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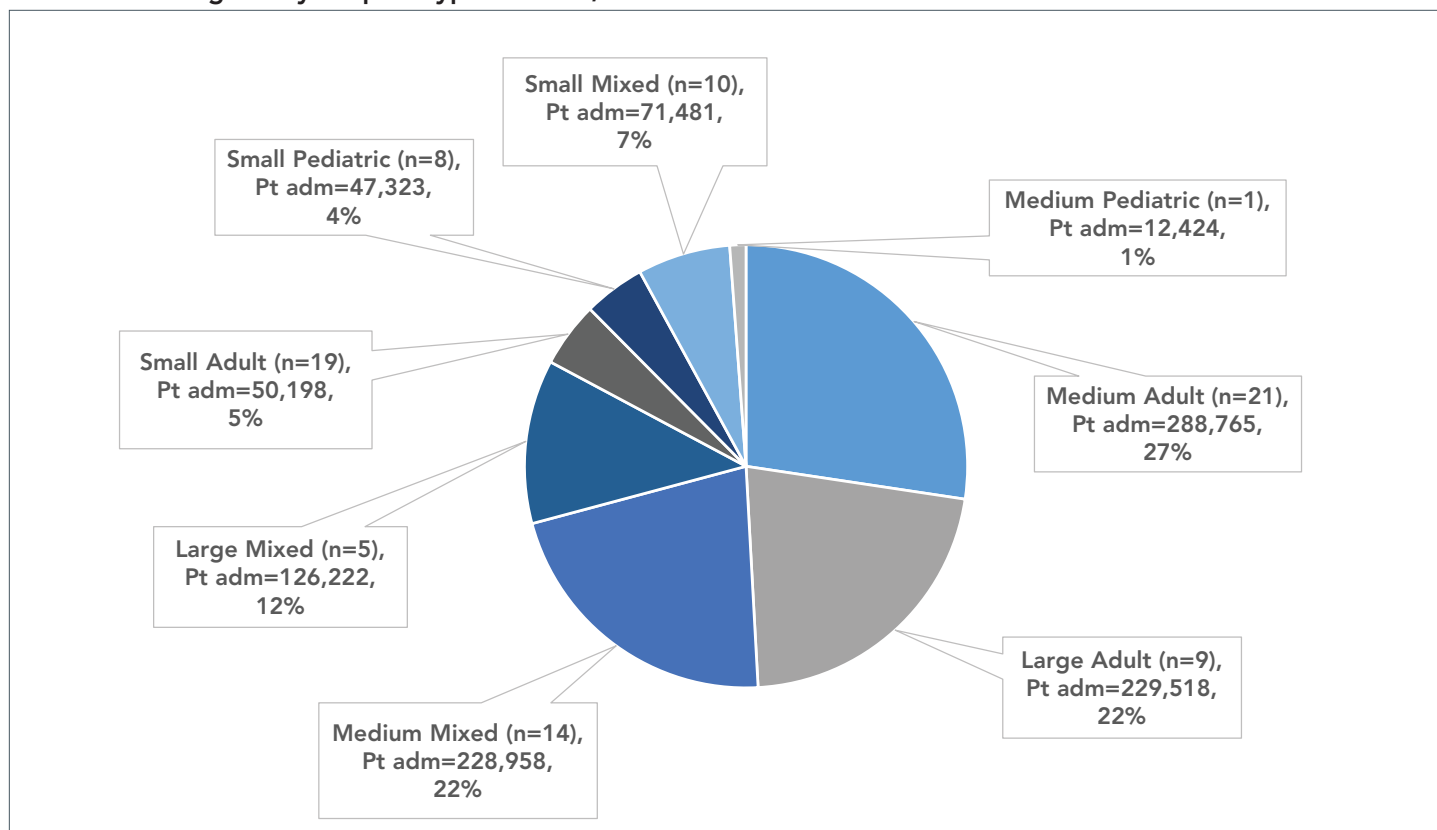
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Abbreviation: Pt adm, patient admissions

Note: Hospital size categories: Small (1-200 beds), Medium (201-499 beds), Large (500+ beds)



Table S1.1: Cases and incidence rates of healthcare-associated and community-associated *Clostridioides difficile* infection by region, hospital type and hospital size, Canada, 2016–2020

| Cases and incidence rates | Year | | | | |
|-----------------------------------|-------|-------|-------|-------|-------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| HA-CDI | | | | | |
| National | | | | | |
| Number of HA-CDI cases | 3,048 | 2,968 | 2,809 | 2,662 | 2,623 |
| Rate per 1,000 patient admissions | 3.30 | 3.17 | 2.97 | 2.75 | 2.82 |
| Rate per 10,000 patient days | 4.39 | 4.19 | 3.94 | 3.62 | 3.80 |
| Number of reporting hospitals | 67 | 68 | 68 | 73 | 82 |
| West | | | | | |
| Number of HA-CDI cases | 1,291 | 1,259 | 1,133 | 1,088 | 1,014 |
| Rate per 1,000 patient admissions | 3.12 | 3.04 | 2.73 | 2.65 | 2.68 |
| Rate per 10,000 patient days | 4.17 | 4.07 | 3.76 | 3.52 | 3.59 |
| Central | | | | | |
| Number of HA-CDI cases | 1,465 | 1,407 | 1,350 | 1,303 | 1,346 |
| Rate per 1,000 patient admissions | 3.56 | 3.33 | 3.23 | 2.86 | 3.13 |
| Rate per 10,000 patient days | 4.94 | 4.51 | 4.19 | 3.87 | 4.10 |
| East | | | | | |
| Number of HA-CDI cases | 292 | 302 | 325 | 271 | 263 |
| Rate per 1,000 patient admissions | 2.95 | 3.02 | 3.23 | 2.71 | 2.21 |
| Rate per 10,000 patient days | 3.33 | 3.47 | 3.67 | 3.06 | 3.35 |
| North | | | | | |
| Number of HA-CDI cases | N/A | N/A | N/A | 0 | 0 |
| Rate per 1,000 patient admissions | N/A | N/A | N/A | 0 | 0 |
| Rate per 10,000 patient days | N/A | N/A | N/A | 0 | 0 |
| Hospital type | | | | | |
| Adult | | | | | |
| Number of HA-CDI cases | 1,954 | 1,891 | 1,836 | 1,714 | 1,759 |
| Rate per 1,000 patient admissions | 3.93 | 3.76 | 3.68 | 3.22 | 3.50 |
| Rate per 10,000 patient days | 4.76 | 4.45 | 4.31 | 3.85 | 4.13 |
| Mixed | | | | | |
| Number of HA-CDI cases | 1,007 | 992 | 884 | 846 | 764 |
| Rate per 1,000 patient admissions | 2.74 | 2.66 | 2.30 | 2.22 | 1.98 |
| Rate per 10,000 patient days | 3.91 | 3.84 | 3.39 | 3.24 | 3.22 |
| Paediatric | | | | | |
| Number of HA-CDI cases | 87 | 85 | 88 | 103 | 100 |
| Rate per 1,000 patient admissions | 1.49 | 1.41 | 1.88 | 1.82 | 2.39 |

| Cases and incidence rates | Year | | | | |
|-----------------------------------|-------|-------|-------|-------|-------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| HA-CDI (continued) | | | | | |
| Hospital type (continued) | | | | | |
| Paediatric (continued) | | | | | |
| Rate per 10,000 patient days | 3.33 | 3.43 | 3.44 | 3.49 | 3.78 |
| Hospital size | | | | | |
| Small (1–200 beds) | | | | | |
| Number of HA-CDI cases | 165 | 152 | 155 | 180 | 216 |
| Rate per 1,000 patient admissions | 2.44 | 2.53 | 2.62 | 2.25 | 1.56 |
| Rate per 10,000 patient days | 2.95 | 3.11 | 3.10 | 3.03 | 2.92 |
| Medium (201–499 beds) | | | | | |
| Number of HA-CDI cases | 1,747 | 1,699 | 1,527 | 1,401 | 1,457 |
| Rate per 1,000 patient admissions | 3.10 | 3.04 | 2.82 | 2.51 | 2.97 |
| Rate per 10,000 patient days | 4.37 | 4.23 | 3.86 | 3.43 | 3.89 |
| Large (500+ beds) | | | | | |
| Number of HA-CDI cases | 1,136 | 1,117 | 1,126 | 1,081 | 950 |
| Rate per 1,000 patient admissions | 3.90 | 3.53 | 3.41 | 3.27 | 3.16 |
| Rate per 10,000 patient days | 4.77 | 4.33 | 4.22 | 4.05 | 3.94 |
| CA-CDI | | | | | |
| National | | | | | |
| Number of CA-CDI cases | 960 | 1,044 | 1,034 | 932 | 1,022 |
| Rate per 1,000 patient admissions | 1.34 | 1.37 | 1.36 | 1.17 | 1.30 |
| Rate per 10,000 patient days | 1.80 | 1.82 | 1.78 | 1.56 | 1.80 |
| Number of reporting hospitals | 55 | 57 | 57 | 62 | 71 |
| West | | | | | |
| Number of CA-CDI cases | 243 | 287 | 263 | 239 | 238 |
| Rate per 1,000 patient admissions | 1.03 | 1.19 | 1.08 | 1.01 | 1.02 |
| Rate per 10,000 patient days | 1.44 | 1.65 | 1.55 | 1.38 | 1.49 |
| Central | | | | | |
| Number of CA-CDI cases | 613 | 634 | 672 | 625 | 707 |
| Rate per 1,000 patient admissions | 1.59 | 1.50 | 1.61 | 1.37 | 1.64 |
| Rate per 10,000 patient days | 2.22 | 2.03 | 2.09 | 1.85 | 2.15 |
| East | | | | | |
| Number of CA-CDI cases | 104 | 123 | 99 | 68 | 77 |
| Rate per 1,000 patient admissions | 1.06 | 1.24 | 1.00 | 0.68 | 0.65 |
| Rate per 10,000 patient days | 1.18 | 1.42 | 1.12 | 0.77 | 0.98 |



Table S1.1: Cases and incidence rates of healthcare-associated and community-associated *Clostridioides difficile* infection by region, hospital type and hospital size, Canada, 2016–2020 (continued)

| Cases and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| CA-CDI (continued) | | | | | |
| North | | | | | |
| Number of CA-CDI cases | N/A | N/A | N/A | 0 | 0 |
| Rate per 1,000 patient admissions | N/A | N/A | N/A | 0 | 0 |
| Rate per 10,000 patient days | N/A | N/A | N/A | 0 | 0 |
| Hospital type | | | | | |
| Adults | | | | | |
| Number of CA-CDI cases | 663 | 696 | 691 | 642 | 710 |
| Rate per 1,000 patient admissions | 1.73 | 1.78 | 1.78 | 1.54 | 1.75 |
| Rate per 10,000 patient days | 2.12 | 2.11 | 2.08 | 1.84 | 2.10 |
| Mixed | | | | | |
| Number of CA-CDI cases | 272 | 327 | 330 | 273 | 299 |
| Rate per 1,000 patient admissions | 0.95 | 1.02 | 0.99 | 0.83 | 0.88 |
| Rate per 10,000 patient days | 1.37 | 1.47 | 1.46 | 1.21 | 1.45 |
| Paediatric | | | | | |
| Number of CA-CDI cases | 25 | 21 | 13 | 17 | 13 |
| Rate per 1,000 patient admissions | 0.50 | 0.40 | 0.33 | 0.34 | 0.36 |
| Rate per 10,000 patient days | 1.15 | 1.00 | 0.61 | 0.67 | 0.57 |
| Hospital size | | | | | |
| Small (1–200 beds) | | | | | |
| Number of CA-CDI cases | 63 | 66 | 48 | 47 | 78 |
| Rate per 1,000 patient admissions | 1.16 | 1.39 | 1.02 | 0.69 | 0.61 |
| Rate per 10,000 patient days | 1.31 | 1.59 | 1.14 | 0.92 | 1.16 |
| Medium (201–499 beds) | | | | | |
| Number of CA-CDI cases | 672 | 681 | 732 | 631 | 670 |
| Rate per 1,000 patient admissions | 1.29 | 1.31 | 1.45 | 1.22 | 1.47 |
| Rate per 10,000 patient days | 1.80 | 1.81 | 1.97 | 1.64 | 1.90 |
| Large (500+ beds) | | | | | |
| Number of CA-CDI cases | 225 | 297 | 254 | 254 | 274 |
| Rate per 1,000 patient admissions | 1.58 | 1.51 | 1.21 | 1.23 | 1.37 |
| Rate per 10,000 patient days | 2.01 | 1.91 | 1.52 | 1.54 | 1.85 |

Abbreviations: CA-CDI, community-associated *C. difficile* infection; *C. difficile*, *Clostridioides difficile*; HA-CDI, healthcare-associated *C. difficile* infection

**Table S1.2: Antimicrobial resistance of healthcare-associated and community-associated *Clostridioides difficile* infection isolates^{a,b}, Canada, 2016–2020**

| Antibiotics | Year | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|
| | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
| | n | % | n | % | n | % | n | % | n | % |
| HA-CDI | | | | | | | | | | |
| Clindamycin | 109 | 22.1 | 115 | 21.9 | 225 | 47.4 | 171 | 40.2 | 43 | 15.7 |
| Moxifloxacin | 85 | 17.2 | 98 | 18.6 | 59 | 12.4 | 50 | 11.8 | 17 | 6.2 |
| Rifampin | 8 | 1.6 | 13 | 2.5 | 8 | 1.7 | 3 | 0.7 | 3 | 1.1 |
| Total number of isolates tested ^c | 494 | N/A | 526 | N/A | 475 | N/A | 425 | N/A | 274 | N/A |
| CA-CDI | | | | | | | | | | |
| Clindamycin | 36 | 22.1 | 34 | 22.7 | 82 | 52.6 | 48 | 39.3 | 12 | 18.2 |
| Moxifloxacin | 18 | 11.0 | 16 | 10.7 | 11 | 7.1 | 14 | 11.5 | 5 | 7.6 |
| Rifampin | 1 | 0.6 | 1 | 0.7 | 2 | 1.3 | 2 | 1.6 | 0 | 0 |
| Total number of isolates tested ^c | 163 | N/A | 150 | N/A | 156 | N/A | 122 | N/A | 66 | N/A |

Abbreviations: CA-CDI, community-associated *C. difficile* infection; *C. difficile*, *Clostridioides difficile*; HA-CDI, healthcare-associated *C. difficile* infection; N/A, not applicable^a All *C. difficile* isolates from 2016 to 2020 submitted to National Microbiology Laboratory were susceptible to tigecycline and vancomycin^b CDI isolates are collected for resistance testing during the two-month period (March and April of each year) for adults (age 18 years and older) and year-round for children (age one year to younger than 18 years old) from admitted patients only^c Total number reflects the number of isolates tested for each of the antibiotics listed above**Table S1.3: Number and proportion of common ribotypes of healthcare-associated and community-associated *Clostridioides difficile* infection cases^a, Canada, 2016–2020**

| Ribotype | Year | | | | | | | | | |
|---------------|------|------|------|------|------|------|------|------|------|------|
| | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
| | n | % | n | % | n | % | n | % | n | % |
| HA-CDI | | | | | | | | | | |
| RT027 | 57 | 11.5 | 81 | 15.4 | 40 | 8.4 | 32 | 7.5 | 17 | 6.2 |
| RT106 | 73 | 14.8 | 59 | 11.2 | 60 | 12.7 | 77 | 18.1 | 41 | 15.0 |
| RT014 | 38 | 7.7 | 40 | 7.6 | 43 | 9.1 | 46 | 10.8 | 22 | 8.0 |
| RT020 | 41 | 8.3 | 34 | 6.5 | 36 | 7.6 | 28 | 6.6 | 23 | 8.4 |
| RT002 | 21 | 4.3 | 23 | 4.4 | 29 | 6.1 | 26 | 6.1 | 10 | 3.7 |
| RT056 | 26 | 5.3 | 25 | 4.8 | 19 | 4.0 | 18 | 4.2 | 7 | 2.6 |
| RT076 | 12 | 2.4 | 21 | 4.0 | 12 | 2.5 | 3 | 0.7 | 9 | 3.3 |
| RT015 | 17 | 3.4 | 12 | 2.3 | 18 | 3.8 | 20 | 4.7 | 9 | 3.3 |
| RT057 | 13 | 2.6 | 15 | 2.7 | 13 | 2.7 | 3 | 0.7 | 3 | 1.1 |
| RT012 | 9 | 1.8 | 5 | 1.0 | 18 | 3.8 | 12 | 2.8 | 10 | 3.7 |
| RT072 | 13 | 2.6 | 9 | 1.7 | 2 | 0.4 | 1 | 0.2 | 1 | 0.4 |
| RT078/126 | 10 | 2.0 | 17 | 3.2 | 10 | 2.1 | 9 | 2.1 | 10 | 3.7 |
| RT629 | 7 | 1.4 | 5 | 1.0 | 13 | 2.7 | 8 | 1.9 | 8 | 2.9 |
| RT103 | 12 | 2.4 | 6 | 1.1 | 10 | 2.1 | 8 | 1.9 | 3 | 1.1 |
| RT054 | 4 | 0.8 | 6 | 1.1 | 8 | 1.7 | 10 | 2.4 | 8 | 2.9 |
| Other | 141 | 28.5 | 168 | 31.9 | 144 | 30.3 | 124 | 29.2 | 93 | 33.9 |
| Total | 494 | N/A | 526 | N/A | 475 | N/A | 425 | N/A | 274 | N/A |
| CA-CDI | | | | | | | | | | |
| RT106 | 18 | 11.0 | 22 | 14.7 | 25 | 16.0 | 22 | 18.0 | 9 | 13.6 |
| RT020 | 18 | 11.0 | 13 | 8.7 | 12 | 7.7 | 9 | 7.4 | 3 | 4.6 |
| RT014 | 16 | 9.8 | 17 | 11.3 | 15 | 9.6 | 10 | 8.2 | 5 | 7.6 |
| RT027 | 12 | 7.4 | 9 | 6.0 | 5 | 3.2 | 4 | 3.3 | 1 | 1.5 |
| RT056 | 9 | 5.5 | 3 | 2.0 | 14 | 9.0 | 4 | 3.3 | 4 | 6.1 |



Table S1.3: Number and proportion of common ribotypes of healthcare-associated and community-associated *Clostridioides difficile* infection cases^a, Canada, 2016–2020 (continued)

| Ribotype | Year | | | | | | | | | |
|---------------------------|------|------|------|------|------|------|------|------|------|------|
| | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
| | n | % | n | % | n | % | n | % | n | % |
| CA-CDI (continued) | | | | | | | | | | |
| RT002 | 8 | 4.9 | 6 | 4.0 | 5 | 3.2 | 5 | 4.1 | 4 | 6.1 |
| RT015 | 5 | 3.1 | 6 | 4.0 | 6 | 3.9 | 10 | 8.2 | 6 | 9.1 |
| RT012 | 4 | 2.5 | 7 | 4.7 | 6 | 3.9 | 4 | 3.3 | 3 | 4.6 |
| RT019 | 5 | 3.1 | 4 | 2.7 | 7 | 4.5 | 3 | 2.5 | 0 | 0 |
| RT328 | 1 | 0.6 | 3 | 2.0 | 3 | 1.9 | 0 | 0 | 0 | 0 |
| RT072 | 8 | 4.9 | 2 | 1.3 | 1 | 0.6 | 0 | 0 | 0 | 0 |
| RT153 | 4 | 2.5 | 4 | 2.7 | 2 | 1.3 | 1 | 0.8 | 0 | 0 |
| RT629 | 0 | 0 | 1 | 0.7 | 4 | 2.6 | 3 | 2.5 | 1 | 1.5 |
| RT078/126 | 3 | 1.8 | 3 | 2.0 | 1 | 0.6 | 2 | 1.6 | 3 | 4.6 |
| RT103 | 1 | 0.6 | 4 | 2.7 | 2 | 1.3 | 0 | 0 | 2 | 3.0 |
| Other | 51 | 31.3 | 46 | 30.7 | 48 | 30.8 | 45 | 36.9 | 25 | 37.9 |
| Total | 163 | N/A | 150 | N/A | 156 | N/A | 122 | N/A | 66 | N/A |

Abbreviations: CA-CDI, community-associated *C. difficile* infection; *C. difficile*, *Clostridioides difficile*; HA-CDI, healthcare-associated *C. difficile* infection; N/A, not applicable
^a CDI isolates are collected for typing during the two-month period (March and April of each year) for adults (age 18 years and older) and year-round for children (age one year to younger than 18 years old from admitted patients only)

Table S2.1: Cases and incidence rates of healthcare-associated and community-associated methicillin-resistant *Staphylococcus aureus* bloodstream infections by region, hospital type and hospital size, 2016–2020

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| HA-MRSA BSI | | | | | |
| National | | | | | |
| Number of HA-MRSA BSI infections | 305 | 317 | 369 | 364 | 314 |
| Rate per 1,000 patient admissions | 0.31 | 0.32 | 0.38 | 0.35 | 0.31 |
| Rate per 10,000 patient days | 0.43 | 0.44 | 0.51 | 0.46 | 0.42 |
| Number of reporting hospitals | 64 | 65 | 62 | 72 | 84 |
| West | | | | | |
| Number of HA-MRSA BSI infections | 134 | 136 | 181 | 163 | 141 |
| Rate per 1,000 patient admissions | 0.30 | 0.30 | 0.41 | 0.36 | 0.34 |
| Rate per 10,000 patient days | 0.41 | 0.43 | 0.57 | 0.49 | 0.46 |
| Central | | | | | |
| Number of HA-MRSA BSI infections | 136 | 150 | 151 | 183 | 139 |
| Rate per 1,000 patient admissions | 0.31 | 0.33 | 0.35 | 0.37 | 0.30 |
| Rate per 10,000 patient days | 0.45 | 0.47 | 0.47 | 0.50 | 0.39 |
| East | | | | | |
| Number of HA-MRSA BSI infections | 35 | 31 | 37 | 18 | 34 |

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| HA-MRSA BSI (continued) | | | | | |
| East (continued) | | | | | |
| Rate per 1,000 patient admissions | 0.34 | 0.30 | 0.36 | 0.17 | 0.25 |
| Rate per 10,000 patient days | 0.38 | 0.34 | 0.40 | 0.20 | 0.36 |
| North | | | | | |
| Number of HA-MRSA BSI infections | 0 | 0 | 0 | 0 | 0 |
| Rate per 1,000 patient admissions | 0 | 0 | 0 | 0 | 0 |
| Rate per 10,000 patient days | 0 | 0 | 0 | 0 | 0 |
| Hospital type | | | | | |
| Adults | | | | | |
| Number of HA-MRSA BSI infections | 179 | 200 | 242 | 216 | 200 |
| Rate per 1,000 patient admissions | 0.36 | 0.40 | 0.49 | 0.39 | 0.38 |
| Rate per 10,000 patient days | 0.45 | 0.49 | 0.59 | 0.47 | 0.45 |
| Mixed | | | | | |
| Number of HA-MRSA BSI infections | 109 | 102 | 115 | 126 | 102 |
| Rate per 1,000 patient admissions | 0.27 | 0.24 | 0.27 | 0.30 | 0.24 |



Table S2.1: Cases and incidence rates of healthcare-associated and community-associated methicillin-resistant *Staphylococcus aureus* bloodstream infections by region, hospital type and hospital size, 2016–2020 (continued)

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| HA-MRSA BSI (continued) | | | | | |
| Hospital type (continued) | | | | | |
| Mixed (continued) | | | | | |
| Rate per 10,000 patient days | 0.39 | 0.37 | 0.41 | 0.44 | 0.38 |
| Paediatric | | | | | |
| Number of HA-MRSA BSI infections | 17 | 15 | 12 | 22 | 12 |
| Rate per 1,000 patient admissions | 0.21 | 0.18 | 0.18 | 0.28 | 0.20 |
| Rate per 10,000 patient days | 0.42 | 0.38 | 0.30 | 0.49 | 0.29 |
| Hospital size | | | | | |
| Small (1–200 beds) | | | | | |
| Number of HA-MRSA BSI infections | 25 | 18 | 19 | 20 | 24 |
| Rate per 1,000 patient admissions | 0.30 | 0.24 | 0.27 | 0.23 | 0.15 |
| Rate per 10,000 patient days | 0.37 | 0.30 | 0.33 | 0.30 | 0.26 |
| Medium (201–499 beds) | | | | | |
| Number of HA-MRSA BSI infections | 182 | 186 | 194 | 175 | 146 |
| Rate per 1,000 patient admissions | 0.31 | 0.32 | 0.35 | 0.30 | 0.29 |
| Rate per 10,000 patient days | 0.46 | 0.47 | 0.50 | 0.43 | 0.39 |
| Large (500+ beds) | | | | | |
| Number of HA-MRSA BSI infections | 98 | 113 | 156 | 169 | 144 |
| Rate per 1,000 patient admissions | 0.30 | 0.33 | 0.43 | 0.43 | 0.40 |
| Rate per 10,000 patient days | 0.38 | 0.42 | 0.55 | 0.54 | 0.50 |
| CA-MRSA BSI | | | | | |
| National | | | | | |
| Number of CA-MRSA BSI infections | 260 | 253 | 359 | 450 | 467 |
| Rate per 1,000 patient admissions | 0.26 | 0.25 | 0.37 | 0.43 | 0.46 |
| Rate per 10,000 patient days | 0.36 | 0.36 | 0.50 | 0.58 | 0.63 |
| Number of reporting hospitals | 64 | 65 | 62 | 67 | 78 |
| West | | | | | |
| Number of CA-MRSA BSI infections | 135 | 137 | 203 | 250 | 244 |
| Rate per 1,000 patient admissions | 0.30 | 0.31 | 0.45 | 0.55 | 0.59 |

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| CA-MRSA BSI (continued) | | | | | |
| West (continued) | | | | | |
| Rate per 10,000 patient days | 0.42 | 0.43 | 0.64 | 0.75 | 0.79 |
| Central | | | | | |
| Number of CA-MRSA BSI infections | 116 | 100 | 147 | 192 | 191 |
| Rate per 1,000 patient admissions | 0.26 | 0.22 | 0.34 | 0.39 | 0.41 |
| Rate per 10,000 patient days | 0.39 | 0.32 | 0.48 | 0.55 | 0.56 |
| East | | | | | |
| Number of CA-MRSA BSI infections | 9 | 16 | 9 | 8 | 32 |
| Rate per 1,000 patient admissions | 0.09 | 0.15 | 0.09 | 0.08 | 0.24 |
| Rate per 10,000 patient days | 0.10 | 0.17 | 0.10 | 0.09 | 0.34 |
| North | | | | | |
| Number of CA-MRSA BSI infections | 0 | 0 | 0 | 0 | 1 |
| Rate per 1,000 patient admissions | 0 | 0 | 0 | 0 | 0.44 |
| Rate per 10,000 patient days | 0 | 0 | 0 | 0 | 1.64 |
| Hospital type | | | | | |
| Adults | | | | | |
| Number of CA-MRSA BSI infections | 150 | 144 | 226 | 283 | 263 |
| Rate per 1,000 patient admissions | 0.30 | 0.29 | 0.46 | 0.51 | 0.50 |
| Rate per 10,000 patient days | 0.38 | 0.35 | 0.55 | 0.62 | 0.59 |
| Mixed | | | | | |
| Number of CA-MRSA BSI infections | 95 | 98 | 114 | 147 | 192 |
| Rate per 1,000 patient admissions | 0.23 | 0.24 | 0.27 | 0.35 | 0.45 |
| Rate per 10,000 patient days | 0.34 | 0.36 | 0.41 | 0.52 | 0.72 |
| Paediatric | | | | | |
| Number of CA-MRSA BSI infections | 15 | 11 | 19 | 20 | 13 |
| Rate per 1,000 patient admissions | 0.19 | 0.13 | 0.29 | 0.25 | 0.21 |
| Rate per 10,000 patient days | 0.37 | 0.28 | 0.47 | 0.45 | 0.32 |



Table S2.1: Cases and incidence rates of healthcare-associated and community-associated methicillin-resistant *Staphylococcus aureus* bloodstream infections by region, hospital type and hospital size, 2016–2020 (continued)

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| CA-MRSA BSI (continued) | | | | | |
| Hospital size | | | | | |
| Small (1–200 beds) | | | | | |
| Number of CA-MRSA BSI infections | 15 | 16 | 22 | 26 | 31 |
| Rate per 1,000 patient admissions | 0.18 | 0.21 | 0.32 | 0.30 | 0.19 |
| Rate per 10,000 patient days | 0.22 | 0.27 | 0.38 | 0.39 | 0.33 |
| Medium (201–499 beds) | | | | | |
| Number of CA-MRSA BSI infections | 155 | 155 | 186 | 251 | 281 |
| Rate per 1,000 patient admissions | 0.27 | 0.27 | 0.33 | 0.44 | 0.57 |
| Rate per 10,000 patient days | 0.39 | 0.41 | 0.48 | 0.64 | 0.79 |
| Large (500+ beds) | | | | | |
| Number of CA-MRSA BSI infections | 90 | 82 | 151 | 173 | 156 |
| Rate per 1,000 patient admissions | 0.28 | 0.24 | 0.44 | 0.44 | 0.44 |
| Rate per 10,000 patient days | 0.35 | 0.30 | 0.56 | 0.55 | 0.54 |

Abbreviations: CA-MRSA BSI, community-associated methicillin-resistant *S. aureus* bloodstream infection; HA-MRSA BSI, healthcare-associated methicillin-resistant *S. aureus* bloodstream infection; *S. aureus*, *Staphylococcus aureus*

Table S2.2: Antimicrobial resistance of healthcare-associated and community-associated methicillin-resistant *Staphylococcus aureus* bloodstream infection isolates^{a,b,c}, Canada, 2016–2020

| Antibiotics | Year | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|
| | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
| | n | % | n | % | n | % | n | % | n | % |
| HA-MRSA BSI | | | | | | | | | | |
| Erythromycin | 218 | 79.9 | 239 | 80.7 | 257 | 76.9 | 196 | 75.1 | 158 | 70.9 |
| Ciprofloxacin | 214 | 78.4 | 228 | 77.0 | 249 | 74.6 | 188 | 72.0 | 145 | 65.0 |
| Clindamycin | 131 | 48.0 | 141 | 47.6 | 168 | 50.3 | 128 | 49.2 | 76 | 34.1 |
| Tetracycline | 13 | 4.8 | 16 | 5.4 | 15 | 4.5 | 18 | 6.9 | 14 | 6.3 |
| Trimethoprim/sulfamethoxazole | 4 | 1.5 | 4 | 1.4 | 3 | 0.9 | 3 | 1.1 | 4 | 1.8 |
| Rifampin | 7 | 2.6 | 3 | 1.0 | 3 | 0.9 | 6 | 2.3 | 2 | 0.9 |
| Tigecycline | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Daptomycin | 3 | 1.1 | 2 | 0.7 | 0 | 0.0 | 0 | 0.0 | 2 | 0.9 |
| Total number of isolates tested ^d | 273 | N/A | 296 | N/A | 334 | N/A | 260 | N/A | 223 | N/A |
| CA-MRSA BSI | | | | | | | | | | |
| Erythromycin | 173 | 75.9 | 188 | 81.0 | 245 | 73.4 | 244 | 76.3 | 248 | 71.7 |
| Ciprofloxacin | 172 | 75.4 | 177 | 76.3 | 231 | 69.2 | 218 | 68.1 | 218 | 63.0 |
| Clindamycin | 90 | 39.5 | 85 | 36.6 | 111 | 33.2 | 94 | 29.4 | 110 | 31.8 |
| Tetracycline | 17 | 7.5 | 18 | 7.8 | 33 | 9.9 | 21 | 6.6 | 20 | 5.8 |
| Trimethoprim/sulfamethoxazole | 6 | 2.6 | 3 | 1.3 | 11 | 3.3 | 5 | 1.6 | 10 | 2.9 |
| Rifampin | 3 | 1.3 | 6 | 2.6 | 3 | 0.9 | 0 | 0.0 | 2 | 0.6 |
| Tigecycline | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Daptomycin | 2 | 0.9 | 3 | 1.3 | 0 | 0.0 | 0 | 0.0 | 2 | 0.6 |
| Total number of isolates tested ^d | 228 | N/A | 232 | N/A | 334 | N/A | 320 | N/A | 346 | N/A |

Abbreviations: CA-MRSA BSI, community-associated methicillin-resistant *Staphylococcus aureus* bloodstream infection; HA-MRSA BSI, healthcare-associated methicillin-resistant *Staphylococcus aureus* bloodstream infection; N/A, not applicable

^a Isolates with unknown case type were excluded from stratified analysis

^b All MRSA isolates from 2016 to 2020 submitted to National Microbiology Laboratory were susceptible to linezolid and vancomycin

^c In some years, the number of isolates tested for resistance varied by antibiotic

^d Total number reflects the number of isolates tested for each of the antibiotics listed above



Table S2.3: Number and proportion of select methicillin-resistant *Staphylococcus aureus* epidemic types identified^a

| Epidemic type | Year | | | | | | | | | |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|
| | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
| | n | % | n | % | n | % | n | % | n | % |
| CMRSA 2 | 189 | 33.6 | 173 | 30.7 | 196 | 27.9 | 169 | 25.0 | 131 | 21.2 |
| CMRSA 7 | 39 | 6.9 | 48 | 8.5 | 57 | 8.1 | 66 | 9.7 | 84 | 13.6 |
| CMRSA 10 | 258 | 45.9 | 253 | 44.9 | 327 | 46.6 | 335 | 49.5 | 311 | 50.2 |
| Other epidemic types ^b | 54 | 9.6 | 61 | 10.8 | 92 | 13.1 | 90 | 13.3 | 69 | 11.1 |
| Unassigned | 22 | 3.9 | 29 | 5.1 | 30 | 4.3 | 17 | 2.5 | 25 | 4.0 |
| Total number of isolates tested | 562 | N/A | 564 | N/A | 702 | N/A | 677 | N/A | 620 | N/A |

Abbreviation: N/A, not applicable

^a MRSA blood isolates are collected year round

^b Other epidemic types from 2016 to 2020 include CMRSA 1, CMRSA 3/6, CMRSA 4, CMRSA 5, CMRSA 8, ST72, ST88, ST97, ST398, ST772, USA 700, USA 1000, USA 1100 and European

Table S3.1: Number of vancomycin-resistant *Enterococci* bloodstream infections incidence rates by region, hospital type and hospital size, 2016–2020

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| National | | | | | |
| Number of VRE BSI infections | 121 | 154 | 246 | 247 | 207 |
| Rate per 1,000 patient admissions | 0.13 | 0.16 | 0.26 | 0.23 | 0.24 |
| Rate per 10,000 patient days | 0.18 | 0.23 | 0.35 | 0.32 | 0.31 |
| Number of reporting hospitals | 58 | 58 | 58 | 68 | 62 |
| West | | | | | |
| Number of VRE BSI infections | 45 | 47 | 99 | 93 | 100 |
| Rate per 1,000 patient admissions | 0.12 | 0.13 | 0.25 | 0.22 | 0.27 |
| Rate per 10,000 patient days | 0.17 | 0.18 | 0.35 | 0.29 | 0.36 |
| Central | | | | | |
| Number of VRE BSI infections | 75 | 106 | 146 | 154 | 105 |
| Rate per 1,000 patient admissions | 0.16 | 0.22 | 0.31 | 0.29 | 0.25 |
| Rate per 10,000 patient days | 0.23 | 0.32 | 0.43 | 0.41 | 0.33 |
| East | | | | | |
| Number of VRE BSI infections | 1 | 1 | 1 | 0 | 2 |
| Rate per 1,000 patient admissions | 0.01 | 0.01 | 0.01 | 0.00 | 0.03 |
| Rate per 10,000 patient days | 0.01 | 0.01 | 0.01 | 0.00 | 0.03 |
| Hospital type | | | | | |
| Adult | | | | | |
| Number of VRE BSI infections | 88 | 116 | 203 | 205 | 164 |
| Rate per 1,000 patient admissions | 0.17 | 0.23 | 0.39 | 0.34 | 0.32 |
| Rate per 10,000 patient days | 0.22 | 0.29 | 0.48 | 0.44 | 0.38 |

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| Hospital type (continued) | | | | | |
| Mixed | | | | | |
| Number of VRE BSI infections | 32 | 37 | 38 | 31 | 40 |
| Rate per 1,000 patient admissions | 0.09 | 0.10 | 0.10 | 0.08 | 0.13 |
| Rate per 10,000 patient days | 0.13 | 0.16 | 0.16 | 0.12 | 0.20 |
| Paediatric | | | | | |
| Number of VRE BSI infections | 1 | 1 | 5 | 11 | 3 |
| Rate per 1,000 patient admissions | 0.01 | 0.01 | 0.08 | 0.14 | 0.06 |
| Rate per 10,000 patient days | 0.02 | 0.03 | 0.12 | 0.25 | 0.08 |
| Hospital size | | | | | |
| Small (1–200 beds) | | | | | |
| Number of VRE BSI infections | 2 | 11 | 21 | 26 | 13 |
| Rate per 1,000 patient admissions | 0.03 | 0.15 | 0.30 | 0.24 | 0.14 |
| Rate per 10,000 patient days | 0.03 | 0.18 | 0.37 | 0.35 | 0.16 |
| Medium (201–499 beds) | | | | | |
| Number of VRE BSI infections | 70 | 73 | 116 | 112 | 115 |
| Rate per 1,000 patient admissions | 0.12 | 0.13 | 0.22 | 0.20 | 0.27 |
| Rate per 10,000 patient days | 0.18 | 0.20 | 0.33 | 0.28 | 0.36 |
| Large (500+ beds) | | | | | |
| Number of VRE BSI infections | 49 | 70 | 109 | 109 | 79 |
| Rate per 1,000 patient admissions | 0.16 | 0.22 | 0.30 | 0.29 | 0.24 |
| Rate per 10,000 patient days | 0.22 | 0.29 | 0.38 | 0.36 | 0.30 |

Abbreviation: VRE BSI, vancomycin-resistant *Enterococci* bloodstream infections



Table S3.2: Number of healthcare-associated vancomycin-resistant *Enterococci* bloodstream infections^a and incidence rates by region, hospital type and hospital size, 2016–2020

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| National | | | | | |
| Number of HA-VRE BSI infections | 113 | 146 | 223 | 217 | 188 |
| Rate per 1,000 patient admissions | 0.12 | 0.16 | 0.23 | 0.21 | 0.22 |
| Rate per 10,000 patient days | 0.17 | 0.22 | 0.32 | 0.28 | 0.28 |
| Number of reporting hospitals | 59 | 59 | 59 | 68 | 62 |
| West | | | | | |
| Number of HA-VRE BSI infections | 42 | 45 | 90 | 84 | 91 |
| Rate per 1,000 patient admissions | 0.11 | 0.12 | 0.23 | 0.19 | 0.25 |
| Rate per 10,000 patient days | 0.16 | 0.18 | 0.32 | 0.26 | 0.33 |
| Central | | | | | |
| Number of HA-VRE BSI infections | 70 | 100 | 132 | 133 | 95 |
| Rate per 1,000 patient admissions | 0.15 | 0.21 | 0.28 | 0.25 | 0.23 |
| Rate per 10,000 patient days | 0.22 | 0.30 | 0.39 | 0.36 | 0.30 |
| East | | | | | |
| Number of HA-VRE BSI infections | 1 | 1 | 1 | 0 | 2 |
| Rate per 1,000 patient admissions | 0.01 | 0.01 | 0.01 | 0.00 | 0.03 |
| Rate per 10,000 patient days | 0.01 | 0.01 | 0.01 | 0.00 | 0.03 |
| Hospital type | | | | | |
| Adult | | | | | |
| Number of HA-VRE BSI infections | 83 | 110 | 189 | 179 | 144 |
| Rate per 1,000 patient admissions | 0.16 | 0.22 | 0.36 | 0.30 | 0.28 |
| Rate per 10,000 patient days | 0.21 | 0.28 | 0.45 | 0.38 | 0.34 |
| Mixed | | | | | |
| Number of HA-VRE BSI infections | 29 | 35 | 29 | 27 | 41 |
| Rate per 1,000 patient admissions | 0.08 | 0.10 | 0.08 | 0.07 | 0.14 |
| Rate per 10,000 patient days | 0.12 | 0.15 | 0.12 | 0.10 | 0.20 |
| Paediatric | | | | | |
| Number of HA-VRE BSI infections | 1 | 1 | 5 | 11 | 3 |

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| Hospital type (continued) | | | | | |
| Rate per 1,000 patient admissions | 0.01 | 0.01 | 0.08 | 0.14 | 0.06 |
| Rate per 10,000 patient days | 0.02 | 0.03 | 0.12 | 0.25 | 0.08 |
| Hospital size | | | | | |
| Small (1–200 beds) | | | | | |
| Number of HA-VRE BSI infections | 2 | 11 | 22 | 25 | 12 |
| Rate per 1,000 patient admissions | 0.03 | 0.15 | 0.31 | 0.23 | 0.13 |
| Rate per 10,000 patient days | 0.03 | 0.18 | 0.38 | 0.33 | 0.14 |
| Medium (201–499 beds) | | | | | |
| Number of HA-VRE BSI infections | 65 | 70 | 106 | 96 | 107 |
| Rate per 1,000 patient admissions | 0.11 | 0.13 | 0.21 | 0.17 | 0.25 |
| Rate per 10,000 patient days | 0.17 | 0.19 | 0.30 | 0.24 | 0.34 |
| Large (500+ beds) | | | | | |
| Number of HA-VRE BSI infections | 46 | 65 | 95 | 96 | 69 |
| Rate per 1,000 patient admissions | 0.15 | 0.20 | 0.26 | 0.25 | 0.21 |
| Rate per 10,000 patient days | 0.20 | 0.27 | 0.33 | 0.32 | 0.26 |

Abbreviation: HA-VRE BSI, healthcare-associated vancomycin-resistant *Enterococci* bloodstream infections
^a Includes all cases identified and have been acquired within Canadian Nosocomial Infection Surveillance Program (CNISP) hospitals and/or from any other healthcare exposure (non-CNISP hospitals, clinics, long-term care facility, etc.) as per the case definition in Annex A



Table S3.3: Number and proportion of vancomycin-resistant *Enterococci* bloodstream infections isolate types identified, 2016–2020

| Isolate type | Year | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|
| | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
| | n | % | n | % | n | % | n | % | n | % |
| VanA, <i>Enterococcus faecium</i> | 88 | 96.7 | 111 | 95.7 | 179 | 97.3 | 168 | 99.4 | 117 | 95.1 |
| VanB, <i>Enterococcus faecium</i> | 3 | 3.2 | 5 | 4.3 | 1 | 0.5 | 1 | 0.6 | 4 | 3.3 |
| VanA and VanB, <i>Enterococcus faecium</i> | 0 | 0.0 | 0 | 0.0 | 1 | 0.5 | 0 | 0.0 | 1 | 0.8 |
| VanA, <i>Enterococcus faecalis</i> | 0 | 0.0 | 0 | 0.0 | 3 | 1.6 | 0 | 0.0 | 1 | 0.8 |
| Total number of isolates tested | 91 | N/A | 116 | N/A | 184 | N/A | 169 | N/A | 123 | N/A |

Abbreviation: N/A, not applicable

Table S3.4: Distribution of vancomycin-resistant *Enterococci* bloodstream (*Enterococcus faecium*) sequence type, 2016–2020

| Sequence type | Year | | | | | | | | | |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|
| | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
| | n | % | n | % | n | % | n | % | n | % |
| ST17 | 3 | 3.3 | 6 | 5.2 | 9 | 5.0 | 35 | 21.2 | 43 | 36.1 |
| ST18 | 14 | 15.4 | 6 | 5.2 | 3 | 1.7 | 3 | 1.8 | 2 | 1.7 |
| ST80 | 11 | 12.1 | 11 | 9.5 | 21 | 11.6 | 21 | 12.7 | 21 | 17.6 |
| ST117 | 21 | 23.1 | 17 | 14.7 | 24 | 13.3 | 16 | 9.7 | 14 | 11.8 |
| ST412 | 13 | 14.3 | 8 | 6.9 | 8 | 4.2 | 1 | 0.6 | 1 | 0.8 |
| ST734 | 4 | 4.4 | 15 | 13.0 | 21 | 11.6 | 19 | 11.5 | 10 | 8.4 |
| ST1478 | 10 | 11.0 | 32 | 2.6 | 70 | 38.7 | 54 | 32.7 | 21 | 17.6 |
| Other ^a | 15 | 16.5 | 21 | 18.1 | 25 | 13.8 | 14 | 8.5 | 7 | 5.9 |
| Untypeable | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 1.2 | 0 | 0.0 |
| Total number of isolates tested | 91 | N/A | 116 | N/A | 181 | N/A | 165 | N/A | 119 | N/A |

Abbreviation: N/A, not applicable

^a "Other" include ST16, ST56, ST78, ST132, ST154, ST192, ST203, ST233, ST252, ST262, ST280, ST282, ST323, ST375, ST414, ST494, ST584, ST612, ST662, ST663, ST664, ST665, ST721, ST736, ST750, ST761, ST772, ST786, ST787, ST802, ST835, ST836, ST912, ST982, ST983, ST984, ST992, ST1032, ST1112, ST1113, ST1201, ST1265, ST1421, ST1424, ST1497, ST1587, ST1612, ST1692, ST1821, ST1824

Note: Three *E. faecalis* from 2018 not included because multilocus sequence typing (MLST) scheme is different

Note: Nine samples are outstanding for MLST



Table S4.1: Number of carbapenemase-producing *Enterobacterales* infections and incidence rates by region, hospital type and hospital size, 2016–2020

| Case and incidence rates | Year | | | | |
|-----------------------------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| National | | | | | |
| Number of CPE infections | 21 | 20 | 36 | 48 | 35 |
| Rate per 1,000 patient admissions | 0.02 | 0.02 | 0.04 | 0.05 | 0.04 |
| Rate per 10,000 patient days | 0.03 | 0.03 | 0.05 | 0.07 | 0.05 |
| Number of reporting hospitals | 55 | 56 | 57 | 64 | 72 |
| West | | | | | |
| Number of CPE infections | 7 | 14 | 21 | 22 | 12 |
| Rate per 1,000 patient admissions | 0.02 | 0.03 | 0.05 | 0.05 | 0.03 |
| Rate per 10,000 patient days | 0.02 | 0.05 | 0.07 | 0.07 | 0.04 |
| Central | | | | | |
| Number of CPE infections | 13 | 5 | 15 | 26 | 21 |
| Rate per 1,000 patient admissions | 0.03 | 0.01 | 0.04 | 0.05 | 0.05 |
| Rate per 10,000 patient days | 0.04 | 0.02 | 0.05 | 0.07 | 0.06 |
| East | | | | | |
| Number of CPE infections | 1 | 1 | 0 | 0 | 2 |
| Rate per 1,000 patient admissions | 0.02 | 0.02 | 0.00 | 0.00 | 0.02 |
| Rate per 10,000 patient days | 0.02 | 0.02 | 0.00 | 0.00 | 0.02 |
| Hospital type | | | | | |
| Adult | | | | | |
| Number of CPE infections | 17 | 15 | 27 | 35 | 27 |
| Rate per 1,000 patient admissions | 0.04 | 0.03 | 0.06 | 0.07 | 0.05 |
| Rate per 10,000 patient days | 0.05 | 0.04 | 0.07 | 0.08 | 0.06 |
| Mixed | | | | | |
| Number of CPE infections | 1 | 5 | 8 | 10 | 7 |
| Rate per 1,000 patient admissions | 0.00 | 0.01 | 0.02 | 0.03 | 0.02 |
| Rate per 10,000 patient days | 0.00 | 0.02 | 0.03 | 0.04 | 0.03 |
| Paediatric | | | | | |
| Number of CPE infections | 2 | 0 | 1 | 3 | 1 |
| Rate per 1,000 patient admissions | 0.02 | 0.00 | 0.02 | 0.04 | 0.02 |
| Rate per 10,000 patient days | 0.05 | 0.00 | 0.02 | 0.07 | 0.02 |
| Hospital size | | | | | |
| Small (1–200 beds) | | | | | |
| Number of CPE infections | 1 | 1 | 2 | 6 | 3 |
| Rate per 1,000 patient admissions | 0.01 | 0.01 | 0.03 | 0.06 | 0.03 |
| Rate per 10,000 patient days | 0.02 | 0.02 | 0.04 | 0.10 | 0.04 |
| Medium (201–499 beds) | | | | | |
| Number of CPE infections | 8 | 6 | 10 | 15 | 11 |
| Rate per 1,000 patient admissions | 0.02 | 0.01 | 0.02 | 0.03 | 0.02 |
| Rate per 10,000 patient days | 0.02 | 0.02 | 0.03 | 0.04 | 0.03 |
| Large (500+ beds) | | | | | |
| Number of CPE infections | 11 | 13 | 24 | 27 | 21 |
| Rate per 1,000 patient admissions | 0.03 | 0.04 | 0.07 | 0.07 | 0.06 |
| Rate per 10,000 patient days | 0.04 | 0.05 | 0.08 | 0.09 | 0.07 |

Abbreviation: CPE, carbapenemase-producing *Enterobacterales*



Table S4.2: Number of carbapenemase-producing *Enterobacterales* colonizations and incidence rates by region, hospital type and hospital size, 2016–2020

| Case and incidence rates | Year | | | | |
|-----------------------------------|-------|-------|-------|-------|-------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| National | | | | | |
| Number of CPE colonizations | 88 | 112 | 142 | 214 | 190 |
| Rate per 1,000 patient admissions | 0.10 | 0.12 | 0.16 | 0.21 | 0.20 |
| Rate per 10,000 patient days | 0.14 | 0.18 | 0.22 | 0.29 | 0.26 |
| Number of reporting hospitals | 55 | 56 | 57 | 64 | 72 |
| West | | | | | |
| Number of CPE colonizations | 20 | 25 | 32 | 42 | 24 |
| Rate per 1,000 patient admissions | 0.05 | 0.06 | 0.08 | 0.09 | 0.06 |
| Rate per 10,000 patient days | 0.07 | 0.09 | 0.11 | 0.13 | 0.08 |
| Central | | | | | |
| Number of CPE colonizations | 68 | 87 | 110 | 172 | 163 |
| Rate per 1,000 patient admissions | 0.16 | 0.20 | 0.26 | 0.35 | 0.37 |
| Rate per 10,000 patient days | 0.23 | 0.28 | 0.35 | 0.49 | 0.49 |
| East | | | | | |
| Number of CPE colonizations | 0 | 0 | 0 | 0 | 3 |
| Rate per 1,000 patient admissions | 0.000 | 0.000 | 0.000 | 0.000 | 0.033 |
| Rate per 10,000 patient days | 0.000 | 0.000 | 0.000 | 0.000 | 0.037 |
| Hospital type | | | | | |
| Adult | | | | | |
| Number of CPE colonizations | 75 | 81 | 93 | 163 | 166 |
| Rate per 1,000 patient admissions | 0.17 | 0.18 | 0.20 | 0.31 | 0.32 |
| Rate per 10,000 patient days | 0.22 | 0.23 | 0.25 | 0.39 | 0.39 |
| Mixed | | | | | |
| Number of CPE colonizations | 13 | 28 | 48 | 44 | 24 |
| Rate per 1,000 patient admissions | 0.04 | 0.08 | 0.14 | 0.11 | 0.06 |
| Rate per 10,000 patient days | 0.05 | 0.12 | 0.20 | 0.16 | 0.09 |
| Paediatric | | | | | |
| Number of CPE colonizations | 0 | 3 | 1 | 7 | 0 |
| Rate per 1,000 patient admissions | 0.00 | 0.04 | 0.02 | 0.09 | 0.00 |
| Rate per 10,000 patient days | 0.00 | 0.08 | 0.02 | 0.16 | 0.00 |
| Hospital size | | | | | |
| Small (1–200 beds) | | | | | |
| Number of CPE colonizations | 0 | 4 | 2 | 2 | 4 |
| Rate per 1,000 patient admissions | 0.00 | 0.06 | 0.03 | 0.02 | 0.04 |
| Rate per 10,000 patient days | 0.00 | 0.09 | 0.04 | 0.03 | 0.06 |
| Medium (201–499 beds) | | | | | |
| Number of CPE colonizations | 25 | 31 | 42 | 106 | 93 |
| Rate per 1,000 patient admissions | 0.05 | 0.06 | 0.09 | 0.20 | 0.20 |
| Rate per 10,000 patient days | 0.08 | 0.09 | 0.13 | 0.29 | 0.26 |
| Large (500+ beds) | | | | | |
| Number of CPE colonizations | 63 | 77 | 98 | 106 | 93 |
| Rate per 1,000 patient admissions | 0.19 | 0.24 | 0.27 | 0.28 | 0.24 |
| Rate per 10,000 patient days | 0.25 | 0.31 | 0.34 | 0.35 | 0.31 |

Abbreviation: CPE, carbapenemase-producing *Enterobacterales*

Table S5: Number and proportion of main carbapenemase-producing pathogens identified^a

| Pathogen | Year | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|
| | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
| | n | % | n | % | n | % | n | % | n | % |
| <i>Klebsiella pneumoniae</i> | 56 | 30.3 | 51 | 25.4 | 66 | 28.2 | 57 | 21.3 | 41 | 19.4 |
| <i>Escherichia coli</i> | 41 | 22.2 | 60 | 29.9 | 54 | 23.1 | 83 | 31.1 | 72 | 34.1 |
| <i>Enterobacter cloacae</i> complex ^b | 34 | 18.4 | 39 | 19.4 | 44 | 18.8 | 60 | 22.5 | 49 | 23.2 |
| <i>Acinetobacter baumannii</i> | 21 | 11.4 | 14 | 7.0 | 6 | 2.6 | 5 | 1.9 | 1 | 0.5 |
| <i>Serratia marcescens</i> | 7 | 3.8 | 3 | 1.5 | 7 | 3.0 | 3 | 1.1 | 4 | 1.9 |
| Others ^c | 26 | 14.1 | 34 | 16.9 | 57 | 24.4 | 59 | 22.1 | 44 | 20.9 |
| Total number of isolates tested | 185 | N/A | 201 | N/A | 234 | N/A | 267 | N/A | 211 | N/A |

Abbreviation: N/A, not applicable

^a Includes data for all isolates submitted

^b *Enterobacter cloacae* complex includes *Enterobacter cloacae* and other *Enterobacter* spp. but excluding *E. aerogenes*

^c Includes: *Acinetobacter* spp., *Citrobacter* spp., *Klebsiella oxytoca*, *Kluyvera cryocrescens*, *Morganella morganii*, *Providencia rettgeri*, *Raoultella* spp.