

BSI Events Excluded from the CLABSI SIR Numerator Line Listing

Updated January 2025

Description

A line list is an organized, detailed list of each record entered in NHSN. In December 2019, a new standard line list report was added to the NHSN Patient Safety Component, titled “Line Listing – BSI Events Excluded from the CLABSI Numerator”. This specific line list, which can be used by facilities and groups, will allow you to view a facility’s BSI events that will be excluded from the Central line-associated bloodstream infection DA module SIR, rate tables, and CMS CLABSI SIR reports. These excluded BSI events are those that have the following factors present on the BSI event form: Mucosal Barrier Injury Laboratory-Confirmed Bloodstream Infection (MBI-LCBI), Extracorporeal life support (ECMO) and Ventricular Assist Device (VAD) BSI events, Munchausen Syndrome by Proxy (MSBP), Epidermolysis bullosa (EB), Patient self-injection, and Pus at vascular access site and will be indicated by the new variable `clab_exclude`. These BSI events will not be included in the CLABSI event count and this line list will help identify those excluded events. The BSI excluded line list will only provide a list of the events that have indicated as central line being present. For more instructions on modifying reports please see:

<https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/howtomodifyreport.pdf>

This guide should be used as a supplement to the basic line list quick reference guide, found here:

<http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/LineLists.pdf>

The screenshot shows a navigation menu with the following structure:

- Expand All
- Collapse All
- Search
- HAI Risk Adjusted Measure Reports (SIRs, SURs)
 - 2022 Baseline (Baseline Set 3)
 - 2015 Baseline (Baseline Set 2)
 - CLABSI and MBI-LCBI
 - SIR SIR - ACH MBI-LCBI Data (2015 Baseline)
 - SIR SIR - ACH CLABSI Data (2015 Baseline)
 - SUR SUR - ACH Central Line Device Use (2015 Baseline)
 - SIR SIR - CAH CLABSI Data (2015 Baseline)
 - SUR SUR - CAH Central Line Device Use (2015 Baseline)
 - SIR SIR - LTAC CLABSI Data (2015 Baseline)
 - SUR SUR - LTAC Central Line Device Use (2015 Baseline)
 - SIR SIR - IRF CLABSI Data (2015 Baseline)
 - SUR SUR - IRF Central Line Device Use (2015 Baseline)
 - Line Listing - BSI Events Excluded from the CLABSI SIR Numerator**



Table 1: BSI variables that have been added to analysis reports

Variable	Variable Name within the Analysis Reports
Mucosal Barrier Injury Laboratory-Confirmed Bloodstream Infections	mbi_lcbi
Extracorporeal life support	ecmo
Ventricular Assist Device	vad
Munchausen Syndrome by Proxy	msbp
Epidermolysis bullosa	eb
Patient self-injection	patinj
Pus at vascular access site	siteBldMatch
Vascular Site	matchSite

Modify "Line Listing - BSI Events Excluded from the CLABSI SIR Numerator"

Show descriptive variable names ([Print List](#)) Analysis Data Set: CLAB_Events Type: Line Listing Last Generated (UTC): [January 31, 2025 7:12 PM](#)

Title/Format Time Period Filters **Display Variables** Sort Variables Display Options

Display Variables:

<p>Available Variables:</p> <ul style="list-style-type: none"> mdroInfPlan medicareID modifyDate OID patGName pathogen1 pathogen2 pathogen3 pathogenDesc1 pathogenDesc2 pathogenDesc3 patMName patRaceAAB patRaceAMIN patRaceASIAN 	<p>All</p> <p>Selected</p> <p>Selected</p> <p>All</p>	<p>Selected Variables:</p> <ul style="list-style-type: none"> admitDate eventID eventDate eventType spcEvent location ecmo vad mbi_lcbi msbp eb siteBldMatch matchSite patInj clab_exclude 	<p>Up</p> <p>Down</p> <p>Undo</p>
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Example:

In our example, there were 5 events entered for the 2024Q4 time period which was verified by running the Line Listing -All CLABSI Events (Table 1) However, the CLABSI Device-associated module SIR report for the same time period and observed only 3 of the 5 events entered were included on the SIR report (Table 2).

To determine why there is a difference in the total number of events entered into NHSN compared to the number included on the SIR report, the Line Listing for BSI Events Excluded from the CLABSI Numerator can be used to identify the difference.

From the report, it is determined that one event was excluded due to presence of ECMO, and the other was excluded due to VAD (Table 3). The clab_exclude variable is also indicated as being present, which also signifies that these events do not meet criteria to be included in the CLABSI event count.

Table 1. Line Listing Report for 2024Q4:

National Healthcare Safety Network Line Listing for All Central Line-Associated BSI Events

As of: January 31, 2025 at 9:08 PM UTC
Date Range: CLAB_EVENTS evtDateYQ 2024Q4 to 2024Q4

orgID	patID	dob	admitDate	eventID	eventDate	eventType	spcEvent	location
10018	4827361950	06/24/1980	10/13/2024	48273	10/24/2024	BSI	LCBI	S-ICU
10018	1593847260	10/06/1999	10/28/2024	15938	11/02/2024	BSI	LCBI	CARDCRIT
10018	6048291753	05/06/1963	11/03/2024	60482	11/13/2024	BSI	LCBI	S-ICU
10018	2375618940	08/27/1985	11/15/2024	23756	11/26/2024	BSI	LCBI	CARDCRIT
10018	9182736450	03/08/1992	12/05/2024	91827	12/11/2024	BSI	LCBI	CARDCRIT

Table 2. SIR Report for 2024Q4:

National Healthcare Safety Network SIR for Central Line-Associated BSI Data for Acute Care Hospitals (2015 baseline) - By OrgID

As of: January 31, 2025 at 9:22 PM UTC
Date Range: BS2_CLAB_RATESALL summaryYQ 2024Q4 to 2024Q4

orgID=10018 medType=U

orgID	ccn	summaryYQ	infCount	numPred	numclays	SIR	SIR_pval	sir95ci
10018	N/A	2024Q4	3	0.943	443	.	.	

Table 3. BSI Excluded Line List for 2024Q4:

**National Healthcare Safety Network
Line Listing for BSI Events Excluded from the CLABSI SIR Numerator**

As of: January 31, 2025 at 9:07 PM UTC
Date Range: CLAB_EVENTS evntDateYQ 2024Q4 to 2024Q4
if (((clab_exclude = "Y")))

orgID	patID	dob	admitDate	eventID	eventDate	eventType	spcEvent	location	ecmo	vad	mbi_lcbi	msbp	eb	siteBldMatch	patInj	matchSite	clab_exclude
10018	1593847260	10/06/1999	10/28/2024	15938	11/02/2024	BSI	LCBI	CARDCRIT	Y	N	N	N	N	N	N	N	Y
10018	2375618940	08/27/1985	11/15/2024	23756	11/26/2024	BSI	LCBI	CARDCRIT	N	Y	N	N	N	N	N	N	Y

Additional Resources:

- HAI Progress Report: <https://www.cdc.gov/hai/data/portal/progress-report.html>
- SIR Guide: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>
- NHSN Analysis Page: <https://www.cdc.gov/nhsn/ps-analysis-resources/index.html>
- NHSN Quick Reference Guides: <https://www.cdc.gov/nhsn/ps-analysis-resources/reference-guides.html>
- Keys to Success with NHSN Data: <https://www.cdc.gov/nhsn/ps-analysis-resources/keys-to-success.html>