



Hospital-Wide Healthcare-associated Bloodstream Infections Surveillance Results 2012–2013

Healthcare-Associated Infections Provincial Surveillance Program

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From April 1, 2012, to March 31, 2013, 64 healthcare facilities took part on a voluntary basis in the hospital-wide surveillance of bloodstream infections (BSIs), for a combined total of 3,797,385 inpatient days (Table 1). Participating facilities reported 2,797 BSIs in 2,674 patients. The total incidence rate was 6.1 cases per 10,000 patient days. The incidence rate in 2012–2013 was significantly lower compared with the average rate for 2008–2012 in facilities that took part in both surveillance periods. Four teaching facilities that were not included in the 2011–2012 study joined the program in 2012–2013. All participating facilities in 2011–2012 continued participation in 2012–2013.

Abbreviations

CRBSI: catheter-related bloodstream infection

HD: hemodialysis

95% CI: 95% confidence interval

SSI: surgical site infection

Non-CRBSI: non-catheter-related-primary bloodstream infection

CoNS: coagulase-negative *Staphylococcus*

ICU: intensive care unit

TABLE 1 Participation of Healthcare Facilities in the Hospital-Wide Surveillance of BSIs, Québec, 2008–2009 to 2012–2013

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Participating facilities (N)	56	61	58	60	64
Admissions (N)	401,959	425,935	403,502	417,280	486,272
Inpatient days (N)	3,179,229	3,407,223	3,259,186	3,275,332	3,797,385
BSIs (cat. 1 and 2b, N)	2,541	2,433	2,517	2,416	2,797
Infected patients (N)	2,372	2,298	2,346	2,303	2,674

Incidence Rates

In 2012–2013, the total incidence rate was 6.1 BSIs per 10,000 patient days. The incidence rates were much higher in intensive care units (ICUs) than in other units (Table 2). Catheter-related bloodstream infections (CRBSIs) were the most common BSIs in ICUs (Table 2 and Figure 2). In other units, the incidence rates varied depending on the type of healthcare facility: non-CRBSI were the most common primary BSIs in teaching facilities, while BSIs secondary to urinary tract infection were the most common in non-teaching facilities (Table 2 and Figure 3).

FIGURE 1 BSI Incidence Rate for Each Type of Infection, by Type of Healthcare Facility, Québec, 2012–2013 (Incidence Rate per 10,000 Patient Days [95% CI])

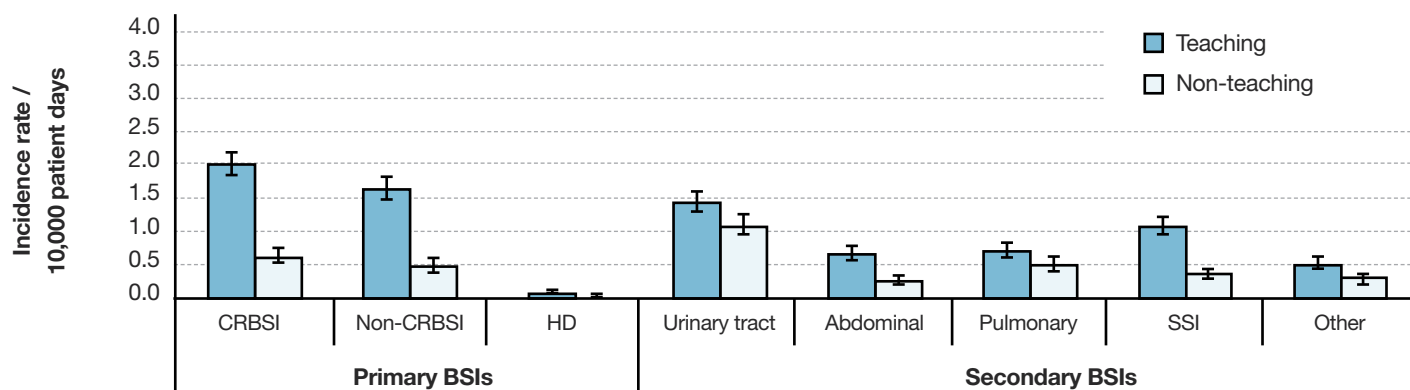
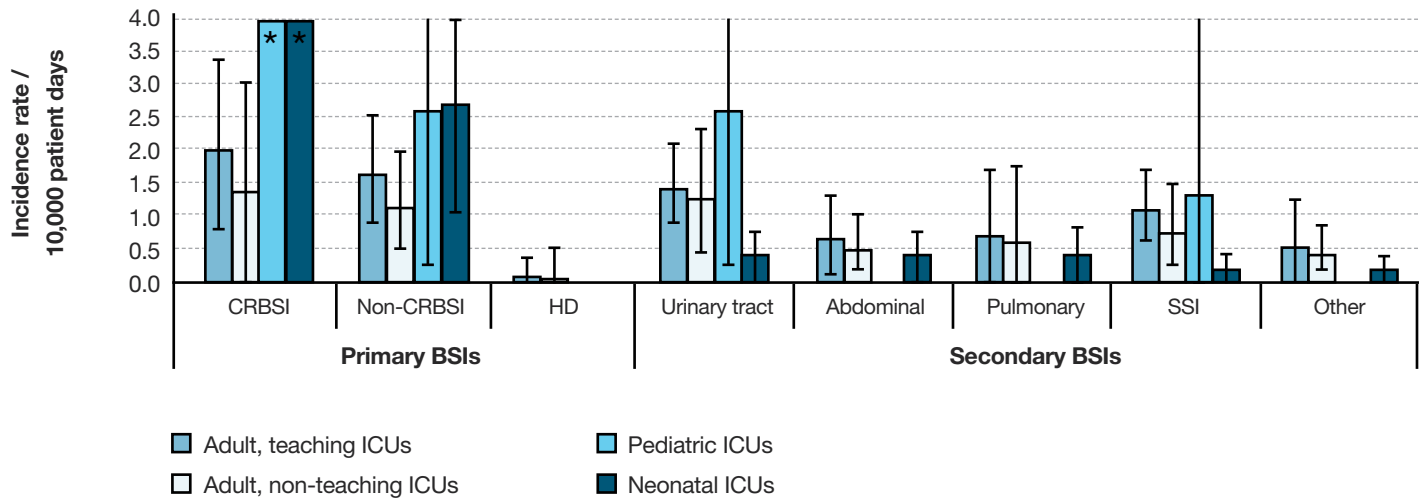


FIGURE 2 BSI Incidence Rate in ICUs, by Type of Infection, by Type of Healthcare Facility and Type of ICU, Québec, 2012–2013 (Incidence Rate per 10,000 Patient Days [95% CI])



* The incidence rate for CRBSIs is 24.7 cases per 10,000 patient days in pediatric ICUs and 17.5 in neonatal ICUs.

FIGURE 3 BSI Incidence Rate in Non-ICU Units, for Each Type of Infection, by Type of Healthcare Facility, Québec, 2012–2013 (Incidence Rate per 10,000 patient Days [95% CI])

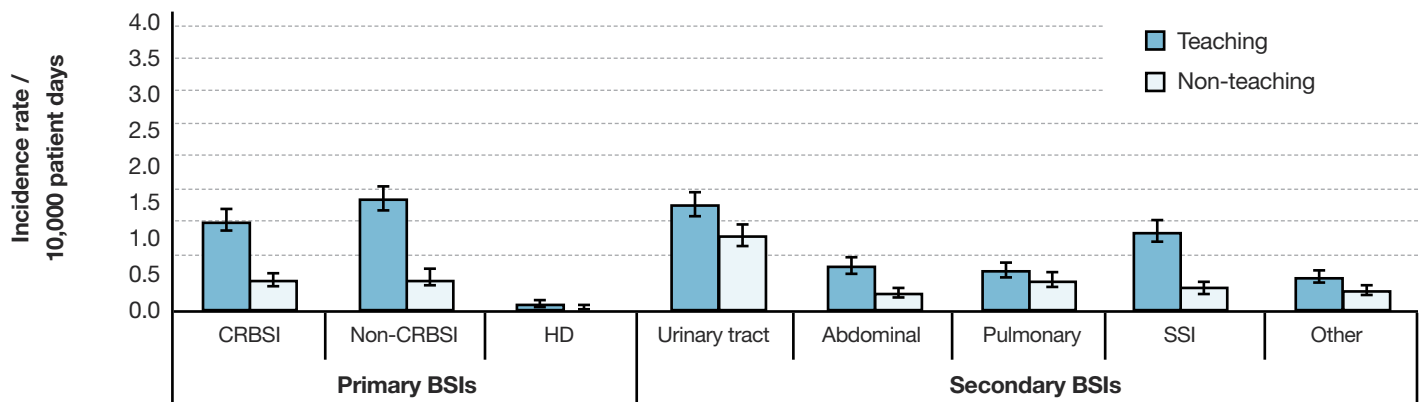


TABLE 2 BSI Incidence Rate by Type of Infection, Type of Healthcare Facility, Type of Unit and Type of ICU, Québec, 2012–2013 (Incidence Rate per 10,000 Patient Days [95% CI])

	Primary BSIs		Secondary BSIs					Total
	CRBSI	Non-CRBSI	Urinary tract	Abdominal	Pulmonary	SSI	Other**	
Total hospitalized	1.4 [1.3; 1.5]	1.1 [1.0; 1.2]	1.3 [1.2; 1.4]	0.5 [0.4; 0.5]	0.6 [0.5; 0.7]	0.7 [0.7; 0.8]	0.4 [0.4; 0.5]	6.1 [5.9; 6.3]
Teaching	2.0 [1.8; 2.2]	1.6 [1.5; 1.8]	1.4 [1.3; 1.6]	0.7 [0.6; 0.8]	0.7 [0.6; 0.8]	1.1 [0.9; 1.2]	0.5 [0.4; 0.6]	8.1 [7.8; 8.5]
Non-teaching	0.6 [0.5; 0.8]	0.5 [0.4; 0.6]	1.1 [0.9; 1.2]	0.3 [0.2; 0.3]	0.5 [0.4; 0.6]	0.3 [0.3; 0.4]	0.3 [0.2; 0.4]	3.6 [3.4; 3.9]
ICUs	8.2 [7.1; 9.3]	2.0 [1.5; 2.6]	1.2 [0.9; 1.7]	0.8 [0.5; 1.2]	2.2 [1.7; 2.8]	0.8 [0.5; 1.2]	0.8 [0.5; 1.2]	16.2 [14.7; 17.8]
Adult teaching	5.7 [4.5; 7.1]	2.3 [1.5; 3.2]	1.1 [0.6; 1.8]	1.2 [0.7; 1.9]	3.0 [2.1; 4.0]	1.0 [0.5; 1.6]	1.5 [0.9; 2.2]	16.0 [13.9; 18.2]
Adult non-teaching	5.0 [3.5; 6.6]	1.1 [0.5; 2.0]	1.8 [1.0; 2.8]	0.4 [0.1; 0.9]	2.2 [1.3; 3.3]	0.8 [0.3; 1.5]	0.3 [0.0; 0.7]	11.7 [9.4; 14.2]
Pediatric	24.7 [14.8; 37]	2.6 [0.2; 7.5]	2.6 [0.2; 7.5]	0.0*	0.0*	1.3 [0.0; 5.1]	0.0*	31.2 [20.0; 44.9]
Neonatal	17.5 [13.9; 21.4]	2.7 [1.4; 4.4]	0.4 [0.0; 1.2]	0.4 [0.0; 1.2]	0.4 [0.0; 1.2]	0.2 [0.0; 0.8]	0.2 [0.0; 0.8]	21.8 [17.9; 26.2]
Non-ICU units	0.9 [0.8; 1.0]	1.1 [0.9; 1.2]	1.3 [1.2; 1.4]	0.5 [0.4; 0.5]	0.5 [0.4; 0.6]	0.7 [0.7; 0.8]	0.4 [0.3; 0.4]	5.3 [5.1; 5.6]
Teaching	1.3 [1.1; 1.4]	1.6 [1.4; 1.7]	1.5 [1.3; 1.7]	0.6 [0.5; 0.7]	0.6 [0.5; 0.7]	1.1 [1.0; 1.3]	0.5 [0.4; 0.6]	7.2 [6.8; 7.5]
Non-teaching	0.4 [0.3; 0.5]	0.5 [0.4; 0.6]	1.1 [0.9; 1.2]	0.2 [0.2; 0.3]	0.4 [0.3; 0.5]	0.3 [0.2; 0.4]	0.3 [0.2; 0.4]	3.3 [3.0; 3.5]

* When the incidence rate is 0, the confidence interval [CI] is not calculated.

** The "Other" column also includes HD-related BSIs and secondary BSIs arising from a skin, soft tissue, bone or joint infection.

Incidence Rate Trends

The BSI incidence rate in 2012–2013 decreased significantly compared with the 2008–2012 pooled mean rate (Table 3). This results from the combination of several non-significant decreases observed in teaching and non-teaching healthcare facilities. Although this downward trend is not significant, it was observed for every BSI type except for non-CRBSIs and cases that fell into the “Other” category (Figure 4). The drop reported in the CRBSI incidence rate is significant ($p = 0.01$).

FIGURE 4 BSI Incidence Rate, by Type of Infection, in Facilities that Previously participated in SPIN (N = 62), Québec, 2008–2012 and 2012–2013 (Incidence Rate per 10,000 Patient-Days [95% CI])

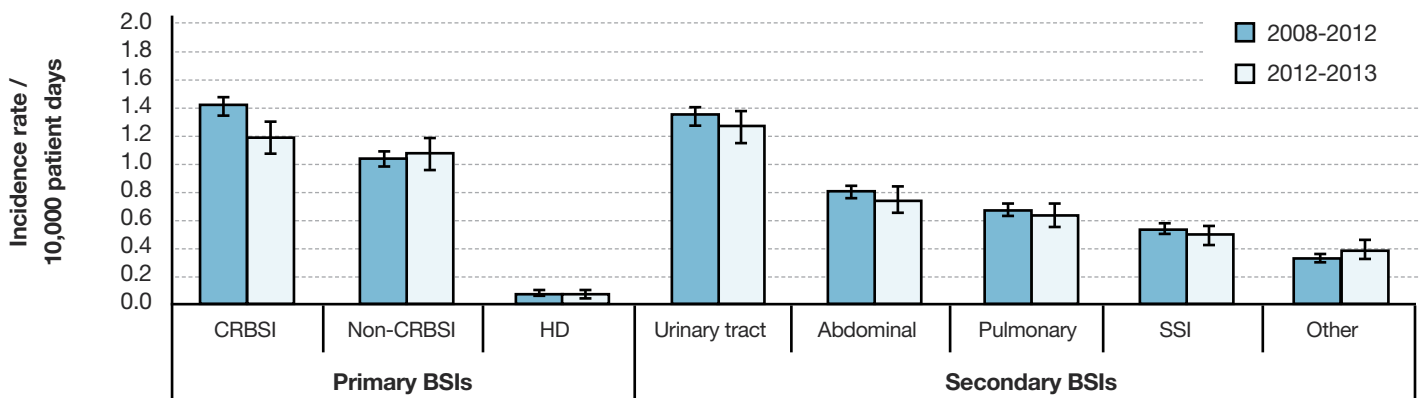


TABLE 3 BSI Incidence Rate, by Type of Healthcare Facility, in Facilities that Previously participated in SPIN (N = 62), Québec, 2008–2012 and 2012–2013 (Incidence Rate per 10,000 Patient-Days [95% CI])

	Number of Facilities	Incidence Rate	
		2008-2012	2012-2013
Teaching facilities	19	8.7 [8.5; 9.0]	8.3 [7.9; 8.8]
Non-teaching facilities	43	3.8 [3.6; 3.9]	3.6 [3.3; 3.9]
Total	62	6.2 [6.1; 6.3]	5.8 [5.6; 6.1]

Description of Cases

Patients who developed a BSI were aged between 0 and 101 years, with a median age of 66 years. Although the incidence rates were higher in ICUs, most of the BSIs occurred in non-ICU units (67%, Table 4 and Figure 5). CRBSIs were the most commonly encountered BSIs in ICUs, whereas BSIs secondary to urinary tract infections were the most common in non-ICU units. Similarly, CRBSIs were the most frequent type of BSI in teaching facilities, whereas BSIs originating from a urinary tract infection ranked first among non-teaching facilities (Table 4 and Figure 6).

FIGURE 5 Breakdown of Cases Based on Type of Unit and Type of ICU, Québec, 2012–2013 (%)

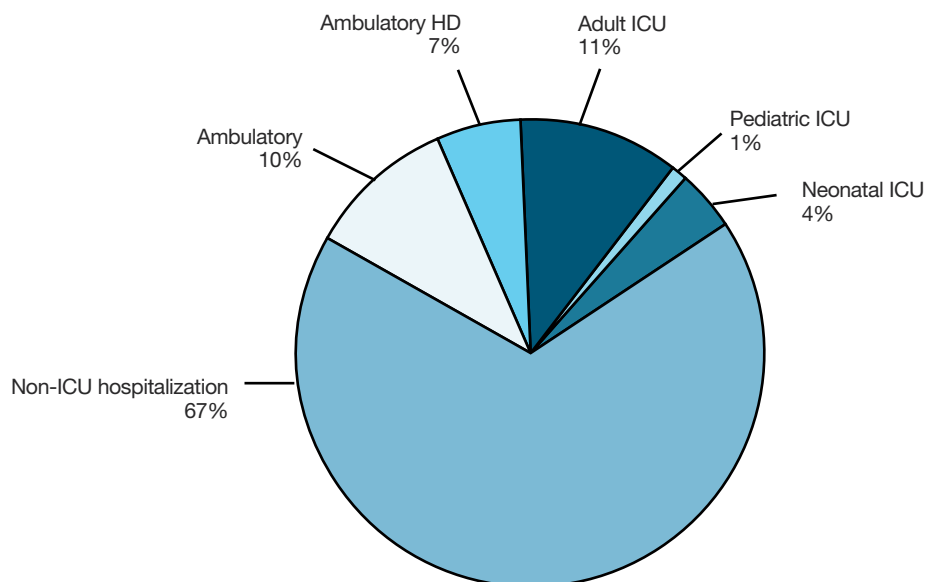


FIGURE 6 Breakdown of Cases Based on Type of BSI, for Teaching and Non-Teaching Healthcare Facilities, Québec, 2012–2013 (%)

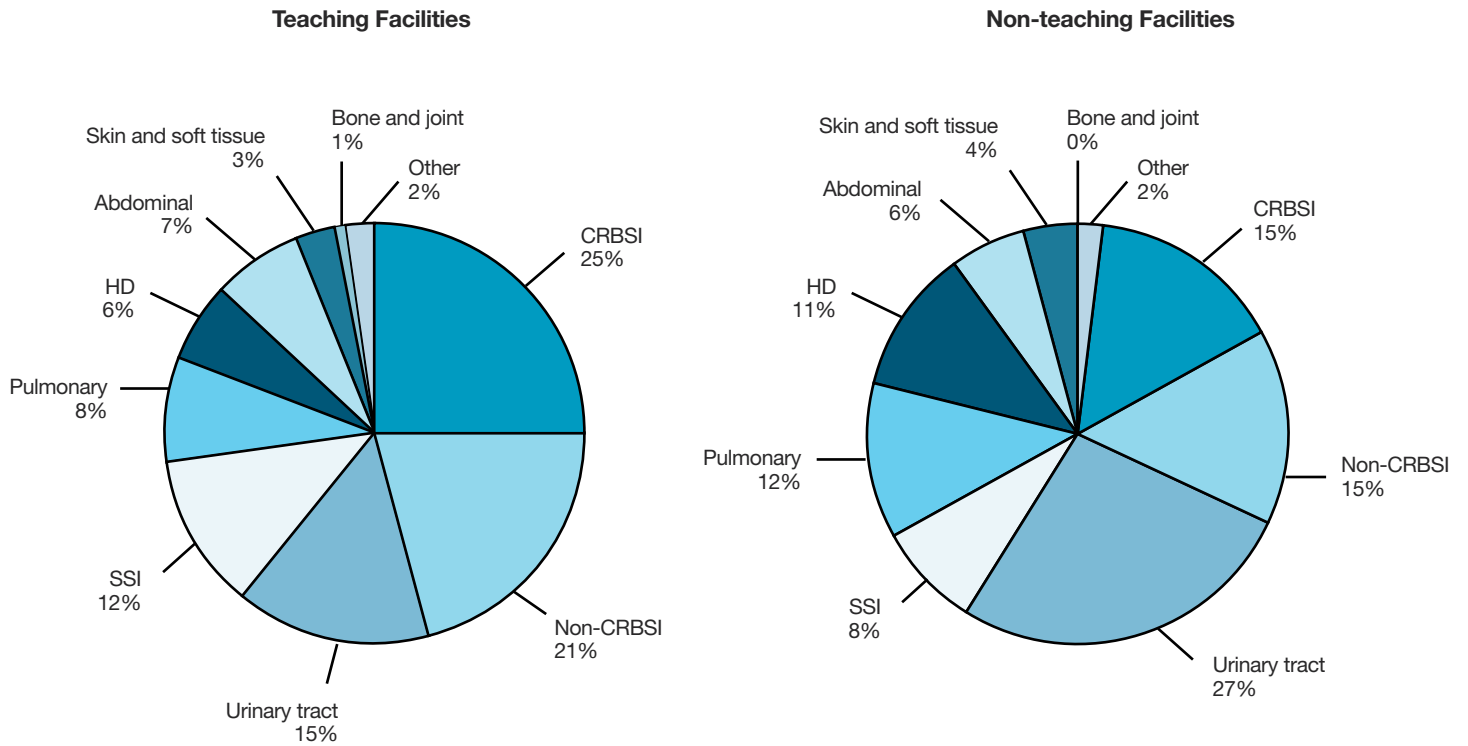


TABLE 4 Number of Cases for Each Type of BSI, by Type of Healthcare Facility, Type of Unit and Type of ICU, Québec, 2012–2013 (N)

	Primary BSIs			Secondary BSIs					Total
	CRBSI	Non-CRBSI	HD	Urinary tract	Abdominal	Pulmonary	SSI	Other*	
Total	609	546	213	525	188	244	306	166	2,797
Teaching	489	426	127	309	140	152	239	114	1,996
Non-teaching	120	120	86	216	48	92	67	52	801
Total hospitalized	525	425	26	484	181	236	282	157	2,316
Teaching	417	340	19	297	137	148	223	108	1,689
Non-teaching	108	85	7	187	44	88	59	49	627
ICU	217	54	4	33	21	58	21	22	430
Adult, teaching	75	30	2	15	16	39	13	19	209
Adult, non-teaching	39	9	2	14	3	17	6	2	92
Pediatric	19	2	0	2	0	0	1	0	24
Neonatal	84	13	0	2	2	2	1	1	105
Non-ICU hospitalization	308	371	22	451	160	178	261	135	1,886
Teaching	239	295	17	278	119	107	208	88	1,351
Non-teaching	69	76	5	173	41	71	53	47	535
Ambulatory	84	121	187	41	7	8	24	9	481
Teaching	72	86	108	12	3	4	16	6	307
Non-teaching	12	35	79	29	4	4	8	3	174

* The "Other" column also includes BSIs secondary to skin, soft tissue, bone or joint infection.

The most common co-morbidity reported in patients with BSI varied depending on the type of infection (Table 5). However, diabetes was in the top two in every category except non-CRBSIs. More than half of the patients, irrespective of the type of infection involved, had at least one comorbidity (Table 6). Note: the information on the presence of comorbidities was not reported for all patients.

TABLE 5 Proportion of Patients with Comorbidity, for Each Type of BSI, Québec, 2012–2013 [N (%)]

Comorbidity	Primary BSIs			Secondary BSIs			
	CRBSI	Non-CRBSI	HD	Urinary tract	Abdominal	Pulmonary	SSI
Diabetes	138 (27)	105 (22)	100 (52)	152 (33)	47 (29)	60 (30)	89 (34)
Non-hematologic malignancies	66 (13)	102 (22)	8 (4)	107 (23)	39 (26)	42 (22)	95 (38)
IV hyperalimentation	221 (42)	43 (9)	1 (0)	17 (3)	27 (17)	19 (9)	26 (10)
Hematologic malignancy	81 (15)	159 (33)	1 (0)	19 (4)	22 (14)	28 (14)	8 (3)
Neutropenia	77 (15)	177 (37)	0 (0)	19 (4)	13 (8)	33 (17)	5 (2)
Renal failure	49 (10)	18 (3)	191 (96)	19 (4)	13 (8)	17 (9)	10 (4)
Hematopoietic stem cell transplant	26 (5)	66 (14)	0 (0)	1 (0)	4 (2)	11 (6)	0 (0)
Solid organ transplant	7 (1)	15 (3)	2 (1)	9 (2)	8 (5)	3 (1)	6 (2)

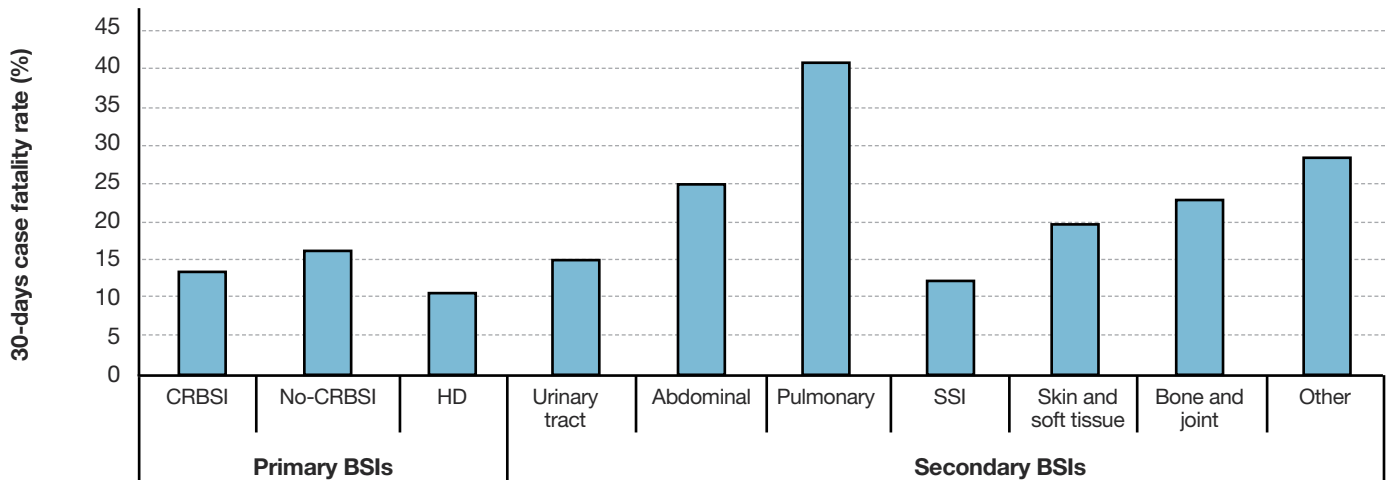
TABLE 6 Breakdown of Cases According to the Number of Comorbidities Reported in Relation to a Healthcare-Associated BSI, Québec, 2012–2013 [N (%)]

	Primary BSIs			Secondary BSIs			
	CRBSI	Non-CRBSI	HD	Urinary tract	Abdominal	Pulmonaire	ISO
0 comorbidity	113 (25)	121 (30)	74 (45)	194 (46)	57 (42)	66 (40)	76 (34)
1 comorbidity	225 (50)	119 (30)	85 (52)	174 (41)	48 (35)	60 (36)	107 (49)
2 comorbidities	92 (20)	112 (28)	3 (1)	43 (10)	23 (17)	25 (15)	30 (13)
3 comorbidities	16 (3)	40 (10)	0 (0)	6 (1)	6 (4)	13 (7)	5 (2)
4 comorbidities or more	0 (0)	3 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Overall, 18% of BSI cases resulted in death within 30 days of bacteremia onset (Table 7). The case fatality was the highest in patients with a BSI secondary to a pulmonary infection (Table 7 and Figure 7).

TABLE 7 10-Day and 30-Day Case Fatality for Each Type of Infection, 2012–2013 (N, %)

	BSIs N	10-day mortality		30-day mortality	
		N	%	N	%
Primary BSIs					
CRBSI	609	48	8	82	13
Non-CRBSI	546	61	11	89	16
HD	213	17	8	23	11
Secondary BSIs					
Urinary tract	525	41	8	79	15
Abdominal	188	28	15	47	25
Pulmonary	244	86	35	100	41
SSI	306	22	7	38	12
Skin and soft tissue	97	13	13	19	20
Bone and joint	13	2	15	3	23
Other	56	11	20	16	29
Total	2,797	329	12	496	18

FIGURE 7 30-Day Case Fatality for Each Type of Infection, Québec, 2012–2013 (%)

Microbiology

The two most frequently isolated microorganisms in reported cases and in cases resulting in death within 30 days were *Staphylococcus aureus* and *Escherichia coli* (Figure 8 and Table 8). Coagulase-negative *Staphylococcus* (CoNS) was the most frequently isolated microorganism in patients with a CRBSI (Figure 9 and Table 8). In patients with a non-CRBSI, a BSI secondary to a urinary tract infection or to an abdominal infection, the most common microorganism was *E. coli*. In cases of hemodialysis and BSIs secondary to a pulmonary infection or an SSI, *S. aureus* ranked first. A polymicrobial infection occurred in 7% of cases.

FIGURE 8 Breakdown of Categories of Isolated Microorganisms in All Cases (N = 3,021) and Cases of Fatality Within 30 Days (N = 543), Québec, 2012–2013 (%)

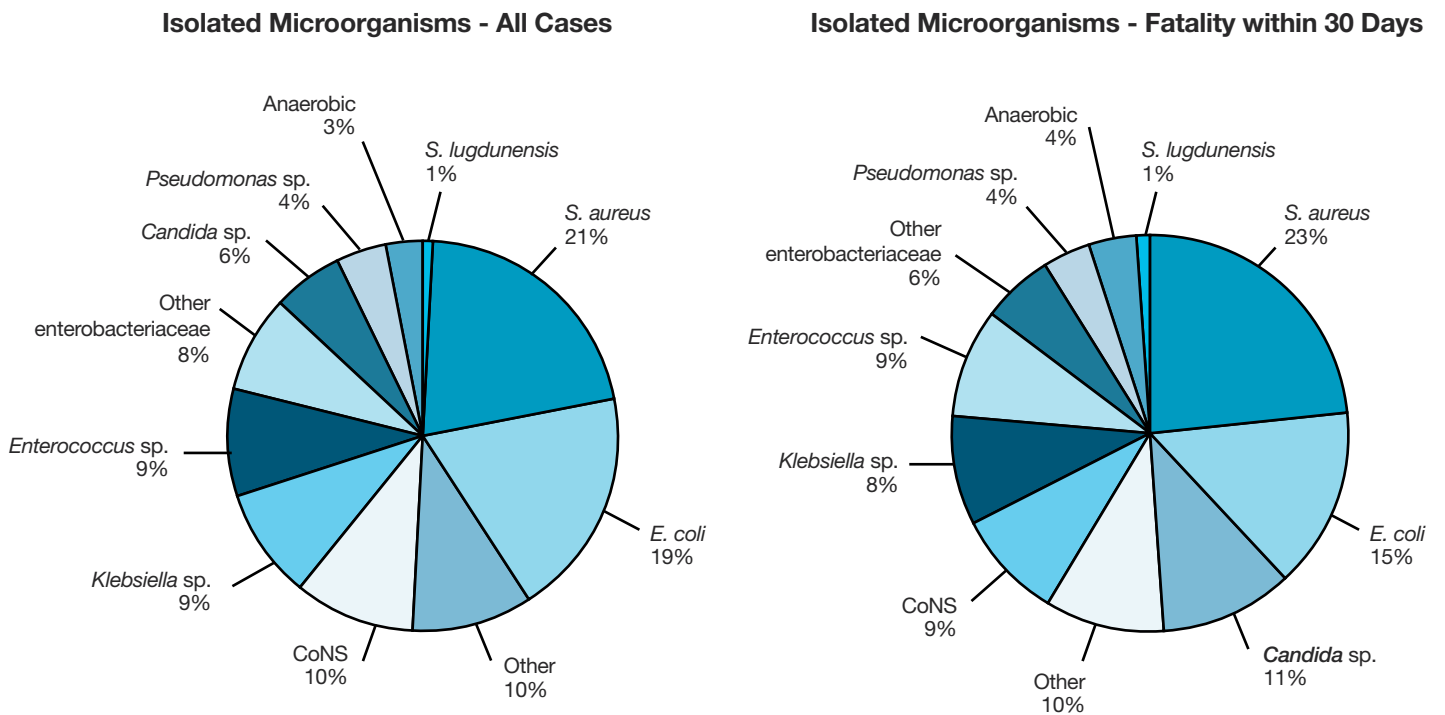


FIGURE 9 Breakdown of Categories of Isolated Microorganisms, for Each Type of BSI, Québec, 2012–2013 (%)

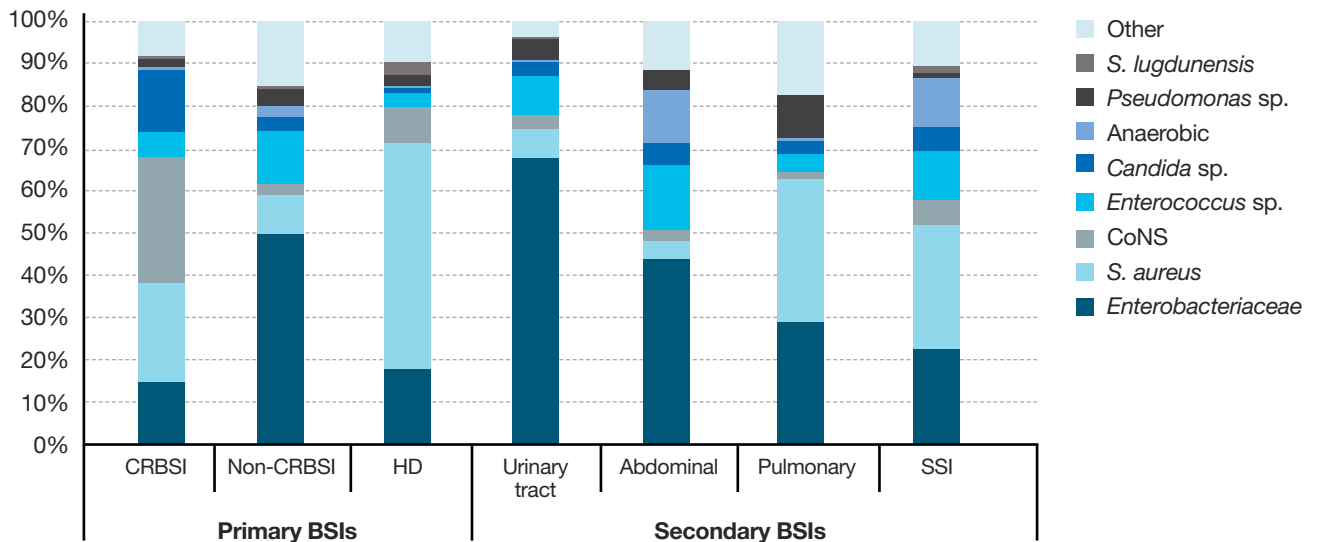


TABLE 8 Breakdown of Microorganisms associated with BSIs, by Type of BSI for all BSIs and Those Associated with a Fatality Within 30 Days, Québec, 2012–2013 (N, %)

Microorganism	Primary BSIs			Secondary BSIs				Overall*	30-Day Case Fatality Rate	
	CRBSI	Non-CRBSI	HD	Urinary tract	Abdominal	Pulmonary	SSI		N	%
Enterobacteriaceae	99	296	40	371	96	78	76	1,090	160	14.7
<i>E. coli</i>	21	178	6	242	49	28	35	571	82	14.4
<i>Klebsiella sp.</i>	38	73	9	73	31	28	17	281	47	16.7
Other enterobacteriaceae	40	45	25	56	16	22	24	238	31	13.0
<i>S. aureus</i>	155	55	119	36	10	88	100	637	128	20.1
CoNS	197	16	19	19	6	5	20	291	48	16.5
<i>Enterococcus sp.</i>	42	76	8	50	33	11	38	276	47	17.0
<i>Candida sp.</i>	97	18	2	19	12	9	19	179	58	32.4
Anaérobies	3	16	1	1	27	1	39	92	20	21.7
<i>Pseudomonas sp.</i>	14	28	7	29	11	27	3	123	24	19.5
<i>S. lugdunensis</i>	1	3	4	2	0	0	6	17	5	29.4
Other	52	86	22	17	24	45	35	316	53	16.8
Total	660	594	222	544	219	264	336	3,021	543	18.0

* This column includes the sum of the other columns as well as secondary BSIs arising from a skin, soft tissue, bone or joint infection, or another source.

Methicillin-resistant *S. aureus* (MRSA) accounted for 17% (110/637) of *S. aureus* BSIs in all geographic areas. This proportion has been decreasing on a fairly constant basis since 2008 (Table 9 and Figure 10). The opposite trend was observed in vancomycin-resistant enterococcus (VRE) BSIs, with 19% of *E. faecium* strains tested in 2012–2013 exhibiting resistance to vancomycin. BSIs associated with carbapenem-resistant enterobacteriaceae continued to be relatively rare in Québec and were observed primarily among *Enterobacter* species.

TABLE 9 Proportion of Strains Tested and Proportion of Resistance to Antibiotics for Selected Isolated Microorganisms, Québec, 2012–2013 (N, %)

Microorganism	Antibiotic	Isolated	Tested		Resistant	
		N	N	%	N	%
<i>Staphylococcus aureus</i>	Oxacillin	637	634	99.5	110	17.4
<i>Enterococcus faecium</i>	Vancomycin	94	94	100.0	18	19.1
<i>Enterococcus faecalis</i>	Vancomycin	135	133	98.5	0	0.0
<i>Klebsiella (pneumoniae/oxytoca)</i>	CSE 4	281	260	92.5	9	3.5
	Imipenem or meropenem	281	0	0.0	–	–
	Multiresistant 1	281	269	95.7	6	2.2
<i>Escherichia coli</i>	CSE 4	571	502	87.9	45	9.0
	Fluoroquinolones 3	571	542	94.9	147	27.1
	Imipenem or meropenem	571	0	0.0	–	–
	Multiresistant 1	571	514	90.0	16	3.1
<i>Enterobacter</i> sp.	CSE 4	107	102	95.3	15	14.7
	Imipenem or meropenem	107	88	82.2	2	2.3
	Multiresistant 1	107	100	93.4	1	1.0
<i>Pseudomonas</i> sp.	Amikacin, gentamicin or tobramycin	123	107	87.0	8	7.5
	CSE 2	123	117	95.1	9	7.7
	Fluoroquinolones 2	123	121	98.4	19	15.7
	Imipenem or meropenem	123	107	87.0	11	10.3
	Piperacillin/tazobactam	123	96	78.0	7	7.3
	Multiresistant 2	123	121	98.4	12	9.9
<i>Acinetobacter</i> sp.	Imipenem or meropenem	15	0	0.0	–	–
	Multiresistant 3	15	0	0.0	–	–

CSE 4: cefepime, cefotaxime, ceftazidime or ceftriaxone; CSE 2: cefepime or ceftazidime.

Fluoroquinolones 3: ciprofloxacin, levofloxacin or moxifloxacin;

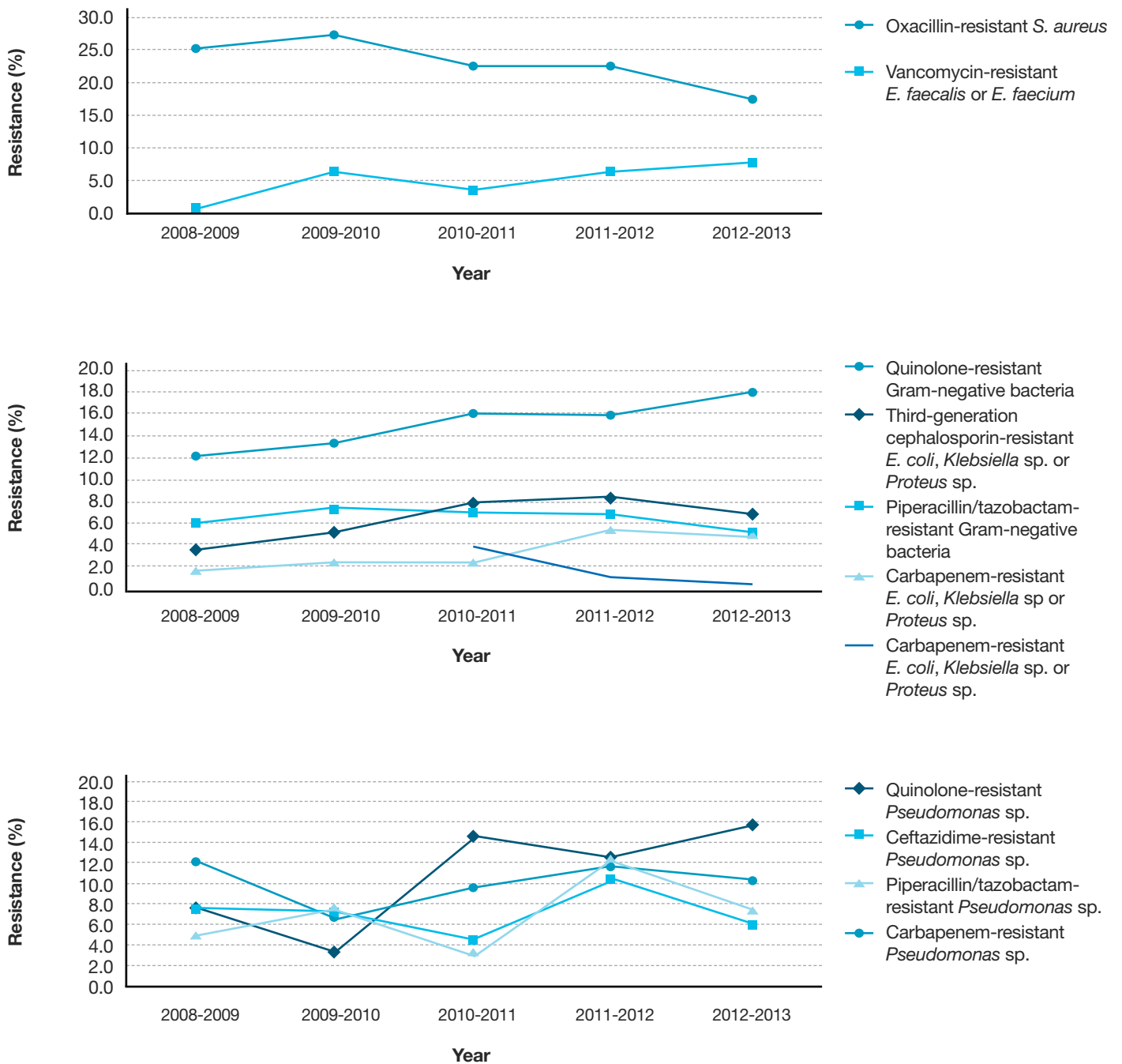
Fluoroquinolones 2: ciprofloxacin or levofloxacin;

Multiresistant 1: intermediate or resistant to an agent in three of the following five categories: cephalosporins 4, fluoroquinolones 3, aminoglycosides, carbapenems, piperacillin or piperacillin/tazobactam.

Multiresistant 2: intermediate or resistant to an agent in three of the following five categories: cephalosporins 2, fluoroquinolones 2, aminoglycosides, carbapenems, piperacillin or piperacillin/tazobactam.

Multiresistant 3: intermediate or resistant to an agent in three of the following six categories: cephalosporins 2, fluoroquinolones 2, aminoglycosides, carbapenems, piperacillin or piperacillin/tazobactam, ampicillin/sulbactam.

FIGURE 10 Antibiotic Resistance in Gram-Positive Bacteria, Gram-Negative Bacteria and *Pseudomonas* sp., Québec, 2008–2009 to 2012–2013 (%)



Results per Healthcare Facility

The incidence rate distribution for teaching facilities decreased compared to the background distribution from 2008–2009 to 2011–2012 (Table 10 and Figure 11). The same is observed in non-teaching facilities (Table 11 and Figure 12). We recommend that facilities compare their current rates with their own rates from previous years, as well as with figures reported by comparable facilities (teaching or non-teaching).

FIGURE 11 BSI Incidence Rate per Facility (2012–2013) and Percentile Ranking (2008–2009 to 2011–2012) for Teaching Healthcare Facilities, Québec, 2012–2013

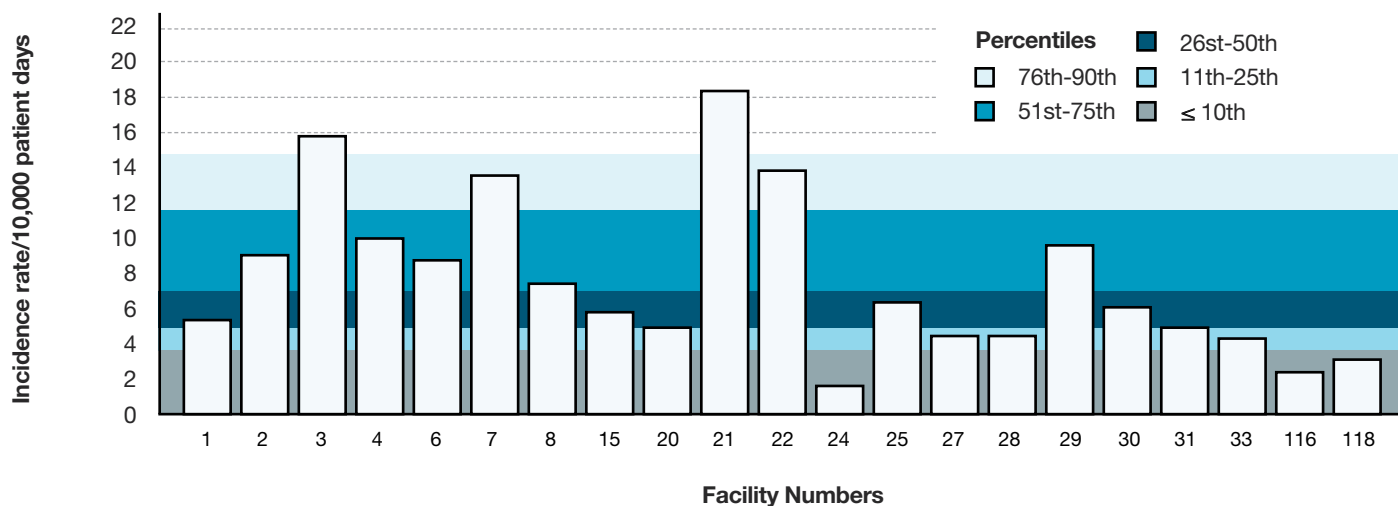


FIGURE 12 BSI Incidence Rate per Facility (2012–2013) and Percentile Ranking (2008–2009 to 2011–2012) for Non-Teaching Healthcare Facilities, Québec, 2012–2013

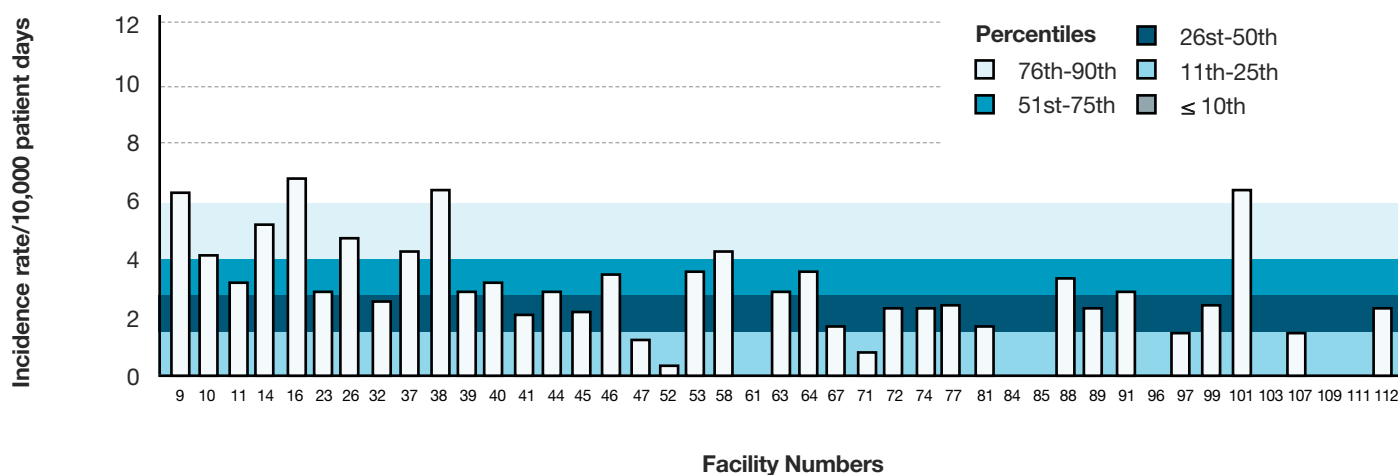


TABLE 10 BSI Incidence Rate per Facility and Percentile Ranking, for Teaching Healthcare Facilities, Québec, 2008–2012 to 2012–2013 (Incidence Rate per 10,000 Patient Days [95% CI])

Facility		2008-2012		2012-2013	
1	HÔPITAL CHARLES-LEMOYNE	5.1	[4.5; 5.8]	5.2	[4.1; 6.5]
2	HÔPITAL DE L'ENFANT-JÉSUS	---		8.8	[7.3; 10.5]
3	HÔPITAL ROYAL VICTORIA	14.5	[13.4; 15.5]	15.4	[13.3; 17.7]
4	HÔPITAL NOTRE-DAME DU CHUM	12.7	[11.7; 13.8]	9.7	[8.0; 11.5]
6	HÔPITAL DE MONTRÉAL POUR ENFANTS	15.5	[13.6; 17.6]	8.5	[5.8; 11.8]
7	PAVILLON L'HÔTEL-DIEU DE QUÉBEC	11.4	[9.8; 13]	13.3	[10.9; 15.8]
8	PAV. MAISONNEUVE / PAV. MARCEL-LAMOUREUX	9.2	[8.5; 9.9]	7.2	[6.0; 8.5]
15	HÔPITAL FLEURIMONT	7.6	[6.9; 8.4]	5.7	[4.4; 7.2]
20	HÔPITAL DE CHICOUTIMI	3.2	[2.7; 3.8]	4.8	[3.5; 6.3]
21	HÔPITAL SAINT-LUC DU CHUM	15.8	[14.6; 17.1]	17.8	[15.3; 20.5]
22	HÔTEL-DIEU DU CHUM	9.5	[8.4; 10.6]	13.4	[11.0 – 16.0]
24	HÔPITAL DU SAINT-SACREMENT	---		1.6	[0.7; 2.8]
25	HÔPITAL DU SACRÉ-CŒUR DE MONTRÉAL	7.4	[6.6; 8.2]	6.1	[4.9; 7.4]
27	PAVILLON CENTRE HOSPITALIER DE L'UNIVERSITÉ LAVAL	1.6	[1.1; 2.3]	4.4	[3.3; 5.6]
28	PAVILLON SAINT-FRANÇOIS D'ASSISE	4.0	[3.2; 4.8]	4.4	[3.2; 5.9]
29	HÔPITAL GÉNÉRAL DE MONTRÉAL	11.2	[10.2; 12.2]	9.4	[7.6; 11.3]
30	HÔTEL-DIEU DE SHERBROOKE	5.6	[4.8; 6.5]	5.8	[4.1; 7.7]
31	PAVILLON SAINT-JOSEPH	4.4	[3.9; 5.1]	4.7	[3.6; 5.9]
33	INSTITUT UNIVERSITAIRE DE CARDIOLOGIE ET DE PNEUMOLOGIE DE QUÉBEC	5.5	[4.7; 6.2]	4.2	[3.0; 5.5]
116	INSTITUT THORACIQUE DE MONTRÉAL	4.3	[3.1; 5.7]	2.2	[0.7; 4.6]
118	HÔPITAL NEUROLOGIQUE DE MONTRÉAL	4.5	[3.2; 5.9]	3.1	[1.3; 5.6]
	10th percentile	3.5		3.1	
	25th percentile	4.8		4.4	
	50th percentile	6.9		5.8	
	74th percentile	11.5		9.4	
	90h percentile	14.6		13.4	

TABLE 11 BSI Incidence Rate per Facility and Percentile Ranking, for Non-Teaching Healthcare Facilities, Québec, 2008–2012 to 2012–2013 (Incidence Rate per 10,000 Patient Days [95% CI])

Facility		2008-2012		2012-2013	
9	HÔPITAL DU HAUT-RICHELIEU	6.5	[5.7; 7.4]	6.3	[4.8; 8]
10	HÔPITAL PIERRE-BOUCHER	5.1	[3.8; 6.6]	4.1	[3; 5.4]
11	HÔPITAL PIERRE-LE GARDEUR	3.3	[2.8; 3.9]	3.3	[2.3; 4.5]
14	CENTRE HOSPITALIER RÉGIONAL DE LANAUDIÈRE	5.8	[5; 6.6]	5.2	[3.8; 6.8]
16	HÔPITAL RÉGIONAL DE RIMOUSKI	5.4	[4.4; 6.6]	6.8	[4.8; 9.1]
23	HÔTEL-DIEU D'ARTHABASKA	2.8	[2.1; 3.5]	2.9	[1.7; 4.5]
26	HÔPITAL DE VERDUN	5.9	[5.1; 6.8]	4.8	[3.4; 6.5]
32	CENTRE HOSPITALIER RÉGIONAL DU GRAND-PORTAGE	3.8	[2.8; 4.9]	2.6	[1.1; 4.6]
37	HÔTEL-DIEU DE SOREL	5.4	[4.4; 6.4]	4.3	[2.7; 6.3]
38	HÔPITAL JEAN-TALON	5.5	[4.6; 6.4]	6.4	[4.4; 8.8]
39	HÔPITAL DE GATINEAU	2.4	[1.7; 3.2]	2.8	[1.6; 4.2]
40	HÔPITAL DE HULL	3.3	[2.5; 4.1]	3.2	[2; 4.7]
41	HÔPITAL DU CENTRE-DE-LA-MAURICIE	2.5	[1.8; 3.3]	2.1	[1; 3.6]
44	HÔPITAL SAINTE-CROIX	3.6	[2.9; 4.4]	2.9	[1.7; 4.4]
45	HÔPITAL DE SAINT-EUSTACHE	4.0	[3.2; 4.8]	2.3	[1.4; 3.4]
46	HÔPITAL DE GRANBY	1.4	[0.9; 2.1]	3.5	[2; 5.6]
47	HÔPITAL DE ROUYN-NORANDA	2.6	[1.7; 3.7]	1.2	[0.2; 2.9]
52	CENTRE HOSPITALIER HÔTEL-DIEU D'AMOS	2.1	[1.3; 3.1]	0.4	[0; 1.6]
53	HÔPITAL DE CHANDLER	3.8	[2.4; 5.5]	3.6	[1.1; 7.4]
58	HÔPITAL DU SUROÏT	4.2	[3.4; 5.1]	4.1	[2.7; 5.9]
61	HÔPITAL NOTRE-DAME-DE-FATIMA	1.4	[0.4; 2.9]	0.0	
63	HÔPITAL DE SAINT-GEORGES	3.1	[2.3; 3.9]	2.8	[1.4; 4.6]
64	HÔPITAL LE ROYER	1.5	[0.8; 2.2]	3.6	[1.7; 6.2]
67	HÔPITAL ET CENTRE DE RÉADAPTATION DE JONQUIÈRE	2.1	[1.4; 3]	1.8	[0.7; 3.3]
71	HÔPITAL DE MATANE	0.7	[0.2; 1.6]	0.8	[0; 3.2]
72	HÔPITAL ET CENTRE D'HÉBERGEMENT DE SEPT-ÎLES	2.3	[1.3; 3.6]	2.3	[0.7; 4.7]
74	HÔPITAL DE DOLBEAU-MISTASSINI	2.4	[1.5; 3.7]	2.4	[0.6; 5.2]
77	HÔPITAL D'AMQUI	1.0	[0.3; 2.3]	2.4	[0.2; 6.9]
81	HÔPITAL DE MONT-LAURIER	1.7	[0.9; 2.9]	1.7	[0.3; 4.1]
84	HÔPITAL DE NOTRE-DAME-DU-LAC	0.6	[0.1; 1.6]	0.0	
85	CSSS DU HAUT-SAINT-MAURICE	0.6	[0.1; 1.8]	0.0	
88	HÔPITAL. CLSC ET CENTRE D'HÉBERGEMENT DE ROBERVAL	2.9	[2.1; 3.9]	3.3	[1.6; 5.5]
89	HÔPITAL DE MONTMAGNY	1.9	[1.1; 2.9]	2.4	[0.7; 4.9]
91	HÔPITAL HÔTEL-DIEU DE GASPÉ	2.9	[1.6; 4.6]	2.9	[0.5; 7.1]
96	CENTRE DE SANTÉ DE CHIBOUGAMAU	0.3	[0; 1.3]	0.0	
97	HÔPITAL DE MARIA	4.6	[3.2; 6.2]	1.4	[0.3; 3.5]
99	HÔPITAL BROME-MISSISQUOI-PERKINS	3.8	[2.7; 5.1]	2.4	[1; 4.6]
101	HÔPITAL RÉGIONAL DE SAINT-JÉRÔME	5.0	[4.3; 5.7]	6.4	[4.9; 8]
103	HÔPITAL LAURENTIEN	1.7	[1; 2.5]	0.0	
107	HÔPITAL DE L'ARCHIPEL	1.3	[0; 4.9]	1.5	[0; 5.8]

Facility		2008-2012		2012-2013	
109	HÔPITAL DE SAINTE-ANNE-DES-MONTS	1.1	[0.3; 2.5]	0.0	
111	HÔPITAL DE PAPINEAU	1.0	[0.4; 2]	0.0	
112	HÔPITAL D'ALMA	3.3	[2.4; 4.4]	2.3	[0.9; 4.3]
	10th percentile		0.0		0.0
	25th percentile		1.5		1.4
	50th percentile		2.8		2.4
	74th percentile		4.0		3.6
	90th percentile		5.9		5.1



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