**Supplementary Table S1.** Characteristics of non-overlapping space-time clusters of reported domestically-acquired typhoid fever cases\* detected by a) state-level analysis; b) region-level analysis; and c) continental United States-level analysis, United States, 1999–2010

a)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| State  | No. of observed cases | Duration (start month – end month) | Radius (km)† | Observed cases / Expected cases | *P*-value | Contains outbreak |
| Alabama‡ | 2 | Jun 2008 | 0 | 16510.12 | <0.01 | Yes |
| Alabama‡ | 2 | Feb 2003 – Jul 2003 | 0 | 329.89 | 0.07 | Yes |
| California | 15 | May 2002 – Aug 2002 | 240 | 6.62 | <0.01 | Yes |
| California‡ | 13 | Jan 2006 – Nov 2008 | 47 | 6.60 | 0.02 | Yes |
| California‡ | 2 | Jan 2003 | 0 | 34.87 | 0.77 | Yes |
| Colorado‡ | 5 | Nov 2005 – Sep 2007 | 48 | 15.96 | 0.02 | No |
| Connecticut‡ | 7 | Jan 2001 – Aug 2004 | 0 | 6.80 | 0.05 | No |
| Florida‡ | 15 | Jan 1999 – Feb 1999 | 60 | 107.04 | <0.01 | Yes |
| Florida‡ | 3 | Aug 2009 – Oct 2009 | 200 | 10.97 | 0.98 | No |
| Georgia‡ | 10 | Jun 1999 – Jun 2002 | 28 | 8.59 | <0.01 | Yes |
| Hawaii‡ | 4 | Jan 2006 – Jul 2008 | 178 | 6.77 | 0.19 | No |
| Illinois‡ | 3 | Sep 2007 – Nov 2007 | 0 | 197.57 | 0.01 | Probably |
| Illinois‡ | 2 | Oct 2008 – Feb 2009 | 46 | 11.80 | 0.99 | No |
| Kentucky‡ | 2 | Apr 2004 | 0 | 435.59 | 0.06 | No |
| Massachusetts‡ | 7 | Apr 2003 – Jun 2004 | 31 | 11.68 | 0.01 | Yes |
| Massachusetts‡ | 2 | Dec 2007 | 0 | 217.76 | 0.09 | Yes |
| Maryland‡ | 8 | Dec 2006 – Jul 2009 | 63 | 6.58 | 0.05 | No |
| Michigan‡ | 5 | Jun 1999 – Jun 2001 | 0 | 30.20 | 0.01 | Probably |
| Minnesota‡ | 16 | May 2004 – Jun 2009 | 30 | 4.46 | <0.01 | Yes |
| Missouri‡ | 4 | Sep 2001 | 45 | 2225.92 | <0.01 | Yes |
| New Jersey‡ | 7 | Jun 2000 – Oct 2000 | 68 | 14.62 | 0.01 | No |
| New Jersey‡ | 2 | Mar 2001 – Apr 2001 | 23 | 131.70 | 0.40 | No |
| New Jersey‡ | 2 | Jul 2007 | 42 | 80.39 | 0.65 | No |
| Nevada‡ | 2 | Jan 2001 – Apr 2001 | 0 | 81.82 | 0.07 | Yes |
| New York | 10 | Sep 2000 – Oct 2000 | 17 | 27.60 | <0.01 | Yes |
| New York‡ | 3 | Aug 2010 | 207 | 17.86 | >0.99 | No |
| Ohio‡ | 4 | Jul 2000 | 0 | 479.38 | <0.01 | Yes |
| Ohio‡ | 2 | Dec 2008 – Jan 2009 | 0 | 88.55 | 0.80 | Yes |
| Oregon‡ | 2 | Sep 2010 | 0 | 256.79 | 0.14 | No |
| Oregon‡ | 2 | Jan 2006 – Aug 2006 | 0 | 19.73 | 0.99 | No |
| Oregon‡ | 2 | Aug 2001 – Nov 2001 | 328 | 18.98 | 0.99 | No |
| Pennsylvania‡ | 2 | Sep 2002 – May 2004 | 126 | 9.91 | >0.99 | No |
| South Dakota‡ | 2 | Jan 2009 | 0 | 754.15 | 0.97 | Yes |
| Tennessee‡ | 3 | Apr 2009 – May 2009 | 0 | 764.83 | <0.01 | Yes |
| Texas‡ | 6 | Aug 2003 | 138 | 118.47 | <0.01 | Yes |
| Texas‡ | 3 | Oct 2010 | 48 | 88.77 | 0.19 | Yes |
| Virginia‡ | 6 | May 2000 – Jun 2000 | 49 | 94.04 | <0.01 | Yes |
| Virginia‡ | 2 | Aug 2001 – Sep 2001 | 0 | 1075.60 | 0.05 | Yes |
| Virginia‡ | 2 | Jun 2006 – Aug 2006 | 49 | 67.81 | 0.94 | Yes |
| Washington‡ | 6 | Nov 2009 – May 2010 | 0 | 21.17 | <0.01 | Yes |
| Washington | 2 | Sep 2000 | 57 | 97.75 | 0.50 | No |
| Washington‡ | 2 | Nov 2007 – Dec 2007 | 116 | 33.18 | 0.96 | Yes |
| Wisconsin‡ | 3 | Aug 2004 – Jun 2005 | 238 | 30.80 | 0.29 | No |
| Wisconsin‡ | 2 | Apr 2008 – Nov 2008 | 42 | 22.02 | 0.93 | No |

b)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Region§ | State¶ | No. of observed case | Duration (start month – end month) | Radius (km)† | Observed cases / Expected cases | *P*-value | Contains outbreak |
| Eastern‡ | New Jersey | 13 | Sep 2000 – Oct 2000 | 21 | 49.03 | <0.01 | Yes |
| Eastern | Virginia | 6 | May 2000 – Jun 2000 | 49 | 104.39 | <0.01 | Yes |
| Eastern | Tennessee | 3 | Apr 2009 – May 2009 | 0 | 272.03 | 0.13 | Yes |
| Eastern | Virginia | 2 | Aug 2001 – Sep 2001 | 0 | 1282.56 | 0.34 | Yes |
| Eastern | Kentucky | 2 | Apr 2004 | 0 | 177.51 | >0.99 | No |
| Western‡ | California | 57 | Aug 1999 – Aug 2003 | 234 | 2.88 | <0.01 | Yes |
| Western‡ | Nevada | 5 | Jun 2010 – Jul 2010 | 185 | 23.17 | 0.29 | Yes |
| Western | Washington | 6 | Nov 2009 – May 2010 | 0 | 12.71 | 0.59 | Yes |
| Western | Oregon | 2 | Sep 2010 | 0 | 250.41 | 0.81 | No |
| Western‡ | Washington | 3 | Sep 2000 | 162 | 27.12 | >0.99 | Yes |
| Minnesota | Minnesota | 16 | May 2004 – Jun 2009 | 30 | 9.22 | <0.01 | Yes |

c)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| State¶  | No. of observed case | Duration(start month – end month) | Radius (km)† | Observed cases / Expected cases | *P*-value | Contains outbreak |
| Florida | 15 | Jan 1999 – Feb 1999 | 61 | 113.37 | <0.01 | Yes |
| California | 85 | Jan 1999 – Sep 2003 | 664 | 3.63 | <0.01 | Yes |
| New Jersey | 13 | Sep 2000 – Oct 2000 | 21 | 55.89 | <0.01 | Yes |
| Minnesota | 16 | May 2004 – June 2009 | 30 | 11.03 | <0.01 | Yes |
| Missouri | 4 | Sep 2001  | 45 | 932.16 | <0.01 | Yes |
| Ohio | 4 |  Jul 2000 | 0 | 324.34 | 0.01 | Yes |
| Texas | 6 | Aug 2003 | 138 | 63.08 | 0.01 | Yes |
| Tennessee | 3 | Apr 2009 – May 2009 | 0 | 310.10 | 0.30 | Yes |
| South Dakota | 2 | Jan 2009 | 0 | 754.15 | 0.97 | Yes |

\* Space-time clusters were identified among cases reported to the National Typhoid and Paratyphoid Fever Surveillance. Space-time clusters with *P*-value <1.00 were included in the analysis.

† 0 km radius indicates that the cluster is limited to one county.

‡ Distinct non-overlapping space-time clusters considered in further analysis.

§ Three regions were analyzed: a region in the eastern United States (Connecticut, Delaware, Kentucky, Massachusetts, Maryland, North Carolina, New Jersey, New York, Pennsylvania, Rhode Island, Tennessee, Virginia, Vermont, West Virginia); a region in the western United States (Arizona, California, Idaho, Oregon, Nevada, Washington) and a region around Minnesota (Iowa, Minnesota, North Dakota, South Dakota, Wisconsin).

¶ State where the cluster’s center is located.