FOODBORNE & WATERBORNE DISEASE FACT SHEET
SACRAMENTO COUNTY 2016

Foodborne illness (FBI) is a common, costly—yet preventable—public health problem. Each year, 1 in 6 Americans gets sick by consuming contaminated foods or beverages, according to the Centers for Disease Control and Prevention. More than 250 different foodborne diseases have been described. Most of these diseases are infections, caused by a variety of bacteria, viruses, and parasites that can be foodborne or waterborne. Waterborne illness (WBI) can result during bathing, washing, drinking, or in food preparation. This report includes information about some of the most frequently reported foodborne/waterborne illnesses (FBI/WBI) in Sacramento County.

The total number of select bacterial-related FBI/WBI cases reported in Sacramento County increased by 38.2% between 2012 and 2015 then decreased in 2016, back to numbers similarly reported in 2012 (Table 1). Most notably, shigellosis decreased by 56.4%, salmonellosis decreased by 32.3%, STEC decreased by 27.7%, and campylobacteriosis decreased by 15.9% from 2015 to 2016.

The total number of select parasitic-related FBI/WBI almost quadrupled between 2012 and 2016 (Table 2). This significant increase was mainly due to a four-and-a-half-fold increase in giardiasis during this five year period. The number of amebiasis reports significantly decreased by 85.7%, from seven reports in 2012 to one report in 2016.

The total number of select viral-related FBI/WBI also increased, with slightly more than double the number of reports in 2016 compared to 2012 (Table 3). This was due to increases in both hepatitis A (+71.4%) and acute hepatitis E (six-fold).

Notes: Data is provisional. Counts may be influenced by surveillance artifacts (e.g. changes in case definitions, implementation/expansion of electronic laboratory reporting, and increased awareness) and outbreaks.

Table 1. Select Foodborne/Waterborne Bacterial Diseases, Sacramento County, 2012-2016

<table>
<thead>
<tr>
<th>Disease</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campylobacteriosis¹</td>
<td>203</td>
<td>258</td>
<td>236</td>
<td>182</td>
<td>153</td>
</tr>
<tr>
<td>E. coli: shiga toxin producing (STEC)²</td>
<td>18</td>
<td>15</td>
<td>44</td>
<td>65</td>
<td>47</td>
</tr>
<tr>
<td>Listeriosis³</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Salmonellosis²</td>
<td>130</td>
<td>148</td>
<td>165</td>
<td>198</td>
<td>134</td>
</tr>
<tr>
<td>Shigellosis²</td>
<td>22</td>
<td>17</td>
<td>16</td>
<td>78</td>
<td>34</td>
</tr>
<tr>
<td>Typhoid/Carrier²</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vibrio¹</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Yersiniosis¹</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>388</td>
<td>453</td>
<td>475</td>
<td>536</td>
<td>384</td>
</tr>
</tbody>
</table>

¹Includes confirmed cases
²Includes confirmed and probable cases
³Includes confirmed, probable, and suspect cases

Table 2. Select Foodborne/Waterborne Parasitic Diseases, Sacramento County, 2012-2016

<table>
<thead>
<tr>
<th>Disease</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amebiasis¹</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Cryptosporidiosis²</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Giardiasis²</td>
<td>64</td>
<td>84</td>
<td>61</td>
<td>165</td>
<td>293</td>
</tr>
<tr>
<td>Trichinosis²</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>79</td>
<td>98</td>
<td>72</td>
<td>175</td>
<td>305</td>
</tr>
</tbody>
</table>

¹Includes confirmed cases
²Includes confirmed and probable cases
³Includes confirmed, probable, and suspect cases

Table 3. Select Foodborne/Waterborne Viral Diseases, Sacramento County, 2012-2016

<table>
<thead>
<tr>
<th>Disease</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatits A¹</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Hepatitis E, Acute¹</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>10</td>
<td>18</td>
</tr>
</tbody>
</table>

¹Includes confirmed cases
²Includes confirmed and probable cases
³Includes confirmed, probable, and suspect cases
⁴Includes confirmed and suspect cases
Seasonal changes can influence people’s behaviors. Figure 1 shows the number of cases of select FBI/WBI by month for Sacramento County from 2012-2016. Campylobacteriosis, STEC, giardiasis, and salmonellosis all peaked between May and October, during the warmer months of the year.

Figure 2 shows the rates of diseases (per 100,000) for the same FBI/WBI by age group for Sacramento County from 2012-2016. The highest rates were among those less than five years of age for each of these select diseases. While the highest rates were among those one to five years of age for Campylobacteriosis, STEC, and giardiasis, the highest rate was among those less than one year of age for salmonellosis.

Figure 3 shows the number and percent of cases hospitalized with STEC by year in Sacramento County during the same five year period. While the highest number of hospitalized STEC cases (14) was in 2015, the highest percent of hospitalized STEC cases (27.9%) was in 2014. Between 2012 and 2016, the number of hospitalized cases has increased four-fold and the percent of hospitalized cases has increased by 52.7%.