Florida Department of Health in St. Lucie County Disease Control and Health Protection Epidemiology Program

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EPIsodes - Monthly Report

Spotlight on Influenza

Influenza (flu) is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness. Serious outcomes of flu infection can result in hospitalization or death. Some people, such as older people, young children, and people with certain health conditions, are at high risk of serious flu complications. There are two main types of influenza (flu) virus: Types A and B. The influenza A and B viruses that routinely spread in people (human influenza viruses) are responsible for seasonal flu epidemics each year.

The best way to prevent flu is by getting vaccinated each year.

Flu is Spread Person to Person

People with flu can spread it to others up to about 6 feet away. Most experts think that flu viruses spread mainly by droplets made when people with flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth, nose, or possibly their eyes.

When Flu Spreads

People with flu are most contagious in the first three to four days after their illness begins. Most healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5 to 7 days after becoming sick. Children and some people with weakened immune systems may pass the virus for longer than 7 days.

Symptoms can begin about 2 days (but can range from 1 to 4 days) after the virus enters the body. That means that people may be able to pass on the flu to someone else before they know they are sick, as well as while they are sick. Some people can be infected with the flu virus but have no symptoms. During this time, those people may still spread the virus to others.

Seasonal Influenza Burden

Influenza virus infection is so common that the number of people infected each season can only be estimated. The Centers for Disease Control and Prevention (CDC) uses adjusted flu hospitalization rates to produce an estimate of the total number of influenza infections in the United States for a given flu season. Key indicators used by the CDC are also used to determine influenza burden in Florida, and locally in St. Lucie County. The following pages include local influenza statistics and influenza resources that can be accessed and used by the public.

Prevent the flu!

Facts about the seasonal flu vaccine:

The flu vaccine cannot give you the flu. Flu shots are made in two ways; either with an inactivated, or killed, virus; or using a single gene from a flu virus. Both produce an immune response without causing an infection.

The flu vaccine will not make you sick. Some people have mild reactions to the vaccine including soreness where the shot was given. The vaccine takes two weeks to be effective against the flu. Some people may get sick with a flu virus, common cold, or other illness they were exposed to before the vaccine's protection started.

The flu vaccine is effective. Every year the CDC conducts studies to determine how well the vaccine protects against the flu. Effectiveness may vary, but overall the vaccination has been shown to reduce the risk of illness by 40% to 60% and reduces the severity of illness in vaccinated people who do get influenza.



StLucieCountyHealth.com

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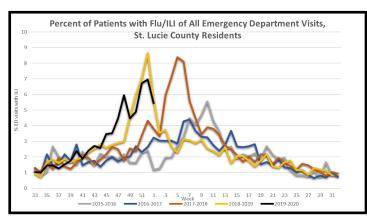
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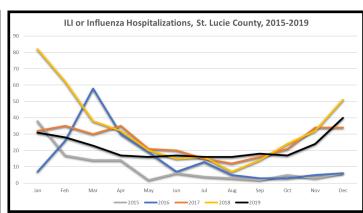
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"Disease control and prevention are core functions of any public health agency. Protection of the public's health from existing, emerging, and re-emerging diseases requires diligence in all aspects of public health. The public health partners identifying and characterizing emerging trends in disease are the physicians, nurses, laboratorians, hospital infection preventionists, and other health care professionals who participate in reportable disease surveillance. Without their participation, the ability to recognize and intervene in emerging public health issues would be much more limited." Florida Morbidity Statistics Report 2016

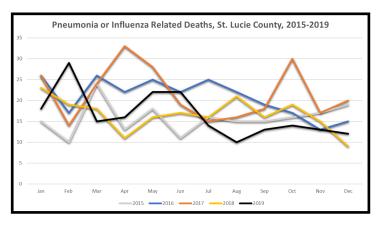
Effects of Influenza and Influenza Like Illness in St. Lucie County

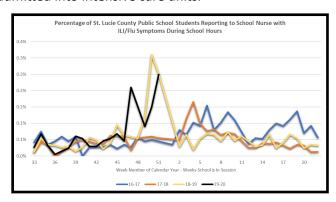




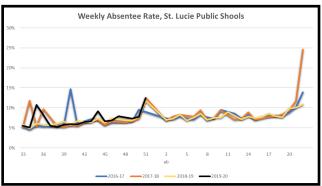
One of the key indicators of influenza activity is the percentage of emergency room visits with complaints or diagnoses of influenza like illness (ILI) or influenza. Percentages over a 2.4% baseline indicate above average community illness. Both the 2017-18 and the 2018-19 seasons stayed above baseline for most of the traditional influenza season (October-April). St. Lucie County saw increased ILI and influenza numbers starting in December and continuing to rise through early February of the 2017-18 season. According to the CDC, the 2017-18 season severity was classified as high across all age groups. An increase in ER visits began early this season, and has remained over baseline consistently since.

According to the Kaiser Family Foundation the average cost for an inpatient hospital stay per day in Florida in 2017 was \$2,102. Floridahealthfinder.gov found an average visit to an emergency department for respiratory illness in 2017 in Florida cost \$3,796 (average cost for all emergency department visits in St. Lucie was \$8,080). At the peak of the 2017-18 season in St. Lucie County, this would represent a cost of \$1.8 million accumulated in one week. At the peak of the 2018-19 season, over \$2.2 million in one week. These costs estimates are likely lower than actual costs as they do not account for patients admitted into intensive care units.





Pneumonia and Influenza related deaths are a factor in every flu season especially severe seasons. Factors that increase a person's risk of serious complications from the flu include; asthma, blood disorders, chronic lung or heart disease, people with weakened immune due to disease, people with kidney or liver disorders, adults 65 years or older, children younger than 2 years old, pregnant women, and people living in congregate settings.



For more information on influenza statewide, to view or subscribe to the Florida FLU REVIEW, go to:

floridahealth.gov/diseases-and-conditions/influenza

For more information on influenza across the United States, go to:

cdc.gov/flu

A key indicator for flu levels in the community is school absenteeism and the number of students visiting a school health nurse during the day for flu associated symptoms. The four school years represented in these charts show the burden of flu in St. Lucie's public schools. The general trends for each year closely match other sources of flu surveillance (ER visits, reported outbreaks).



HOTIGA HEALTH **VACCINES FROM BIRTH-AGE 18**

Protect your baby from disease. Florida Health follows the recommendations and vaccine schedules of the Centers for Disease Control and Prevention (CDC): www.cdc.gov/vaccines/schedules/leas read/child. If your child needs to be "caught up" on vaccines, or has not had any vaccines, make an appointment with your health care provider today.

AGE	VACCINE	Hib Haemophilus influenzae Type B			
Birth	Hep B	HepA	Hepatitis A		
- Date of		HepB	Hepatitis B		
2 months	DTaP, Hep B, Hib, IPV, PCV, Rotavirus	MMR	Measles-Mumps-Rubella		
4 months	DTaP, Hib, IPV, PCV, Rotavirus	VAR	Varicella (chickenpox)		
6 months	DTaP, Hib, PCV, Rotavirus, Flu*	DTaP	Diphtheria-Tetanus-Acellular Pertussis (whooping cough)		
6-18 months	Hep B, IPV	DT	Diphtheria-Tetanus		
		Td	Tetanus-Diphtheria		
12-15 months	MMR, VAR, PCV, Hib	Tdap	Tetanus-Diphtheria-Acellular Pertussis (whooping cough)		
12-23 months	Hep A (2 doses)	IPV	Inactivated Polio Vaccine		
15-18 months	DTaP	PCV	Pneumococcal Conjugate Vaccine		
4-6 years	DTaP, IPV, MMR, VAR	IIV	IIV Inactivated Influenza Vaccine		
		MCV4	Meningococcal Conjugate Vaccine		
11-12 years	Tdap, HPV (2 or 3 doses), MCV4	Men B	Meningococcal B (Men B)		
13-16 years	MCV4	HPV	Human Papillomavirus Vaccine		

*After 6 months of age, then flu vaccine EVERY year after

Florida HEALTH

FluFreeFlorida.com

www.lmmunizeFlorida.org

Preliminary Cases of Reportable Diseases/Conditions in St. Lucie County and Florida, Year to Date, 2018 and 2019

Note that this table includes preliminary

confirmed and probable cases reported in Florida residents (regardless of where infection was acquired) by date reported to the Bureau of Epidemiology as captured in the reportable disease surveillance system (Merlin).). Merlin data for 2018 were finalized in April 2019 and case counts for 2019 will be finalized in April 2020. Preliminary case counts are current as of the date noted, but may change. A percentage of cases will be determined not to be cases after additional review and this percentage varies by disease. For example, 4% of meningococcal cases reported in 2014 in Florida were later determined not to be true cases and were removed from final case

Please note that counts presented in this table may differ from counts presented in other tables or reports, depending on the criteria used.

Changes in case definitions used for epidemiologic surveillance can result in dramatic changes in case counts. Current Florida Surveillance Case Definitions are available online at: http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-surveillance/surveillance-and-investigation-guidance/index.html

^Case definition for reported lead poisoning changed in 2018.

*Beginning in 2018, the probable case definition for Shiga toxin-producing E. coli (STEC) included non-culture tests for symptomatic people.

**From 2015 to 2016, the probable case classification for campylobacteriosis included non-culture tests for symptomatic people with no culture result available and no other enteric pathogen detected. Beginning in 2017, the probable case classification was revised to include non-culture tests for symptomatic people, independent of a culture result or detection of another enteric pathogen.

^^Beginning in 2017, the probable case classification for salmonellosis, shigellosis, and vibriosis included non-culture tests, independent of the presence of symptoms.

	St. Lucie County		Florida	
Disease Category	Year to Date, December 28, 2019			
	2018	2019	2018	2019
Vaccine-Preventable Diseases				
Measles (Rubeola)	0	0	15	3
Mumps	0	0	55	135
Pertussis	0	1	326	391
Varicella (Chickenpox)	20	22	853	983
CNS Diseases and Bacteremias				
Creutzfeldt-Jakob Disease (CJD)	0	0	24	42
Haemophilus influenzae Invasive Disease	0	3	310	372
in children 5 years or younger	0	0	50	48
Listeriosis	0	1	47	51
Meningitis, Bacterial or Mycotic	6	0	113	99
Meningococcal Disease	0	0	18	22
Streptococcus pneumoniae Invasive Disease	-	-	-	-
Drug-Resistant	2	5	201	255
Drug-Susceptible	2	18	366	626
Enteric Infections				
Campylobacteriosis*	93	78	4,729	4,536
Cryptosporidiosis	6	9	586	662
Cyclosporiasis	0	6	76	543
Giardiasis, Acute	13	14	1,105	1,089
Salmonellosis**	151	172	7,224	7,140
Shiga Toxin Producing Escherichia coli (STEC)^	10	7	809	781
Shigellosis**	11	48	1,510	1,418
Typhoid Fever (Salmonella serotype Typhi)	0	0	27	27
Viral Hepatitis				
Hepatitis A	2	53	548	3,395
Hepatitis B, Acute	13	16	783	855
Hepatitis B, Chronic	75	84	4,772	5,001
Hepatitis B, Surface Antigen in Pregnant Women	10	6	395	429
Hepatitis C, Acute	14	24	485	1,008
Hepatitis C, Chronic	482	422	22,208	20,840
Hepatitis D, E, G	1	0	11	10
Vectorborne, Zoonoses				
Dengue Fever	0	1	87	405
Ehrlichiosis/Anaplasmosis	0	2	58	58
Lyme Disease	3	1	169	166
Malaria	0	0	58	49
Rabies, Animal	1	0	111	130
Rabies, Human	0	0	1	0
Rabies, Possible Exposure	120	127	4,083	4,417
Rocky Mountain Spotted Fever/Rickettsiosis	0	1	22	43
West Nile Virus Disease	0	0	39	6
Others				
Botulism, Foodborne	0	0	0	1
Botulism, Infant	0	0	1	0
Brucellosis	0	0	13	8
Carbon Monoxide Poisoning	3	0	168	142
Ciguatera Fish Poisoning	5	1	69	71
Lead Poisoning^^	20	25	2,123	1,261
Legionellosis	10	6	496	447
Mercury Poisoning	0	1	36	19
Vibriosis (Excluding Cholera)**	3	5	242	263

Click here for a list of Reportable Diseases/Conditions in Florida