REFRESHER:
MRSA Bacteremia and *C. difficile* LabID Event Reporting

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NCEZID, Division of Healthcare Quality Promotion/Surveillance Branch

Centers for Disease Control and Prevention

NHSN Training Calendar Year 2021

Key Concepts to LabID Event Reporting:

- **Events are reported by patient *AND* location.**
- **An ‘inpatient’ is a patient housed on an inpatient location. An ‘outpatient’ is a patient housed on an outpatient unit [such as the ED or a dedicated 24-hour observation unit]. Facility specific status designations such as ‘observation’, ‘inpatient’, ‘outpatient’, ‘swing bed patient’ or ‘short stay patient’ do not apply for NHSN reporting.**
- **Hospital day 1 = date admitted to facility [the calendar day the patient locates to an inpatient location]. Time spent in the ED or on a dedicated 24-hour observation unit is time prior to admission.**

Key Concepts to LabID Event Reporting:

- **LabID Event reporting is based strictly on laboratory testing data without clinical evaluation of the patient, allowing for a much less labor- intensive method of tracking. Symptoms are NOT used in LabID event reporting.**

- **LabID Event reporting is by single facility; prior positives identified at a different facility will not influence reporting at your facility [reporting resets at new facility].**

- *****the '*Transfer Rule*' does NOT apply to LabID event reporting.**

- **LabID Events are attributable to the location where the positive specimen is collected.**

- **The 'LabID 14-day rule' is location specific.**

Special Case Exception for FacWideIN LabID Event Reporting

Specimens collected from an affiliated* outpatient location (excluding ED and 24-hour observation locations) can be reported for the inpatient admitting location IF collected on the same calendar day as inpatient admission. Note: the 'date admitted to facility' is the calendar day the patient locates to an inpatient location for the facility.

**Affiliated outpatient location* is an outpatient location where the same patient identifier is used allowing for tracking of specimens across services using the same patient number. In these 'exception' cases, attribute the event to the admitting location.

What's the Location Have to Do With It?
Inpatient Rehab/Inpatient Psychiatric Units

- **NHSN considers transfers from an acute care inpatient unit to an inpatient rehab (IRF) and/or an inpatient psychiatric location (IPF) a *continuous* stay for NHSN reporting purposes.**

- **Facility admission date for a LabID event should reflect the date the patient was physically admitted into either an acute care inpatient location or an IRF/IPF location *whichever comes first* during the patient stay.**

Monthly Reporting Plan

- **The Monthly Reporting Plan informs CDC which modules a facility is participating in during a given month.**
  - Referred to as “In-Plan” data
- **The Plan also informs CDC which data can be used for aggregate analyses.**
  - This INCLUDES sharing applicable data with CMS!
- **A facility must enter a Plan for every month of the year.**
- **NHSN will only submit data to CMS for *complete* months (data for all months of the quarter must be in place prior to submission).**

Monthly Reporting Plan

Multi-Drug Resistant Organism Module

	Locations	Specific Organism Type
🗑	FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)	MRSA - MRSA

Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
☐			☐	☐	☐	☑	☐	☐

	Locations	Specific Organism Type
🗑	ED-ER - ED-ER	MRSA - MRSA

Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
☐			☐	☐	☐	☑	☐	☐

	Locations	Specific Organism Type
🗑	OBS - 24-HR OBS	MRSA - MRSA

Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
☐			☐	☐	☐	☑	☐	☐

Add Row | Clear All Rows | Copy from Previous Month

Monthly Reporting Plan

Multi-Drug Resistant Organism Module

	Locations	Specific Organism Type
🗑	FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)	MRSA - MRSA

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	Locations	Specific Organism Type
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Process and Outcome Measures

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☐			☐	☐	☐	☑	☐	☐

	Locations	Specific Organism Type
🗑	5 EAST - ADULT REHAB	MRSA - MRSA

Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
☐			☐	☐	☐	☑	☐	☐

Monthly Reporting Plan

Multi-Drug Resistant Organism Module

	Locations	Specific Organism Type
🗑	FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)	CDIF - C. difficile

Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
☐			☐	☐	☑	☐	☐	☐

	Locations	Specific Organism Type
🗑	ED-ER - ED-ER	CDIF - C. difficile

Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
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	Locations	Specific Organism Type
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Process and Outcome Measures

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Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
☐			☐	☐	☑	☐	☐	☐

Facility-wide Inpatient: FacWideIN

FacWideIN Standard Reporting Guidance:

The **first** positive specimen for the patient AND the location is submitted as a LabID event. Following this submission, there should be > 14 days between positive specimens *in this location* before a new LabID event is submitted (the LabID event 14-day rule). If the patient moves to a new location, reporting resets (starts anew). This guidance applies to all inpatient locations in the facility, including locations with a different CMS Certification Number (CCN) such as inpatient rehab (IRF) or psych locations (IPF) as well as from emergency departments and 24-hour observation locations.

Definition: *MRSA* LabID Event

- ***MRSA*** = *S. aureus* cultured from a specimen that tests oxacillin-resistant, cefoxitin-resistant, or methicillin-resistant by standard susceptibility testing methods, **or** a laboratory finding of *MRSA* (includes but not limited to PCR or other molecular based detection methods).

- ***LabID Event =*** First *MRSA*+ blood culture for the patient in the location – excludes active surveillance specimens. The *MRSA* finding is from a blood specimen for a patient in a location with no prior MRSA positive blood specimen result collected **within 14 days** for the patient and location *(includes across calendar months for Blood Specimen Only reporting)*

CD-positive laboratory assay:
A positive laboratory test result for *C. difficile* toxin A and/or B, (includes molecular assays [PCR] and/or toxin assays) tested on an unformed stool specimen (must conform to the container)
OR
A toxin-producing *C. difficile* organism detected by culture or other laboratory means performed on an unformed stool sample (must conform to the container).

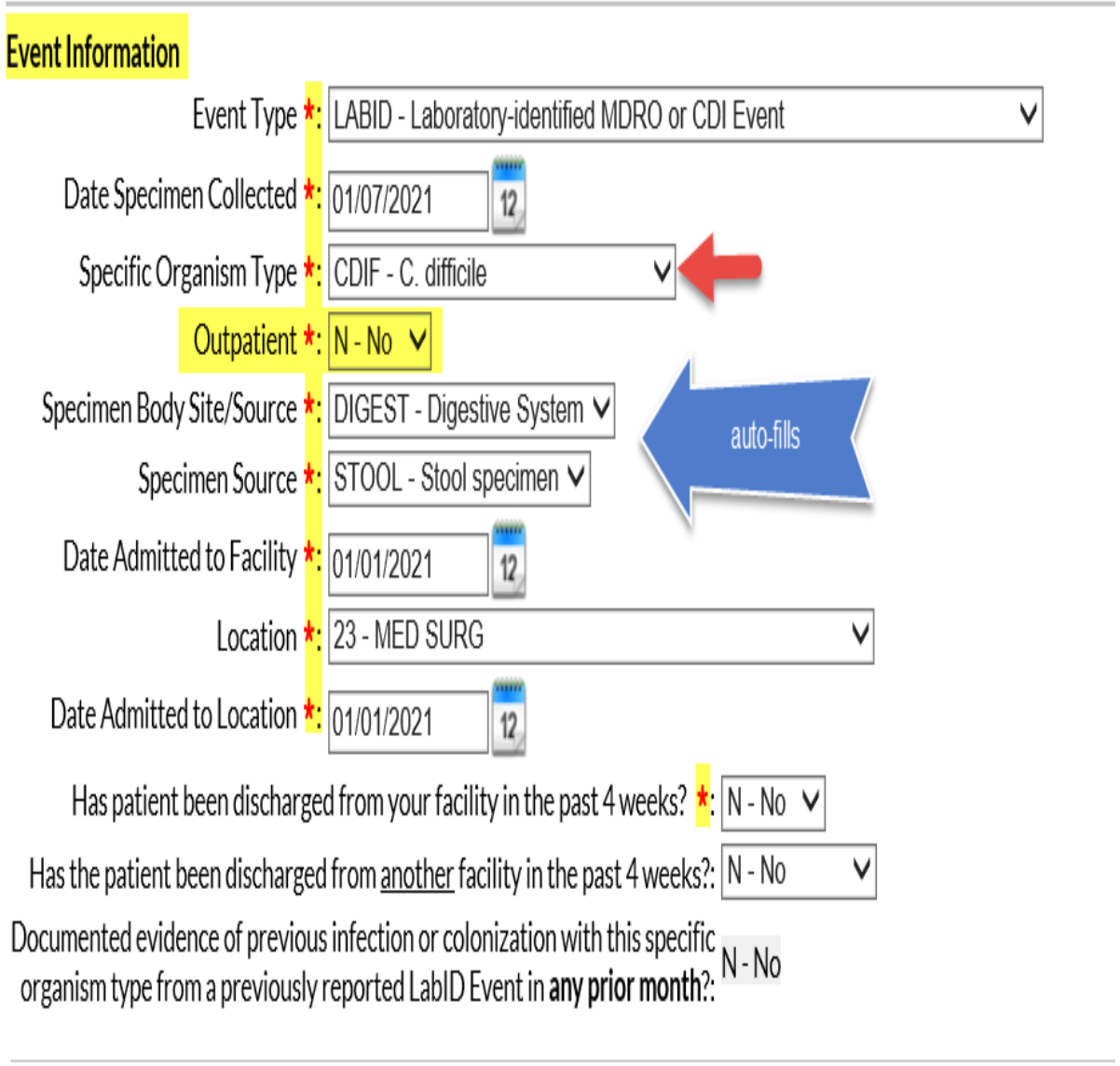
Must be Unformed Stool

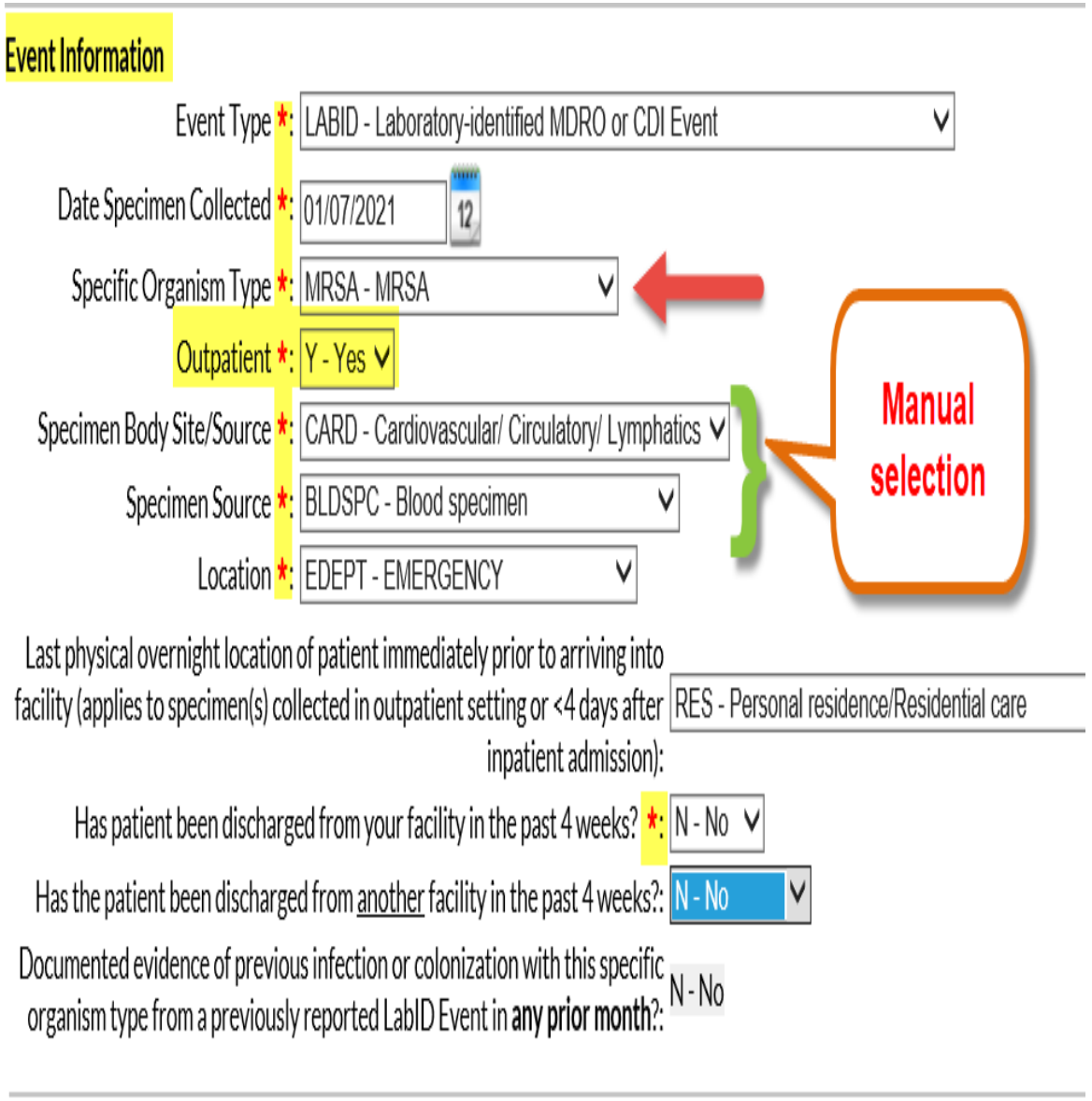
Definition: *C. Difficile* LabID Event

- **Note:**

When using a multi-step testing algorithm for CDI **on the same unformed** stool specimen, the finding of the **last test performed** on the specimen that is documented in the patient medical record will determine if the CDI positive laboratory assay definition is met.

LabID Event Submission





Categorization of MRSA LabID Events

The NHSN application automatically categorizes *MRSA* LabID Events as:

- **Community-Onset (CO)**: LabID Event specimen collected in an outpatient location or in an inpatient location ≤ 3 days after admission to the facility [hospital days 1 (admission), 2, or 3]
- **Healthcare Facility-Onset (HO)**: LabID Event specimen collected > 3 days after admission to the facility [on or after hospital day 4]

Categorization of C. Difficile LabID Events

- **Healthcare Facility-Onset (HO)**: LabID Event specimen collected >3 days after admission to the facility (i.e., on or after day 4).

- **Community-Onset (CO)**: LabID Event specimen collected in an outpatient location or an inpatient location ≤ 3 days after admission to the facility (specifically, days 1, 2, or 3 of admission).

- **Community-Onset Healthcare Facility-Associated (CO-HCFA)**: CO LabID Event collected from a patient who was discharged from the facility ≤ 4 weeks prior to the date current stool specimen was collected.

Categorization of C. Difficile LabID Events

NHSN will further categorize CDI LabID Events based on specimen collection date and prior specimen collection date of a previous CDI LabID Event (that was entered into NHSN) as:

Incident CDI LabID Event

- Any CDI LabID Event from a specimen obtained > 56 days (8 weeks) after the most recent CDI LabID Event (or with no previous CDI LabID Event documented) for that patient. Note: the date of first specimen collection is considered day 1.

OR

Recurrent CDI LabID Event

- Any CDI LabID Event from a specimen obtained > 14 days (2 weeks) and ≤ 56 days (8 weeks) after the most recent CDI LabID Event for that patient. Note: the date of first specimen collection is considered day 1.

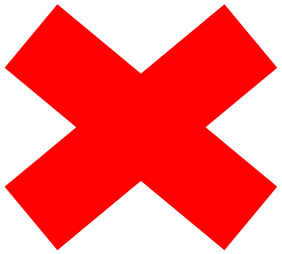
Reporting Denominator Data

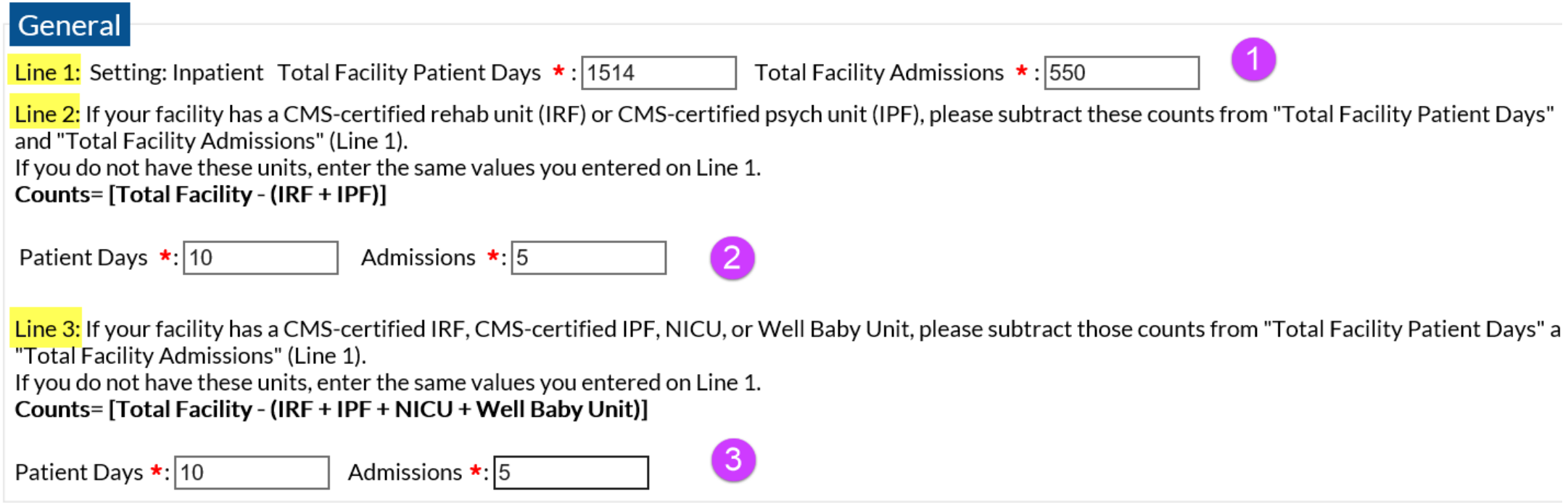
Denominator Data: FacWideIN

- **Line 1:** Counts from all inpatient locations in the facility
- **Line 2:** Counts from all inpatient locations in the facility except CMS-certified Rehab and Psych units (formerly labeled MDRO row 2)
- **Line 3:** Counts from all inpatient locations in the facility except CMS-certified Rehab and Psych units, NICUs, and well-baby units (formerly CDI row 3)

Example: Incorrect Data Entry

- Line 2 and Line 3 refer to the total number of patients housed in inpatient locations (FacWideIN) in your facility, regardless of the patient's MDRO or *C. difficile* infection status (not diagnosis)
- ***Each denominator row should be a **sub-set of the row above it**





Denominator Data

Select CDI Test type quarterly (last month of each calendar-year quarter – March; June; September; December)

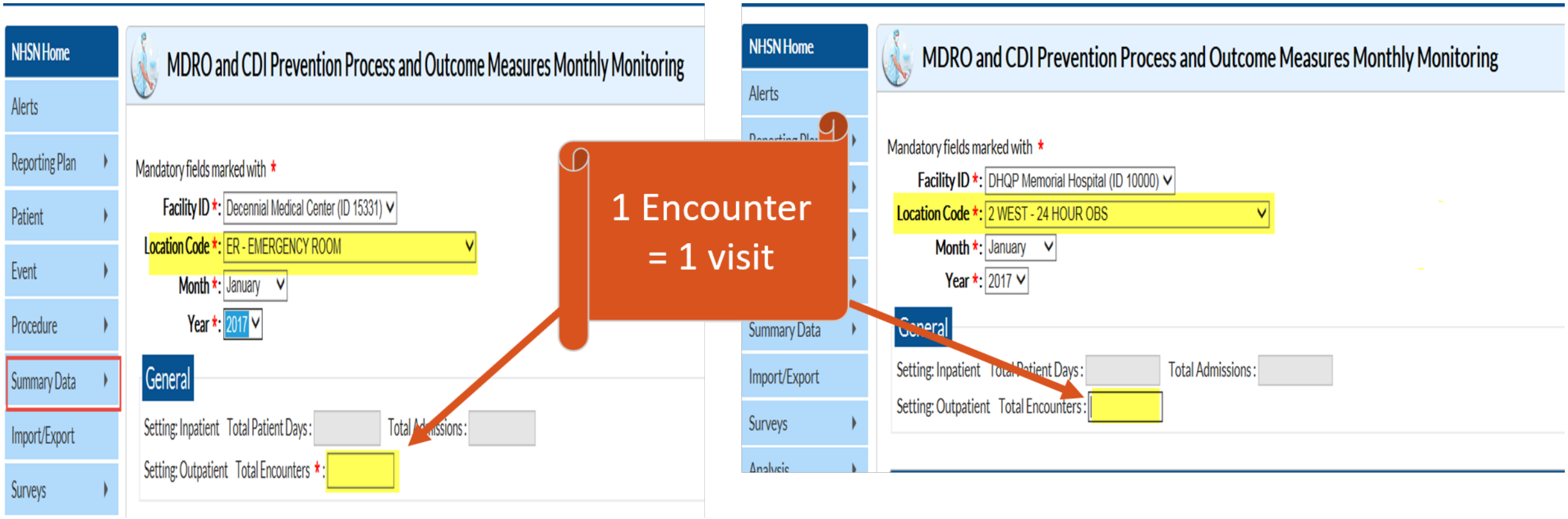
**For this quarter, what is the primary testing method for *C. difficile* used most often by your facility's laboratory or the outside laboratory where your facility's testing is performed? (check one)

- ☐ Enzyme immunoassay (EIA) for toxin
- ☐ Cell cytotoxicity neutralization assay
- ☐ Nucleic acid amplification test (NAAT) (e.g., PCR, LAMP)
- ☐ 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
- ☐ Toxigenic 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 or conduct a search for further guidance on selecting the correct option to report.)

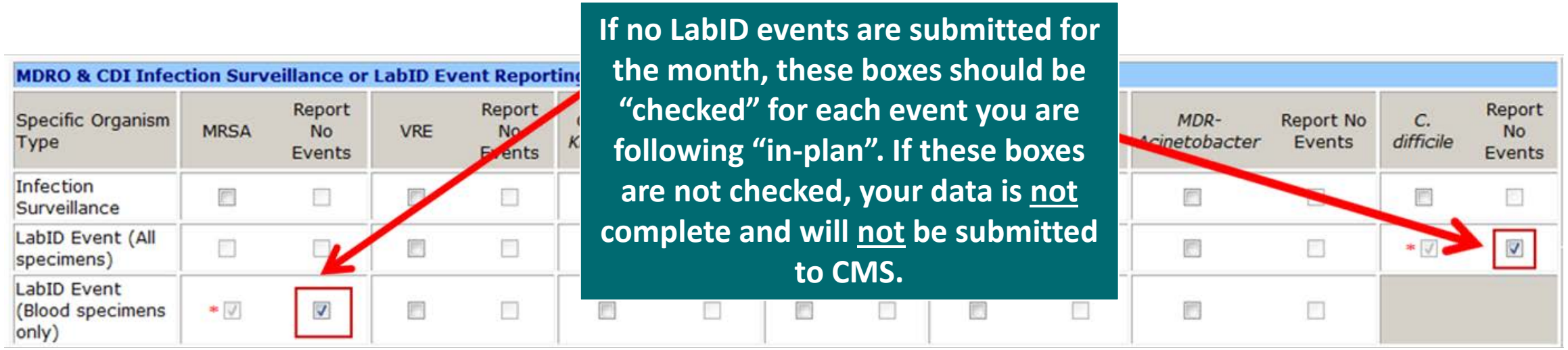
Denominator Data: Emergency Department / 24-hour observation

- On the summary data entry screen, use the 'Location Code" drop down menu to select ED or 24-hour observation as the location for which you are entering the summary data.
- After selecting the appropriate unit, month, and year, one summary data field will become required (Total Encounters). Repeat steps for 24-hour observation locations.
  1 visit = 1 encounter



Denominator Data: Report No Events

- If you have identified and reported any *C. difficile* LabID events during the month, you are finished with your reporting for the month and can skip this step.
- If you have not identified any LabID events for *C. difficile* at the end of a month, you must indicate this on the summary data record to complete your reporting efforts.
- On the MDRO and CDI Module summary data form, checkboxes for "Report No Events" are found underneath the patient day and admission count fields, as seen in the screenshot below.



MDRO & CDI Infection Surveillance or LabID Event Reporting

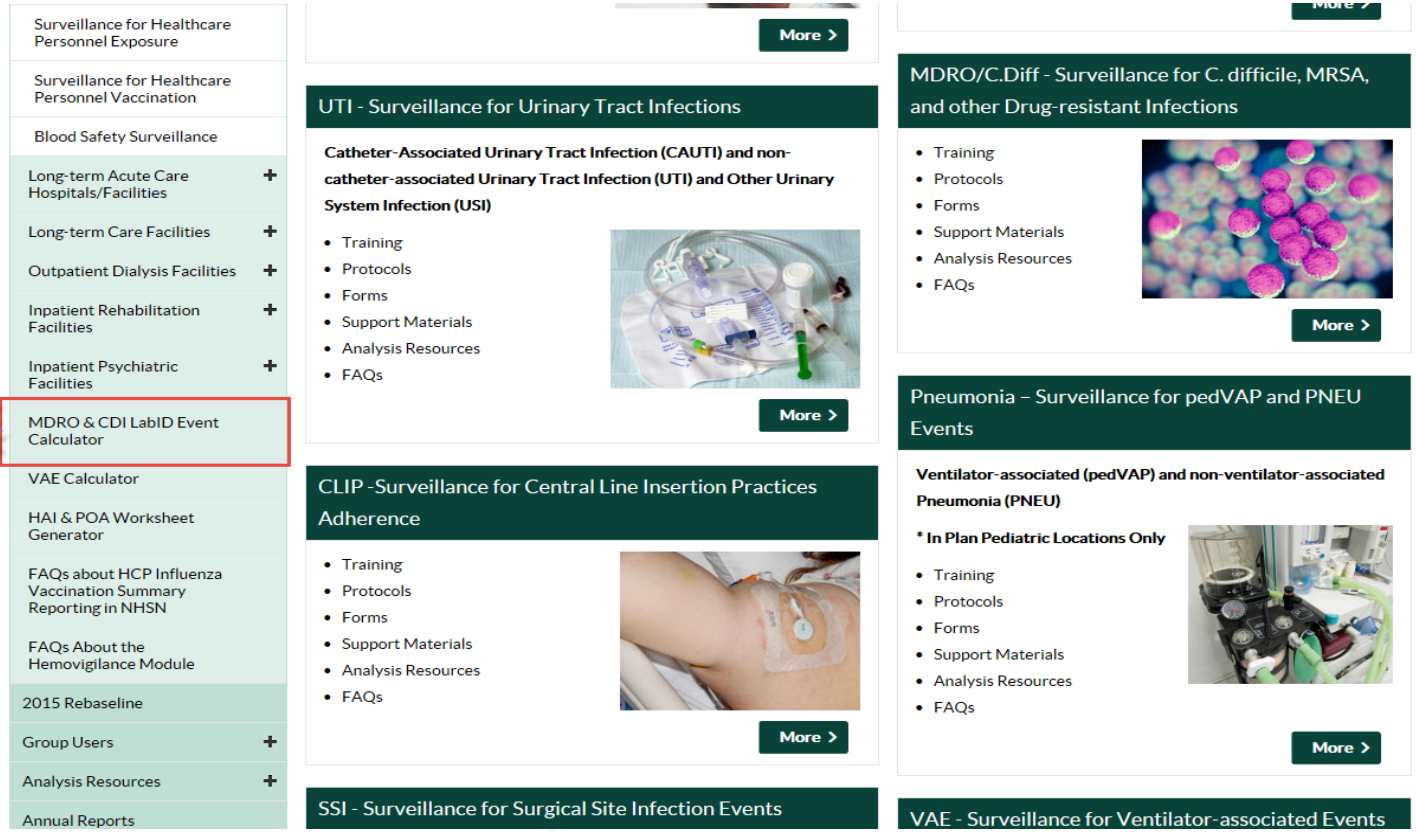
Specific Organism Type	MRSA	Report No Events	VRE	Report No Events	MDR-Acinetobacter	Report No Events	C. difficile	Report No Events
Infection Surveillance	☐	☐	☐	☐	☐	☐	☐	☐
LabID Event (All specimens)	☐	☐	☐	☐	☐	☐	* ☑	☑
LabID Event (Blood specimens only)	* ☑	☑	☐	☐	☐	☐		

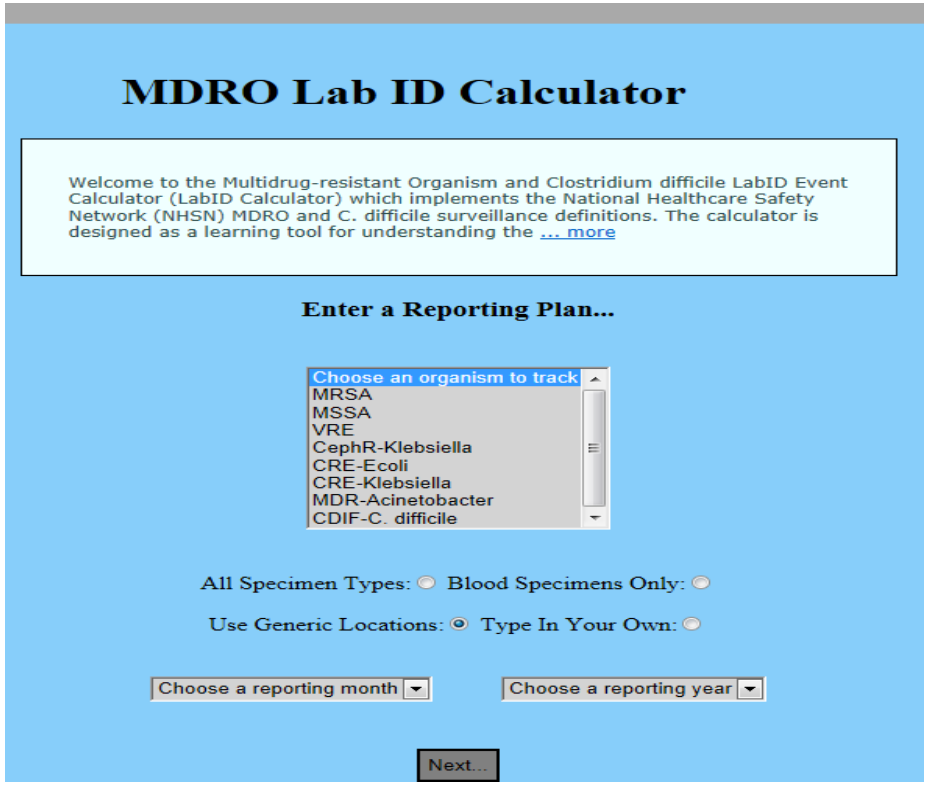
If you identify and enter LabID events for an organism after you've already checked the "Report No Events" box, the "Report No Events" check will automatically be removed in the NHSN database.

LabID Event Calculator:

https://www.cdc.gov/nhsn/labid-calculator/index.html.

- Available for use with C. difficile and MDRO LabID Event reporting
- Aids in decision making around the 14-day rule
- External calculator





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