



Epi Watch

A Monthly Epidemiology Newsletter



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(727) 820-4270

Epi Watch is a monthly newsletter from the Pinellas County Health Department. For more information, or to add your e-mail address to the distribution list, please contact Andrea Dopico:
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"The reason for collecting, analyzing and disseminating information on a disease is to control that disease. Collection and analysis should not be allowed to consume resources if action does not follow."

Foege, W.H. et al. (1976). *Int. J of Epidemiology*, 5:29-37.

Chagas Disease

Karen Alelis, MPH

Chagas disease is caused by a parasite, *Trypanosoma cruzi* (*T. cruzi*), which is transmitted through contact with the feces of an infected blood-sucking insect called a triatomine bug. After feeding on the host, these bugs defecate near the bite wound and *T. cruzi* is transmitted through the wound or mucosal membranes. Triatomine bugs are common in rural areas of Latin America where there are poor housing conditions but are also found in the United States. There are an estimated 100,000 infected persons in the United States, of which most acquired Chagas disease in endemic countries. Although vectorborne transmission of Chagas disease is rare in the United States, infection can occur from blood transfusion, organ transplantation, or mother to baby transmission.

Acute infection of Chagas disease may be mild or asymptomatic presenting as fever or swelling near the site of the bite wound, and although rare, may lead to severe inflammation of the heart muscle or brain. After the acute phase that can last from a few weeks to months, infected persons enter the chronic phase. Approximately 70%-80% of *T. cruzi* infected people in the chronic stage do not show any signs or symptoms of Chagas disease which can last many years or throughout life whereas about 20%-30% of infected individuals progress to disease and develop serious cardiac or gastrointestinal complications.

Laboratory diagnostics further supports clinical evidence of Chagas disease through the observation of *T. cruzi* parasite in a blood smear by microscopic examination. However, parasites are only detected by blood smear in the acute phase when parasites are observed circulating in blood. Upon confirmation of Chagas disease, treatment with either of two drugs, Benznidazole or nifurtimox, preferably benznidazole should be given but can only be obtained from the Centers for Disease Control and Prevention (CDC). Treatment is most effective if given during the acute phase of infection.

On December 13, 2006, the US Food and Drug Administration approved a screening test to identify infection with Chagas disease in donated blood. In response, Florida Blood Services began screening blood donations for Chagas disease on this date. Infected persons with *T. cruzi* should be advised not to donate blood and their family members should be offered screening if they have the same exposure history or they are children of infected women. Most of the newly diagnosed patients identified as having a *T. cruzi* infection through blood donor screening will not show any signs of infection and will be in the chronic phase.

Currently, Chagas disease is not a reportable disease/condition in Florida. However, if persons infected with *T. cruzi* are identified through blood donor screening, the Pinellas County Health Department is an available resource for disease and treatment information.

For additional information on Chagas Disease, please visit: <http://www.cdc.gov/chagas/factsheet.html>

Selected Reportable Diseases in Pinellas County

Disease	2007 November	2007 Year-to-Date	2006 Year-to-Date	2006 Total
AIDS	22	160	201	220
Animal Bite, PEP Recommended	3	30	37	38
Animal Rabies		1		
Arboviral Illness (Human):				
Dengue		2	3	3
EEE				
SLE				
WNV		1		
CA/LaCrosse				
Campylobacteriosis	5	44	25	28
Chlamydia	260	3140	2689	2961
Creutzfeldt-Jakob Disease (CJD)		1		1
Cryptosporidiosis		15	8	9
Cyclosporiasis		1		
<i>E. coli</i> O157:H7		1	2	2
<i>E. coli</i> Shiga Toxin (+)	1	14	2	3
Giardiasis	2	24	32	37
Gonorrhea	98	1383	1518	1646
<i>H. influenzae</i> :				
Meningitis				
Pneumonia		2	3	3
Primary Bacteremia	2	5	4	5
Epiglottitis				
Hansen's Disease		2		
Hemolytic Uremic Syndrome (HUS)			2	2
Hepatitis, Acute Viral:				
A	1	6	5	5
B	3	21	20	24
C		6	9	9
Hepatitis B: Pregnant Woman +HBsAg	3	31	23	27
Hepatitis, Chronic Viral				
B	23	238	149	186
C	110	1549	1228	1581
HIV	20	237	156	173
Lead Poisoning:				
Total:	1	28	21	22
Children < 6 years:	1	6	5	6
Legionellosis		9	12	13
Listeriosis			2	2
Lyme Disease		10	2	3
Malaria		1	3	3
Meningitis:				
Group B Strep				
<i>S. pneumoniae</i>	1	5	2	2
Other Bacterial		4	7	10
Meningococcal Disease		1	6	7
Mercury Poisoning			3	5
Mumps				
Pertussis	1	8	5	5
Rocky Mountain Spotted Fever		1	3	3
Salmonellosis	24	205	155	175
Shigellosis		39	18	19
Streptococcal Disease, Inv. Group A	4	14	14	16
<i>S. pneumoniae</i> , Inv. Disease (DR)	3	37	17	18
<i>S. pneumoniae</i> , Inv. Disease (Suscept)	1	23	21	25
Syphilis:				
Total	10	117	131	140
Infectious (P and S)	3	60	36	38
Early Latent	4	34	56	59
Congenital				
Late Syphilis (Late Latent; Neurosyphilis)	3	23	39	43
Tuberculosis	2	34	27	30
<i>Vibrio</i> Infections	2	12	6	6

Provisional cases reported by the Pinellas County Health Department. Blank cells indicate no cases reported.

For a complete list of reportable diseases and guidelines for reporting, please visit: http://www.doh.state.fl.us/disease_ctrl/epi/index.html