Supplement Table 1. Population-level lifetime risks of *Clostridioides difficile* infection in privately insured males, 2017, 2011 through 2017

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Probability based on data from 2017 (MarketScan and Medicare-only insured populations)** | **Probability based on data from 2011 through 2017 (MarketScan and Medicare-only insured populations)** |
| **Age start (years)** | **Age** **end (years)** | **Probability of living to start of interval without CDI** | **Probability of developing CDI in this interval** | **Cumulative probability of developing CDI (through the end of interval)** | **Probability of living to start of interval without CDI** | **Probability of developing CDI in this interval** | **Cumulative probability of developing CDI (through the end of interval)** |
| 18 | 24 | 1.0000 | 0.0017 | 0.0017 | 1.0000 | 0.0017 | 0.0017 |
| 25 | 29 | 0.9896 | 0.0014 | 0.0031 | 0.9899 | 0.0012 | 0.0029 |
| 30 | 34 | 0.9798 | 0.0014 | 0.0045 | 0.9812 | 0.0013 | 0.0042 |
| 35 | 39 | 0.9688 | 0.0017 | 0.0061 | 0.9714 | 0.0014 | 0.0056 |
| 40 | 44 | 0.9562 | 0.0019 | 0.0079 | 0.9602 | 0.0016 | 0.0071 |
| 45 | 49 | 0.9414 | 0.0023 | 0.0101 | 0.9463 | 0.0020 | 0.0091 |
| 50 | 54 | 0.9212 | 0.0029 | 0.0128 | 0.9260 | 0.0027 | 0.0116 |
| 55 | 59 | 0.8911 | 0.0037 | 0.0160 | 0.8956 | 0.0041 | 0.0153 |
| 60 | 64 | 0.8478 | 0.0053 | 0.0205 | 0.8518 | 0.0096 | 0.0234 |
| 65 | 69 | 0.7886 | 0.0114 | 0.0296 | 0.7901 | 0.0107 | 0.0319 |
| 70 | 74 | 0.7099 | 0.0194 | 0.0434 | 0.7116 | 0.0183 | 0.0449 |
| 75 | 79 | 0.6058 | 0.0268 | 0.0596 | 0.6062 | 0.0269 | 0.0612 |
| 80 | 84 | 0.4710 | 0.0383 | 0.0776 | 0.4690 | 0.0384 | 0.0792 |
| 85 | max | 0.3086 | 0.0546 | 0.0945 | 0.3045 | 0.0601 | 0.0975 |

Supplement Table 2. Population-level lifetime risks of *Clostridioides difficile* infection in privately insured females, 2017, 2011 through 2017

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Probability based on data from 2017 (MarketScan and Medicare-only insured populations)** | **Probability based on data from 2011 through 2017 (MarketScan and Medicare-only insured populations)** |
| **Age start (years)** | **Age end (years)** | **Probability of living to start of interval without CDI** | **Probability of developing CDI in this interval** | **Cumulative probability of developing CDI (through the end of interval)** | **Probability of living to start of interval without CDI** | **Probability of developing CDI in this interval** | **Cumulative probability of developing CDI (through the end of interval)** |
| 18 | 24 | 1.0000 | 0.0028 | 0.0028 | 1.0000 | 0.0028 | 0.0028 |
| 25 | 29 | 0.9940 | 0.0022 | 0.0050 | 0.9941 | 0.0021 | 0.0049 |
| 30 | 34 | 0.9883 | 0.0024 | 0.0074 | 0.9890 | 0.0023 | 0.0071 |
| 35 | 39 | 0.9813 | 0.0025 | 0.0099 | 0.9826 | 0.0024 | 0.0095 |
| 40 | 44 | 0.9729 | 0.0027 | 0.0126 | 0.9747 | 0.0026 | 0.0121 |
| 45 | 49 | 0.9623 | 0.0035 | 0.0159 | 0.9643 | 0.0032 | 0.0152 |
| 50 | 54 | 0.9475 | 0.0042 | 0.0200 | 0.9495 | 0.0041 | 0.0191 |
| 55 | 59 | 0.9258 | 0.0051 | 0.0247 | 0.9279 | 0.0055 | 0.0242 |
| 60 | 64 | 0.8954 | 0.0068 | 0.0308 | 0.8978 | 0.0121 | 0.0350 |
| 65 | 69 | 0.8543 | 0.0121 | 0.0411 | 0.8522 | 0.0122 | 0.0454 |
| 70 | 74 | 0.7956 | 0.0249 | 0.0609 | 0.7924 | 0.0225 | 0.0633 |
| 75 | 79 | 0.7056 | 0.0314 | 0.0831 | 0.7032 | 0.0309 | 0.0850 |
| 80 | 84 | 0.5827 | 0.0420 | 0.1075 | 0.5790 | 0.0412 | 0.1089 |
| 85 | max | 0.4200 | 0.0577 | 0.1318 | 0.4161 | 0.0617 | 0.1346 |

Supplement Table 3. Population-level lifetime risks of *Clostridioides difficile* infection in Medicaid insured males, 2017, 2011 through 2017

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Probability based on data from 2017 (MarketScan and Medicare-only insured populations)** | **Probability based on data from 2011 through 2017 (MarketScan and Medicare-only insured populations)** |
| **Age start (years)** | **Age end (years)** | **Probability of living to start of interval without CDI** | **Probability of developing CDI in this interval** | **Cumulative probability of developing CDI (through the end of interval)** | **Probability of living to start of interval without CDI** | **Probability of developing CDI in this interval** | **Cumulative probability of developing CDI (through the end of interval)** |
| 18 | 24 | 1.0000 | 0.0023 | 0.0023 | 1.0000 | 0.0044 | 0.0044 |
| 25 | 29 | 0.9890 | 0.0031 | 0.0054 | 0.9872 | 0.0039 | 0.0083 |
| 30 | 34 | 0.9775 | 0.0041 | 0.0094 | 0.9758 | 0.0051 | 0.0133 |
| 35 | 39 | 0.9639 | 0.0053 | 0.0145 | 0.9624 | 0.0059 | 0.0190 |
| 40 | 44 | 0.9479 | 0.0058 | 0.0200 | 0.9470 | 0.0071 | 0.0257 |
| 45 | 49 | 0.9295 | 0.0095 | 0.0289 | 0.9281 | 0.0106 | 0.0355 |
| 50 | 54 | 0.9028 | 0.0124 | 0.0401 | 0.9002 | 0.0144 | 0.0485 |
| 55 | 59 | 0.8648 | 0.0138 | 0.0520 | 0.8602 | 0.0179 | 0.0639 |
| 60 | 64 | 0.8140 | 0.0168 | 0.0656 | 0.8063 | 0.0366 | 0.0934 |
| 65 | 69 | 0.7479 | 0.0428 | 0.0976 | 0.7260 | 0.0489 | 0.1288 |
| 70 | 74 | 0.6498 | 0.0624 | 0.1382 | 0.6263 | 0.0680 | 0.1714 |
| 75 | 79 | 0.5265 | 0.0744 | 0.1774 | 0.5023 | 0.0851 | 0.2142 |
| 80 | 84 | 0.3843 | 0.0774 | 0.2071 | 0.3594 | 0.1087 | 0.2532 |
| 85 | max | 0.2368 | 0.1048 | 0.2320 | 0.2081 | 0.1363 | 0.2816 |

Supplement Table 4. Population-level lifetime risks of *Clostridioides difficile* infection in Medicaid insured females, 2017, 2011 through 2017

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Probability based on data from 2017 (MarketScan and Medicare-only insured populations)** | **Probability based on data from 2011 through 2017 (MarketScan and Medicare-only insured populations)** |
| **Age start (years)** | **Age end (years)** | **Probability of living to start of interval without CDI** | **Probability of developing CDI in this interval** | **Cumulative probability of developing CDI (through the end of interval)** | **Probability of living to start of interval without CDI** | **Probability of developing CDI in this interval** | **Cumulative probability of developing CDI (through the end of interval)** |
| 18 | 24 | 1.0000 | 0.0030 | 0.0030 | 1.0000 | 0.0034 | 0.0034 |
| 25 | 29 | 0.9938 | 0.0025 | 0.0055 | 0.9936 | 0.0032 | 0.0065 |
| 30 | 34 | 0.9879 | 0.0036 | 0.0090 | 0.9873 | 0.0043 | 0.0107 |
| 35 | 39 | 0.9797 | 0.0044 | 0.0133 | 0.9790 | 0.0059 | 0.0165 |
| 40 | 44 | 0.9695 | 0.0062 | 0.0193 | 0.9677 | 0.0080 | 0.0242 |
| 45 | 49 | 0.9556 | 0.0088 | 0.0277 | 0.9523 | 0.0108 | 0.0346 |
| 50 | 54 | 0.9358 | 0.0110 | 0.0380 | 0.9303 | 0.0160 | 0.0495 |
| 55 | 59 | 0.9081 | 0.0151 | 0.0517 | 0.8981 | 0.0216 | 0.0688 |
| 60 | 64 | 0.8692 | 0.0171 | 0.0666 | 0.8545 | 0.0393 | 0.1024 |
| 65 | 69 | 0.8203 | 0.0413 | 0.1005 | 0.7879 | 0.0478 | 0.1401 |
| 70 | 74 | 0.7399 | 0.0609 | 0.1456 | 0.7046 | 0.0666 | 0.1870 |
| 75 | 79 | 0.6296 | 0.0693 | 0.1892 | 0.5942 | 0.0858 | 0.2379 |
| 80 | 84 | 0.4961 | 0.0797 | 0.2287 | 0.4567 | 0.1024 | 0.2847 |
| 085 | max | 0.3388 | 0.0952 | 0.2610 | 0.3003 | 0.1304 | 0.3238 |

Supplement Table 5. Lifetime risks of *Clostridioides difficile* infection, 2017 MarketScan and Medicare data, by sex and source of health insurance

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sex** | **Source of Data**  | **Ages 18+** | **Ages 40+** | **Ages 45+** | **Ages 50+** | **Ages 55+** | **Ages 60+** | **Ages 65+** |
| Male | Commercial | 9.45% | 9.24% | 9.20% | 9.16% | 9.17% | 9.25% | 9.38% |
| Male | Medicaid | 23.20% | 22.94% | 22.80% | 22.49% | 22.19% | 22.11% | 22.25% |
| Female | Commercial | 13.18% | 12.52% | 12.39% | 12.23% | 12.08% | 11.96% | 11.82% |
| Female | Medicaid | 26.10% | 25.54% | 25.29% | 24.93% | 24.56% | 24.08% | 23.70% |

aFor the chronic conditions, the MarketScan commercial data were used for the 18-64 year age ranges, and Medicare data for those aged 65 and older (both Medicare only and dually insured with Medicaid).

References for published life tables used to support analysis of lifetime CDI risk in persons with specific chronic conditions:

Heart Disease

Peeters A, Mamun AA, Willekens F, Bonneux L. A cardiovascular life history. A life course analysis of the original Framingham Heart Study cohort. *Eur Heart J.* 2002;23(6):458-466. Also used for mortality risks due to heart disease

Diabetes

Di Angelantonio E, Kaptoge S, Wormser D, et al. Association of Cardiometabolic Multimorbidity With Mortality. *JAMA.* 2015;314(1):52-60.

Wright AK, Kontopantelis E, Emsley R, et al. Life Expectancy and Cause-Specific Mortality in Type 2 Diabetes: A Population-Based Cohort Study Quantifying Relationships in Ethnic Subgroups. *Diabetes Care.* 2017;40(3):338-345. Also used for mortality risks due to diabetes.

End-Stage Renal Disease

Neild GH. Life expectancy with chronic kidney disease: an educational review. *Pediatr Nephrol.* 2017;32(2):243-248. Also used for mortality risks due to end-stage renal disease.