

Supplementary Table 1. Incidence rate per 100,000 person-years of patients with *E. cloacae* complex blood stream infections (n=154) in Calgary, Alberta, Canada (2015-17)

Sex	Age	2015		2016		2017	
		IR	95% CI	IR	95% CI	IR	95% CI
Males	0-4 yr	0	[0.0-9.1]	4.6	[0.6-16.5]	2.4	[0.1-13.1]
	5-14 yr	0	[0.0-5.1]	0	[0.0-4.9]	2.6	[0.3-9.3]
	15-19 yr	0	[0.0-10.7]	5.8	[0.7-20.9]	2.9	[0.1-16.0]
	20-24 yr	2.4	[0.1-13.5]	2.5	[0.1-13.9]	2.5	[0.1-14.0]
	25-34 yr	0	[0.0-3.5]	1.9	[0.2-6.8]	1.9	[0.2-6.9]
	35-44 yr	1	[0.0-5.4]	1.9	[0.2-6.9]	0	[0.0-3.5]
	45-54 yr	5.8	[1.9-13.5]	3.5	[0.7-10.1]	11.5	[5.5-21.2]
	55-64 yr	13.4	[6.1-25.5]	13	[5.9-24.7]	11.2	[4.8-22.1]
	65-74 yr	11.2	[3.0-28.6]	7.9	[1.6-23.1]	12.3	[4.0-28.7]
	75+ yr	32.5	[13.1-66.9]	13.4	[2.8-39.1]	38.8	[17.8-73.7]
Females	Any	4.4	[2.9-6.5]	4.4	[2.9-6.3]	6.2	[4.4-8.5]
	0-4 yr	4.7	[0.6-16.8]	2.4	[0.1-13.3]	0	[0.0-9.1]
	5-14 yr	1.5	[0.0-8.1]	0	[0.0-5.2]	0	[0.0-5.1]
	15-19 yr	0	[0.0-11.5]	0	[0.0-11.4]	0	[0.0-11.4]
	20-24 yr	5.2	[0.6-18.9]	0	[0.0-9.9]	0	[0.0-9.9]
	25-34 yr	0	[0.0-3.5]	0.9	[0.0-5.3]	2.9	[0.6-8.4]
	35-44 yr	2	[0.2-7.2]	2	[0.2-7.1]	1.9	[0.2-6.9]
	45-54 yr	2.4	[0.3-8.6]	2.4	[0.3-8.6]	2.4	[0.3-8.6]
	55-64 yr	6	[1.6-15.4]	16	[8.0-28.6]	7	[2.3-16.3]
	65-74 yr	7.8	[1.6-22.7]	2.5	[0.1-13.8]	6.9	[1.4-20.1]
Overall	75+ yr	6.7	[0.8-24.3]	26	[11.2-51.3]	6.4	[0.8-23.2]
	Any	3.0	[1.8-4.7]	4.2	[2.8-6.2]	2.7	[1.6-4.4]
	0-4 yr	2.4	[0.3-8.7]	3.5	[0.7-10.2]	1.2	[0.0-6.7]
	5-14 yr	0.7	[0.0-3.9]	0.0	[0.0-2.5]	1.3	[0.2-4.8]
	15-19 yr	0.0	[0.0-5.5]	3.0	[0.4-10.8]	1.5	[0.0-8.3]
	20-24 yr	3.8	[0.8-11.0]	1.3	[0.0-7.2]	1.3	[0.0-7.2]
	25-34 yr	0.0	[0.0-1.7]	1.4	[0.3-4.1]	2.4	[0.8-5.6]
	35-44 yr	1.5	[0.3-4.3]	1.9	[0.5-5.0]	1.0	[0.1-3.4]
	45-54 yr	4.1	[1.7-8.5]	2.9	[1.0-6.8]	7.0	[3.6-12.2]
	55-64 yr	9.8	[5.2-16.7]	14.5	[8.9-22.4]	9.1	[4.8-15.6]
Hospital discharges ¹	65-74 yr	9.4	[3.8-19.4]	5.1	[1.4-13.1]	9.5	[4.1-18.7]
	75+ yr	17.5	[8.0-33.3]	20.7	[10.3-37.1]	20.2	[10.1-36.2]
	Any	1.2	[0.9-1.6]	1.4	[1.1-1.9]	1.5	[1.1-2.0]

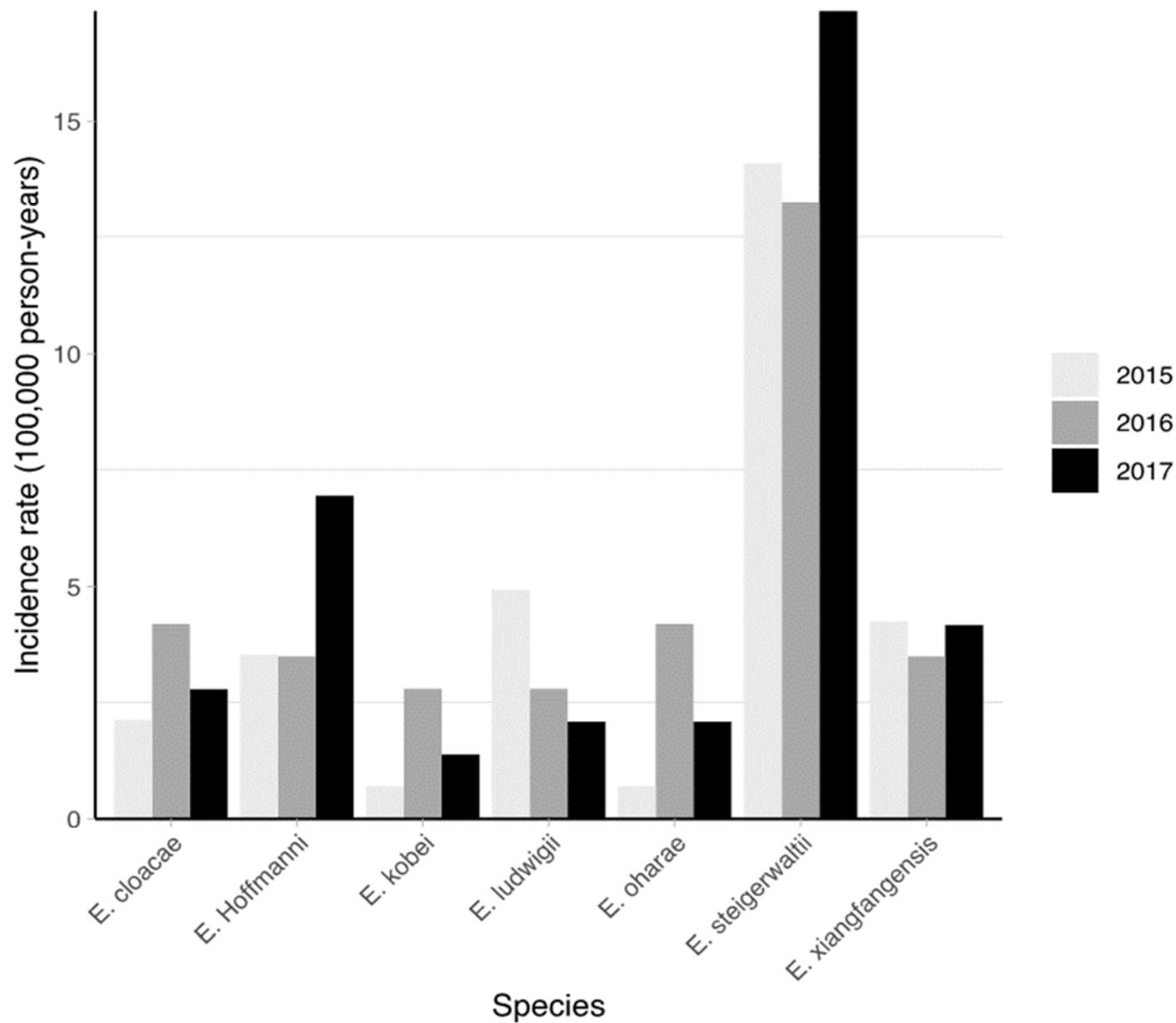
Hospital discharges¹ 31.7 [23.1-42.5] 37.0 [27.7-48.4] 38.8 [29.3-50.4]

¹ Incidence rate per 100,000 hospital discharges-years

Supplementary Table 2. *E. cloacae* complex Sequence Types obtained from the Calgary Region during 2015-17 (n=154)

Species	Sequence Types
<i>E. hormaechei</i> subsp. <i>steigerwaltii</i> (n=64)	ST45 (n=2), ST50 (n=10) , ST62 (n=1), ST88 (n=2), ST110 (n=1), ST113 (n=2), ST116 (n=4), ST133 (n=4), ST134 (n=1), ST141 (n=3), ST170 (n=1), ST190 (n=1), ST234 (n=2), ST254 (n=1), ST281 (n=1), ST335 (n=1), ST376 (n=1), ST550 (n=1), ST636 (n=1), ST656 (n=1), ST688 (n=2), ST705 (n=1), ST740 (n=2), ST742 (n=2), ST769 (n=1), ST776 (n=1), ST776 (n=1), ST982 (n=1), ST1115 (n=1), ST1147 (n=1), ST1156 (n=1), ST1159 (n=1), ST1156 (n=1), ST1170 (n=1), ST1178 (n=1), ST1181 (n=1), ST1191 (n=1), ST1209 (n=1)
<i>E. hormaechei</i> subsp. <i>hoffmanni</i> (n=20)	ST102 (n=3), ST118 (n=1), ST135 (n=1), ST145 (n=3), ST168 (n=1), ST278 (n=3), ST286 (n=5) , ST1148 (n=1), ST1169 (n=1)
<i>E. hormaechei</i> subsp. <i>xiangfangesis</i> (n=17)	ST66 (n=1), ST114 (n=1), ST120 (n=2), ST127 (n=1), ST144 (n=1), ST148 (n=1), ST171 (n=1), ST264 (n=1), ST279 (n=1), ST527 (n=1), ST557 (n=1), ST902 (n=1), ST1143 (n=1), ST1146 (n=1), ST1158 (n=1), ST1160 (n=1)
<i>E. ludwigii</i> (n=14)	ST13 (n=1), ST14 (n=2), ST492 (n=1), ST1145 (n=1), ST1149 (n=1), ST1164 (n=1), ST1179 (n=1), ST1182 (n=1), ST1184 (n=1), ST1185 (n=1), ST1186 (n=1), ST1187 (n=1), ST1210 (n=1)
<i>E. cloacae</i> subsp. <i>cloacae</i> (n=13)	ST41 (n=1), ST373 (n=1), ST469 (n=1), ST598 (n=1), ST681 (n=1), ST803 (n=1), ST995 (n=1), ST1163 (n=1), ST1171 (n=2), ST1172 (n=1), ST1175 (n=1), ST1180 (n=1), ST1190 (n=1)
<i>E. hormaechei</i> subsp. <i>oharae</i> (n=10)	ST68 (n=2), ST108 (n=8)
<i>E. kobei</i> (n=7)	ST191 (n=2), ST1034 (n=1), ST1150 (n=1), ST1167 (n=1), ST1173 (n=1)
<i>E. asburiae</i> (n=3)	ST162 (n=1), ST252 (n=1), ST1166 (n=1)
<i>E. cloacae</i> subsp. <i>dissolvens</i> (n=3)	ST1175 (n=1), ST1180 (n=1), ST1190 (n=1)
<i>E. mori</i> (n=2)	ST1155 (n=1), ST1174 (n=1)
<i>E. hormaechei</i> subsp. <i>hormaechei</i> (n=1)	ST1183 (n=1)

Supplementary Figure 1. Incidence rate per 100,000 person-years of patients with *E. cloacae* complex blood stream infections (n=154) in Calgary, Alberta, Canada (2015-17)



Supplementary Figure 2. A core based-SNP Phylogenetic tree of *Enterobacter cloacae* complex causing blood stream infections (n=154) in Calgary, Alberta, Canada (2015-17)

The tree was created using the RedDog pipeline for mapping-based detection of SNPs, the reference is the *E. cloacae* subsp. *cloacae* ATCC 13047. Core SNPs (n=46,2875) were used to build maximum-likelihood tree using RAxML. (n=49,1087 bases of repeat or phage-related regions were removed). The tree was visualized with iTOL (<https://itol.embl.de/>)

