**SUPPLEMENTARY MATERIAL**

**Appendix A**. Country-specific attribution estimates to food-animal reservoirs, travel, outbreaks and unknown sources.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Source** | **AT** | | | | **BE** | | | | **CY** | | | |
|  | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 0.1 | 73 | 26 | 277 | 2.3 | 935 | 104 | 3,672 | 4.8 | 4,226 | 544 | 15,500 |
| Pigs | 14.4 | 13,130 | 1,971 | 45,970 | 74.2 | 30,130 | 3,461 | 117,300 | 51.1 | 44,580 | 6,639 | 156,700 |
| Turkeys | 3.7 | 3,417 | 503 | 12,090 | 9.2 | 3,750 | 423 | 14,680 | 6.4 | 5,626 | 618 | 21,480 |
| Layers | 59.8 | 54,520 | 8,310 | 189,500 | 2.9 | 1,178 | 123 | 4,710 | 8.9 | 7,722 | 976 | 28,520 |
| Travel | 12.2 | 11,110 | 1,674 | 38,690 | 0.0 | 0 | 0 | 0 | 3.8 | 3,334 | 504 | 11,650 |
| Unknown | 9.4 | 8,605 | 1,267 | 30,210 | 11.2 | 4,554 | 512 | 17,810 | 24.9 | 21,750 | 3,128 | 77,430 |
| Outbreak | 0.3 | 272 |  |  | 0.1 | 52 |  |  | 0.0 | 0 |  |  |
|  |  | | | |  | | | |  | | | |
| **Source** | **CZ** | | | | **DE** | | | | **DK** | | | |
|  | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 0.1 | 1,308 | 92 | 5,201 | 0.5 | 6,378 | 519 | 24,980 | 3.5 | 918 | 132 | 3,295 |
| Pigs | 10.9 | 128,900 | 19,490 | 446,700 | 33.1 | 420,300 | 63,750 | 1,462,000 | 18.0 | 4,743 | 854 | 16,170 |
| Turkeys | 1.8 | 20,710 | 3,080 | 72,250 | 1.3 | 17,000 | 2,561 | 59,330 | 19.6 | 5,167 | 775 | 18,210 |
| Layers | 84.6 | 997,000 | 151,300 | 3,450,000 | 52.0 | 660,800 | 100,100 | 2,301,000 | 10.1 | 2,665 | 617 | 8,710 |
| Travel | 1.7 | 20,090 | 3,047 | 69,610 | 5.3 | 67,860 | 10,260 | 236,100 | 23.7 | 6,239 | 946 | 21,850 |
| Unknown | 0.8 | 9,890 | -1,204 | 41,970 | 7.6 | 96,850 | 14,570 | 337,000 | 18.3 | 4,813 | 725 | 16,860 |
| Outbreak | 0.0 | 88 |  |  | 0.2 | 1,990 |  |  | 6.8 | 1,786 |  |  |
|  |  | | | |  | | |  |  | | | |
| **Source** | **EE** | | | | **ES** | | |  | **FI** | | | |
|  | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 4.6 | 923 | 160 | 3,356 | 0.1 | 3,384 | 45 | 17,680 | 0.7 | 21 | 0 | 96 |
| Pigs | 27.5 | 5,488 | 818 | 19,130 | 33.1 | 869,600 | 130,000 | 3,066,000 | 4.7 | 150 | 22 | 530 |
| Turkeys | 2.1 | 421 | 47 | 1,601 | 12.9 | 339,100 | 50,400 | 1,196,000 | 1.6 | 53 | 5 | 203 |
| Layers | 55.0 | 10,980 | 1,671 | 37,940 | 43.1 | 1,133,000 | 169,200 | 4,003,000 | 2.4 | 79 | 10 | 291 |
| Travel | 7.9 | 1,587 | 244 | 5,460 | 0.0 | 0 | 0 | 0 | 80.1 | 2,571 | 387 | 8,939 |
| Unknown | 2.6 | 516 | -601 | 2,764 | 10.7 | 281,100 | 41,470 | 993,700 | 4.6 | 148 | 21 | 530 |
| Outbreak | 0.3 | 63 |  |  | 0.0 | 469 |  |  | 5.9 | 189 |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Source** | **FR** | | | | **GR** | | | | **HU** | | | |
|  | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 13.4 | 66,000 | 10,120 | 230,000 | 1.2 | 28,530 | 384 | 148,100 | 4.5 | 52,570 | 7,904 | 182,900 |
| Pigs | 34.3 | 168,900 | 25,950 | 586,700 | 9.5 | 227,200 | 33,520 | 801,600 | 26.7 | 313,300 | 47,160 | 1,090,000 |
| Turkeys | 12.6 | 62,180 | 9,363 | 217,400 | 0.4 | 9,061 | 468 | 40,570 | 5.4 | 63,760 | 9,558 | 222,200 |
| Layers | 2.9 | 14,150 | 2,864 | 47,600 | 78.3 | 1,872,000 | 279,200 | 6,552,000 | 54.9 | 643,600 | 96,960 | 2,231,000 |
| Travel | 0.0 | 0 | 0 | 0 | 2.3 | 55,820 | 8,336 | 195,400 | 0.2 | 1,975 | 298 | 6,840 |
| Unknown | 36.5 | 179,800 | 27,140 | 627,000 | 8.3 | 197,700 | 25,090 | 721,300 | 8.1 | 94,870 | 14,110 | 331,500 |
| Outbreak | 0.2 | 966 |  |  | 0.0 | 0 |  |  | 0.2 | 1,815 |  |  |
|  |  | | | |  | | | |  | | | |
| **Source** | **IE** | | | | **IT** | | | | **LT** | | | |
|  | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 1.5 | 100 | 6 | 486 | 2.3 | 17,680 | 2,639 | 62,030 | 1.2 | 5,244 | 631 | 19,630 |
| Pigs | 27.2 | 1,810 | 113 | 8,616 | 73.2 | 560,700 | 85,200 | 1,949,000 | 9.5 | 42,750 | 6,428 | 148,700 |
| Turkeys | 8.8 | 589 | 35 | 2,810 | 5.3 | 40,410 | 6,028 | 141,700 | 0.7 | 3,318 | 369 | 12,600 |
| Layers | 14.6 | 971 | 64 | 4,594 | 2.2 | 16,520 | 2,309 | 59,450 | 86.9 | 390,000 | 59,010 | 1,353,000 |
| Travel | 31.7 | 2,110 | 133 | 10,020 | 1.3 | 9,908 | 1,505 | 34,480 | 0.3 | 1,294 | 196 | 4,488 |
| Unknown | 15.3 | 1,018 | 62 | 4,864 | 15.8 | 120,800 | 18,280 | 421,300 | 1.2 | 5,596 | -4,449 | 27,910 |
| Outbreak | 0.9 | 63 |  |  | 0.0 | 0 |  |  | 0.1 | 335 |  |  |
|  |  | | | |  | | | |  | | | |
| **Source** | **LU** | | | | **LV** | | | | **NL** | | | |
|  | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 4.4 | 96 | 6 | 449 | 0.9 | 873 | 92 | 4,135 | 4.6 | 4,455 | 653 | 15,810 |
| Pigs | 8.5 | 184 | 13 | 833 | 13.7 | 13,590 | 2,052 | 47,280 | 27.3 | 26,330 | 3,978 | 91,590 |
| Turkeys | 6.9 | 149 | 11 | 670 | 0.3 | 291 | 6 | 1,368 | 9.7 | 9,404 | 1,393 | 33,050 |
| Layers | 49.8 | 1,073 | 89 | 4,662 | 82.5 | 81,600 | 12,450 | 282,200 | 26.2 | 25,270 | 4,015 | 87,770 |
| Travel | 9.6 | 207 | 17 | 896 | 1.5 | 1,459 | 222 | 5,046 | 14.2 | 13,730 | 2,079 | 47,900 |
| Unknown | 20.7 | 446 | 35 | 1,961 | 0.7 | 714 | -4,236 | 7,337 | 17.5 | 16,920 | 2,521 | 59,240 |
| Outbreak | 0.0 | 0 |  |  | 0.4 | 351 |  |  | 0.5 | 470 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Source** | **PL** | | | | **PT** | | | | **SE** | | | |
|  | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 25.1 | 796,600 | 120,900 | 2,772,000 | 42.3 | 1,357,000 | 202,700 | 4,727,000 | 0.5 | 28 | 2 | 117 |
| Pigs | 47.8 | 1,520,000 | 229,700 | 5,269,000 | 36.3 | 1,164,000 | 175,500 | 4,052,000 | 4.8 | 282 | 42 | 991 |
| Turkeys | 1.2 | 39,640 | 5,790 | 139,900 | 0.6 | 18,580 | 546 | 83,890 | 1.7 | 99 | 13 | 361 |
| Layers | 23.0 | 731,300 | 111,500 | 2,550,000 | 9.1 | 290,400 | 29,270 | 1,138,000 | 2.5 | 145 | 29 | 506 |
| Travel | 0.1 | 1,978 | 300 | 6,882 | 0.4 | 11,250 | 1,704 | 39,030 | 75.9 | 4,441 | 666 | 15,530 |
| Unknown | 2.7 | 84,840 | 11,520 | 305,300 | 11.4 | 364,300 | 49,970 | 1,310,000 | 10.2 | 596 | 89 | 2,089 |
| Outbreak | 0.1 | 3,484 |  |  | 0.0 | 90 |  |  | 4.4 | 260 |  |  |
|  |  | | | |  | | | |  | | | |
| **Source** | **SI** | | | | **SK** | | | | **UK** | | | |
|  | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 0.5 | 564 | 7 | 3,037 | 0.0 | 363 | 21 | 1,779 | 0.6 | 1,590 | 236 | 5,565 |
| Pigs | 20.6 | 21,600 | 2,464 | 84,410 | 18.0 | 189,300 | 28,490 | 664,900 | 11.7 | 32,370 | 4,886 | 112,600 |
| Turkeys | 4.0 | 4,197 | 452 | 16,740 | 2.6 | 27,580 | 4,066 | 97,930 | 10.1 | 27,930 | 4,208 | 97,290 |
| Layers | 59.5 | 62,240 | 7,195 | 242,500 | 76.8 | 807,500 | 121,800 | 2,826,000 | 35.5 | 97,990 | 14,800 | 340,900 |
| Travel | 0.0 | 0 | 0 | 0 | 0.8 | 8,152 | 1,228 | 28,540 | 24.3 | 67,250 | 10,170 | 234,100 |
| Unknown | 14.7 | 15,370 | 1,716 | 60,450 | 1.7 | 17,940 | 1,124 | 70,500 | 17.8 | 49,270 | 7,449 | 171,200 |
| Outbreak | 0.6 | 656 |  |  | 0.0 | 449 |  |  | 0.0 | 0 |  |  |

**Appendix B**. Attribution estimates to food-animal reservoirs in their country of origin. The percentage column refers to percentage of EU cases “originated” by that country.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **AT** | | | | **BE** | | | | **CY** | | | |
| **Source** | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 0.3 | 191 | 67 | 466 | 0.8 | 16,540 | 5,603 | 44,550 | 0.3 | 4,155 | 552 | 15,190 |
| Pigs |  | 23,560 | 10,910 | 47,650 |  | 109,000 | 53,050 | 220,300 |  | 40,090 | 10,190 | 122,900 |
| Turkeys |  | 2,437 | 947 | 5,810 |  | 851 | 258 | 2,516 |  | 456 | 50 | 1,741 |
| Layers |  | 31,970 | 6,051 | 107,300 |  | 14,340 | 3,923 | 43,140 |  | 3,045 | 386 | 11,220 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **CZ** | | | | **DE** | | | | **DK** | | | |
| **Source** | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 6.0 | 956 | 247 | 3,045 | 6.7 | 7,650 | 2,587 | 20,900 | 0.5 | 0 | 0 | 0 |
| Pigs |  | 114,700 | 29,510 | 323,100 |  | 645,100 | 265,700 | 1,551,000 |  | 85,460 | 37,260 | 189,400 |
| Turkeys |  | 15,020 | 4,451 | 40,000 |  | 22,310 | 10,170 | 50,260 |  | 0 | 0 | 0 |
| Layers |  | 874,200 | 142,000 | 2,999,000 |  | 440,100 | 124,900 | 1,258,000 |  | 584 | 226 | 1,390 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **EE** | | | | **ES** | | | | **FI** | | | |
| **Source** | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 0.1 | 0 | 0 | 0 | 18.4 | 58,490 | 13,020 | 185,800 | 0.0 | 0 | 0 | 0 |
| Pigs |  | 9,121 | 3,271 | 21,790 |  | 1,306,000 | 423,700 | 3,556,000 |  | 0 | 0 | 0 |
| Turkeys |  | 0 | 0 | 0 |  | 302,600 | 55,350 | 1,029,000 |  | 0 | 0 | 0 |
| Layers |  | 5,419 | 1,339 | 16,020 |  | 1,414,000 | 406,100 | 4,286,000 |  | 10 | 4 | 22 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **FR** | | | | **GR** | | | | **HU** | | | |
| **Source** | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 2.5 | 35,210 | 6,162 | 120,300 | 10.9 | 27,380 | 499 | 141,600 | 6.0 | 53,660 | 9,881 | 180,800 |
| Pigs |  | 238,400 | 91,980 | 576,800 |  | 90,550 | 13,560 | 319,100 |  | 286,600 | 59,800 | 943,700 |
| Turkeys |  | 116,700 | 43,460 | 287,300 |  | 445 | 54 | 1,754 |  | 84,060 | 27,580 | 230,500 |
| Layers |  | 20,610 | 7,262 | 52,790 |  | 1,701,000 | 256,400 | 5,944,000 |  | 587,900 | 93,970 | 2,023,000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **IE** | | | | **IT** | | | | **LT** | | | |
| **Source** | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 0.1 | 3,927 | 1,474 | 9,996 | 2.4 | 17,440 | 3,194 | 59,030 | 0.0 | 1,192 | 216 | 4,185 |
| Pigs |  | 8,004 | 4,158 | 15,200 |  | 299,900 | 51,940 | 1,024,000 |  | 4,684 | 791 | 16,020 |
| Turkeys |  | 638 | 185 | 1,809 |  | 56,860 | 19,810 | 153,800 |  | 399 | 108 | 1,207 |
| Layers |  | 7 | 1 | 21 |  | 32,510 | 10,850 | 82,980 |  | 0 | 0 | 0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **LU** | | | | **LV** | | | | **NL** | | | |
| **Source** | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 0.0 | 0 | 0 | 0 | 1.2 | 876 | 157 | 3,126 | 1.8 | 1,944 | 890 | 4,067 |
| Pigs |  | 340 | 146 | 785 |  | 3,016 | 544 | 10,190 |  | 121,000 | 56,900 | 251,200 |
| Turkeys |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 5,088 | 2,711 | 9,397 |
| Layers |  | 414 | 39 | 1,776 |  | 196,500 | 69,420 | 486,500 |  | 165,200 | 39,940 | 512,100 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **PL** | | | | **PT** | | | | **SE** | | | |
| **Source** | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 21.3 | 803,600 | 131,400 | 2,768,000 | 14.5 | 1,305,000 | 198,500 | 4,535,000 | 0.0 | 7 | 2 | 20 |
| Pigs |  | 1,402,000 | 257,400 | 4,721,000 |  | 876,000 | 134,800 | 3,040,000 |  | 364 | 189 | 695 |
| Turkeys |  | 71,110 | 30,950 | 167,900 |  | 1,342 | 198 | 5,397 |  | 0 | 0 | 0 |
| Layers |  | 1,287,000 | 492,000 | 3,162,000 |  | 239,800 | 27,870 | 928,000 |  | 64 | 13 | 215 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **SI** | | | | **SK** | | | | **UK** | | | |
| **Source** | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | | **%** | **mean** | **95% CI** | |
| Broilers | 0.4 | 412 | 33 | 2,060 | 5.0 | 1,711 | 628 | 3,999 | 0.8 | 8,632 | 3,920 | 18,300 |
| Pigs |  | 11,440 | 1,577 | 43,820 |  | 72,300 | 12,190 | 249,600 |  | 50,810 | 20,800 | 117,600 |
| Turkeys |  | 2,864 | 381 | 11,170 |  | 71 | 18 | 220 |  | 19,080 | 6,737 | 52,040 |
| Layers |  | 57,020 | 6,929 | 221,100 |  | 768,300 | 192,800 | 2,339,000 |  | 60,270 | 10,210 | 206,300 |

**Appendix C.** Estimated values for *acj*, source-dependent factor(mean and 95% Credibility Interval).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Broilers** | **95% CI** | | | | | **Pigs** | **95% CI** | | | | | **Turkeys** | **95% CI** | | | | | **Layers** | **95% CI** | | | | |
| **AT** | 5.38E-07 | [ | 2.00E-08 | , | 2.85E-06 | ] | 4.93E-05 | [ | 4.30E-05 | , | 5.58E-05 | ] | 1.39E-04 | [ | 1.07E-04 | , | 1.76E-04 | ] | 7.42E-04 | [ | 7.14E-04 | , | 7.70E-04 | ] |
| **BE** | 2.69E-05 | [ | 2.10E-05 | , | 3.36E-05 | ] | 2.00E-04 | [ | 1.89E-04 | , | 2.11E-04 | ] | 5.27E-04 | [ | 4.54E-04 | , | 6.06E-04 | ] | 1.73E-05 | [ | 1.02E-05 | , | 2.48E-05 | ] |
| **CY** | 1.66E-06 | [ | 8.27E-07 | , | 2.74E-06 | ] | 3.51E-05 | [ | 2.93E-05 | , | 4.12E-05 | ] | 1.39E-03 | [ | 4.90E-04 | , | 2.59E-03 | ] | 1.03E-04 | [ | 4.97E-05 | , | 1.73E-04 | ] |
| **CZ** | 1.81E-06 | [ | 3.07E-07 | , | 3.86E-06 | ] | 1.41E-04 | [ | 1.30E-04 | , | 1.52E-04 | ] | 6.25E-04 | [ | 4.98E-04 | , | 7.67E-04 | ] | 8.63E-04 | [ | 8.52E-04 | , | 8.74E-04 | ] |
| **DE** | 1.11E-05 | [ | 2.36E-06 | , | 2.13E-05 | ] | 1.13E-04 | [ | 1.07E-04 | , | 1.19E-04 | ] | 1.05E-04 | [ | 8.92E-05 | , | 1.22E-04 | ] | 6.08E-04 | [ | 6.02E-04 | , | 6.15E-04 | ] |
| **DK** | 9.31E-05 | [ | 5.06E-05 | , | 1.42E-04 | ] | 2.19E-05 | [ | 1.91E-05 | , | 2.48E-05 | ] | 2.39E-03 | [ | 2.01E-03 | , | 2.79E-03 | ] | 1.08E-04 | [ | 8.54E-05 | , | 1.31E-04 | ] |
| **EE** | 7.53E-05 | [ | 1.54E-05 | , | 1.55E-04 | ] | 9.84E-05 | [ | 7.51E-05 | , | 1.24E-04 | ] | 3.43E-04 | [ | 1.27E-04 | , | 6.85E-04 | ] | 4.48E-04 | [ | 3.92E-04 | , | 5.04E-04 | ] |
| **ES** | 4.12E-08 | [ | 1.54E-09 | , | 2.18E-07 | ] | 1.07E-05 | [ | 9.91E-06 | , | 1.15E-05 | ] | 1.54E-04 | [ | 1.33E-04 | , | 1.76E-04 | ] | 1.01E-05 | [ | 9.78E-06 | , | 1.04E-05 | ] |
| **FI** | 6.27E-04 | [ | 3.15E-05 | , | 1.98E-03 | ] | 4.70E-04 | [ | 3.35E-04 | , | 5.98E-04 | ] | 2.71E-03 | [ | 7.36E-04 | , | 4.99E-03 | ] | 8.39E-06 | [ | 3.53E-06 | , | 1.34E-05 | ] |
| **FR** | 5.10E-05 | [ | 4.73E-05 | , | 5.50E-05 | ] | 3.86E-05 | [ | 3.61E-05 | , | 4.10E-05 | ] | 1.47E-04 | [ | 1.33E-04 | , | 1.62E-04 | ] | 5.99E-06 | [ | 4.65E-06 | , | 7.50E-06 | ] |
| **GR** | 6.83E-07 | [ | 2.51E-08 | , | 3.53E-06 | ] | 8.43E-06 | [ | 6.90E-06 | , | 1.01E-05 | ] | 1.07E-05 | [ | 1.51E-06 | , | 3.47E-05 | ] | 2.61E-05 | [ | 2.45E-05 | , | 2.75E-05 | ] |
| **HU** | 4.93E-06 | [ | 4.23E-06 | , | 5.67E-06 | ] | 1.06E-04 | [ | 9.72E-05 | , | 1.16E-04 | ] | 2.00E-04 | [ | 1.75E-04 | , | 2.28E-04 | ] | 2.39E-04 | [ | 2.30E-04 | , | 2.47E-04 | ] |
| **IE** | 3.39E-07 | [ | 1.83E-07 | , | 5.52E-07 | ] | 2.24E-05 | [ | 1.88E-05 | , | 2.61E-05 | ] | 2.34E-04 | [ | 1.56E-04 | , | 3.26E-04 | ] | 3.95E-05 | [ | 3.04E-05 | , | 4.91E-05 | ] |
| **IT** | 6.56E-06 | [ | 5.22E-06 | , | 8.06E-06 | ] | 5.81E-05 | [ | 5.51E-05 | , | 6.11E-05 | ] | 4.52E-05 | [ | 3.52E-05 | , | 5.72E-05 | ] | 1.34E-06 | [ | 8.14E-07 | , | 2.00E-06 | ] |
| **LT** | 2.08E-05 | [ | 7.6E-06 | , | 3.5E-05 | ] | 1.2E-04 | [ | 1.0E-04 | , | 1.4E-04 | ] | 1.3E-04 | [ | 4.6E-05 | , | 2.5E-04 | ] | 3.8E-02 | [ | 3.7E-02 | , | 3.9E-02 | ] |
| **LU** | 3.11E-05 | [ | 5.6E-06 | , | 5.2E-05 | ] | 2.8E-05 | [ | 1.2E-05 | , | 5.0E-05 | ] | 4.0E-04 | [ | 1.9E-04 | , | 6.9E-04 | ] | 6.8E-04 | [ | 5.5E-04 | , | 8.1E-04 | ] |
| **LV** | 2.85E-06 | [ | 9.1E-08 | , | 1.2E-05 | ] | 7.5E-05 | [ | 6.0E-05 | , | 9.2E-05 | ] | 7.5E-05 | [ | 3.2E-06 | , | 3.0E-04 | ] | 9.4E-05 | [ | 8.8E-05 | , | 1.0E-04 | ] |
| **NL** | 5.37E-06 | [ | 3.7E-06 | , | 6.7E-06 | ] | 2.0E-05 | [ | 1.8E-05 | , | 2.2E-05 | ] | 1.5E-04 | [ | 1.1E-04 | , | 1.8E-04 | ] | 2.9E-05 | [ | 2.6E-05 | , | 3.1E-05 | ] |
| **PL** | 2.01E-05 | [ | 1.7E-05 | , | 2.0E-05 | ] | 5.8E-05 | [ | 5.4E-05 | , | 6.3E-05 | ] | 2.1E-05 | [ | 1.5E-05 | , | 2.9E-05 | ] | 3.9E-05 | [ | 3.4E-05 | , | 4.5E-05 | ] |
| **PT** | 8.37E-06 | [ | 6.8E+03 | , | 9.8E-06 | ] | 8.2E-06 | [ | 7.3E-06 | , | 9.1E-06 | ] | 5.4E-06 | [ | 2.9E-07 | , | 1.8E-05 | ] | 2.3E-06 | [ | 7.4E-07 | , | 4.9E-06 | ] |
| **SE** | 1.46E-04 | [ | 2.4E-05 | , | 2.4E-04 | ] | 7.7E-05 | [ | 6.3E-05 | , | 9.1E-05 | ] | 5.0E-03 | [ | 3.1E-03 | , | 7.1E-03 | ] | 3.8E-04 | [ | 2.3E-04 | , | 5.4E-04 | ] |
| **SI** | 6.52E-06 | [ | 2.2E-07 | , | 2.9E-05 | ] | 1.3E-04 | [ | 1.1E-04 | , | 1.5E-04 | ] | 8.8E-05 | [ | 5.5E-05 | , | 1.3E-04 | ] | 2.3E-04 | [ | 2.1E-04 | , | 2.4E-04 | ] |
| **SK** | 1.50E-07 | [ | 5.5E-09 | , | 6.6E-07 | ] | 3.8E-04 | [ | 3.5E-04 | , | 4.1E-04 | ] | 6.4E-04 | [ | 5.0E-04 | , | 8.0E-04 | ] | 1.1E-03 | [ | 1.0E-03 | , | 1.1E-03 | ] |
| **UK** | 1.71E-06 | [ | 1.1E-06 | , | 2.0E-06 | ] | 4.4E-05 | [ | 4.0E-05 | , | 4.8E-05 | ] | 1.2E-03 | [ | 1.1E-03 | , | 1.4E-03 | ] | 4.8E-04 | [ | 4.7E-04 | , | 4.9E-04 | ] |

**Appendix D**. Estimated values for *qi*, *Salmonella* subtype-dependent factor (mean and 95% Credibility Interval).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Serovar** | ***qi*** | **95% CI** | | |
| ***S*. Enteritidis** | 1(a) |  |  |  |
| ***S*. Agona** | 0.0527 | [0.0488 | , | 0.0569] |
| ***S*. Anatum** | 0.0252 | [0.0223 | , | 0.0283] |
| ***S*. Bovismorbificans** | 0.1854 | [0.1690 | , | 0.2034] |
| ***S*. Brænderup** | 0.1386 | [0.1223 | , | 0.1567] |
| ***S.* Brandenburg** | 0.1096 | [0.1009 | , | 0.1190] |
| ***S*. Bredeney** | 0.0170 | [0.0151 | , | 0.0191] |
| ***S*. Derby** | 0.0197 | [0.0186 | , | 0.0201] |
| ***S*. Hadar** | 0.0734 | [0.0670 | , | 0.0806] |
| ***S*. Heidelberg** | 0.1163 | [0.0960 | , | 0.1401] |
| ***S*. Infantis** | 0.1223 | [0.1167 | , | 0.1281] |
| ***S.* Kentucky** | 1.9980 | [1.7970 | , | 2.2130] |
| ***S*. Kottbus** | 0.0143 | [0.0124 | , | 0.0164] |
| ***S*. Livingstone** | 0.0595 | [0.0540 | , | 0.0653] |
| ***S*. London** | 0.0826 | [0.0751 | , | 0.0908] |
| ***S*. Mbandaka** | 0.0473 | [0.0425 | , | 0.0523] |
| ***S*. Montevideo** | 0.1124 | [0.1044 | , | 0.1210] |
| ***S*. Newport** | 0.2476 | [0.2320 | , | 0.2645] |
| ***S*. Rissen** | 0.0302 | [0.0268 | , | 0.0340] |
| ***S*. Saintpaul** | 0.0600 | [0.0538 | , | 0.0671] |
| ***S*. Typhimurium** | 0.2153 | [0.2054 | , | 0.2264] |
| ***S*. Virchow** | 0.2469 | [0.2320 | , | 0.2625] |

(a) The q value for *S*. Enteritidis is fixed to 1, and the other serovars are calculated relatively to it.