FLORIDA DEPARTMENT OF HEALTH IN PINELLAS COUNTY

EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

June 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.

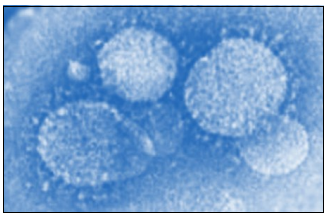
Disease Reporting

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

Surveillance Update:
Middle East Respiratory Syndrome (MERS)



- Middle East Respiratory Syndrome (MERS) is a viral respiratory illness that is new to humans. The virus that causes MERS is called Middle East Respiratory Syndrome Coronavirus (MERS-CoV). Some individuals have reported mild symptoms; however, most people infected with MERS-CoV develop severe respiratory illness.
- Since MERS first emerged in the Arabian Peninsula in 2012, CDC has been working with global partners to better understand the nature of the virus, including how it affects people, and how it spreads.
- **There have been no MERS cases in the United States since May 2014. The risk of MERS to the general public in this country remains very low.**
- Since May 2015, the Republic of Korea has been investigating an outbreak of MERS. It is the largest known outbreak of MERS outside the Arabian Peninsula. As of June 12, a total of 126 MERS-CoV cases, including 11 deaths, have been linked to a single chain of transmission. The index case had recent travel to four countries in the Middle East before developing symptoms. The patient sought care at multiple health care facilities in the Republic of Korea before finally reporting a history of potential exposure to the virus and being isolated.
- **Recommendations**
  The Florida Department of Health continues to recommend that healthcare providers and health departments throughout the US be prepared to detect and manage cases of MERS. **Healthcare providers should continue to routinely ask their patients about their travel history and healthcare facility exposure and to consider a diagnosis of MERS-CoV infection in persons who meet the criteria for patient under investigation (PUI).** An updated PUI definition, which has been revised to include considerations of recent travel to Korea, is available at http://www.floridahealth.gov/diseases-and-conditions/mers/index.html. **Specifically, persons who meet the following updated criteria for PUI should be evaluated for MERS-CoV infection in addition to other common respiratory pathogens and reported immediately to state or county health departments:**

  A. Patient is clinically stable for outpatient management AND any of the following:

  ⇒ A history of health care employment in or near the Arabian Peninsula or the Republic of Korea within 14 days before symptom onset

  ⇒ A history of hospital visitation (e.g. emergency room visit, doctor's appointment, visit someone in the hospital) in or near the Arabian Peninsula or the Republic of Korea in the 14 days before symptom onset

  ⇒ Is the person a close contact of a confirmed or probable MERS case

  OR

  B. Patient requires hospitalization for respiratory illness (e.g. low O2 sats, hypotension, tachycardia) has a fever AND any of the following:

  ⇒ History of travel to or from a country in or near the Arabian Peninsula1 or the Republic of Korea in the 14 days before symptom onset

  ⇒ Residency in a country in or near the Arabian Peninsula1 or the Republic of Korea in the 14 days before symptom onset

  ⇒ Close contact4 to a symptomatic person who developed fever and acute respiratory illness (not necessarily pneumonia) in the 14 days after traveling from countries in or near the Arabian Peninsula1 or the Republic of Korea?

  ⇒ Is a member of a cluster of patients with severe acute respiratory illness (e.g. fever and pneumonia requiring hospitalization) of unknown etiology in which MERS is being evaluated, in consultation with county health departments?

The above criteria serve as guidance for testing; however, patients should be evaluated and discussed with county health departments on a case-by-case basis if their clinical presentation or exposure history is equivocal (e.g., uncertain history of health care exposure).

More information about MERS and the current outbreak in the Republic of Korea can be found on the World Health Organization website: http://www.who.int/csr/disease/coronavirus_infections/en/ and the Centers for Disease Control and Prevention (CDC) website: http://www.cdc.gov/features/novelcoronavirus/

HAN 378: Bird Infections with Highly-Pathogenic Avian Influenza A (H5N2), (H5N8), and (H5N1) Viruses: Recommendations for Human Health Investigations and Response

CDC Health Alert Network (HAN) Health Advisory Message that was issued on June 2, 2015

Summary:

Highly-pathogenic avian influenza A H5 viruses have been identified in birds in the United States since December 2014. The purpose of this HAN Advisory is to notify public health workers and clinicians of the potential for human infection with these viruses and to describe CDC recommendations for patient investigation and testing, infection control including the use personal protective equipment, and antiviral treatment and prophylaxis.

- Avian influenza continues to circulate in domestic poultry and wild birds in the U.S.
- While domestic poultry and some other birds are severely affected by these viruses, no illnesses have been reported in persons in contact with impacted birds.
- The North American H5N1 avian influenza virus strain is not the same virus as the strain that is causing severe illness in Asia and Africa.
- Other strains of avian influenza reported outside the U.S. have been associated with a broader array of respiratory symptoms than seasonal influenza which may range from conjunctivitis to acute respiratory distress syndrome.
- Because zoonotic influenza virus strains are circulating around the world and may be found in different types of animals, it is always important to collect recent travel and animal contact history.
- Suspected cases of avian or zoonotic influenza in people should be reported to your county health department immediately to ensure appropriate testing and implementation of infection control measures.

Clinicians should immediately report suspect cases of HPAI H5 or other zoonotic influenza to the DOH-Pinellas, Epidemiology Program at 727-507-4346. **The complete HAN can be found here: http://emergency.cdc.gov/han/han00378.asp**

Swimming Season is Here: Stay Healthy!

Cryptosporidium Infections

Cryptosporidium parasites are one of the most common causes of illness associated with treated recreational water in the United States. According to the Centers for Disease Control and Prevention, there has been a nationwide increase in reported cases of cryptosporidiosis over the last decade. Whether this is due to increased awareness and more sensitive testing or reflects a real increase in cases, the data indicate that approximately 748,000 cases occur annually though only about 2% are reported. Cases tend to peak during the summer months when use of recreational water is at its highest.

In 2014, Pinellas County experienced a county-wide outbreak of cryptosporidiosis. During an average year, Pinellas County generally sees 15-20 reported cases of crypto (a rate of 2.0-3.0 per 100,000 population). In 2014, 240 cases were reported, which is a rate of 26 per 100,000 population. Consistent with national trends, most of the cases occurred between June and September.

Crypto should be considered in patients that present with diarrheal illness, particularly in children as they are the group most frequently affected. A routine lab order for an ova and parasite screen does not look for the *Cryptosporidium* parasite and the test must be ordered specifically. Most commercial labs have the capability to perform the appropriate testing. Preferable tests include a polymerase chain reaction (PCR), direct fluorescent antibody (DFA) test, enzyme immunoassay (EIA), or light microscopy.

Cases of cryptosporidiosis are required to be reported to your local health department by the business day following diagnosis. The report should include the lab results as well as the patient's demographics and recent office visit notes.

For more information regarding the parasite, Cryptosporidium, please refer to the CDC's website: http://www.cdc.gov/parasites/crypto/

Primary Amebic Meningoencephalitis (PAM)

Naegleria fowleri is the causative agent for Primary Amebic Meningoencepalitis (PAM). It is a freshwater ameba commonly found in warm bodies of fresh water, such as lakes, rivers, and hot springs, under-chlorinated swimming pools, and soil around the world. *Naegleria fowerli* is the only species of *Naegleria* that has been found to infect humans. Although *Naegleria fowleri* is commonly found in the environment, infection is rare. Due to its high fatality rate, this disease is a public health concern. There have only been three known infected individuals in the United States from 1962 to 2013 that have survived.

Infection with *Naegleria fowleri* is most common during the warm summer months of July, August, and September. Infection typically occurs when the ameba enters the body through the nose when people are swimming, diving, or participating in other rigorous activities in freshwater. ***Naegleria fowleri*** **infection cannot be spread from person to person contact and will not occur as a result of drinking water.**

Acute PAM symptoms are similar to meningitis and include fever, headaches, nausea/vomiting, neck stiffness, and confusion. Symptoms can present from 1 to 7 days post exposure and progress rapidly.

PAM is a reportable disease in Florida and suspected cases need to be reported to your local health department within one day. The Centers for Disease Control and Prevention (CDC) now has an investigational drug called miltefosine for the treatment of infections caused by free living ameba. **Physicians who suspect they have a patient that has as infection due to a free living ameba are directed to contact the CDC immediately at 770-488-7100.**

For more information regarding PAM, please refer to the Florida Department of Health's website: http://www.floridahealth.gov/diseases-and-conditions/primary-amebic-meningoencephalitis/index.html

Selected Reportable Diseases in Pinellas County

	Pinellas	Total		Pinellas County Annual Totals		
Disease	May 2015	Pinellas 2015	Florida 2015	2014	2013	2012
A. Vaccine Preventable						
Measles			**5**			
Mumps			**5**			
Pertussis	**1**	**4**	**145**	19	17	10
Varicella	**1**	**20**	**361**	35	19	16
B. CNS Diseases & Bacteremias						
Creutzfeldt-Jakob Disease (CJD)		**2**	**15**			2
Meningitis (Bacterial, Cryptococcal, Mycotic)		**2**	**48**	4	5	6
Meningococcal Disease		**1**	**13**		1	
C. Enteric Infections						
Campylobacteriosis	**8**	**49**	**865**	103	63	59
Cryptosporidiosis	**8**	**18**	**222**	240	19	29
Cyclosporiasis					5	1
E. coli Shiga Toxin (+)			**47**	6	7	8
Giardiasis	**1**	**11**	**370**	42	34	32
Hemolytic Uremic Syndrome (HUS)			**3**		1	
Listeriosis			**10**			5
Salmonellosis	**12**	**53**	**1488**	216	203	203
Shigellosis	**12**	**37**	**753**	21	5	18
D. Viral Hepatitis						
Hepatitis A			**43**	2	6	4
Hepatitis B: Pregnant Woman +HBsAg	**4**	**23**	**185**	21	17	16
Hepatitis B, Acute	**2**	**20**	**185**	44	39	16
Hepatitis C, Acute	**3**	**12**	**68**	19	17	5
Animal Rabies			**31**	2		
Rabies, possible exposure	**5**	**56**	**1289**	190	193	201
Chikungunya Fever		**2**	**70**	10		
Dengue			**13**	1	2	3
Eastern Equine Encephalitis						
Lyme Disease			**36**	5	8	6
Malaria			**14**	3	1	2
St. Louis Encephalitis						
West Nile Virus						
F. Others						
AIDS**	**20**	**53**	**n/a**	148	118	130
HIV**	**33**	**140**	**n/a**	264	185	177
Chlamydia*	**337**	**1759**	**n/a**	3853	4141	3812
Gonorrhea*	**106**	**560**	**n/a**	1295	1424	1029
Hansen's Disease			**8**			
Lead Poisoning: Children < 6 years:		**2**	**50**	8	4	2
Legionellosis	**1**	**5**	**118**	13	10	13
Mercury Poisoning			**8**	2		
Syphilis, Total*	**21**	**110**	**n/a**	186	114	141
Syphilis, Infectious (Primary and Secondary)	**10**	**70**	**n/a**	75	52	61
Syphilis, Early Latent	**4**	**24**	**n/a**	61	37	47
Syphilis, Congenital			**n/a**			
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	**7**	**17**	**n/a**	50	25	33
Tuberculosis	**3**	**3**	**n/a**	25	30	17
Vibrio Infections	**1**	**3**	**60**	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) and, therefore, they have a "clinical diagnosis". This could result in an artificial increase in HIV case reporting in the upcoming months. In addition, children from ages 6-12 years that are diagnosed with HIV can now be reported as "AIDS" with a CD4 absolute count <200, children from 1-5 years old can be diagnosed AIDS with a CD4 test <500 and children <1 years old can be diagnosed with AIDS with a CD4 test <750. This may affect our YTD comparison between years for the upcoming year. For a more detailed explanation on changes in reporting and changes in trends, please contact the Bureau of HIV/AIDS, Data Analysis Section.