

LONG-TERM CARE FACILITY (LTCF) Urinary Tract Infection (UTI) Event Reporting Module in LTCF Component

Purpose of Document:

The purpose of this guidance document is to assist long-term care facilities (LTCFs) with reporting Urinary Tract Infection (UTI) events in the CDC's National Healthcare Safety Network (NHSN) LTCF Component. LTCFs eligible to report UTI event data in the long-term care component include skilled nursing facilities/nursing homes, Intermediate Care Facilities for Individuals with Intellectual Disabilities, psychiatric residential treatment facility, and state veterans' homes.

Participation Requirements:

- A [NHSN Monthly Reporting Plan \(MRP\)](#) must be completed for each calendar month in which a facility plans to enter data into the NHSN user interface.
 - MRP's can be submitted for more than month at a time.
 - A monthly plan **must be in place before events can be entered** into NHSN for that calendar month.
- Facilities must **submit** all UTI events that meet NHSN criteria (*referred to as numerator data*).
 - This includes both catheter-associated and non-catheter associated UTI events.
- [Monthly Summary Data](#)-For each participating month, the facility must submit UTI denominator data.
- **Resolve** "[Alerts](#)," if applicable.

Step 1: From the home screen, click "EVENT" and then "Add".



Step 2: Enter the Resident information, being sure to complete every field with a ***red asterisk**. The required fields will include Resident ID, Gender, Ethnicity, Race, DOB, Resident Type, Date of First Admission to Facility, and Date of Current Admission to Facility. (The Facility ID will pre-populate).

Note: A resident type must be selected as either Short Stay (SS) or Long Stay (LS). A short stay resident is defined as being in the facility for 100 or less calendar days from the date of first admission into the facility. A long-stay resident is defined as being in the facility for more than 100 calendar days from the date of first admission.

Event Date minus First Admission Date

SS-Short-stay: On the date of specimen collection (event date), the resident has been in facility for 100 days or less from date of first admission.

LS-Long-stay: On the date of specimen collection (event date), the resident has been in facility for more than 100 days from date of first admission.

This is auto-populated in the NHSN system

Resident type *:
 SS - Short-stay
 LS - Long Stay

Note: Date of First Admission to Facility: 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.

Date of Current Admission to Facility: Date of current admission must occur BEFORE the date of event.

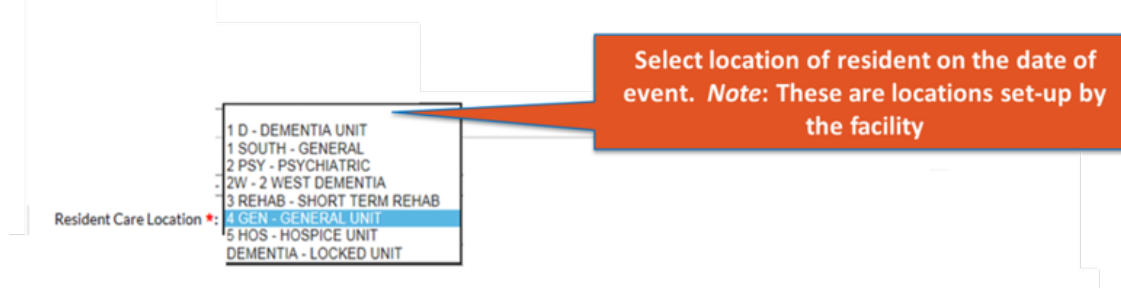
Date resident first entered the facility.
Date remains the same even if the resident leaves the facility for short periods of time (<30 consecutive days).

Most recent date resident entered the facility.
If the resident enters the facility for the first time and has not left for more than 2 calendar days, then the date of current admission will be the same as the date of first admission. If the resident leaves the facility for more than 2 calendar days (the day the resident left the facility = day 1) and returns, the date of current admission should be updated to the date of return to the facility.

Step 3: Scroll down to the “Event Information” section. For “Event Type,” select “UTI.” The date of event will be the date the specimen was collected. (The Event Date/Date Specimen Collected cannot occur before the current admission date.)

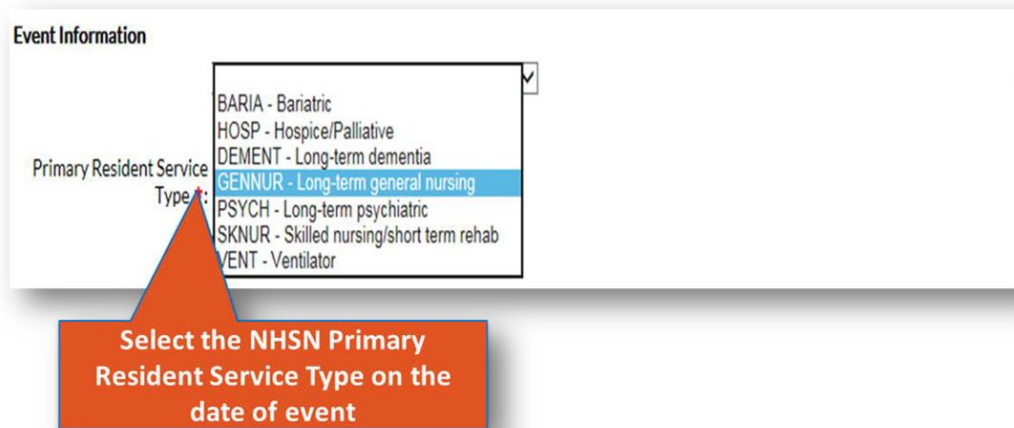
The date when the first clinical evidence (signs/symptoms) of the UTI appeared or the date the urine culture specimen used to meet the infection criteria was collected, whichever comes first

Step 4: Enter the location of the resident at the time of specimen collection.



Note: If the resident has a specimen collected in an outpatient setting and meets the previously discussed setting requirements, the selected resident care location should reflect the location of the resident immediately prior to leaving the LTCF to visit the outpatient setting.

Step 5: Select the single primary service that best represents the type of care the resident was receiving on the date the specimen was collected. (The available service types are auto-populated with NHSN service types, which means they are not pre-set-up by the facility).



Step 6: For the next question, enter “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 LTC facility in the past four weeks, otherwise select “No”.

- If “YES” is selected, two additional questions will populate for the user to answer:
 - The date of last transfer from acute care to your facility;
 - Was the resident on antibiotic therapy for this specific organism type at the time of transfer to your facility?

Note: A resident visit to an ED/ER or outpatient visit (physician’s office) is excluded since these outpatient visits do not represent an actual admission into an acute care facility.

Step 7: For the next question, select the indwelling urinary catheter status at the time of the event.

- If INPLACE or REMOVE is selected, two additional questions will populate for the user to answer:
 - Site where indwelling urinary catheter inserted
 - Date of indwelling urinary catheter insertion

Step 8: If “NEITHER” is selected, an additional question will populate:

- If indwelling urinary catheter not in place, was another urinary device type present at the time of event onset?
- If “Yes” is selected, an additional question will populate.
 - Other device type

Step 9: Specify the NHSN UTI criteria that the resident meets. (Check all that apply).

Specify Criteria Used * (check all that apply):

<p>Signs & Symptoms</p> <p><input type="checkbox"/> 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</p> <p><input type="checkbox"/> Rigors</p> <p><input type="checkbox"/> New onset confusion/functional decline</p> <p><input type="checkbox"/> New onset hypotension</p> <p><input type="checkbox"/> Acute pain, swelling or tenderness of the testes, epididymis, or prostate</p> <p><input checked="" type="checkbox"/> Acute dysuria</p> <p><input type="checkbox"/> Purulent drainage at catheter insertion site</p> <p>New and/or marked increase in (check all that apply):</p> <p><input type="checkbox"/> Urgency</p> <p><input type="checkbox"/> Frequency</p> <p><input type="checkbox"/> Incontinence</p> <p><input type="checkbox"/> Costovertebral angle pain or tenderness</p> <p><input type="checkbox"/> Suprapubic tenderness</p> <p><input type="checkbox"/> Visible (gross) hematuria</p>	<p>Laboratory & Diagnostic Testing</p> <p><input type="checkbox"/> Positive urine culture with no more than 2 species of organisms, at least one of which is a bacterium of $\geq 10^5$ CFU/ml</p> <p><input type="checkbox"/> Leukocytosis ($> 10,000$ cells/mm³), or Left shift ($> 6\%$ or 1,500 bands/mm³)</p> <p><input checked="" type="checkbox"/> Positive blood culture with 1 matching organism in urine culture</p>
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Specific Event **:

Once NHSN UTI Criteria met, the “Specific Event” will auto-populate

Step 10: Once the specific event field auto-populates, the secondary bloodstream infection will auto-populate to, "Yes" or "No."

- For the next question, please identify if the resident was transferred to an acute care facility within 7 days.
 - It is important to note the user should select "Yes" if the user was transferred for any reason.
- The next question is optional, the user can answer "Yes" or "No" if the resident died.
- If a pathogen was identified the user should specify the number and type of pathogens from the drop-down boxes.

The screenshot shows a form with the following fields and callouts:

- Specific Event**: *SUTI - Symptomatic UTI
- Secondary Bloodstream Infection**: *Y - Yes
- Transfer to acute care facility within 7 days**: * (dropdown menu)
- Pathogens identified**: *Y - Yes If Yes, specify below ->
- Pathogens**: Three dropdown menus for Pathogen 1, Pathogen 2, and Pathogen 3.
- Died within 7 days of Date of Event**: (dropdown menu)

Callouts:

- "This will auto populate depending on the selections from the Specify Criteria Used section" (points to the Secondary Bloodstream Infection field)
- "Yes, if the resident transferred to acute care facility for any reason in the 7 days after the date of event" (points to the Transfer to acute care facility field)
- "Optional. Yes, if resident died from any cause within 7 days after the date of event" (points to the Died within 7 days field)

Step 11: After selecting the pathogen(s), a drop-down screen will display all possible antimicrobials.

- Each field with a red asterisk must be completed.
- The box on the right displays the possible selections for each field.
- The user may enter up to 2 pathogens for a UTI **without** secondary BSI.
- The user may enter up to 3 pathogens for a UTI **with** secondary BSI.

The screenshot shows a grid of antimicrobial options with a legend:

- Pathogen 1**: Escherichia coli - EC
- Antimicrobials**: Grid of options including AMK, AMP, AMPSUL, AMXCLV, CEFOT, CEFTRX, CEFTAVI, CEFTAZ, CEFUR, LEVO, MOXI, COL, PB, DORI, IMI, MINO, IETRA, ERTA, GENT.
- Legend**:
 - S = Susceptible
 - I = Intermediate
 - R = Resistant
 - NS = Non-susceptible
 - S-DD = Susceptible dose dependent
 - N = Not tested

Callout: "Enter up to 2 pathogens for UTI without secondary BSI. If secondary BSI is yes. User may enter up to 3 pathogens"


Step 12: The last two fields are optional and may be used for local or group use to customize or expand data collected by the LTCF.

- In the custom field, up to 50 characters may be customized with date, numeric, or alphanumeric information.
- The comments section is a place to add additional information about a particular event.
- **NHSN does not use the data entered in custom fields or comments for any analysis functions.**

The screenshot displays the 'Custom Fields' and 'Comments' sections of the reporting module. The 'Custom Fields' section includes a dropdown menu for 'PRIORHX' with 'YES' selected. An orange callout box points to this section with the text 'Optional, but must be set-up before reporting event'. The 'Comments' section features a text area containing the text 'TRANSFER FROM STAYAWAY ACUTE CARE FACILITY.' An orange callout box points to this text area with the text 'Free text'. At the bottom of the form, there are two buttons: 'Save' and 'Back', with the 'Save' button highlighted by a red box.

Monthly Summary Data

Step 1: NHSN has a worksheet (optional) to collect UTI denominator data (This form may also be used to collect LabID event data). Daily counts must be summed at the end of the month into a monthly total. The monthly total will be entered into the NHSN application. Forms and instructions are also available under *Data Collection Forms and Instructions* at [Urinary Tract Infections \(UTI\) | LTCF | NHSN | CDC](#).



NHSN
NATIONAL HEALTHCARE
SAFETY NETWORK

Form Approved
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www.cdc.gov/nhsn

Denominators for LTCF

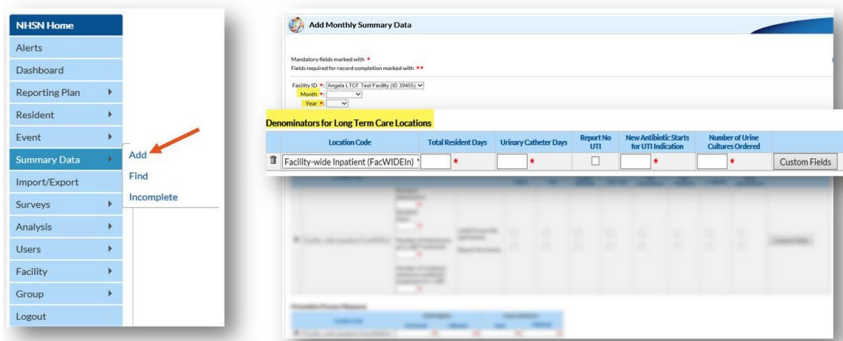
Page 1 of 1 **required for saving *conditionally required based on monitoring selection in Monthly Reporting Plan

Date	**Number of Residents	**Location Code: *Number of residents with a urinary catheter	*New antibiotic starts for UTI indication	*Number of urine cultures ordered	**Month: *Resident Admissions	**Year: *Number of admissions on C. diff treatment	*Number of Residents Started on Antibiotic Treatment for C. diff
1							
2							
3							
4							

*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: _____							

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

Step 2: The monthly summary data can be submitted by selecting the "Summary Data" category on the NHSN blue navigation panel, select "add" and complete the required fields. The Facility ID, Month, and Year must be submitted first. There are four denominators which must be submitted each month.



Step 3: For each day of the month, record the total number of residents in the facility. At the end of the month, add the daily counts and enter the total as **Total Resident Days**.

Denominators for Long Term Care Locations

Location Code	Total Resident Days	Urinary Catheter Days	Report No UTI	New Antibiotic Starts for UTI Indication	Number of Urine Cultures Ordered	Custom Fields
Facility-wide Inpatient (FacWIDEIn)	<input type="text"/> *	<input type="text"/> *	<input type="checkbox"/>	<input type="text"/> *	<input type="text"/> *	Custom Fields

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Step 4: For each day of the month, count and record the number of residents in the facility who have an indwelling urinary catheter. The aggregate count for the calendar month should be entered as the total “Urinary Catheter Days.” **DO NOT** include straight in-and-out catheters, suprapubic catheters, external catheters, or Nephrostomy tubes in your count.

Denominators for Long Term Care Locations

Location Code	Total Resident Days	Urinary Catheter Days	Report No UTI	New Antibiotic Starts for UTI Indication	Number of Urine Cultures Ordered	Custom Fields
Facility-wide Inpatient (FacWIDEIn)	<input type="text"/> *	<input type="text"/> *	<input type="checkbox"/>	<input type="text"/> *	<input type="text"/> *	Custom Fields



Step 5: If UTI surveillance was included on the NHSN Monthly Reporting Plan (MRP), but the facility did not identify and report at least one UTI event during the month, a check mark must be placed in the box “Report No UTI.”

Location Code	Total Resident Days	Urinary Catheter Days	Report No UTI	New Antibiotic Starts for UTI Indication	Number of Urine Cultures Ordered	Custom Fields
Facility-wide Inpatient (FacWIDEIn)	<input type="text"/> *	<input type="text"/> *	<input type="checkbox"/>	<input type="text"/> *	<input type="text"/> *	

Step 6: Enter the monthly sum of all new prescriptions/orders for antibiotics given to residents suspected or diagnosed with having a UTI. (This also includes both catheter-associated and non-catheter associated).

- Count antibiotic starts even if the infection being treated did not meet NHSN criteria for a symptomatic UTI event.
- Capture all new antibiotic orders, regardless of number of doses or days of therapy.
- **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 resident continues to take the antibiotic while in the facility.

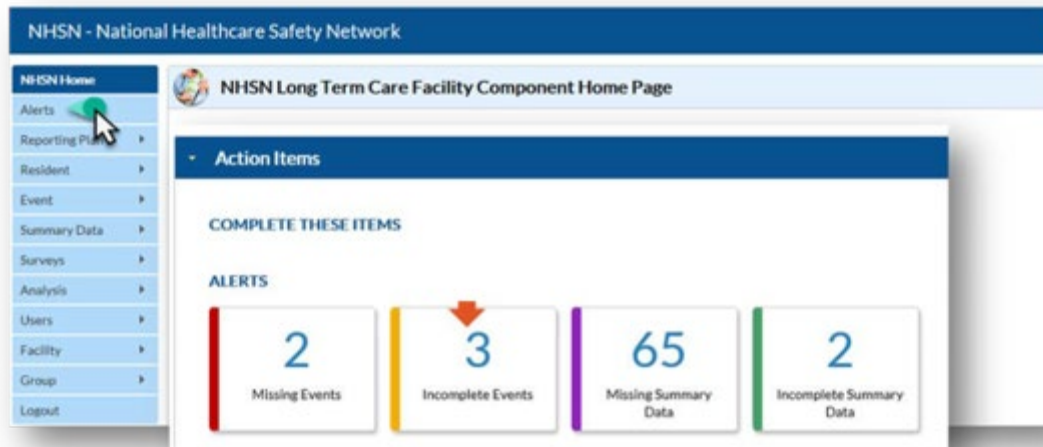
Location Code	Total Resident Days	Urinary Catheter Days	Report No UTI	New Antibiotic Starts for UTI Indication	Number of Urine Cultures Ordered	Custom Fields
Facility-wide Inpatient (FacWIDEIn)	<input type="text"/> *	<input type="text"/> *	<input type="checkbox"/>	<input type="text"/> *	<input type="text"/> *	

Step 7: Enter the monthly sum of new urine cultures ordered for a resident regardless of whether the resident has a UTI meeting the NHSN event criteria. **Do not** include urine cultures ordered by another healthcare facility prior to the resident’s admission or readmission back to your facility.

Location Code	Total Resident Days	Urinary Catheter Days	Report No UTI	New Antibiotic Starts for UTI Indication	Number of Urine Cultures Ordered	Custom Fields
Facility-wide Inpatient (FacWIDEIn)	<input type="text"/> *	<input type="text"/> *	<input type="checkbox"/>	<input type="text"/> *	<input type="text"/> *	

Alerts

The NHSN system will automatically check the system to ensure all data is completed properly. The system will send an alert to the user notifying of missing event info, an incomplete event, missing summary data, or incomplete summary data. The alerts should be resolved prior to using the analysis function. The analysis function is how a facility can generate line lists to view data that has been submitted. Alerts can be located on the home page under the “Alerts” tab.

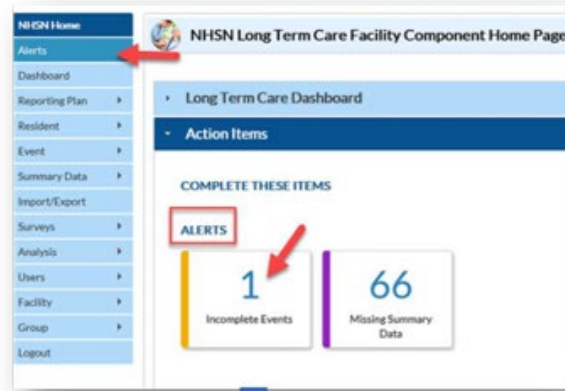


Common Alerts

Incomplete Event: This alert indicates that an incomplete UTI event submitted and saved.

– Remember—only events for residents who meet NHSN UTI criteria should be reported.

- To resolve the alert, click on the hyperlinked Event number (#) and review/edit data with ***red asterisk(s)**. Common issues could be missing criteria, specifically, a positive urine culture. After reviewing all categories and making edits, ensure the information is saved to ensure the data is marked as resolved.



The following are incomplete "In Plan" events.

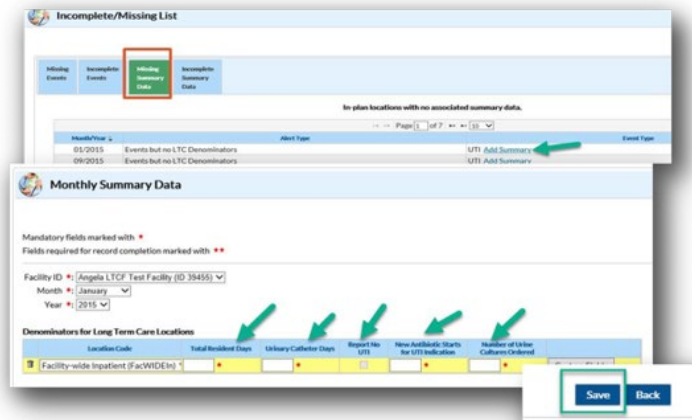
Resident ID	Last Name	First Name	Gender	Date of Birth	Event #	Event Type
123456	Boat	MissThe	F	09/29/1935	30546	UTI

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Missing Event: A second common alert is a missing event. If there is a monthly report submitted but no UTI event reported, you must select the "Report No Events" checkbox. If the checkbox is not selected the system will alert the user to a missing event. The two solutions are either checking the "Report No Events" box or submitting any necessary UTI events for the month.

Missing Events	Incomplete Events	Missing Summary Data	Incomplete Summary Data
In-plan denominators reported for these locations with no associated events. Print Form			
Months/Year	Alert Type	Event Type/Pathogen	Summary Data Form Type
12/2018	Summary but no events	UTI	LTC.DENOM
			Report No Events <input checked="" type="checkbox"/>

Missing Summary Data: This alert will occur when summary data has not been completed for the calendar month. To resolve, click the “Add Summary” hyperlink and enter summary data under “Denominators for Long Term Care Locations.” Remember to click “SAVE” before exiting.



Incomplete Summary Data: This issue will occur if the data entered has fields missing or invalid data numbers. The issue can be resolved in a similar manner as the missing summary data alert is fixed.

