EpiNotes

Florida Department of Health - Hillsborough County Disease Surveillance Newsletter February 2014

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TO REPORT A DISEASE: **Epidemiology** 813.307.8010 After Hours Emergency 813.307.8000

Food and Waterborne Illness

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Sexually Transmitted Disease

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Tuberculosis

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Pertussis Information

Adlin Santiago, RN

Pertussis is an acute infectious, reportable disease caused by the bacterium Bordetella pertussis. Humans are the only known hosts. Transmission occurs by close contact with respiratory secretions or airborne droplets, most commonly sneezing, coughing, or sharing personal items such as utensils, glasses, or toothbrushes. Neither infection nor immunization provides lifelong immunity.

The clinical course of pertussis is divided into three stages:

- 1. Catarrhal stage: Begins with runny nose, sneezing, low-grade fever, and a mild cough. The cough gradually becomes more severe. This stage lasts about 1-2 weeks.
- 2. Paroxysmal stage: Paroxysms or bursts of numerous, rapid coughs, and a high pitched whoop on inspiration. During paroxysm attacks the patient may become cyanotic. Vomiting or exhaustion commonly follows the episode. The patient does not appear to be ill between attacks. Duration of this stage is about 1 to 6 weeks but may persist for up to 10 weeks.
- 3. **Convalescent stage**: Cough becomes less severe and disappears in about 2 to 3 weeks.

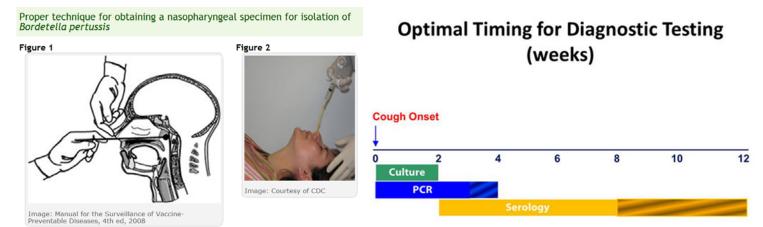
Infected people are most contagious during the catarrhal stage and the first 2 weeks after cough onset.

The most common complication, and the cause of most pertussis related deaths, is secondary bacterial pneumonia. Other complications are seizures, encephalopathy due to hypoxia, otitis media, anorexia, dehydration, pneumothorax, hernias, rectal prolapse, difficulty sleeping, urinary incontinence, and rib fracture. Young infants are at increased risk of respiratory failure attributable to apnea or secondary bacterial pneumonia and are at risk of cardiopulmonary failure from pulmonary hypertension.

Bordetella pertussis is a small, aerobic gram-negative rod, requiring a special media for isolation. Culture or PCR is used to detect organism. Specimens from the posterior nasopharynx, not the throat, should be



obtained using a Dacron or Rayon swab, and not a cotton swab. See Figures 1 and 2 for proper technique for obtaining this specimen. Cultures are less likely to be positive if performed later in the course of illness (more than 2 weeks after cough onset), on specimens from persons who have received antibiotics, or have been completely vaccinated. Serology testing for titers is also available and can be performed on specimens collected up to 12 weeks following cough onset. See the chart below for the optimal timing of pertussis diagnostic testing.



Antimicrobial agents administered during the catarrhal stage may ameliorate the disease. After the cough is established, antimicrobial agents have no discernible effect on the course of illness but are recommended to limit spread of organisms to others. Azithromycin, Erythromycin, or Clarithromycin are the first line agents for treatment and prophylaxis. Household and other close contacts that are unimmunized or underimmunized should have pertussis immunization initiated or continued using recommended schedule by age.

Chemoprophylaxis is recommended for all household contacts of the patient and other close contacts including children in child care, young infant, pregnant woman, and person who has contact with infants. **Chemoprophylaxis should be given even if the contact is fully immunized therefore limiting secondary transmission**. If 21 days have elapsed since onset of cough, chemoprophylaxis has limited value but should be considered for high risk household contacts. The agents, doses, and duration of prophylaxis are the same as for treatment.

Health care facilities should maximize efforts to immunize all health care professionals with Tdap and to prevent transmission of pertussis. All health care staff should observe respiratory precautions when examining a patient with a cough illness or suspected pertussis. Recommended prevention measures include vaccination, proper hand washing, respiratory etiquette, healthy hydration, rest, and social isolation when ill.

The Florida Department of Health in Hillsborough County Epidemiology Program is charged with the control of communicable diseases and conditions that may significantly affect public health as specified in Florida Administrative Code (F.A.C.) Chapter 64D-3. FDOH-Hillsborough is requesting health care providers notify the Epidemiology Program of any confirmed or suspect pertussis cases by phone at (813) 307-8010 or fax at (813) 276-2981.

Influenza Update (Weeks 3-7)

Hillsborough County

- In the last five weeks, the County has reported MILD flu activity
- In the same time frame, we have investigated three influenza outbreaks in elementary schools
 - o Influenza A and B were confirmed via rapid test in all three outbreaks.
- We are still receiving reports of positive influenza labs, including hospitalizations and ICU admission from hospitals and private providers

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 At this time, more than 60% of the reported hospitalizations this flu season have been in people 18 to 64 years old.

- o Average age for admission is 48.9 years old
- Average age for ICU admission is 58 years old
- All adults who were hospitalized with flu had chronic underlying conditions, such as obesity, metabolic disorders (diabetes), and cardiovascular disease.
- So far, FIVE influenza associated deaths have been reported since January
 - All influenza Type A
 - No pediatric cases
 - o Average age: 43.6 years old
 - o Four males and one female
 - o All had chronic underlying medical conditions

Statewide

- Most Florida counties reported mild influenza activity. In week 7, nine counties reported increasing influenza
 activity; 35 counties indicated activity is at a plateau
- Emergency department (ED) and urgent care center (UCC) ILI visits have decreased in recent weeks and is as expected for this time of year; although still too early to tell, it appears that the influenza season has peaked.
- While activity statewide is at expected levels, those at high risk for infection, such as pregnant women are among those presenting to EDs and UCCs for care.
- 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).
- No pediatric influenza-associated deaths were reported in week 7. Three pediatric influenza-associated deaths have been reported in the 2013-2014 season.
- Because of regional influenza activity in some regions of the state, Florida reported regional influenza activity to CDC in week 7. This activity level represents the geographic spread of influenza in Florida.

CDC INFLUENZA DIVISION KEY POINTS

- The predominant virus so far this season is H1N1, which is an Influenza Type A.
- This is the H1N1 virus that emerged in 2009 to cause a pandemic. This virus has continued to circulate since the
 pandemic as a seasonal flu virus, but this is the first flu season since the pandemic that this virus has circulated
 so widely.
- Seasonal flu is responsible for severe illness and death every year, but who is most affected each season can vary depending on the predominant circulating virus.
- Throughout the season, CDC has received several reports of severe flu illness among young and middle-aged adults, many of whom were infected with the 2009 H1N1 virus. Some hospitalizations and deaths have been reported.
- These severe flu outcomes are a reminder that flu can be a very serious disease for anyone, including young, previously healthy adults.
- CDC urges people who still have not been vaccinated to get vaccinated now.
- All flu vaccines this season are designed to protect against H1N1.
- Influenza vaccination is especially important for people in the most vulnerable groups.
- People at high risk for serious flu complications include: people with underlying chronic medical conditions such
 as asthma, diabetes, heart disease, or neurological conditions; pregnant women; those younger than 5 years or
 older than 65 years of age; or anyone with a weakened immune system. A full list of high risk factors is available
 at http://www.cdc.gov/flu/about/disease/high_risk.htm

Reportable Disease Surveillance Data

Annual Totals Year-to-date **Disease Category** 3 Year **Average** Jan 13 Jan 14 **Vaccine Preventable Diseases** Diphtheria 0.00 Measles 0.00 0.33 Mumps Pertussis 82.00 Poliomyelitis 0.00 Rubella 0.00 Smallpox 0.00 Tetanus 0.00 Varicella 52.00 **CNS Diseases & Bacteremias** Creutzfeldt-Jakob Disease 1.33 Haemophilus influenzae (Invasive Disease) 12.67 In Children 5 Years or Younger 2.00 Listeriosis 3.00 12.33 Meningitis (Bacterial, Cryptococcal, Mycotic) Meningococcal Disease 3.33 Staphylococcus aureus (VISA, VRSA) 1.00 Streptococcal Disease, Group A (Invasive Disease) 17.33 Streptococcus pneumoniae (Invasive Disease) 71.33 **Drug Resistant** 37.33 34.00 Drug Susceptible **Enteric Infections** Campylobacteriosis* 119.33 Cholera 0.33 58.00 Cryptosporidiosis Cyclospora 4.00 Escherichia coli, Shiga toxin-producing (STEC)** 25.33 Giardiasis† 63.67 Hemolytic Uremic Syndrome 1.00 328.00 Salmonellosis Shigellosis 159.00 Typhoid Fever 0.00 Viral Hepatitis Hepatitis A 6.33 Hepatitis B (Acute) 40.33 Hepatitis C (Acute) 23.67 Hepatitis +HBsAg in Pregnant Women 39.67 Hepatitis D, E, G 0.33

Reportable Disease Surveillance Data

	Annual Totals				Year-to-date			
Disease Category	2011	2012	2013	3 Year Average	Jan 13	Jan 14		
Vectorborne, Zoonoses								
Dengue	4	5	4	4.33	2	0		
Eastern Equine Encephalitis††	0	0	1	0.33	0	0		
Ehrlichiosis/Anaplasmosis	0	0	1	0.33	0	0		
Leptospirosis	0	0	0	0.00	0	0		
Lyme Disease	7	9	12	9.33	0	0		
Malaria	7	7	8	7.33	0	1		
Plague	0	0	0	0.00	0	0		
Psittacosis	0	0	0	0.00	0	0		
Q Fever (Acute and Chronic)	0	0	0	0.00	0	0		
Rabies (Animal)	2	5	0	2.33	0	2		
Rabies (Human)	0	0	0	0.00	0	0		
Rabies (Possible Exposure)	94	91	102	95.67	8	15		
Rocky Mountain Spotted Fever	0	1	1	0.67	0	0		
St. Louis Encephalitis††	0	0	0	0.00	0	0		
Toxoplasmosis	1	1	1	1.00	1	0		
Trichinellosis	0	0	0	0.00	0	0		
Tularemia	0	0	0	0.00	0	0		
Typhus Fever (Epidemic and Endemic)	2	0	0	0.67	0	0		
Venezuelan Equine Encephalitis††	0	0	0	0.00	0	0		
West Nile Virus††	0	1	0	0.33	0	0		
Western Equine Encephalitis††	0	0	0	0.00	0	0		
Yellow Fever	0	0	0	0.00	0	0		
Others								
Anthrax	0	0	0	0.00	0	0		
Botulism, Foodborne	0	0	0	0.00	0	0		
Botulism, Infant	0	0	0	0.00	0	0		
Brucellosis	1	0	0	0.33	0	0		
Glanders	0	0	0	0.00	0	0		
Hansen's Disease (Leprosy)	0	2	2	1.33	0	0		
Hantavirus Infection	0	0	0	0.00	0	0		
Legionellosis	12	8	18	12.67	0	0		
Melioidosis	0	0	0	0.00	0	0		
Vibriosis	8	14	13	11.67	0	0		

Reportable Disease Surveillance Data

	Annual Totals				Year-to-date		
Disease Category	2011	2012	2013	3 Year Average	Jan 13	Jan 14	
Chemicals/Poisoning							
Arsenic	0	0	0	0.00	0	0	
Carbon Monoxide	13	4	4	7.00	0	0	
Lead	193	330	329	284.00	4	1	
Mercury	0	0	0	0.00	0	0	
Pesticide	15	4	4	7.67	0	0	
Influenza							
Influenza, Pediatric Associated Mortality	0	0	1	0.33	0	0	
Influenza, Novel or Pandemic Strain	7	0	0	2.33	0	0	
HIV/AIDS							
AIDS	192	172	231	198.33	5	12	
HIV Infection	318	327	403	349.33	11	35	
STDs							
Chlamydia	7288	7124	7220	7210.67	1010	1091	
Gonorrhea	2343	2160	2023	2175.33	309	269	
Syphilis, Congenital	3	6	3	4.00	1	0	
Syphilis, Latent	134	129	189	150.67	20	19	
Syphilis, Early	91	117	124	110.67	18	25	
Syphilis, Infectious	124	155	156	145.00	26	35	
Tuberculosis							
ТВ	46	51	54	50.33	4	0	
Food and Waterborne Illness Outbreaks							
Food and Waterborne Cases	13	74	73	53.33	6	0	
Food and Waterborne Outbreaks	3	4	4	3.67	1	0	



Creutzfeldt-Jakob disease (CJD)

Florida Department of Health - Hillsborough County

Division of Community Health • Office of Epidemiology P.O. Box 5135

Tampa, FL 33675-5135

PHONE: (813) 307-8010 • FAX: (813) 276-2981 After Hours Reporting All Diseases - (813) 307-8000

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 *Reporting requirements for laboratories difference of the control of the co		ditions in Florida Practit		
	HIV – (813) 307-8011		Cryptosporidiosis		Ricin toxicity
120,	DO NOT FAX		Cyclosporiasis	- 	Rocky Mountain spotted fever
+	Acquired Immune Deficiency Syndrome (AIDS)	•	Dengue		Rubella (including congenital)
	Human Immunodeficiency Virus (HIV)	 	Diphtheria	-	St. Louis encephalitis (SLE) virus disease
+	infection (all, and including neonates born to an infected woman, exposed newborn)	-	Eastern equine encephalitis virus disease	•	(neuroinvasive and non-neuroinvasive)
STD -	(813) 307- 8022	•	(neuroinvasive and non-neuroinvasive)	•	Salmonellosis
	Fax (813) 307-8027	•	Ehrlichiosis	•	Saxitoxin poisoning (including paralytic
•	Chancroid	•	Encephalitis, other (non-arboviral)		shellfish poisoning)(PSP) Severe Acute Respiratory Syndrome-
•	Chlamydia		Enteric disease due to: Escherichia coli, O157:H7	<u> </u>	associated Coronavirus (SARS-CoV) disease
•	Conjunctivitis (in neonates ≤ 14 days old)		Escherichia coli, other pathogenic		Shigellosis
•	Gonorrhea	2111	E. coli including entero- toxigenic, invasive, pathogenic, hemorrhagic,		Smallpox Staphylococcus aureus (infection with
•	Granuloma inguinale Herpes Simplex Virus (HSV) (in infants up to		aggregative strains and shiga toxin	711	intermediate or full resistance to
	60 days old with disseminated infection with		positive strains		vancomycin, VISA, VRSA) Staphylococcus enterotoxin B (disease due
•	involvement of liver, encephalitis and infections limited to skin, eyes and mouth;	<u>•</u>	Giardiasis (acute)		to)
	anogenital in children ≤ 12 years old)	<u>!</u>	Glanders Haemophilus influenzae (meningitis and	•	Streptococcal disease (invasive, Group A)
_	Human papilloma virus (HPV) (associated laryngeal papillomas or recurrent respiratory	!	invasive disease)	•	Streptococcus pneumoniae (invasive disease)
•	papillomatosis in children ≤ 6 years old;	•	Hansen's disease (Leprosy)	•	Tetanus
	anogenital in children ≤ 12 years) Lymphogranuloma venereum (LGV)	2111	Hantavirus infection	•	Toxoplasmosis (acute)
	Syphilis	2111	Hemolytic uremic syndrome	•	Trichinellosis (Trichinosis)
	Syphilis (in pregnant women and neonates)	2111	Hepatitis A	!	Tularemia
тв со	NTROL - (813) 307-8015 x 4758	•	Hepatitis B, C, D, E, and G		Typhoid fever
	Fax- (813) 975-2014	•	Hepatitis B surface antigen (HBsAg) (positive in a pregnant woman or a child up	!	Typhus fever (disease due to <i>Rickettsia</i> prowazekii infection)
•	Tuberculosis (TB)	l	to 24 months old)	•	Typhus fever (disease due to Rickettsia
CANC	ER – Tumor Registry Database Cancer (except non-melanoma skin cancer,	<u>!</u>	Influenza due to novel or pandemic strains		typhi, R. felis infection) Vaccinia disease
+	and including benign and borderline	2111	Influenza-associated pediatric mortality (in persons < 18 years)		Varicella (Chickenpox)
EPIDE	intracranial and CNS tumors) MIOLOGY – (813) 307-8010		Lead Poisoning (blood lead level ≥ 10μg/dL);		Varicella (offickeripox)
	Fax (813) 276-2981	•	additional reporting requirements exist for hand held and/or on-site blood lead testing		Venezuelan equine encephalitis virus
!	Any disease outbreak		technology, see 64D-3 FAC	!	disease (neuroinvasive and non- neuroinvasive)
	Any case, cluster of cases, or outbreak of a disease or condition found in the general	•	Legionellosis	•	Vibriosis (Vibrio infections)
	community or any defined setting such as a	•	Leptospirosis	-	Viral hemorrhagic fevers (Ebola, Marburg,
	hospital, school or other institution, not listed below that is of urgent public health	2111	Listeriosis	- -	Lassa, Machupo) West Nile virus disease (neuroinvasive and
1	significance. This includes those indicative	•	Lyme disease	•	non-neuroinvasive)
	of person to person spread, zoonotic spread, the presence of an environmental, food or	•	Malaria	•	Western equine encephalitis virus disease (neuroinvasive and non-neuroinvasive)
	waterborne source of exposure and those that result from a deliberate act of terrorism.	!	Measles (Rubeola)		Yellow fever
•	Amebic encephalitis	_ !	Melioidosis		
•	Anaplasmosis	•	Meningitis (bacterial, cryptococcal, mycotic)		
!	Anthrax	!	Meningococcal disease (includes meningitis	! :	Report immediately 24/7 by phone
•	Arsenic poisoning	ļ	and meningococcemia)		upon initial suspicion or laboratory test order
	Botulism (foodborne, wound, unspecified,	•	Mercury poisoning	~~	Report immediately 24/7
•	other) Botulism (infant)	<u>*************************************</u>	Mumps Neurotoxic shellfish poisoning		by phone
	Brucellosis		Pertussis	• =	Report next business day
•	California serogroup virus (neuroinvasive	•	Pesticide-related illness and injury	+ =	Other reporting timeframe
	and non-neuroinvasive disease)		Plague		
· .	Carpon monovido poisoning		Poliomyelitis, paralytic and non-paralytic		
	Carbon monoxide poisoning Cholera	 	Psittacosis (Ornithosis)		
<u> </u>		-	Q Fever		
	Ciguatera fish poisoning (Ciguatera) Congenital anomalies	- This	Rabies (human, animal)		
-	Congenital anomalies		Dabias (massible superus)		

Rabies (possible exposure)

FLORIDA DEPARTMENT OF HEALTH - PRACTITIONER DISEASE REPORT FORM

(Please complete the following information to report the suspect or diagnosis of a disease which is reportable under Florida Administrative Code 64D-3.) DH2136,10/06 Patient Information: ☐ Please check here if you would like more copies of the form Area Code + Phone Number Last Name MI First Name Date of Birth (MMDDYYYY) Social Security Number (no dashes) Hispanic Male Ethnicity: Gender: Address Non-Hispanic Female Unknown City State Zip Code Disease Specific Information: Other:_ Pregnancy Status: Date of Onset: Race: Black Disease Fatal? Yes No Not Pregnant **Patient** Asian Hospitalized? Discharge Date: Pregnant American Indian/AlaskaNative Number of Months_ Hospital Name: Native Hawaiian/Pacific Islander Medicaid Number or Insurance: Unknown Disease or Condition Reporting: For HIV/AIDS and HIV exposed newborns please report per forms indicated in F.A.C. 64D-3. ☐ Enteric disease due to Escherichia ☐ Legionellosis □ Severe acute respiratory syndrome (SARS) Report immediately upon: coli O157:H7 Leptospirosis Enteric disease due to other path- Listeriosis ☐ Shigellosis = Initial suspicion 24/7 by phone ogenic Escherichia coli ☐ Lyme disease = Diagnosis 24/7 by phone Giardiasis (acute) ☐ Lymphogranuloma Venereum Staphylococcus aureus, intermediate Glanders . T (LGV) or full resistance to vancomycin ☐ Anthrax 🗗 🛚 Staphylococcus enterotoxin B ☐ Botulism, foodborne ◢■■ Gonorrhea Malaria Measles (Rubeola) П Granuloma inguinale Streptococcal disease, invasive Botulism, infant Haemophilus influenzae, meningitis Melioidosis 2 1 Group A □ Botulism, other/wound/unspecified 2 ■ and invasive disease Meningitis, bacterial, cryptococcal, Streptococcal pneumoniae, invasive Brucellosis 🗗 📱 П Hansen's disease other mycotic disease П California serogroup virus disease Hantavirus infection Meningococcal disease Syphilis П Campylobacteriosis П Hemolytic uremic syndrome Mercury poisoning Syphilis, pregnancy or neonate □ Chancroid Hepatitis, acute A Chlamydia Mumps Tetanus П Hepatitis, acute B, C, D, E, G Neurotoxic shellfish poisoning Toxoplasmosis, acute Cholera 🗗 🛚 Pertussis 2 Hepatitis, chronic B, C Trichinellosis (Trichinosis) Ciguatera fish poisoning Pesticide-related illness and injury \square Tuberculosis (TB) П Hepatitis B surface antigen ☐ Clostridium perfringens epsilon toxin positive in pregnant woman or Plague F Tularemia F □ Conjunctivitis, in neonatal ≤14 days child up to 24 months Poliomyelitis 2 1 Typhoid fever Creutzfeldt-Jakob disease (CJD) Herpes simplex virus (HSV) in Psittacosis (Ornithosis) Typhus fever, endemic Cryptosporidiosis Typhus fever, epidemic 🖅 🛚 infants up to six months O Fever П Cyclosporiasis Rabies, animal HSV anogenital in children≤12 yrs □ Vaccinia disease П Dengue Diphtheria 🗗 📱 Human papilloma virus (HPV) ☐ Rabies, humanæ ☐ Varicella (chickenpox) Date of vaccination __/_ anogenital in children≤12 yrs □ Rabies possible exposure Eastern equine encephalitis HPV assocated laryngeal papillo-(animal bite) at ! Varicella mortality П virus disease П mas or recurrent respiratory Ricin toxicity: Venezuelan equine encephalitis Ehrlichiosis, human granulocytic virus disease 💵 🛚 Rocky Mountain spotted fever papillomatosis in children ≤6 yrs (HEG) ☐ Rubella ■ HPV cancer associated strains Vibriosis, Vibrio infections Ehrlichiosis, human monocytic ☐ Influenza – due to novel or pan-☐ St. Louis encephalitis virus disease ☐ Viral hemorrhagic fevers 🞏 📱 (HME) demic strains 💵 📱 □ Salmonellosis West Nile virus disease Ehrlichiosis, human other or Influenza - assocated pediatric ☐ Saxitoxin poisoning, including Western equine encephalitis virus unspecified species mortality in persons <18 yrs 25 paralytic shellfish poisoning (PSP) disease ☐ Encephalitis, other (non-arboviral) ☐ Yellow fever ♣ ▮ Lead poisoning Any Outbreak, grouping, or clustering of patients having similar disease, symptoms, syndromes: Medical Information: Provider Information: Diagnosis Date: Name: Please attach lab Test Conducted? record (if available) Address: Lab Name: City, State, Zip: Lab Results: Lab Test Date: Provider Fax: () Test Method: Treatment Provided? Email: Treatment: **County Health Department Fax:** 813-276-2981 Medical Record Number: CHD After-Hours Phone Number: 813-307-8000