FLORIDA DEPARTMENT OF HEALTH IN PINELLAS COUNTY

EPI WATCH

Monthly Epidemiology Newsletter

August 2019

Florida Department of Health in Pinellas County
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Division of Disease Control and Health Protection

Disease Reporting

To report diseases and clusters of illness:

Phone: (727) 824-6932

Fax: (727) 484-3865 (excluding HIV/AIDS)

To report HIV/AIDS by mail: Surveillance Room 3-138

205 Dr. MLK Jr St. N

St. Petersburg, FL 33701

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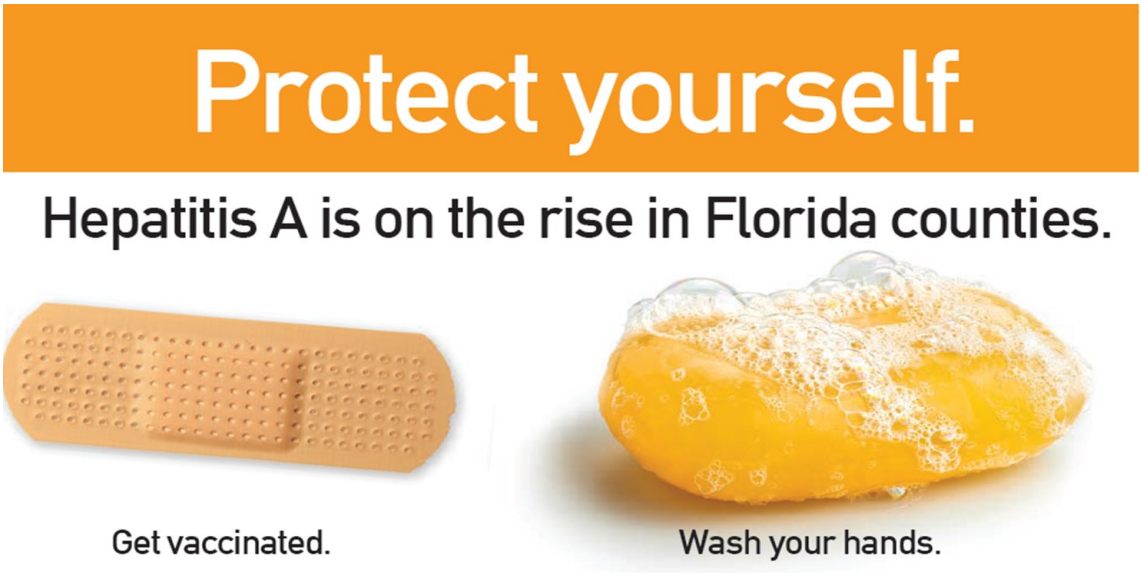
Declaration of Public Health Emergency: Hepatitis A Outbreak

On August 1, 2019, the State Surgeon General Dr. Scott Rivkees declared a Public Health Emergency in response to the ongoing Hepatitis A outbreak in Florida. The declaration reemphasizes the measures that need to be taken to prevent ongoing transmission, including vaccination and proper hygiene. The complete declaration can be found on the Florida Department of Health's website.



National Immunization Awareness Month

August is National Immunization Awareness month which highlights the importance of vaccinations and the efforts of healthcare providers to protect patients of all ages against vaccine-preventable diseases through on-time vaccination.

The Florida Department of Health in Pinellas County encourages healthcare professionals to review patients' vaccination history and discuss with them additional vaccination recommendations as needed. The recent national outbreaks of hepatitis A and measles are a reminder of how quickly diseases can spread among under- or unvaccinated individuals. Research has consistently shown that healthcare professionals are the most trusted source of vaccine information for parents and patients. Information regarding vaccine schedules for children and adults can be found here and is a helpful tool for determining what vaccines work best for your patients.

The Centers for Disease Control and Prevention (CDC) has numerous resources for healthcare professionals on how best to speak with their patients as well as offering educational materials for patients and parents. Further information can be found here.

Dengue cases continue to increase across the Americas which allows for the potential introduction into Florida.

Steps should be taken to avoid mosquito bites.

Patients with travel to endemic areas and present with symptoms, including fever, should be evaluated, tested and managed for possible arboviral illness.

Pinellas County's HPV Ambassador Program

The human papillomaviruses (HPV) are a family of viruses that infect epithelial tissues and one of the most common sexually transmitted infection. HPV infections lead to HPV-related cancers in about 19,000 females and 12,000 males annually in the United States[1]. In a 2012 CDC report, Florida ranked as the state with one of the lowest HPV vaccination rates and the second highest rates of HPV-associated cancer in the U.S. between 2011 and 2015[1]. A survey of parents and health care professionals determined that the HPV vaccine was not being strongly recommended in the community. Therefore, the overarching goal was to reduce the rate of HPV-related cancers by increasing vaccination rates in Pinellas County through the establishment of the HPV Ambassador Program.

The HPV Ambassador Program was established in 2017 with the goals of educating the community and healthcare professionals as well as students about the benefits of the HPV vaccine and increasing the immunization rates among eligible youth throughout Pinellas County and beyond. The HPV Ambassador Program focuses on providing education and training HPV Ambassadors on HPV-related cancers and immunization. Healthcare professionals, including medical, pharmaceutical, and dental students, are trained to educate parents and patients about the HPV vaccine and the importance of in preventing HPV-related cancers and other diseases.

For more information on the HPV Ambassador Program, trainings and vaccination at the Florida Department of Health in Pinellas County, please visit: *http://pinellas.floridahealth.gov/programs-and-services/clinical-and-nutrition-services/immunizations/hpv.html*

References:
[1]Human papillomavirus-associated cancers – United States, 2004-2008. MMWR. 2012. 61(15):258-261.

Harmful Algal Blooms

Harmful algal blooms (HABs) take place when there is a significant increase of algal concentrations that produce toxins or have harmful effects on humans and other marine animals. With warmer temperatures, these organisms (algae) are more likely to start growing in different fresh and salt water bodies. Depending on the species, the water can look green, red or brown; however, some of these blooms are not easily seen. We have observed different types of blooms across Florida, such as blue-green algae bloom, brown tide, and the very well-known Red Tide[1].

Depending on the type of exposure, type of toxin and duration of exposure, an individual may become ill. Symptoms can include skin, eye, nose or throat irritation, abdominal pain, headaches, neurological symptoms, vomiting and diarrhea[2]. If you think you, or your pet, have been exposed, it is recommended to see your health care provider (or veterinarian).

It is highly recommended that individuals with chronic respiratory problems (e.g., asthma, chronic lung diseases) avoid areas with HABs, especially when red tide is present in Florida. Symptoms will usually resolve once an individuals remove themselves from the area or source of exposure.

To read more information about HABs and red tide, you can visit:
http://www.floridahealth.gov/environmental-health/aquatic-toxins/harmful-algae-blooms/index.html and http://blogs.ifas.ufl.edu/indianriverco/files/2018/10/Red-Tide.pdf

References:
[1]National Oceanic and Atmospheric Administration (NOAA). Harmful Algal Blooms: Tiny Organisms with a Toxic Punch. Webpage: https://oceanservice.noaa.gov/hazards/hab/. Accessed on: July 2019.
[2]Centers for Disease Control and Prevention (CDC). Be Aware of Harmful Algal Bloom. Webpage: https://www.cdc.gov/habs/be-aware-habs.html.

Health Advisories and Travel Notices

CDC Current U.S. Outbreak List

Circulating vaccine-derived poliovirus type 2 – African Region

Middle East respiratory syndrome coronavirus (MERS-CoV)

Select Reportable Diseases in Pinellas County

	Pinellas		YTD Total		Pinellas County Annual Totals		
Disease	**July 2019**	**July 2018**	**Pinellas 2019**	**Florida 2019**	**2018**	**2017**	**2016**
A. Vaccine Preventable							
Measles	0	0	1	2	7	0	0
Mumps	0	0	1	101	2	2	0
Pertussis	8	0	18	230	32	36	18
Varicella	2	4	20	588	67	24	74
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	3	12	1	2	2
Meningitis (Bacterial, Cryptococcal, Mycotic)	1	0	3	56	9	7	7
Meningococcal Disease	0	0	1	15	1	0	0
C. Enteric Infections							
Campylobacteriosis	32	18	180	2804	264	207	178
Cryptosporidiosis	10	5	39	349	34	40	27
Cyclosporiasis	15	4	16	367	4	6	5
E. coli Shiga Toxin (+)	3	1	13	478	14	9	4
Giardiasis	4	2	33	634	41	45	41
Hemolytic Uremic Syndrome (HUS)	0	0	0	2	0	0	0
Listeriosis	0	0	1	21	1	0	2
Salmonellosis	28	19	99	3446	233	278	188
Shigellosis	2	6	14	878	40	26	19
D. Viral Hepatit							
Hepatitis A	33	10	330	2090	113	1	2
Hepatitis B: Pregnant Woman +HBsAg	1	2	8	240	14	25	28
Hepatitis B, Acute	5	1	44	528	52	51	70
Hepatitis C, Acute	9	7	63	625	40	30	49
E. VectorBorne/Zoonoses							
Animal Rabies	0	0	0	82	1	3	3
Rabies, possible exposure	17	16	87	2576	130	140	131
Chikungunya Fever	0	0	0	3	0	0	1
Dengue	1	0	2	80	0	0	2
Eastern Equine Encephalitis	0	0	0	0	0	0	0
Lyme Disease	5	3	8	57	12	17	16
Malaria	2	0	5	27	3	0	0
West Nile Virus	0	0	0	2	0	0	0
Zika Virus Disease	0	1	3	0	2	5	23
F. Others							
Chlamydia	381	399	2518	n/a	4422	4188	4133
Gonorrhea	138	124	758	n/a	1439	1574	1566
Hansen's Disease	0	0	0	12	0	0	0
Legionellosis	2	1	12	217	0	0	0
Mercury Poisoning	1	0	1	14	0	0	0
Syphilis, Total	32	32	255	n/a	438	382	400
Syphilis, Infectious (Primary and Secondary)	19	19	116	n/a	190	160	188
Syphilis, Early Latent	9	7	102	n/a	158	128	146
Syphilis, Congenital	0	0	4	n/a	2	5	2
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	4	6	0	n/a	88	89	64
Tuberculosis	1	2	13	n/a	33	28	31
Vibrio Infections	5	0	14	151	6	11	8

*YTD up to July 31, 2019. n/a = not available at this time

Reportable diseases include confirmed and probable cases only. All case counts are current and provisional. Data is collected from the Merlin Reportable Disease database, surveillance systems maintained at the Florida Department of Health in Pinellas County, and Florida CHARTS http://www.floridacharts.com/charts/default.aspx. STD data in STARS is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

Dengue Fever – Information for Clinicians

Version 2.1 5/10/2019

Please contact the Florida Department of Health in Pinellas County (DOH-Pinellas) immediately during business hours at 727-824-6932 if you suspect a patient has dengue to ensure prompt mosquito control efforts.

Dengue infection is caused by any of four distinct but closely related dengue virus (DENV) serotypes (called DENV-1, -2, -3, and -4). Dengue is currently the most frequent cause of acute febrile illness among returning U.S. travelers from the Caribbean, Central and South America, and Asia.

Transmission occurs through the bite of an infected mosquito. Dengue may also be transmitted from mother to fetus in utero or to neonate at parturition. **An infected person should avoid mosquito bites while ill to prevent infection of local mosquitoes.**

Incubation period is 3 to 14 days.

Clinical Presentation: Dengue fever can range from a mild non-specific febrile syndrome to classic dengue fever or "break-bone fever," or in the most severe forms of the disease (2–4% of cases), dengue hemorrhagic fever (DHF) and dengue shock syndrome (DSS). More than 20% of cases may be asymptomatic. Dengue should be considered when locally acquired infection is suspected or in persons who live in or have traveled to a dengue endemic area in the two weeks prior to symptom onset and have **fever**.

Dengue fever signs and symptoms may include:

- Headache or retro-orbital pain
- Myalgia, bone pain, or arthralgia
- Anorexia and nausea
- Rash
- Thrombocytopenia
- Leukopenia

Hemorrhagic fever or shock symptoms may appear after the febrile phase and include abdominal pain or tenderness, persistent vomiting, mucosal bleeding, liver enlargement, clinical fluid accumulation, or laboratory results indicating an increase in hematocrit concurrent with a rapid decrease in platelets.

Patients at risk for severe disease:

- Previously infected with another dengue virus
- Elderly
- Infants
- Sickle cell anemia
- Diabetes mellitus
- Chronic renal failure

Patients with suspected dengue fever also should be evaluated, tested and managed for possible Zika or chikungunya virus infection if travel was to areas where these viruses are present, as co-infection is possible.

Laboratory Testing: Polymerase chain reaction **(PCR) can be used to detect viral RNA in serum samples collected during the first seven days post-symptom onset**. Testing for DENV-specific IgM antibodies should be requested for serum specimens taken six or more days after onset. Approximately 20% of dengue patients who have been previously exposed to another dengue serotype may show elevated IgG titers and have transient or no elevated dengue IgM titers, making identification of such cases difficult without PCR testing on the acute sample. PCR testing is available commercially and is the only way to definitively diagnose acute cases. In 2018 alone, over 75 individuals tested PCR-positive for dengue virus after travel to affected areas. More than one third of these would not have been identified without complete dengue testing, including PCR. DOH-Pinellas can provide guidance on how and when to submit samples to the Florida Department of Health (FDOH) Bureau of Public Health Laboratories.

Resources:

DOH-Pinellas Reportable Disease Line: 727-824-6932
FDOH Dengue Website: www.floridahealth.gov/diseases-and-conditions/dengue/index.html
CDC Dengue Website: www.cdc.gov/dengue/clinicallab/clinical.html