructions for Form Completion
	• Do not include new antibiotic orders written while the resident was admitted in another facility, even if the resident continued to take the antibiotic during admission or readmission back to your facility. • Medications used to treat *Clostridioides difficile* infection may include oral (PO) vancomycin and/or oral (PO) metronidazole (Flagyl); and Fidaxomicin. • In the absence of CDI documentation, users are encouraged to consult with the physician or nurse to verify treatment for *C. difficile* since these medications could be prescribed for other conditions.
LabID Event (All specimens)	**Required.** NHSN will auto populate a check mark in the box for each specific organism type selected for surveillance in the facility's Monthly Reporting Plan. **Important Notes:** • Selections are based on the facility Monthly Reporting Plan for selected calendar month. • Surveillance for CDI LabID events are limited to lose stool specimens. • Surveillance for MDRO LabID events must include all specimen sources.
Report No Events	***Conditionally required***. For each specific organism type in which no LabID events were submitted to NHSN for the selected month, as indicated by double red asterisk next to the box, the user must click in the box to put a check-mark as confirmation that surveillance was performed for the entire calendar month for the specific organism type and that no events were identified for LabID event submission. **Important Notes:** • Selections for *Report No Events* will be disabled for each organism in which at least one LabID event was submitted to NHSN during the calendar month. • If a LabID event is submitted after the Monthly Summary Data has been saved, NHSN will auto-update the information by unselecting the "report no events" box.
Custom Fields	***Optional*.** Up to 50 fields may be customized for local or group use in any combination of the following formats: date (MMDDYYYY), numeric or alphanumeric. **Note:** Each Custom Field must be set up in the Facility/Custom Options section of NHSN before the field can be selected for use.

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Denominators for LTCF

 **Required for saving *Conditionally required based on monitoring selection in Monthly Reporting Plan

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	*Resident Admissions	*Number of admissions on *C. diff* treatment	*Number of Residents Started on Antibiotic Treatment for *C. diff*
1							
2							
3							
4							
5							
6							
7							
8							
9							
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27							
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29							
30							
31							
***Monthly Total**	-	-	-	-	-	-	-
	Total resident days	**Urinary-Catheter Days**	**New antibiotic starts for UTI indication**	**Number of urine cultures ordered**	**Resident admissions**	**Resident admissions on *C. diff* treatment**	**Number of residents started on antibiotic treatment for *C. diff***

Label: _____ _____ _____ _____ _____ _____
Data: _____ _____ _____ _____ _____ _____

Table 3. Instructions for Completion of the Long-term Care Facility Component – Denominators for LTCF (CDC 57.142)

Data Field	Instructions for Form Completion
Facility ID	**Required.** The NHSN-assigned facility ID number will be auto populated by the system.
Month	**Required.** Using the drop-down menu, select the correct month during which the data were collected.
Year	**Required.** Using the drop-down menu, select the correct year during which the data were collected.
Denominators for Long Term Care Locations	
Location Code	**Required**. NHSN will auto populate the code for the location where the monthly monitoring data was collected. Since Long-term Care Facilities are required to perform surveillance for all resident care locations, the code will populate as *Facility-wide Inpatient (FacWideIN).* There is not an option to change the code.
Total Resident Days (*Number of Residents*)	**Required.** For each day of the month, record the number of residents in the facility and submit the **total count** for the calendar month and year as *Total Resident Days*. Do not include residents for whom a bed is being held but are not actually present in the facility. **Important Notes:** • To calculate resident days, for each day of the month, at the same time each day, record the number of residents in the facility. At the end of the month, sum the daily counts and enter the total into NHSN. • When resident days are available from electronic databases (for example, ADT-admission, discharge, transfer records), these sources may be used as long as the counts are not substantially different (+/- 5%) from manually collected counts.
Urinary Catheter Days *(Number of residents with a urinary catheter)*	***Conditionally required***. Complete only if the facility performed urinary tract infection (UTI) surveillance for the selected calendar month and year. For each day of the month, count and record the number of residents in the facility who have an *indwelling urinary catheter*. The total count for the calendar month is to be entered as the *Urinary Catheter Days*. Important **Note**: • An indwelling urinary catheter is a drainage tube inserted in the urinary bladder *through the urethra*, is left in place, and is connected to a collection system; also called a Foley catheter. Do not include non-indwelling urinary collection devices in count. Examples include straight in-and-out catheters, suprapubic catheters, or external catheters.

Data Field	Instructions for Form Completion
Report No UTI	***Conditionally required***. If the facility did not submit at least one UTI event to NHSN during the selected calendar month and year, as indicated by double red asterisk next to the box, the user must click in the box to add a check-mark as confirmation that surveillance was performed for the entire calendar month for NHSN UTI events and that no events were identified for UTI event submission. **Important Notes:** • Selections for *Report No Events* will be disabled if at least one UTI event was submitted to NHSN during the calendar month. • If a UTI event is submitted after the Monthly Summary Data has been saved, NHSN will auto-update the information by unselecting the "report no events" box.
New Antibiotic Starts for UTI Indication	***Conditionally required***. Complete only if the facility performed urinary tract infection (UTI) surveillance for the selected calendar month and year. For each day of the month, count and record the number of new prescriptions for an antibiotic given for residents suspected or diagnosed with having a UTI, (includes both catheter-associated and not catheter associated). The total count for the calendar month should be submitted as *New Antibiotic Starts for UTI Indication*. **Important Notes**: • Include all new antibiotic orders, regardless of how many doses the resident received or how many days the resident was on the medication. • Include new antibiotic orders even if the resident did not complete the antibiotic or switched to a new antibiotic. • If the resident was switched to a new antibiotic, include the first and new order in the count (count as two new orders). • Include only antibiotics for UTI indication that are started while the resident received care in your facility or written/started by outside providers who saw the resident during a brief outpatient visit (for example an outpatient clinic or emergency department) when the resident returned to the reporting LTCF on the calendar day of the visit or the next calendar day (not admitted to another facility). • Do not include new antibiotic orders written while the resident was admitted in another facility, even if the resident continued to take the antibiotic during admission or readmission back to your facility.

Data Field	Instructions for Form Completion
Number of Urine Cultures Ordered	***Conditionally required.*** Complete only if the facility performed urinary tract infection (UTI) surveillance for the selected calendar month and year. For each day of the month, count and record the number of urine cultures ordered for residents under the care of your facility. The total count for the calendar month is to be submitted as the *Number of Urine Cultures Ordered*. Capture all new urine culture orders for a resident (see important notes below). regardless of whether the resident met NHSN UTI criteria. **Important Notes:** • Include only urine cultures ordered while the resident received care in your facility or ordered by outside providers who saw the resident during a brief outpatient visit (for example an outpatient clinic or emergency department) when the resident returned to the reporting LTCF on the calendar day of the visit or the next calendar day. • Do not include urine cultures ordered while resident was admitted in another facility.
Resident Admissions	***Conditionally required***. Complete only if the facility performed MDRO and/or CDI LabID event surveillance for the selected calendar month and year. For each day of the month, count and record the number of residents admitted or readmitted to the facility. Only the total count for the calendar month is to be submitted to NHSN as *Resident Admissions*. **Important Notes:** • A readmission is defined as a resident that was out of the facility for more than two (2) calendar days and then returned. • If the facility also performed LabID event surveillance for the same calendar month and year, one *Resident Admissions* field will be used for all event types.
Number of Admissions On *C. diff* Treatment	***Conditionally required***. Complete only if the facility performed CDI LabID event surveillance for the selected calendar month and year. For each day of the month, count and record the number of residents who were receiving medication therapy (such as antibiotics) for the treatment of *C.difficile* infection at the time of admission or readmission to your facility. Only the total count for the calendar month is submitted to NHSN as the *Number of Admissions on C. diff Treatment*. See important notes below. **Important Notes:** • A readmission is defined as a resident that was out of the facility for more than two (2) calendar days and then returned to the reporting facility.

Data Field	Instructions for Form Completion
	• A resident admitted or readmitted on CDI treatment should be included in this count even if they did not have an NHSN defined CDI LabID event or positive *C. difficile* test result. • Common medications used to treat *Clostridioides difficile* infection may include oral (PO) vancomycin, oral (PO) metronidazole (Flagyl), and/or Fidaxomicin. ○ In the absence of CDI documentation, users are encouraged to consult with the physician or nurse to verify treatment for *C. difficile* since these medications could be prescribed for other conditions.
Number of Residents Started on Antibiotic Treatment for C. diff (*C. difficile)*	***Conditionally required*****.** Complete only if the facility performed CDI LabID event surveillance for the selected calendar month and year. For each day of the calendar month, count and record the number of new prescriptions or orders for a medication (for example, antibiotic) given for residents suspected or diagnosed with having a *C. difficile* infection in the facility. Only the total count for the calendar month is submitted to NHSN as the *Number of Residents Started on Antibiotic Treatment for C. diff.* **Important Notes:** • Include all new CDI medication/treatment orders regardless if the resident had a positive *C. difficile* test result or met NHSN CDI LabID event criteria. • Include all new CDI medication/treatment orders (for example, antibiotic orders) regardless of how many doses the resident received or how many days the resident was on the medication. • Include new CDI medication/treatment orders (for example, antibiotic orders) even if the resident did not complete the antibiotic or switched to a new antibiotic. • If the resident was switched to a new antibiotic, include the first and new order in the count (count as two new orders) • Include only CDI medications that were started while the resident received care in your facility or by outside providers who saw the resident during a brief outpatient visit (for example an outpatient clinic or emergency department) when the resident returned to the reporting LTCF on the calendar day of the visit or the next calendar day (resident was not admitted to another facility). • Do not include new antibiotic orders written while the resident was admitted in another facility, even if the resident continued to take the medication after admission or readmission back to your facility. • Common medications used to treat *Clostridioides difficile* infection (previously referred to as *Clostridium difficile* infection) may include oral (PO) vancomycin and/or oral (PO) metronidazole (Flagyl); and Fidaxomicin. • In the absence of CDI documentation, users are encouraged to consult with the physician or nurse to verify treatment for *C. difficile* since these medications could be prescribed for other conditions.

Data Field	Instructions for Form Completion
Monthly Total For: • Resident-days, • Urinary catheter-days, • New antibiotic starts for UTI indication, • Total urine cultures ordered, • Resident admissions, • Resident admissions on *C. difficile* treatment, • Number of C. diff treatment starts	***Conditionally required*.** Complete based on the modules a facility included in the NHSN Monthly Reporting Plan for the selected calendar month and year. For each applicable column, calculate the total by adding/summing the numbers recorded for each calendar day of the month. The total for selected columns is to be submitted to NHSN for the selected calendar month and year. Alternatively, if available, these monthly totals can be obtained from LTCF administrative data sources in place of performing daily counts.
Custom Fields	***Optional.*** Up to 50 fields may be customized for local- or group-use in any combination of the following formats: date (MMDDYYYY), numeric, or alphanumeric. **Note**: Each Custom Field must be set up in the Facility/Custom Options section of NHSN before the field can be selected for use.

NHSN Key Terms, Acronyms, and Definitions
Long-term Care Facility Component

1. **80% Rule:** A principle used to determine which location label to select when different types of service are provided on a single unit. A location label selected for a given unit should describe the service provided to the majority (~80%) of residents housed there in the previous year. See CDC Location for additional details.
2. **Annual Facility Survey:** Completed at the beginning of each calendar year to describe the facility characteristics and practices for the previous calendar year. For example, in 2024, facilities will complete the 2023 Annual Facility Survey to document facility characteristics and practices during the 2023 calendar year.
3. **Antibody Test:** May be referred to as serological test, blood test, serology test. May be useful in detecting a past infection.
4. **Antigen Test:** Diagnostic test. May be referred to as a rapid diagnostic test. May be useful in detecting an active infection.
5. **ASC/AST:** Active Surveillance Cultures or Testing. For purposes of NHSN surveillance; Active Surveillance Culture/Testing (ASC/AST) refers to testing that is intended to identify the presence/carriage of microorganisms for the purpose of instituting or discontinuing isolation precautions (for example, nasal swab for MRSA, rectal swab for VRE), or monitoring for eradication of a carrier state. ASC/AST does NOT include identification of microorganisms with cultures or tests performed for diagnosis and treatment purposes (for example, specimens collected from sterile body sites including blood specimens). Also see Surveillance Cultures.
6. **Assisted Living Facility (AL or ALF):** These facilities provide help with activities of daily living (for example, taking medicine, using eye drops, getting to appointments, and preparing meals). Residents often live in their own room or apartment within a building or group of buildings.
7. **BSI**: Bloodstream Infection. The LTCF Component does not have a protocol for reporting BSIs. However, when reporting a UTI using the NHSN UTI protocol, users will mark “Yes” to “Secondary Bloodstream Infection” if the resident has a microorganism reported in a urine culture and has the same microorganism reported from a blood culture.

NHSN Key Terms, Acronyms, and Definitions
Long-term Care Facility Component

8. **CAUTI:** Catheter-associated Urinary Tract Infection. Referred to as CA-SUTI (catheter associated symptomatic urinary tract infection) in the LTCF protocol. See LTCF UTI Event protocol.
9. **CCN:** CMS Certification Number (CCN). May also be referred to as Medicare Provider Number.
10. **CDC Location:** A CDC-defined designation given to a resident care area housing residents who have similar disease conditions or who are receiving care for similar medical specialties. Each facility location that is monitored is "mapped" to one CDC Location. The specific CDC Location label is determined by the type of resident cared for in that area according to the 80% Rule. That is, if 80% of residents are of a certain type (for example, individuals requiring restorative care following recent hospitalization) then that area is designated as that type of location (in this case, a LTCF Skilled Nursing/Short Term Rehabilitation unit). For detailed instructions on how to map locations, see "Instructions for Mapping Patient Care Locations in NHSN" in the Locations and Descriptions chapter.
11. **CDI:** *Clostridioides difficile* infection. Previously referred to as *Clostridium difficile* infection. Frequently referred to as *C. diff* or *C. difficile.* See LabID Event protocol.
12. **Catheter Days:** A daily count of the number of residents in the LTCF with an indwelling urinary (Foley) catheter. To calculate catheter days, for each day of the month, at the same time each day, record the number of residents who have an indwelling urinary (Foley) catheter. At the end of the month, sum the daily counts and enter the total into the NHSN. See LTCF UTI Event protocol.
13. **CSV:** Comma separated values. A plain text file (contains only numbers and letters) that contains a list of data that can be easily exchanged between different applications by importing to and exporting from.
14. **Dashboard:** The LTCF dashboard provides users with a high-level summary overview of reported infections and prevented process measure data in the facility through graphs and tables. The LTCF dashboard can be found on the NHSN homepage.
15. **Date of Event:** The date of event is defined as the date when the first clinical evidence (signs/symptoms) of the UTI appeared or the date the specimen used to make or confirm the

NHSN Key Terms, Acronyms, and Definitions
Long-term Care Facility Component

diagnosis was collected, whichever comes first. This definition does not apply to LabID event. See Event Date in LabID Event protocol.

16. **Device-associated Infection:** A healthcare-associated Infection (HAI) in a resident with a device (for example, indwelling urinary catheter) if the device was in place for >2 calendar days on the date of event and was also in place on the date of event or the day before. If the device was in place for >2 calendar days and then removed, the date of event must be the day of discontinuation or the next day to be device associated.
17. **Dysuria:** The sensation of pain, burning, or discomfort on urination.
18. **Event Contributed to Death:** The event either directly caused death or exacerbated an existing disease condition, which then led to death.
19. **Event Date:** See date of event.
20. **Fever:** See vital signs.
21. **HAI:** Healthcare-associated Infection. An infection is considered a HAI if the date of event of the NHSN site-specific infection criterion (for example, UTI) occurs on or after the 3rd calendar day of current admission to the LTCF where day of current admission is calendar day 1. There must be no evidence that the infection was present or incubating at the time of admission to the LTCF, unless a change in pathogen or signs and symptoms strongly suggests the acquisition of a new infection. **Note:** The HAI definition is not to be used in the LabID Event protocols.
22. **HPS:** Healthcare Personal Safety (HPS). May be used by LTCFs to report healthcare staff safety events such as influenza vaccination. See Surveillance for Healthcare Personnel Vaccination home page.
23. **Hypotension:** See vital signs.
24. **Indwelling Urinary Catheter**: A drainage tube that is inserted into the urinary bladder through the urethra, is left in place, and is connected to a collection system; also called a Foley catheter. Straight in-and-out catheters are *not* considered indwelling urinary catheters.
25. **Infection Date:** See date of event.
26. **IP:** Infection preventionist or infection prevention.

NHSN Key Terms, Acronyms, and Definitions
Long-term Care Facility Component

27. **ICPO:** Infection control and prevention officer.
28. **Incomplete Event Alert:** Reported events that are missing required information. All incomplete events must be resolved before event data are considered as complete and included in analyses for the month.
29. **Incomplete Summary Data Alert:** Occurs when the monthly summary data submission is incomplete for a given month. This often occurs when a monthly reporting plan is updated to include an additional event(s) after summary data have been submitted or when the "Report No Events" box has been left unchecked when at least one in-plan event was not reported. Incomplete summary data alerts must be resolved before data are considered complete and included in analyses for that month.
30. **In-plan Surveillance:** Facility has indicated in their monthly reporting plan that the NHSN surveillance protocol(s) will be used, in its entirety, for that particular event. A monthly reporting plan must be completed each month before a facility is able to enter event data into the NHSN application. Out-of-plan surveillance options are not available in the LTCF Component.
31. **LabID Event:** Laboratory-identified event. See Laboratory-identified Multidrug-Resistant Organism (MDRO) & Clostridium difficile Infection (CDI) Events for Long-term Care Facilities (LTCFs) module.
32. **Location:** The resident care area to which a resident is assigned while receiving care in facility.
33. **Long-term Care Hospital (LTCH):** A hospital in which extended medical and rehabilitative care is provided to individuals with clinically complex problems, such as multiple acute or chronic conditions, that need hospital-level care for relatively extended periods. Also referred to by the NHSN as long-term acute care (LTAC).
34. **Long-term Care Facility (LTCF):** Facilities providing a spectrum of medical and non-medical supports and services to frail or older adults unable to reside independently in the community. The following LTCFs are able to use NHSN for surveillance (some or all modules): Nursing Homes/Skilled Nursing Facilities (LTC:SKILLNURS); Intermediate Care Facilities for Individuals with Intellectual Disabilities (LTC:ICF/IID); Assisted Living Facilities and Residential Care Facilities (LTC:ASSIST); Psychiatric Residential Treatment Facility (LTC:PSYCH); Skilled Nursing Facility for

NHSN Key Terms, Acronyms, and Definitions
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State Veteran's Homes (LTC:SVHSNF); and Assisted Living Facility for State Veteran's Homes (LTC:SVHALF).

35. **MDRO:** Multidrug resistant organism. See Laboratory-identified Multidrug-Resistant Organism (MDRO) & Clostridium difficile Infection (CDI) Events for Long-term Care Facilities (LTCFs) module.
36. **Missing Event Alert:** Occurs when a module and event type is selected on the monthly reporting plan, but no events were reported for that month and the monthly summary data submission is either missing or does not indicate that in-plan events were not identified during the month (referred to on the monthly summary page as "Report No Events").
37. **Missing Summary Data Alert:** Occurs when a module and event type is selected on the monthly reporting plan, but no summary/denominator was submitted for the month. Complete summary data are required to be submitted before data are considered complete and included in analyses for the month.
38. **Molecular Test.** Diagnostic test. May be referred to as viral test, RT-PCR test, LAMP test, nucleic acid amplification test (NAAT), rapid molecular test. May be useful in detecting active infection.
39. **MRP:** Monthly reporting plan. The Monthly Reporting Plan informs the NHSN which modules and events a facility will be tracking for the month. A facility must have a MRP for each month in which the facility will perform surveillance in the NHSN.
40. **NAAT:** Nucleic acid amplification test. Allows the identification of pathogenic organisms by detecting their DNA or RNA. Includes, but not limited to, Polymerase Chain Reaction (PCR) and Real Time Polymerase Chain Reaction (RT-PCR).
41. **NHSN:** National Healthcare Safety Network.
42. **NHSN Facility Administrator:** A specific individual identified by a healthcare facility as the person who will be managing the facility within the NHSN application. This person serves as the primary point of contact for NHSN communication to the facility and is responsible for NHSN facility enrollment, set-up, and adding and inactivating users. The NHSN facility administrator is often the person who oversees infection prevention program activities and *does not* have to be the organization's facility administrator or part of executive leadership.

NHSN Key Terms, Acronyms, and Definitions
Long-term Care Facility Component

43. **Nursing Home (NH):** A nursing facility providing primarily long-term maintenance and restorative care for individuals needing support with their activities of daily living. A large percentage of certified nursing homes in the U.S. provide a combination of long-term nursing care or restorative services and skilled nursing services.
44. **Org ID:** Organization ID, also referred to as Facility ID. The unique identification number created by NHSN, which is assigned to a facility at the time of enrollment.
45. **PPE:** Personal protective equipment. A source of protection against physical, chemical, and biological hazards. Routes of exposure may include inhalation, dermal contact, ingestion, contact through mucous membranes, or other methods. Examples of PPE includes respirators to protect against aerosolized pathogens, (for example N95); goggles and face shields to protect eyes from exposure to splashes and sprays; facemasks to protect the nose and mouth from exposure to splashes, sprays, and respiratory secretions; protective clothing (for example, fluid resistant, impermeable protective clothing such as gowns); and gloves to protect against exposure to infectious materials or chemical exposures. This list is not exhaustive. For additional information, please visit the National Institute for Occupational Safety and Health (NIOSH)
46. **PSC:** Patient Safety Component. Used by hospitals and other acute care and healthcare facilities for infection reporting.
47. **Resident Days:** A daily count of the number of residents in a long-term care facility location during a specific period of time. Calculate resident days for each day of the month, at the same time each day, record the number of residents. When resident days are available from electronic databases, these sources may be used only if the counts are not substantially different (+/- 5%) from manually collected counts. At the end of the month sum the daily counts and enter the total into NHSN.
48. **SAMS:** Secure Access Management Services. SAMS provides secure online access to and exchange of information between CDC and healthcare facilities and public health partners. U.S. law requires federal government agencies like CDC perform an identity check on each person before granting access to non-public information.

NHSN Key Terms, Acronyms, and Definitions
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49. **SARS-CoV-2:** The virus that causes COVID-19.
50. **Skilled Nursing Facility (SNF):** A facility engaged primarily in providing skilled nursing care and rehabilitation services for residents who require such care because of injury, disability, or illness. A large percentage of SNFs are dually certified as both SNFs and nursing homes.
51. **SAMS Grid Card:** A grid card issued through Secure Access Management Services (SAMS) that adds a layer of security when users access NHSN through a web-based portal to submit data to CDC. Users will receive a SAMS grid card after successfully registering through SAMS.
52. **Summary Data:** Also referred to as denominator data that must be entered for each month a facility is participating in NHSN reporting. Examples of denominator/summary data include total resident days for the month, total admissions for the month, and total urinary catheter days, to name a few. The required data depends on which module(s) a facility participated in during the given month. Best practice is to complete denominator data by the end of the following month. For example, denominator data for July should be submitted to NHSN by the end of August. Timely and complete event and summary data submission ensures complete data are included in analyses.
53. **Surveillance Cultures:** Those cultures reported as part of infection prevention and control surveillance including, but not limited to perirectal cultures for vancomycin-resistant *Enterococci* (VRE) and/or nasal swabs for methicillin-resistant *Staphylococcus aureus* (MRSA) surveillance. Not for use in resident diagnosis. Also called active surveillance cultures or testing (ASC/AST). Positive surveillance cultures do not contribute or preclude a resident from meeting NHSN HAI or LabID event criteria. Also see Active Surveillance Culture/Testing (ASC/AST).
54. **Temperature:** See Vital Signs. The temperature value applied to meet surveillance criteria should be the value documented in the medical record regardless of site tested (for example, tympanic, oral, or axillary).
55. **UTI:** Urinary tract infection. See NHSN LTCF UTI protocol.

NHSN Key Terms, Acronyms, and Definitions
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56. **Variable:** A term used to describe an individual data collection object where it contains numeric or character (text) information. The term can also be called “field” or “data element” and is similar to the concept of a column in a spreadsheet.
57. **Vital Signs:** If a specific value for a vital sign is not stated in a CDC/NHSN HAI definition criterion (for example, hypotension), the facility should use the vital sign parameters as stated in its policies and procedures for clinical practices. For fever, which NHSN does have as a stated value, use the temperature documented in the patient’s medical record (specifically, no conversion of temperature based on route of collection).

NHSN
NATIONAL HEALTHCARE SAFETY NETWORK

LONG-TERM CARE FACILITY (LTCF)
Healthcare Associated Infections Reporting Tool
Frequently Asked Questions

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General Questions

Q. How do I de-active a user from accessing our NHSN data?

The current NHSN facility administrator or another NHSN user with facility administrative rights may deactivate a current NHSN user by following the below directions:

1. Log into NHSN
2. On the left navigation pane, select **Users>Find>**
3. Select **Find** again for a list of users to populate
4. From the list, select the box to the left of the person's name and **click the** "**Deactivate" button** and confirm by clicking "OK".

-OR-

1. Follow steps 1-3 above
2. From the populated list of users, select the hyperlink (user's name)
3. When the user's profile opens, select Edit and change User Active from Yes to "NO".

Q. Is there a cut-off date for facilities to enter data and correct alerts?

The expectations are that data will be entered and alerts will be resolved in a timely manner, so data are available for analysis. While there is not an established cut-off date for entering LTCF data, CDC-NHSN recommends users to complete data entry and resolve alerts by the end of each month for the previous month's submission to prevent data backlog, which is more prone to errors. For example, if a user has outstanding data and/or alerts for October, the data entry and alerts should be resolved no later than the 30th day of November.

Q. Do I have to get resident permission before reporting data to NHSN?

Public health surveillance does not fall under HIPAA and CDC-NHSN has safeguards to protect PII and ensure privacy. Additionally, NHSN was developed as a quality improvement tool to support infection surveillance and prevention activities. Therefore, individual patient/resident permission would not be required for a facility to use the system for their own, local, quality improvement activities.

Q. Can a person be the NHSN administrator for multiple facilities?

Yes. The person will use the same SAMS grid card to access all facilities in which he /she is listed as a user. **Note**-- the same email address must be used for NHSN and SAMS.

Q. I am trying to enter an event into NHSN, and my facility locations are not showing in the "location" drop-down box.

Verify that resident locations have been set-up (mapped) in the NHSN application for your facility. NHSN provides step-by-step instructions for mapping resident locations, which is accessible by clicking or copying and

pasting the URL of the below link. Please note, users must scroll to the "adding/mapping LTCF locations" section of the presentation. Facility Set-up 2023 (cdc.gov)

Q. How do we reassign/change the NHSN Facility Administrator?

The NHSN facility administrator role will need to be re-assigned if the current NHSN facility administrator is leaving or no longer working at the facility.

OPTION 1 (*preferred option*)-The preference is for the outgoing NHSN facility administrator to re-assign the role to a current or new NHSN user in the NHSN application before he/she is deactivated as a facility user (or is no longer working at the facility). This can be done by the outgoing NHSN Facility Administrator by completing the following steps

1. Log-in to NHSN using SAMS credentials
2. From left navigation bar, select **"Facility"**
3. Then select "**Add/Edit Component**"
4. From the Facility Information Page, scroll down to "**Contact Information**"
5. Click on "**Reassign**" next to the outgoing NHSN Facility Administrator
6. On the *Users Reassign List*, either select a listed NHSN user or select "Add User" to reassign the NHSN Facility Administrator role. Once selected, follow the instructions on the screen.

Important Notes:

- If adding a new NHSN user, you will be required to assign an NHSN "user ID" which you will make up. For example, use the first initial and last name of the new user (TWright).
- Additionally, you will be required to add the legal name (must match identity documents, such as driver license, a phone number, and a correct e-mail address).

OPTION 2: If the role of NHSN facility administrator cannot be re-assigned by the outgoing NHSN facility administrator, the facility must request NHSN to manually re-assign the role. This request can be made by completing the *NHSN Facility Administrator Change Request Form* (CDC 57.104),which can be accessed by clicking the lined title above or by copying and pasting the following URL in your web-browser: Change NHSN Facility Administrator | NHSN | CDC

Important Notes:

1. The individual signing the written request cannot be the same person being named as the new NHSN facility administrator.

2. Allow up to 5 business days for the change request to be verified and completed.

3. After NHSN completes the process, the role of NHSN facility administrator will be re-assigned to the designated person. If the new NHSN facility administrator does not already have access to NHSN, then he or she will receive an e-mail with instructions to register with SAMS. SAMS registration is required before the new NHSN Facility Administrator can gain access to the NHSN application.

Annual Survey

Q. What is a National Provider ID (10-digit number)?

An NPI (National Provider Identifier) is an identification number given to health care providers by the CMS (Centers for Medicare and Medicaid Services). It is a 10-digit number used for a variety of reasons in the health industry. It is not the same number as the CCN. The facility billing department should have this number. There is a national registry for the NPI number which can be accessed online at https://npiregistry.cms.hhs.gov/ or https://npidb.org/

Q. The NHSN LTC Annual Facility Survey requires nursing homes to identify the primary diagnostic testing method for *C. difficile*. How does the nursing home answer this question if the facility uses more than one laboratory?

LTCFs are encouraged to contact the diagnostic laboratory to which most of the resident samples/specimens are sent. In discussion with that laboratory, facilities can identify the primary diagnostic testing method for *C. difficile* used by that laboratory to report on the NHSN annual facility survey.

Q. When a LTCF is entering information for the Annual Facility Survey, can the entered data be saved and completed at a later time?

No. When completing the LTCF Annual Facility Survey, all data entry must occur in one sitting. Meaning, a user cannot enter information, save the survey, and complete data entry at later time. Users are encouraged to print the enrollment form and manually complete the Annual Facility Survey prior to entering the information in the NHSN application. The form and instructions for completing the Annual Facility Survey are located on the LTCF home page under data collection forms: https://www.cdc.gov/nhsn/forms/57.137_LTCFSurv_BLANK.pdf

https://www.cdc.gov/nhsn/forms/instr/57.137-toi-annual-facility-survey.pdf

Q. Will facilities be required to complete annual facility survey on a yearly basis?

All LTCFs have the option to complete the survey, however, the survey is not required for facilities participating only in the COVID-19 module.

1. Facilities will not lose NHSN access after March 1.
2. Facilities that are currently, or plan to participate in, additional modules any time during 2023, such as healthcare associated infections (urinary tract infections), laboratory-identified events for C. difficile and/or multidrug resistant organisms, and/or prevention process measures are required to complete the survey either prior to March 1, or prior to reporting in the non-COVID-19 module(s), if beginning after March.
3. Please be aware that facilities with incomplete surveys may continue to see the "Survey Required 20xx" alert under Action Items on the NHSN LTCF home page, but no action is required unless the facility plans to participate in the available non-COVID-19 modules.

Q. Can I make edits to an annual facility survey after it has been submitted?

Yes. A user may edit the annual facility survey by logging into the NHSN application home page and on the left navigation bar; Click **SURVEYS** > **FIND** >. Next, select the SURVEY YEAR for the survey you are making edits and click FIND. Once the survey opens, scroll all the way to the bottom and select EDIT. Once updates are made, select SAVE.

Enrollment

Q. My facility assigned me a generic email address. Will this impact NHSN enrollment since an individual email address I needed for NHSN and SAMS?

Maybe. When enrolling a facility in NHSN or when adding a new user in an enrolled NHSN facility, employees must provide a valid email address. This email address will be used to receive correspondence from the NHSN and to gain access to the NHSN through SAMS. It is strongly recommended that employees use their own company email address (for example, firstnamelastname@organization.org) and NOT a generic email address (for example, genericDON@organization.org) since the e-mail address will be used as a unique identifier to gain access to the system.

If a facility is unable to provide an individualized or unique email address to the employee responsible for entering data into NHSN and a generic email address (for example, genericDON@organization.org) is used, the facility is ultimately responsible for working with the employee to: (1) delete their SAMS account or (2) remove the generic email address from their SAMS account once they leave and are no longer employed at the facility (see details below). The SAMS user support team is not able to delete an existing account unless the account holder (specifically, employee) contacts them directly.

Q. Must my skilled nursing facility (SNF) enroll separately in NHSN if located inside a hospital?

Maybe. If your SNF is located inside of an acute care hospital (ACH) and has a separate 6-digit CMS certification number (CCN), then the SNF should be enrolled as a separate NHSN facility type (LTC:SKILLNURS) and report using the protocols in the Long-term Care Facility Component. The SNF will have its own 6-digit CCN with the last four digits between 5000-6499

Q. What if I don't know my CCN or CCN effective date/participation date?

Please refer to this look-up tool https://qcor.cms.gov/main.jsp and select "Basic Search" to the left under "Tools" to look up the correct CCN and effective date for the facility.

Q. Do I need to update the CMS Certification Number (CCN)? If so, how do I update the CCN for our facility?

Yes. Every facility must have the correct CCN listed in the NHSN application. If a facility is newly certified, changes ownership, or enrolled into NHSN using a temporary ID number instead of their CMS Certification Number (CCN), the NHSN facility administrator or an NHSN user with administrative rights is able to add/update the facility's CCN within the facility contact information section of the application.

To add or edit a facility CCN, please see following guidance document under Guidance Documents on NHSN LTCF home page: *Adding/Editing a CMS Certification Number within NHSN* or copy and paste the following URL into your Internet browser: https://www.cdc.gov/nhsn/pdfs/cms/Changing-CCN-within-NHSN.pdf

Q. I need a temporary enrollment number to enroll my facility.

Please contact nhsn@cdc.gov

Q. Can an employee use their own personal email address (for example, Gmail account) to enroll in NHSN and SAMS?

Yes. There are no email address restrictions when registering to participate in NHSN. Any functional email account may be used. Facilities should develop their own policy for use of non-facility email addresses. It is important to note however, that all NHSN communications are sent to the email address used to register with NHSN and SAMS. Thus, if a personal email address is used, employees should have access to their personal email (for example, Gmail account) during work hours in order to receive timely and up-to-date information sent by the NHSN.

Q. What is the best Internet browser to use for NHSN?

To have the best experience with NHSN, use a recommended, up-to-date browser. We recommend: Microsoft Edge (latest version), Chrome (latest version), Firefox (latest version), or Safari (latest version).

Other browsers or older versions of the recommended browsers may work, however certain features may be incompatible. Please review information regarding System requirements: FAQs About NHSN | NHSN | CDC.

Q. What is my User ID?

NHSN User ID is a label used to identify users in the NHSN application. The User ID is created by the NHSN user during facility enrollment or when a new user is added to the NHSN application. Most users will set-up their NHSN User ID as being the first initial and last name (i.e., A Smith). The NHSN User ID can have up to 32 characters or numbers. It cannot be an email-address or contain any special characters (i.e., %$&).

Q. How do I add a user to my facility?

After facility enrollment is complete and activated in NHSN, the NHSN Facility Administrator may add users to the account.

- Log into SAMS
- Select NHSN Reporting
- On left-side Navigation pane, select Users > ADD
- Complete the required fields and click “SAVE”
- You will then be prompted to assign the new user rights

- Click on "Save"

*Please check to ensure that you have added users as an "Active User."

If a newly added user does not have SAMS access, they should receive an email confirmation following this process. The email will also ask the new user to click on the corresponding link to agree to the NHSN Rules of Behavior. Once they agree to the Rules of Behavior, NHSN will automatically submit.

SAMS

Q. Do all NHSN users need a SAMS card, or can one card be used for an entire facility?

All NHSN users are required to be registered with SAMS and have their own SAMS grid card or soft token credentials. It is important to note that SAMS registration is owned by the employee registering and NOT the facility.

Q. What is the SAMS grid card or soft token used for?

The SAMS Grid or soft token is used as part of the NHSN log in process as an identity verification step to provide additional security. All level 3 users must have a SAMS grid card or soft token to access the NHSN application.

Q. Can an individual with a SAMS account just share their credentials with others in the facility?

No, only the user who underwent the SAMS registration process and accepted the NHSN Rules of Behavior should have access to their account for security purposes. Each SAMS account is owned by the individual who enrolled and thus, they are responsible for all activity under their account. Under no circumstances should employees share their GRID cards or other protected information with other personnel. Each employee needing access to NHSN should open their own SAMS account and proceed through the credentialing process.

Q. What do I do if I add a user to NHSN, but he/she does not receive the NHSN e-mail with instructions to agree to the NHSN Rules of Behavior to initiate the SAMS process?

Be sure the correct e-mail was entered for the user. If so, contact nhsn@cdc.gov for help resolving the issue.

Q. When submitting ID proof can a user take a photo with a cell phone and upload the picture?

Yes. Users can upload documents using their Smart Phones. Uploading/scans are always better as they are easier to read. SAMS helpdesk can be reached at: SAMShelp@cdc.gov

Q. What should I do if I lose my SAMS Grid?

Contact the SAMS helpdesk in order to receive a new Grid Card SAMShelp@cdc.gov

You can reach the SAMS Help Desk between the hours of 8:00 AM and 8:00 PM EST Monday through Friday (except for U.S. Federal holidays) at the following:

Local: 404-498-6065

Toll Free: 877-681-2901

Email: samshelp@cdc.gov

Q. If an employee leaves a facility, is their SAMs account automatically terminated?

No, each SAMS account is owned by an individual. Thus, if an employee leaves a facility, they still have access to their SAMS account. However, a facility can and should deactivate the employee's NHSN profile to disable further access to the facility's NHSN account.

Q. What do I need to do if I get a new e-mail address?

In order to continue access to the facility in NHSN, an e-mail update must be done in **both** SAMS and the NHSN application and be the exact same.

Review the guidance document How to Edit Email Addresses in SAMS and NHSN Facilities (cdc.gov) to change the email address in both SAMS and NHSN.

Important: When editing an email, the email address in SAMS needs to be updated **first** or the user will lose access to NHSN. If the email in the NHSN facility is inadvertently changed first, and a user can no longer log in, please contact SAMSHelp@cdc.gov and request that the user's SAMS profile be updated with the new email address.

Remember! The email in SAMS and the NHSN facility must be identical for a user to access the facility.

Please contact NHSN@cdc.gov with any questions.

Q. If an employee with SAMS/NHSN access is transferring to another facility, but still needs their SAMS account, would they have to recreate an account at the new facility?

Not necessarily, the user enrolling in SAMS owns their SAMS account, so they may transfer that account to a new facility. However, it is their responsibility to ensure they have access to the email address used to create the account. If they will no longer have access to the email account once they are no longer employed at the facility, the EMPLOYEE must change their email in SAMS to another functioning email (for example, either the new facilities email or a personal email address such as Gmail).

Q. What do I do if I forget my NHSN password?

If you cannot log on to SAMS and you do not remember your password, go the login page https://sams.cdc.gov and click "**Forgot your password?**" A page will display that will allow you to identify yourself by answering the security questions you configured during your registration. You will then be allowed to change your password.

UTI Event Protocol

Q. Are the NHSN UTI definitions used in hospitals apply to nursing homes?

No. The NHSN protocols and definitions used by LTCFs in the LTCF Component Module are different from the protocols/definitions used by acute care facilities in the Patient Safety Component module. This means the following rules do **not** apply to LTCFs: 1. The NHSN Infection Window Period; and 2. The Repeat Infection Timeframe.

Please refer to LTCF UTI protocol on the NHSN webpage HAI Surveillance Protocol for UTI Events for LTCF (cdc.gov)

Q. Do I still count a urine culture if aseptic technique was not used during collection?

Yes. The technique to obtain a urine culture is not part of the UTI protocol. NHSNs' aim is not to direct care, but rather to measure the effect of care on outcomes. The facility should use the urine culture technique parameters as stated in its policies and procedures for clinical practice.

Q. How does NHSN define confusion and/or functional decline?

We recognize that McGeer and the MDS have specific parameters to define a new onset of confusion. NHSN surveillance criteria do not require specific parameters. For NHSN surveillance purposes, a documented change in mental status, such as new or worsening mental status (deviation from the normal) can be used to meet NHSN definitions for CA-SUTI, but only when accompanied by leukocytosis.

Q. Do the NHSN criteria for UTI have a specific time period for identifying a second UTI in a resident?

No. The protocol does not incorporate specific rules for identifying subsequent UTI in a resident. Users should take into consideration the overall clinical presentation of the resident when determining if he/she has a new UTI verses a continuation of a recent UTI. Some considerations may include: (1) new or acutely worsening of signs and symptoms; (2) continuation of antibiotics; and (3) new/change in culture results. For example, did the resident get better before the new onset of signs and symptoms or new urine culture? Did the resident complete antibiotics from the first identified UTI? If unsure how to apply the NHSN criteria, users are encouraged to submit specific resident cases (without resident identifier information) to nhsn@cdc.gov for feedback.

Q. How do I determine a baseline temperature for a resident?

Since the LTCF UTI protocol does not specify parameters for what is considered a baseline, facilities should use their internal policy and procedures to define how they will measure/determine a baseline temperature for a resident. In other words, what is "normal" for the resident without outside influences of illness, medications, dehydration, etc.? The primary goal for this criterion to increase the sensitivity and specificity of using 'fever" as an indicator for infection. Some facilities will establish a baseline vital sign measurement starting point during

the initial admission assessment into the LTCF, and when the resident is at his/her healthiest (without infection, dehydration, etc.). These baseline measurements then become a basis for comparison with subsequent measurements to detect changes and abnormal findings.

Q. Define what is meant by "fever of >99°F on repeated occasions"

"Repeated occasions" means more than one documented temperature reading of >99°F. These readings do not have to be consecutive but should be within a reasonable timeframe to indicate a change from the residents' baseline.

Q. Is there a timeframe that all UTI criteria must be met to be considered a reportable UTI event?

No. The protocol does not include a timeframe in which all the UTI criteria must be met, so clinical judgement must be used when determining if the resident meets NHSN UTI criteria when culture collection and signs and/or symptoms occur on different days. Some facilities use a three-day window, which is reasonable and can be used as an arbitrary timeframe.

Q. When I entered a UTI event into the NHSN application, the "specific event" box is blank. How do I fix this?

The "Specific Event" box will automatically populate with the type of NHSN defined UTI the resident meets (for example, CA-SUTI, SUTI, ABUTI) based on the reported event data including: (1) presence of an indwelling urinary catheter; (2) laboratory and diagnostic data; and (3) signs and symptoms. If the entered data does not meet the NHSN UTI criteria, the "Specific Event" will not populate in the application. This means either the resident does not meet NHSN UTI criteria in which you would not report the event to NHSN, or the correct criteria were inadvertently selected/unselected.

Q. If a resident has a suprapubic catheter, do I still need to report a UTI?

Even though a suprapubic catheter is not considered as an indwelling urinary device, a UTI in a resident with a suprapubic catheter could be reported as a symptomatic urinary tract infection (SUTI) if the NHSN SUTI/non-catheter associated criteria are met.

Q. Does prophylactic antibiotic use count in the denominator for "new antibiotic starts for UTI indication"?

Yes. All new prescriptions for an antibiotic given for a resident for UTI treatment (suspected, diagnosed, prophylaxis) should be included in the count.

Q. How would I assess UTI symptoms in paraplegic and quadriplegic adults who do not have sensation that may meet NHSN UTI criteria?

These scenarios are quite unique and represent a good example of a resident who may have a clinical UTI, but the documentation does not meet the NHSN criteria. Since the LTCF UTI surveillance definitions are designed to improve consistency in tracking events in populations rather than individual clinical care, surveillance criteria may not be equally sensitive for all resident populations, including those with spinal cord injury, comatose, brain injuries, and heavily sedated residents. A set of criteria that covered every subpopulation with high specificity and sensitivity would be so complicated that it would be very difficult to employ and next to impossible to do so consistently across different facilities. Our recommendation is to use the documented signs and symptoms to determine if the NHSN UTI criteria are met. If the resident appears to have Costovertebral (CV) tenderness or other pain based on facial grimaces and/or other signs, then you can use that documentation to meet the NHSN UTI criteria. However, if the signs/symptoms are not documented, the recommendation is to not report the UTI to NHSN even though the resident may have a clinically treated UTI.

Q. Do I count a UTI event after the resident was discharged?

Surveillance for UTI after the resident is transferred or discharged from the reporting LTCF is not required. However, if discovered, a NHSN UTI event with an event date on the day of discharge or the next calendar day is attributable to the discharging LTCF and should be included in UTIs reported to NHSN for that LTCF. No indwelling urinary catheter days are reported for discharged or transferred residents.

Q. Do I count antibiotic starts for UTI indication if resident is prescribed an antibiotic while in the emergency department?

Maybe. Include only antibiotics for UTI indication that are started while the resident received care in your facility or written/started by outside providers who saw the resident during a brief outpatient visit (for example an outpatient clinic or emergency department) **when the resident returned to the reporting LTCF on the calendar day of the visit or the next calendar day**. Do not include if resident is admitted to the facility.

Q. Do I include urine cultures if ordered by an outside physician in an outpatient clinic or Emergency Department?

Maybe. Include only urine cultures ordered while the resident received care in your facility or ordered by outside providers who saw the resident during a brief outpatient visit (for example an outpatient clinic or emergency department) **when the resident returned to the reporting LTCF on the calendar day of the visit or the next calendar day.**

Do not include urine cultures ordered while resident was admitted in another facility.

Lab-ID Event

Q. What are the most common medications I should look for when determining if a resident is on treatment for *C. difficile* infection?

Some of the common *C. difficile* treatments to look for are oral vancomycin, metronidazole, and fidaxomicin.

Q. Are laboratory results obtained from an emergency department (ED) or outpatient (OP) setting, such as a physician's office, eligible to be included in LabID Event reporting for the LTCF?

Yes- If a resident returns to the LTCF within 2 calendar days of leaving. In efforts to follow the continuum of care when residents briefly leave the LTCF, specimens collected from OP settings should be reported to NHSN if the resident returns to the LTCF on the calendar day of the OP visit or the next calendar day. Since these specimens are collected during the "current admission" in the LTCF, the categorization of these specimens will be the same as if the specimen was collected while the resident was physically in the LTCF.

Q. If the resident was admitted to our facility with *C. difficile* and our doctor orders another stool culture on the resident, do I have to report positive *C. difficile* LabID event if the specimen collected in our facility is positive?

Yes. **All positive C. difficile assays** collected by a resident housed in the reporting LTCF must be reported even if the resident has a history of CDI prior to admission to the reporting LTCF. A positive specimen collected prior to admission to the reporting LTCF (for example, during an admission in another healthcare facility) does **not** preclude reporting for the LTCF.

Q. Should I report a CDI LabID event if the PCR is positive, but the confirmatory EIA is negative?

Yes. All positive LabID specimens must be reported when collected from a resident physically located in the reporting LTCF, as well as positive specimens collected during a brief outpatient visit when the resident returns to the LTCF within two calendar days.

It will be important for LTCFs to select the correct answer on the Annual Facility Survey for *Primary testing method for C. difficile (*for example, 2-step testing NAAT, plus EIA If NAAT if positive) so future risk adjustment methodologies may be applied to data.

Q. Should a resident be counted in the "Number of residents started on antibiotic treatment for C. diff if they only received treatment for 1 day?

Yes. A resident started on medication-antibiotic treatment for *C. difficile* infection should also be captured in the summary data count for "Number of residents started on antibiotic treatment for C. diff," if treatment was started. This includes residents that had a negative PCR or EIA test and those residents in which treatment was discontinued after 1 or more days or given empirically. Please see the form instructions for additional information, which can be reviewed by clicking on or copying and pasting the following URL into your Internet browser Instructions for Completion of MDRO or CDI Monthly Monitoring for LTCF (cdc.gov)

Q. If our resident leaves the LTCF and is subsequently admitted to the hospital, do I need to report a positive *C. difficile* result that was collected while the resident was a patient in the hospital?

No. Any specimens collected during an admission in another healthcare facility are excluded from LabID event reporting for your LTCF.

Q. Do I have to report a LabID event for a specimen collected on the first or second day a resident is admitted to our facility?

Yes. Since January 1, 2020, **all** positive LabID specimens must be reported when collected from a resident physically located in the reporting LTCF, as well as positive specimens collected during a brief outpatient visit when the resident returns to the LTCF within two calendar days. NHSN LabID event reporting is designed to capture both community-onset (CO) and LTCF-onset (LO) events. NHSN will categorize submitted events as Community-onset (CO) or LTCF-onset (LO) based on the current admission date for the resident and the specimen collection date.

Q. How do I assign a LabID Event as community-onset or long-term care facility onset?

The NHSN application will automatically categorize all LabID Events entered in the application based on LabID events submitted to NHSN. The user does not assign these categorizations.

Q. If a nursing home resident has a positive CDI, is discharged, readmitted to the same facility and re-tested all within that 14-day window, how does the second CDI result get classified, and should it be entered in NHSN?

Since January 1, 2020, all positive LabID specimens must be reported to NHSN. The NHSN application will categorize submitted events as duplicate or non-duplicate based on event dates in the 14-day window period. The 14-day rule for reporting CDI LabID Events expands across admissions to the SAME facility. This means if a nursing home resident has a positive *C. difficile* lab result, is discharged, readmitted to the same facility and re-tested all within that 14-day window, the second result should still be submitted, but NHSN will categorize the event as a duplicate CDI assay and it will be excluded from calculated analysis, such as rates.

Q. What do I need to report to NHSN if a resident is admitted to our nursing home on treatment for *C. difficile*? Am I supposed to submit a LabID event for the resident?

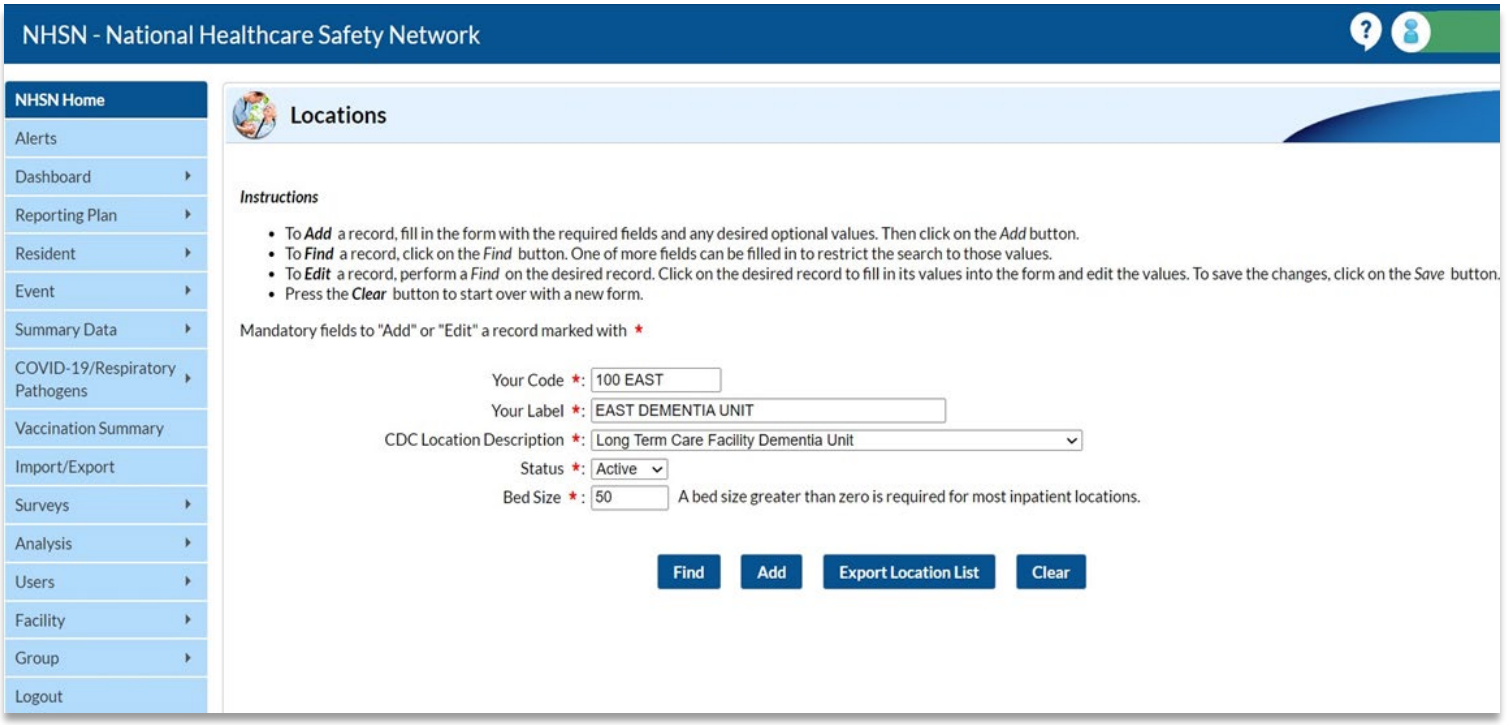
If a resident is admitted to the facility while on treatment for *C. difficile*, the resident should always be included in that month's denominator count for "Number of Admissions on C. diff Treatment."

A LabID Event would only be submitted to NHSN if the resident also had a positive *C. difficile* lab result when the specimen was collected while the resident was receiving care in the nursing home or during a brief outpatient visit when the resident returns to the LTCF within two calendar days.

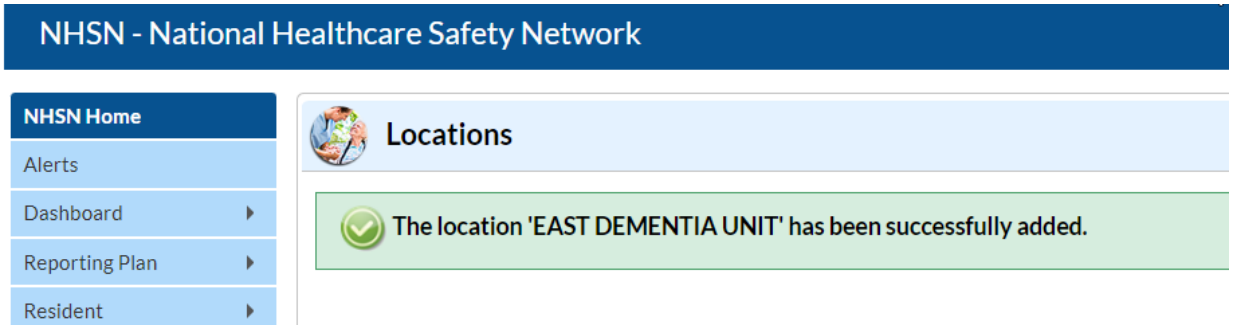
Remember: CDI LabID events (numerator data) and "Number of Admissions on C. diff Treatment" (denominator data) are not mutually exclusive. Meaning, a resident may be included in the denominator count only for the given month.

LTCF Location Mapping Guidance

- A user with Administrator Rights selects **Facility**, then **Locations**.
- On the **Locations screen**, read the instructions carefully.
- Complete all mandatory fields.
- **Your Code:** Enter a code of your choice that will allow easy identification of the location.
- **Your Label:** Enter a short description of the location.
- **CDC Location Description:** Select the appropriate CDC location from the drop-down menu.
- **Status:** Select 'Active' when adding a new location.
- **Bed Size:** Enter the number of licensed beds in the unit.
- Click on the **Add** button to save the location
- After successfully adding a location, it will be available in all active components.



LTCF Location Mapping Guidance



Important Tips:

- Long-term Care Facilities have designated NHSN locations. The names and descriptions of these locations are in the Master CDC Location and Description document under the Long-Term Care Facilities section, found at CDC Locations and Descriptions and Instructions for Mapping Patient Care Locations
- To map the appropriate CDC location code for a unit, review the resident mix in that unit during the previous year. Choose the location code that best describes the type of resident care/service delivered on that unit
- NHSN "80% Rule": Sometimes more than one type of resident receives care in a location, for example, both long-stay and skilled resident beds are mixed together. In that situation, select the location code which best reflects the majority of residents usually cared for on that unit. Ideally this code would apply to 80% of residents on the unit. But, if there is not a clear majority, select the code that makes sense for your facility.

Long-Term Care Component website: Long-term Care Facilities (LTCF) Component | NHSN | CDC

NHSN User Support: nhsn@cdc.gov