Public Health Surveillance

Surveillance is a key core public health function and has been defined as the regular collection, meaningful analysis, and routine dissemination of relevant data for providing opportunities for public health action to prevent and control disease. Surveillance is done for many reasons such as identifying cases of diseases posing immediate risk to communities, detecting clusters and monitoring trends of disease that may represent outbreaks, evaluating control and prevention measures and developing hypotheses for emerging diseases.

Within Duval County, surveillance data is obtained through:

- Reports of notifiable diseases and conditions by providers (Merlin)
- Laboratory data from the Bureau of Laboratories
- Emergency department (ED) syndromic surveillance as monitored through Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)
- Florida Poison Information Center Network (FPICN)
- ILINet Sentinel Provider Influenza Surveillance
- Passive reports from the community
  - Notifiable diseases
  - Outbreaks

Report Summary – November 2014

The month of November included a variety of surveillance and investigation activities within Duval County. These included monitoring enteric disease activity, influenza and RSV surveillance, and investigating numerous cases of reportable illness.

Influenza-like illness (ILI) activity continues to increase. DOH-Duval continues to observe enteric illnesses and continues to monitor them.

Information on Protection Against Respiratory Syncytial Virus is highlighted in the Other Notable Trends and Statistics section. Lastly, this edition’s notable investigation of the month summarizes statewide influenza surveillance as produced by the Bureau of Epidemiology at the Florida Department of Health.

Table of Contents

Enteric Disease Overview ................................................................. Page 2
- Salmonellosis & cryptosporidiosis activity continues in Florida
Respiratory Disease & Influenza-like Illness Overview .......................... Pages 3 - 5
- Influenza and RSV continue to increase
Mosquito-borne Illness Surveillance ...................................................... Page 6
Other Notable Trends and Statistics .................................................... Page 7
- Protection Against Respiratory Syncytial Virus
Table of Recently Reported Diseases/Conditions .................................. Pages 8-9
Sexually Transmitted Disease Data ....................................................... Page 10
Data Dictionary ................................................................................ Page 11
List of Reportable Diseases and Conditions .......................................... Page 12
Summary

Reported cases of salmonellosis and cryptosporidiosis began to decrease during the month of November (Figure 2). Thirty (30) cases of salmonellosis were reported in November in Duval residents, which is lower than the expected number (Figure 2). The mean number of cases for the same time period during the previous five years was 57.8 cases for November. The most represented age group of reported cases of salmonellosis for 2014 (144/319, 45.14%) occurred in the 0-4 age group. Cases of cryptosporidiosis (15) began to decline, as well as, cases of giardiasis (4), shigellosis (3) remained low in October, while cases of campylobacteriosis (10) increased (Figure 2).

Norovirus activity is increasing in Florida. During November, five outbreaks of norovirus (3 confirmed norovirus GII) or gastrointestinal illness (suspect viral gastroenteritis) were reported in the State of Florida. One (1) cryptosporidiosis outbreak was reported in a daycare in Duval County in November (Source: FDENS EpiCom & DOH-Duval surveillance).


ESSENCE Reportable Disease Surveillance Data

Figure 2: Reported Cases of Select Enteric Conditions by Report Month, Duval County, January 2011 – November 2014

Additional Enteric Disease Trends Update

Figure 3: Reported Cases of Salmonellosis by Report Week-Duval County - 2011-2014

Figure 4: Reported Cases of Cryptosporidiosis Report Week-Duval County - 2011-2014
Summary

Currently, influenza-like illness (ILI) activity is at a mild level in Duval County. In Duval County, ED visits for ILI as monitored through ESSENCE remained above 2% from week 45 and climbed above 3% for week 48 (Figure 7). In November, there were sixteen (16) positive influenza results within Duval County that were tested at the Bureau of Public Health Labs (BPHL) - Jacksonville. ILI ED visits are increasing in all age groups (Figure 6). Other viruses known to be currently circulating, potentially causing ILI, include rhinovirus, adenovirus, parainfluenza, enterovirus, and respiratory syncytial virus (RSV).


Figure 5: Percentage of ILI from ED Chief Complaints, Florida ESSENCE - Duval County Participating Hospitals (n=8)

Figure 6: Age Comparison of ILI ED Visits – NE FL ESSENCE Facilities - Reported From July-2012 to December-2014
Summary

Within the last month, one (1) specimen has tested positive for influenza B and fifteen (15) specimens were positive for influenza A H3 as tested by the Bureau of Public Health Laboratories (BPHL). Influenza A, unspecified (52), influenza A H3 (15), influenza B Yamagata (1), influenza B, unspecified (1) and Unknown (8) were detected by private labs (as reported through Electronic Lab Reporting (ELR), Figure 8).

Figure 7: Number of Specimens Tested by FL Bureau of Public Health Laboratories (BPHL) and Percent Positive for Influenza by Lab Event Date – Week 36, 2011 to Week 49, 2014 as Reported by Merlin - Duval County

Figure 8: Number of Influenza-Positive Specimens Reported through Electronic Lab Reporting by Subtype by Lab Event Date as Reported by Merlin and Percent ILI in ESSENCE ED data – Week 36, 2012 to Week 49, 2014 - Duval County
Summary
Circulation of influenza and RSV have continued to increase during the month of November. RSV season for the North Region of Florida traditionally runs from September to March. The percent positive for influenza reported by local hospital data is 15.18% (65/428) (Figure 9 and Figure 10). The percent positive for RSV specimens during the month of September was 16.69% (96/575) (Figure 11). In October, the percent positive for influenza was 2.73% and for RSV was 15.50%.

Figure 9: Local Weekly Hospital Influenza A Surveillance Data- Reported From 1/20/2013-12/6/2014

Figure 10: Local Weekly Hospital Influenza B Surveillance Data- Reported From 1/20/2013-12/6/2014

Figure 11: Local Weekly Hospital RSV Surveillance Data- Reported From 1/20/2013-12/6/2014
MBI surveillance utilizes monitoring of arboviral seroconversions in sentinel chicken flocks, human surveillance, monitoring of mosquito pools, veterinary surveillance, and wild bird surveillance. MBI surveillance in Florida includes endemic viruses West Nile Virus (WNV), Eastern Equine Encephalitis Virus (EEEV), St. Louis Encephalitis Virus (SLEV), and Highlands J Virus (HJV), and exotic viruses such as Dengue Virus (DENV) and California Encephalitis Group Viruses (CEV). Resources: http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html

Figure 11: Florida Arbovirus Surveillance (January 1 - December 06, 2014)

**State of Florida 2014 Human Case Summary**

**West Nile Virus Illnesses Acquired in Florida:** A total of fifteen human cases of WNV illness acquired in Florida have been reported in 2014; one in Alachua (August), one in Clay (October), three in Escambia (July, August, September), two in Duval (August, September), one in Leon (August), one in Marion (October), one in Pasco (August), one in Polk (September) and four in Volusia (August, September) Counties. Two asymptomatic positive blood donors were reported from Santa Rosa (July) and St. Johns (September) Counties.

**International Travel-Associated Dengue Fever Cases:** Seventy-eight cases of dengue with onset in 2014 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were: Bangladesh, Bolivia, Brazil (2), Caribbean, Colombia, Costa Rica (4), Cuba (27), Cuba/Bahamas, Dominican Republic (9), El Salvador (2), Guadeloupe, Guatemala, Guyana (10), Haiti (104), Haiti/Dominican Republic, Honduras (2), India, Indonesia, Jamaica (56), Martinique (2), Nicaragua, Philippines, Puerto Rico (103), Puerto Rico/Dominican Republic (2), South America, St. Lucia (2), St. Thomas/St. Martin/Bahamas (2), St. Thomas, St. Vincent and the Grenadines, Trinidad (2), Trinidad/Tobago (2), Venezuela (2), and Virgin Islands (4). Counties reporting cases were: Alachua (2), Brevard (2), Broward (75), Charlotte (2), Clay (2), Collier (2), Duval (9), Escambia (2), Flagler, Hernando (3), Highlands, Hillsborough (35), Indian River (2), Lake (5), Lee (15), Leon (2), Manatee (3), Marion, Miami-Dade (70), Monroe, Nassau, Okaloosa (2), Orange (57), Osceola (17), Palm Beach (41), Pasco (4), Pinellas (10), Polk (21), Santa Rosa, Sarasota (3), Seminole (9), St. Johns (2), St. Lucie (3), and Volusia (4). Twenty-nine of the cases were reported in non-Florida residents. In 2014, 35 of the 78 cases of dengue reported in Florida have been serotyped by PCR. Additional serotyping and strain typing are being conducted.

**Dengue Fever Cases Acquired in Florida:** In 2014, a total of six cases of locally acquired dengue fever have been reported. Six cases of dengue in Miami-Dade residents with onset in June, August, and September have been reported as acquired in Miami-Dade County.

**International Travel-Associated Chikungunya Fever Cases:** Four hundred and six cases of chikungunya with onset in 2014 have been reported in individuals with travel history to a chikungunya endemic country or area experiencing an outbreak in the two weeks prior to onset. Countries of origin were: Antigua (2), Angola (2), Barbados, Bequia, Colombia (2), Cuba (6), Dominica/Guadaloupe, Dominican Republic (86), El Salvador (3), Grenada, Guatemala, Guyana (10), Haiti (104), Haiti/Dominican Republic, Honduras (2), India, Indonesia, Jamaica (56), Martinique (2), Nicaragua, Philippines, Puerto Rico (103), Puerto Rico/Dominican Republic (2), South America, St. Lucia (2), St. Thomas/St. Martin/Bahamas (2), St. Thomas, St. Vincent and the Grenadines, Trinidad (2), Trinidad/Tobago (2), Venezuela (2), and Virgin Islands (4). Counties reporting cases were: Alachua (2), Brevard (2), Broward (75), Charlotte (2), Clay (2), Collier (2), Duval (9), Escambia (2), Flagler, Hernando (3), Highlands, Hillsborough (35), Indian River (2), Lake (5), Lee (15), Leon (2), Manatee (3), Marion, Miami-Dade (70), Monroe, Nassau, Okaloosa (2), Orange (57), Osceola (17), Palm Beach (41), Pasco (4), Pinellas (10), Polk (21), Santa Rosa, Sarasota (3), Seminole (9), St. Johns (2), St. Lucie (3), and Volusia (4). Twenty-nine of the cases were reported in non-Florida residents.

**Chikungunya Fever Cases Acquired in Florida:** In 2014, a total of eleven cases of locally acquired chikungunya fever have been reported. One case of chikungunya fever with onset in July was acquired in Broward County. Two cases of chikungunya fever with onset in June were acquired in Miami-Dade County. Four cases of chikungunya fever with onset in July were acquired in Palm Beach County. Four cases of chikungunya fever with onset in July and August were acquired in St. Lucie County.

**International Travel-Associated Malaria Cases:** Fifty-eight cases of malaria with onset in 2014 have been reported. Countries of origin were: Angola (3), Cambodia, Dominican Republic, East Africa, Equatorial Guinea (2), Ghana (3), Ghana/Rwanda, Ghana/Senegal, Ghana/Togo, Guatemala, Guyana, Haiti, Honduras, India (8), Ivory Coast (3), Kenya (3), Liberia, Nigeria (10), Nigeria/Ethiopia, Papua New Guinea, Peru, Sierra Leone (5), Sudan, Togo, Uganda (2), and multiple sub-Saharan African countries (3). Counties reporting cases were: Broward (8), Clay, Duval (3), Escambia, Hernando, Hillsborough (9), Leon, Miami-Dade (13), Okaloosa (2), Orange (7), Osceola (2), Palm Beach (5), Pasco, Pinellas (2), Santa Rosa, and Seminole. Fifteen of the cases were reported in non-Florida residents.

**Table 1: Florida Mosquito-Borne Disease Surveillance Summary (through December 06, 2014)**

<table>
<thead>
<tr>
<th>Mosquito-Borne Disease</th>
<th>Human</th>
<th>Horses</th>
<th>Sentinel Chickens</th>
<th>Deer</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Nile Virus</td>
<td>17*</td>
<td>5</td>
<td>322</td>
<td>-</td>
</tr>
<tr>
<td>St. Louis Encephalitis Virus</td>
<td>2</td>
<td>-</td>
<td>105</td>
<td>-</td>
</tr>
<tr>
<td>Highlands J Virus</td>
<td>-</td>
<td>-</td>
<td>69</td>
<td>-</td>
</tr>
<tr>
<td>California</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Encephalitis Group Viruses</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Eastern Equine Encephalitis Virus</td>
<td>-</td>
<td>56</td>
<td>171</td>
<td>2</td>
</tr>
</tbody>
</table>

*Case count includes two asymptomatic blood donors.*
Protection Against Respiratory Syncytial Virus (Source: CDC.gov)

RSV is common during fall, winter and spring. It usually causes mild, cold-like symptoms. But RSV can be serious, especially for infants and older adults. Help protect your child and others from RSV.

Respiratory syncytial virus, or RSV, is a common virus. It spreads through coughing and sneezing. You can also get RSV by touching surfaces that have RSV on them, then touching your eyes, nose, or mouth. Most children get RSV by the time they are 2 years old. Healthy children usually experience mild, cold-like symptoms and recover on their own within a week or two. But RSV can cause severe lung infections, including bronchiolitis (infection of small airways in the lungs) and pneumonia. Each year in the United States, 100,000 to 126,000 babies younger than 1 year old are hospitalized due to RSV infection.

Those who have a higher risk for severe illness caused by RSV include:

- Premature babies
- Children younger than 2 years old with chronic lung disease or certain heart problems
- Adults 65 years and older
- People with weakened immune systems, such as from HIV infection, organ transplants, and specific medical treatments like chemotherapy

Help Prevent the Spread of RSV

You can help protect yourself, your child, and others from RSV infection by following a few prevention tips:

- **Wash your hands often**
  Wash your hands often with soap and water for 20 seconds, and help young children do the same. If soap and water are not available, use an alcohol-based hand sanitizer. Washing your hands will help protect you from germs.

- **Keep your hands off your face**
  Avoid touching your eyes, nose, and mouth with unwashed hands. Germs spread this way.

- **Avoid close contact with sick people**
  Avoid close contact, such as kissing, and sharing cups or eating utensils with people who have cold-like symptoms.

- **Cover your coughs and sneezes**
  Cover your mouth and nose with a tissue when coughing or sneezing. Throw the tissue in the trash afterward.

- **Clean and disinfect surfaces**
  Clean and disinfect surfaces and objects that people frequently touch, such as toys and doorknobs. When people infected with RSV touch surfaces and objects, they can leave behind germs. Also, when they cough or sneeze, droplets containing germs can land on surfaces and objects.

- **Stay home when you are sick**
  If possible, stay home from work, school, and public areas when you are sick. This will help

If you have cold-like symptoms, you should take extra care to stay away from people who have a higher risk for severe illness caused by RSV. Whether this is possible or not, you should carefully follow the prevention tips above.

Children often pass the virus to one another at their school or childcare center. Limiting the time that high-risk children spend in these settings during the RSV season may help protect them from infection. For more information, see Preventing the Spread of Illness In Child Care or School.

There is no vaccine to prevent RSV infection, but there is a medicine that can help protect some babies. This medicine (called palivizumab) is a series of monthly shots. Doctors usually give the shots once a month during RSV season to infants and young children who have a higher risk for serious illness caused by RSV. If you are concerned about your child’s risk for RSV, talk to your pediatrician about these shots.
### Table 3: Provisional Cases* of Selected Notifiable Disease, Duval County, Florida, November 2014

<table>
<thead>
<tr>
<th>Disease</th>
<th>Duval County</th>
<th>Florida</th>
<th>Duval County</th>
<th>Florida</th>
<th>Duval County</th>
<th>Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>2013</td>
<td>Mean†</td>
<td>Median¶</td>
<td>2014</td>
<td>2013</td>
</tr>
<tr>
<td><strong>A. Vaccine Preventable Diseases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diphtheria</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Measles</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mumps</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pertussis</td>
<td>7</td>
<td>1</td>
<td>2.4</td>
<td>2</td>
<td>64</td>
<td>27</td>
</tr>
<tr>
<td>Rubella</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tetanus</td>
<td>0</td>
<td>1</td>
<td>0.2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Varicella</td>
<td>3</td>
<td>1</td>
<td>3.8</td>
<td>4</td>
<td>43</td>
<td>51</td>
</tr>
<tr>
<td><strong>B. CNS Diseases &amp; Bacteremias</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creutzfeldt-Jakob Disease</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>H. influenzae (invasive)</td>
<td>0</td>
<td>0</td>
<td>0.6</td>
<td>0</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Meningitis (bacterial, cryptococcal, mycotic)</td>
<td>1</td>
<td>0</td>
<td>1.2</td>
<td>2</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Meningococcal Disease</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Staphylococcus aureus (VISA, VRSA)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Streptococcus pneumoniae (invasive disease)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug resistant</td>
<td>1</td>
<td>3</td>
<td>2.2</td>
<td>3</td>
<td>14</td>
<td>31</td>
</tr>
<tr>
<td>Drug susceptible</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>Streptococcal Disease, Group A, Invasive</td>
<td>0</td>
<td>0</td>
<td>0.6</td>
<td>1</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td><strong>C. Enteric Infections</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campylobacteriosis</td>
<td>10</td>
<td>7</td>
<td>6.4</td>
<td>7</td>
<td>87</td>
<td>88</td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
<td>15</td>
<td>0</td>
<td>1.6</td>
<td>1</td>
<td>132</td>
<td>25</td>
</tr>
<tr>
<td>Cyclosporiasis</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Giardias</td>
<td>4</td>
<td>3</td>
<td>7.2</td>
<td>7</td>
<td>51</td>
<td>55</td>
</tr>
<tr>
<td>Hemolytic Uremic Syndrome</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Listeriosis</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>30</td>
<td>39</td>
<td>57.8</td>
<td>65</td>
<td>326</td>
<td>383</td>
</tr>
<tr>
<td>Shiga Toxin-Producing E. coli (STEC)</td>
<td>1</td>
<td>2</td>
<td>0.4</td>
<td>0</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Shigellos</td>
<td>3</td>
<td>34</td>
<td>10.4</td>
<td>2</td>
<td>51</td>
<td>343</td>
</tr>
<tr>
<td>Typhoid Fever</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

*Recently Reported Diseases/Conditions in Florida*
### Recently Reported Diseases/Conditions in Florida

#### Duval County

<table>
<thead>
<tr>
<th>Disease Description</th>
<th>2014</th>
<th>2013</th>
<th>2014 Mean†</th>
<th>2013 Median¶</th>
<th>Month Cumulative (YTD)</th>
<th>2014</th>
<th>2013</th>
<th>2014 Mean†</th>
<th>2013 Median¶</th>
<th>Month Cumulative (YTD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Viral Hepatitis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>1</td>
<td>0</td>
<td>0.2</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>12.4</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>Hepatitis B +HBsAg in pregnant women</td>
<td>1</td>
<td>2</td>
<td>1.8</td>
<td>2</td>
<td>45</td>
<td>46</td>
<td>26</td>
<td>35.2</td>
<td>32</td>
<td>469</td>
</tr>
<tr>
<td>Hepatitis B, Acute</td>
<td>2</td>
<td>2</td>
<td>1.8</td>
<td>2</td>
<td>16</td>
<td>13</td>
<td>13</td>
<td>26.6</td>
<td>25</td>
<td>394</td>
</tr>
<tr>
<td>Hepatitis C, Acute</td>
<td>0</td>
<td>1</td>
<td>0.4</td>
<td>0</td>
<td>10</td>
<td>3</td>
<td>10</td>
<td>10.4</td>
<td>10</td>
<td>175</td>
</tr>
<tr>
<td>E. Vector Borne, Zoonoses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Rabies</td>
<td>0</td>
<td>0</td>
<td>0.4</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>Ciguatera</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>0.8</td>
<td>0</td>
<td>73</td>
</tr>
<tr>
<td>Dengue Fever</td>
<td>0</td>
<td>1</td>
<td>0.2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.4</td>
<td>0</td>
<td>103</td>
</tr>
<tr>
<td>Eastern Equine Encephalitis†</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>
<td>1</td>
</tr>
<tr>
<td>Ehrlichiosis/Anaplasmosis¶¶</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1.2</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td>Leptospirosis</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lyme Disease</td>
<td>1</td>
<td>0</td>
<td>0.4</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>5.2</td>
<td>3</td>
<td>61</td>
</tr>
<tr>
<td>Malaria</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>West Nile Virus†</td>
<td>1</td>
<td>1</td>
<td>0.8</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2.6</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>F. Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botulism-infant</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>
<td>0</td>
</tr>
<tr>
<td>Brucellosis</td>
<td>1</td>
<td>0</td>
<td>0.2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1.0</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Carbon Monoxide Poisoning</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>25</td>
<td>30</td>
<td>9</td>
<td>6</td>
<td>138</td>
</tr>
<tr>
<td>Hansens Disease (Leprosy)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>15</td>
<td>16</td>
<td>23.8</td>
<td>23</td>
<td>280</td>
</tr>
<tr>
<td>Vibrios</td>
<td>1</td>
<td>0</td>
<td>0.2</td>
<td>0</td>
<td>8</td>
<td>13</td>
<td>10</td>
<td>12.0</td>
<td>-</td>
<td>162</td>
</tr>
</tbody>
</table>

* Confirmed and probable cases based on date of report as reported in Merlin to the Bureau of Epidemiology. Incidence data for 2014 is provisional. May include Non-Florida Cases.
† Mean of the same month in the previous five years
¶ Median for 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, (Please note that suspect cases are not included in this report)
†† Includes neuroinvasive and non-neuroinvasive
¶¶ Includes *E. ewingii*, HGE, HME, and undetermined
## Table 4: Duval County Reported Sexually Transmitted Disease for Summary for November 2014

<table>
<thead>
<tr>
<th>Sex</th>
<th>Area 4 %</th>
<th>Duval %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>Area 4 %</th>
<th>Duval %</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Black</td>
<td>4</td>
<td>57%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>14%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Area 4 %</th>
<th>Duval %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>15-19</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>20-24</td>
<td>1</td>
<td>14%</td>
</tr>
<tr>
<td>25-29</td>
<td>2</td>
<td>29%</td>
</tr>
<tr>
<td>30-39</td>
<td>3</td>
<td>43%</td>
</tr>
<tr>
<td>40-49</td>
<td>1</td>
<td>14%</td>
</tr>
<tr>
<td>50+</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total Cases</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

Please note that STD numbers are provisional.

* Area 4 consists of Baker, Clay, Duval, Nassau, and St. Johns

Merlin: The Merlin system is essential to the control of disease in Florida. It serves as the state's repository of reportable disease case reports, and features automated notification of staff about individual cases of high-priority diseases. All reportable disease data presented for this report has been abstracted from Merlin, and as such are provisional. Data collected in Merlin can be viewed using http://www.floridacharts.com/merlin/freqrpt.asp.

Event Date: Reportable diseases and conditions presented within this report are reported by event date. This is the earliest date associated with the case. In most instances, this date represents the onset of illness. If this date is unknown, the laboratory report date is utilized as the earliest date associated with a case.

ILINet (previously referred to as the Sentinel Provider Influenza Surveillance Program): The Outpatient Influenza-like Illness Surveillance Network (ILINet) consists of more than 3,000 healthcare providers in all 50 states, the District of Columbia, and the U.S. Virgin Islands reporting over 25 million patient visits each year. Each week, approximately 1,400 outpatient care sites around the country report data to CDC on the total number of patients seen and the number of those patients with ILI by age group. For this system, ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat in the absence of a KNOWN cause other than influenza. The percentage of patient visits to healthcare providers for ILI reported each week is weighted on the basis of state population. This percentage is compared each week with the national baseline of 2.5%. Duval County has 5 ILinet providers that contribute to the state and national data.

NREVSS: The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors temporal and geographic patterns associated with the detection of respiratory syncytial virus (RSV), human parainfluenza viruses (HPIV), respiratory and enteric adenoviruses, and rotavirus.

MMWR week: The week of the epidemiologic year for which the National Notifiable Diseases Surveillance System (NNDSS) disease report is assigned by the reporting local or state health department for the purposes of Morbidity and Mortality Weekly Report (MMWR) disease incidence reporting and publishing. Values for MMWR week range from 1 to 53, although most years consist of 52 weeks.

Syndromic Surveillance: An investigational approach where epidemiologists use automated data acquisition and generation of statistical signals, monitor disease indicators continually (real time) or at least daily (near real time) to detect outbreaks of diseases earlier and more completely than might otherwise be possible with traditional public health surveillance (e.g., reportable disease surveillance and telephone consultation).

ESSENCE: The Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE) is a syndromic surveillance system for capturing and analyzing public health indicators for early detection of disease outbreaks. ESSENCE utilizes hospital emergency department chief complaint data to monitor disease indicators in the form of syndromes for anomalies. ESSENCE performs automatic data analysis, establishing a baseline with a 28-day average. Daily case data is then analyzed against this baseline to identify statistically significant increases. A yellow flag indicates a warning and a red flag indicates an alert. Currently, all eight Duval County Hospitals are sending ED data to the ESSENCE system; an additional 5, three in Clay, one in St Johns, and one in Nassau County, provide regional coverage. The 13 reporting hospitals in our region include Baptist Beaches (Duval), Baptist Clay (Clay), Baptist Downtown (Duval), Baptist Nassau (Nassau), Baptist South (Duval), Flagler (St. Johns), Memorial (Duval), Mayo (Duval), Orange Park (Clay), Shands Jacksonville (Duval), St. Vincent’s (Duval), St. Vincent’s Clay (Clay), and St. Vincent’s Southside (Duval).

Chief Complaint (CC): The concise statement describing the symptom, problem, condition, diagnosis, physician recommended return, or other factor that is the reason for a medical encounter.

Syndrome: A set of chief complaints, signs and/or symptoms representative of a condition that may be consistent with a CDC defined disease of public health significance. ESSENCE syndrome categories include botulism-like, exposure, fever, gastrointestinal, hemorrhagic, ILL, neurological, rash, respiratory, shock/coma, injury, and other.

Count: The number of emergency department visits relating to a syndrome of query.

Other Links and Resources:
Florida Department of Health, Bureau of Epidemiology: http://www.doh.state.fl.us/disease_ctrl/epi/index.html
<table>
<thead>
<tr>
<th>Disease/Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute rheumatic fever</td>
</tr>
<tr>
<td>Anthrax</td>
</tr>
<tr>
<td>Arsenic poisoning</td>
</tr>
<tr>
<td>Arboviral diseases not otherwise listed</td>
</tr>
<tr>
<td>Botulism, foodborne, wound, and unspecified</td>
</tr>
<tr>
<td>Botulism, infant</td>
</tr>
<tr>
<td>Brucellosis</td>
</tr>
<tr>
<td>California serogroup virus disease</td>
</tr>
<tr>
<td>Campylobacteriosis</td>
</tr>
<tr>
<td>Cancer, excluding non-melanoma skin cancer and including benign and borderline intracranial and CNS tumors</td>
</tr>
<tr>
<td>Carbon monoxide poisoning</td>
</tr>
<tr>
<td>Chancroid</td>
</tr>
<tr>
<td>Chikungunya fever</td>
</tr>
<tr>
<td>Chikungunya fever, locally acquired</td>
</tr>
<tr>
<td>Chlamydia</td>
</tr>
<tr>
<td>Cholera (Vibrio cholerae type O1)</td>
</tr>
<tr>
<td>Ciguatera fish poisoning</td>
</tr>
<tr>
<td>Congenital anomalies</td>
</tr>
<tr>
<td>Conjunctivitis in neonates &lt;14 days old</td>
</tr>
<tr>
<td>Creutzfeldt-Jakob disease (CJD)</td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
</tr>
<tr>
<td>Cyclosporiasis</td>
</tr>
<tr>
<td>Dengue fever</td>
</tr>
<tr>
<td>Dengue fever, locally acquired</td>
</tr>
<tr>
<td>Diphtheria</td>
</tr>
<tr>
<td>Eastern equine encephalitis</td>
</tr>
<tr>
<td>Ehrlichiosis/anaplasmosis</td>
</tr>
<tr>
<td>Escherichia coli infection, Shiga toxin-producing</td>
</tr>
<tr>
<td>Giardiasis, acute</td>
</tr>
<tr>
<td>Glanders</td>
</tr>
<tr>
<td>Gonorrhea</td>
</tr>
<tr>
<td>Granuloma inguinale</td>
</tr>
<tr>
<td>Haemophilus influenzae invasive disease in children &lt;5 years old</td>
</tr>
<tr>
<td>Hansen’s disease (leprosy)</td>
</tr>
<tr>
<td>Herpesvirus infection</td>
</tr>
<tr>
<td>Hemolytic uremic syndrome (HUS)</td>
</tr>
<tr>
<td>Hepatitis A</td>
</tr>
<tr>
<td>Hepatitis B, C, D, E, and G</td>
</tr>
<tr>
<td>Hepatitis B surface antigen in pregnant women or children &lt;2 years old</td>
</tr>
<tr>
<td>Herpes simplex virus infection in infants &lt;60 days old with disseminated infection and liver involvement; encephalitis; and infections limited to skin, eyes, and mouth; anogenital HSV in children &lt;12 years old</td>
</tr>
<tr>
<td>Human immunodeficiency virus (HIV) infection</td>
</tr>
<tr>
<td>HIV, exposed infants &lt;18 months old born to an HIV-infected woman</td>
</tr>
<tr>
<td>Human papillomavirus (HPV), associated laryngeal papillomas or recurrent respiratory papillomatosis in children &lt;6 years old; anogenital papillomas in children &lt;12 years old</td>
</tr>
<tr>
<td>Influenza A, novel or pandemic strain</td>
</tr>
<tr>
<td>Influenza-associated pediatric mortality in children &lt;18 years old</td>
</tr>
<tr>
<td>Lead poisoning</td>
</tr>
<tr>
<td>Legionellosis</td>
</tr>
<tr>
<td>Leprosy</td>
</tr>
<tr>
<td>Lyme disease</td>
</tr>
<tr>
<td>Lymphogranuloma venereum (LGV)</td>
</tr>
<tr>
<td>Malaria</td>
</tr>
<tr>
<td>Measles (rubeola)</td>
</tr>
<tr>
<td>Meningitis, bacterial or mycotic</td>
</tr>
<tr>
<td>Meningococcal disease</td>
</tr>
<tr>
<td>Mercury poisoning</td>
</tr>
<tr>
<td>Mumps</td>
</tr>
<tr>
<td>Neonatal abstinence syndrome (NAS)</td>
</tr>
<tr>
<td>Neurotoxic shellfish poisoning</td>
</tr>
<tr>
<td>Pertussis</td>
</tr>
<tr>
<td>Pesticide-related illness and injury, acute</td>
</tr>
<tr>
<td>Plague</td>
</tr>
<tr>
<td>Poliomyelitis</td>
</tr>
<tr>
<td>Psittacosis (ornithosis)</td>
</tr>
<tr>
<td>Q Fever</td>
</tr>
<tr>
<td>Rabies, animal or human</td>
</tr>
<tr>
<td>Rabies, possible exposure</td>
</tr>
<tr>
<td>Ricin toxin poisoning</td>
</tr>
<tr>
<td>Rocky Mountain spotted fever and other spotted fever rickettsioses</td>
</tr>
<tr>
<td>Rubella</td>
</tr>
<tr>
<td>St. Louis encephalitis</td>
</tr>
<tr>
<td>Salmonellosis</td>
</tr>
<tr>
<td>Sarcoidosis</td>
</tr>
<tr>
<td>Septic shock with normal temperature (SSTN)</td>
</tr>
<tr>
<td>Severe acute respiratory disease syndrome associated with coronavirus infection</td>
</tr>
<tr>
<td>Shigellosis</td>
</tr>
<tr>
<td>Smallpox</td>
</tr>
<tr>
<td>Staphylococcal enterotoxin B poisoning</td>
</tr>
<tr>
<td>Staphylococcus aureus infection, intermediate or full resistance to vancomycin (VISA, VRSA)</td>
</tr>
<tr>
<td>Streptococcus pneumoniae invasive disease in children &lt;5 years old</td>
</tr>
<tr>
<td>Syphilis</td>
</tr>
<tr>
<td>Syphilis in pregnant women and neonates</td>
</tr>
<tr>
<td>Tetanus</td>
</tr>
<tr>
<td>Trichinosis (trichinosis)</td>
</tr>
<tr>
<td>Tuberculosis (TB)</td>
</tr>
<tr>
<td>Tularemia</td>
</tr>
<tr>
<td>Typhoid fever (Salmonella typhi)</td>
</tr>
<tr>
<td>Typhus fever, epidemic</td>
</tr>
<tr>
<td>Vaccinia disease</td>
</tr>
<tr>
<td>Varicella (chickenpox)</td>
</tr>
<tr>
<td>Venezuelan equine encephalitis</td>
</tr>
<tr>
<td>Vibrio (infections of Vibrio species and closely related organisms, excluding Vibrio cholerae type O1)</td>
</tr>
<tr>
<td>Viral hemorrhagic fever</td>
</tr>
<tr>
<td>West Nile virus disease</td>
</tr>
<tr>
<td>Yellow fever</td>
</tr>
</tbody>
</table>

*Section 381.0031 (2), Florida Statutes (F.S.), provides that “Any practitioner licensed in this state to practice medicine, osteopathic medicine, chiropractic medicine, naturopathy, or veterinary medicine; any hospital licensed under part I of chapter 335; or any laboratory licensed under chapter 438 that diagnoses or suspects the existence of a disease of public health significance shall immediately report the fact to the Department of Health.” Florida's county health departments serve as the Department’s representatives in this reporting requirement. Furthermore, Section 381.004 (1), F.S. provides that “The department shall periodically issue a list of infectious or noninfectious diseases determined by it to be a threat to public health and therefore of significance to public health and shall furnish a copy of the list to the practitioners.”*