
National Center for Emerging and Zoonotic Infectious Diseases
Division of Foodborne, Waterborne, and Environmental Diseases
Salmonellosis is estimated to cause more than 1.2 million illnesses each year in the United States, with more than 23,000 hospitalizations and 450 deaths (1). *Salmonella* infections most often cause gastroenteritis, which can range from mild to severe. However, invasive infections can also occur and can be severe and life-threatening.

National surveillance for *Salmonella* infections was established in the United States in 1962. Clinical diagnostic laboratories submit *Salmonella* isolates from human clinical specimens to state and territorial public health laboratories, where they are confirmed and serotyped according to the Kauffmann-White scheme. Reports of these laboratory-confirmed *Salmonella* isolates are then submitted by state and territorial public health departments to the Centers for Disease Control and Prevention (CDC) (2). Unusual or untypable serotypes are forwarded to the National *Salmonella* Reference Laboratory at CDC for further characterization or confirmation; results are reported back to state and territorial public health laboratories. Serotyping provides a consistent subtyping scheme for that has changed little over time, permitting analysis of trends in surveillance data. In the United States, serotype-specific *Salmonella* surveillance is conducted to define endemic patterns of salmonellosis, to detect outbreaks, to identify temporal trends in disease transmission, and to monitor the impact of control efforts. This report summarizes 42 years of surveillance data on *Salmonella* isolates from humans, and includes analyses by age, sex, geography, and season.

In addition to reports of isolates from humans, reports of *Salmonella* isolates from animals and related sources (e.g., environment and feeds) are included in this report; these data come from the National Veterinary Services Laboratories (NVSL) of the United States Department of Agriculture’s Food Safety and Inspection Service (USDA-FSIS). These isolates are submitted by veterinary diagnostic laboratories throughout the United States for serotyping (2). Clinical animal isolates (referred to as “clinical/non-human”) are *Salmonella* isolates from animals with clinical signs consistent with salmonellosis; “non-clinical/non-human” isolates are *Salmonella* isolates identified through herd and flock monitoring and surveillance, feed sample testing, environmental testing, and USDA-FSIS food testing programs.

**Explanation of Figures**

Figures for this report were generated using data from a 42-year period, 1968 to 2011, for the top 30 serotypes.

Figure 1 shows the 3-month moving average rate of reported isolates (per 100,000 population) by month and year. Data points for each month are the mean of the rate of isolates from that month (determined by specimen collection date) and the preceding and subsequent months. This smoothing process reduces erratic fluctuations (reporting artifacts, random changes, or outbreaks) that could obscure real periodic changes and therefore helps reveals periodic occurrences that are useful for characterizing some serotypes.

Figure 2 shows the distribution of human isolates by specimen source. The graph has 6 different types or groups of sources. For each source type, the data graphed are the percentage of the total number of isolates reported for each source. Note that the Y-axis scale varies from serotype to serotype.
Figure 3 shows the distribution of isolates by month of specimen collection for each of 3 age groups: 0-4 years old, 5-29 years old, and 30+ years old. For each age group, the percentage of isolates reported in each month of the year is plotted.

Figure 4 shows the rate of isolates (per 100,000 population) by year for each of 3 age groups: 0-4 years old, 5-29 years old, and 30+ years old. Note that the Y-axis scale varies from serotype to serotype.

Figure 5 shows the median ages of persons whose specimens yielded isolates, by sex, for each month of the year.

Figure 6 shows the median ages of persons whose specimens yielded isolates, by sex, for each year of specimen collection. When interpreting this graph, it is important to bear in mind that, over this period, the average age of the US population increased.

Figure 7 shows the distribution by age group and sex of persons whose specimens yielded isolates. Age-groups are <1, 1-4, 5-9, 10-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79 and 80+ years old. For each age group the graph shows the percentage of the total number of isolates reported for each sex. These percentages are not adjusted for the unequal age group intervals. Note that the Y-axis scale varies from serotype to serotype.

Figure 8 summarizes data from NVSL for non-human sources from 1968 to 2011. Samples originating from non-human sources are tested for Salmonella for a variety of purposes; sampling is neither complete nor representative, and any interpretation of these data should consider these limitations.

Figures 9 through 14 show age-standardized rates of isolates per 100,000 population, by county, in 6 maps. Eight-year intervals were used for the analysis, except for the last two intervals, which are 7 and 6 years, respectively. Average rates for each county were determined by summing the total number of isolates from each time interval and dividing by the population, based on US census data for the midpoint of the interval. The county-specific rates were then standardized to the age distribution of the 2011 census. The data were categorized into four levels corresponding to quartiles of the overall serotype-specific incidences over the 42-year period. Counties for which data are not shown are those for which the state reported isolates of the serotype but did not provide county-level information or for which the state reported no isolates of the serotype (no infections with that serotype were diagnosed, or isolates were not fully serotyped). Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time.

**Data limitations**

A major limitation of these data is that many cases of salmonellosis are not diagnosed and reported to the state health department; this may occur because the ill person does not seek medical care, the health care provider does not obtain a stool culture, or the culture results are not reported to public health officials. These factors lead to underreporting; it is estimated that 29.3 cases of salmonellosis occur for every one that is laboratory-confirmed and reported (1). A second important limitation is that, overall, 7.6% of specimens are reported with missing or incomplete serotype, which adds another source of potential bias to the data descriptions.
References


Suggested Citation
Salmonella serotype Agona

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=33,426

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=33,426

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=26,276   Missing=7,150

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=26,276   Missing=7,150

Salmonella serotype Agona

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time.
Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Agona

Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Rate per 100,000 population

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-6 for full details on changes to county and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Agona

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

[Map showing age-standardized rates per 100,000 population by county for Salmonella serotype Agona from 1984 to 1991, with color coding for rate per 100,000 population: blue for 0.01 to 0.16, light blue for 0.17 to 0.31, yellow for 0.32 to 0.58, and red for > 0.58.]

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Salmonella serotype Agona

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Anatum

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=10,702

Year specimen collected

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=10,702

Source of specimen collected

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=8,487  Missing=2,215

Month specimen collected

Age group  0 to 4 years  5 to 29 years  30+ years

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=8,487  Missing=2,215

Year specimen collected

Age group  0 to 4 years  5 to 29 years  30+ years
Salmonella serotype Anatum

Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011

N=6,487  Missing=2,402

Month specimen collected
- Female
- Male

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011

N=6,487  Missing=2,402

Year specimen collected
- Female
- Male

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011

N=6,487  Missing=2,402

Age group
- Female
- Male

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011

N=16,227

Source
- Birds/Wild Animals
- Bovine
- Chicken
- Equine
- Reptile
- Turkey
- Domestic Animal/Environment
- Feed/Food Supplements
- Other

Clonal

Non-Clonal

Percentage

0 10 20 30 40 50 60 70 80 90 100

0.00 0.04 1.12 2.19 3.25 4.32 5.38 6.44 7.50 8.56 9.62 10.68 11.74 12.80 13.86 14.92 15.98 17.04 18.10 19.16 20.22 21.28 22.34 23.40 24.46 25.52 26.58 27.64 28.70 29.76 30.82 31.88 32.94 33.99 35.05 36.11 37.17 38.23 39.29 40.35 41.41 42.47 43.53 44.59 45.65 46.70 47.76 48.82 49.87 50.93 51.99 53.05 54.10 55.16 56.21 57.27 58.32 59.37 60.43 61.48 62.54 63.59 64.64 65.69 66.74 67.79 68.84 69.89 70.94 71.99 73.04 74.09 75.14 76.19 77.24 78.29 79.34 80.39 81.44 82.49 83.54 84.59 85.64 86.69 87.74 88.79 89.84 90.89 91.94 92.99 94.04 95.09 96.14 97.19 98.24 99.29 100.34

Count  %

199  2.90
2,681 19.50
1,160  8.64
716  5.23
2,701 19.65
73  0.53
2,492 18.13
2,535 17.13
511  3.63
15  0.10
925  3.72
322 12.08
14  0.06
343  1.33
1  0.04
301 12.13
407 16.40
152  6.13
1  0.04
Salmonella serotype Anatum

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998
**Salmonella serotype Anatum**

**Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005**

[Map of the United States showing age-standardized rates for Salmonella serotype Anatum, with color coding indicating different rate ranges.]
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Berta

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=8,884

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=8,884

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=7,343  Missing=1,521

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=7,343  Missing=1,521
Salmonella serotype Berta

Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011

N=7,363  Missing=1,719

Month specimen collected
- Female
- Male

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011

N=7,363  Missing=1,719

Year specimen collected
- Female
- Male

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011

N=7,363  Missing=1,719

Age group
- Female
- Male

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011

N=2,551

<table>
<thead>
<tr>
<th>Source</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds/Wild Animals</td>
<td>9</td>
<td>0.69</td>
</tr>
<tr>
<td>Bovine</td>
<td>45</td>
<td>3.45</td>
</tr>
<tr>
<td>Chicken</td>
<td>677</td>
<td>51.86</td>
</tr>
<tr>
<td>Equine</td>
<td>29</td>
<td>2.22</td>
</tr>
<tr>
<td>Pig</td>
<td>56</td>
<td>4.29</td>
</tr>
<tr>
<td>Reptile</td>
<td>25</td>
<td>1.92</td>
</tr>
<tr>
<td>Turkey</td>
<td>107</td>
<td>8.20</td>
</tr>
<tr>
<td>Other</td>
<td>340</td>
<td>26.05</td>
</tr>
<tr>
<td>Domestic Animals</td>
<td>13</td>
<td>1.00</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.16</td>
</tr>
<tr>
<td>Feed/Feed Supplements</td>
<td>4</td>
<td>0.31</td>
</tr>
<tr>
<td>Domestic Animals</td>
<td>4</td>
<td>0.32</td>
</tr>
<tr>
<td>Other</td>
<td>810</td>
<td>65.01</td>
</tr>
<tr>
<td>Domestic Animals</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
<td>1.69</td>
</tr>
<tr>
<td>Domestic Animals</td>
<td>254</td>
<td>20.00</td>
</tr>
<tr>
<td>Other</td>
<td>86</td>
<td>6.90</td>
</tr>
<tr>
<td>Domestic Animals</td>
<td>13</td>
<td>1.04</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
<td>1.20</td>
</tr>
</tbody>
</table>

Salmonella Atlas 2013
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Berta

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time.
Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped)
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Blockley

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=10,387

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=10,387

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=7,908  Missing=2,479

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=7,908  Missing=2,479
Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011

N=7,908  Missing=2,568

Month specimen collected
- Female
- Male

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011

N=7,908  Missing=2,568

Year specimen collected
- Female
- Male

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011

N=7,908  Missing=2,568

Age group
- Female
- Male

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011

N=1,966

Source
- Clinical
  - Birds/Wild Animals
  - Bovine
  - Chicken
  - Equine
  - Porcine
  - Rattlesnake
  - Turkey

- Non-Clinical
  - Domestic Animals/Environment
  - Feed/Feed Supplements

<table>
<thead>
<tr>
<th>Source</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds/Wild Animals</td>
<td>948</td>
<td>48.48</td>
</tr>
<tr>
<td>Bovine</td>
<td>21</td>
<td>1.06</td>
</tr>
<tr>
<td>Chicken</td>
<td>68</td>
<td>3.47</td>
</tr>
<tr>
<td>Equine</td>
<td>14</td>
<td>0.72</td>
</tr>
<tr>
<td>Porcine</td>
<td>500</td>
<td>25.75</td>
</tr>
<tr>
<td>Rattlesnake</td>
<td>260</td>
<td>13.27</td>
</tr>
<tr>
<td>Turkey</td>
<td>160</td>
<td>8.16</td>
</tr>
<tr>
<td>Domestic Animals/Environment</td>
<td>30</td>
<td>1.52</td>
</tr>
<tr>
<td>Feed/Feed Supplements</td>
<td>30</td>
<td>1.52</td>
</tr>
</tbody>
</table>

Count  | %
---     | ---
47      | 2.42
23      | 1.18
948     | 48.48
21      | 1.06
68      | 2.67
14      | 0.72
530     | 27.25
260     | 13.27
160     | 8.16
30      | 1.52
30      | 1.52
1       | 0.05
2       | 0.10
0       | 0.00
0       | 0.00
0       | 0.00
1       | 0.05
952     | 4.86
0       | 0.00
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Blockley

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time.
Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Braenderup

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011
Salmonella serotype Braenderup

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998
Salmonella serotype Braenderup

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Salmonella serotype Braenderup

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards Publication 64 for full details on changes to counties and equivalent entities of the United States over time.

Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Derby

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=12,525

Year specimen collected

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=12,525

Source of specimen collected

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=9,564 Missing=2,961

Month specimen collected

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=9,564 Missing=2,961

Year specimen collected

Age group  
- 0 to 4 years  
- 5 to 29 years  
- 30+ years
Salmonella serotype Derby

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Rate per 100,000 population

0.01 to 0.07  0.08 to 0.15  0.16 to 0.33  > 0.33

Age standardization based on 2011 census

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Derby

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Enteritidis

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)

Age standardization based on 2011 census

Rate per 100,000 population:
- 0.01 to 0.58
- 0.59 to 1.17
- 1.18 to 2.24
- > 2.24
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time.
Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
**Salmonella serotype Enteritidis**

**Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991**

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011
Salmonella serotype Hadar

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011
Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011
N=19,730  Missing=5,337

Month specimen collected
- Female
- Male

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011
N=19,730  Missing=5,337

Year specimen collected
- Female
- Male

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011
N=19,730  Missing=5,337

Age group
- Female
- Male

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011
N=15,906

<table>
<thead>
<tr>
<th>Source</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birds/Wild Animals</td>
<td>198</td>
<td>1.71</td>
</tr>
<tr>
<td>Bovine</td>
<td>207</td>
<td>1.78</td>
</tr>
<tr>
<td>Chicken</td>
<td>5450</td>
<td>46.97</td>
</tr>
<tr>
<td>Equine</td>
<td>12</td>
<td>0.10</td>
</tr>
<tr>
<td>Porcine</td>
<td>131</td>
<td>1.13</td>
</tr>
<tr>
<td>Rattles</td>
<td>18</td>
<td>0.16</td>
</tr>
<tr>
<td>Turkey</td>
<td>3097</td>
<td>26.69</td>
</tr>
<tr>
<td>Other</td>
<td>2286</td>
<td>19.54</td>
</tr>
<tr>
<td>Domestic Animals/Environment</td>
<td>150</td>
<td>1.29</td>
</tr>
<tr>
<td>Feed/Food Supplements</td>
<td>48</td>
<td>0.41</td>
</tr>
<tr>
<td>Clinical</td>
<td>11</td>
<td>0.26</td>
</tr>
<tr>
<td>Birds/Wild Animals</td>
<td>272</td>
<td>2.32</td>
</tr>
<tr>
<td>Bovine</td>
<td>73</td>
<td>0.63</td>
</tr>
<tr>
<td>Chicken</td>
<td>22</td>
<td>0.19</td>
</tr>
<tr>
<td>Equine</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Porcine</td>
<td>122</td>
<td>1.02</td>
</tr>
<tr>
<td>Rattles</td>
<td>3343</td>
<td>27.71</td>
</tr>
<tr>
<td>Turkey</td>
<td>225</td>
<td>1.88</td>
</tr>
<tr>
<td>Other</td>
<td>372</td>
<td>3.14</td>
</tr>
<tr>
<td>Domestic Animals/Environment</td>
<td>8</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Non-Clinical

<table>
<thead>
<tr>
<th>Source</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds/Wild Animals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bovine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porcine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rattles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Animals/Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed/Food Supplements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Salmonella serotype Hadar**

**Figure 09 - Age standardized rates per 100,000 of reported isolates by county, 1968 to 1975**

***No isolates reported during this time period***
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Rate per 100,000 population

- Blue: 0.01 to 0.16
- Light blue: 0.17 to 0.33
- Yellow: 0.34 to 0.69
- Red: > 0.69

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entitles of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
**Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011**

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Heidelberg

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=103,420

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=103,420

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=82,706  Missing=20,714

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=82,706  Missing=20,714
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Age standardization based on 2011 census

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entitles of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Age standardization based on 2011 census

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype I4,[5],12:i:-
Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011

N=9,761  Missing=1,318

Month specimen collected
- Female
- Male

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011

N=9,761  Missing=1,318

Year specimen collected
- Female
- Male

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011

N=9,761  Missing=1,318

Age group
- Female
- Male

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011

N=2,518

<table>
<thead>
<tr>
<th>Source</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds/Wild Animals</td>
<td>195</td>
<td>14.46</td>
</tr>
<tr>
<td>Bovine</td>
<td>486</td>
<td>35.88</td>
</tr>
<tr>
<td>Chicken</td>
<td>54</td>
<td>4.00</td>
</tr>
<tr>
<td>Equine</td>
<td>115</td>
<td>8.70</td>
</tr>
<tr>
<td>Pork</td>
<td>213</td>
<td>15.79</td>
</tr>
<tr>
<td>Reptile</td>
<td>7</td>
<td>0.52</td>
</tr>
<tr>
<td>Turkey</td>
<td>2</td>
<td>0.15</td>
</tr>
<tr>
<td>Other</td>
<td>32</td>
<td>2.37</td>
</tr>
<tr>
<td>Domestic Animal/Environment</td>
<td>47</td>
<td>3.48</td>
</tr>
<tr>
<td>Feed/Feed Supplements</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Birds/Wild Animals</td>
<td>36</td>
<td>2.68</td>
</tr>
<tr>
<td>Bovine</td>
<td>42</td>
<td>3.59</td>
</tr>
<tr>
<td>Chicken</td>
<td>840</td>
<td>61.66</td>
</tr>
<tr>
<td>Equine</td>
<td>6</td>
<td>0.51</td>
</tr>
<tr>
<td>Pork</td>
<td>39</td>
<td>2.94</td>
</tr>
<tr>
<td>Reptile</td>
<td>35</td>
<td>2.79</td>
</tr>
<tr>
<td>Turkey</td>
<td>101</td>
<td>7.64</td>
</tr>
<tr>
<td>Other</td>
<td>69</td>
<td>5.09</td>
</tr>
<tr>
<td>Domestic Animal/Environment</td>
<td>1</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Salmonella serotype I 4,[5],12:i:-
Figure 09 - Age standardized rates per 100,000 of reported isolates by county, 1968 to 1975

*** No isolates reported during this time period ***

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 4-4 for full details on changes to counties and equivalent entities of the United States over time.

H76pt Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Salmonella serotype I 4,[5],12:i:-
Figure 11 - Age standardized rates per 100,000 of reported isolates by county, 1984 to 1991

*** No isolates reported during this time period ***

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time.

H76p1 Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)

Salmonella serotype I 4,[5],12:i:-
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time.

Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Infantis

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=40,213

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=40,213

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=31,209  Missing=9,004

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=31,209  Missing=9,004
Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011

N=31,209  Missing=9,522

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011

N=31,209  Missing=9,522

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011

N=31,209  Missing=9,522

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011

N=9,903
Salmonella serotype Infantis

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Infantis

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Infantis

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1,2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entitles of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped). Age standardization based on 2011 census.
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Javiana

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=38,964

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=38,964

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=32,571  Missing=6,393

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=32,571  Missing=6,393
Salmonella serotype Javiana

Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011

N=32,571 Missing=7,980

Month specimen collected
- Female
- Male

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011

N=32,571 Missing=7,980

Year specimen collected
- Female
- Male

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011

N=32,571 Missing=7,980

Age group
- Female
- Male

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011

N=1,869

Source
- Clinical
- Non-Clinical

Count |
---|---
Bovine | 58 |
Chicken | 57 |
Equine | 27 |
Porcine | 27 |
Reptile | 249 |
Turkey | 266 |
Domestic Animal/Environment | 84 |
Feed/Feed Supplements | 5 |
Bovine | 5 |
Chicken | 99 |
Equine | 41 |
Porcine | 6 |
Reptile | 188 |
Turkey | 115 |
Domestic Animal/Environment | 23 |
Feed/Feed Supplements | 0 |

% |
---|---
4.21 |
4.14 |
1.96 |
1.96 |
8.07 |
19.50 |
6.10 |
0.36 |
1.63 |
1.02 |
20.16 |
8.35 |
1.22 |
38.29 |
23.42 |
4.68 |
0.00 |

Salmonella Atlas 2013
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype) or isolates not fully serotyped.
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Salmonella serotype Javiana

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)

Age standardization based on 2011 census
Salmonella serotype Javiana

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998
Salmonella serotype Javiana

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entitles of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Age standardization based on 2011 census

Maps represent U.S. state and county designations on August 1, 2011. See Federal Information Processing Standards (FIPS) Publication 44 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Litchfield

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=7,022

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=7,022

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=5,715  Missing=1,307

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=5,715  Missing=1,307
Salmonella serotype Litchfield

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Rate per 100,000 population

- .01 to 0.07
- 0.08 to 0.14
- 0.15 to 0.33
- > 0.33

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Salmonella serotype Litchfield

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Age standardization based on 2011 census

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time.
Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Mbandaka

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=5,891

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=5,891

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=4,861 Missing=1,030

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=4,861 Missing=1,030
Salmonella serotype Mbandaka

Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011

N=4,861 Missing=1,188

Month specimen collected

Female Male

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011

N=4,861 Missing=1,188

Year specimen collected

Female Male

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011

N=4,861 Missing=1,188

Age group

Female Male

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011

N=8,055

<table>
<thead>
<tr>
<th>Source</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds/Wild Animals</td>
<td>59</td>
<td>1.08</td>
</tr>
<tr>
<td>Bovine</td>
<td>1,202</td>
<td>21.92</td>
</tr>
<tr>
<td>Chicken</td>
<td>1,660</td>
<td>30.57</td>
</tr>
<tr>
<td>Equine</td>
<td>137</td>
<td>2.50</td>
</tr>
<tr>
<td>Porcine</td>
<td>791</td>
<td>14.62</td>
</tr>
<tr>
<td>Reptile</td>
<td>71</td>
<td>0.20</td>
</tr>
<tr>
<td>Turkey</td>
<td>231</td>
<td>5.31</td>
</tr>
<tr>
<td>Domestic Animal/Environment</td>
<td>772</td>
<td>14.88</td>
</tr>
<tr>
<td>All Non-Human</td>
<td>136</td>
<td>2.66</td>
</tr>
<tr>
<td>Feed/Feed Supplements</td>
<td>427</td>
<td>7.99</td>
</tr>
<tr>
<td>Birds/Wild Animals</td>
<td>423</td>
<td>16.45</td>
</tr>
<tr>
<td>Bovine</td>
<td>1,246</td>
<td>46.54</td>
</tr>
<tr>
<td>Chicken</td>
<td>2</td>
<td>0.08</td>
</tr>
<tr>
<td>Equine</td>
<td>160</td>
<td>6.22</td>
</tr>
<tr>
<td>Porcine</td>
<td>298</td>
<td>11.59</td>
</tr>
<tr>
<td>Reptile</td>
<td>308</td>
<td>11.98</td>
</tr>
<tr>
<td>Turkey</td>
<td>86</td>
<td>3.35</td>
</tr>
<tr>
<td>Domestic Animal/Environment</td>
<td>7</td>
<td>0.27</td>
</tr>
<tr>
<td>Feed/Feed Supplements</td>
<td>7</td>
<td>0.27</td>
</tr>
</tbody>
</table>
Salmonella serotype Mbandaka

Figure 09 - Age standardized rates per 100,000 of reported isolates by county, 1968 to 1975

*** No isolates reported during this time period ***

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 4-4 for full details on changes to counties and equivalent entities of the United States over time.

*Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped)*
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Mbandaka

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Mbandaka

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011
Salmonella serotype Mississippi

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=10,105

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=10,105

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=7,936 Missing=2,169

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=7,936 Missing=2,169
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 44 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Salmonella serotype Mississippi

Age standardization based on 2011 census

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entitles of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011
Salmonella serotype Montevideo

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=32,239

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=32,239

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=26,428  Missing=5,811

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=26,428  Missing=5,811
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-6 for full details on changes to counties and equivalent entities of the United States over time.

Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Montevideo

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Montevideo

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Muenchen

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011
Salmonella serotype Muenchen

Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011

N=20,497  Missing=5,379

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011

N=20,497  Missing=5,379

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011

N=20,497  Missing=5,379

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011

N=4,221
Salmonella serotype Muenchen

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information, or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Muenchen

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Muenchen

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
**Salmonella serotype Newport**

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)

Age standardization based on 2011 census.
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (i.e., infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full detail on changes to counties and equivalent entities of the U.S. over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Oranienburg

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=24,748

Year specimen collected

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=24,748

Source of specimen collected

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=20,130  Missing=4,618

Month specimen collected

Age group  0 to 4 years  5 to 29 years  30+ years

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=20,130  Missing=4,618

Year specimen collected

Age group  0 to 4 years  5 to 29 years  30+ years
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Salmonella serotype Oranienburg

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Oranienburg

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Oranienburg

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time.
Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Panama

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=9,201

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=9,201

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=7,311  Missing=1,490

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=7,311  Missing=1,490
Salmonella serotype Panama

Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011
N=7,311  Missing=2,046

Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011
N=7,311  Missing=2,046

Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011
N=7,311  Missing=2,046

Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011
N=1,145
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Panama

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entitles of the United States over time.

Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Poona

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011
Salmonella serotype Poona
Salmonella serotype Poona

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entitites of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011
Salmonella serotype Reading

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=5,446

N=5,446

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

Source of specimen collected

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=4,526 Missing=920

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=4,526 Missing=920

Salmonella Atlas 2013
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities in the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Saintpaul

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=31,298

Year specimen collected

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=31,298

Source of specimen collected

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=25,383  Missing=5,915

Month specimen collected

Age group  0 to 4 years  5 to 29 years  30+ years

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=25,383  Missing=5,915

Year specimen collected

Age group  0 to 4 years  5 to 29 years  30+ years
Salmonella serotype Saintpaul

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time.
Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Salmonella serotype Saintpaul

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998
Salmonella serotype Saintpaul

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 80-3 for full details on changes to counties and equivalent entities of the United States over time.

Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Sandiego

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011
Salmonella serotype Sandiego

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level data. Information on the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)

Rate per 100,000 population

- 0.01 to 0.05
- 0.06 to 0.1
- 0.11 to 0.21
- > 0.21

Age standardization based on 2011 census.
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
**Salmonella serotype Sandiego**

**Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005**

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entitles of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Salmonella serotype Sandiego
**Salmonella serotype Schwarzengrund**

**Figure 1** - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

**Figure 2** - Percentage of reported isolates, by specimen source, 1968-2011

**Figure 3** - Percentage of reported isolates, by age group and month, 1968-2011

**Figure 4** - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011
Salmonella serotype Schwarzengrund

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards Publication 4-4 for full details on changes to counties and equivalent entities of the United States over time.

Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Age standardization based on 2011 census

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations as August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Senftenberg

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=5,927

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=5,927

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=4,645  Missing=1,242

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=4,645  Missing=1,242
**Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011**

*Month specimen collected*

- Female
- Male

*Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011*

*Year specimen collected*

- Female
- Male

*Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011*

*Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011*

**Source**

- Birds/Wild Animals
- Bovine
- Chicken
- Equine
- Porcine
- Reptile
- Turkey
- Other
- Domestic Animal/Environment
- Feed/Feed Supplements
- Non-Clinical

<table>
<thead>
<tr>
<th>Source</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds/Wild Animals</td>
<td>263</td>
<td>2.24</td>
</tr>
<tr>
<td>Bovine</td>
<td>391</td>
<td>3.33</td>
</tr>
<tr>
<td>Chicken</td>
<td>2186</td>
<td>18.61</td>
</tr>
<tr>
<td>Equine</td>
<td>100</td>
<td>0.85</td>
</tr>
<tr>
<td>Porcine</td>
<td>711</td>
<td>6.05</td>
</tr>
<tr>
<td>Reptile</td>
<td>33</td>
<td>0.28</td>
</tr>
<tr>
<td>Turkey</td>
<td>5115</td>
<td>43.54</td>
</tr>
<tr>
<td>Other</td>
<td>1576</td>
<td>13.40</td>
</tr>
<tr>
<td>Domestic Animal/Environment</td>
<td>162</td>
<td>1.38</td>
</tr>
<tr>
<td>Feed/Feed Supplements</td>
<td>1214</td>
<td>10.33</td>
</tr>
<tr>
<td>Bovine</td>
<td>53</td>
<td>0.45</td>
</tr>
<tr>
<td>Chicken</td>
<td>119</td>
<td>1.00</td>
</tr>
<tr>
<td>Equine</td>
<td>2422</td>
<td>20.44</td>
</tr>
<tr>
<td>Porcine</td>
<td>4</td>
<td>0.06</td>
</tr>
<tr>
<td>Reptile</td>
<td>81</td>
<td>0.69</td>
</tr>
<tr>
<td>Turkey</td>
<td>293</td>
<td>2.45</td>
</tr>
<tr>
<td>Other</td>
<td>3721</td>
<td>31.45</td>
</tr>
<tr>
<td>Domestic Animal/Environment</td>
<td>116</td>
<td>1.00</td>
</tr>
<tr>
<td>Feed/Feed Supplements</td>
<td>23</td>
<td>0.19</td>
</tr>
</tbody>
</table>

*Salmonella serotype Senftenberg*
Salmonella serotype Senftenberg

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Senftenberg

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)

Age standardization based on 2011 census
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Senftenberg

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entitites of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time.

Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Stanley

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=5,334

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=5,334

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=4,563  Missing=771

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=4,563  Missing=771
Salmonella serotype Stanley

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 1-4 for full details on changes to counties and equivalent entities of the United States over time.
Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entitles of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011
Salmonella serotype Thompson

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=24,238

Year specimen collected

Rate

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=24,238

Source of specimen collected

Percentage

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=19,476  Missing=4,762

Month specimen collected

Percentage

Age group
- 0 to 4 years
- 5 to 29 years
- 30+ years

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=19,476  Missing=4,762

Year specimen collected

Rate

Age group
- 0 to 4 years
- 5 to 29 years
- 30+ years
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975

Maps represent U.S. state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Thompson

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations on August 1, 2012. See Federally Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).

Age standardization based on 2011 census.
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

*Salmonella* serotype Thompson

Maps represent U.S. state and county designations as of August 1, 2012. See Public Health Services (PHS) Publication 60.4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Salmonella serotype Typhi

Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011

N=21,373

Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011

N=21,373

Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011

N=18,113  Missing=3,260

Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011

N=18,113  Missing=3,260
**Salmonella serotype Typhi**

**Figure 5 - Median age of persons whose specimens yielded isolates, by month, 1968-2011**

N=18,113  Missing=3,831

Month specimen collected
- Female
- Male

**Figure 6 - Median age of persons whose specimens yielded isolates, by year, 1968-2011**

N=18,113  Missing=3,831

Year specimen collected
- Female
- Male

**Figure 7 - Percentage of reported isolates, by age group and sex, 1968-2011**

N=18,113  Missing=3,831

Age group
- Female
- Male

**Figure 8 - Percentage of non-human isolates, by type and source, reported by the National Veterinary Services Laboratories, USDA-FSIS, 1968-2011**

N=45

<table>
<thead>
<tr>
<th>Source</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>4</td>
<td>8.89</td>
</tr>
<tr>
<td>Porcine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>41</td>
<td>91.11</td>
</tr>
</tbody>
</table>

**Salmonella Atlas 2013**

229
Salmonella serotype Typhi

Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 86-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Salmonella serotype Typhi

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 84 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
**Salmonella** serotype Typhimurium

**Figure 1 - Rate of reported isolates per 100,000 population, 3-month moving average, by month and year, 1968-2011**

N=366,254

**Figure 2 - Percentage of reported isolates, by specimen source, 1968-2011**

N=366,254

**Figure 3 - Percentage of reported isolates, by age group and month, 1968-2011**

N=295,007  Missing=71,247

**Figure 4 - Rate of reported isolates per 100,000 population, by age group and year, 1968-2011**

N=295,007  Missing=71,247

Age group  
- Green: 0 to 4 years  
- Red: 5 to 29 years  
- Blue: 30+ years
Figure 09 - Age-standardized rate per 100,000 population, by county, 1968 to 1975
Figure 10 - Age-standardized rate per 100,000 population, by county, 1976 to 1983

Maps represent US state and county designations as of August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 4-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Salmonella serotype Typhimurium

Figure 11 - Age-standardized rate per 100,000 population, by county, 1984 to 1991

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 64 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)
Figure 12 - Age-standardized rate per 100,000 population, by county, 1992 to 1998
Salmonella serotype Typhimurium

Figure 13 - Age-standardized rate per 100,000 population, by county, 1999 to 2005

Maps represent US state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 8-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped).
Figure 14 - Age-standardized rate per 100,000 population, by county, 2006 to 2011

Maps represent U.S. state and county designations on August 1, 2012. See Federal Information Processing Standards (FIPS) Publication 6-4 for full details on changes to counties and equivalent entities of the United States over time. Blank counties are those for which the state reported isolates of the serotype but did not provide county-level information or the state reported no isolates of the serotype (no infections with that serotype or isolates not fully serotyped.)