FLORIDA DEPARTMENT OF HEALTH IN PINELLAS COUNTY

EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

March 2015

Florida Department of Health in Pinellas County
205 Dr. M.L King Street N.
St. Petersburg, FL 33701
(727) 824-6900
www.PinellasHealth.com

Division of Disease Control and Health Protection
8751 Ulmerton Road
Largo, FL 33771
(727) 524-4410

Director
Claude Dharamraj, MD, MPH, FAAP
claude.dharamraj@flhealth.gov

Editor
JoAnne Lamb, MPH
joanne.lamb@flhealth.gov

For more information, or to add your e-mail address to the distribution list, please contact the Editor.

Disease Reporting

To report diseases and clusters of illness
(*other than TB/STD/HIV/AIDS*)
Phone: (727) 507-4346
Fax: (727) 507-4347

For TB, STD or HIV/AIDS Reporting
Phone: (727) 824-6932

Animal Bite Reporting
Phone: (727) 524-4410 x7665

Chickenpox and the Importance of Community Immunity

By Andrea Leapley, MPH

According to the Centers for Disease Control and Prevention (CDC), in the early 1990s there were approximately 4 million cases of chickenpox each year, which lead to 10,500-13,000 hospitalizations and 100-150 deaths. A vaccine against chickenpox was introduced in 1995 and it is estimated that the vaccine prevents 3.5 million cases of chickenpox, 9,000 hospitalizations, and 100 deaths each year. Between 2011 and 2013, the state of Florida reported an average of 682 cases of chickenpox each year while Pinellas County reported an average of 23 cases.

Adolescent female with varicella lesions in various stages. Source: http://www.vaccineinformation.org/photos/variaap002.jpg

In early November of 2014, the Florida Department of Health in Pinellas County (DOH-Pinellas) Epidemiology Program was notified of a case of chickenpox in an unvaccinated four year old female exposed to varicella by a family member who had been recently diagnosed with shingles. The patient was a student at a local private school with a low rate of vaccination among students. A letter was distributed to students who had contact with the patient to recommend that they follow up with their healthcare provider regarding vaccination and post-exposure prophylaxis.

By early December, an additional ten cases among students at the school were reported to the Epidemiology Program. Due to the ongoing transmission, it was recommended that all susceptible students (those who were not vaccinated and had no proof of natural immunity) in classrooms with a case of chickenpox be excluded from school for the duration of the 21 day incubation period. The school had a total of 168 students, of which 36 were vaccinated against varicella (21% vaccination rate). A second letter was distributed to the entire student body explaining the exclusion process and recommending vaccination to protect against the chickenpox and avoid being excluded.

Cases of chickenpox continued to be reported to the Epidemiology Program through early January 2015. In all, 15 cases of chickenpox were confirmed among students (9% attack rate). An additional case was also confirmed in a household contact of an ill student for a total of 16 cases. All of the cases were unvaccinated. A total of 42 students were excluded from school. Of the 42 excluded, 11 students received a dose of the varicella vaccine and returned to school before the end of the 21 day incubation period.

Clusters of varicella and other vaccine preventable illnesses continue to occur around the United States among populations with low vaccination rates. These clusters highlight the importance of vaccination and maintaining community immunity. Community immunity means that enough of a population is immune to a disease so that the disease will not spread among that population. Community immunity is important because it protects everyone, especially the vulnerable among us, such as infants who are too young to be vaccinated and persons who are immunocompromised and unable to be vaccinated.

Varicella cases should be reported by the next business day to your local health department.
For additional information on varicella and the current vaccine recommendations, please visit:
http://www.cdc.gov/chickenpox/about/

Tuberculosis Cases Reach Historic Low in Florida

By Florida Department of Health, Office of Communications, February 20, 2015

TALLAHASSEE—The Florida Department of Health announces historic lows for tuberculosis (TB) incidence statewide. For four consecutive years, annual cases of active TB have declined by nearly 29 percent. This news means more residents are able to lead healthy lives in the Sunshine State, a commitment the department continually strives to fulfill.

"The decline in active tuberculosis cases in Florida over the past four years reflects our statewide commitment to eliminating tuberculosis though a community-based system of care," said State Surgeon General and Secretary of Health Dr. John Armstrong. "29 percent fewer cases translates to protecting hundreds of Floridians from illness and making communities healthier."

Tuberculosis is caused by an organism called Mycobacterium tuberculosis. The organism usually attacks the lungs, but TB bacteria can attack any part of the body such as the kidney, spine and brain. TB is curable, but if not treated properly can be fatal. The last peak of TB cases in Florida occurred in 2010 when 833 cases were reported statewide. In 2014 the number of TB cases dropped to 595 across the state. The department works to continue the steady decline of TB cases in Florida by providing leadership and assuring those who have TB receive coordinated care in line with the Florida System of TB Care guidelines.

The Florida System of TB Care outlines a model for the treatment of TB that is both patient-centered and community-based. The objective is to ensure effective TB prevention efforts for patients with latent TB infection and treatment-until-cure for TB disease. Both efforts are critical in the eradication of this disease.

To learn more about TB and the Florida System of TB Care, please visit http://www.floridahealth.gov/diseases-and-conditions/tuberculosis/index.html

2014 Ebola Outbreak in West Africa - Update

- According to the Word Health Organization (WHO) Situation Report, 116 new confirmed cases of Ebola virus disease were reported in the week to 8 March. Guinea and Sierra Leone each reported 58 new cases during the week, and it is the first time since June 2014 that the weekly incidence in Sierra Leone has not exceeded that of Guinea. The new cases in both countries are reported from districts in and near the capital cities.
- Liberia has had no newly reported confirmed cases of Ebola virus disease for the second complete week. Only two counties have reported a confirmed case within the past 21 days. A total of 102 contacts from these cases were being monitored.
- Two imported cases, including one death, and two locally acquired cases in healthcare workers were reported in the United States in 2014. **There are currently no active cases of Ebola in the United States.**

Additional information can be found here: http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.html. WHO Situation Reports can be found here: http://www.who.int/csr/disease/ebola/situation-reports/archive/en/.

2014-2015 Measles Multi-state Outbreak- Update

- According to the Centers for Disease Control (CDC), from 12/28/14 - 1/6/15 there were 142 people from 7 states reported to have measles that are considered to be part of an ongoing outbreak related to an amusement park in California.
- From January 1 to March 6, 2015, there were 173 people from 17 states and DC reported to have measles. During 2014, 644 people from 27 states were reported to have measles. This is the greatest yearly number of cases reported since measles elimination was documented in the U.S. in 2000.
- There have been no confirmed cases of measles in Florida residents in 2014 or 2015.
- Vaccination is the best way to protect yourself against measles. One dose of vaccine is about 93% effective and two doses of the vaccine are about 97% effective at preventing measles if exposed to the virus.

This information is from the CDC website and can be found here: http://www.cdc.gov/measles/multi-state-outbreak.html. Additional information about measles can be found here: http://www.cdc.gov/measles/index.html.

Selected Reportable Diseases in Pinellas County

	Pinellas	Total		Pinellas County Annual Totals		
Disease	**February 2015**	**Pinellas 2015**	**Florida 2015**	**2014**	**2013**	**2012**
A. Vaccine Preventable						
Measles						
Mumps			**1**			
Pertussis	**2**	**2**	**53**	19	17	10
Varicella	**2**	**11**	**131**	35	19	16
B. CNS Diseases & Bacteremias						
Creutzfeldt-Jakob Disease (CJD)	**1**	**1**	**6**			2
Meningitis (Bacterial, Cryptococcal, Mycotic)			**21**	4	5	6
Meningococcal Disease	**1**	**1**	**7**		1	
C. Enteric Infections						
Campylobacteriosis	**13**	**22**	**297**	103	63	59
Cryptosporidiosis	**5**	**6**	**85**	240	19	29
Cyclosporiasis					5	1
E. coli Shiga Toxin (+)			**14**	6	7	8
Giardiasis	**4**	**8**	**152**	42	34	32
Hemolytic Uremic Syndrome (HUS)			**3**		1	
Listeriosis			**3**			5
Salmonellosis	**7**	**16**	**487**	216	203	203
Shigellosis	**2**	**4**	**214**	21	5	18
D. Viral Hepatitis						
Hepatitis A			**15**	2	6	4
Hepatitis B: Pregnant Woman +HBsAg	**4**	**4**	**53**	21	17	16
Hepatitis B, Acute	**4**	**6**	**56**	44	39	16
Hepatitis C, Acute	**4**	**7**	**20**	19	17	5
E. Vector Borne, Zoonoses						
Animal Rabies			**13**	2		
Rabies, possible exposure	**15**	**31**	**483**	190	193	201
Chikungunya Fever		**1**	**48**	10		
Dengue			**7**	1	2	3
Eastern Equine Encephalitis						
Lyme Disease			**15**	5	8	6
Malaria			**7**	3	1	2
St. Louis Encephalitis						
West Nile Virus						
F. Others						
AIDS**	**11**	**19**	**n/a**	149	118	130
HIV**	**30**	**58**	**n/a**	278	185	177
Chlamydia	**309**	**626**	**n/a**	3854	4141	3812
Gonorrhea	**99**	**199**	**n/a**	1295	1424	1029
Hansen's Disease			**1**			
Lead Poisoning: Children < 6 years:	**1**	**1**	**20**	8	4	2
Legionellosis	**1**	**2**	**47**	13	10	13
Mercury Poisoning			**2**	2		
Syphilis, Total	**9**	**28**	**n/a**	186	114	141
Syphilis, Infectious (Primary and Secondary)	**5**	**20**	**n/a**	75	52	61
Syphilis, Early Latent	**2**	**5**	**n/a**	61	37	47
Syphilis, Congenital			**n/a**			
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	**2**	**3**	**n/a**	50	25	33
Tuberculosis			**n/a**	25	30	17
Vibrio Infections			**14**	10	11	10

n/a = not available at this time. Blank cells indicate no cases reported. Reportable diseases include confirmed and probable cases only. All case counts are 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 PRISM is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

**Current HIV Infection data reflects any case meeting the CDC definition of "HIV infection" which includes all newly reported HIV cases and newly reported AIDS cases with no previous report of HIV. Newly reported HIV Infection cases do not imply they are all newly diagnosed cases. CDC case definitions for HIV and AIDS, as of September 2014, were now accepted into the updated version of eHARS. This means that prior to September HIV cases that were not considered "reportable" due to an undetectable HIV viral load can now be reported as an HIV case if Surveillance staff can determine if the patient is being treated on ARVs (antiretrovirals)