The CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS EXCLUDED LINE LIST

November 2023

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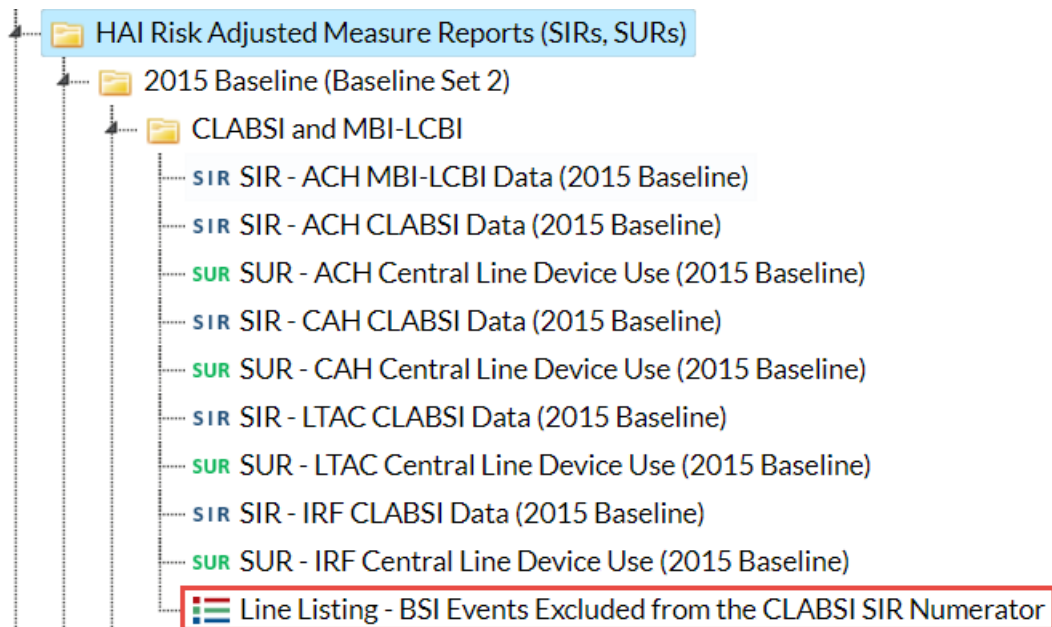http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/LineLists.pdf

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

Example:

In our example, there were 5 events entered for the 2019Q4 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 2019Q4:

National Healthcare Safety Network
Line Listing for All Central Line-Associated BSI Events
As of: January 8, 2020 at 3:44 PM
Date Range: CLAB EVENTS evntDateYr 2019Q4 and Including 2019Q4

orgID	patID	dob	gender	admitDate	eventID	eventDate	eventType	spcEvent	location
10000	0001234	06/24/1980	F	11/10/2019	86923	12/01/2019	BSI	LCBI	S-ICU
10000	0906	09/06/1980	F	10/01/2019	101124	11/10/2019	BSI	LCBI	CARDCRIT
10000	100022	05/16/1956	F	10/13/2019	108987	10/28/2019	BSI	LCBI	OF3682-1
10000	CM1207-BSI-A	05/05/1955	F	12/05/2019	39661377	12/07/2019	BSI	LCBI	CARDCRIT
10000	CM1218-BSI-A	05/05/1955	M	10/13/2019	39833856	10/23/2019	BSI	LCBI	CARDCRIT

Table 2. SIR Report for 2019Q4:

National Healthcare Safety Network

SIR for Central Line-Associated BSI Data for Acute Care Hospitals (2015 baseline) - By OrgID
As of: January 28, 2020 at 9:49 AM
Date Range: BS2 CLAB RATESALL summaryYQ 2019Q4 to 2019Q4

orgID=10000 medType=M

orgID	ccn	summaryYQ	infCount	numPred	numcldays	SIR	SIR_pval	sir95ci	SIR_pctl
10000	N/A	2019Q4	3	0.943	443	.	.		.

Table 3. BSI Excluded Line List for 2019Q4:

National Healthcare Safety Network
Line Listing for BSI Events Excluded from the CLABSI Numerator
As of: January 8, 2020 at 8:07 AM
Date Range: CLAB_EVENTS evntDateYQ 2019Q4 to 2019Q4

orgID	patID	dob	gender	admitDate	eventID	eventDate	eventType	spcEvent	location	ecmo	vad	mbi_lcbi	msbp	eb	siteBldMatch	matchSite	clab_exclude	patInj
10000	CM1207-BSI-A	05/05/1955	F	12/05/2019	39661377	12/07/2019	BSI	LCBI	CARDCRIT	Y	N	N	N	N	N		Y	N
10000	CM1218-BSI-A	05/05/1955	M	10/13/2019	39833856	10/15/2019	BSI	LCBI	CARDCRIT	N	Y	N	N	N	N		Y	N

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