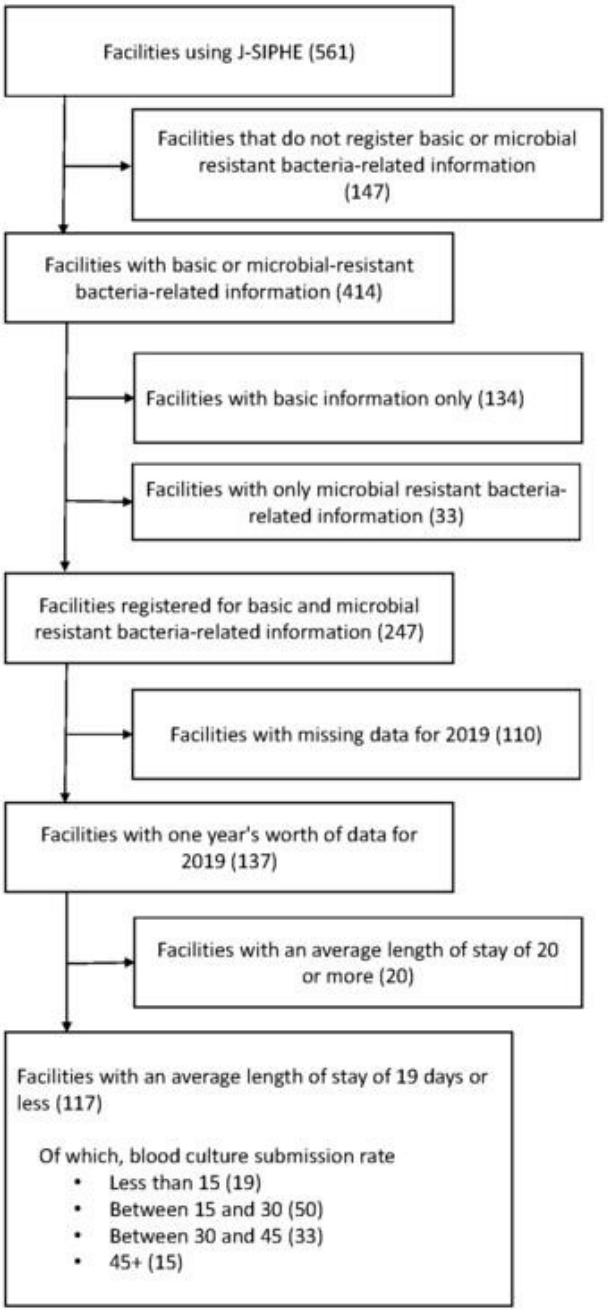
the total number of submitted blood cultures per 1000 patients/day. The incidence of bloodstream infections was calculated as the number of positive blood cultures excluding contaminated specimens per 1000 patients/day. The blood culture submission rate was then divided into four categories, respectively: category 1: 0–15; category 2: 15–30; category 3: 30–45; and category 4: 45–80.

The Kruskal-Wallis test was performed to determine overall difference among 4 submission rate categories and the Dunn test with Bonferroni correction was used to compare pairs of submission rate categories.

Filtering of facilities for data analysis

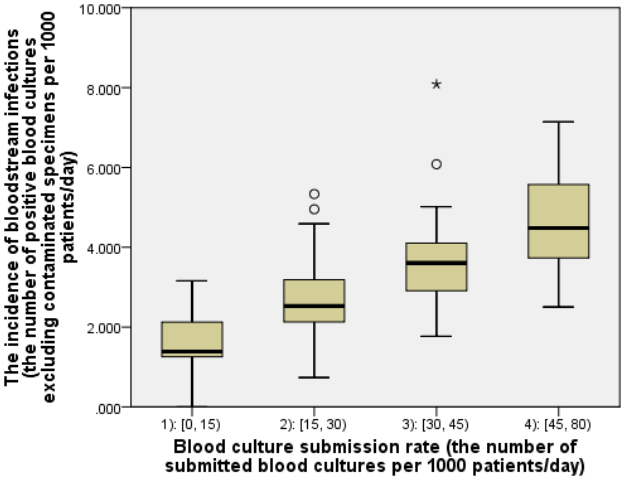


Results. A total of 117 hospitals were included in the analysis. The median number of beds was 415.0 (interquartile ratio [IQR]: 274.5–549.5). The median incidence of bloodstream infection was 2.78 (2.17–3.87). The median blood culture submission rate was 26.18 (17.20–35.76). The median incidence of bloodstream infection by category of blood culture submission rate was 1.39, 2.53, 3.61, and 4.48, respectively; with a significant difference observed among the four categories overall (p< 0.01). Significant differences were observed between categories 1 and 2 and between categories 2 and 3 (both p< 0.01) but not between categories 3 and 4 (p=0.758).

Characteristics of the acute hospitals by category of blood culture submission rate

Blood culture submission rate (the number of submitted blood cultures per 1000 patients/day)		Number of beds	Hospitals with a mean length of stay	Blood culture multiple set rate	Blood culture contamination rate	Positive blood culture rate including contaminated bacteria	Positive blood culture rate excluding contaminated bacteria
1) : [0, 15)	N	19	19	19	19	19	19
	Median	271.00	13.5000	0.93258	0.02041	0.15854	0.15789
	Minimum	173	7.00	0.385	0.000	0.000	0.000
	Maximum	499	17.30	1.000	0.102	0.339	0.333
2) : [15, 30)	N	50	50	50	50	50	50
	Median	345.50	12.4000	0.91539	0.01410	0.14512	0.12853
	Minimum	120	7.30	0.340	0.000	0.049	0.049
	Maximum	1207	24.40	1.000	0.045	0.246	0.217
3) : [30, 45)	N	33	33	33	33	33	33
	Median	500.00	11.4000	0.89655	0.01336	0.11525	0.10714
	Minimum	135	7.10	0.414	0.000	0.050	0.042
	Maximum	1080	18.20	0.990	0.052	0.211	0.188
4) : [45, 80)	N	15	15	15	15	15	15
	Median	568.00	11.6000	0.95783	0.00591	0.09078	0.08127
	Minimum	281	8.80	0.801	0.001	0.054	0.051
	Maximum	885	15.20	0.963	0.037	0.150	0.136
Total	N	117	117	117	117	117	117
	Median	415.00	12.0000	0.91982	0.01336	0.13435	0.11399
	Minimum	120	7.00	0.340	0.000	0.000	0.000
	Maximum	1207	24.40	1.000	0.102	0.339	0.333

Incidence of bloodstream infections by category of blood culture submission rate



Conclusion. The blood culture submission rate is considered to be around 45 in the acute hospital setting in Japan. The incidence of bloodstream infections is greatly affected by submission rates.

Disclosures. **All Authors**: No reported disclosures

909. Reassessing Pathogens Eligible for the Centers for Disease Control and Prevention's (CDC's) National Healthcare Safety Network (NHSN) "Mucosal Barrier Injury-Laboratory Confirmed Bloodstream Infection" Criteria

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Session: P-43. HAI: Surveillance

Background. NHSN Mucosal Barrier Injury-Laboratory Confirmed Bloodstream Infection (MBI-LCBI) includes pathogens likely to cause bloodstream infections (BSI) in some oncology patients. MBI-LCBIs are excluded from central line-associated BSI (CLABSI) reporting to the Centers for Medicare & Medicaid Services. NHSN users have requested other pathogens be added to MBI-LCBI. To make decision, we compared CLABSI pathogen distributions in three NHSN patient location groups.

Methods. We analyzed CLABSI data from hospitals conducting surveillance for ≥ 1 month from January 2014–December 2018 in ≥ 1 MBI high-risk location (leukemia, lymphoma, and adult and pediatric hematopoietic stem cell transplant wards). We compared CLABSI pathogen distributions and rates in MBI high-risk locations to medium-risk (solid tumor, adult and pediatric general hematology-oncology wards) and low-risk locations (adult and pediatric medical, surgical, and medical-surgical wards), and used $\chi 2$ tests to compare percentages with statistical significance at $P \leq 0.05$.

Results. Overall, 122 hospitals reported 23,578 CLABSIs and 12,961,921 central line (CL)-days (1.81 CLABSIs per 1,000 CL-days) (Table). Percentages of CLABSIs due to three MBI-LCBI pathogens (*E. coli, E. faecium,* Viridans streptococci) were significantly higher in high- versus low-risk locations, while for other MBI-LCBI pathogens (*K. pneumoniae/oxytoca, E. faecalis, Candida* spp., *Enterobacter* spp.) percentages were significantly lower in high-risk locations (Figure). For pathogens not currently in MBI-LCBI, coagulase-negative staphylococci caused similar percentages of CLABSIs across locations, *S. aureus* caused a significantly higher percentage of CLABSIs in low-risk locations, while PA caused a significantly higher percentage of CLABSIs in high-risk locations.

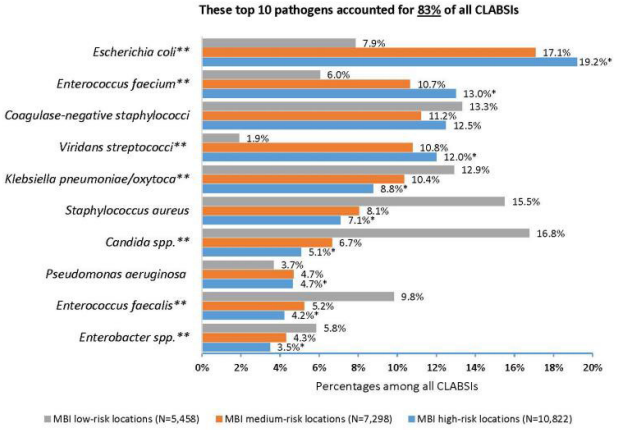
Table. CLABSIs attributed to MBI high-risk, medium-risk, and low-risk locations, NHSN, 2014–2018

Table: CLABSIs attributed to MBI high-risk, medium-risk, and low-risk locations, NHSN, 2014–2018

	MBI high-risk locations	MBI medium-risk locations	MBI low-risk locations
No. hospitals	122	122	122
No. inpatient locations	151	145	353
No. events	10,822	7,298	5,458
No. pathogens	12,050	8,132	6,238
No. central line (CL)-days	3,263,475	3,761,996	5,936,450
No. patient-days	3,891,347	6,709,371	28,895,520
Pooled mean CLABSI rate per 1,000 CL-days	3.32	1.94	0.92
Device utilization ratio (DUR)	0.84	0.56	0.21

Figure. Percentages of top 10 pathogen-specific CLABSIs in MBI high-risk, medium-risk, and low-risk locations, NHSN, 2014–2018

Figure: Percentages of top 10 pathogen-specific CLABSIs in MBI high-risk, medium-risk, and low-risk locations, NHSN, 2014 – 2018



*$p < 0.05$ for the percentage of this pathogen causing LCBI in MBI high-risk compared to low-risk locations

** Current MBI-LCBI pathogens

Conclusion. Differences in percentages of CLABSIs due to selected pathogens between MBI high-risk and low-risk locations are evident in NHSN data. Lower percentages of *Klebsiella* and *Candida* spp. in high-risk locations might be partially due to antimicrobial prophylaxis in oncology patients. Although PA caused a significantly higher percentage of CLABSIs in high-risk locations, the absolute difference was modest. Additional analyses are needed.

Disclosures. **All Authors**: No reported disclosures

910. A Comprehensive, One Year, Hospital-Wide Snapshot of All Serious Infectious Complications in People Who Inject Drugs

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Session: P-43. HAI: Surveillance

Background. There has been a dramatic rise in IV drug use (IVDU) and its associated mortality and morbidity, however, the scope of this effect has not been described. Kentucky is at the epicenter of this epidemic and is an ideal place to better understand the health complications of IVDU in order to improve outcomes.

Methods. All adult in-patient admissions to University of Kentucky hospitals in 2018 with an Infectious Diseases (ID) consult and an ICD 9/10 code associated with IVDU underwent thorough retrospective chart review. Demographic, descriptive, and outcome data were collected and analyzed by standard statistical analysis.

Results. 390 patients (467 visits) met study criteria. The top illicit substances used were methamphetamine (37.2%), heroin (38.2%), and cocaine (10.3%). While only 4.1% of tested patients were HIV+, 74.2% were HCV antibody positive. Endocarditis (41.1%), vertebral osteomyelitis (20.8%), bacteremia without endocarditis (14.1%), abscess (12.4%), and septic arthritis (10.4%) were the most common infectious complications. The in-patient death rate was 3.0%, and 32.2% of patients were readmitted within the study period. The average length of stay was 26 days.

In multivariable analysis, infectious endocarditis was associated with a statistically significant increase in risk of death, ICU admission, and hospital readmission. Although not statistically significant, trends toward mortality and ICU admission were identified for patients with prior endocarditis and methadone was correlated with decreased risk of readmission and ICU stay.

FIGURE 1: Reported Substances Used

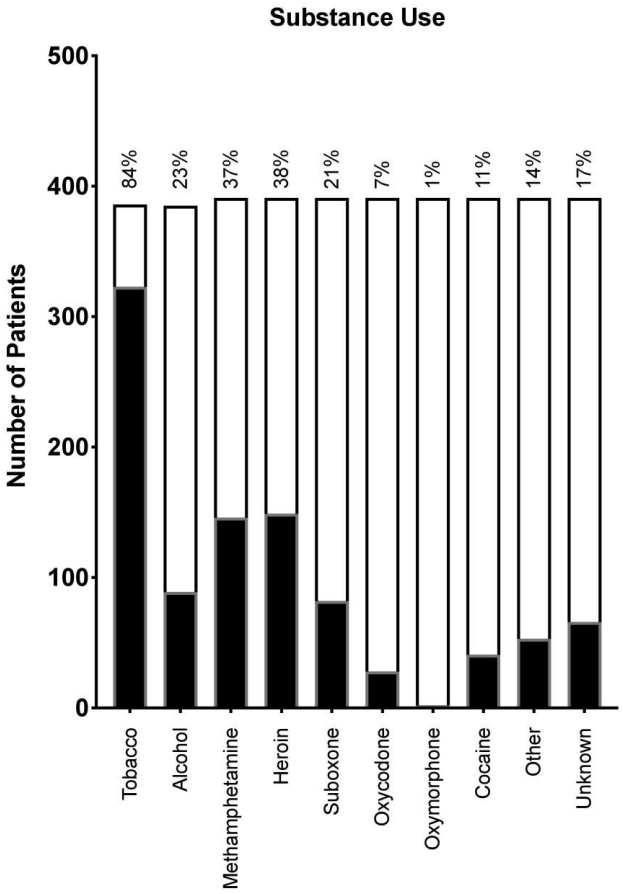

FIGURE 2: Comorbidities