Duval County Epidemiology Surveillance Report

The Florida Department of Health (DOH) in Duval County, Epidemiology

October 2014

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 – October 2014

The month of October 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 remains low but continues to increase. DOH-Duval continues to observe enteric illnesses and continues to monitor the increase in cryptosporidiosis cases statewide.

Information on *Two Cases of St. Louis Encephalitis in Duval County Residents* is highlighted in the *Other Notable Trends and Statistics* section. Lastly, this edition's *notable investigation of the month* summarizes a cluster of Carbon Monoxide exposures in Duval County.

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Notable Investigation of the Month-

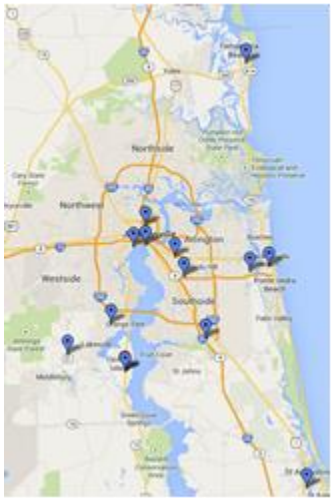
Carbon Monoxide Poisoning Cluster – August 2014

In early September 2014, DOH-Duval Epidemiology Program identified a cluster of carbon monoxide poisoning via the Essence Syndromic Surveillance System. Follow-up was completed with the hospital Infection Control Preventionist and Medical Records, the three patients, and the Fire Department contact. Two electricians and a restaurant maintenance supervisor installed a new breaker system during the night of August 29 – 30, 2014. A generator was placed outside the facility with the extension cord passing through the doorway to power the large lights and electrical equipment and causing the door to be held open slightly.

After approximately seven hours on the job, the three patients experienced fatigue and headaches, but attributed it to long workdays and work conditions. Approximately three hours later, a family member phoned and became concerned when the patient exhibited slurred speech. The Fire Department was notified; phone calls to work managers and household members were made. All three of the patients went to the ER, were treated with oxygen via a nonrebreather mask, and observed. Two were then discharged home and one was transferred to another facility. Carboxyhemoglobin levels ranged from 14.3% to 35%, a critical level. The patient with the critical level was flown to a center to receive hyperbaric oxygen therapy and was then discharged to home. The patients continued to experience fatigue and headache for over a week after the exposure and symptomatic treatment was advised. The patients returned to work within the following week after exposure.

Carbon monoxide poisoning is a reportable condition in Florida. The Essence system is helpful in identifying clusters. Ruth Voss RN MPH BAN

Figure 1: ESSENCE Hospitals



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Report prepared by Haley Zachary, MSPH - Haley.Zachary@flhealth.gov – All data are provisional

Enteric Disease Overview

Summary

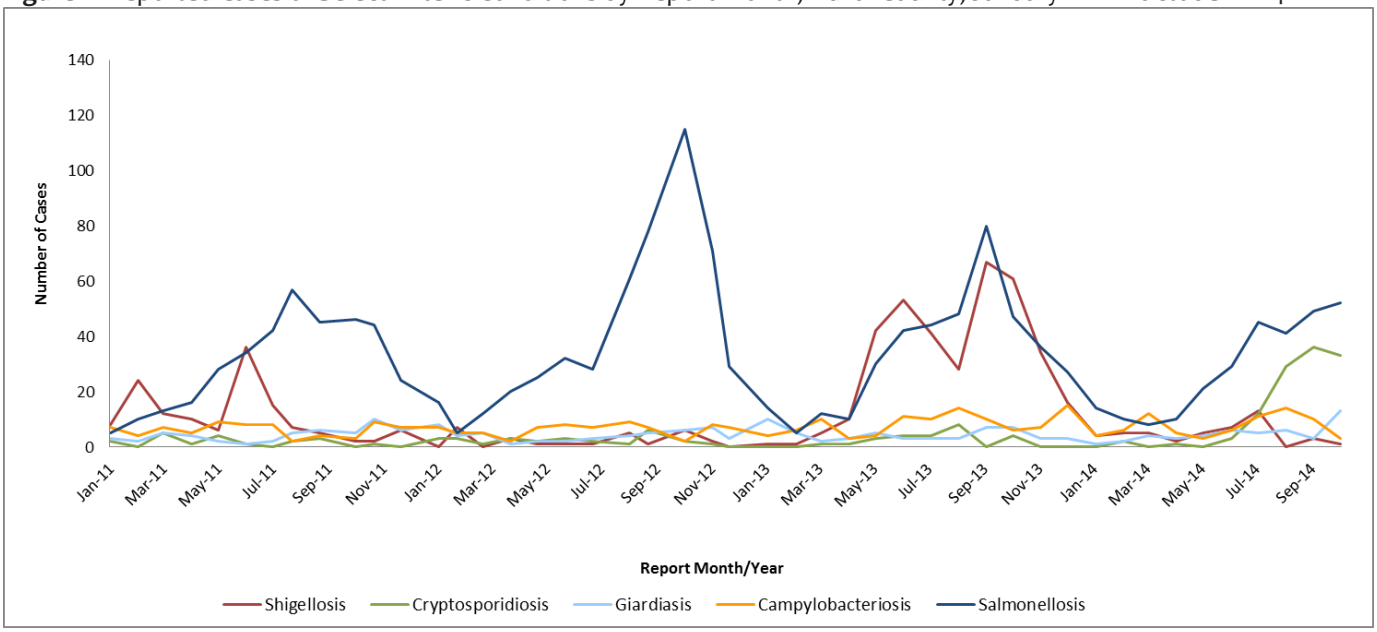
Reported cases of salmonellosis and cryptosporidiosis plateaued during the month of October (Figure 2). Fifty-three (53) cases of salmonellosis were reported in October in Duval residents, which is lower than the expected number (Figure 2&3). The mean number of cases for the same time period during the previous five years was 70.0 cases for October. The most represented age group of reported cases of salmonellosis for 2014 (134/299, 44.8%) occurred in the 0-4 age group. Cases of cryptosporidiosis (33) remained elevated, cases of giardiasis (13) also increased, shigellosis (2) remained low in October, while cases of campylobacteriosis (3) decreased (Figure 2).

Norovirus activity is increasing in Florida. During October, ten outbreaks of norovirus (2 confirmed norovirus GII) or gastrointestinal illness (8) (suspect viral gastroenteritis) were reported in the State of Florida. One GI outbreak was reported in a Duval County Assisted Living Facility (Source: FDENS EpiCom & DOH- Duval surveillance). During October, two (2) cryptosporidiosis outbreaks were reported in Florida via EpiCom, one outbreak was reported in a Duval County daycare.

For prevention information, visit http://www.cdc.gov/norovirus/ & http://www.floridahealth.gov/diseases-and-conditions/norovirus-infection/index.html

ESSENCE Reportable Disease Surveillance Data

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



Additional Enteric Disease Trends Update

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

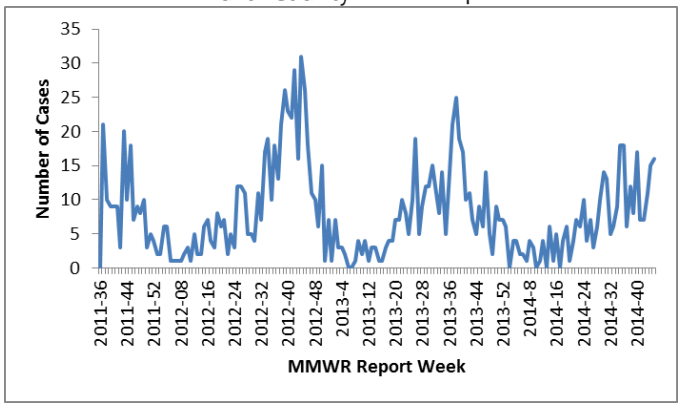
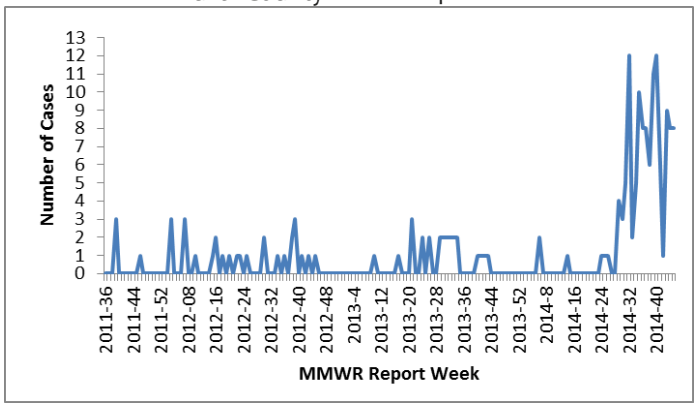


Figure 4: Reported Cases of Cryptosporidiosis Report Week- Duval County - 2011-2014



Respiratory Disease & ILI Overview

Summary

Currently, influenza-like illness (ILI) activity is at a mild level. In Duval County, ED visits for ILI as monitored through ESSENCE climbed above 2% for weeks 41 and 45 (Figure 7), and has remained above 1% since week 36. In October, there were four (4) positive influenza results within Duval County that were tested at the Bureau of Public Health Labs (BPHL) -Jacksonville. ILI ED visits is 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).

Comprehensive Statewide Influenza Surveillance: http://www.floridahealth.gov/diseases-and-conditions/influenza/Florida%20Influenza%20Surveillance%20Reports/index.html

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

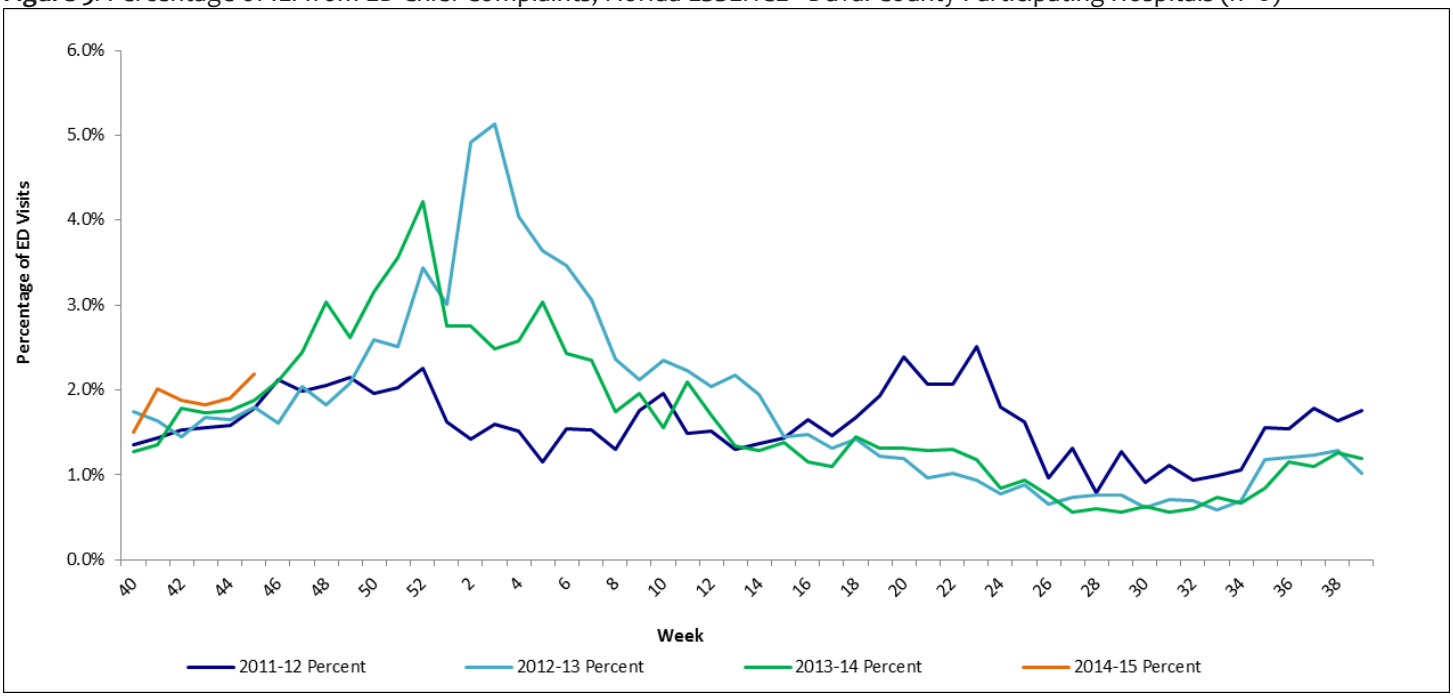
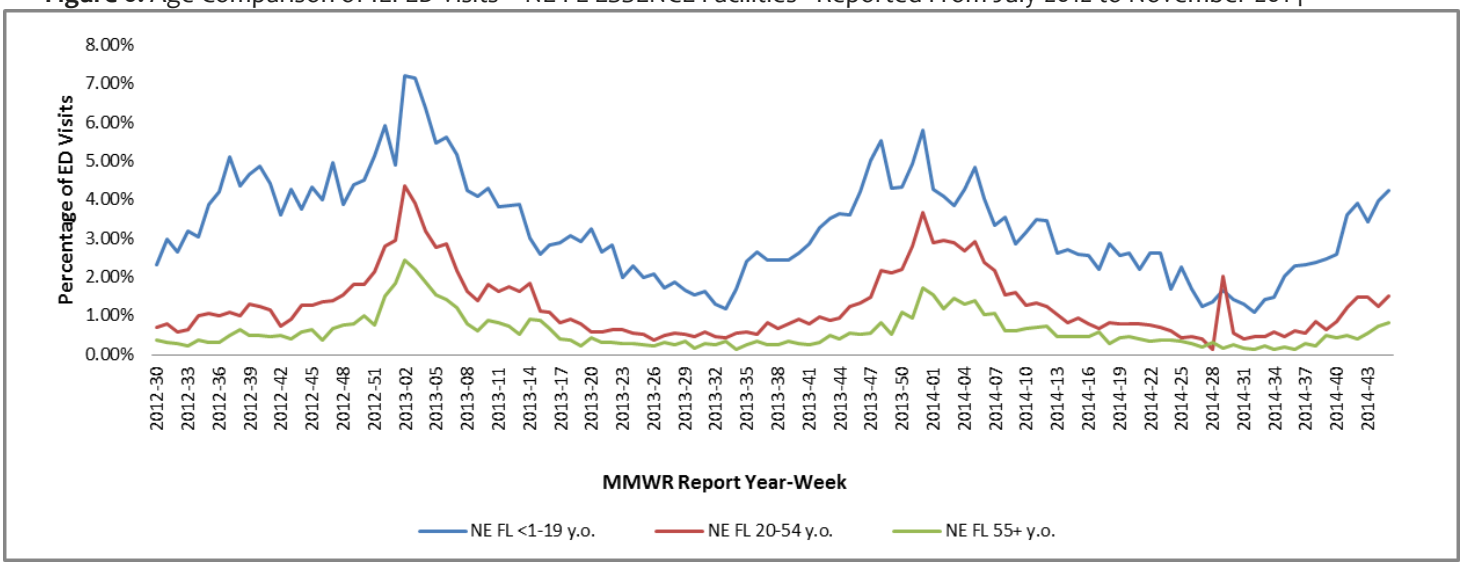


Figure 6: Age Comparison of ILI ED Visits – NE FL ESSENCE Facilities - Reported From July-2012 to November-2014



Respiratory Disease & ILI Overview Continued

Summary

Within the last month, one (1) specimen has tested positive for influenza B and three (3) specimens were positive for influenza A H3 as tested by the Bureau of Public Health Laboratories (BPHL). Influenza A, unspecified (7), influenza A H3 (3), and influenza B, unspecified (5) 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 44, 2014 as Reported by Merlin - Duval County

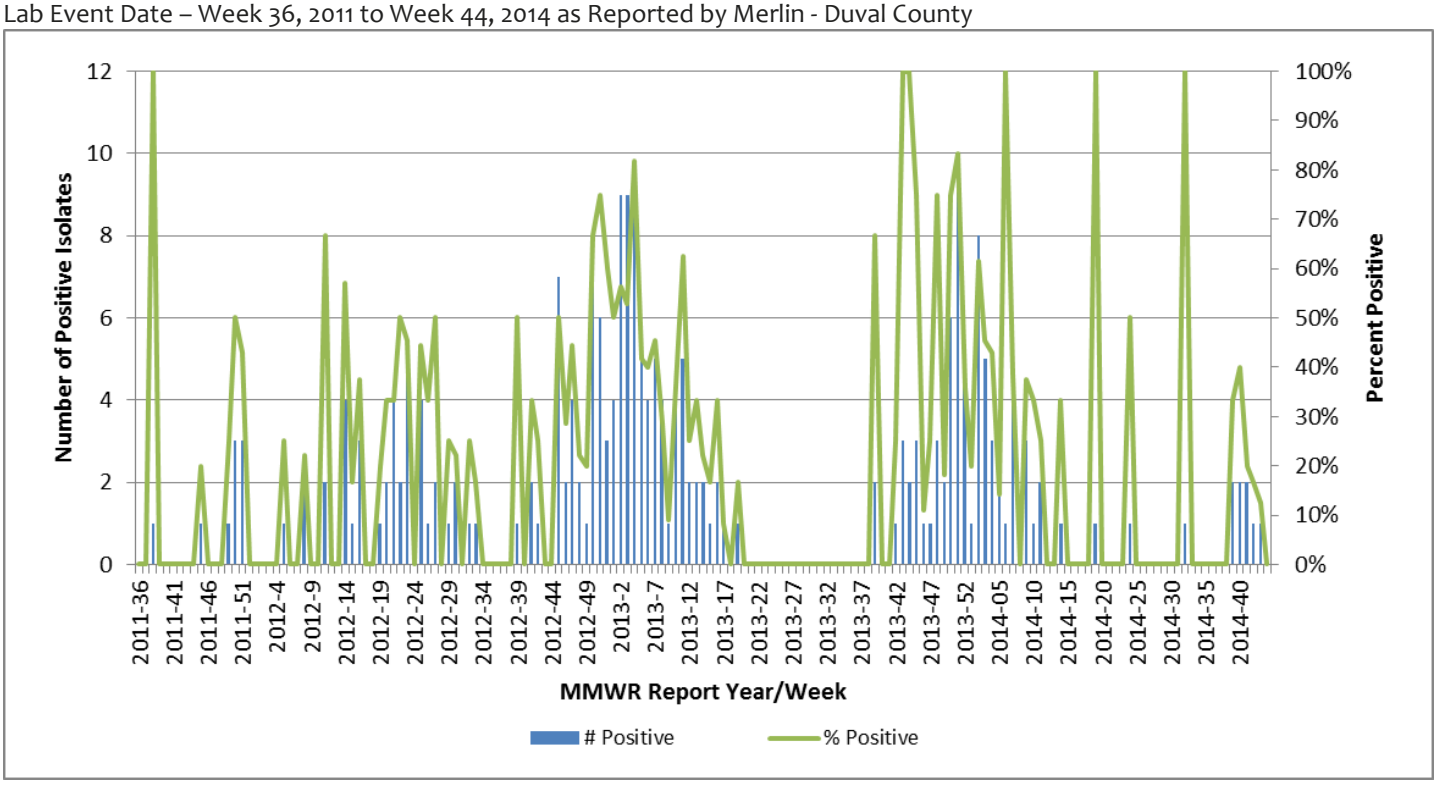
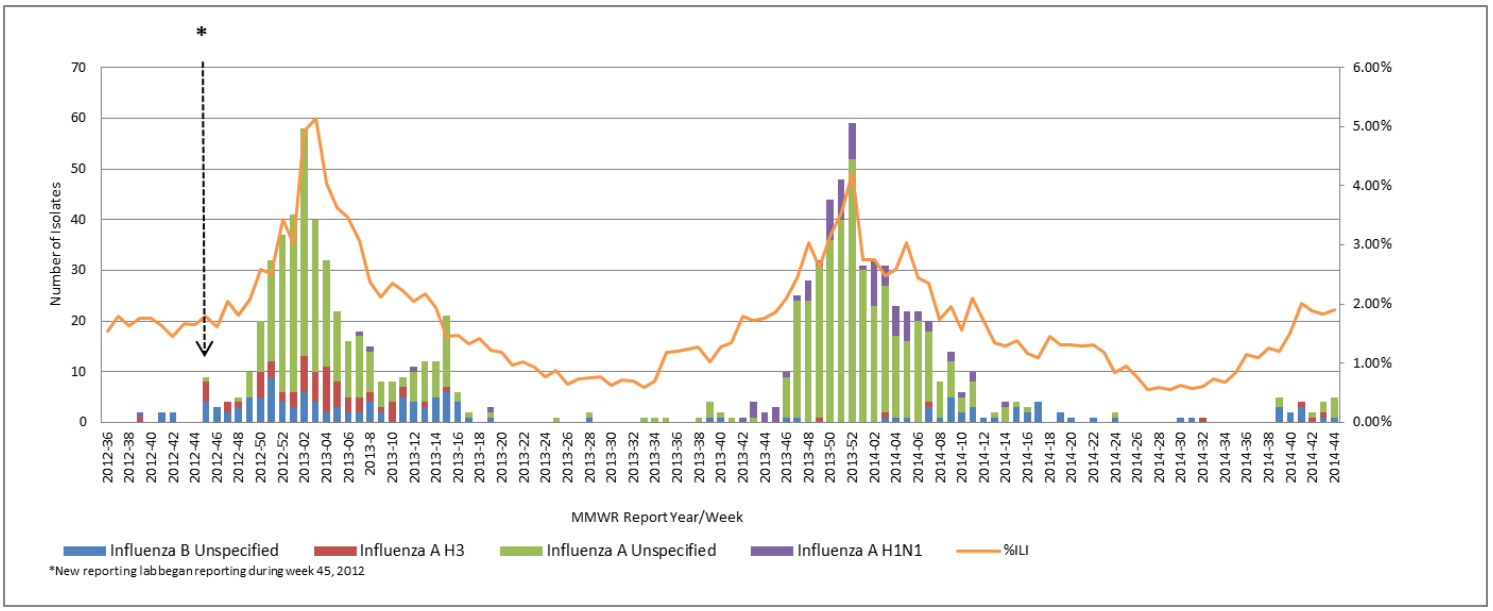


Figure 8: Number of Influenza-Positive Specimens Reported through Electronic Lab Reporting by Subtype by Lab Event Date as Reported by Merlin and Percent ILI in ESSENCE ED data – Week 36, 2012 to Week 44, 2014 - Duval County



Respiratory Virus Surveillance (NREVSS N. Region)

Summary

Circulation of influenza and RSV have begun to increase during the month of October. 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 2.73% (9/329) (Figure 9 and Figure 10). The percent positive for RSV specimens during the month of September was 15.5% (71/457) (Figure11). In September, the percent positive for influenza was 1.80 % and for RSV was 5.75%.

Figure 9: Local Weekly Hospital Influenza A Surveillance Data- Reported From 1/20/2013-11/1/2014

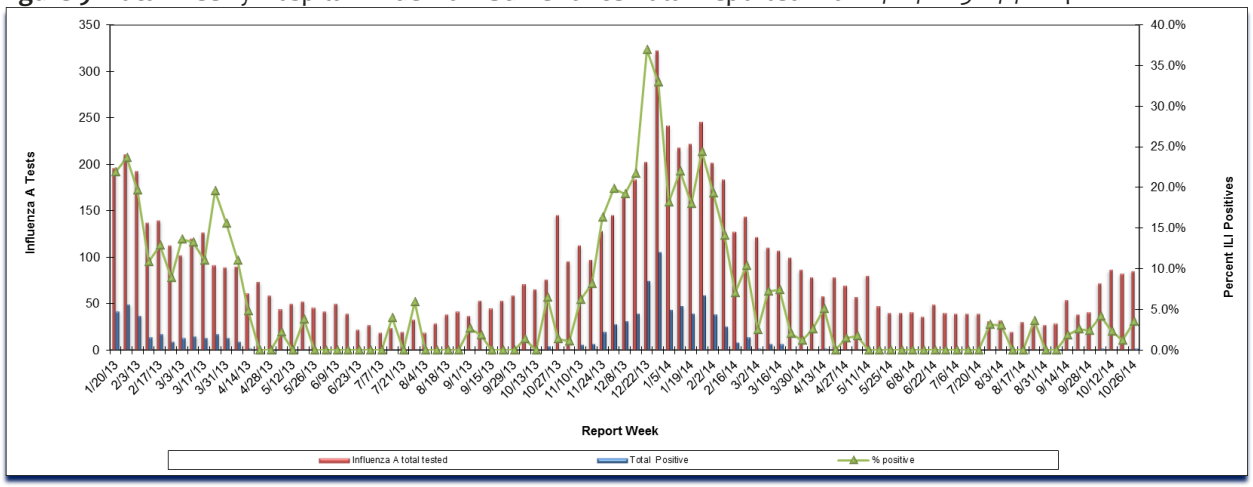


Figure 10: Local Weekly Hospital Influenza B Surveillance Data- Reported From 1/20/2013-11/1/2014

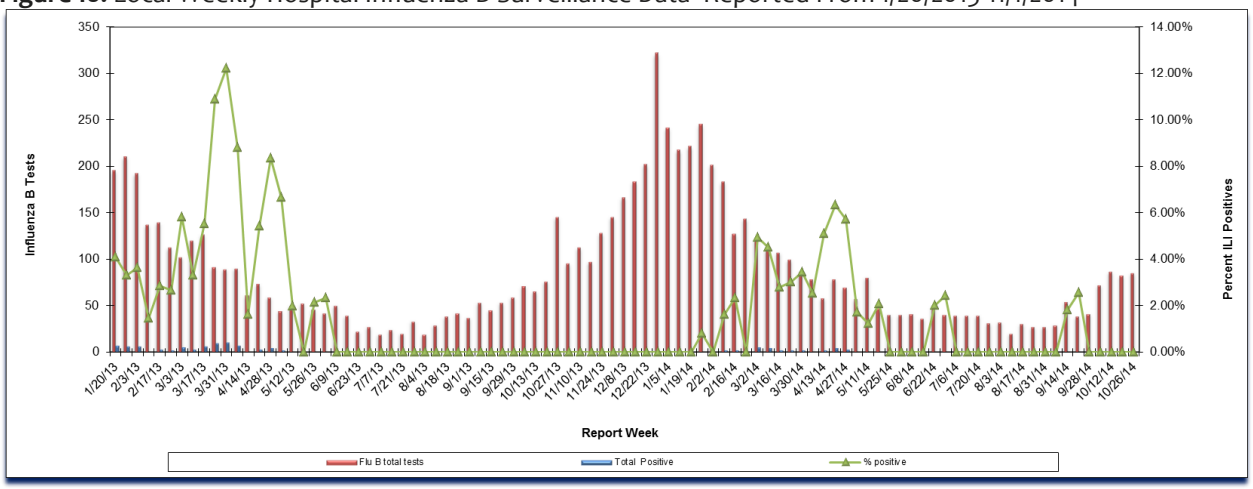
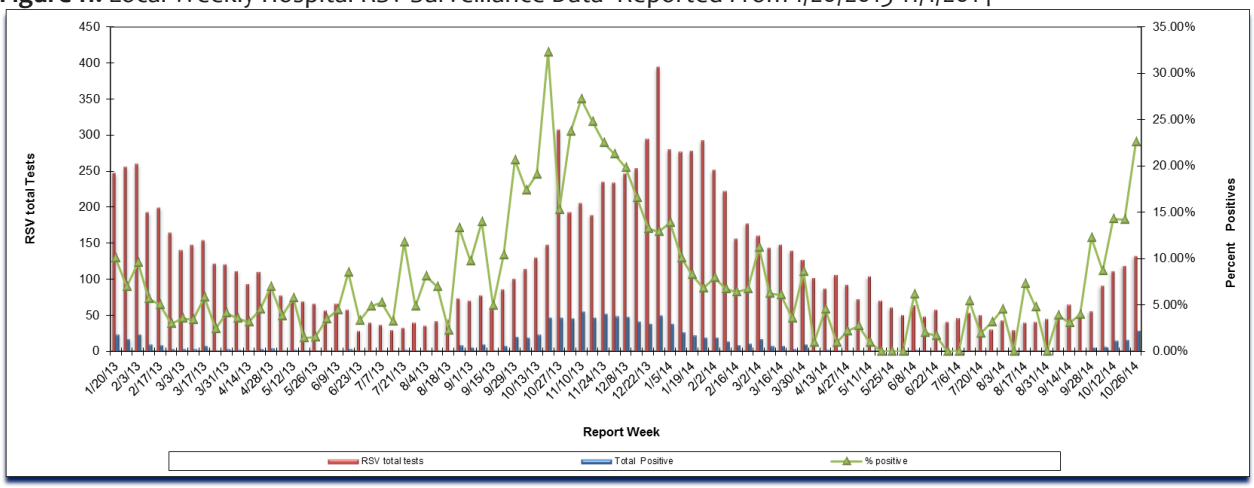


Figure 11: Local Weekly Hospital RSV Surveillance Data- Reported From 1/20/2013-11/1/2014



Florida Mosquito-Borne Disease Summary

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- November 08, 2014)

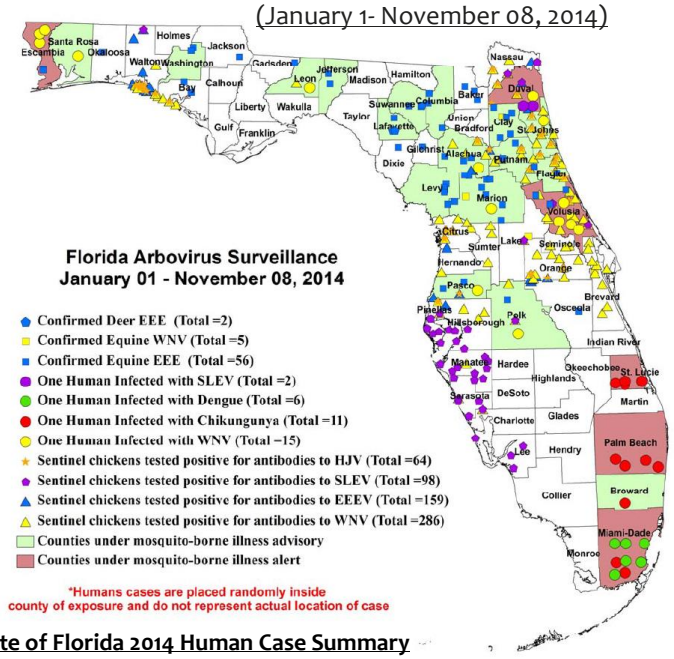


Table 1: Florida Mosquito-Borne Disease Surveillance Summary
Year to Date (through November 08, 2014)

Mosquito-Borne Disease	Human	Horses	Sentinel Chickens	Birds
West Nile Virus	13	5	286	-
St. Louis Encephalitis Virus	2	-	98	-
Highlands J Virus	-	-	64	-
California Encephalitis Group Viruses	-	-	-	-
Eastern Equine Encephalitis Virus	-	56	159	-

State of Florida 2014 Human Case Summary

West Nile Virus Illnesses Acquired in Florida: A total of thirteen human cases of WNV illness acquired in Florida have been reported in 2014; one in Alachua (August), three in Escambia (July, August, September), one in Duval (August), 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-two 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, Columbia, Costa Rica (3), Cuba (27), Cuba/Bahamas, Dominican Republic (9), El Salvador (2), Guadeloupe, Guatemala, Guyana, Haiti (3), Honduras (5), Jamaica, Mexico (2), Puerto Rico (5), Sri Lanka, Trinidad, and Venezuela (3). Counties reporting cases were: Alachua, Brevard (2), Broward (7), Clay, Collier, Highlands, Hillsborough (5), Lee, Manatee (2), Marion, Miami-Dade (33), Orange (4), Osceola (5), Palm Beach (2), Pinellas, Seminole (2), St. Lucie (2), and Volusia. Six of the cases were reported in non-Florida residents. In 2014, 32 of the 72 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: Three hundred and fifty 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), Antigua/Barbuda, Barbados, Bequia, Cuba (6), Dominica/Guadalupe, Dominican Republic (82), El Salvador (2), Grenada, Guatemala, Guyana (10), Haiti (104), Haiti/Dominican Republic, Honduras, India, Indonesia, Jamaica (31), Martinique (2), Philippines, Puerto Rico (84), Puerto Rico/Dominican Republic (2), South America, St. Lucia (2), St. Thomas/St. Martin/Bahamas (2), St. Thomas, St. Vincent and the Grenadines, Trinidad, Trinidad/Tobago, Venezuela, and Virgin Islands (4). Counties reporting cases were: Alachua (2), Brevard (4), Broward (67), Charlotte (2), Clay (2), Collier, Duval (8), Escambia (2), Flagler, Hernando (3), Highlands, Hillsborough (28), Indian River, Lake (3), Lee (14), Leon (2), Manatee (2), Marion, Miami-Dade (60), Monroe, Nassau, Okaloosa (2), Orange (40), Osceola (13), Palm Beach (35), Pasco (4), Pinellas (10), Polk (19), Santa Rosa, Sarasota (3), Seminole (8), St. Johns (2), St. Lucie (3), and Volusia (4). Twenty-five 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-two cases of malaria with onset in 2014 have been reported. Countries of origin were: Angola (3), Cameroon, Dominican Republic, East Africa, Equatorial Guinea (2), Ghana (2), Ghana/Rwanda, Ghana/Senegal, Ghana/Togo, Guatemala, Guyana, Haiti, Honduras, India (7), Ivory Coast (3), Kenya (3), Nigeria (7), 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 (7), Clay, Duval (2), Escambia, Hernando, Hillsborough (8), Leon, Miami-Dade (11), Okaloosa (2), Orange (7), Osceola (2), Palm Beach (4), Pasco, Pinellas (2), Santa Rosa, and Seminole. Twelve of the cases were reported in non-Florida residents. *Thirty-seven cases (71%) were diagnosed with Plasmodium falciparum. Eleven cases (21%) were diagnosed with Plasmodium vivax. Two cases (4%) were diagnosed with Plasmodium malariae. Two cases (4%) were diagnosed with Plasmodium ovale.*

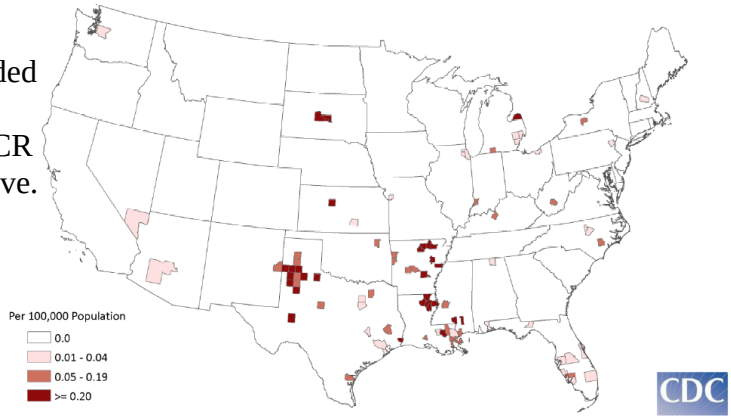
Other notable trends and statistics

Two cases of Saint Louis Encephalitis in Duval County Residents:

Saint Louis encephalitis virus (SLEV) is transmitted to humans by the bite of an infected mosquito. Most cases of SLEV disease have occurred in eastern and central states. Most persons infected with SLEV have no apparent illness. Initial symptoms of those who become ill include fever, headache, nausea, vomiting, and tiredness. Severe neuroinvasive disease (often involving encephalitis, an inflammation of the brain) occurs more commonly in older adults. In rare cases, long-term disability or death can result. There is no specific treatment for SLEV infection; care is based on symptoms. You can reduce your risk of being infected with SLEV by using insect repellent, wearing protective clothing, and staying indoors while mosquitoes are most active. If you think you or a family member may have SLEV neuroinvasive disease, it is important to consult your healthcare provider for proper diagnosis. (Source: CDC.gov)

Patient one: During the month of September a 50 year old female, with documented underlying medical conditions was diagnosed with West Nile Virus via CSF PCR. Symptoms included fever, slurred speech, and sided weakness. A sample was sent to the Bureau of Public Health Laboratories-Jacksonville where PCR for both West Nile Virus and St. Louise Encephalitis were positive. The specimen was then sent to Tampa for further confirmation where the final result was confirmed as St. Louis Encephalitis. Due to the necessity of further testing the SLE result was not confirmed until the month of October.

Patient two: Towards the end of August a 57 year old white female was hospitalized with an onset of symptoms which included fever 102°F, headache, sinus pressure, near syncope, nausea, vomiting, poor appetite, weakness, and malaise. Patient had a prior medical history of underlying medical conditions. Acute and convalescent specimens sent to the BPHL were confirmed to be positive for Saint Louis Encephalitis.



* Neuroinvasive disease includes cases reported as encephalitis, meningoencephalitis, or meningitis. Cases are reported by county of residence.

Data table: This map shows the distribution of St. Louis encephalitis virus neuroinvasive disease (encephalitis and/or meningitis) average annual incidence from 1996 through 2010. Counties are shaded according to incidences ranging from less than 0.05, 0.05 to 0.19, and greater than or equal to 0.2 per 100,000 population. Shaded counties are scattered throughout the United States.

In both cases local mosquito control was notified, mosquito control assessed both properties and heightened spraying and monitoring of the area. Duval County had a single sentinel chicken positive for SLEV antibodies collected on 9/2 and reported 9/9/14. The last positive sentinel chicken for SLE in Duval County was in 2000. DOH-Duval issued a Mosquito-borne illness Advisory on September 15, 2014 and a Mosquito-borne illness Alert on October 22, 2014.

These are the first reported cases of SLE in Florida since 2003. Like West Nile virus (WNV) and dengue, SLE is a flavivirus. Historically, periodic large outbreaks involving over 100-200 people have been reported in Florida, particularly in the Tampa Bay area. Since the introduction of WNV in 2001, SLE outbreaks have not been seen in Florida. An interesting article based on collaborative work performed by FL DOH and University of South Florida personnel, raises the possibility of competitive pressure between WNV and SLE and can be viewed at: http://wwwnc.cdc.gov/eid/article/15/4/pdfs/08-1094.pdf For more information about SLE see: http://www.cdc.gov/sle/index.html

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Recently Reported Diseases/Conditions in Florida

Table 3: Provisional Cases* of Selected Notifiable Disease, Duval County, Florida, October 2014

	Duval County						Florida					
	Month				Cumulative (YTD)		Month				Cumulative (YTD)	
	2014	2013	Mean†	Median¶	2014	2013	2014	2013	Mean†	Median¶	2014	2013
A. Vaccine Preventable Diseases												
Diphtheria	**0**	0	0	0	0	0	**0**	0	0	0	0	0
Measles	**0**	0	0	0	0	0	**0**	0	0	0	0	9
Mumps	**0**	0	0	0	0	0	**0**	0	0.4	0	1	2
Pertussis	**11**	6	4.2	4	57	26	**34**	121	53.8	36	667	609
Rubella	**0**	0	0	0	0	0	**0**	0	0	0	0	0
Tetanus	**0**	0	0	0	0	1	**0**	0	0.2	0	2	4
Varicella	**3**	5	2.2	2	40	50	**49**	60	59.2	60	491	580
B. CNS Diseases & Bacteremias												
Creutzfeldt-Jakob Disease	**0**	0	0	0	0	1	**1**	1	1.2	1	14	17
H. influenzae (invasive)	**1**	1	0.4	0	15	20	**21**	17	13.2	15	233	230
Meningitis (bacterial, cryptococcal, mycotic)	**0**	0	1.4	1	13	10	**6**	10	14.6	15	105	123
Meningococcal Disease	**0**	0	0	0	2	0	**7**	5	3.2	3	42	52
Staphylococcus aureus (VISA, VRSA)	**0**	0	0	0	0	1	**0**	0	0.2	0	3	3
Streptococcus pneumoniae (invasive disease)												
Drug resistant	**0**	3	2.6	2	15	28	**11**	35	41.4	36	354	465
Drug susceptible	**1**	1	2.6	1	21	25	**21**	31	36.6	39	376	485
Streptococcal Disease, Group A, Invasive	**0**	0	0.2	0	8	7	**0**	22	14	13	184	254
C. Enteric Infections												
Campylobacteriosis	**3**	6	3.8	3	77	81	**157**	150	121	126	1913	1749
Cryptosporidiosis	**33**	4	2.4	3	117	25	**348**	67	50.2	50	1685	361
Cyclosporiasis	**0**	0	0.2	0	0	6	**1**	1	2	2	30	47
Giardiasis	**13**	7	6.4	6	47	52	**131**	98	141.4	118	1008	935
Hemolytic Uremic Syndrome	**0**	1	0.2	0	0	3	**1**	2	0.4	0	6	10
Listeriosis	**0**	1	0.2	0	2	3	**5**	3	2.6	3	36	36
Salmonellosis	**53**	49	70	67	296	344	**873**	860	896.4	860	5103	5097
Shiga Toxin-Producing E. coli (STEC)	**0**	1	0.2	0	2	7	**21**	8	7.8	8	151	108
Shigellosis	**2**	61	17	6	48	309	**194**	168	146	150	2054	811
Typhoid Fever	**0**	0	0	0	0	1	**2**	1	1.2	1	14	10

Recently Reported Diseases/Conditions in Florida

	Duval County						Florida					
	Month				Cumulative (YTD)		Month				Cumulative (YTD)	
	2014	2013	Mean†	Median¶	2014	2013	2014	2013	Mean†	Median¶	2014	2013
D. Viral Hepatitis												
Hepatitis A	**0**	1	0.4	0	0	5	**11**	21	13.2	11	99	112
Hepatitis B +HBsAg in pregnant women	**4**	3	2.6	3	45	44	**31**	30	35.8	33	432	414
Hepatitis B, Acute	**1**	1	0.6	1	14	11	**35**	38	26.8	28	349	306
Hepatitis C, Acute	**0**	0	0	0	10	2	**12**	6	9.8	6	162	197
E. Vector Borne, Zoonoses												
Animal Rabies	**2**	0	0.4	0	3	2	**9**	8	10.6	12	77	84
Ciguatera	**0**	0	0	0	0	0	**2**	4	4	4	60	44
Dengue Fever	**0**	0	0.4	0	0	3	**13**	15	15.2	15	93	146
Eastern Equine Encephalitis††	**0**	0	0	-	0	0	**0**	0	.2	-	1	2
Ehrlichiosis/Anaplasmosis¶¶	**0**	0	.2	-	1	0	**4**	2	1.2	-	36	24
Leptospirosis	**0**	0	0	0	0	0	**0**	0	0.4	0	0	1
Lyme Disease	**0**	0	0	0	1	1	**10**	11	13.8	12	125	121
Malaria	**1**	1	0.8	1	2	5	**6**	5	6.2	6	58	53
St. Louis Encephalitis††	**1**	0	0	-	2	0	**1**	0	0	-	2	0
West Nile Virus††	**1**	1	1.2	-	2	2	**7**	2	4.2	-	22	6
F. Others												
Botulism-infant	**0**	0	0	0	0	0	**0**	0	0	0	0	1
Brucellosis	**0**	0	0	0	1	0	**2**	1	0.2	0	5	6
Carbon Monoxide Poisoning	**0**	2	0.4	0	5	25	**8**	19	8.6	5	108	142
Hansens Disease (Leprosy)	**0**	0	0	0	0	0	**1**	1	1	1	6	7
Legionellosis	**2**	0	1	1	9	12	**34**	28	22.4	25	264	215
Vibrios	**0**	1	1.4	1	7	13	**26**	31	15.2	-	152	175

***** 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

Recently Reported Diseases/Conditions in Florida

Table 4: Duval County Reported Sexually Transmitted Disease for Summary for October 2014

Infectious and Early Latent Syphilis Cases

Sex	Area 4	%	Duval	%
Male	12	100%	12	100%
Female	0	0%	0	0%
Race	**Area 4**	**%**	**Duval**	**%**
White	2	17%	2	17%
Black	10	83%	10	83%
Hispanic	0	0%	0	0%
Other	0	0%	0	0%
Age	**Area 4**	**%**	**Duval**	**%**
0-14	0	0%	0	0%
15-19	2	17%	2	17%
20-24	4	33%	4	33%
25-29	3	25%	3	25%
30-39	1	8%	1	8%
40-49	1	8%	1	8%
50+	1	8%	1	8%
Total Cases	12		12	

Chlamydia Cases

Sex	Area 4	%	Duval	%
Male	166	27%	127	27%
Female	439	73%	343	73%
Race	**Area 4**	**%**	**Duval**	**%**
White	110	18%	67	14%
Black	259	43%	243	52%
Hispanic	15	2%	13	3%
Other	221	37%	147	31%
Age	**Area 4**	**%**	**Duval**	**%**
0-14	4	1%	3	1%
15-19	156	26%	122	26%
20-24	235	39%	180	38%
25-29	122	20%	99	21%
30-39	69	11%	50	11%
40-54	18	3%	15	3%
55+	1	1%	1	1%
Total Cases	605		470	

Gonorrhea Cases

Sex	Area 4	%	Duval	%
Male	81	42%	70	43%
Female	113	58%	92	57%
Race	**Area 4**	**%**	**Duval**	**%**
White	40	21%	25	15%
Black	104	54%	99	61%
Hispanic	3	2%	3	2%
Other	47	24%	35	22%
Age	**Area 4**	**%**	**Duval**	**%**
0-14	0	0%	0	0%
15-19	27	14%	22	14%
20-24	71	37%	60	37%
25-29	45	23%	37	23%
30-39	35	18%	31	19%
40-54	10	5%	7	4%
55+	6	3%	5	3%
Total Cases	194		162	

Please note that STD numbers are provisional.

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

For more STD surveillance data see: http://www.floridahealth.gov/diseases-and-conditions/sexually-transmitted-diseases/std-statistics/

Data Dictionary

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, ILI, 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
Florida Annual Morbidity Reports: http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/data-and-publications/fl-amsr1.html
Influenza Surveillance Reports:
http://www.floridahealth.gov/diseases-and-conditions/influenza/florida-influenza-weekly-surveillance.htm

Reportable Diseases/Conditions in Florida

Practitioner List (Laboratory Requirements Differ)

Effective June 4, 2014

Did you know that you are required* to report certain diseases to your local county health department?

DOH-Duval Disease reporting telephone numbers:
AIDS, HIV - (904) 253-2989, (904) 253-2955
STD - (904) 253-2974, Fax - (904) 253-2601
TB Control - (904) 253-1070, Fax - (904) 253-1943
All Others- (904) 253-1850, Fax - (904) 253-1851
After Hours Emergency - (904) 434-6035

!	Report immediately 24/7 by phone upon initial suspicion or laboratory test order
☎	Report immediately 24/7 by phone
•	Report next business day
+	Other reporting timeframe

- ! Outbreaks of any disease, any case, cluster of cases, or exposure to an infectious or non-infectious disease, condition, or agent found in the general community or any defined setting (e.g., hospital, school, other institution) not listed that is of urgent public health significance
- \+ Acquired immune deficiency syndrome (AIDS)
- ☎ Amebic encephalitis
- ! Anthrax
- • Arsenic poisoning
- • Arboviral diseases not otherwise listed
- ! Botulism, foodborne, wound, and unspecified
- • Botulism, infant
- ! Brucellosis
- • California serogroup virus disease
- • Campylobacteriosis
- \+ Cancer, excluding non-melanoma skin cancer and including benign and borderline intracranial and CNS tumors
- • Carbon monoxide poisoning
- • Chancroid
- • Chikungunya fever
- ☎ Chikungunya fever, locally acquired
- • Chlamydia
- ! Cholera (*Vibrio cholerae* type O1)
- • Ciguatera fish poisoning
- \+ Congenital anomalies
- • Conjunctivitis in neonates <14 days old
- • Creutzfeldt-Jakob disease (CJD)
- • Cryptosporidiosis
- • Cyclosporiasis
- • Dengue fever
- ☎ Dengue fever, locally acquired
- ! Diphtheria
- • Eastern equine encephalitis
- • Ehrlichiosis/anaplasmosis
- • *Escherichia coli* infection, Shiga toxin-producing
- • Giardiasis, acute
- ! Glanders
- • Gonorrhea
- • Granuloma inguinale
- ! *Haemophilus influenzae* invasive disease in children <5 years old
- • Hansen's disease (leprosy)
- ☎ Hantavirus infection
- ☎ Hemolytic uremic syndrome (HUS)
- ☎ Hepatitis A
- • Hepatitis B, C, D, E, and G
- • Hepatitis B surface antigen in pregnant women or children <2 years old
- ☎ Herpes B virus, possible exposure
- • Herpes simplex virus (HSV) in infants <60 days old with disseminated infection and liver involvement; encephalitis; and infections limited to skin, eyes, and mouth; anogenital HSV in children <12 years old
- \+ Human immunodeficiency virus (HIV) infection
- • HIV, exposed infants <18 months old born to an HIV-infected woman
- • Human papillomavirus (HPV), associated laryngeal papillomas or recurrent respiratory papillomatosis in children <6 years old; anogenital papillomas in children <12 years old
- ! Influenza A, novel or pandemic strains
- ☎ Influenza-associated pediatric mortality in children <18 years old
- • Lead poisoning
- • Legionellosis
- • Leptospirosis
- ☎ Listeriosis
- • Lyme disease
- • Lymphogranuloma venereum (LGV)
- • Malaria
- ! Measles (rubeola)
- ! Melioidosis
- • Meningitis, bacterial or mycotic
- ! Meningococcal disease
- • Mercury poisoning
- • Mumps
- \+ Neonatal abstinence syndrome (NAS)
- ☎ Neurotoxic shellfish poisoning
- ☎ Pertussis
- • Pesticide-related illness and injury, acute
- ! Plague
- ! Poliomyelitis
- • Psittacosis (ornithosis)
- • Q Fever
- ☎ Rabies, animal or human
- ! Rabies, possible exposure
- ! Ricin toxin poisoning
- • Rocky Mountain spotted fever and other spotted fever rickettsioses
- ! Rubella
- • St. Louis encephalitis
- • Salmonellosis
- • Saxitoxin poisoning (paralytic shellfish poisoning)
- ! Severe acute respiratory disease syndrome associated with coronavirus infection
- • Shigellosis
- ! Smallpox
- ☎ Staphylococcal enterotoxin B poisoning
- ☎ *Staphylococcus aureus* infection, intermediate or full resistance to vancomycin (VISA, VRSA)
- • *Streptococcus pneumoniae* invasive disease in children <6 years old
- • Syphilis
- ☎ Syphilis in pregnant women and neonates
- • Tetanus
- • Trichinellosis (trichinosis)
- • Tuberculosis (TB)
- ! Tularemia
- ☎ Typhoid fever (*Salmonella* serotype Typhi)
- ! Typhus fever, epidemic
- ! Vaccinia disease
- • Varicella (chickenpox)
- ! Venezuelan equine encephalitis
- • Vibriosis (infections of *Vibrio* species and closely related organisms, excluding *Vibrio cholerae* type O1)
- ! Viral hemorrhagic fevers
- • West Nile virus disease
- ! Yellow fever

*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 395; or any laboratory licensed under chapter 483 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 representative in this reporting requirement. Furthermore, Section 381.0031 (4), *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…"