

Duval County Epidemiology Surveillance Report

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

December 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 – December 2014

The month of December 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 *CDC: Flu Activity Expands; Severity Similar to Past H3N2 Seasons* 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.

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Notable Investigation of the Month: Florida Influenza Activity

The 2014-15 flu season is in full swing in Florida.

- While it is not uncommon for influenza and ILI activity levels to increase during this time of year, current activity levels are above levels seen during previous years at this time. Influenza activity has increased the most in people over 65 in the past few weeks, **influenza activity remains highest in children and overall is widespread throughout Florida.**

-Due to increased influenza activity in all regions of the state, Florida reported widespread influenza activity to CDC in week 53. This is the fourth week reporting widespread activity; this represents the geographic spread of influenza in Florida.

-Most Florida counties reported increasing influenza activity. In week 53, 34 counties reported increasing influenza activity; 30 counties indicated activity is at a plateau.

-Emergency department (ED) and urgent care center (UCC) ILI visits are increasing in all regions.

-The proportion of visits to EDs and UCCs with a chief complaint of ILI and the proportion of visits resulting in a discharge diagnosis of influenza for those ≤19 years old are at or near what we typically see at the peak of flu season. Increased influenza activity in children typically comes ahead of increases in activity in adults and the elderly.

-There continues to be increased levels of influenza in pregnant women presenting to EDs for care that is above expected levels for this time of year. Pregnant women are among those at high risk for severe complications due to influenza infection. More information can be found here: http://www.floridahealth.gov/diseases-and-conditions/influenza/_documents/Other/influenza-guidance-for-health-care-providers.pdf

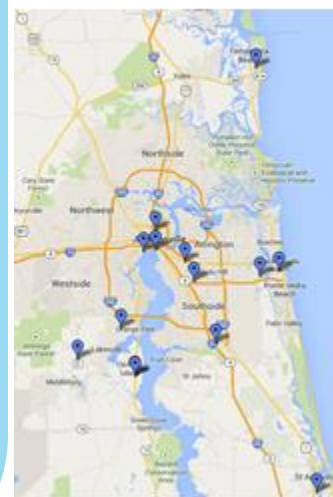
-In Florida, the most common influenza subtype detected at the Bureau of Public Health Laboratories (BPHL) in recent weeks has been influenza A (H3): In week 53, 40 of 57 (70.2%) specimens submitted for influenza testing at BPHL were PCR positive for seasonal strains of influenza: thirty-one were positive for influenza A (H3), seven were influenza A not yet subtyped, and one was influenza B not yet subtyped. While it is too early to tell if this flu season will be worse than other years, seasons when influenza A (H3) predominantly circulates are often associated with higher morbidity and mortality, particularly in the elderly and very young.

-No pediatric influenza-associated deaths were reported in week 53.

- The preliminary estimated number of Florida deaths due to pneumonia or influenza in week 53 was below the excess threshold.

Produced by: Bureau of Epidemiology, Florida Department of Health

Figure 1: ESSENCE Hospitals



Enteric Disease Overview

Summary

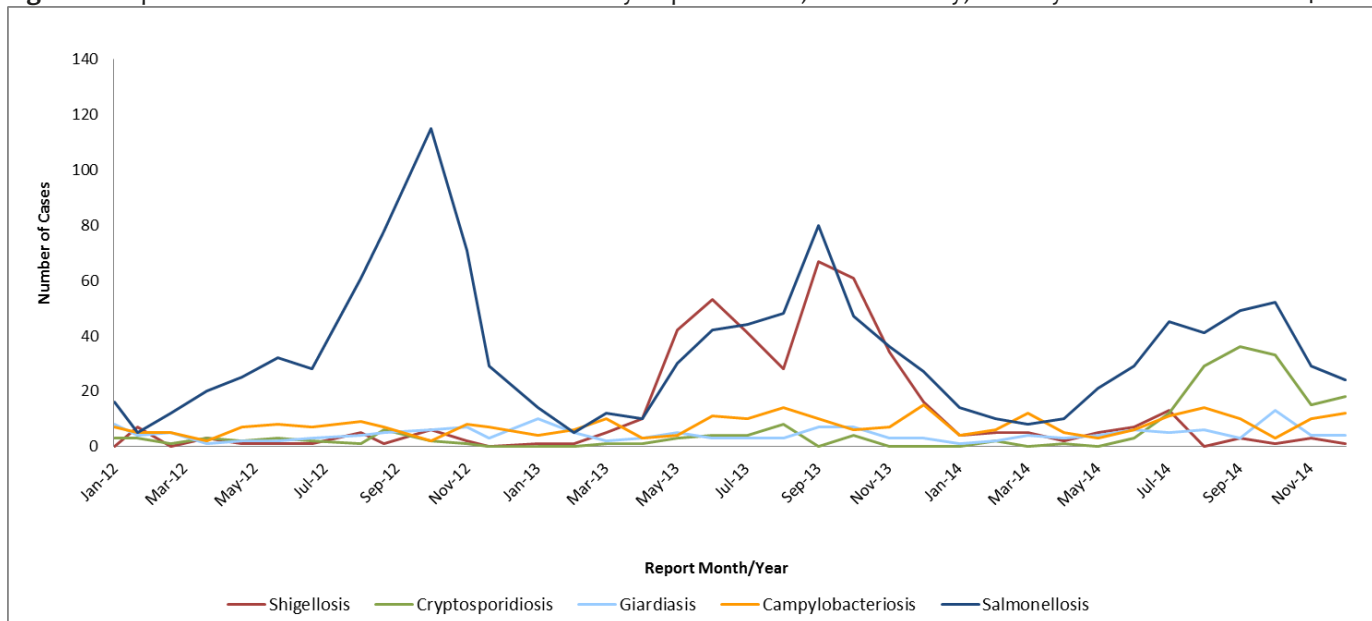
Reported cases of salmonellosis and cryptosporidiosis plateaued during the month of December (Figure 2). Twenty-six (26) cases of salmonellosis were reported in December in Duval County residents, which is lower than the expected number (Figure 2&3). The mean number of cases for the same time period during the previous five years was 30.6 cases for December. The most represented age group of reported cases of salmonellosis for 2014 (147/330, 44.54%) occurred in the 0-4 age group. Cases of cryptosporidiosis (18) and giardiasis (4) continued at a plateau, cases of shigellosis (3) remained low in December, while cases of campylobacteriosis (12) increased (Figure 2).

Norovirus activity remains elevated in Florida. During December, two confirmed outbreaks of norovirus GII and seven outbreaks of gastrointestinal illness (suspect viral gastroenteritis) were reported in the State of Florida. There were no cryptosporidiosis outbreaks reported in Duval County during the month of December (Source: FDENS EpiCom & DOH- Duval surveillance).

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 2012 – December 2014



Additional Enteric Disease Trends Update

Figure 3: Reported Cases of Salmonellosis by Report Week - Duval County - 2012-2014

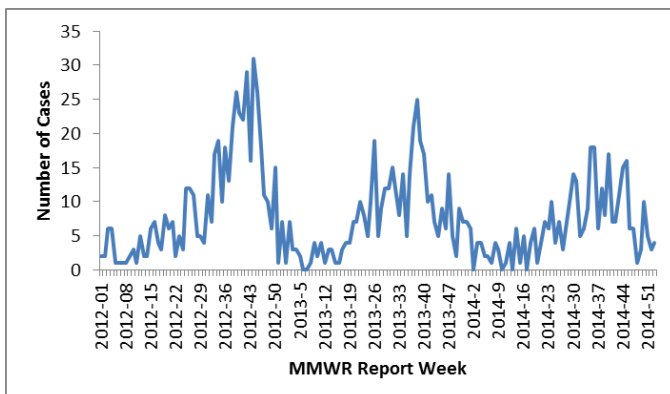
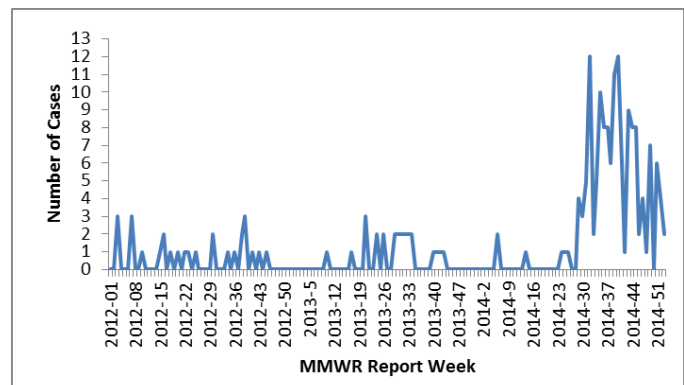


Figure 4: Reported Cases of Cryptosporidiosis Report Week - Duval County - 2012-2014



Respiratory Disease & ILI Overview

Summary

Currently, influenza-like illness (ILI) activity is at a moderate level in Duval County. In Duval County, ED visits for ILI as monitored through ESSENCE remained above 2% since week 45 and climbed above 5% for week 52 (Figure 7). In December, there were thirty-five (35) 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).

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)

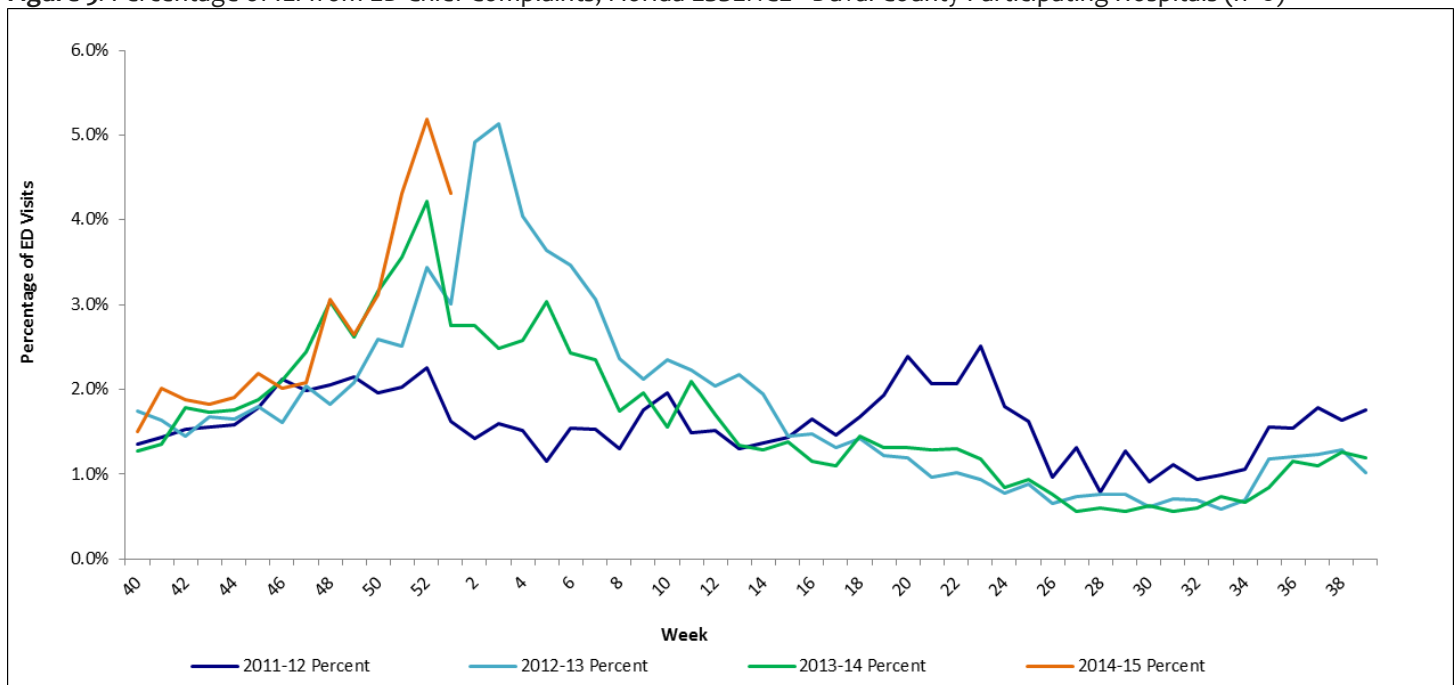
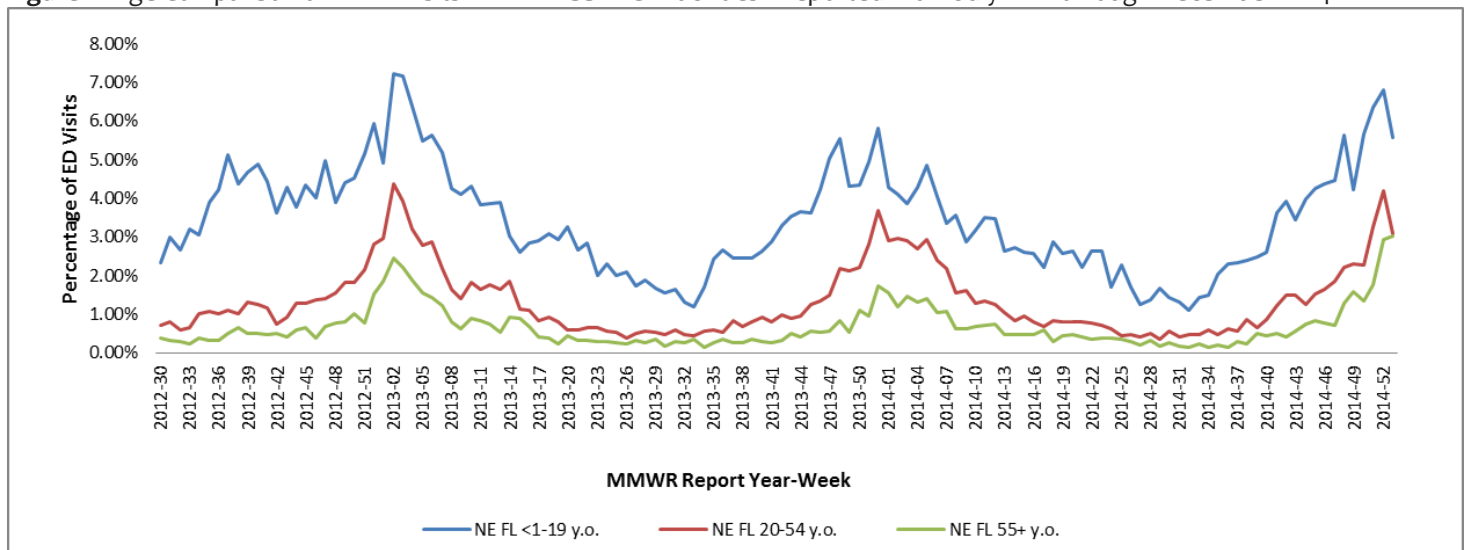


Figure 6: Age Comparison of ILI ED Visits – NE FL ESSENCE Facilities - Reported From July-2012 through December-2014



Respiratory Disease & ILI Overview Continued

Summary

Within the month of December, one (1) specimen tested positive for influenza B Victoria, thirty-three (33) specimens were positive for influenza A H3 and one (1) specimen was positive for influenza A H1N1 as tested by the Bureau of Public Health Laboratories (BPHL). Influenza A H1N1 was positive in one (1) specimen, influenza A H3 (33), influenza A H1N1 (1), influenza B Victoria (1), influenza A unspecified (320), influenza B unspecified (12) and Unknown (18) 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, 2012 to Week 53, 2014 as Reported by Merlin - Duval County

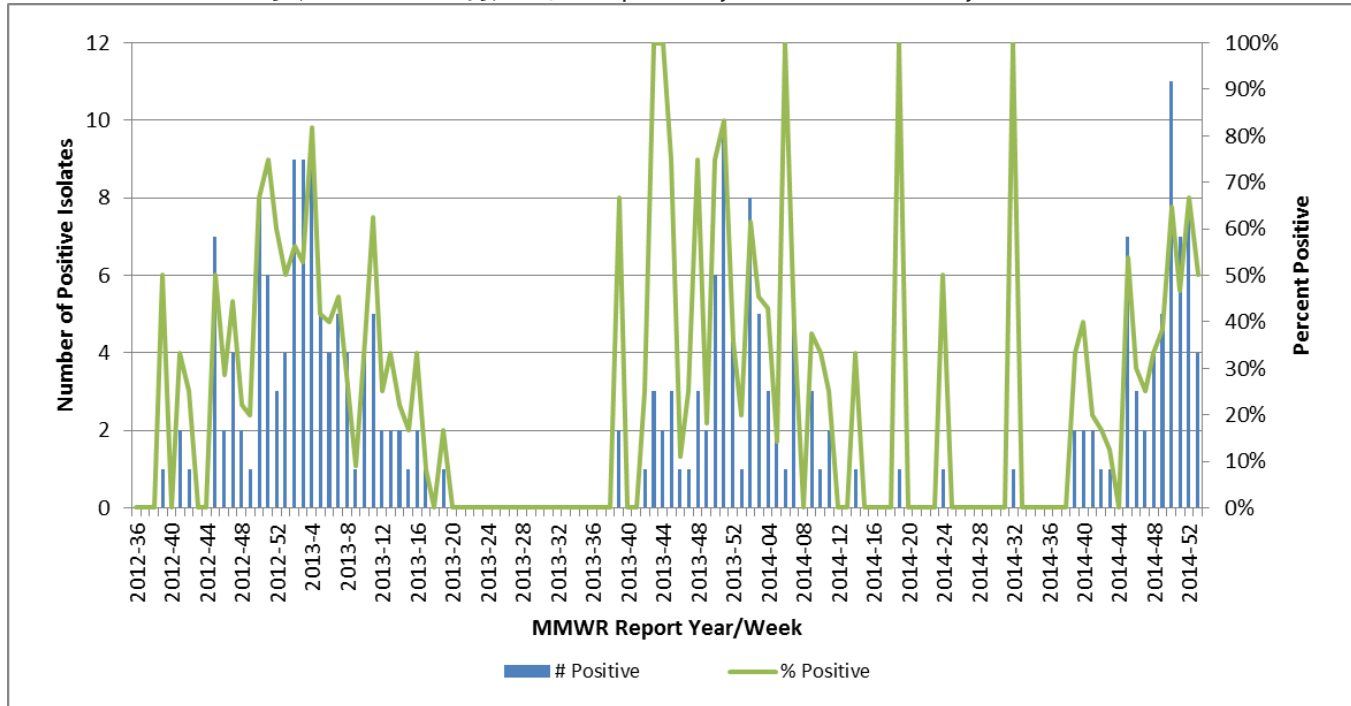
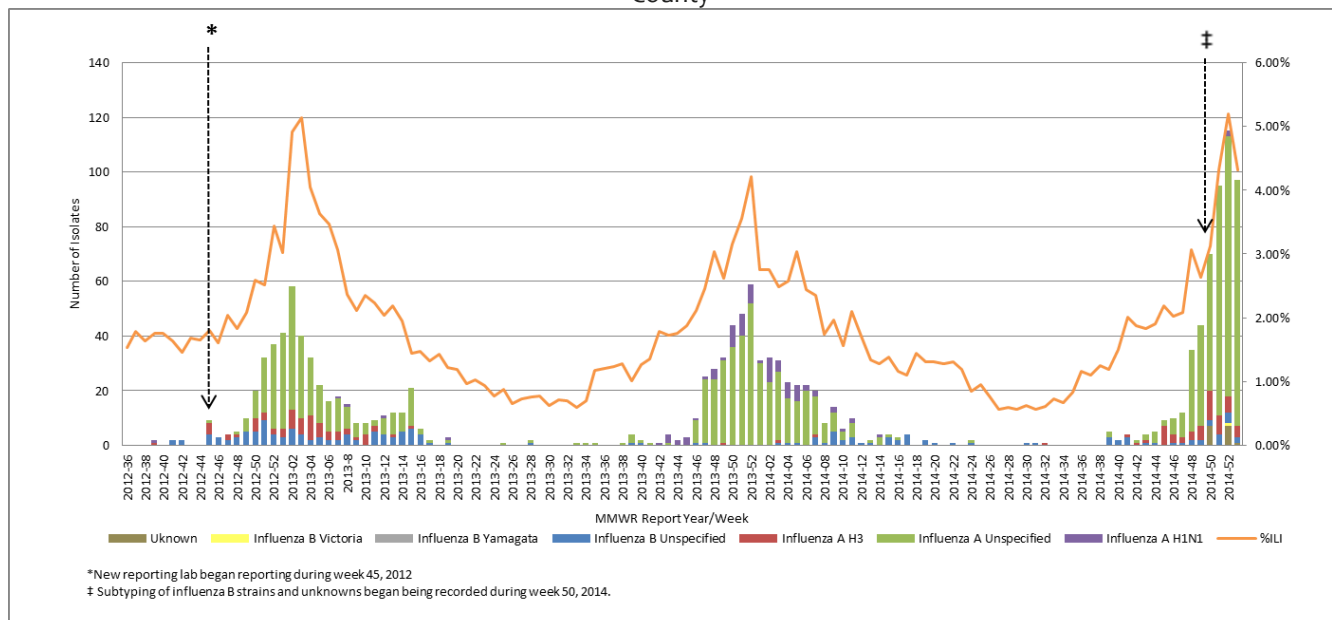


Figure 8: Number of Influenza-Positive Specimens Reported through Electronic Lab Reporting by Subtype by Lab Event Date as Reported by Merlin and Percent ILI in ESSENCE ED data – Week 36, 2012 to Week 53, 2014 - Duval County



Respiratory Virus Surveillance (NREVSS N. Region)

Summary

Circulation of influenza and RSV have remained increased during the month of December. 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 28.3% (555/1960) (Figure 9 and Figure 10). The percent positive for RSV specimens during the month of December was 16.50% (101/612) (Figure 11). In November, the percent positive for influenza was 15.18 % and for RSV was 16.69%.

Figure 9: Local Weekly Hospital Influenza A Surveillance Data- Reported From 1/20/2013-1/4/2015*

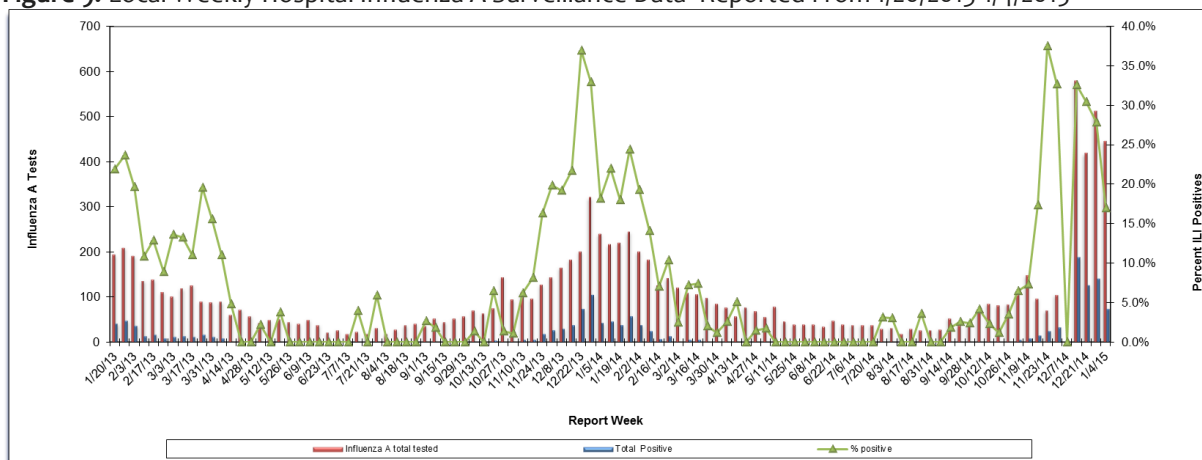


Figure 10: Local Weekly Hospital Influenza B Surveillance Data- Reported From 1/20/2013-1/4/2015*

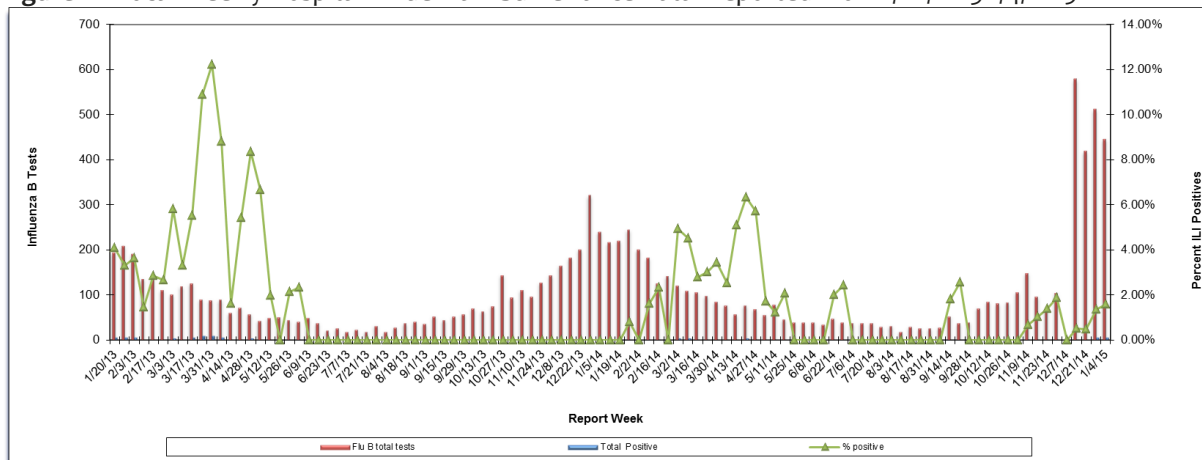
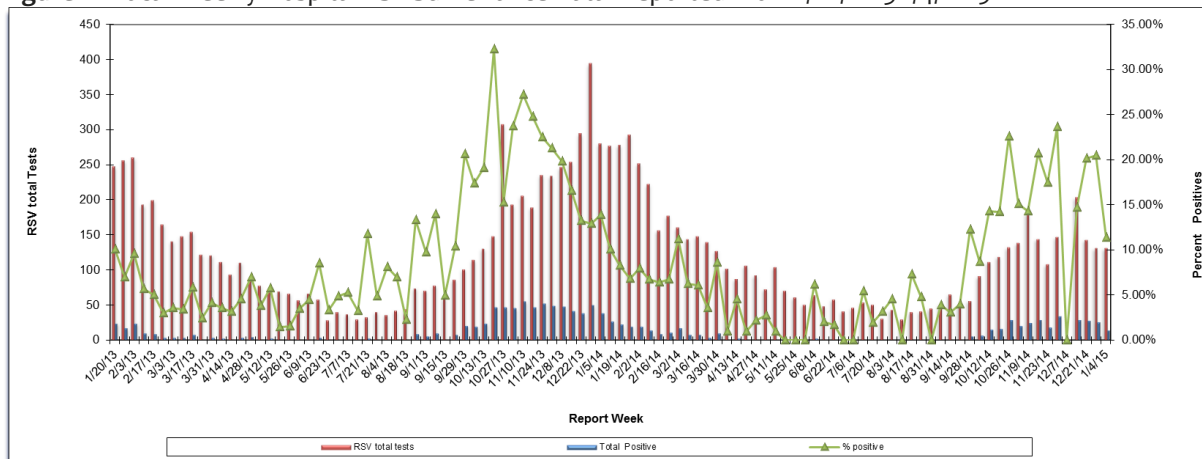


Figure 11: Local Weekly Hospital RSV Surveillance Data- Reported From 1/20/2013-1/4/2015*



* Data was not reported for week 50, 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- December 31, 2014)

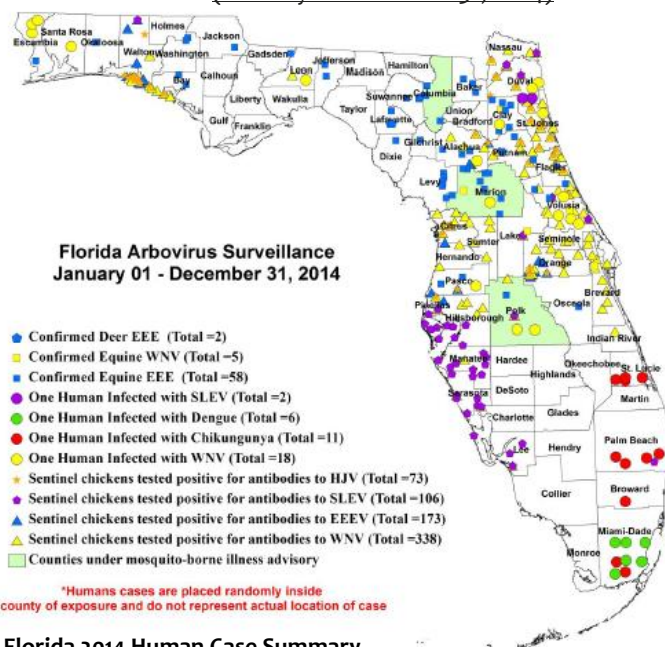


Table 1: Florida Mosquito-Borne Disease Surveillance Summary

Year to Date (through December 31, 2014)

Mosquito-Borne Disease	Human	Horses	Sentinel Chickens	Deer
West Nile Virus	18*	5	338	-
St. Louis Encephalitis Virus	2	-	106	-
Highlands J Virus	-	-	73	-
California Encephalitis Group Viruses	-	-	-	-
Eastern Equine Encephalitis Virus	-	58	173	2

* Case count includes two asymptomatic blood donors.

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. Three asymptomatic positive blood donors were reported from Polk (November), Santa Rosa (July) and St. Johns (September) Counties.

International Travel-Associated Dengue Fever Cases: Eighty 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 (5), Cuba (27), Cuba/Bahamas, Dominican Republic (9), El Salvador (2), Guadeloupe, Guatemala, Guyana, Haiti (4), Honduras (7), Jamaica (2), Mexico (3), Puerto Rico (6), 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 (37), Orange (4), Osceola (6), Palm Beach (5), Pinellas, Seminole (2), St. Lucie (2), and Volusia. Seven of the cases were reported in non-Florida residents. In 2014, 35 of the 80 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 fifty-two 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, Caribbean, Colombia (4), Cuba (7), Dominica/Guadalupe, Dominican Republic (88), El Salvador (6), Grenada, Guatemala, Guyana (10), Haiti (107), Haiti/Dominican Republic, Honduras (2), India, Indonesia, Jamaica (66), Martinique (2), Nicaragua (3), Philippines, Puerto Rico (119), Puerto Rico/Dominican Republic (2), South America, St. Lucia (2), St. Thomas/St. Martin/Bahamas (2), St. Vincent and the Grenadines, Trinidad (2), Trinidad/Tobago (4), Venezuela (3), and Virgin Islands (8). Counties reporting cases were: Alachua (2), Brevard (4), Broward (83), Charlotte (3), Clay (2), Collier (2), Duval (10), Escambia (2), Flagler (2), Hernando (3), Highlands, Hillsborough (37), Indian River (2), Lake (5), Lee (16), Leon (2), Manatee (3), Marion, Miami-Dade (82), Monroe, Nassau, Okaloosa (2), Orange (57), Osceola (20), Palm Beach (45), Pasco (4), Pinellas (11), Polk (24), Santa Rosa, Sarasota (3), Seminole (9), St. Johns (3), St. Lucie (3), Volusia (5), and Walton. Thirty-four 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: Sixty-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 (3), Ghana/Rwanda, Ghana/Senegal, Ghana/Togo, Guatemala, Guyana, Haiti, Honduras, India (9), Ivory Coast (3), Kenya (3), Liberia, Nigeria (11), Nigeria/Ethiopia, Papua New Guinea, Peru (2), Sierra Leone (5), Sudan (2), Togo, Uganda (2), and multiple sub-Saharan African countries (3). Counties reporting cases were: Broward (9), Clay, Duval (3), Escambia, Hernando, Hillsborough (10), Leon, Miami-Dade (13), Okaloosa (2), Orange (7), Osceola (2), Palm Beach (5), Pasco, Pinellas (3), Santa Rosa, Seminole, and Volusia. Sixteen of the cases were reported in non-Florida residents.

Other notable trends and statistics

CDC: Flu Activity Expands; Severity Similar to Past H3N2 Seasons

January 5, 2015 – Flu continues to expand its reach in the United States this season, with the latest CDC [FluView report](http://www.cdc.gov/flu/weekly/fluactivitysurv.htm)(<http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>) showing that 43 states are experiencing either high or widespread flu activity, mostly resulting from circulation of drifted H3N2 viruses. Patient visits to doctors for influenza-like-illness (ILI) are now almost even with the peak of 2012-2013 season, the last time H3N2 viruses predominated. Relatively higher flu hospitalization rates seen so far this season are similar to what has been observed during some past H3N2-predominant seasons. CDC continues to encourage influenza vaccination and prompt treatment with flu antiviral drugs for people at high risk of serious flu complications, including people 65 and older, children younger than 5 years (and especially those younger than 2 years), pregnant women and any person with [certain health conditions](http://www.cdc.gov/flu/about/disease/high_risk.htm)(http://www.cdc.gov/flu/about/disease/high_risk.htm).

For the week ending December 27, 2014, ILI visits accounted for 5.9% of all clinic visits, and had been elevated for 6 consecutive weeks. For the past 13 seasons, ILI has remained elevated for between 1 and 19 weeks each season, with an average of 13 weeks.

Also for week 52, overall flu-related hospitalizations were 12.6 per 100,000 people, which is comparable to the 13.3 per 100,000 overall hospitalization rate seen during the same week of the 2012-2013 season, but higher than the 8.9 per 100,000 rate observed during week 52 of 2013-2014, which was an H1N1-predominant season. Hospitalization rates are almost always highest among people 65 years and older. During week 52 this season, the hospitalization rate for people 65 and older was 51.8 per 100,000 people. During week 52 of the 2012-2013 season, the hospitalization rate for people 65 and older was 52.8 per 100,000. During 2013-2014, it was 16.4 per 100,000. Hospitalization rates are cumulative, so this season's rates will likely continue to rise. The end-of-season hospitalization rate for people 65 and older during 2012-2013 was 183.2 per 100,000.

Additionally, another 6 flu-associated pediatric deaths are being reported this week, bringing the total number of flu pediatric deaths that have been reported this season to 21. With the exception of the pandemic, the number of flu-associated pediatric deaths has ranged from 37 to 171 since 2004-2005, when pediatric flu deaths became nationally reportable.

Another indicator used to track deaths associated with influenza is the [122 Cities Mortality Reporting System](http://www.cdc.gov/flu/weekly/overview.htm)(<http://www.cdc.gov/flu/weekly/overview.htm>) — which tracks the total number of death certificates processed in 122 representative cities and the number of those for which pneumonia or influenza (P&I) is listed as the underlying or contributing cause of death. Last week P & I was at the "epidemic threshold" for that week (6.8%), meaning more deaths than expected were being seen, but this week, P & I is once again below epidemic threshold. Flu seasons typically follow a pattern where influenza-like illness rises, followed by increases in hospitalizations, which are in turn followed by an increase in reported deaths. P & I is likely to rise again before the season concludes. During 2012-2013, P & I peaked at 9.9 percent. This was the highest recorded P & I in nearly a decade, but was comparable to recorded percentages for past severe seasons, including 2003-2004 when P&I reached 10.4 percent.

H3N2 viruses continue to predominate in the United States this season, accounting for more than 95 percent of all influenza reported to CDC from U.S. WHO and NREVSS collaborating laboratories. In the past, H3N2-predominant seasons have been associated with more severe illness and higher mortality, especially in older people and young children, relative to H1N1- or B-predominant seasons. Between 1976 and 2007, for example, CDC estimates that an average of 28,909 people died from flu during H3N2 seasons, compared to 10,648 people during non-H3N2 predominant years. Estimates of the number of flu deaths among people older than 18 are not available for this season. Only pediatric flu deaths are nationally reportable. CDC uses modeling to estimate the total number of deaths each season but this data won't be available until after the season has concluded.

Most of the H3N2 viruses circulating are "drifted" or different from the H3N2 vaccine virus; suggesting that the vaccine's ability to protect against those viruses may be reduced. Two factors play an important role in determining the likelihood that flu vaccines will protect a person from flu illness: 1) characteristics of the person being vaccinated (such as their age and health), and 2) the similarity or "match" between the flu viruses in the vaccine and those spreading in the community.

CDC conducts studies throughout each influenza season to help determine how well flu vaccines are working. These studies are called "[vaccine effectiveness](http://www.cdc.gov/flu/about/qa/vaccineeffect.htm)(<http://www.cdc.gov/flu/about/qa/vaccineeffect.htm>)" studies or "VE" studies, for short. Recent studies by CDC researchers and other experts indicate that flu vaccine reduces the risk of doctor visits due to flu by approximately 60% among the overall population when the vaccine viruses are like the ones spreading in the community. If the viruses in the vaccine are different from circulating flu viruses, vaccine effectiveness can be lowered. For example, during 2007-2008, drifted H3N2 viruses circulated during the flu season. VE estimates against H3N2 during that season were 43%. CDC anticipates publishing vaccine effectiveness estimates for the current season in mid- to late January.

CDC continues to recommend flu vaccination even when there are drifted viruses circulating because the vaccine can still prevent infection and also prevent serious flu-related complications in many people. Anyone who has not gotten vaccinated yet this season

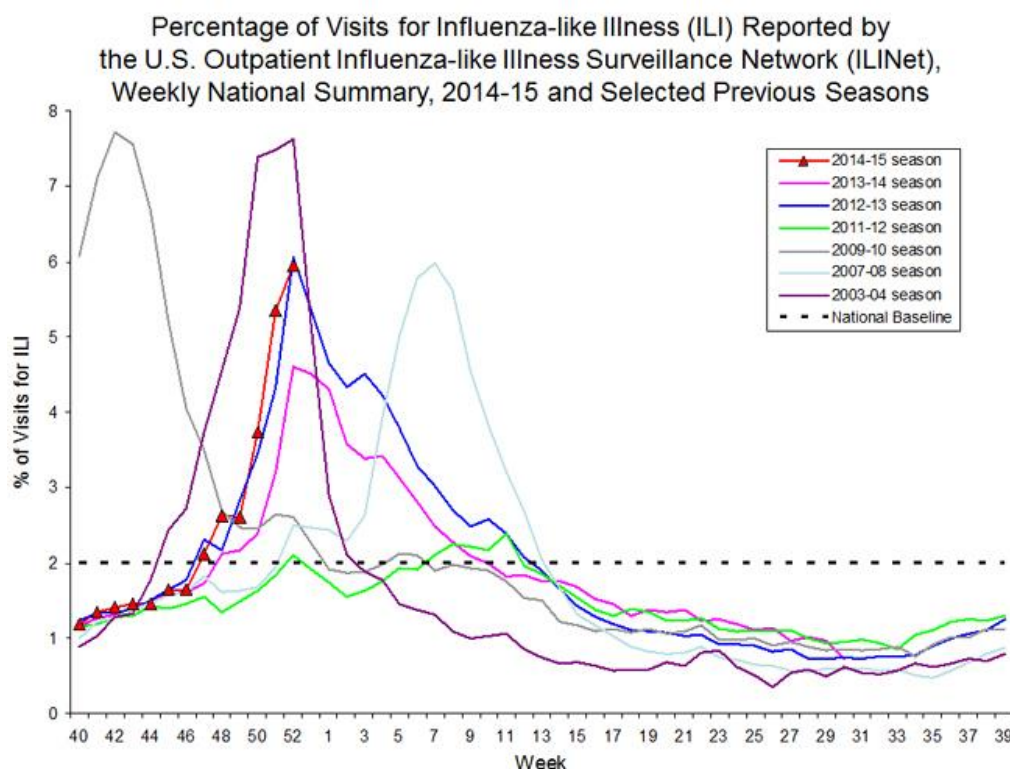
Other notable trends and statistics continued

should do so now. This includes people who may already have gotten the flu this season because flu vaccines protect against three or four different viruses and it's possible that other viruses will circulate later in the season. It's fairly common for there to be two waves of flu activity during a season, the second wave is often caused by an influenza B virus. The [Flu Vaccine Finder](#) may be helpful locating vaccine.

As of December 5, 2014, an estimated 145.4 million doses of seasonal flu vaccine had been distributed. As of early November, only 40% of people in the U.S. had reported getting a flu vaccine this season. Final vaccine uptake estimates for this season are expected in the fall of 2015.

CDC also recommends flu antiviral drugs for treatment of influenza illness in people who are very sick with flu or people with the flu who are at high risk of serious flu complications. Influenza antiviral drugs are a second line of defense against the flu to treat flu illness. These prescription drugs work best when started soon after influenza symptoms begin (within 2 days), but persons with high-risk conditions can benefit even when antiviral treatment is started after the first two days of illness. People at high risk from flu should see a doctor if they develop flu-like symptoms. While doctors **may** prescribe antiviral drugs for non-high risk patients with flu, all high risk patients with suspected influenza **should** be receiving antiviral drugs. There are now three flu antiviral drugs approved and recommended for use this season: oseltamivir (Tradename Tamiflu®), zanamivir (Tradename Relenza®) and [peramivir \(Rapivab®\)](#), the latter is an intravenous formulation approved for use in people 18 and older by the Food and Drug Administration (FDA) this season.

Nationally the country is likely to continue to experience several more weeks of flu activity as flu spreads to other states that have not yet had significant activity. Activity has been elevated in the Southern states for six weeks now. The mid-west saw increases in activity more recently. Most of the northeast and west of the country has yet to experience the full brunt of the flu season.



This graph compares data on influenza-like illness (ILI) collected by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) by week across seven different flu seasons (2003-2004, 2007-2008, 2009-2010, 2011-2012, 2012-2013, 2013-2014 and the current season, 2014-2015.) The graph illustrates the fact that ILI activity for the current season (2014-2015) is most similar to ILI activity during the 2012-2013 flu season. H3N2 viruses were the predominant flu viruses reported during the 2003-2004, 2007-2008, 2011-2012 and 2012-2013 seasons and are currently the predominant flu viruses reported so far this season.

The 2003-2004 season had the highest ILI curve (as high as the pandemic). While 2007-2008 has a similar ILI trajectory to 2012-2013 and to the current season, that year the flu season did not begin until much later.

ILI is defined as fever (100 °F or higher) and a cough and/or sore throat without a known cause other than flu. (The current national baseline of 2.0% was calculated for the 2014-2015 season and should not be used for previous flu seasons).

Recently Reported Diseases/Conditions in Florida

Table 3: Provisional Cases* of Selected Notifiable Disease, Duval County, Florida, December 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	2.2	2	1	2
Pertussis	2	9	3.8	3	66	36	26	77	35	28	725	739
Rubella	0	0	0	0	0	0	0	0	0	0	0	0
Tetanus	0	0	0	0	0	2	0	1	0.6	0	2	6
Varicella	3	2	3.8	4	45	53	60	50	57.6	54	578	668
B. CNS Diseases & Bacteremias												
Creutzfeldt-Jakob Disease	1	0	0.4	0	1	1	6	2	2	2	26	20
<i>H. influenzae</i> (invasive)	1	4	1.6	1	16	24	18	34	24.4	26	262	281
Meningitis (bacterial, cryptococcal, mycotic)	1	1	0.6	0	15	11	16	17	18.6	19	138	154
Meningococcal Disease	0	0	0.4	0	2	0	2	6	3.2	2	50	63
<i>Staphylococcus aureus</i> (VISA, VRSA)	0	0	0	0	0	1	1	1	0.4	0	4	5
<i>Streptococcus pneumoniae</i> (invasive disease)												
Drug resistant	0	5	4.2	5	14	36	23	49	69.6	57	349	550
Drug susceptible	5	4	5.4	4	29	32	38	58	73.8	66	459	579
Streptococcal Disease, Group A, Invasive	0	5	2	1	8	12	0	37	30.6	29	184	308
C. Enteric Infections												
Campylobacteriosis	12	15	9	7	99	103	154	166	138.4	138	2226	2066
Cryptosporidiosis	18	0	1.4	0	150	25	110	31	37.2	35	1900	426
Cyclosporiasis	0	0	0	0	0	6	3	1	2.4	2	33	49
Giardiasis	4	4	5.6	4	55	59	83	113	140.2	134	1159	1135
Hemolytic Uremic Syndrome	0	0	0	0	0	3	0	4	1.2	0	7	14
Listeriosis	1	0	0	0	4	3	4	3	6.8	6	48	41
Salmonellosis	26	28	30.6	31	352	411	434	520	536.8	508	6071	6249
Shiga Toxin-Producing <i>E. coli</i> (STEC)	0	0	0.4	0	3	9	13	10	9.2	10	175	128
Shigellosis	1	16	5.8	6	52	359	168	130	115	130	2402	1035
Typhoid Fever	0	0	0	0	0	1	1	1	0.6	1	15	11

Recently Reported Diseases/Conditions in Florida

	Duval County						Florida					
					Cumulative						Cumulative	
	Month				(YTD)		Month				(YTD)	
	2014	2013	Mean†	Median¶	2014	2013	2014	2013	Mean†	Median¶	2014	2013
D. Viral Hepatitis												
Hepatitis A	0	0	0.4	0	1	5	12	8	13.8	14	111	135
Hepatitis B +HBsAg in pregnant women	2	2	2	2	46	48	45	43	43.4	43	513	483
Hepatitis B, Acute	2	2	1.2	2	18	15	40	36	31.2	32	433	385
Hepatitis C, Acute	0	1	0.2	0	10	4	11	13	12.4	13	187	223
E. Vector Borne, Zoonoses												
Animal Rabies	0	0	0	0	3	2	14	12	9.6	9	94	105
Ciguatera	0	0	0	0	0	0	3	4	2.4	2	76	52
Dengue Fever	0	0	0.2	0	0	4	8	15	14	12	108	175
Eastern Equine Encephalitis††	0	0	0	0	0	0	0	0	0	0	1	2
Ehrlichiosis/Anaplasmosis¶¶	0	0	0	0	1	0	0	0	1.6	-	37	24
Leptospirosis	0	0	0	0	0	0	0	0	0.6	1	0	1
Lyme Disease	0	0	0.6	1	1	1	19	15	11.8	15	154	146
Malaria	0	0	0.2	0	3	5	9	4	8	6	69	60
St. Louis Encephalitis††	0	0	0	0	2	0	0	0	0	0	2	0
West Nile Virus††	0	0	0.2	0	2	3	1	1	1.2	-	20	8
F. Others												
Botulism-infant	0	0	0	0	0	0	0	0	0.2	0	0	1
Brucellosis	0	0	0	0	2	0	0	3	1.6	2	7	10
Carbon Monoxide Poisoning	2	0	1	0	7	25	22	12	15.6	12	157	163
Hansens Disease (Leprosy)	0	0	0	0	0	0	2	3	1.4	1	8	10
Legionellosis	1	4	1.2	0	10	19	24	31	19.4	16	304	269
Vibrios	0	0	0	0	8	13	14	17	15.4	-	176	201

* 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 December 2014

Infectious and Early Latent Syphilis Cases					Chlamydia Cases					Gonorrhea Cases				
Sex	Area 4	%	Duval	%	Sex	Area 4	%	Duval	%	Sex	Area 4	%	Duval	%
Male	3	75%	3	75%	Male	65	25%	53	27%	Male	32	39%	25	38%
Female	1	25%	1	25%	Female	190	75%	147	74%	Female	50	61%	41	62%
Race	Area 4	%	Duval	%	Race	Area 4	%	Duval	%	Race	Area 4	%	Duval	%
White	2	50%	2	50%	White	56	22%	32	16%	White	20	24%	13	20%
Black	2	50%	2	50%	Black	110	43%	96	48%	Black	40	49%	39	59%
Hispanic	0	0%	0	0%	Hispanic	9	4%	8	4%	Hispanic	3	4%	2	3%
Other	0	0%	0	0%	Other	80	31%	64	32%	Other	19	23%	12	18%
Age	Area 4	%	Duval	%	Age	Area 4	%	Duval	%	Age	Area 4	%	Duval	%
0-14	0	0%	0	0%	0-14	1	0%	1	1%	0-14	0	0%	0	0%
15-19	1	25%	1	25%	15-19	60	24%	40	20%	15-19	13	12%	10	15%
20-24	1	25%	1	25%	20-24	99	39%	79	40%	20-24	24	29%	16	24%
25-29	1	25%	1	25%	25-29	62	24%	49	25%	25-29	19	23%	17	26%
30-39	1	25%	1	25%	30-39	22	9%	20	10%	30-39	14	17%	12	18%
40-49	0	0%	0	0%	40-54	9	4%	9	5%	40-54	10	12%	10	15%
50+	0	0%	0	0%	55+	2	1%	2	1%	55+	2	2%	1	2%
Total Cases	4		4		Total Cases	255		200		Total Cases	82		66	

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..."