EPI EXAMINER
A Monthly Epidemiology Report
June, 2017

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Disease Summary: In June, a total of 458 cases of various diseases were reported to the Florida Department of Health in Broward County (DOH-Broward). Among them, there were three cases of cyclosporiasis, five cases of hepatitis A, three cases of acute hepatitis B, one case of hepatitis E, one case of possible herpes B virus exposure, three cases of animal rabies, two cases of carbon monoxide poisoning, one case of Hansen’s disease (leprosy), four cases of mercury poisoning, one case of influenza-associated pediatric mortality, one case of acute pesticide-related illness and injury, and ten cases of varicella (chickenpox). These were higher than the averages of the same month in the previous five years.

Food Recalls: There were 13 food recalls reported in Florida, June 2017.

<table>
<thead>
<tr>
<th>Brand Names</th>
<th>Food</th>
<th>Date</th>
<th>Health Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Garlic Inc.</td>
<td>Queso Fresco/Whole Milk Cheese</td>
<td>06/05/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>Kroger</td>
<td>12 oz. packages of Simple Truth Dry Roasted Macadamia Nuts</td>
<td>06/14/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>Gomacro</td>
<td>Limited Number of Macrobars and Thrive Bars</td>
<td>06/14/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>Wildway LLC</td>
<td>Certain Grain-Free Granola Products</td>
<td>06/14/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>New England Natural Bakers</td>
<td>Evoke Organic Classic Swiss &amp; Athlete Fuel</td>
<td>06/15/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>Bulletproof 360, Inc.</td>
<td>Collagen Protein Bars and Bites</td>
<td>06/15/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>Willis Ocean Inc</td>
<td>Uneviscerated Scomber Fish</td>
<td>06/16/2017</td>
<td>Clostridium Botulinum</td>
</tr>
<tr>
<td>Chic-A-Peas, LLC</td>
<td>Chic-a-Peas Baked Crunchy Chickpeas 2 oz. packages</td>
<td>06/16/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>NOW Health Group Inc.</td>
<td>Ellyndale® Nutty Infusions™</td>
<td>06/16/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>Supreme Cuisine</td>
<td>Meat and Poultry Fat and Lard Products</td>
<td>06/17/2017</td>
<td>Packaging defect may cause spoilage</td>
</tr>
<tr>
<td>United Natural Trading LLC</td>
<td>Products Containing Organic and Natural Chopped Dates</td>
<td>06/20/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>House of Thaller</td>
<td>Selected Pine Nut Hummus Products</td>
<td>06/21/2017</td>
<td>Listeria</td>
</tr>
<tr>
<td>Publix</td>
<td>Publix Tropical Medley Mix</td>
<td>06/26/2017</td>
<td>Listeria</td>
</tr>
</tbody>
</table>

All data are provisional.
Table 1. Provisional Cases* of Selected Notifiable Disease, Broward County, Florida, June 2017

<table>
<thead>
<tr>
<th>Disease</th>
<th>BROWARD COUNTY</th>
<th>FLORIDA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>June 2017</td>
<td>Cumulative (YTD)</td>
</tr>
<tr>
<td></td>
<td>2016 Mean†</td>
<td>2016</td>
</tr>
<tr>
<td><strong>A. Enteric Infections</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campylobacteriosis</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Cyclosporiasis</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>E.Coli, Shiga Toxin-Producing Infection**</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Giardiasis, Acute</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>65</td>
<td>63</td>
</tr>
<tr>
<td>Shigellosis</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td><strong>B. Viral Hepatitis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Hepatitis B, Acute</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Hepatitis B, Pregnant Women</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Hepatitis C, Acute</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Hepatitis E</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>C. Vector Borne, Zoonoses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ciguatera Fish Poisoning</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Herpes B Virus, Possible Exposure</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Lyme Disease</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Rabies, Animal</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Rabies, Possible Exposure</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Zika Virus Disease and Infection, Non-Congenital</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td><strong>D. Others</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Monoxide Poisoning</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Hansen's Disease (Leprosy)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Influenza-Associated Pediatric Mortality</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Lead Poisoning</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Mercury Poisoning</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Pertussis</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Pesticide-Related Illness and Injury, Acute</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Varicella (Chickenpox)</td>
<td>10</td>
<td>3</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 are 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.

All data are provisional.
Syndromic Surveillance

Enas Mohamed, M.B.B.S., M.P.H.

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 bio-terrorism 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 compliant 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.

Figure 1. ESSENCE Daily Emergency Department Visits, Broward, June 2017

Table 2. ESSENCE Chief Complaint Alerts and Warnings for Reportable Disease and Chief Complaint Syndromes, June 2017

<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>15</td>
<td>17</td>
<td>Botulism-like Illness</td>
<td>22</td>
<td>12, 21, 26, 27, 28</td>
</tr>
<tr>
<td>Vaccine Preventable Diseases¹</td>
<td>3</td>
<td>5</td>
<td>Exposure</td>
<td>None</td>
<td>9, 15, 19, 22, 23</td>
</tr>
<tr>
<td>Hepatitis A and B</td>
<td>None</td>
<td>None</td>
<td>Fever</td>
<td>None</td>
<td>3, 21</td>
</tr>
<tr>
<td>Meningitis (may not be bacterial)</td>
<td>12, 15, 16</td>
<td>None</td>
<td>Gastrointestinal Illness</td>
<td>None</td>
<td>11</td>
</tr>
<tr>
<td>Varicella (chicken pox)</td>
<td>None</td>
<td>None</td>
<td>Hemorrhagic Illness</td>
<td>None</td>
<td>None</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>20, 21, 26</td>
<td>None</td>
</tr>
<tr>
<td>Dengue</td>
<td>None</td>
<td>None</td>
<td>Neurological</td>
<td>26</td>
<td>12, 13, 20, 22</td>
</tr>
<tr>
<td>Encephalitis</td>
<td>None</td>
<td>None</td>
<td>Rash</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Malaria</td>
<td>None</td>
<td>None</td>
<td>Respiratory</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Zika Infection</td>
<td>None</td>
<td>None</td>
<td>Shock/Coma</td>
<td>None</td>
<td>5, 12</td>
</tr>
<tr>
<td>Gastrointestinal Illnesses</td>
<td>13, 14, 16, 17, 19, 20</td>
<td>1, 15</td>
<td>Other Illness</td>
<td>None</td>
<td>20, 21, 22</td>
</tr>
<tr>
<td>General Enterics²</td>
<td>13, 14, 16, 17, 19, 20</td>
<td>1, 15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vomit and Diarrhea</td>
<td>None</td>
<td>3</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

All data are provisional.
Influenza Surveillance

Patrice Fernandez, M.P.H.

During the month of June, Influenza and ILI activity continued to circulate at low levels nationally. The Centers for Disease Control and Prevention (CDC) has identified an antigenically drifted influenza B Victoria lineage strain circulating nationally, and in Florida, that is different from the strain of influenza B Victoria lineage contained in the current 2016-17 influenza vaccination. Statewide activity has remained low, which is typical for this time of year. Florida reported local Influenza Like Illness (ILI) activity with the peak of the season to have passed in week 8. There were no positive influenza tests detected by the Bureau of Public Health Laboratories in recent weeks in Broward County. Broward influenza activity peaked in week 52 and remains sporadic.

Figure 2. ESSENCE ILI Visits, Broward, 2016-2017

Figure 3. ESSENCE Reported ILI Visits, Broward, 2016-2017

Figure 4. Merlin Reported Circulating Flu Types, Broward, 2017

Summary of Influenza and Respiratory Diseases Data

The number of visits to the emergency department for ILI was decreasing and was below the number of expected visits at this time for the month of June (week 22 to week 26) with zero alerts and zero warnings (Fig. 2). The percentage of emergency department visits due to ILI was decreasing and was below the weekly average for the last five years (Fig. 3). According to Merlin Flu Lab Reports, the number of positive tests for Influenza A has plateaued and was similar to the number of positive tests for Influenza B. Overall, the number of positive test results are decreasing as expected for the month of June (Fig. 4).

Influenza Prevention Recommendations

Florida Department 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.