



EpiCenter

SUMMER 2013

FLORIDA HEALTH PALM BEACH COUNTY
EPIDEMIOLOGY PROGRAM, DIVISION OF
EPIDEMIOLOGY AND COMMUNICABLE DISEASES

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To Report a Disease:
Weekdays
561-671-4184
Fax: 561-837-5330
Weekends/Evenings:
561-840-4500

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Raccoons Testing Positive for Rabies in Record Numbers

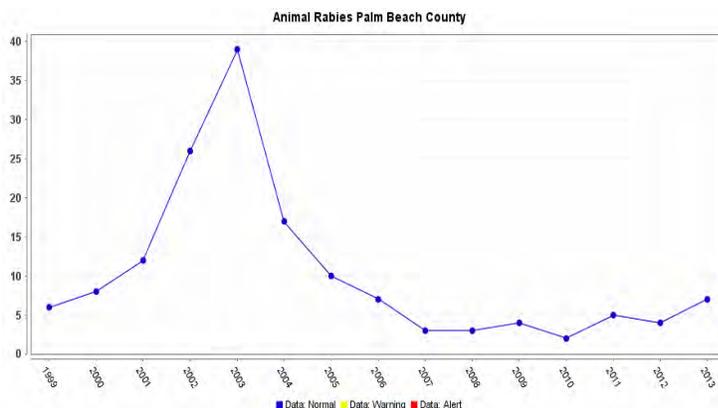
In the first five months of this year, Florida Department of Health / Palm Beach County Division of Epidemiology and Communicable Diseases has reported 7 positive tests for rabies in animals. This was the highest number of cases per quarter recorded in Palm Beach County since the first quarter of 2005. Since 2005, 80% of the animal testing was done due to an exposure that had occurred to either a person or another animal. 10% of the testing done was for surveillance purposes and another 10% was unknown.

All of the 2013 cases so far have been found in raccoons. While raccoon cases have always counted for the highest number by far, positive

tests for rabies have been found in bats, bobcats, foxes, and otters, as well as in cats and dogs in Palm Beach County. A 60 day alert was ordered after 3 infected animals were found in one area within a short period of time. Flyers and news releases were issued in the other areas affected.



Continued on Page 2



EPI CHANGES

The Division of Epidemiology has a new name. We are now the Division of Epidemiology and Communicable Diseases at the Florida Department of Health, Palm Beach County. You may have also noticed the new logo we are using. The changes in our name reflect changes at the state and local level. Our new organizational structure joins the Epidemiology Program with the STD, TB and HIV programs, under the leader-

ship of our new Division Director, Dr. Robert Parkes. While these programs have always worked together in the past, we look forward to developing even closer working relationships in the future and developing a more coordinated and efficient means of interacting with our community partners.

Dr. Parkes, Director, Medical Epidemiologist and Senior Physician for the Division of Epidemiology and Communicable Diseases, Florida



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Raccoon and skunk sharing a meal given to them by people



“Never feed stray and/or wild animals”

Raccoons Testing Positive for Rabies in Record Numbers Cont'd

According to the CDC, there are several things you can do to protect yourself and your pets from rabies.

First, visit your veterinarian with your pet on a regular basis and keep rabies vaccinations up-to-date for all cats, ferrets, and dogs.

Second, maintain control of your pets by keeping cats and ferrets indoors and keeping dogs under direct supervision.

Third, spay or neuter your pets to help reduce the number of unwanted pets that may not be properly cared for or vaccinated regularly.

Finally, call animal control to remove all stray animals from your neighborhood since these animals may be unvaccinated or ill.

In the event of an animal bite exposure, please follow these steps for reporting and accessing rabies vaccine.

- All animal bites need to be reported to Animal Care and Control at 561-233-1200. In addition, all possible rabies exposures need to be reported to the Epidemiology Program of the Florida Department of Health Palm Beach County, phone 561-671-4184, fax 561-837-5330.
- Post-exposure vaccine is provided on an appointment only basis. Appointments can be scheduled by calling the Epidemiology Program at 561-671-4184.
- A sliding fee scale or insurance reimbursement will be applied to the cost of providing these vaccines.

Epi Changes Cont'd

Department of Health, Palm Beach County, did his undergraduate studies in Medicine at the University of the West Indies between 1991 and 1996. After internship he did his residency in Internal Medicine at the University of the West Indies. He practiced as an Attending Physician at the Kingston Public Hospital for 8 years. After migration to the USA in 2008, he did one year of internship in Internal Medicine and then transferred to the Preventive

Medicine and Public Health Residency program at FDOH Palm Beach County. He completed his residency in 2012.

Dr Parkes is Board Certified in Preventive Medicine and Public Health. He also holds a Masters in Public Health (summa cum laude) from Nova Southeastern University. Dr. Parkes is a faculty member in the Palm Beach County Health Department Preventive Medicine and Public Health Residency Program.

He has authored two books and published several scientific papers on chronic and communicable diseases in peer reviewed journals.



Dr. Parkes relaxing at JoEllen Alvarez's retirement celebration

What's New with Novel Viruses?

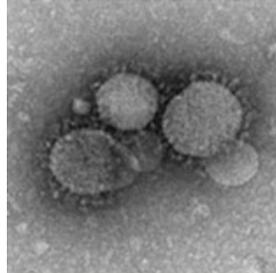
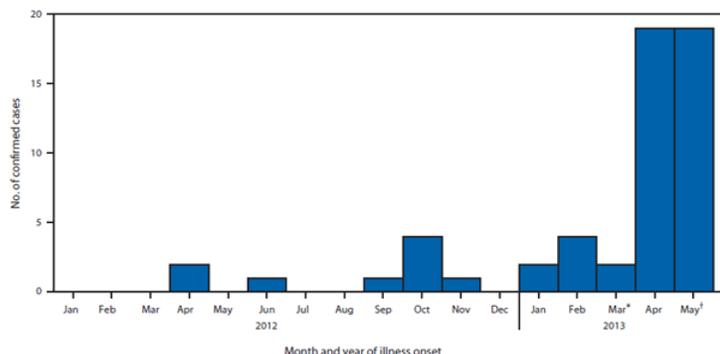
Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

A novel coronavirus called “Middle East Respiratory Syndrome Coronavirus” (MERS-CoV) was identified in 2012 as the cause of respiratory illness in people. Cases have been seen in the following countries: France, Germany, Jordan, Qatar, Saudi Arabia, Tunisia, the United Kingdom and the United Arab Emirates (UAE).

Eight clusters of illnesses have been reported by six countries (France, Italy, Jordan, Saudi Arabia, Tunisia, and UK). These clusters provide clear evidence of human-to-human transmission of MERS-CoV. The reservoir and route of transmission of MERS-CoV are still being investigated. Genetic sequencing to date has determined the virus is most closely related to coronaviruses detected in bats. The Centers for Disease Control and Prevention (CDC) is continuing to collaborate with the World Health Organization (WHO) and affected countries to better characterize the epidemiology of MERS-CoV infection in humans.

So far, there are no reports of anyone in the U.S. getting infected and sick with MERS-CoV. Additional information about MERS-CoV regarding the evaluation of patients, testing for MERS-CoV, infection control, and management of contacts is available at the CDC website, <http://www.cdc.gov/coronavirus/mers/index.html>

Number of confirmed cases of MERS-CoV (N = 55) reported as of June 7, 2013, to WHO, by month of illness onset — worldwide, 2012–2013. (CDC)



MERS-CoV particles as seen by negative stain electrons microscopy (CDC)

Avian Influenza A (H7N9) Virus

As of June 7, 2013, the Centers for Disease Control and Prevention (CDC) has reported 132 cases of human infection with a novel strain of avian influenza A (H7N9) virus. Thirty-seven cases have died. The cases have been seen in the eastern Chinese municipalities and provinces, as well as a single exported case in Taiwan. While mild illness in human cases has been seen, most patients have had severe respiratory illness. So far, there is no evidence of ongoing human-to-human transmission. No cases of H7N9 outside of China have been reported. Because influenza viruses constantly change, leading to the possibility that this virus could become able to spread between people and trigger a pandemic, CDC is following this situation closely and coordinating with domestic and international partners. The H7N9 virus has genetic changes that have been associated with making bird flu viruses spread better and more easily to mammals, causing more severe disease and causing disease to progress more quickly. CDC has issued a health alert for public health officials and clinicians in the United States to look for flu symptoms in travelers who are returning from countries with H7N9 bird flu. Additional information about Avian Influenza A (H7N9) is available on the CDC website at <http://www.cdc.gov/flu/avianflu/h7n9-virus.htm> and includes guidance regarding use of antivirals, infection control, diagnosis and testing and information for laboratorians.

For people traveling to China, the CDC has issued these recommendations:

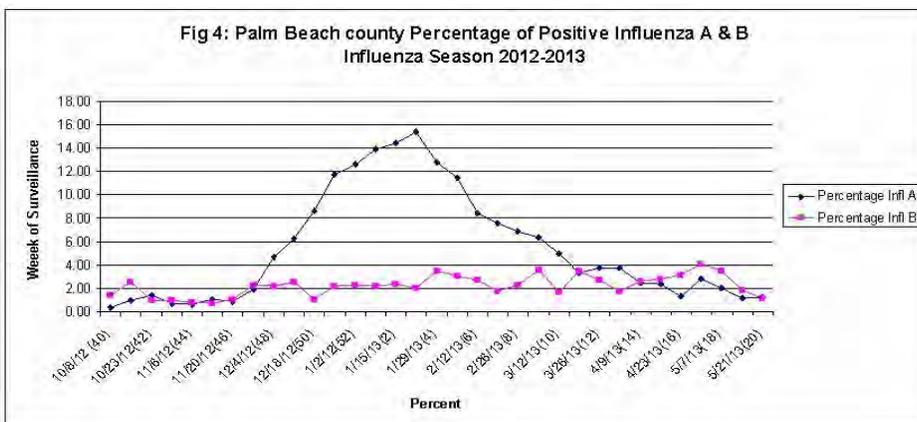
- Do not touch birds, pigs, or other animals. Avoid markets or farms with live poultry or other live animals.
- Eat food that is fully cooked, including meat, poultry, and eggs. Don't eat food from street vendors.
- Practice hygiene and cleanliness. Wash your hands often. Don't touch your eyes, nose, or mouth. Avoid close contact, with people who are sick.
- See a doctor right away if you become sick with fever, coughing, or shortness of breath, during or after travel to China.



Influenza A H7N9 a viewed through an electron microscope (CDC)

Influenza Season Surveillance Summary Palm Beach County, 2012-2013

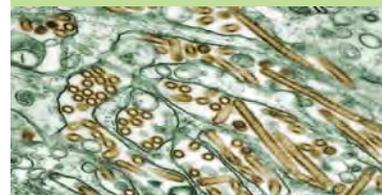
- The percentage of ILI emergency room (ER) visits increased from week ending Dec.8, 2012 through March 23, 2013.
- The highest percentage of ILI ER visits was recorded in week ending Jan. 12, 2013. The morbidity trend decreased from that point but remained higher as compared to the previous two flu seasons.
- The lowest percentage of ILI was recorded during week ending May 4, 2013
- Total of 3 outbreaks reported.
- No Pediatric influenza deaths were reported.



Novel Viruses Continued

Highly Pathogenic Avian Influenza (H5N1)

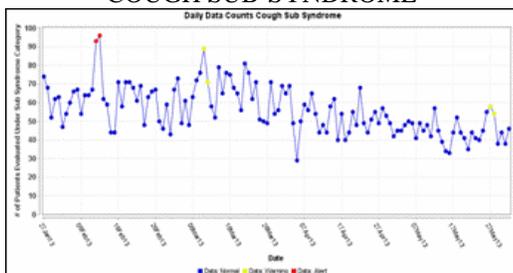
More than 600 human HPAI H5N1 cases have been reported to the World Health Organization (WHO) from 15 countries in Asia, Africa, the Pacific, Europe and the Near East since November 2003. Approximately 60% of the cases have died. Indonesia, Vietnam and Egypt have reported the highest number of human HPAI H5N1 cases to date. Of the few avian influenza A viruses that have crossed the species barrier to infect humans, HPAI H5N1 virus has caused the largest number of detected cases of severe disease and death in humans. Despite the high mortality, human cases of HPAI H5N1 remain rare to date, even among persons exposed to infected sick or dead poultry.



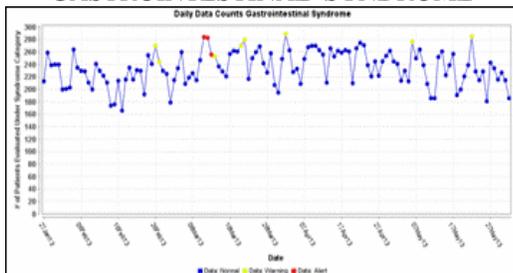
Colorized transmission electron micrograph of Avian Influenza A H5N1 viruses

ESSENCE Report Week 22

COUGH SUB-SYNDROME



GASTROINTESTINAL SYNDROME



Reference Corner

<http://www.who.int/ith/updates/20100421/en/index.html>
- International Infectious Diseases

http://www.doh.state.fl.us/disease_ctrl/epi/
- State of Florida Bureau of Epidemiology

http://www.cdc.gov/mmwr/mmwr_wk.html
- CDC, Morbidity and Mortality Weekly Report

<http://www.fda.gov/Food/FoodSafety/default.htm>
- FDA, Food Safety & Bad Bug Book

PALM BEACH COUNTY HEALTH DEPARTMENT
 REPORTED COMMUNICABLE DISEASES FROM THE DIVISION OF EPIDEMIOLOGY & DISEASE CONTROL

WEEK 22, 2013 (Period from:06/02/13 to 06/08/13)	This Week	This Year	Same Time Last Year
CENTRAL NERVOUS SYSTEM AND INVASIVE DISEASES:			
Haemophilus influenzae invasive disease	2	13	11
Meningococcal disease	0	0	4
Listeriosis	0	2	1
Streptococcus pneumoniae invasive disease, drug-resistant	1	19	11
Streptococcus pneumoniae invasive disease, susceptible	2	25	16
Streptococcal disease, invasive Group A	0	13	4
Meningitis: bacterial, cryptococcal, mycotic	0	4	2
Encephalitis, other (non-arboviral)	0	0	0
Creutzfeldt-Jakob Disease (CJD)	0	0	0
Influenza A, novel or pandemic strains	0	0	0
VACCINE PREVENTABLE DISEASES:			
Mumps	0	0	0
Pertussis	0	18	11
Tetanus	0	0	0
Varicella	2	14	21
HEPATITIS:			
Hepatitis A	0	2	3
Hepatitis B, acute	0	5	7
Hepatitis B, chronic	7	183	96
Hepatitis B, (HBsAg+) in pregnant women	4	36	17
Hepatitis C, acute	0	6	2
Hepatitis C, chronic	37	936	497
ENTERIC DISEASES:			
Giardiasis	1	27	28
Campylobacteriosis	4	61	57
Shigellosis	2	7	24
Salmonellosis	12	149	154
Cryptosporidiosis	0	8	17
Cyclosporiasis	0	0	0
Typhoid fever	0	0	1
Escherichia coli, Shiga toxin producing	1	20	18
Vibrio fluvialis	0	0	0
Vibrio alginolyticus	0	0	4
Vibrio vulnificus	0	0	0
Vibrio parahaemolyticus	0	1	0
Vibrionaceae, other	0	0	0
OTHER DISEASES:			
Human exposure to a potentially rabid animal	3	79	68
Animal rabies	0	7	2
Monkey bite	0	1	2
Brucellosis	0	0	2
Carbon monoxide poisoning	1	18	7
Dengue fever	0	6	0
Hansen's disease (Leprosy)	0	0	0
Hemolytic uremic syndrome (HUS)	0	0	0
Lead poisoning	0	22	11
Legionellosis	1	5	8
Lyme disease	0	1	2
Malaria	0	3	3
Mercury poisoning	0	0	1
Pesticide-related illness or injury	1	3	3
Toxoplasmosis	0	2	0



Florida Department of Health Palm Beach County

Disease Reporting Telephone Numbers

AIDS, HIV - (561) 840-0144

STD - (561) 803-7326, Fax - (561) 840-0148

TB Control - (561) 803-7342, Fax - (561) 840-0171

All Others EPI - (561) 671-4184, Fax - (561) 837-5330 M-F 8AM-5PM

(561) 840-4500 Evenings after 5PM and Weekends

Section 381.0031 (1,2), Florida Statutes, provides that "Any practitioner, licensed in Florida to practice medicine, osteopathic medicine, chiropractic, naturopathy, or veterinary medicine, who diagnoses or suspects the existence of a disease of public health significance shall immediately report the fact to the Department of Health." The DOH county health departments serve as the Department's representative in this reporting requirement. Furthermore, this Section provides that "Periodically the Department shall issue a list of diseases determined by it to be of public health significance...and shall furnish a copy of said list to the practitioners..."

Reportable Diseases/Conditions in Florida Practitioner* Guide 11/24/08

*Reporting requirements for laboratories differ. For specific information on disease reporting, consult Rule 64D-3, Florida Administrative Code (FAC).

AIDS, HIV - (561) 840-0144

- + Acquired Immune Deficiency Syndrome (AIDS)
- Human Immunodeficiency Virus (HIV) Infection (all, and including neonates born to an infected woman, exposed newborn)

STD - (561) 803-7326

- Chancroid
- Chlamydia
- Conjunctivitis (In neonates ≤ 14 days old)
- Gonorrhea
- Granuloma Inguinale
- Herpes Simplex Virus (HSV) (In infants up to 80 days old with disseminated infection with involvement of liver, encephalitic and infections limited to skin, eyes and mouth; anogenital in children ≤ 12 years old)
- Human papilloma virus (HPV) (associated laryngeal papillomas or recurrent respiratory papillomatosis in children ≤ 8 years old; anogenital in children ≤ 12 years)
- Lymphogranuloma venereum (LGV)
- Syphilis
- Syphilis (In pregnant women and neonates)

TB CONTROL - (561) 803-7342

- Tuberculosis (TB)

CANCER - (305) 243-4600

- + Cancer (except non-melanoma skin cancer, and including benign and borderline intra-axial and CNS tumors)

ALL OTHERS EPI - (561) 671-4184

- ! Any disease outbreak
- ! Any case, cluster of cases, or outbreak of a disease or condition found in the general community or any defined setting such as a hospital, school or other institution, not listed below that is of urgent public health significance. This includes those indicative of person to person spread, zoonotic spread, the presence of an environmental, food or waterborne source of exposure and those that result from a deliberate act of terrorism.
- Amebic encephalitic
- Anaplasmosis
- ! Anthrax
- Arsenic poisoning
- ! Botulism (foodborne, wound, unspecified, other)
- Botulism (Infant)
- ! Brucellosis
- California serogroup virus (neuroinvasive and non-neuroinvasive disease)
- Campylobacteriosis
- Carbon monoxide poisoning
- ! Cholera
- Ciguatera fish poisoning (Ciguatera)
- Congenital anomalies
- Creutzfeldt-Jakob disease (CJD)
- Cryptosporidiosis

- Cyclosporiasis
- Dengue
- ! Diphtheria
- Eastern equine encephalitic virus disease (neuroinvasive and non-neuroinvasive)
- Ehrlichiosis
- Encephalitis, other (non-arboviral)
- Enteric disease due to:
 - Escherichia coli, O157:H7
 - Escherichia coli, other pathogenic E. coli including entero-toxigenic, invasive, pathogenic, hemorrhagic, aggregative strains and shiga toxin positive strains
- Giardiasis
- ! Glanders
- ! Haemophilus influenzae (meningitic and invasive disease)
- Hansen's disease (Leprosy)
- ! Hantavirus infection
- ! Hemolytic uremic syndrome
- ! Hepatitis A
- Hepatitis B, C, D, E, and G
- Hepatitis B surface antigen (HBsAg) (positive in a pregnant woman or a child up to 24 months old)
- ! Influenza due to novel or pandemic strains
- ! Influenza-associated pediatric mortality (in persons < 18 years)
- Lead Poisoning (blood lead level ≥ 10µg/dL; additional reporting requirements exist for hand held and/or on-site blood lead testing technology, see 64D-3 FAC)
- Legionellosis
- Leptospirosis
- ! Listeriosis
- Lyme disease
- Malaria
- ! Measles (Rubella)
- ! Molluscum
- Meningitis (bacterial, cryptococcal, mycotic)
- ! Meningococcal disease (Includes meningitic and meningococcal)
- Mercury poisoning
- Mumps
- ! Neurotoxic shellfish poisoning
- ! Pertussis
- Pesticide-related illness and injury
- ! Plague
- ! Poliomyelitic, paralytic and non-paralytic
- Psittacosis (Ornithosis)
- Q Fever
- ! Rabies (human, animal)
- ! Rabies (possible exposure)

- ! Rotaviruses
- Rocky Mountain spotted fever
- ! Rubella (including congenital)
- St. Louis encephalitic (SLE) virus disease (neuroinvasive and non-neuroinvasive)
- Salmonellosis
- Saxitoxin poisoning (including paralytic shellfish poisoning) (PSP)
- ! Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV) disease
- Shigellosis
- ! Smallpox
- Staphylococcus aureus, community associated mortality
- ! Staphylococcus aureus (infection with intermediate or full resistance to vancomycin, VISA, VRSA)
- ! Staphylococcus enterotoxin B (disease due to)
- Streptococcal disease (invasive, Group A)
- Streptococcus pneumoniae (invasive disease)
- Tetanus
- Toxoplasmosis (acute)
- Trichinellosis (Trichinosis)
- ! Tularemia
- ! Typhoid fever
- ! Typhus fever (disease due to Rickettsia prowazekii infection)
- Typhus fever (disease due to Rickettsia typhi, R. felis infection)
- ! Vibriosis disease
- Variola (Chickenpox)
- Variola mortality
- ! Venezuelan equine encephalitic virus disease (neuroinvasive and non-neuroinvasive)
- Vibriosis (Vibrio infections)
- ! Viral hemorrhagic fevers (Ebola, Marburg, Lassa, Machupo)
- West Nile virus disease (neuroinvasive and non-neuroinvasive)
- Western equine encephalitic virus disease (neuroinvasive and non-neuroinvasive)
- ! Yellow fever

! - Report immediately 24/7 by phone upon initial suspicion or laboratory test order

! - Report immediately 24/7 by phone

• = Report next business day

+ = Other reporting timeframe