EPI EXAMINER
A Monthly Epidemiology Report
August, 2016

INSIDE THIS REPORT

Disease Summary.............................................1  Merin Reportable Disease Surveillance....3
Food Recalls..................................................1  Syndromic Surveillance..............................4
Immunization Outreach.................................2  Influenza Surveillance.................................5

Disease Summary:
In August, 2016, a total of 556 cases of various diseases were reported to the Florida Department of Health in Broward County (DOH-Broward). Among them, there were eighty-one cases of salmonellosis, one case of amebic encephalitis, three cases of meningitis (bacterial or mycotic), five cases of acute hepatitis B, four cases of acute hepatitis C, nine cases of possible rabies exposure, fifty-one cases of Zika virus disease and infection (non-congenital), and one case of vibriosis (other Vibrio species). These were higher than the averages of the same month in the previous five years.

Food Recalls:
There were 5 food recalls reported in Florida for the month of August, 2016.

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Food</th>
<th>Recall Date</th>
<th>Health Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grassfields Cheese LLC</td>
<td>Organic cheeses: Gouda, Onion ’n Garlic, Country Dill, Leyden, Edam, Lamont, Cheddar, Chili Cheese, Fait Fras, Polkton Corners and Crofters</td>
<td>08/04/2016</td>
<td>STEC</td>
</tr>
<tr>
<td>Rabbit Creek Products</td>
<td>Bread, muffin and brownie mixes</td>
<td>08/11/2016</td>
<td>E. coli O121</td>
</tr>
<tr>
<td>Cambridge Farms, LLC</td>
<td>3 Brands of Frozen, cut</td>
<td>08/19/2016</td>
<td>Listeria</td>
</tr>
<tr>
<td>Country Fresh, LLC</td>
<td>Various fresh-cut vegetables</td>
<td>08/26/2016</td>
<td>Listeria</td>
</tr>
<tr>
<td>Snyder’s-Lance, Inc.</td>
<td>Diamond of California®</td>
<td>08/30/2016</td>
<td>Salmonella</td>
</tr>
</tbody>
</table>
The Florida Department of Health in Broward County (DOH-Broward) throughout the year provides free immunizations for children who are uninsured or underinsured in order to decrease vaccine-preventable diseases. These vaccines are paid for by the Federal Vaccines for Children (VFC) program. Every year during the month of August, DOH-Broward organizes a two week and two day back to school event to help immunize children and prepare them for school.

This year at The 2016 Back-to-School Immunization Campaign, DOH-Broward, serviced a total of 3,203 children in two weeks and two days to help them return to school from their summer break. The event was held at the Lauderhill Mall at 1267 NW 40th Avenue, August 8th—23rd Monday through Friday from 9am to 1pm and on Thursdays until 6pm and on Saturday the 13th from 9am to 2pm.

DOH-Broward immunized 2,587 children and provided a total of 8,069 vaccines. In addition, DOH-Broward provided a total of 616 “680-Immunization forms” (immunization records required for school) for students that were up to date with their vaccinations. This year, DOH-Broward offered vaccines such as Polio, MMR, Varicella (Chickenpox), Hepatitis B, D-tap, T-dap, Td, HIB, HPV9, PCV13, and Meningococcal (MCV4).

DOH-Broward worked tirelessly, months in advance to prepare for this event. Flyers and promotional materials were delivered to schools and external stakeholders to help notify the community about this event. Together with the generous support of the community, the health department was able to provide a much needed service to the community. Parents were encouraged to bring their child’s immunization records to the event. In order for children to be vaccinated, each child was accompanied by a legal guardian or parent. Our data entry specialist then recorded the information into our Florida Shots Immunization Registry system. Parents from all over the world brought in their immunization records from other countries. The data entry staff was prepared with vaccination translation materials to help translate vaccines into the Florida Shots System. Certified translators were also contacted to help the translation process at the event.

Source: http://www.afmfc.com/748/
### Table 1. Provisional Cases* of Selected Notifiable Disease, Broward County, Florida, August, 2016

<table>
<thead>
<tr>
<th></th>
<th>BROWARD COUNTY</th>
<th>FLORIDA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>August (YTD)</td>
<td>Cumulative (YTD)</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>2015</td>
</tr>
<tr>
<td><strong>A. Enteric Infections</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campylobacteriosis</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>E.Coli, Shiga-Toxin Producing Infection**</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Giardiasis, Acute</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>81</td>
<td>66</td>
</tr>
<tr>
<td>Shigellosis</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td><strong>B. CNS Diseases &amp; Bacteremias</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amebic Encephalitis</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Meningitis, Bacterial or Mycotic</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Streptococcus Pneumoniae Invasive Disease: Drug Resistant</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Drug Susceptible</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td><strong>C. Viral Hepatitis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Hepatitis B, Acute</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Hepatitis B, Surface Antigen In Pregnant Women</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Hepatitis C, Acute</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td><strong>D. Vector Borne, Zoonoses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chikungunya Fever</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Dengue Fever</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Malaria</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rabies, Possible Exposure</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Zika Virus Disease and Infection, Non-Congenital</td>
<td>51</td>
<td>0</td>
</tr>
<tr>
<td><strong>E. Others</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead Poisoning</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Varicella (Chickenpox)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Vibriosis (Other Vibrio Species)</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

* Confirmed, Probable, Suspect and Unknown Cases based on date of report as reported in Merlin.
† Mean of the number of cases of the same month in the previous five years
** Includes E. coli O157:H7; shiga-toxin positive, serogroup non-O157; and shiga-toxin positive, not serogrouped

Highlighted diseases/conditions are higher than expected for the current month in Broward.

The Merlin system is Florida’s state repository of reportable disease case reports, including automated notification of staff about individual cases of high priority diseases. Data is extracted using event date which is usually the date of onset of illness, and when that is unknown, event date may be date of lab report, or date of diagnosis.
The Electronic Surveillance System for the Early Notification of Community Based Epidemics (ESSENCE) was developed by Johns Hopkins University and Walter Reed Army Institute of Research. It is a syndromic surveillance tool used to monitor potential bioterrorism threats and reportable diseases. Chief complaint data is transmitted daily to the ESSENCE system from participating hospital emergency rooms. DOH-Broward monitors a total of 17 reporting hospitals in Broward County. ESSENCE groups the chief complaint data into twelve syndrome groups, including: botulism-like, exposure, fever, gastrointestinal (GI), hemorrhagic, influenza-like-illness (ILI), neurological, rash, respiratory, shock/coma, injury, and other. ESSENCE creates automatic warnings or alerts for the monitoring of the twelve syndrome groups by comparing statistical differences in observed and predicted disease based on a 28-day average. Specialized queries have also been developed to monitor Florida state reportable diseases in Broward County. When an observed value is statistically higher at the p<.05 level, a yellow warning flag is generated.

**Table 2. ESSENCE Chief Complaint Alerts and Warnings for Reportable Disease and Chief Complaint Syndromes, August 2016**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Alert Dates</th>
<th>Warning Dates</th>
<th>Syndrome</th>
<th>Alert Dates</th>
<th>Warning Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Reportable Disease Query</td>
<td>None</td>
<td>14</td>
<td>Botulism-like Illness</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Vaccine Preventable Diseases¹</td>
<td>None</td>
<td>7, 8</td>
<td>Exposure</td>
<td>None</td>
<td>21</td>
</tr>
<tr>
<td>Hepatitis A and B</td>
<td>None</td>
<td>None</td>
<td>Fever</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Meningitis (may not be bacterial)</td>
<td>None</td>
<td>14</td>
<td>Gastrointestinal Illness</td>
<td>None</td>
<td>5, 7, 21</td>
</tr>
<tr>
<td>Varicella (chicken pox)</td>
<td>None</td>
<td>None</td>
<td>Hemorrhagic Illness</td>
<td>14</td>
<td>8, 17, 18</td>
</tr>
<tr>
<td>Vector Borne Diseases</td>
<td>None</td>
<td>None</td>
<td>Influenza-like Illness (ILI)</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Chikungunya</td>
<td>None</td>
<td>None</td>
<td>Injury</td>
<td>None</td>
<td>29</td>
</tr>
<tr>
<td>Dengue</td>
<td>None</td>
<td>None</td>
<td>Neurological</td>
<td>29</td>
<td>15</td>
</tr>
<tr>
<td>Encephalitis</td>
<td>None</td>
<td>None</td>
<td>Rash</td>
<td>13, 14</td>
<td>1, 12, 15, 16, 22</td>
</tr>
<tr>
<td>Malaria</td>
<td>None</td>
<td>None</td>
<td>Respiratory</td>
<td>13</td>
<td>29</td>
</tr>
<tr>
<td>Zika Infection</td>
<td>1, 2, 4, 5</td>
<td>3, 6, 25</td>
<td>Shock/Coma</td>
<td>None</td>
<td>22</td>
</tr>
<tr>
<td>Gastrointestinal Illnesses</td>
<td>None</td>
<td>13, 29</td>
<td>Other Illness</td>
<td>None</td>
<td>20, 21, 31</td>
</tr>
<tr>
<td>General Enterics²</td>
<td>None</td>
<td>5, 7, 21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vomit and Diarrhea</td>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Varicella, Measles, Mumps, Rubella, Diphtheria, Tetanus, Pertussis, Polio
² Cryptosporidium, cyclospora, shigellosis, shigella, salmonellosis, salmonella, ciguatera, campylobacteriosis, cholera, E. coli, and vibrio
Influenza surveillance remains low nationwide. In Florida, Influenza Like Illness (ILI) visits have increased slightly statewide. There have been no positive influenza tests detected by the Bureau of Public Health Laboratories in recent weeks and data suggests that the season peaked in week 10 in Broward County. Broward flu activity is sporadic.

**Influenza Prevention Recommendations**

Florida Department of Health in Broward County recommends that everyone take precautions to prevent the spread of influenza. The flu is a contagious disease, caused by the influenza virus, and spreads to others when infected persons cough, sneeze or talk. Common symptoms of the flu include: fever (usually high), headache, extreme tiredness, cough, sore throat, runny or stuffy nose, muscle aches, nausea, vomiting, and diarrhea (more common among children than adults). Influenza vaccines have protected millions of people safely for decades. The CDC recommends an annual flu vaccine as the first and best way to protect against influenza. This recommendation is the same even during years when the vaccine composition (the viruses the vaccine protects against) remains unchanged from the previous season. Everyone 6 months and older is encouraged to get vaccinated against the flu even if they got vaccinated last season.

**Other recommendations include:**

- Wash your hands often with soap and water or an alcohol-based hand sanitizer.
- Avoid touching your eyes, nose, or mouth.
- Stay home when you are sick, keep sick children home and check with a health care provider, as needed.
- Do not share eating utensils, drinking glasses, towels or other personal items.
- Avoid close contact with people who are sick, if possible.