EpiCenter

WINTER 2013/2014

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

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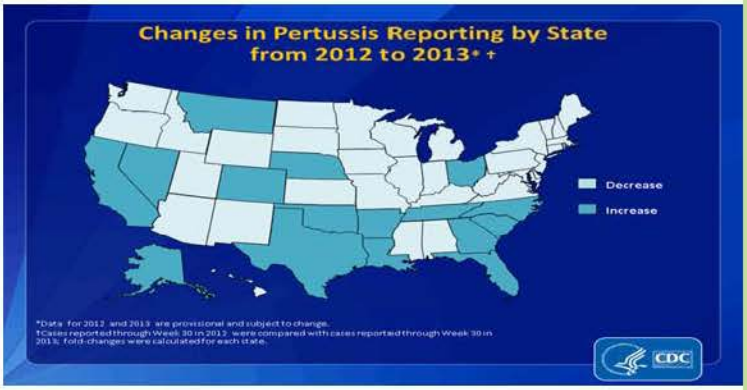
INSIDE THIS ISSUE:

Trends in Pertussis Surveillance 2012-2013

The Centers for Disease Control and Prevention (CDC), reported over 48,000 cases of pertussis in 2012, which is the highest number of cases in the United States since 1955. According to the CDC, several factors have likely contributed to this increase , including increased awareness and improved recognition of pertussis among clinicians, greater access to and use of laboratory diagnostics, especially polymerase chain reaction (PCR) testing, increased surveillance and reporting of pertussis to public health departments, and waning immunity from pertussis vaccines. According to the national statistics, the incidence rate of pertussis among infants exceeds that of all other age groups. The second highest rates of disease are observed among children 7 through 10 years old. Rates also increased in adolescents 13 and 14 years of age. 18 pertussis related deaths during 2012 were reported to CDC across the United States. Rates also increased in adolescents 13 and 14 years of age. 18 pertussis related deaths during 2012 were reported to CDC across the United States. The majority of deaths occurred among infants younger than 3 months of age.



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Hepatitis C in Young Adults Project

The Epidemiology Program of FDOH in Palm Beach County is one of 4 counties statewide that has been awarded a three year grant from CDC to participate in an enhanced hepatitis surveillance project investigating exposure risks in chronic cases of hepatitis C infections in young adults.

The Enhanced Surveillance of Chronic Hepatitis C in Young Adults project has two main goals. The first is to collect information on common risk factors for hepatitis C in young adults aged 18-30 years. The second goal is to identify cases of acute hepatitis C that may have been misclassified as chronic cases.

This age group was chosen because diagnoses of hepatitis C infections in younger adults, as compared to the Baby Boomer generation (born between 1946 – 1964), is more likely to represent recent infections due to recent or current behaviors that can be targeted for intervention.

The project consists of a review of all hepatitis C labs to determine eligibility according to age, residence and diagnostic criteria. Eligible participants are then contacted to facilitate

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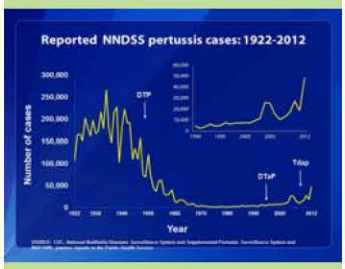
Fast Facts About Pertussis From The CDC



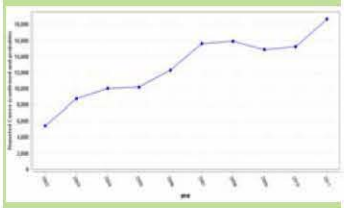
- Worldwide, there are an estimated 30-50 million cases of pertussis and about 300,000 deaths per year. Since the 1980s, there has been an increase in the number of reported cases of pertussis in the U.S. In 2010, an increase in reported cases among 7-10 year olds was seen. Similar trends occurred during 2012; however, a slight increase in cases was also observed among 13 and 14 year olds.
- In 2012, 48,277 cases of pertussis (whooping cough) were reported in the U.S., but many more go undiagnosed and unreported. This is the most number of cases reported in the U.S. since 1955 when 62,786 cases were reported.
- Coughing fits due to pertussis infection can last for up to 10 weeks or more; sometimes known as the "100 day cough."
- Pertussis can cause serious illness in infants, children and adults and can even be life-threatening, especially in infants.
- The most effective way to prevent pertussis is through vaccination with DTaP for infants and children and with Tdap for preteens, teens and adults — protection from the childhood vaccine fades over time.
- Vaccinated children and adults can become infected with and transmit pertussis; however, disease is less likely to be severe.
- Approximately half of infants less than 1 year of age who get pertussis are hospitalized.
- Vaccination of pregnant women with Tdap is especially important to help protect infants.
- Pertussis is generally treated with antibiotics, which are used to control the symptoms and to prevent infected people from spreading the disease.

Content source: Center for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases, Division of Bacterial Diseases August, 2013.

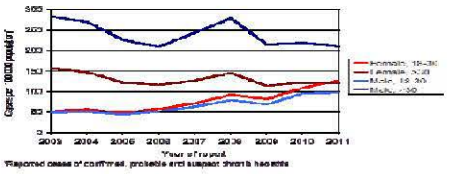
Hepatitis C in Young Adults Project Cont'd

completion of an in-depth interview, identifying risk behaviors, symptoms, medical care and treatment, and level of knowledge of preventive behaviors. Participants are referred for any needed hepatitis vaccines and mailed a guide about local services. Contacts of participants are included in referrals for vaccine and /or testing. The data is entered and forwarded to the state offices for compilation.

The goal of participation in this project is not only to contribute to the body of knowledge about hepatitis C infections in this age group but also to assist in the development of a strategy for prevention of hepatitis C infection in adolescents and young adults.

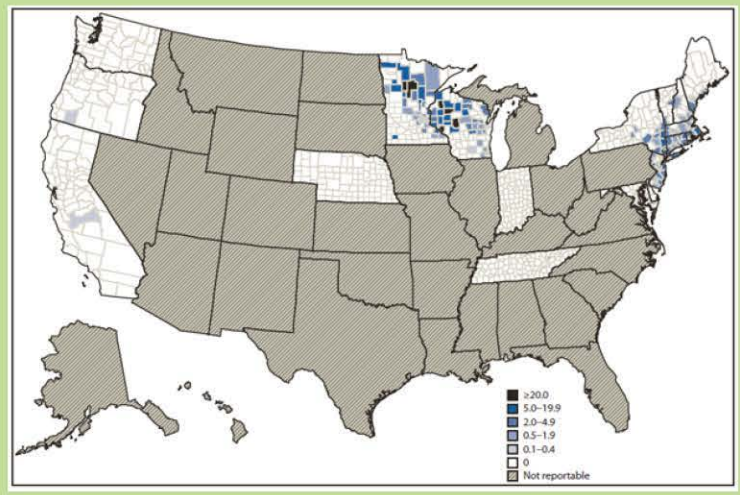


Reported Cases of Chronic Hepatitis C (confirmed and probable) in Florida, 2002-2011



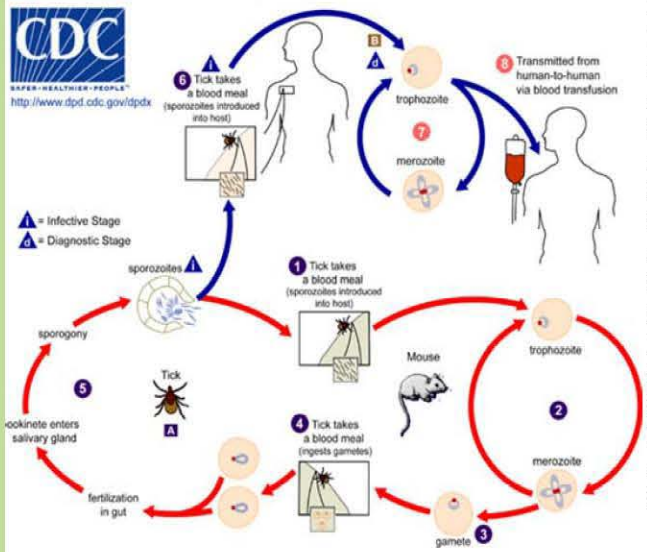
Rate of Newly Identified Chronic Hepatitis C by Sex and Age Group, Florida, 2003-2011

Travel brings Babesiosis Cases to Palm Beach County



Incidence of Human Babesiosis, 2011. CDC

Apply repellents as a protective measure to reduce your risk for babesiosis. (CDC Photo: Mary Bartlett)



The Florida Department of Health Palm Beach County Epidemiology program investigated 2 reported cases of suspected malaria that were later identified as babesiosis. Both patients had traveled to different parts of the Northeastern United States 4-6 weeks before symptom onset. Due to discrepancies between lab results for suspected malaria and exposure information, these cases were identified for additional investigation. During the investigation, state lab assistance was requested for testing for babesia. Further testing was done at the CDC lab which confirmed Babesia microti. Treatment consultation for the cases was obtained through the Centers for Disease Control and Prevention (CDC).

Babesiosis is caused by a protozoan infection of erythrocytes and shares clinical features with malaria. It is found most commonly in parts of the Northeast and upper Midwest and usually peaks during the warm months. Babesia microti is often found in white-footed mice and other small mammals. The infection is primarily transmitted by ticks, usually the blacklegged ticks or deer ticks during the nymph stage when the ticks are very small, (about the size of a poppy seed). The disease may be asymptomatic, or symptoms may appear 1 to 6 weeks after the tick bite. Symptoms include fever, chills, sweats, headache, body aches, loss of appetite, nausea, or fatigue. Treatment usually consists of a combination of 2 drugs, atovaquone plus azithromycin; or clindamycin plus quinine. Treatment of asymptomatic persons is not recommended. (Centers for Disease Control and Prevention CDC Content source: Global Health - Division of Parasitic Diseases and Malaria, 2012).

A nymphal stage *Ixodes scapularis* tick (approximately the size of a poppy seed) is shown here on the back of a penny. Credit: G. Hickling, University of Tennessee.

Influenza Surveillance Information Week 48

- The influenza activity level in Palm Beach County has remained at a mild level since the start of the 2013-2014 season. This is the same level reported in most Florida counties.
- There have been no outbreaks of Influenza or Influenza-Like-Illness re ported in Palm Beach County this year as yet. One has been reported in another county statewide.
- One pediatric influenza associated death has been reported from Palm Beach County, which is the only one this season to date in the state.
- Emergency department (ED) ILI visits have increased overall in recent weeks and the statewide percent of ED visits for ILI is slightly above typical levels for this time of year.
- In Florida, the most common influenza subtype detected at the Bureau of Public Health Laboratories (BPHL) in recent weeks has been influenza A (2009 H1N1).
- Because of low influenza activity in most regions of the state, Florida reported regional influenza activity to CDC in week 46. This activity level represents the geographic spread of influenza in Florida.

Trends in Pertussis Surveillance 2012-2013 (Continued)

During 2012, increased pertussis cases or outbreaks were reported in a majority of states. Forty-nine states and Washington, D.C. reported increases in disease in 2012 compared with 2011.

Overall in 2013, reporting of pertussis for the majority of states has declined. However, 13 states, including Florida and Washington D.C. are still seeing an increase in pertussis cases compared with the same time during 2012. For the State of Florida, the total numbers of cases of pertussis reported in Florida in 2013 have risen to the highest level since 1990.

In Palm Beach County, the trend for pertussis cases has remained elevated over the usual numbers since 2011. 2012 had a total of 39 cases reported. As of Dec.1, 2013, 29 cases had been reported to the Epidemiology Program of the FDOH in Palm Beach.

Epi Strike Team members participate in the Radiological Emergency Reception Center Full-Scale Exercise on Dec. 4, 2012

Reference Corner

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

http://www.floridahealth.gov
- Florida Department of Health

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

FLORIDA HEALTH PALM BEACH COUNTY

REPORTED COMMUNICABLE DISEASES FROM THE DIVISION OF EPIDEMIOLOGY & DISEASE CONTROL

WEEK 48, 2013 (Period from:11/24/13 to 11/30/13)	This Week	This Year	Same Time Last Year
CENTRAL NERVOUS SYSTEM AND INVASIVE DISEASES:			
Haemophilus influenzae invasive disease	0	18	21
Meningococcal disease	0	2	5
Listeriosis	0	4	2
Streptococcus pneumoniae invasive disease, drug-resistant	1	37	19
Streptococcus pneumoniae invasive disease, susceptible	0	39	23
Streptococcal disease, invasive Group A	0	27	19
Meningitis: bacterial, cryptococcal, mycotic	0	11	5
Encephalitis, other (non-arboviral)	0	1	0
Creutzfeldt-Jakob Disease (CJD)	0	0	0
Influenza-associated pediatric mortality	0	1	0
VACCINE PREVENTABLE DISEASES:			
Mumps	0	1	0
Pertussis	1	30	35
Tetanus	0	0	0
Varicella	1	19	32
HEPATITIS:			
Hepatitis A	0	6	9
Hepatitis B, acute	0	20	14
Hepatitis B, chronic	1	330	279
Hepatitis B, (HBsAg+) in pregnant women	1	70	57
Hepatitis C, acute	0	15	8
Hepatitis C, chronic	39	1769	1602
ENTERIC DISEASES:			
Giardiasis	2	69	68
Campylobacteriosis	0	154	148
Shigellosis	2	30	44
Salmonellosis	3	350	426
Cryptosporidiosis	0	28	28
Cyclosporiasis	0	1	1
Typhoid fever	0	1	2
Escherichia coli, Shiga toxin producing	0	43	37
Vibrio fluvialis	0	2	1
Vibrio alginolyticus	0	2	4
Vibrio vulnificus	0	0	0
Vibrio parahaemolyticus	0	4	1
Vibrionaceae, other	0	1	0
OTHER DISEASES:			
Human exposure to a potentially rabid animal	0	150	121
Animal rabies	0	13	4
Monkey bite	0	1	2
Brucellosis	0	1	2
Carbon monoxide poisoning	0	29	14
Dengue fever	0	14	4
Hansen's disease (Leprosy)	0	0	0
Hemolytic uremic syndrome (HUS)	0	0	0
Lead poisoning	0	33	33
Legionellosis	0	26	21
Lyme disease	0	7	4
Malaria	0	6	4
Mercury poisoning	0	0	1
Pesticide-related illness or injury	0	4	4
Toxoplasmosis	0	1	1

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 60 days old with disseminated infection with involvement of liver, encephalitis 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 intracranial 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 encephalitis
- • 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 encephalitis 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* (meningitis 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 (Rubeola)
- ! Melioidosis
- • Meningitis (bacterial, cryptococcal, mycotic)
- ! Meningococcal disease (includes meningitis and meningococcemia)
- • Mercury poisoning
- • Mumps
- ☎ Neurotoxic shellfish poisoning
- ☎ Pertussis
- • Pesticide-related illness and injury
- ! Plague
- ! Poliomyelitis, paralytic and non-paralytic
- • Psittacosis (Ornithosis)
- • Q Fever
- ☎ Rabies (human, animal)
- ! Rabies (possible exposure)
- ! Ricin toxicity
- • Rocky Mountain spotted fever
- ! Rubella (including congenital)
- • St. Louis encephalitis (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)
- ! Vaccinia disease
- • Varicella (Chickenpox)
- • Varicella mortality
- ! Venezuelan equine encephalitis 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 encephalitis 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