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# EXAMINER

A Monthly Epidemiology Report January, 2017

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#### **Disease Summary:**

In January, a total of 375 cases of various diseases were reported to the Florida Department of Health in Broward County (DOH-Broward). Among them, there were forty-seven cases of salmonellosis, two cases of hepatitis A, one case of leptospirosis, twenty-one cases of possible rabies exposure, four cases of noncongenital Zika virus disease and infection, two cases of Creutzfeldt-Jakob disease (CJD), five cases of legionellosis, two cases of measles (rubeola), and one case of mercury poisoning. These were higher than the averages of the same month in the previous five years.

#### Food Recalls:

There were 4 food recalls reported in Florida for the month of January 2017.

			-
Brand Name	Food	Recall Date	Health Risk
Hostess Brands, LLC	Limited-Edition Holiday White Peppermint Host- ess <sup>®</sup> Twinkies <sup>®</sup>	01/09/2017	Salmonella
Palmer Candy Company	Certain chocolate products	01/10/2017	Salmonella
Tupperware U.S., Inc.	Southwest Chipotle Sea- soning	01/11/2017	Salmonella
Dutch Valley Food Distribu- tors, Inc.	Cappuccino Snack Mix	01/12/2017	Salmonella

All data are provisional.

## Merlin Reportable Disease Surveillance

## Xiaoran Ye, M.P.H.

Table 1 . Provisional Cases\* of Selected Notifiable Disease, Broward County, Florida, January 2017

	BROWARD COUNTY			FLORIDA						
				Cumu	ative				Cumu	lative
		January		(YT	D)		January		(YT	D)
	2017	2016	Mean†	2017	2016	2017	2016	Mean†	2017	2016
A. Enteric Infections										
Campylobacteriosis	19	11	15.8	19	11	296	262	225.4	296	262
Cryptosporidiosis	4	0	1.6	4	0	27	44	39	27	44
E.Coli, Shiga-Toxin Producing Infection**	4	5	3	4	5	43	45	33	43	45
Giardiasis, Acute	5	8	7.8	5	8	93	71	76.8	93	71
Listeriosis	1	1	0.4	1	1	7	1	3.2	7	1
Salmonellosis	47	35	28.8	47	35	290	379	331.6	290	379
Shigellosis	7	5	10.2	7	5	68	75	73.8	68	75
B. CNS Diseases & Bacteremias										
Meningitis, Bacterial or Mycotic	2	2	1.8	2	2	10	12	13.6	10	12
Streptococcus Pneumoniae Invasive Disease, < 6 y	ears ol	d:								
Drug Resistant	1	1	0.6	1	1	5	4	4.6	5	4
Drug Susceptible	1	1	0.8	1	1	2	7	4.2	2	7
C. Viral Hepatitis										
Hepatitis A	2	0	0.2	2	0	12	10	6.4	12	10
Hepatitis B, Acute	4	4	1.8	4	4	44	47	29	44	47
Hepatitis B, Surface Antigen In Pregnant Women	10	6	5.4	10	6	36	39	32.2	36	39
D. Vector Borne, Zoonoses										
Leptospirosis	1	0	0	1	0	1	0	0	1	0
Lyme Disease	1	2	0.4	1	2	29	9	7.4	29	9
Malaria	1	0	1.6	1	0	4	4	6.8	4	4
Rabies, Possible Exposure	21	1	0.8	21	1	232	204	197.4	232	204
Zika Virus Disease and Infection, Non-Congenital	4	0	0.0	4	0	57	6	1.2	57	6
Zika virus Disease and mection, Non-Congenitar	4	0	U	4	U	57	0	1.2	57	0
E. Others										
Carbon Monoxide Poisoning	1	0	1.4	1	0	17	23	14.8	17	23
Creutzfeldt-Jakob Disease (CJD)	2	0	0.2	2	0	2	1	1.2	2	1
Lead Poisoning	5	3	2	5	3	63	25	30.4	63	25
Legionellosis	5	3	3.2	5	3	39	24	21.8	39	24
Measles (Rubeola)	2	0	0	2	0	2	0	0.8	2	0
Mercury Poisoning	1	0	0	1	0	2	2	1.6	2	2
Mumps	1	0	0.2	1	0	2	2	1.4	2	2
Pertussis	2	1	2	2	1	14	35	38.6	14	35
Varicella (Chickenpox)	6	9	2.6	-	9	51	73	63	51	73
Vibriosis (Other Vibrio Species)	1	1	0.2	1	1	3	2	0.6	3	2
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\* Confirmed, Probable, Suspect and Unknown Cases based on date of report as reported in Merlin.

<sup>+</sup> Mean of the number of cases of the same month in the previous five years.

\*\* Includes E. coli O157:H7; shiga-toxin positive, serogroup non-O157; and shiga-toxin positive, not serogrouped.

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

The Merlin system is Florida's state repository of reportable disease case reports, including automated notification of staff about individual cases of high priority diseases. Data are extracted using event date which is usually the date of onset of illness, and when that is unknown, event date may be date of lab report, or date of diagnosis.

## Syndromic Surveillance

## Nicole Castillo, M.P.H.

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



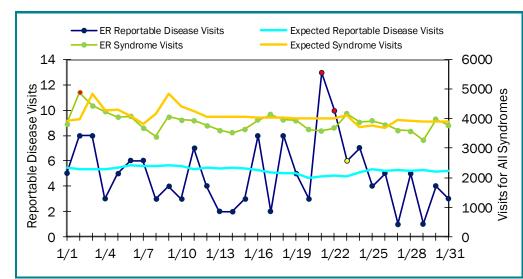


Figure 1. There are one warning and two alerts for E.R reportable disease visits; and zero warnings and one alert for E.R syndromic visits. *Warning - Yellow data point Alert - Red data point* 

Disease	Alert Dates	Warning Dates	Syndrome	Alert Dates	Warning Dates	
All Reportable Disease Query	21, 22	23	Botulism-like Illness	None	6, 10	
Vaccine Preventable Diseases <sup>1</sup>	24	None	None Exposure		16, 22	
Hepatitis A and B	None	None	Fever	21	24	
Meningitis (may not be bacterial)	16	22, 23, 24	Gastrointestinal Illness	None	2	
Varicella (chicken pox)	18, 21	22	Hemorrhagic Illness	6	None	
Vector Borne Diseases	None	None	Influenza-like Illness (ILI)	None	24	
Chikungunya	None	13	Injury	None	22	
Dengue	None	None	Neurological	None	4	
Encephalitis	None	None	Rash	None	2	
Malaria	None	None	Respiratory	2	25	
Zika Infection	None	None	Shock/Coma	4	3, 9, 18	
Gastrointestinal Illnesses	22	None	Other Illness	2	None	
General Enterics <sup>2</sup>	22	None				
Vomit and Diarrhea	None	None				

<sup>1</sup> Varicella, Measles, Mumps, Rubella, Diphtheria, Tetanus, Pertussis, Polio

<sup>2</sup> Cryptosporidium, cyclospora, shigellosis, shigella, salmonellosis, salmonella, ciguatera, campylobacteriosis, cholera, E. coli, and vibrio

## Influenza Surveillance

## Nicole Castillo, M.P.H.

During the month of January, influenza and ILI activity increased nationally to levels above the national baseline. Florida reported widespread Influenza Like Illness (ILI) activity at levels similar to those observed in previous influenza seasons. There were three positive influenza tests detected by the Bureau of Public Health Laboratories in recent weeks in Broward County. These labs were associated with two outbreaks occurring during the month of January in Broward County. Flu activity remains widespread.



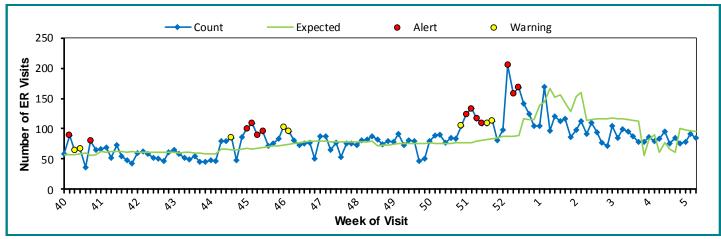
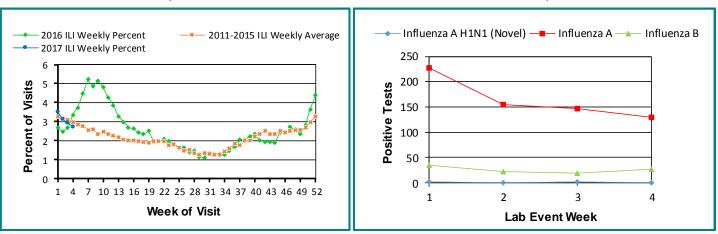


Figure 3. ESSENCE Reported ILI Visits, Broward, 2016-2017

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



#### Summary of Influenza and Respiratory Diseases Data

The number of visits to the emergency department for ILI was decreasing and fell below the number of expected visits at this time for the month of January (week 1 to week 4) with zero alerts and zero warnings. (Fig. 2). The percentage of emergency department visits due to ILI was decreasing and was similar to the weekly average for the last five years (Fig. 3). According to Merlin Flu Lab Reports, the number of positive tests for Influenza A was found to be significantly higher than the number of positive tests for Influenza A was found to be significantly higher than the number of positive tests for Influenza B (Fig. 4).

#### Influenza Prevention Recommendations

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

#### Other recommendations include:

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

