

Laboratory-identified Event (LabID) Module for Long-term Care Facilities (LTCFs)

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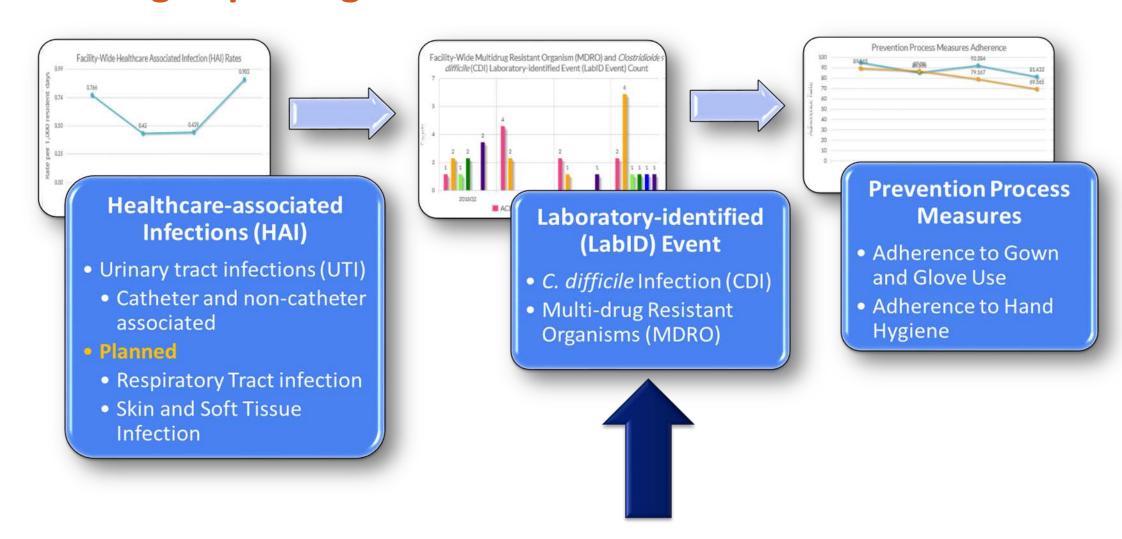
Nurse Epidemiologist

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Learning Objectives

- Demonstrate an understanding of Laboratory-identified (LabID) Event surveillance and reporting for NHSN.
- Explain Clostridioides difficile infection (CDI) and multi-drug resistant organism (MDRO) LabID Event definitions and protocols.
- Describe how to enter LabID event data into the NHSN application.
- Define required monthly summary data for CDI and MDRO LabID Event reporting.
- Explain importance of and steps for resolving data quality alerts.

Standardized Surveillance Criteria and Analysis for the Following Reporting Modules



Which LTCFs are Eligible to Report UTI Event Data to NHSN?



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



Intermediate/chronic care facilities for the developmentally disabled



Assisted living facilities & residential care facilities

Note: limited to Prevention Process Measures Module

What is Laboratory-identified (LabID) Event Reporting?

The use of standardized case definitions that incorporate laboratory based metrics and limited admission data as a proxy for surveillance of infection events.

Benefits of Using Positive Lab Tests to Track Infection Events

- Clinical evaluation of resident is not required, and therefore this surveillance option is often less labor intensive
- Minimal chart review
- Objective laboratory-based metrics that allow facilities to
 - Estimate infection burden in the facility
 - Estimate exposure burden in the facility
 - Assess the need for and effectiveness of interventions
 - Increased comparability between clinical settings

Surveillance and Reporting Rules for LabID Event Module

- Surveillance must occur for all resident care locations in the facility referred to as facility-wide inpatient or FacWidelN.
- Must report positive non-duplicate test results for specimens collected from a resident in your facility at the time of specimen collection.

AND

- Specimens collected during a brief outpatient (OP) visit to an emergency department (ED) or clinic/physician's office if:
 - The resident returns back to your facility on same calendar day of the OP visit or the next calendar day

Note: There should be **no** change in **current** admission date

Surveillance and Reporting Rules for LabID Event Module

- Do **NOT** report a LabID event for positive test results that were collected while the resident was receiving **inpatient** care in another healthcare facility at the time of specimen collection.
- Do NOT report a LabID event for a specimen collected prior to the resident's admission to your facility.

Monthly Participation Requirements

- A NHSN Monthly Reporting Plan must be completed for each calendar month in which a facility plans to enter data into the NHSN.
 - LabID event surveillance must occur for the entire calendar month for the selected events/organisms
- Submit all non-duplicate positive specimens to NHSN (numerator data)
- Summary Data For each participating month, the facility must report the required denominator data
- Resolve "Alerts", if applicable

Reporting Options Available in LabID Event Module

- I. Clostridioides difficile infection (CDI; C. difficile)
- II. Multi-drug Resistant Organism (MDRO)
 - A facility can chose to monitor one or more of the following organisms:
 - Staphylococcus aureus, methicillin-resistant (MRSA)
 - Staphylococcus aureus, methicillin-susceptible (MSSA) with MRSA surveillance
 - Vancomycin-Resistant Enterococcus spp. (VRE)
 - Cephalosporin-Resistant Klebsiella spp.(CephR-Klebsiella)
 - Carbapenem-Resistant Enterobacteriaceae (CRE)
 - ✓ Klebsiella spp. (CRE-Klebsiella)
 - ✓ E coli. (CRE-E coli)
 - ✓ Enterobacter (CRE-Enterobacter)
 - Multidrug-Resistant Acinetobacter spp. (MDR-Acinetobacter)



Understanding *C. difficile* in Your Facility: Questions to Ponder...

- How do we define CDI?
- How do we track/measure CDI?
- Are my facility's CDI rates high?
- If my facility's rates are high, why?
- Are CDI rates in my community high?
- Which residents are most affected by CDI in my facility?
- Skilled care vs. long-stay?
- Recently hospitalized?
- Recent antibiotic use?
- Are most cases of CDI new, or relapsing cases?

Knowledge Check 1:

Describe how *C. difficile* LabID event surveillance for performed in a participating NHSN long-term care facility.

- A. The facility uses the CDC's National Healthcare Safety Network (NHSN) laboratory-identified event (LabID Event) metrics to identify and report residents with *C. difficile* in all resident care locations in the facility.
- B. The facility uses the CDC's National Healthcare Safety Network (NHSN) healthcare associated infection (HAI) methods to identify and report residents with *C. difficile* in all resident care locations in the facility.
- C. The facility uses the CDC's National Healthcare Safety Network (NHSN) **laboratory-identified event (LabID Event) metrics** to identify and report residents with *C. difficile* in the **skilled nursing locations** in the facility.

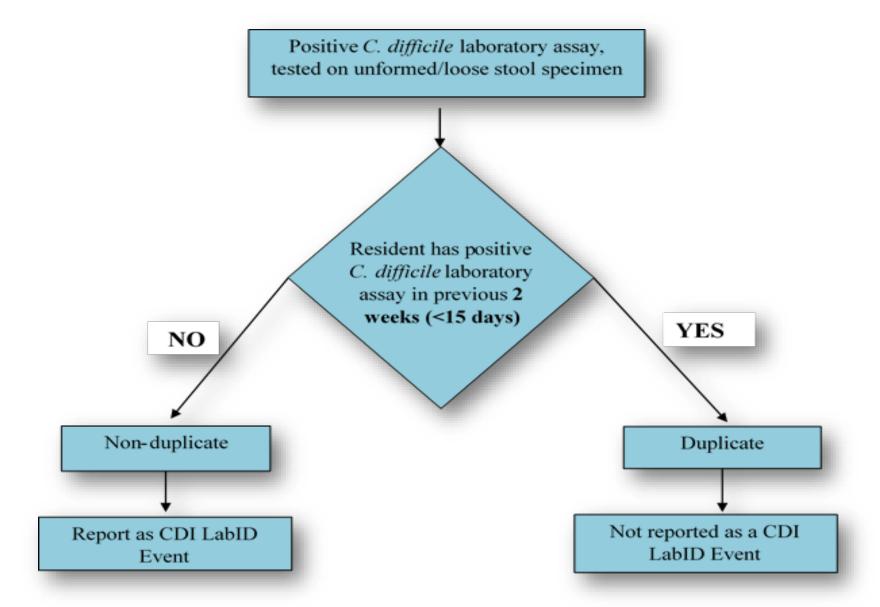
Keep in mind the following.....

- Facility wide surveillance is required, which means surveillance must occur in all resident care locations.
- Testing performed on unformed/loose stool specimens (conforms to the shape of the container).
- * Positive tests collected before a resident's admission to the LTCF or during an admission in another facility are <u>excluded</u>.
- Non-duplicate laboratory results collected from an ED or other OP setting must be included if:
 - ✓ The resident returns to the LTCF on the calendar day of transfer to the OP setting or the following calendar day (specifically, there is no change in <u>current</u> admission date for LTCF)

Common Terms and Definitions used in LabID Event Module

- ❖ C. difficile positive laboratory assay: Unformed/loose stool that tests positive for C. difficile toxin A and/or B, (includes molecular assays [PCR] and/or toxin assays) OR A toxin-producing C. difficile organism detected by culture or other laboratory means.
- Duplicate *C. difficile* positive laboratory assay: Any *C. difficile* toxin positive lab result collected from the same resident, while being cared for in your facility, following a previous *C. difficile* positive laboratory assay within the past 14 days.
- **CDI LabID Event:** A non-duplicate *C. difficile* positive laboratory assay.

Figure 1 - C. difficile Test Result Algorithm for Laboratory-identified (LabID) Events



Knowledge Check 2:

Mr. Bill was transferred to your facility from the local hospital on May 1. According to his admission record, he completed treatment for CDI prior to transfer. Two days after being transferred to your facility, the new internist ordered a C. diff test "just to be on the safe side". On May 4, the stool specimen was positive for toxin A.

Does this test result qualify as a CDI LabID Event that must be reported to NHSN?

- A. YES. Because the specimen was collected while resident was receiving care in your facility.
- B. NO. Because he had a documented history of CDI while in another facility.
- C. NO. because the test was collected over the weekend.

What if the Resident Has a Known History of *C. difficile*?

- A non-duplicate, positive *C. difficile* lab assay collected from a resident in your facility must be reported **even if**:
 - The resident has a known history of CDI
 - For example, the resident had a positive specimen collected during an admission in another healthcare facility and then again after readmission to your facility—report the specimen collected in your facility
 - □ The positive specimen was collected in the first three days of the resident's admission or re-admission to your facility

Knowledge Check 3:

Mr. Lloyd, a resident in your LTCF, was re-admitted to your facility after a brief inpatient stay at the local acute care hospital. You read in his chart that during his admission in the acute care facility, he tested positive for *C. difficile*.

Should you report a CDI LabID event for the positive *C. difficile* test result that was collected during his admission in the acute care facility?

- A. YES
- B. NO

What Specimens Should NOT be Submitted to NHSN as a CDI LabID Event?

- Negative *C. difficile* laboratory assay lab results
- Specimens collected during an <u>admission</u> in another healthcare facility
- Duplicate positive results, defined as the same resident having a positive *C. difficile* lab result in the previous 14 days, when that specimen was collected in your facility or OP setting (ED or clinic)

Knowledge Check 4 (Mr. Lloyd cont.):

What if Mr. Lloyd had another positive C. difficile test result

two days after returning to your facility?

Should you report this specimen as a CDI LabID event?

Specimen collected while receiving care in the LTCF

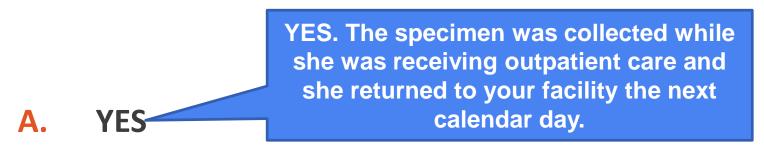
A. YES

B. NO

Knowledge Check 5:

Ms. Taylor, a resident in your LTCF, was transferred to the emergency department (ED) on June 1 for complaints of ongoing diarrhea and fever. A stool specimen collected in the ED tested positive for *C. difficile*. After receiving IV fluids, Ms. Taylor was transferred back to your facility on June 2 and was placed in contact isolation.

Should you report the positive C. difficile test result from the ED as a CDI LabID Event for your facility?



B. NO

Categorization of CDI LabID Events

- NHSN will analyze data that have been entered into the application.
- This includes categorizing all CDI LabID events to determine if the event is
 - Community onset (CO)
 - Long term care facility onset (LO)
 - □ Acute care transfer long term care facility onset (ACT-LO)

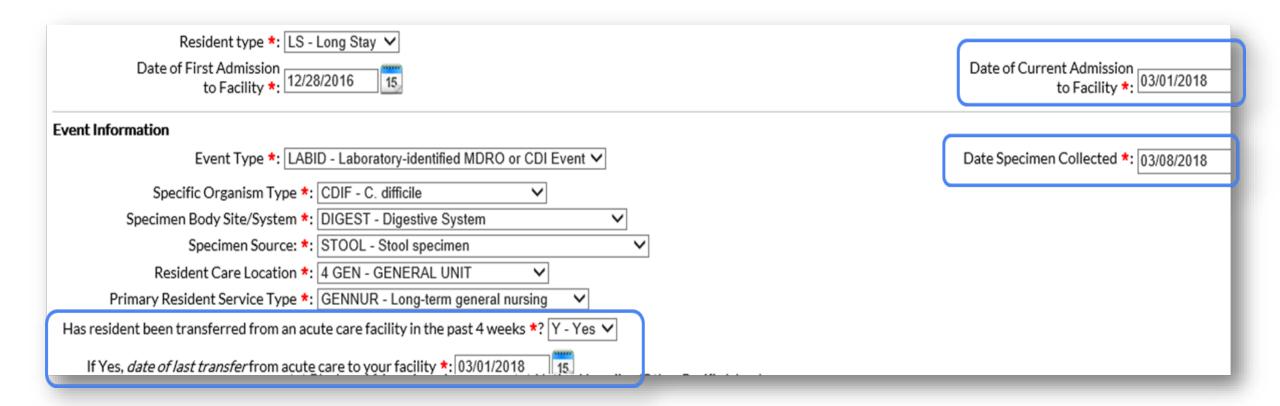
AND

☐ If the event is incident or recurrent

NHSN will Categorize CDI LabID Events Based on:

- 1. Reported date of current admission to facility,
- 2. Reported specimen collection date (also referred to as date of event),
- 3. Reported date of last transfer from acute care to your facility.
- Community-onset (CO): Date specimen collected 3 calendar days or less after current admission to the facility (i.e., days 1, 2, or 3 of admission)
- Long-term Care Facility-onset (LO): Date specimen collected more than 3 calendar days after current admission to the facility (i.e., on or after day 4)
 - LO Events are further sub-classified :
 - □ Acute Care Transfer-Long-term Care Facility-onset (ACT-LO): LO LabID events with a specimen collection date 4 weeks or more following date of last transfer from an acute care facility

Categorization of CDI LabID Events is Dependent on Accurate Event Information



EXAMPLE: NHSN Classification of LabID Events asCommunity-onset (CO) or LTCF-onset (LO)

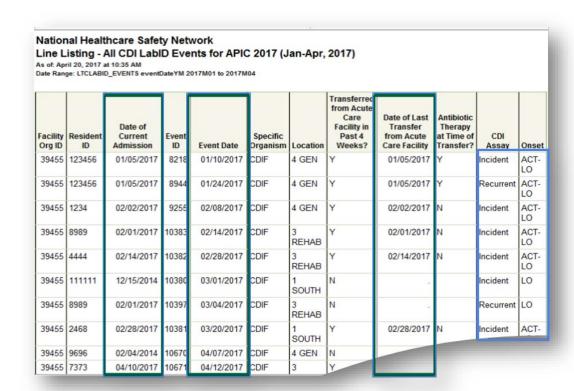
LTCF Current Admission Date: March 1				
March 1 st	March 2 nd	March 3 rd	March 4 th	March 5 th
Day 1	Day 2	Day 3	Day 4	Day 5
Community-Onset (CO)			Long-term Care Facility Onset (LO)	



Both Community-Onset and LTCF-Onset LabID Events Must be Submitted to the NHSN

NHSN will Further Categorize CDI LabID Events Based on: date specimen collected and specimen collection date of the most recent CDI LabID Event entered into NHSN

- Incident CDI LabID Event: The first CDI LabID Event ever submitted for the resident in your facility or a CDI LabID Event from a specimen collected more than 8 weeks after the most recent CDI LabID Event entered into the NHSN application
- Recurrent CDI LabID Event: Any CDI LabID
 Event entered 8 weeks or less after the most recent CDI LabID Event entered into the NHSN for a resident in in your facility.



Let's Review!

Resident ID	Current Admission Date	Specimen Collection Date	Previous positive C. diff result date	Submit as CDI LabID Event
10	2/1/19	2/2/19	none	YES
11	2/15/19	2/25/19	none	YES
12	2/1/19	2/1/19	none	YES
10	2/1/19	2/10/19	2/2/19	NO, duplicate
13	2/20/19	2/17/19	none	NO, collected prior to admission to facility
11	3/1/19	3/7/19	2/25/19	NO, duplicate
10	2/1/19	2/18/19	2/10/19	NO, duplicate from last specimen collection



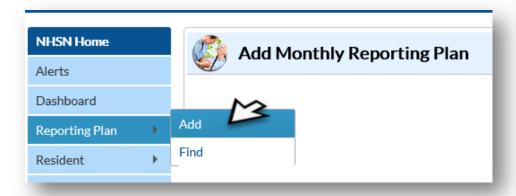
Submit Reporting Plan for Every Month of Participation

Monthly Reporting Plan

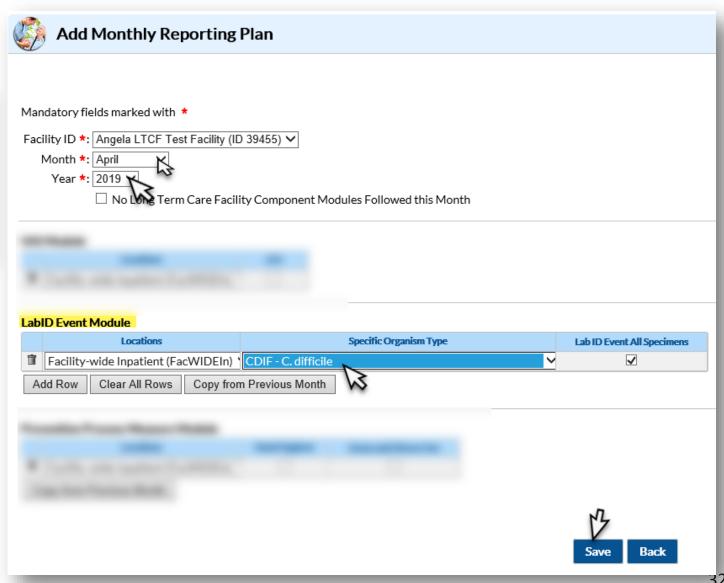
- Informs CDC-NHSN which module(s) and events a facility is following during a given month
- A facility must enter a Plan for every month in which surveillance and data submissions will occur
 - ☐ A Plan must be in place <u>before</u> events can be entered into NHSN
- Plans may be entered for up to one year in advance

Add Monthly Reporting Plan for CDI LabID Event Module

Participation

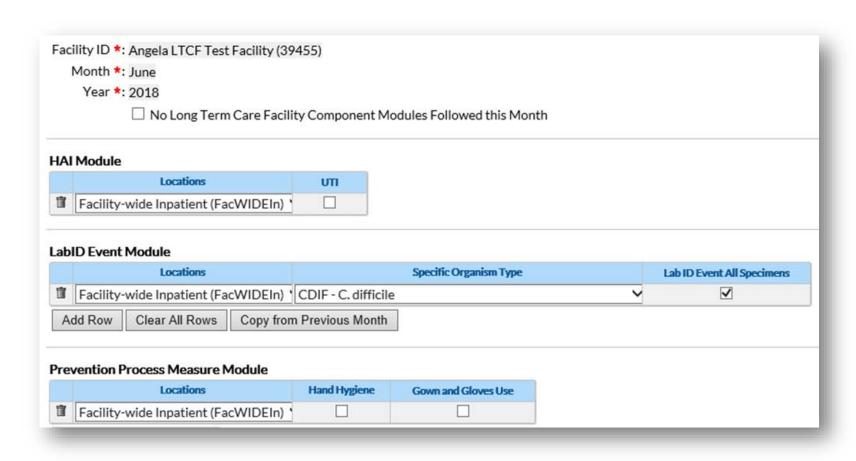


- **Facility-wide Inpatient** (FACWIDEIN) is default location
- Select CDIF-C. difficile as the Specific Organism Type
- LabID Event All Specimens is default



Knowledge Check 6:

Based on this reporting plan, what modules and events will this facility report for June, 2018?



- A. UTI only
- **B.** All LabID events
- C. CDI LabID event only



Reporting CDI LabID Event

Customizable NHSN LabID Event form available for data collection

- Optional form
- Allows users to collect required information prior to submitting NHSN event
- Use one form for each LabID event
- Form may be customized for each facility
- Use accompanying Table of Instructions for helpful guidance

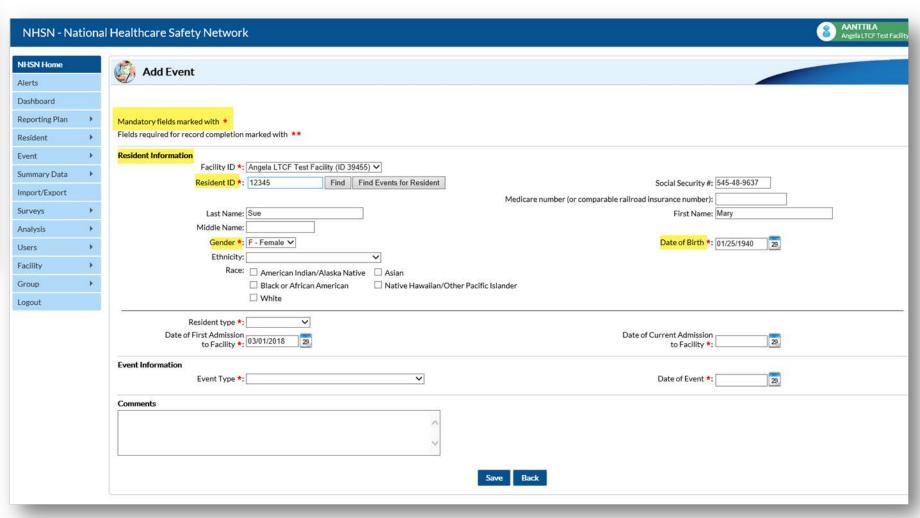
≥ NHSN	Form Approved OMB No. 0920-0666 Exp. Date: 11/30/2019						
National Healthcare Safety Network	www.cdc.gov/nhsn						
Laboratory-identified MDRO or CDI Event for LTCF							
Page 1 of 1							
*required for saving							
Facility ID:	Event #:						
*Resident ID:	*Social Security #:						
Medicare number (or comparable railroad insurance number):							
Resident Name, Last: First:	Middle:						
*Gender: M F Other	*Date of Birth://						
Ethnicity (specify):	Race (specify):						
*Resident type: Short-stay Long-stay							
*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-I	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							

Laboratory-identified MDRO or CDI Event for LTCF Form (CDC 56.138)

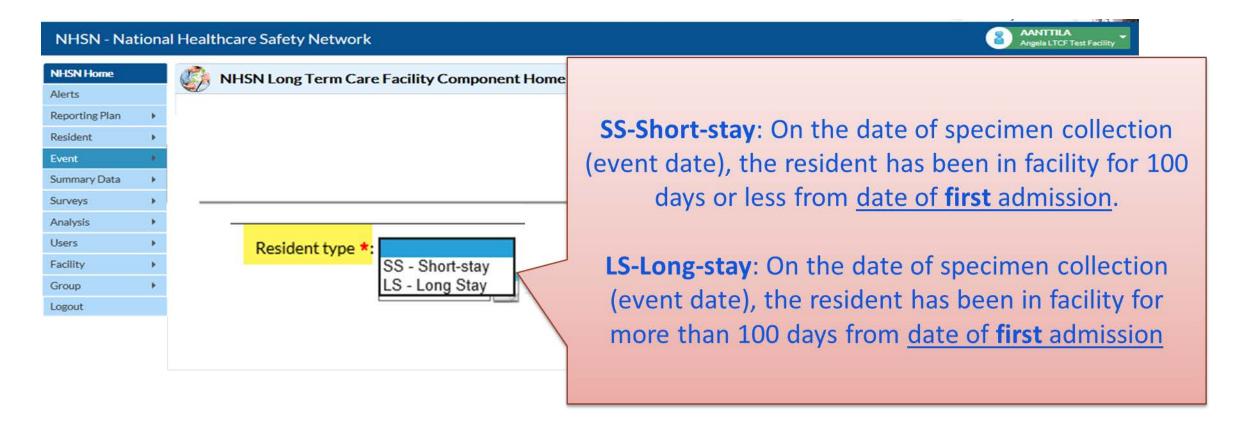
Submitting a CDI LabID Event to NHSN



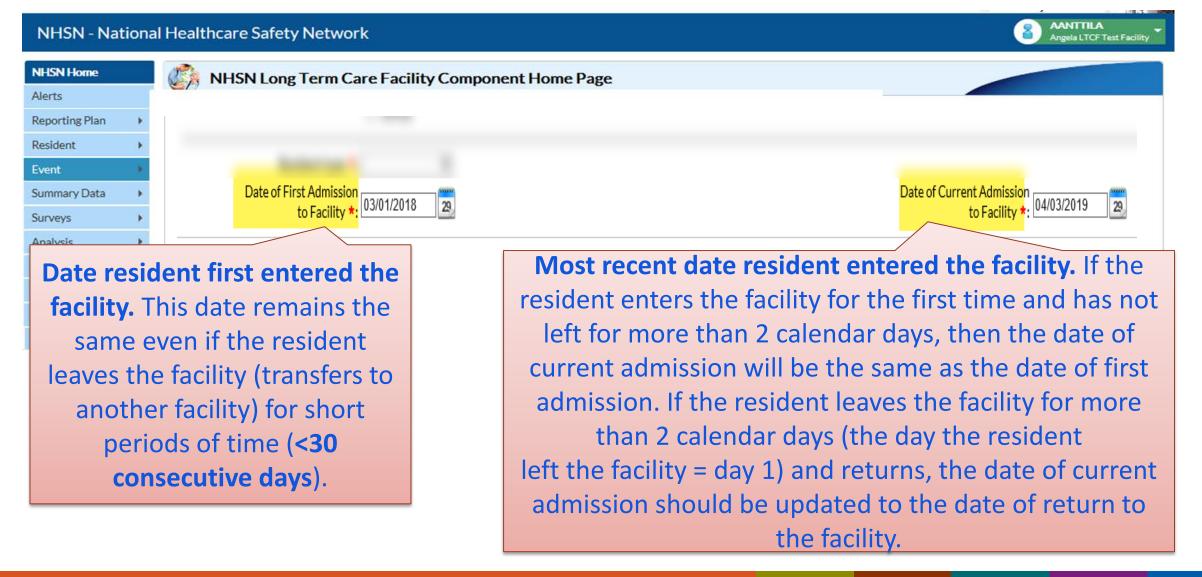
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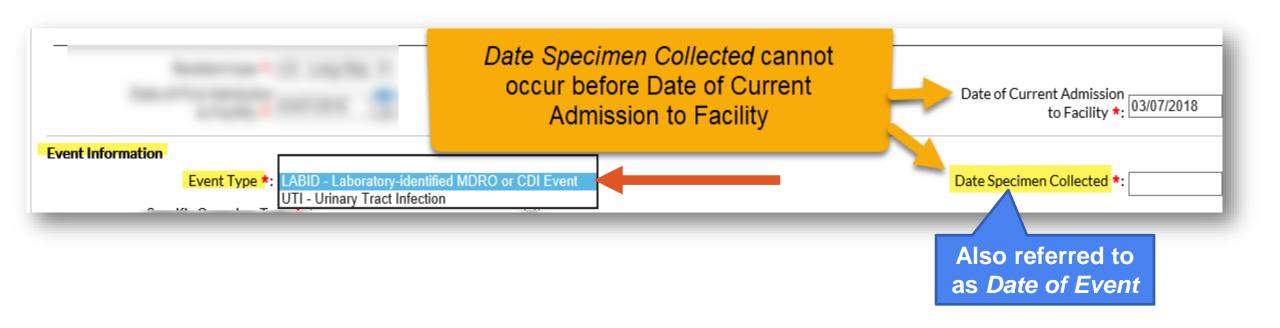
Submitting a CDI LabID Event to NHSN Resident Type



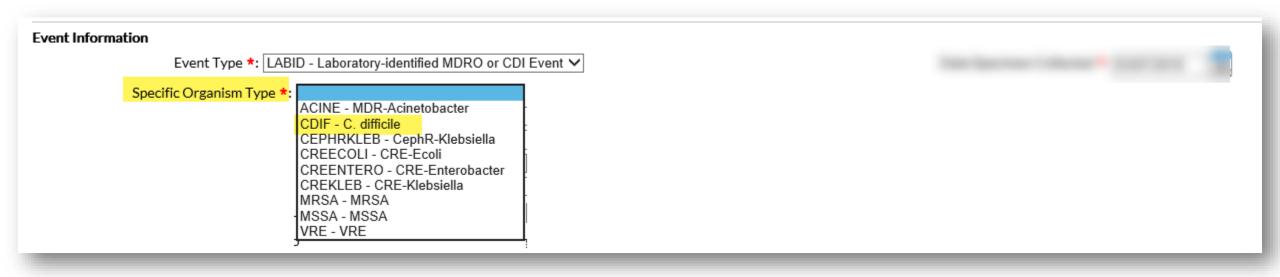
Submitting a CDI LabID Event to NHSN Date of First and Current Admission to Facility



Submitting a CDI LabID Event to NHSN Event Type and Date Specimen Collected

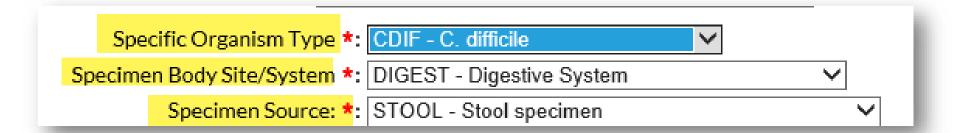


Submitting a CDI LabID Event to NHSN Specific Organism Type

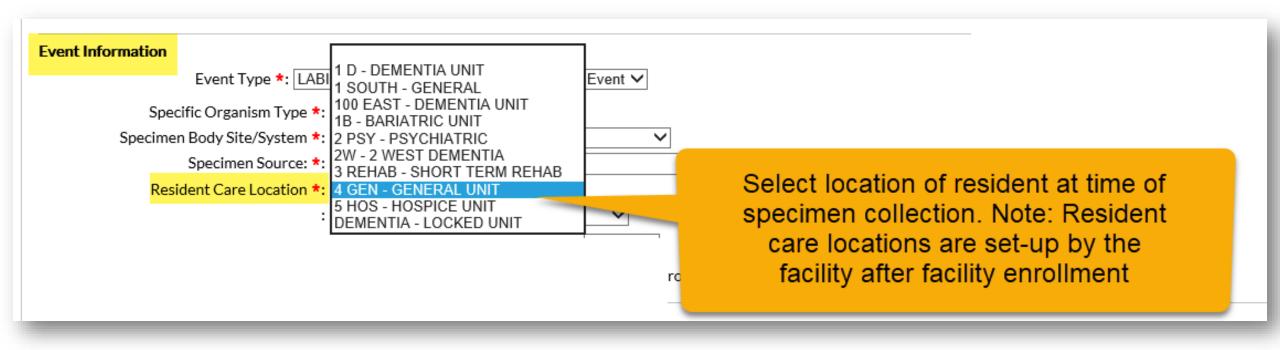


Submitting a CDI LabID Event to NHSN Specific Organism Type: CDIF- C. difficile

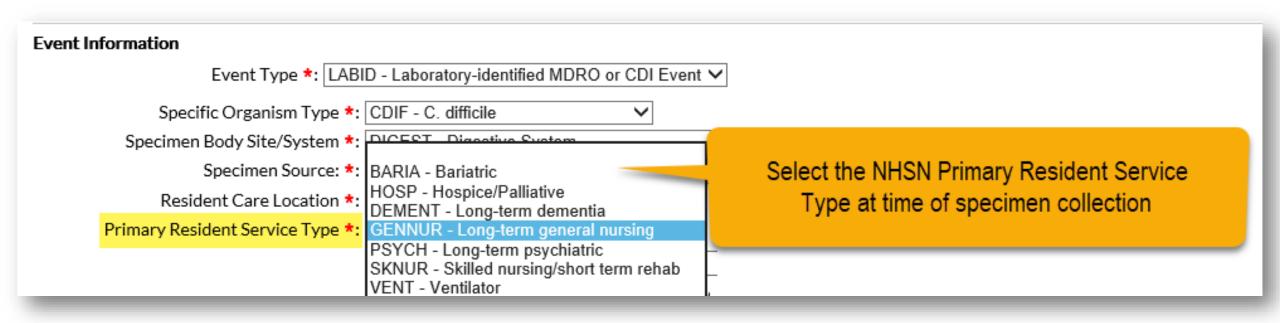




Submitting a CDI LabID Event to NHSN Resident Care Location



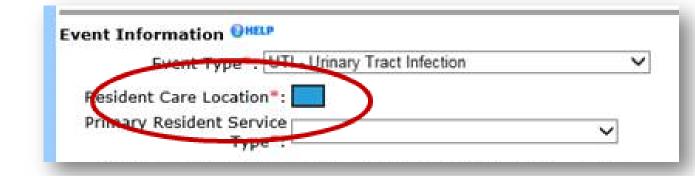
Submitting a CDI LabID Event to NHSN Primary Service Type



Knowledge Check 7:

I'm entering a CDI LabID Event for a resident in my facility, but when I try to select her resident care location, the drop-down box is blank. What is wrong?

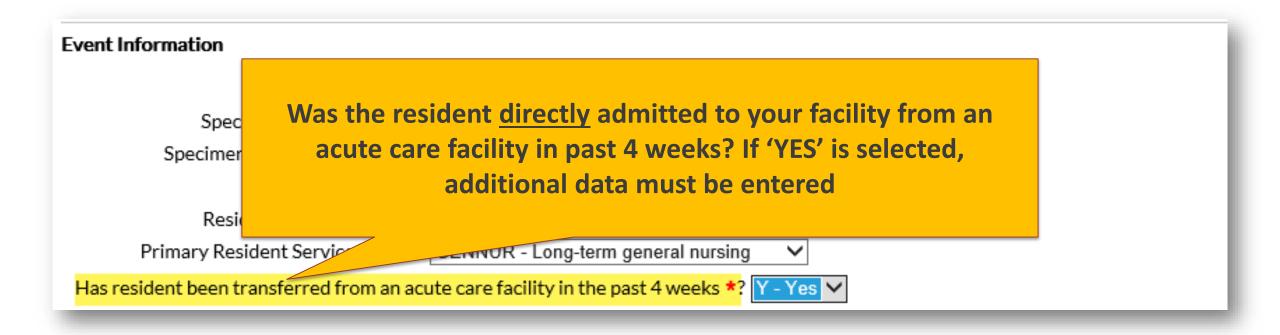
- A. The resident doesn't really have CDI.
- B. The resident is not really a resident in your facility.
- C. The resident care locations have not been set-up (mapped) for your facility and you must do this before submitting events to NHSN.



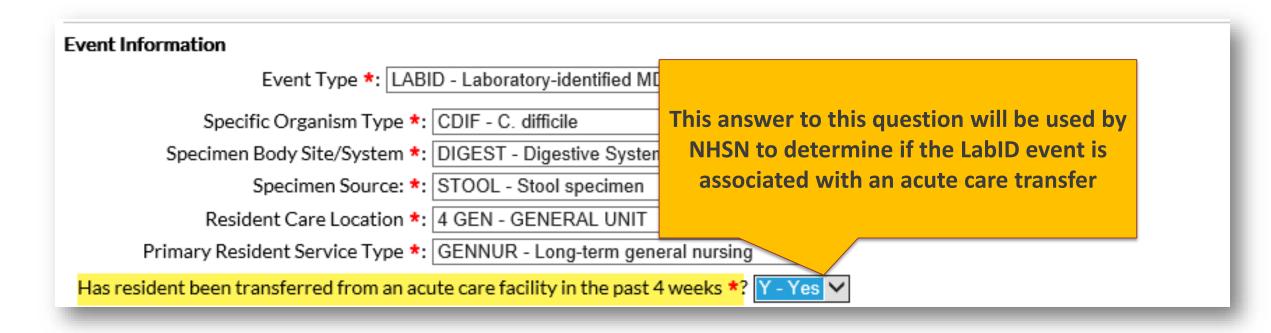
Resident care locations must be set-up (mapped) in the NHSN application before reporting events since the event location will be selected during event reporting



Submitting a CDI LabID Event to NHSN Transfer from Acute Care Facility

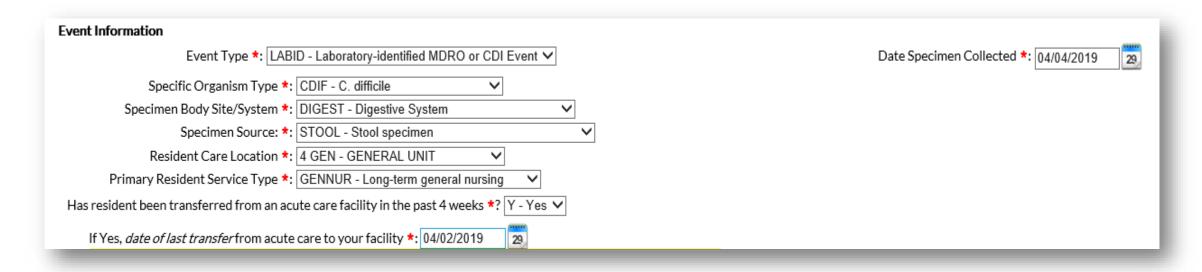


Submitting a CDI LabID Event to NHSN Transfer from Acute Care Facility, continued



If Yes, date of last transfer from acute care to your facility *:

Submitting a CDI LabID Event to NHSN Transfer from Acute Care Facility, continued



If Yes, was the resident on antibiotic therapy for this specific organism type at the time of transfer to your facility *?

Informs burden of CDI coming into facility

If YES to this question, this resident should also be included in the monthly summary count for. Number of Admissions on C. diff Treatment

Common Medications Used to Treat *C. difficile*

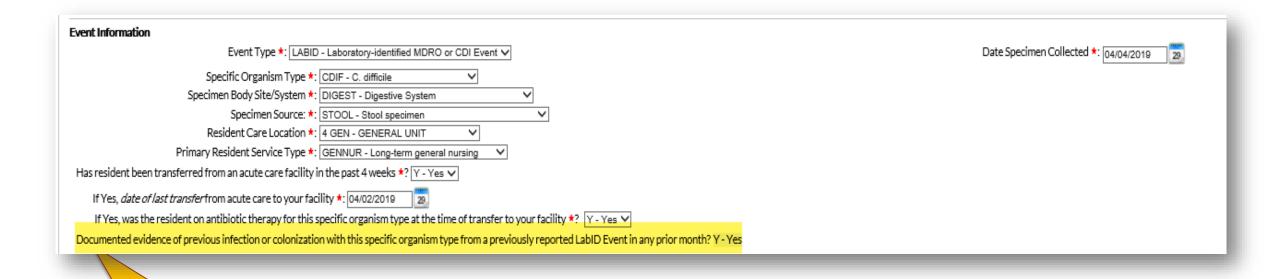
If Yes, was the resident on antibiotic therapy for this specific organism type at the time of transfer to your facility *? Y-Yes



If resident is admitted on treatment for CDI, you may see one of the below medications in the admission records:

- Metronidazole (Flagyl)
- Oral vancomycin (Vancocin HCL)
- Fidaxomicin (Dificid, Dificlir, OPT-80, PAR-101)

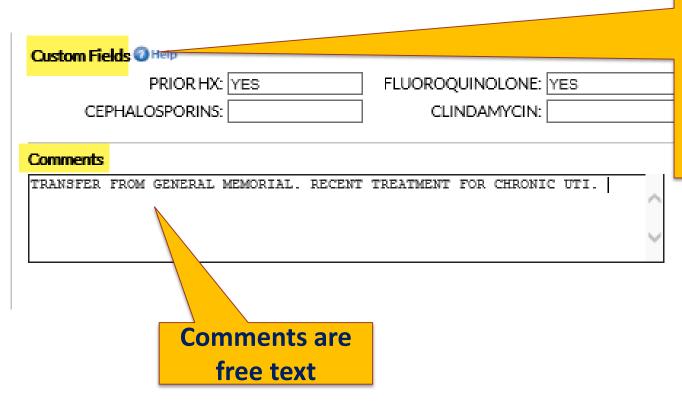
Submitting a CDI LabID Event to NHSN Documented Evidence Previous.....



Auto-populated by the NHSN.

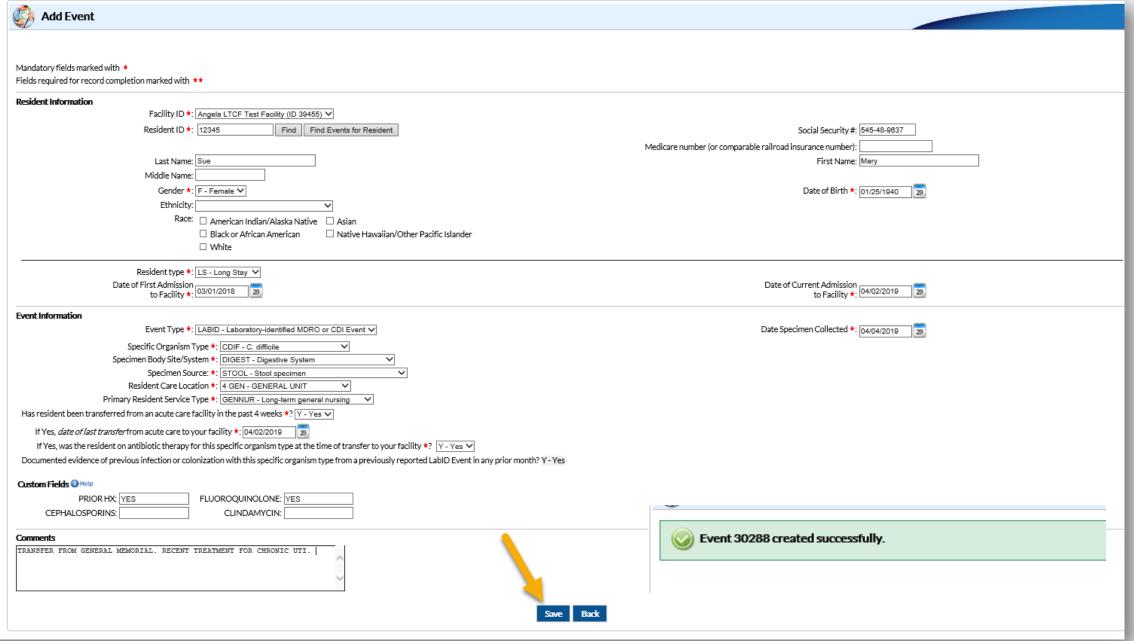
Non-editable by users

Submitting a CDI LabID Event to NHSN Optional: *Custom Fields and Comments*



Optional Custom fields provide facilities option to document additional variables of interest. Must be set-up before reporting event



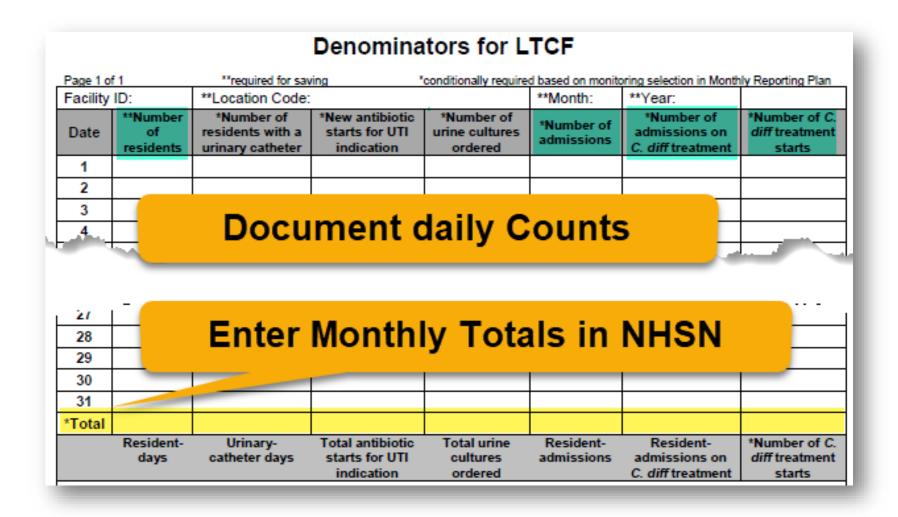




Collect and Submit CDI Monthly Summary Data

Monthly Summary Reporting for CDI (Denominator)

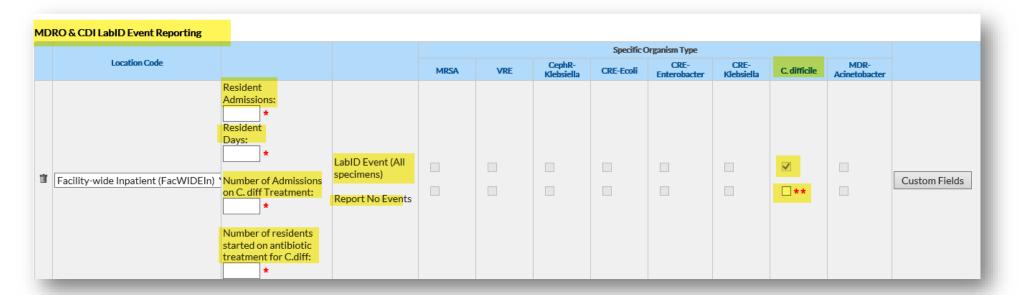
- Optional NHSN worksheet may used to document daily counts for selected columns
- Only the monthly totals should be entered into the NHSN application



Monthly Summary Requirements for CDI LabID Event Participation

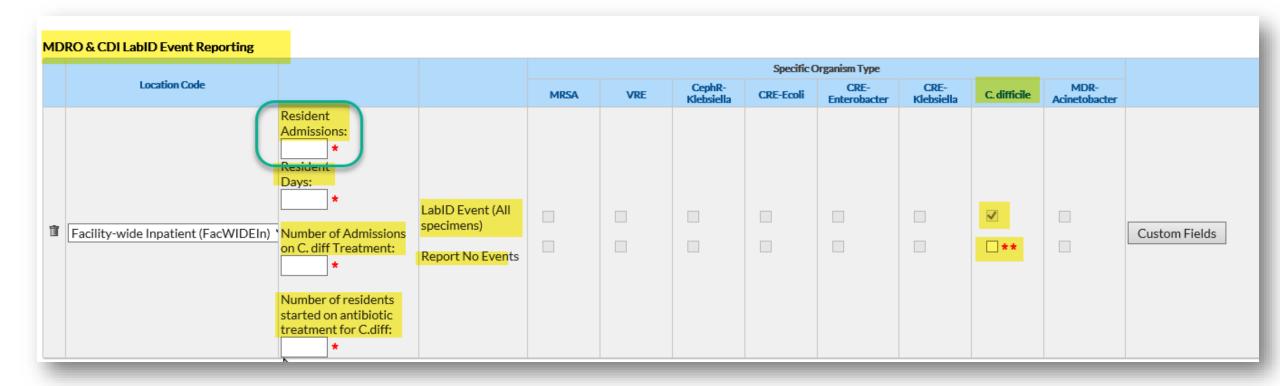
Each Month of Participation, Facility Must Report the Following:

- Resident Admissions
- Resident Days
- Number of Admissions on C. diff Treatment
- Number of Residents Started on antibiotic Treatment for C. difficile
- Report No Events, if applicable



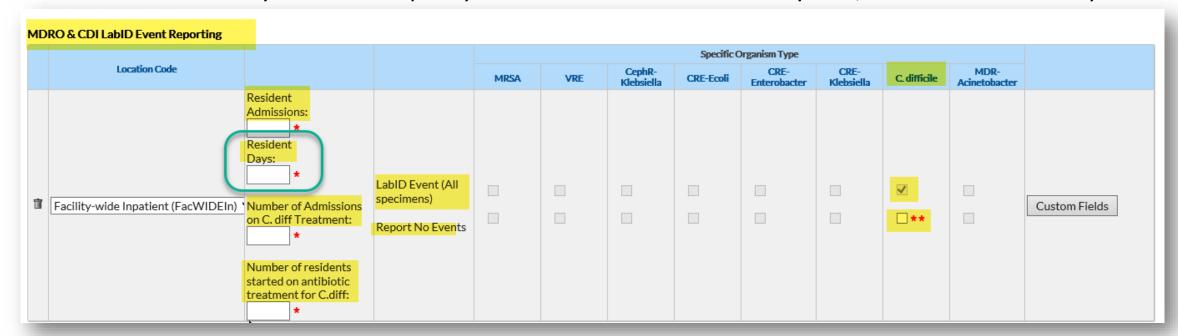
Resident Admissions:

The total number of residents admitted to the LTCF during the selected calendar month. Includes new admissions and re-admissions.



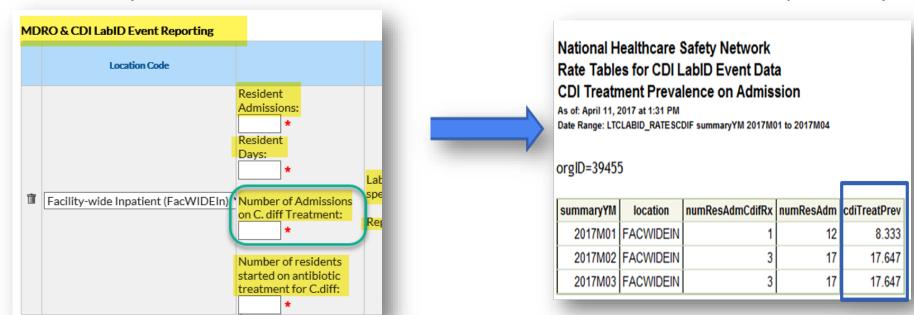
Resident Days: To calculate resident days, for each day of the month, record the total number of residents in the facility. At the end of the month, add the daily counts and enter the total as Resident Days.

- Data may come from electronic medical record, if available
- Users may also calculate based on facility occupancy.
 - □ 100 bed facility at 100% occupancy for June: 100 residents x 30 days = 3,000 total resident days
 - □ 100 bed facility at 90% occupancy for June: 90 residents x 30 days = 2,700 total resident days



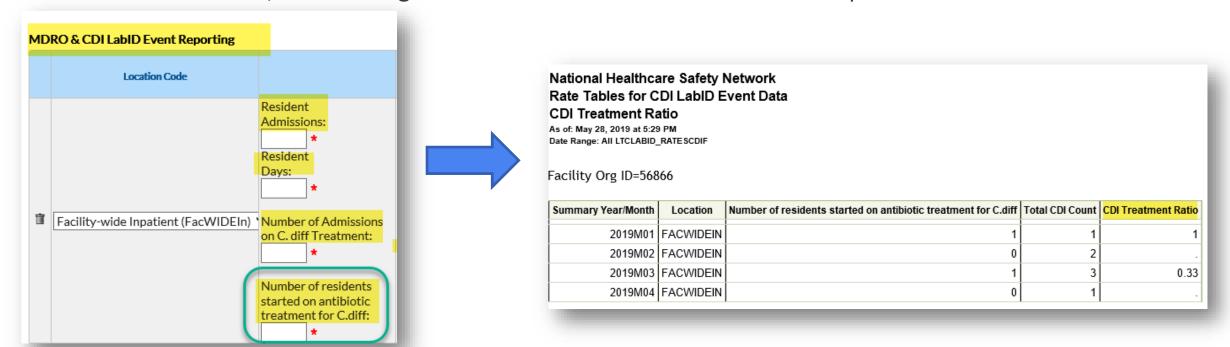
Number of Admissions on C. diff Treatment:

- Informs burden of CDI coming into the facility (CDI treatment prevalence)
- Total number of residents who were receiving antibiotic treatment for CDI at the time of admission to the LTCF
 - includes new and readmissions
- This count is independent of CDI LabID Event reporting
 - A resident may be included in this count, but not have a CDI LabID Event reported by the LTCF



Number of Residents Started on Antibiotic Treatment for C. diff:

- Informs understanding of CDI management practices (CDI treatment ratio)
- Can inform burden of CDI in the facility
- Captures number of residents started on treatment for CDI that month based on clinical decisions; specifically residents without a positive C. difficile test.
- This count is independent of testing
 - Includes ALL residents with order for treatment, including those not tested <u>and</u> those who were tested, but had negative results. Also includes orders for empiric treatment.



LabID Events (All specimens):

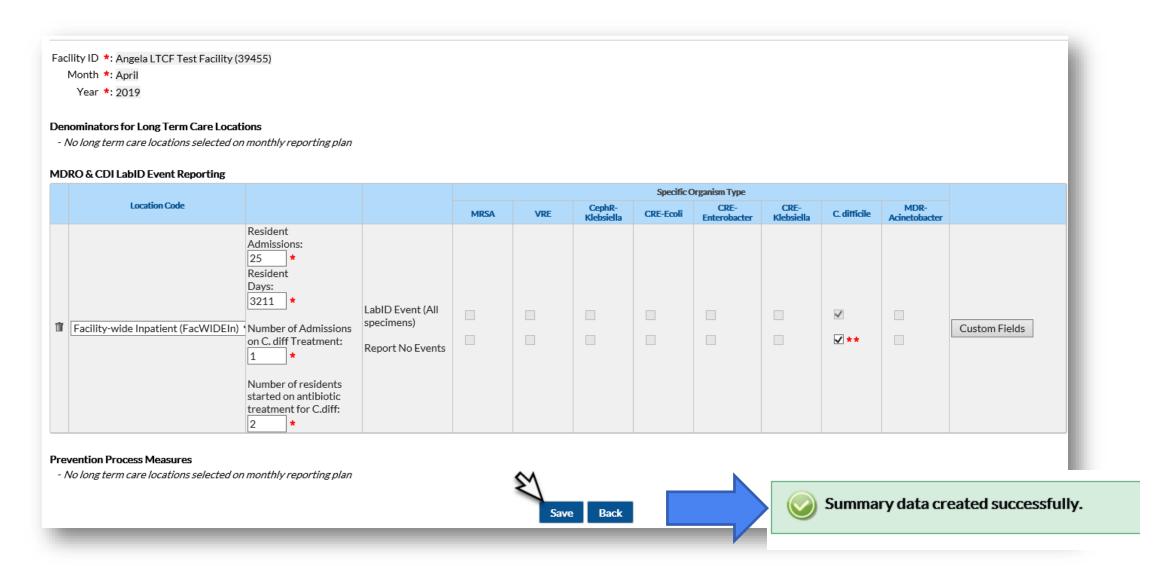
A grayed out check-mark will appear for each organism under surveillance for the month (based on your selections in the Monthly Reporting Plan)

	Specific Organism Type							
	MRSA	VRE	CephR- Klebsiella	CRE-Ecoli	CRE- Enterobacter	CRE- Klebsiella	C. difficile	MDR- Acinetobacter
_abID Event (All								3
specimens)							~	
Report No Events							_ **	
cepore 110 Events								

- **Report No Events**: A red asterisk will appear next to boxes that require attention.
- User must put a check-mark in the box to validate that no LabID events were identified for the specified organism for the calendar month.
- The box will be grayed out and without red asterisks if at least one event was submitted for that organism during the calendar month.
- ❖ If a LabID event is entered for the organism after summary data submitted, the application will auto-update.

	Specific Organism Type							
	MRSA	VRE	CephR- Klebsiella	CRE-Ecoli	CRE- Enterobacter	CRE- Klebsiella	C. difficile	MDR- Acinetobacter
LabID Event (All specimens)							✓	
Report No Events							_**	
							1.3	
							W	

Complete Monthly Summary for CDI





Understanding MDROs in Your facility: Questions to Ponder...

- Do we know what MDROs we have in our facility? MRSA? VRE?
- How do we track/measure the most common MDROs in our facility?
- Are the MDRO rates high in my facility?
- If my facility's rates are high, why?
- What are the most common MDROs in my community?
- Which residents are most affected by MDROs in my facility?
 - □ Skilled care vs. long-stay
 - Recently hospitalized?
 - Device-associated (indwelling urinary devices)
 - Wounds

Multi-drug Resistant Organisms (MDROs) Options

A facility can chose to monitor one or more of the following organisms:

- Staphylococcus aureus, methicillin-resistant (MRSA)
- Staphylococcus aureus, methicillin-susceptible (MSSA) plus MRSA
- Vancomycin-Resistant Enterococcus spp. (VRE)
- Cephalosporin-Resistant Klebsiella spp.(CephR-Klebsiella)
- Carbapenem-Resistant Enterobacteriaceae (CRE)
 - □ Klebsiella spp. (CRE-Klebsiella)
 - □ E coli. (CRE-E. coli)
 - □ Enterobacter (CRE-Enterobacter)
 - Multidrug-Resistant Acinetobacter spp. (MDR-Acinetobacter)

Knowledge Check 8:

Describe how MDRO LabID event surveillance is performed in a participating NHSN long-term care facility.

- A. The facility uses the CDC's NHSN laboratory-identified event (LabID Event) metrics to identify and report residents with selected MDRO in all resident care locations in the facility.
- B. The facility uses the CDC's NHSN healthcare associated infection (HAI) methods to identify and report residents with selected MDRO in all resident care locations in the facility.
- C. The facility uses the CDC's NHSN laboratory-identified event (LabID Event) metrics to identify and report residents with selected MDRO in the skilled nursing locations in the facility.



FACEWIDEIN surveillance and reporting is required for LabID event participation

Definitions: Gram-stain Positive Organisms

- MRSA: S. aureus testing resistant to oxacillin, methicillin, or cefoxitin, by standard susceptibility testing methods or by a positive result from an FDA-approved test for direct MRSA detection from that specimen source.
- * MSSA: *S. aureus* testing intermediate or susceptible to oxacillin, methicillin, and cefoxitin by standard susceptibility testing methods; a positive result from an FDA approved test for direct MSSA detection from that specimen source; or a negative result from an FDA-approved test for direct MRSA detection from a specimen source.
 - * Note: MSSA is only an option when surveillance includes MRSA
- ❖ VRE: Any *Enterococcus species* that is **resistant** to vancomycin, by standard susceptibility testing methods or by a positive result from an FDA-approved test for VRE detection from that specimen source.

Definitions: Gram-stain Negative Organisms

- **CephR-Klebsiella:** *Klebsiella* **species** testing **resistant** or **intermediate** to cephalosporin antibiotics like ceftazidime, cefotaxime, ceftriaxone, or cefepime.
- * CRE: Escherichia coli (E. coli), Klebsiella species, or Enterobacter species testing resistant to imipenem, meropenem, doripenem, or ertapenem by standard susceptibility testing methods OR by production of a carbapenemase demonstrated using a recognized test (e.g., polymerase chain reaction, metallo-β-lactamase test, modified-Hodge test, Carba-NP).
 - Note: CRE surveillance requires facilities to monitor for all three organisms (CRE-E. coli, CRE-Klebsiella spp., and CRE-Enterobacter spp.).

Definitions: Gram-stain Negative Organisms, continued

MDR-Acinetobacter: Any Acinetobacter species testing resistant or intermediate to at least one agent in <u>at least 3 antimicrobial classes</u> of the following 6 antimicrobial classes:

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

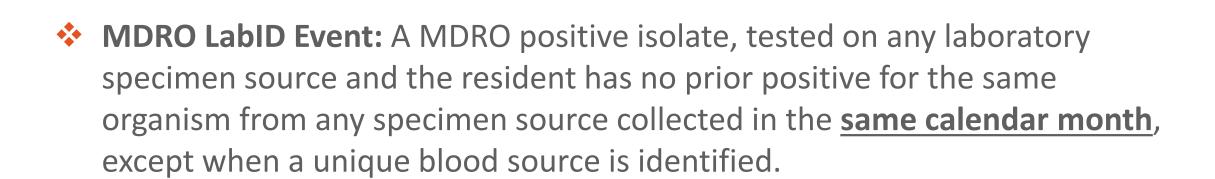


Surveillance must occur for <u>all</u> specimen sources for the selected MDRO(s)

Common Terms and Definitions used in LabID Event Module

Applies to specimens collected in the LTCF or during brief OP visit to ED or clinic

MDRO Positive Isolate: Any specimen, obtained for clinical decision making, testing that is positive for a MDRO. Note: Excludes tests related to active surveillance testing



Common Terms and Definitions used in LabID Event Module

❖ Unique Blood Source LabID Event: A MDRO isolate identified in a resident with no prior positive blood culture for the same MDRO in the past 2 weeks (<15 days), even across calendar months and admissions

■ Note: A unique blood source isolate must be reported even if the resident had this same MDRO previously isolated in a non-blood specimen earlier during the same calendar month.

Submit a MDRO LabID Event When...

✓ The specimen was collected while resident was receiving care in your facility or during a brief OP visit and returns to the LTCF on same calendar day or the next.

AND...

✓ It's the <u>first positive</u> MDRO collected from any specimen source from the resident in a calendar month.

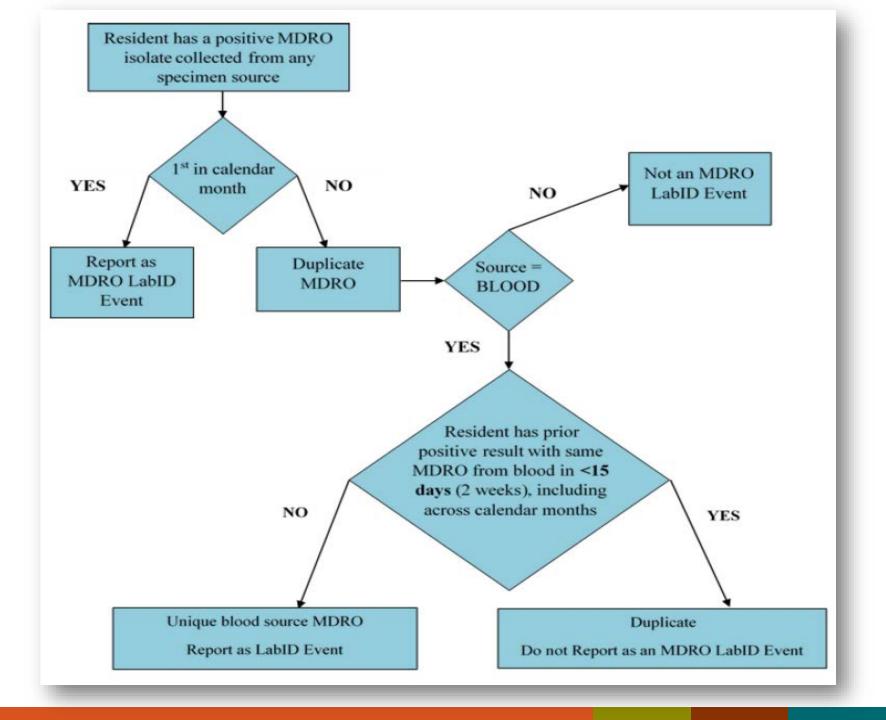
OR...

- ✓ It's a positive MDRO collected from a **blood culture** and:
 - □ It's the **first positive** MDRO from any specimen source for the resident during the calendar month, even if the resident had a prior blood reported within two weeks in the previous month

OR...

☐ If it is not the first positive for the calendar month, the resident has not had a prior positive blood culture with the same MDRO in previous 14 days

FIGURE 2



Which MDRO Specimens Should <u>NOT</u> be Reported to NHSN as a LabID Event?

- Negative MDRO lab results
- Specimens collected as part of active surveillance testing
- Specimens collected during an inpatient <u>admission</u> in another healthcare facility
- Duplicate positive results, defined as:
 - MDRO collected from non-blood source after the same MDRO has already been reported for the resident during the <u>same calendar month</u>
 - Resident has MDRO collected from a blood source and it's not the first positive MDRO for the resident in the calendar month and another positive result with the same MDRO from blood has been reported in previous 14 days



If a blood specimen is entered as the first specimen of the month, then no non-blood specimens can be entered for the remainder of that calendar month for that resident.

However, another blood specimen may be entered if it represents a unique blood isolate (>2 weeks since previous same MDRO blood isolate).

EXAMPLE

On March 27, Mr. C had a positive VRE blood culture that was entered into the NHSN as a VRE LabID Event. On April 2, he had another positive VRE blood culture that was entered into the NHSN because it was the first positive VRE isolate for the new calendar month. He had a wound that also tested positive for VRE on April 20. This specimen was not entered into the NHSN since it represented a duplicate MDRO laboratory isolate for April.

Again, on April 27, Mr. C had another positive VRE blood culture. Since the isolate represented a unique blood source (>14 days since the last positive VRE blood specimen), the VRE blood specimen was submitted to the NHSN as a VRE LabID Event.

Let's Review: Meet Mr. Jones

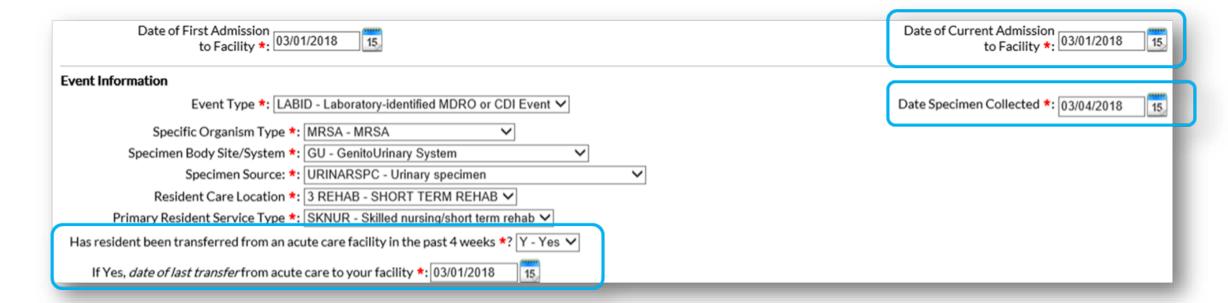
Assume this is the line list for Mr. Jones and all specimens collected are shown

	Current Admit Date	Specimen Collection Date	Specimen Source	Lab Result	Report as a LabID Event?	Explanation
1	2/1/18	2/2/18	Urine	MRSA	yes	1st MRSA from any specimen in calendar month
2	2/1/18	2/17/18	Wound	MRSA	no	Non-blood source, prior positive MRSA isolate this calendar month
3	2/1/18	2/21/18	Blood	MRSA	yes	Unique blood source and no prior MRSA blood in <15 days
4	2/1/18	2/26/18	Blood	MRSA	no	<15 days from previous MRSA+ blood specimen
5	2/1/18	2/28/18	Nasal	MRSA	no	Screening test results are excluded from LabID events
6	2/1/18	3/1/18	Blood	MRSA	yes	1 st MRSA positive collected in new calendar month
7	2/1/18	3/11/18	Urine	MRSA	no	Non-blood source, prior positive MRSA isolate this calendar month
8	2/1/18	3/14/18	Urine	VRE	yes	1st VRE from any specimen in calendar month

NHSN will Categorize MDRO LabID Events for Analysis

Categorizations are determined by:

- 1. Reported date of current admission to facility,
- 2. Reported date specimen collected, and
- 3. Reported date of last transfer from acute care to your facility



NHSN will Categorize MDRO LabID Events for Analysis

- Community-onset (CO): Date specimen collected 3 calendar days or less after current admission to the facility (i.e., days 1, 2, or 3 of admission)
- Long-term Care Facility-onset (LO): Date specimen collected more than 3 calendar days after current admission to the facility (i.e., on or after day 4)
 - LO Events are further sub-classified:
 - Acute Care Transfer-Long-term Care Facility-onset (ACT-LO): LO LabID events with a specimen collection date 4 weeks or more following date of last transfer from an acute care facility

EXAMPLE: NHSN Classification of LabID Events asCommunity-onset (CO) or LTCF-onset (LO)

LTCF Current Admission Date				
March 1 st	March 2 nd	March 3 rd	March 4 th	March 5 th
Day 1	Day 2	Day 3	Day 4	Day 5
Community-Onset	(CO)	Long-term Ca	Long-term Care Facility Onset (LO)	



Submit Reporting Plan for Every Month of Participation

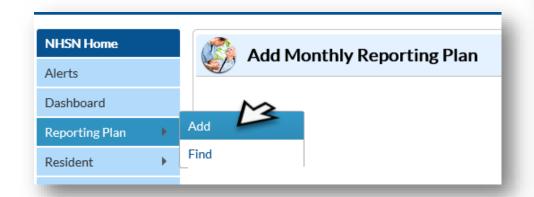
Monthly Reporting Plan



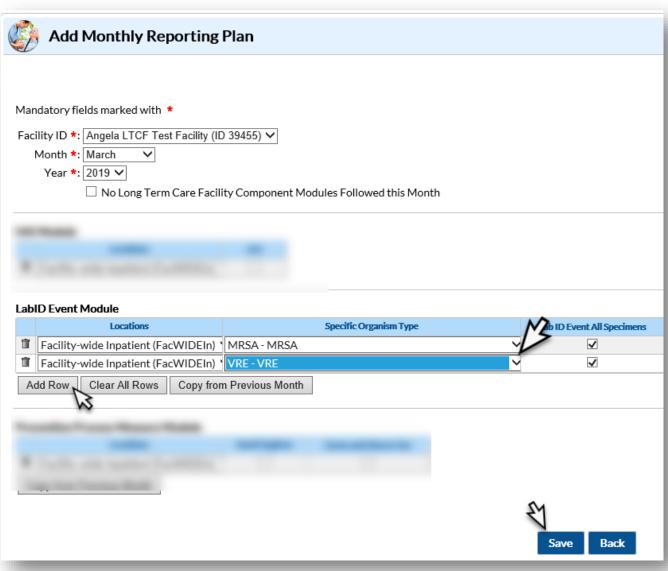
Add Monthly Reporting Plan

- Informs CDC-NHSN which module(s) and events a facility is following during a given month
- A facility must enter a Plan for every month in which surveillance and data submissions will occur
 - ☐ A Plan must be in place <u>before</u> events can be entered into NHSN
- A plan may be entered for up to one year in advance

Add Monthly Reporting Plan for MDRO LabID Event Module Participation



- Red asterisk = required to save page
- Click ADD ROW to add additional event options for the LabID Event Module
- SAVE





Reporting CDI or MDRO LabID Event

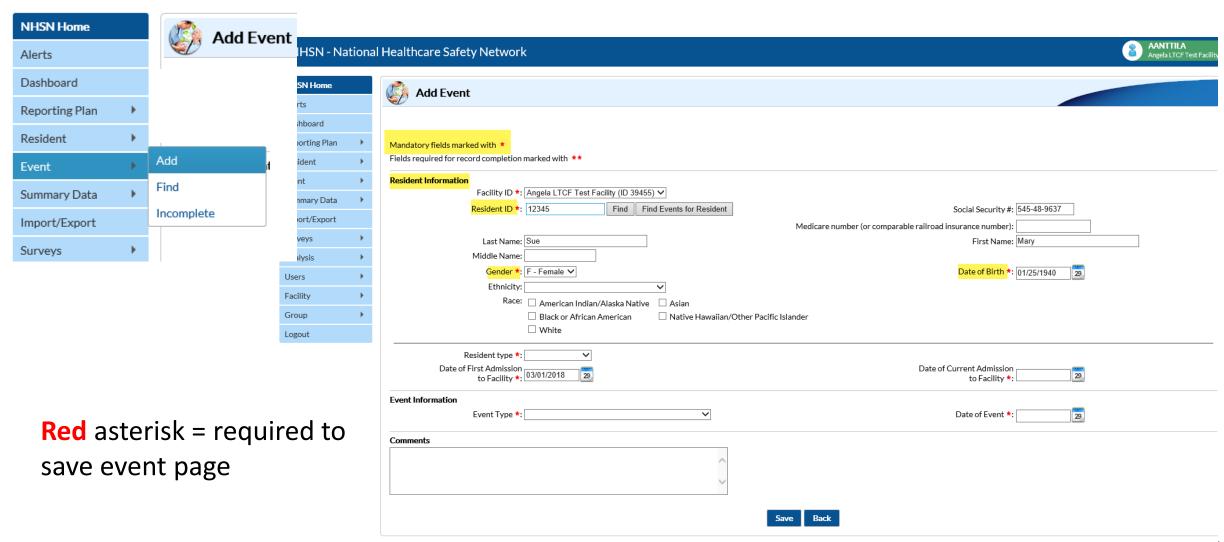
Customizable NHSN LabID Event form available for data collection

- Optional form
- Allows users to collect required information prior to submitting NHSN event
- Use one form for each LabID event
- Form may be customized for each facility
- Use accompanying Table of Instructions for helpful guidance

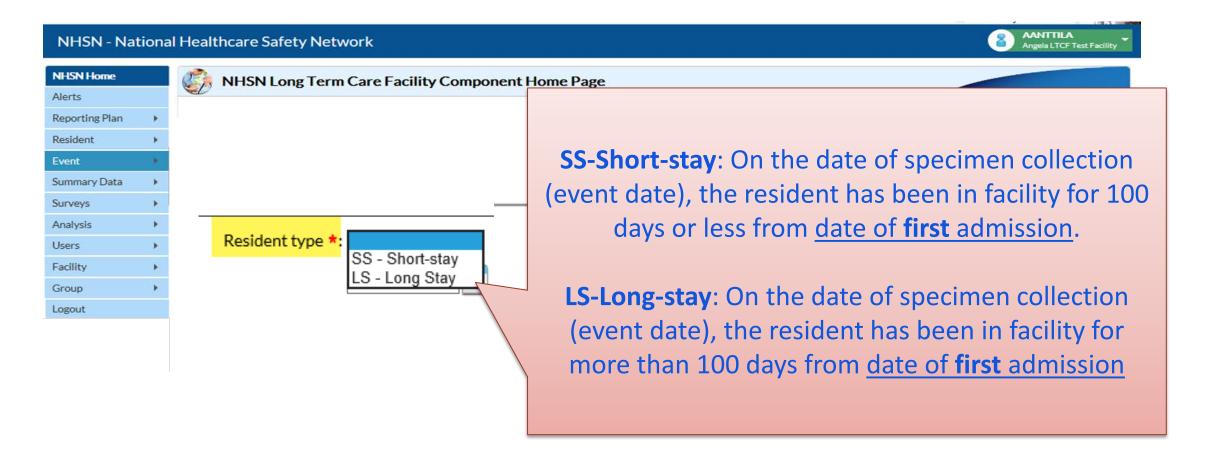
≥ NHSN	Form Approved OMB No. 0920-0666 Exp. Date: 11/30/2019						
National Healthcare Safety Network	www.cdc.gov/nhsn						
Laboratory-identified MDF	RO or CDI Event for LTCF						
Page 1 of 1							
*required for saving							
Facility ID:	Event #:						
*Resident ID:	*Social Security #:						
Medicare number (or comparable railroad insurance numb	per):						
Resident Name, Last: First:	Middle:						
*Gender: M F Other	*Date of Birth://						
Ethnicity (specify):	Race (specify):						
*Resident type: Short-stay	g-stay						
*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-I	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							

Laboratory-identified MDRO or CDI Event for LTCF Form (CDC 56.138)

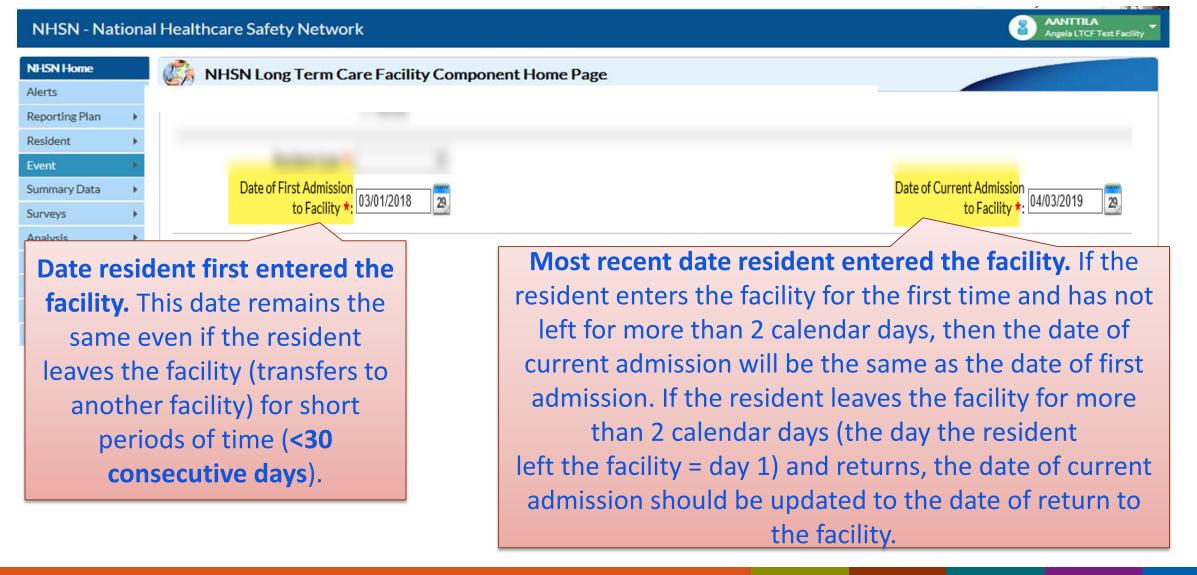
Submitting a MDRO LabID Event to NHSN



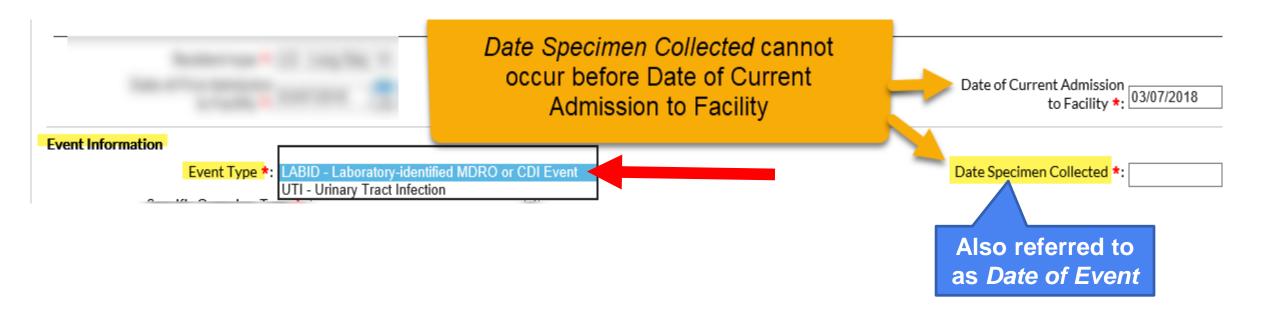
Submitting a MDRO LabID Event to NHSN Resident Type



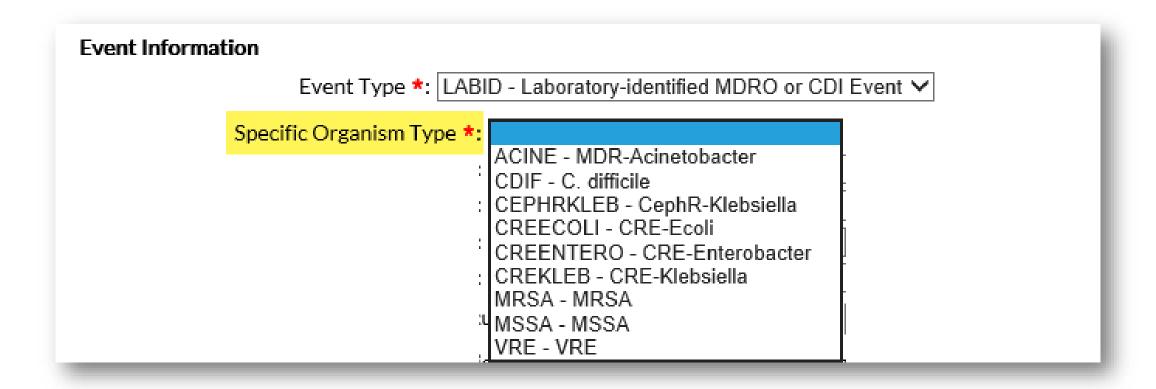
Submitting a MDRO LabID Event to NHSN Date of First and Current Admission to Facility



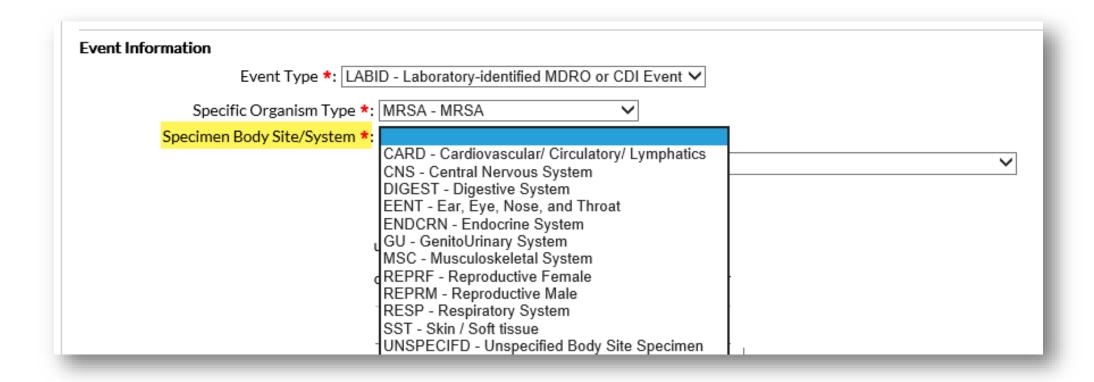
Submitting a MDRO LabID Event to NHSN Event Type and Date Specimen Collected



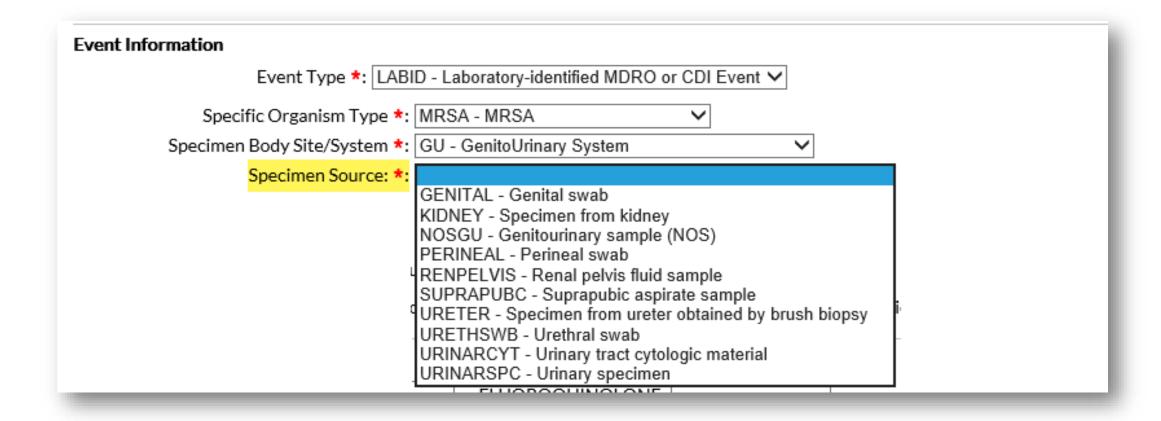
Submitting a MDRO LabID Event to NHSN Specific Organism Type



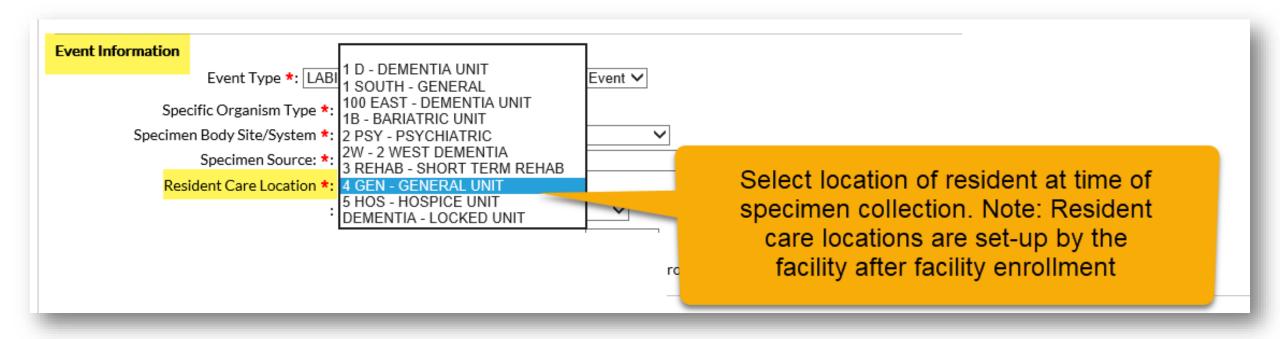
Submitting a MRSA LabID Event to NHSN Specimen Body Site/System



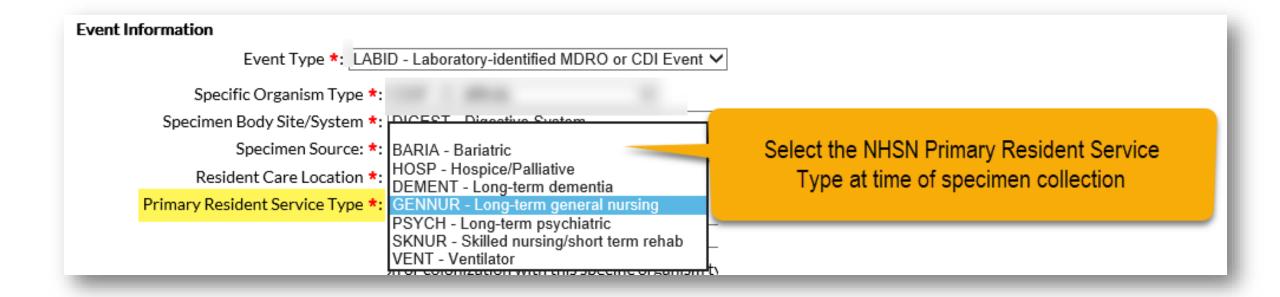
Submitting a MRSA LabID Event to NHSN Specimen Source



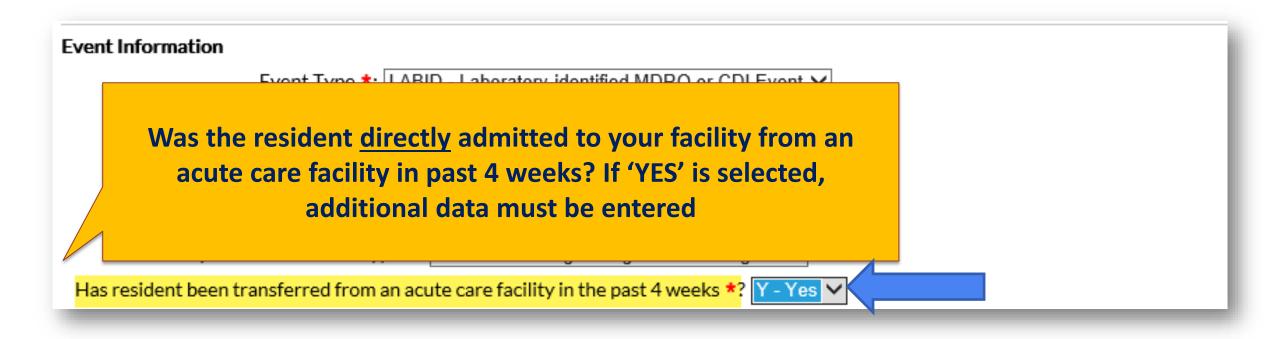
Submitting a MDRO LabID Event to NHSN Resident Care Location



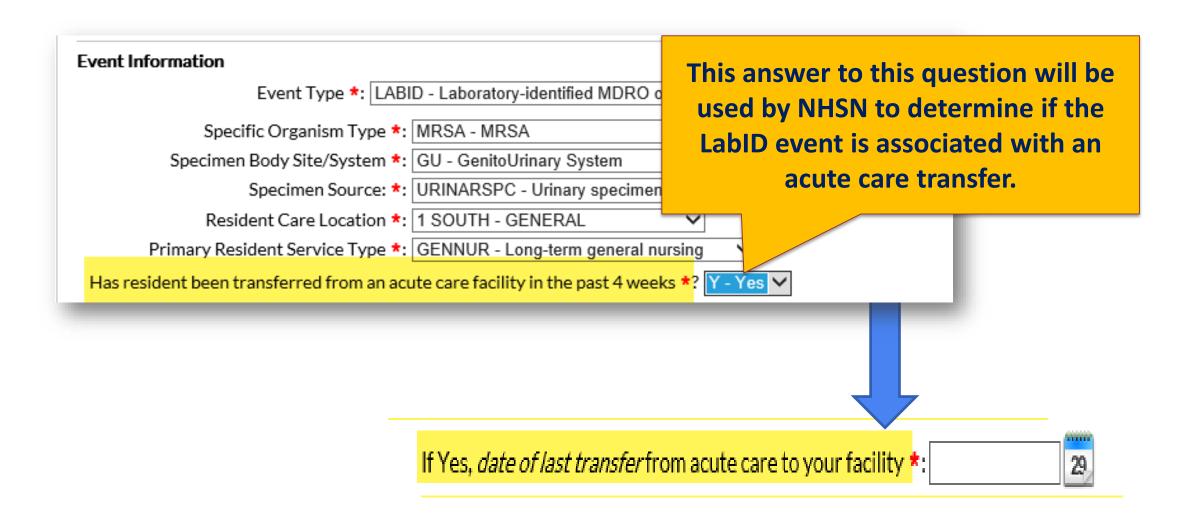
Submitting a MDRO LabID Event to NHSN Primary Service Type



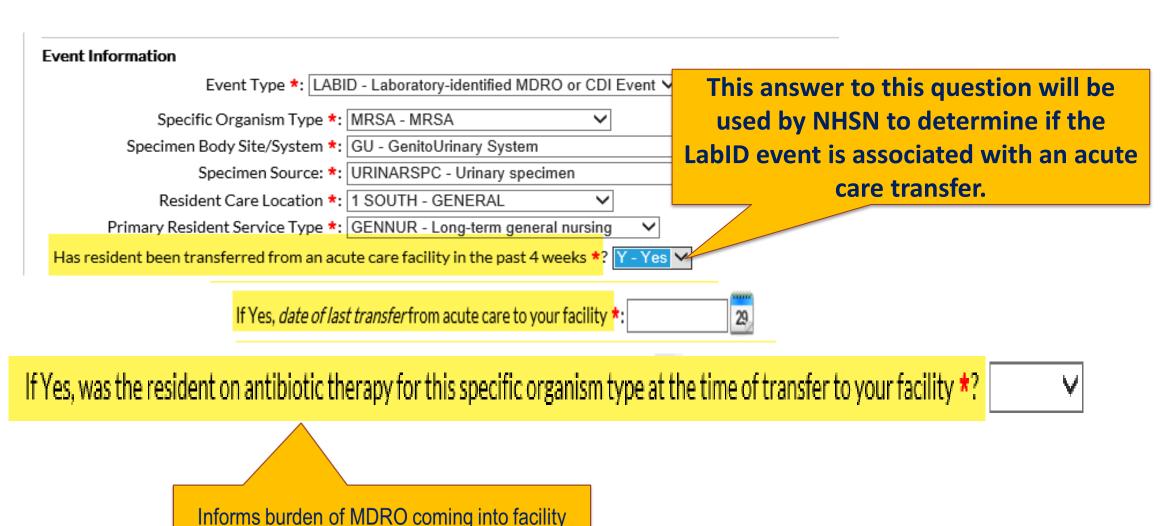
Submitting a MDRO LabID Event to NHSN Transfer from Acute Care Facility



Submitting a MDRO LabID Event to NHSN Transfer from Acute Care Facility, continued



Submitting a MDRO LabID Event to NHSN Transfer from Acute Care Facility, continued



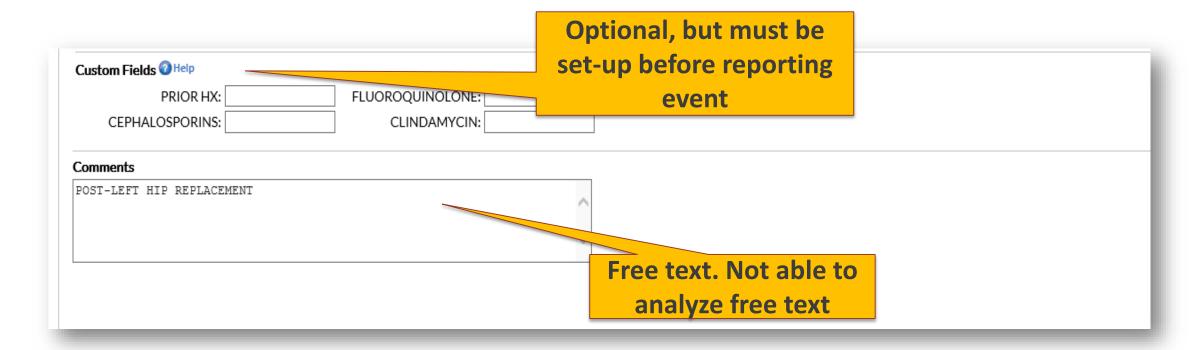
Submitting a MDRO LabID Event to NHSN Documented Evidence Previous.....

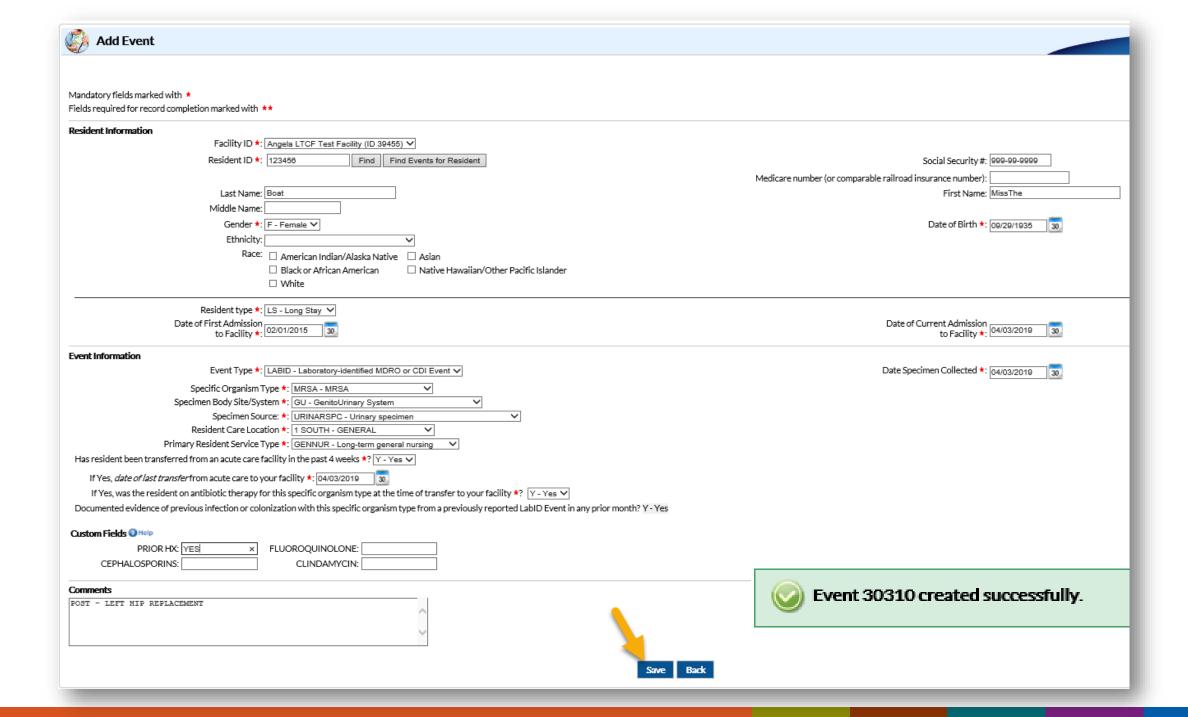
Event Information
Event Type ★: LABID - Laboratory-identified MDRO or CDI Event ∨
Specific Organism Type ★: MRSA - MRSA
Specimen Body Site/System ★: GU - GenitoUrinary System ✓
Specimen Source: ★: URINARSPC - Urinary specimen ✓
Resident Care Location *: 1 SOUTH - GENERAL
Primary Resident Service Type ★: GENNUR - Long-term general nursing ∨
Has resident been transferred from an acute care facility in the past 4 weeks ★? Y - Yes ✓
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 *?
Documented evidence of previous infection or colonization with this specific organism type from a previously reported LabID Event in any prior month? Y - Yes

Auto-populated by the NHSN.

Non-editable by users

Entering MDRO-MRSA LabID Event: Optional: *Custom Fields and Comments*





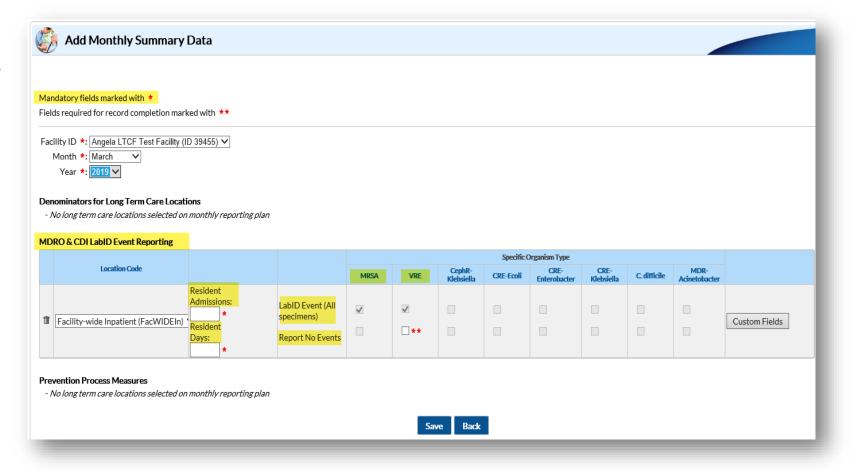


Collect and Submit MDRO Monthly Summary Data

Monthly Summary Requirements for MDRO LabID Event Module Participation

Each Month of Participation, Facility Must Report the Following:

- Resident Admissions
- Resident Days
- Report No Events, if applicable

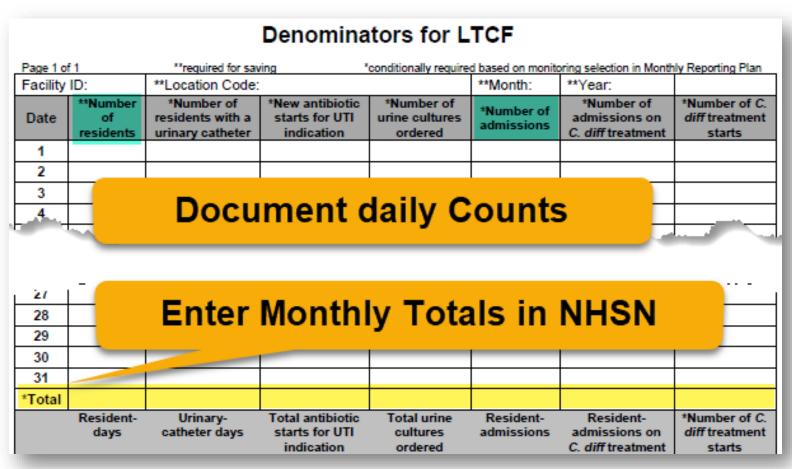


Monthly Summary for MDRO Participation (Denominator)

- Optional NHSN worksheet that may used to document daily counts for selected columns
- Only the monthly totals are entered into the NHSN application at the end of each month

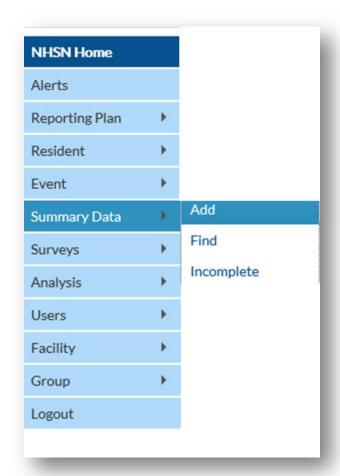
Forms and Table of Instructions (TOIs) available on LTCF home page, under Data Collection Forms:

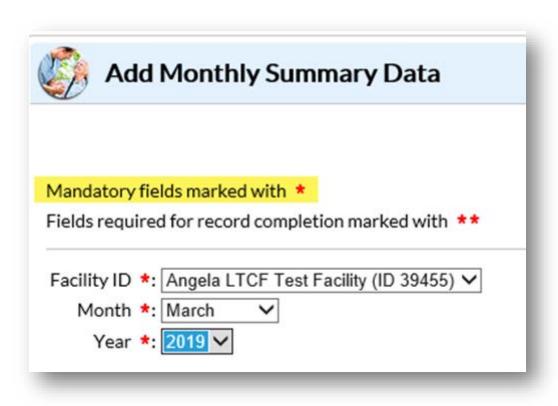
https://www.cdc.gov/nhsn/ltc/cdiff-mrsa/index.html



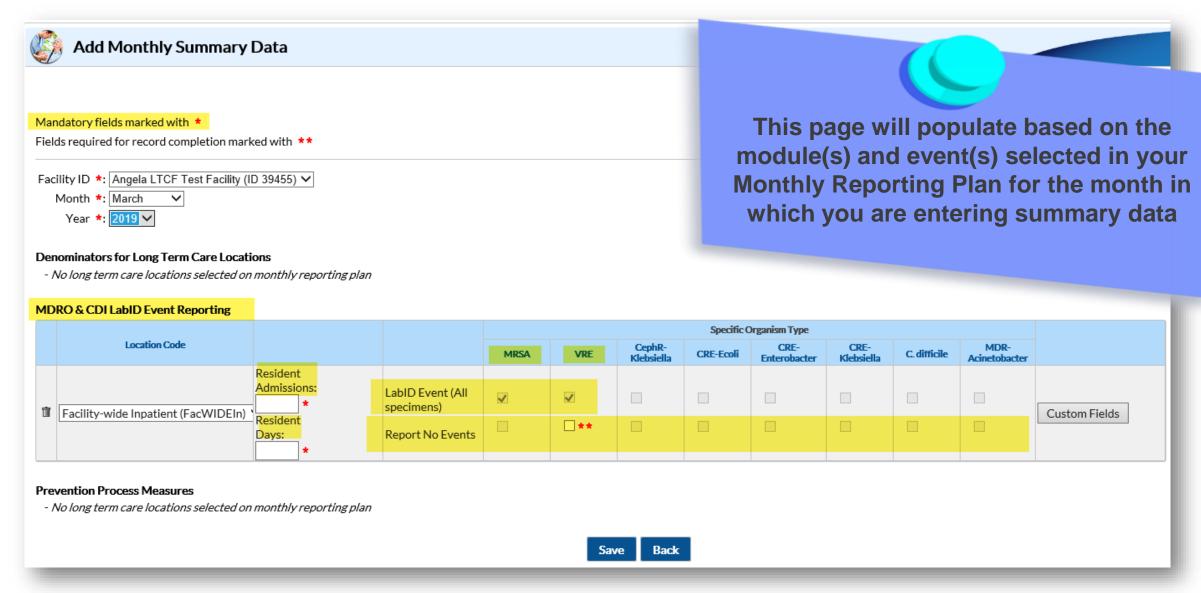
Submitting Monthly Summary Data in NHSN

- To submit summary data:
 - 1. Locate 'Summary Data' on left-hand navigation bar, and then 'Add'
 - 2. Enter the month and year for which summary data will be reported



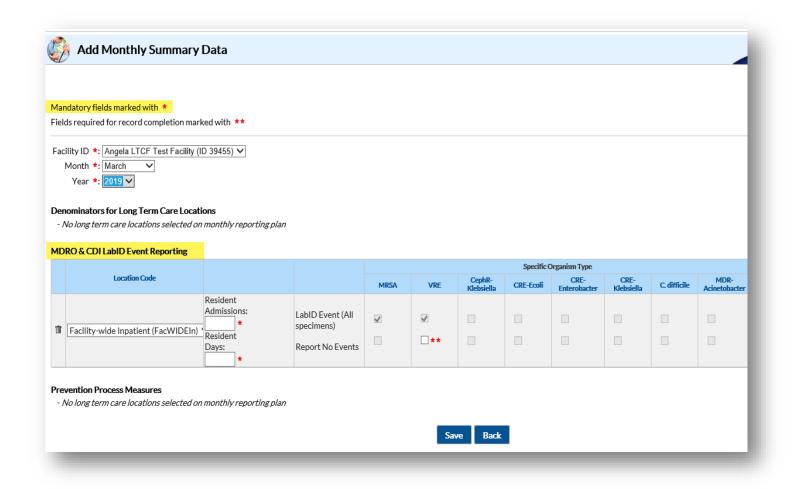


Submitting Monthly Summary Data in NHSN



Knowledge Check 9:

Based on the Monthly Summary Data below, what modules and events did the facility select to participate for March, 2019?



- A. All modules, all Events
- B. MRSA LabID events only
- C. All MDRO LabID Events
- MRSA and VRE LabID events only
- E. VRE LabID events only

Resident Admissions: Only required if monthly surveillance includes LabID event surveillance

The total number of residents admitted to the LTCF during the selected calendar month. Includes new admissions and re-admissions if a resident was out of the facility for more than 2 calendar days

Location Code			Specific Organism Type								
			MRSA	VRE	CephR- Klebsiella	CRE-Ecoli	CRE- Enterobacter	CRE- Klebsiella	C. difficile	MDR- Acinetobacter	
Facility-wide Inpatient (FacWIDEIn)	Resident										Custom Fields
	Admissions:	LabID Event (All specimens)	✓	✓							
	Resident Days:	Report No Events		_ **							

Resident Days:

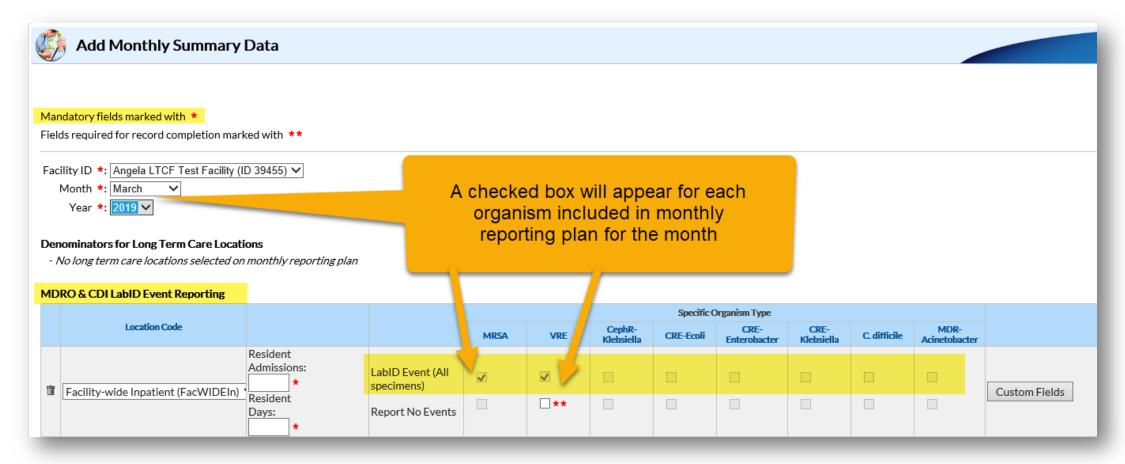
To calculate resident days, for each day of the month, record the total number of residents in the facility. At the end of the month, add the daily counts and enter the total as Resident Days.

- Data may come from electronic medical record, if available
- Users may also calculate based on facility occupancy.
 - □ 100 bed facility at 100% occupancy for June: 100 residents x 30 days = 3,000 total resident days
 - □ 100 bed facility at 90% occupancy for June: 90 residents x 30 days = 2,700 total resident days



LabID Events (All specimens)

A grayed out check-mark will appear for each organism under surveillance for the month (based on selections in the Monthly Reporting Plan)

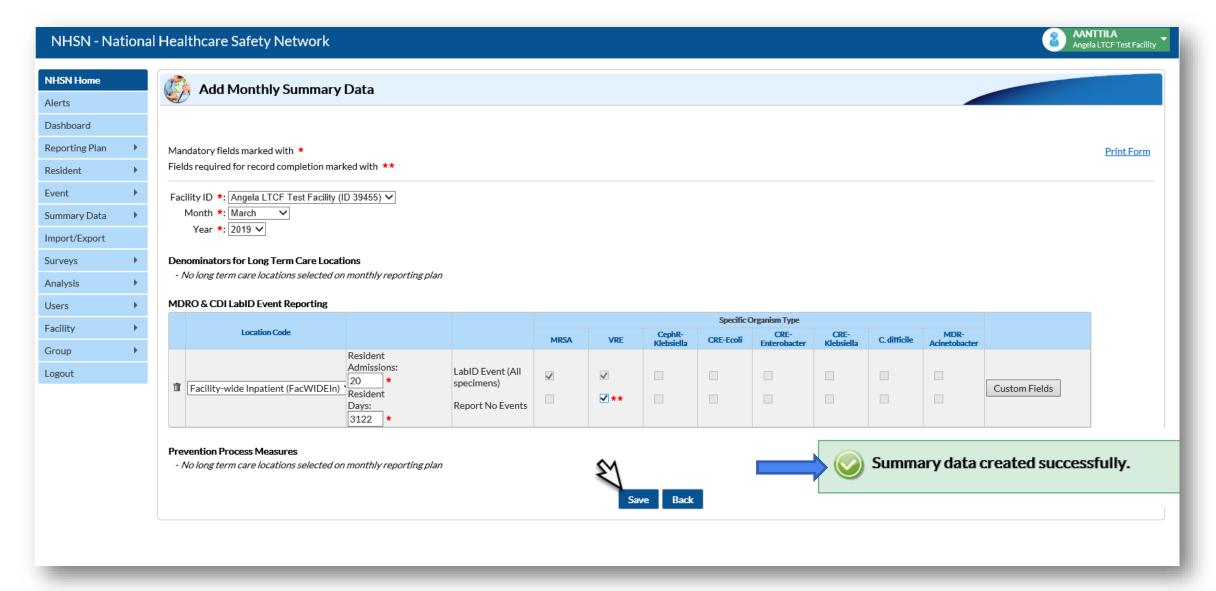


Report No Events:

- A red asterisk will appear next to boxes that require attention.
- User must put a check-mark in the box to validate that no LabID events were identified for the specified organism for the calendar month.
- The box will be grayed out and without red asterisks if at least one event was submitted for that organism during the calendar month.
- ❖ If a LabID event is entered for the organism after summary data submitted, the application will auto-update.

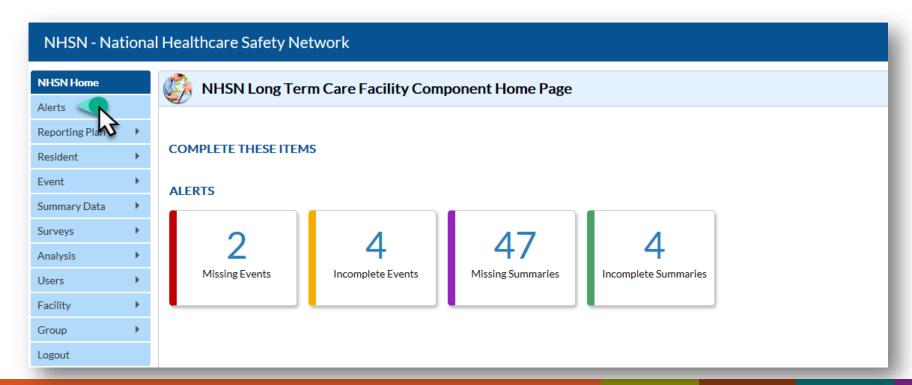
Location Code			Specific Organism Type								
			MRSA	VRE	CephR- Klebsiella	CRE-Ecoli	CRE- Enterobacter	CRE- Klebsiella	C. difficile	MDR- Acinetobacter	
Facility-wide Inpatient (FacWIDEIn)	Resident Admissions:	LabID Event (All specimens)	✓	V							Custom Fields
	Resident Days:	Report No Events		**							

Complete Monthly Summary for MDRO LabID Events



Alerts

- Automatic checks in the NHSN that remind users of incomplete or missing data
- Incomplete monthly data will be excluded from any analysis reports until resolved
- ❖ Before using the analysis function, make sure to clear all relevant alerts
- Found on the Home Page, or by clicking on the 'Alerts' tab on the sidebar

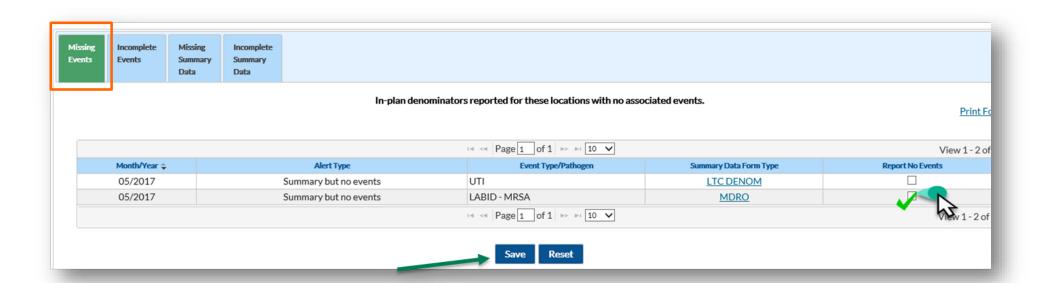


Common Alerts for LabID Event Reporting: Missing Events

LabID event module selected in the Monthly Reporting Plan, but no selected MDRO or CDI events submitted for the month and the "Report No Events" box was not selected on the Monthly Summary page for that calendar month.

To resolve alert:

- ✓ Submit CDI and/or selected MDRO event(s) for calendar month
- ✓ If no events to report for the month, click box to indicate Report No Events by each event type/pathogen

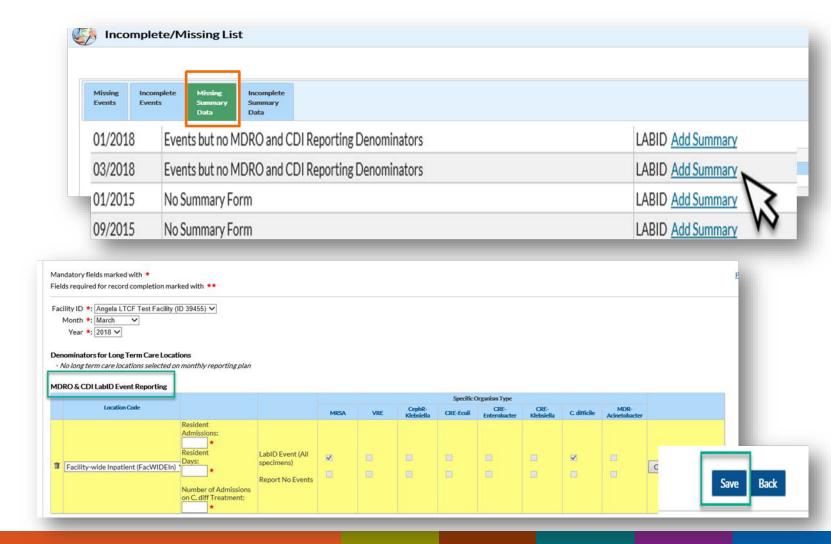


Common Alerts for LabID Event Reporting: Missing Summary Data

Summary Data has not been completed for the calendar month

To resolve:

- Click Add Summary hyperlink
- Enter Summary Data under "MDRO & CDI LabID Event Reporting"
- Remember to SAVE before exiting

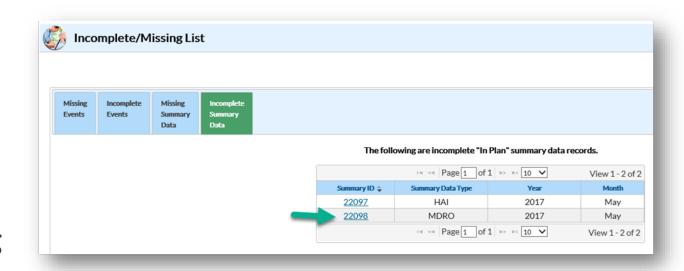


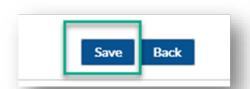
Common Alerts for LabID Event Reporting: Incomplete Summary Data

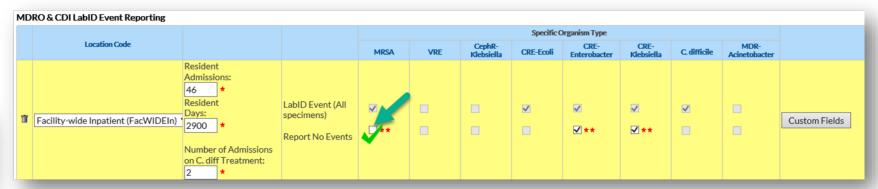
Summary Data page is missing required data for the calendar month

To resolve alert:

- ✓ Click on Summary ID
- ✓ Complete missing data fields, as indicated by red asterisk(s)
- ✓ Remember to SAVE before exiting







NHSN Resources Long-term Care Facility Component

- NHSN LTCF website: https://www.cdc.gov/nhsn/ltc/index.html
- NHSN LTCF Surveillance for *C. difficile*, MRSA, and other Drug-resistant Infections website: https://www.cdc.gov/nhsn/ltc/cdiff-mrsa/index.html
 - ✓ Training
 - ✓ Protocols
 - ✓ Data collection forms
 - ✓ Tables of instructions for completing all forms
 - ✓ Key terms
 - ✓ Frequently asked questions and answers
 - Questions or Need Help? Contact User Support at nhsn@cdc.gov

Home-Page: LabID Event Surveillance for *C. difficile*, MRSA, and other Drug-resistant Infections

Access to event modules

- Training
- Protocols
- Forms and instructions
- Support materials such as locations, key terms, and more
- Analysis resources
- Frequently Asked Questions

https://www.cdc.gov/nhsn/ltc/cdiff-mrsa/index.html



Questions? We'd love to hear from you! E-mail us at nhsn@cdc.gov and include "LTCF" in subject line

QUESTIONS

