*Epidemiology and Infection*

**The Shift in Seasonality of Legionellosis in the U.S.**

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*Supplementary Material*

**Table S1.** Age distribution of reported cases to the CDC from 1993 to 2015.

**Table S2.** Summary of trend and peak timing estimates for reported legionellosis cases by the CDC during 1993 – 2015 (December cases removed).

**Table S1.** Age distribution of reported cases to the CDC from 1993 to 2013.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   |   | Age group (years) |   | Summary |
| Year |   | <1 | 1-4 | 5-14 | 15-24 | 25-39 | 40-64 | 65+ | age not stated |   | Total | % 65+ |
| *period 1* |  | 1993 |   | 4 | 5 | 7 | 29 | 171 | 1014\* | 50 |   | 1280 | NA |
|  | 1994 |   | 6 | 5 | 7 | 47 | 209 | 1303\* | 38 |   | 1615 | NA |
|  | 1995 |   | 4\* | 10 | 30 | 652\* | 518 | 27 |   | 1241 | 41.7 |
|  | 1996 |   | 4 | 3 | 5 | 32 | 142 | 484 | 516 | 12 |   | 1198 | 43.1 |
|  | 1997 |   | 4 | 1 | 5 | 24 | 144 | 517 | 454 | 14 |   | 1163 | 39.0 |
| *period 1a* | 1998 |   | 4 | 2 | 4 | 17 | 136 | 609 | 569 | 14 |   | 1355 | 42.0 |
| 1999 |   | 3 | 1 | 5 | 25 | 120 | 503 | 440 | 11 |   | 1108 | 39.7 |
| 2000 |   | 6 | 1 | 4 | 22 | 115 | 543 | 429 | 7 |   | 1127 | 38.1 |
| 2001 |   | 3 | 2 | 8 | 7 | 128 | 590 | 421 | 9 |   | 1168 | 36.0 |
| 2002 |   | 4 | - | 5 | 28 | 128 | 673 | 476 | 7 |   | 1321 | 36.0 |
| *period 2* | *period 2a* | 2003 |   | 2 | - | 5 | 29 | 191 | 1187 | 796 | 22 |   | 2232 | 35.7 |
| 2004 |   | 6 | 1 | 8 | 27 | 194 | 1044 | 728 | 85 |   | 2093 | 34.8 |
| 2005 |   | 3 | 2 | 13 | 25 | 180 | 1177 | 884 | 17 |   | 2301 | 38.4 |
| 2006 |   | 4 | 3 | 4 | 29 | 209 | 1466 | 1111 | 8 |   | 2834 | 39.2 |
|  | 2007 |   | 7 | 3 | 4 | 25 | 203 | 1386 | 1082 | 6 |   | 2716 | 39.8 |
|  | 2008 |   | 3 | 2 | 9 | 40 | 220 | 1649 | 1241 | 17 |   | 3181 | 39.0 |
|  | 2009 |   | 2 | 4 | 4 | 34 | 242 | 1825 | 1386 | 25 |   | 3522 | 39.4 |
|  | 2010 |   | 6 | 4 | 7 | 38 | 240 | 1699 | 1296 | 56 |   | 3346 | 38.7 |
|  | 2011 |   | 2 | 5 | 13 | 41 | 257 | 2107 | 1646 | 131 |   | 4202 | 39.2 |
|  | 2012 |   | 1 | 1 | 6 | 38 | 248 | 1863 | 1442 | 89 |   | 3688 | 39.1 |
|  | 2013 |   | 4 | 9 | 5 | 39 | 287 | 2413 | 1844 | 353 |   | 4954 | 37.2 |
|  | 2014 |  | 1 | 0 | 2 | 37 | 335 | 2374 | 2185 | 232 |  | 5166 | 42.3 |
|  | 2015 |   | 3 | 5 | 4 | 57 | 404 | 2844 | 2559 | 203 |   | 6079 | 42.1 |
|  \* Age categories in 1993 to 1995 differed from the other years. In 1993 and 1994, the age categories for individuals above 39 were the following: 40-49, 50-59 and 60+. These correspond to values 180, 188, and 646 in 1993 and 259, 276, and 768 in 1994. In 1995, age category under 5 was listed with a value of 4 and categories 25-44 and 45-64 were listed with values of 255 and 397 respectively.- These values were not defined the original CDC reports and were assumed as 0 since the corresponding rates of (0) were provided in parentheses. NA: Not applicable |

**Table S2.** Summary of trend and peak timing estimates for reported legionellosis cases by the CDC during 1993 – 2015 (December cases removed).

|  |  |  |
| --- | --- | --- |
| Term |   | *Estimate (95%CI)* |
|   | *period 1* |  | *period 2* |
| Trend as % change in disease counts per month |   |  |   |   |
|   | 0.243 (0.206, 0.281) |   | 0.851 (0.831, 0.870) |
|   |  |   |   |
| Peak timing in months |   |  |   |   |
|   | 8.982 (8.796, 9.169) |   | 8.205 (8.163, 8.247) |
|   |  |   |   |
| Peak timing  |   | Aug 30 (Aug 25, Sep 5) |   | Aug 6 (Aug 5, Aug 8) |
|  | CI-Low: 0.186 (5.59d) |  | CI-Low: 0.042 (1.30d) |
|  | CI-High: 0.186 (5.59d) |  | CI-High: 0.042 (1.30d) |