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- New Mexico Emerging Infections Program
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- U.S. Food and Drug Administration
- Centers for Disease Control’s Emerging Infections Program
- Centers for Disease Control’s Division of Foodborne, Waterborne, and Environmental Diseases

The following persons from CDC contributed substantially to compiling this report:

- Kelly Barrett
- Allison Spinelli
- Mary Patrick
- Olga Henao
- Patricia Griffin
- Staci Dixon

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FoodNet 2014 Annual Report


What is FoodNet?

The Foodborne Diseases Active Surveillance Network (FoodNet) is a collaborative program of the Centers for Disease Control and Prevention (CDC), 10 state health departments, the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS), and the Food and Drug Administration (FDA).

FoodNet determines the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food, monitors changes in their incidence, collects information about the sources of infection, and disseminates information to provide a foundation for food safety policy and prevention efforts.

Cases of infection and incidence

In 2014, FoodNet identified 19,507 laboratory-confirmed cases of infection, 4,476 hospitalizations, and 75 deaths.

<table>
<thead>
<tr>
<th>Pathogen</th>
<th>Cases n</th>
<th>Incidence (%)</th>
<th>Hospitalizations n</th>
<th>(%)</th>
<th>Deaths n</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campylobacter</td>
<td>6,465</td>
<td>13.29</td>
<td>1,088</td>
<td>(17)</td>
<td>9</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Listeria</td>
<td>116</td>
<td>0.24</td>
<td>106</td>
<td>(91)</td>
<td>17</td>
<td>(15)</td>
</tr>
<tr>
<td>Salmonella</td>
<td>7,439</td>
<td>15.29</td>
<td>2,144</td>
<td>(29)</td>
<td>32</td>
<td>(0.4)</td>
</tr>
<tr>
<td>Shigella</td>
<td>2,774</td>
<td>5.70</td>
<td>575</td>
<td>(21)</td>
<td>4</td>
<td>(0.1)</td>
</tr>
<tr>
<td>STEC* O157</td>
<td>444</td>
<td>0.91</td>
<td>155</td>
<td>(35)</td>
<td>3</td>
<td>(0.7)</td>
</tr>
<tr>
<td>STEC non-O157</td>
<td>697</td>
<td>1.43</td>
<td>106</td>
<td>(15)</td>
<td>2</td>
<td>(0.3)</td>
</tr>
<tr>
<td>Vibrio</td>
<td>221</td>
<td>0.45</td>
<td>44</td>
<td>(20)</td>
<td>3</td>
<td>(1)</td>
</tr>
<tr>
<td>Yersinia</td>
<td>136</td>
<td>0.28</td>
<td>30</td>
<td>(22)</td>
<td>1</td>
<td>(1)</td>
</tr>
<tr>
<td>Cryptosporidium</td>
<td>1,189</td>
<td>2.44</td>
<td>226</td>
<td>(19)</td>
<td>4</td>
<td>(0.3)</td>
</tr>
<tr>
<td>Cyclospora</td>
<td>26</td>
<td>0.05</td>
<td>2</td>
<td>(8 )</td>
<td>0</td>
<td>(0.0)</td>
</tr>
<tr>
<td>Total</td>
<td>19,507</td>
<td></td>
<td>4,476</td>
<td>(8 )</td>
<td>75</td>
<td>(0)</td>
</tr>
</tbody>
</table>

*Rate per 100,000 people
†Shiga toxin-producing Escherichia coli

- The incidence of infection and the number of hospitalizations and deaths was highest for Salmonella.
- Percentages of hospitalizations and deaths were highest for Listeria.
- Incidences of all infections were highest among children <5 years except for Listeria, Vibrio, and Cyclospora, which were highest among people >65 years.
- Overall, the highest percentages of hospitalizations and deaths were among people ≥65 years.
Changes in incidence


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Campylobacter</td>
<td>24%↓</td>
<td>11%↑</td>
<td>1%↓</td>
</tr>
<tr>
<td>Listeria</td>
<td>45%↓</td>
<td>12%↓</td>
<td>11%↓</td>
</tr>
<tr>
<td>Salmonella</td>
<td>5%↓</td>
<td>1%↑</td>
<td>0%</td>
</tr>
<tr>
<td>Shigella</td>
<td>46%↓</td>
<td>12%↓</td>
<td>19%↑</td>
</tr>
<tr>
<td>STEC† O157</td>
<td>47%↓</td>
<td>33%↓</td>
<td>19%↓</td>
</tr>
<tr>
<td>STEC non-O157</td>
<td>-</td>
<td>-</td>
<td>22%↑</td>
</tr>
<tr>
<td>Vibrio</td>
<td>141%↑</td>
<td>54%↑</td>
<td>7%↑</td>
</tr>
<tr>
<td>Yersinia</td>
<td>60%↓</td>
<td>21%↓</td>
<td>19%↓</td>
</tr>
<tr>
<td>Cryptosporidium</td>
<td>8%↑</td>
<td>13%↑</td>
<td>3%↓</td>
</tr>
<tr>
<td>Cyclospora</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2014 Overall</td>
<td>29%↓</td>
<td>3%↓</td>
<td>8%↓</td>
</tr>
</tbody>
</table>

*Percentage change reported as increase (↑) or as decrease (↓) and shading denotes statistical significance n at p<0.05 level.
†Shiga toxin-producing Escherichia coli.
‡Changes over time not evaluated.
§The measure of overall change in incidence combines data for Campylobacter, Listeria, Salmonella, STEC O157, Vibrio, and Yersinia, the six key bacterial pathogens for which >50% of illnesses are estimated to be transmitted by food.
The model weights by incidence of infection for each pathogen.

Compared with 2011–2013, the 2014 incidence was significantly:
- Lower for STEC O157
- Higher for STEC Non-O157

Compared with 2006–2008, the 2014 incidence was significantly:
- Lower for STEC O157
- Higher for Campylobacter and Vibrio

Other FoodNet activities

Surveillance for reports of positive culture-independent diagnostic tests (CIDTs)

In 2014, FoodNet collected 1,593 reports of positive CIDTs that were not confirmed by culture. Clinical laboratories increasingly use CIDTs to diagnose bacterial enteric infections, a trend that will challenge the ability of surveillance systems to identify cases, characterize pathogens, monitor trends, and detect outbreaks. FoodNet began routine, ongoing surveillance of all reports of positive CIDTs without culture confirmation (either because a culture did not yield a pathogen or because the specimen was not cultured) for STEC in 2008, Campylobacter in 2009, and all other FoodNet pathogens in 2011.
**Reports of positive culture independent diagnostic tests**, by pathogen—FoodNet, 2014

* Shiga toxin-producing *Escherichia coli*

**Positive CIDT reports are defined as the detection of the enteric pathogen, or for STEC, Shiga toxin or the genes that encode a Shiga toxin, in a stool specimen or enrichment broth using a culture-independent diagnostic test. Any positive CIDT report that was confirmed by culture is counted only among the confirmed infections. For STEC, only positive CIDT reports that were confirmed at the state public health laboratory.

**Special studies**

In 2014, FoodNet completed data collection for a study of risk factors for infection with STEC serogroups other than O157. Since 1996, FoodNet has conducted more than 20 research studies to expand knowledge about risk factors for, and clinical characteristics of, intestinal pathogens.

**Publications**

In 2014, CDC summarized and used FoodNet data to:

- Publish seven peer-reviewed journal articles and present two abstracts at scientific conferences,
- Monitor progress toward CDC’s Healthy People 2020 national health objectives,
- Describe the preliminary 2014 data in the *Morbidity and Mortality Weekly Report*, and
- Provide incidence data for a Health and Human Services high priority goal to decrease *Salmonella* serotype Enteritidis infections.
Most foodborne illnesses can be prevented.

Since FoodNet began in 1996, some progress has been made in decreasing food contamination and reducing illness caused by foodborne pathogens. More work is needed. Surveillance data provides information for food safety policy and prevention efforts.
FoodNet 2014 Annual Report

**CAMPYLOBACTER**

*Campylobacter* causes an estimated 1.3 million illnesses and 120 deaths in the United States every year. Most of these infections are not laboratory-confirmed.


---

**Cases of infection reported to FoodNet**: 6,465
**Hospitalizations**: 1,088
**Deaths**: 9
**Incidence rate**: 13.3 per 100,000 people

**Groups with highest incidence**
- Age: <5 years
- Sex: male
- Race: white
- Ethnicity: Hispanic

**Isolates with species information**: 2,825 (44%)
- *C. jejuni*: 2,484 (88%)
- *C. coli*: 259 (9%)
- *C. upsaliensis*: 47 (2%)
- All other: 35 (1%)

**Significant changes in incidence rate**
- 11% higher than in 2006–2008
- 24% lower than in 1996–1998

**International travel**
- Cases with infection likely acquired abroad: 16% (767 of 4,964 cases with travel information)

**Outbreaks**
- Cases associated with an outbreak: <1%

**Seasonality**
- Month with most cases: July

---

*FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: [www.cdc.gov/foodnet/surveillance.html](http://www.cdc.gov/foodnet/surveillance.html).*
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CAMPYLOBACTER

Percentage of Campylobacter infections by species—FoodNet, 2014

Percentage of Campylobacter infections by month—FoodNet, 2014

Incidence* of Campylobacter infections—FoodNet, 1996 through 2014

*per 100,000 people
**Listeria monocytogenes** causes an estimated 1,600 illnesses and 260 deaths in the United States every year. Some of these infections are not laboratory-confirmed.

*www.cdc.gov/listeria*

### Cases of infection reported to FoodNet*
- **116**
- Hospitalizations: 106
- Deaths: 17
- **Incidence rate**: 0.24 per 100,000 people
- Pregnancy-associated cases (women and infants): 21
- **Fetal outcome**: 2 abortions or stillbirths
- Cases aged >65 years: 61

### Groups with highest incidence
- Age: 80+ years
- Sex: similar in female and male
- Race: Indian/Native American
- Ethnicity: Hispanic

### Significant changes in incidence rate
- 45% lower than in 1996–1998

### International travel
- Cases with infection likely acquired abroad: <1%
  (1 of 110 cases with travel information)

### Outbreaks
- Cases associated with an outbreak: 4.3%

### Seasonality
- Month with most cases: July

*FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: [www.cdc.gov/foodnet/surveillance.html](http://www.cdc.gov/foodnet/surveillance.html).*
Percentage of *Listeria* infections by month—FoodNet, 2014

Incidence* of *Listeria* infections—FoodNet, 1996 through 2014

*per 100,000 people
Salmonella causes an estimated 1.2 illnesses and 450 deaths in the United States every year. Most of these infections are not laboratory-confirmed. Over 2,000 Salmonella serotypes cause human disease.

*FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: [www.cdc.gov/foodnet/surveillance.html](http://www.cdc.gov/foodnet/surveillance.html).

### Incidence* of Salmonella infections by age, sex, race, and ethnicity—FoodNet, 2014

<table>
<thead>
<tr>
<th>Age</th>
<th>5-9</th>
<th>10-19</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
<th>70-79</th>
<th>80+</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>15</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5-9</td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10-19</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20-29</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>30-39</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>40-49</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50-59</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>60-69</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>70-79</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>80+</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Cases of infection reported to FoodNet*:
- 7,439 cases
- Hospitalizations: 2,144
- Deaths: 32
- Incidence rate: 15.3 per 100,000 people

### Groups with highest incidence
- Age: <5 years
- Sex: female
- Race: Asian/Pacific Islander
- Ethnicity: similar in Hispanic and non-Hispanic

### Isolates with serotype information:
- Enteritidis: 1,426 (19%)
- Typhimurium: 836 (11%)
- Newport: 768 (10%)
- Javiana: 685 (9%)
- I 4,[5],12:i-: 392 (5%)
- Heidelberg: 194 (3%)
- All other: 2,504 (34%)

### International travel
- Cases with infection likely acquired abroad: 9% (525 of 5,734 cases with travel information)

### Outbreaks
- Cases associated with an outbreak: 6%

### Seasonality
- Month with most cases: August

*per 100,000 people
FoodNet 2014 Annual Report

**SALMONELLA**

Percentage of serotyped *Salmonella* infections by serotype—FoodNet, 2014

![Pie chart showing percentage of serotyped Salmonella infections by serotype](chart1.png)

- Enteritidis: 21%
- Typhimurium: 12%
- Newport: 10%
- Javiana: 6%
- O4,[5],12:i-: 5%
- Heidelberg: 3%
- All other: 37%

Percentage of *Salmonella* infections by month—FoodNet, 2014

![Graph showing percentage of Salmonella infections by month](chart2.png)

Incidence* of *Salmonella* infections—FoodNet, 1996 through 2014

![Graph showing incidence of Salmonella infections](chart3.png)

*per 100,000 people
**Shiga Toxin-Producing Escherichia coli (STEC)**

*STEC* causes an estimated 265,000 total infections in the United States each year. Most of these infections are not laboratory-confirmed. About 8% of people who are diagnosed with STEC O157 infection develop hemolytic uremic syndrome.

www.cdc.gov/ecoli

---

**STEC O157**

Cases of infection reported to FoodNet*: 444  
Hospitalizations: 155  
Deaths: 3  
Incidence rate: 0.91 per 100,000 people

Groups with highest incidence
- Age: <5 years
- Sex: female
- Race: white
- Ethnicity: non-Hispanic

Significant changes in incidence rate
- 47% lower than in 1996–1998
- 33% lower than in 2006–2008
- 19% lower than in 2011–2013

International travel
- Cases with infection likely acquired abroad: 5% (21 of 422 of cases with travel information)

Outbreaks
- Cases associated with an outbreak: 16%

Seasonality
- Month with most cases: July

**STEC non-O157**

Cases of infection reported to FoodNet*: 697  
Hospitalizations: 106  
Deaths: 2  
Incidence rate: 1.43 per 100,000 people

Groups with highest incidence
- Age: <5 years
- Sex: female
- Race: white
- Ethnicity: Hispanic

Significant changes in incidence rate
- 22% higher than in 2011–2013

International travel
- Cases with infection likely acquired abroad: 15% (95 of 634 cases with travel information)

Outbreaks
- Cases associated with an outbreak: 6%

Seasonality
- Month with most cases: July

*FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: www.cdc.gov/foodnet/surveillance.html.*

*per 100,000 people*
SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC)

Isolates with O Antigen information: 1,070 (88%)

- O157: 444 (41%)
- O26: 173 (16%)
- O103: 135 (13%)
- O111: 111 (10%)
- O121: 42 (4%)
- O45: 18 (2%)
- O145: 19 (2%)
- All other: 128 (12%)

Percentage of STEC Infections by O Antigen—FoodNet, 2014

*Percentage of STEC O157 (solid) and non-O157 (dotted) infections by month—FoodNet, 2014

Incidence* of STEC O157 (solid) and non-O157† (dotted) infections—FoodNet, 1996 through 2014

*per 100,000 people; †Non-O157 data not collected until 2000
FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: www.cdc.gov/foodnet/surveillance.html.

*FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: www.cdc.gov/foodnet/surveillance.html.

**Shigella** causes an estimated 500,000 illnesses and 40 deaths in the United States every year. Most of these infections are not laboratory-confirmed.

www.cdc.gov/shigella

---

**Cases of infection reported to FoodNet**: 2,774  
**Hospitalizations**: 575  
**Deaths**: 4  
**Incidence rate**: 5.7 per 100,000 people

**Groups with highest incidence**  
- Age: <5 years  
- Sex: male  
- Race: black  
- Ethnicity: Hispanic

**Isolates with species information**: 2,603 (94%)  
- *S. sonnei*: 2,215 (85%)  
- *S. flexneri*: 374 (14%)  
- *S. boydii*: 11 (<1%)  
- *S. dysenteriae*: 3 (<1%)

**Significant changes in incidence rate**  
- 46% lower than in 1996–1998

**International travel**  
Cases with infection likely acquired abroad: 7%  
(150 of 2,051 cases with travel information)

**Outbreaks**  
Cases associated with an outbreak: 7%

**Seasonality**  
Month with most cases: December

---

*per 100,000 people*
FoodNet 2014 Annual Report

**SHIGELLA**

Percentage of speciated *Shigella* infection by species—FoodNet, 2014

![Pie chart showing percentage of *Shigella* infections by species](chart.png)

- **S. sonnei**: 85%
- **S. flexneri**: 14%
- **S. boydii**: <1%
- **S. dysenteriae**: <1%

Percentage of *Shigella* infections by month—FoodNet, 2014

![Line graph showing monthly incidence of *Shigella* infections](chart.png)

Incidence* of *Shigella* infections—FoodNet, 1996 through 2014

![Line graph showing annual incidence of *Shigella* infections](chart.png)

* per 100,000 people
Vibrio causes an estimated 80,000 illnesses and 100 deaths in the United States every year. Most of these infections are not laboratory-confirmed.

www.cdc.gov/vibrio

Cases of infection reported to FoodNet*: 221
Hospitalizations: 44
Deaths: 3
Incidence rate: 0.45 per 100,000 people

Groups with highest incidence
- Age: 40 years and older
- Sex: male
- Race: white
- Ethnicity: non-Hispanic

Isolates with species information: 210 (95%)
- *V. parahaemolyticus*: 131 (62%)
- *V. alginolyticus*: 28 (13%)
- *V. vulnificus*: 20 (10%)
- *V. fluvialis*: 10 (5%)
- *V. cholerae* non-O1, non-O139: 7 (3%)
- All other: 14 (7%)

Significant changes in incidence rate
- 54% higher than in 2006–2008
- 141% higher than in 1996–1998

International travel
- Cases with infection likely acquired abroad: 9% (18 of 201 cases with travel information)

Outbreaks
- Cases associated with an outbreak: 6%

Seasonality
- Month with most cases: August

*FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: www.cdc.gov/foodnet/surveillance.html.
FoodNet 2014 Annual Report

**VIBRIO**

Percentage of speciated *Vibrio* infections by species—FoodNet, 2014

- *V. parahaemolyticus*
- *V. alginolyticus*
- *V. vulnificus*
- *V. fluvialis*
- *V. cholerae non-O1, non-O139*
- *Other* *

*V. mimicus, Grimontia hollisae, V. cholerae non-01, Photobacterium damselae, V. metschnikovii, V. cholerae 01, V. cholerae unspecified.*

Percentage of *Vibrio* infections by month—FoodNet, 2014

Incidence* of *Vibrio* infections—FoodNet, 1996 through 2014

*per 100,000 people*
Yersinia causes an estimated 115,000 illnesses and 29 deaths in the United States every year. Most of these infections are not laboratory-confirmed. 
www.cdc.gov/nczved/divisions/dfbmd/diseases/yersinia

Cases of infection reported to FoodNet*: 136
Hospitalizations: 30
Deaths: 1
Incidence rate: 0.28 per 100,000 people

Groups with highest incidence
- Age: <5
- Sex: male
- Race: Asian/Pacific Islander
- Ethnicity: non-Hispanic

Significant changes in incidence rate
- 60% lower than in 1996–1998

International travel
- Cases with infection likely acquired abroad: 4%
  (4 of 103 cases with travel information)

Outbreaks
- Cases associated with an outbreak: <1%

Seasonality
- Month with most cases: January

*FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: www.cdc.gov/foodnet/surveillance.html.

*per 100,000 people
Percentage of Yersinia infections by month—FoodNet, 2014

Incidence* of Yersinia infections—FoodNet, 1996 through 2014

*per 100,000 people
Cryptosporidium causes an estimated 750,000 illnesses and 46 deaths in the United States every year. Most of these infections are not laboratory-confirmed. [www.cdc.gov/parasites/crypto](http://www.cdc.gov/parasites/crypto)

Cases of infection reported to FoodNet*: 1,189  
Hospitalizations: 226  
Deaths: 4  
Incidence rate: 2.4 per 100,000 people

### Groups with highest incidence
- Age: <5 years
- Sex: male
- Race: white
- Ethnicity: non-Hispanic

### International travel
- Cases with infection likely acquired abroad: 10% (91 of 925 cases with travel information)

### Outbreaks
- Cases associated with an outbreak: 5%

### Seasonality
- Month with most cases: August

*FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: [www.cdc.gov/foodnet/surveillance.html](http://www.cdc.gov/foodnet/surveillance.html)
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CRYPTOSPORIDIUM

Percentage of Cryptosporidium infections by month—FoodNet, 2014

Incidences* of Cryptosporidium infections—FoodNet, 1997 through 2014

*per 100,000 people
Cyclospora cayetanensis causes an estimated 20,000 illnesses in the United States every year. Most of these infections are not laboratory-confirmed. [www.cdc.gov/parasites/cyclosporiasis](http://www.cdc.gov/parasites/cyclosporiasis)

### Cases of infection reported to FoodNet*
- **Cases of infection reported to FoodNet**: 26
- **Hospitalizations**: 2
- **Deaths**: 0
- **Incidence rate**: 0.05 per 100,000 people

### Groups with highest incidence
- **Age**: 70-79 years
- **Sex**: female
- **Race**: white
- **Ethnicity**: non-Hispanic

### International travel
- **Cases with infection likely acquired abroad**: 48% (11 of 23 cases with travel information)

### Outbreaks
- **Cases associated with an outbreak**: 0

### Seasonality
- **Month with most cases**: July

*FoodNet determined the number of laboratory-confirmed infections caused by selected pathogens transmitted commonly by food. FoodNet collected data from 15% of the US population. For more information: [www.cdc.gov/foodnet/surveillance.html](http://www.cdc.gov/foodnet/surveillance.html)*
CYCLOSPORA

Percentage of *Cyclospora* infections by month—FoodNet, 2014

Incidence* of *Cyclospora* infections—FoodNet, 1997 through 2014

*per 100,000 people
HUS is a life-threatening condition characterized by anemia, low platelet count, and kidney failure.

2013 is the most recent year for which complete data are available

Cases reported to FoodNet*: 88
   Cases <5 years: 46
   Deaths: 0

Median age (range): 4.3 years (1 year–17 years)

Female: 53 (60%)

Median days hospitalized (range): 11 (2–372)

Seasonality
   • 76% of cases occurred May through October

HUS Etiology
   • 67 (76% of 88) cases had evidence of Shiga toxin-producing *Escherichia coli* (STEC) infection
      o 54 (81% of 67) cases had STEC isolated, of the following serogroups
         ▪ O157 (53 cases)
         ▪ O127 (1 case)
      o 9 (13% of 67) cases had O157 antibodies detected by serology
   • Percentage of children <5 years old with STEC O157 isolated who developed HUS: 27% (33/124)

*FoodNet staff conducted active surveillance for physician-diagnosed post-diarrheal HUS through a network of nephrologists and infection preventionists and reviewed hospital discharge data for children <18 years old. FoodNet collected data from 15% of the US population. For more information: www.cdc.gov/foodnet/surveillance.html.