*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) | |