



Epi Watch

A Monthly Epidemiology Newsletter



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(other than HIV/AIDS) use:
(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.

Syndromic Surveillance at the Pinellas County Health Department

Tara Richardson, MPH

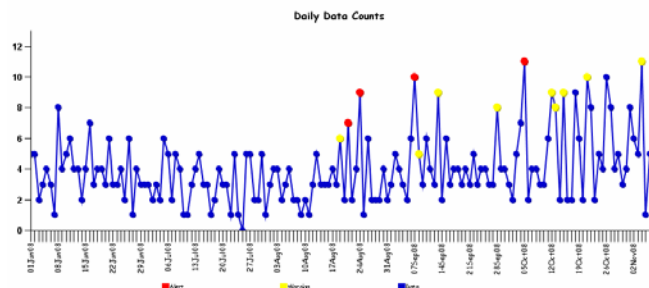
Syndromic Surveillance is a very important part of the daily activities at the Pinellas County Health Department (PinCHD). These activities are carried out to monitor and detect events that may be early warning signals of an epidemic or a potential bioterrorism-related incident. On a daily basis, eleven (11) hospitals in Pinellas County electronically transmit chief complaint data from their emergency departments to the Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE) via File Transfer Protocol (FTP). ESSENCE is a data management/analysis system developed by the John Hopkins University in conjunction with the Department of Homeland Security. ESSENCE analyzes the chief complaints by grouping them into categories of similar complaints, known as syndromes. The program looks for syndromes that are occurring more frequently than expected.

The data that is transmitted contains patient age, sex, chief complaint, time of visit, race/ethnicity, discharge disposition (e.g. admitted, discharged, etc), zip code, and hospital name. No patient identifying information is included. Each chief complaint is then assigned into one of the following syndrome categories: respiratory, gastrointestinal, hemorrhagic, influenza-like illnesses, shock/coma, neurological, fever, rash, injury, botulism-like and other (e.g. asthma). ESSENCE performs automatic data analysis, establishing a baseline with a 28-day average (Estimated Weighted Moving Average). The data is monitored on a daily basis by epidemiologists at the PinCHD for statistically significant increases in activity or any other situation that may be of public health concern. If something is detected, the PinCHD staff will contact the hospitals to obtain further information.

While ESSENCE was originally intended to serve as an early warning system, it is also used to gather information such as influenza activity levels, animal bites within a region, and emergency department visits after a hurricane or during events that draw a large number of people (World Series, Super Bowl, July 4th Celebrations).

The World Series was a recent event of particular interest to the PinCHD. The first two games were hosted in St. Petersburg, Florida, on October 22 and 23, 2008. There were a large number of visitors to the area, thus creating many public health implications. It was assumed that there would be multiple syndromic alerts indicating outbreaks of foodborne illnesses, motor vehicle accidents, or other events. Thankfully, the games took place that week without any major incident. The PinCHD will continue to monitor the ESSENCE system on a regular basis, especially during Super Bowl XLIII, which will be hosted in Tampa, Florida on February 1, 2009. For further information, the author may be contacted by calling (727) 824-6932 or by e-mail: Tara_Richardson@doh.state.fl.us

Influenza-Like Illnesses (June 2008 to November 2008)



ILI Graph: This is an example of a graph produced by ESSENCE. Now that we are in the Influenza season, we expect to see increases in the number of emergency room visits for chief complaints that fall under the Influenza-Like-Illnesses (ILI) syndrome (i.e. cough, cold, fever)

Selected Reportable Diseases in Pinellas County

Disease	2008 October	2008 Year-to-Date	2007 Year-to-Date	2007 Total
AIDS	13	164	136	168
Animal Rabies	1	2	1	1
Arboviral Illness (Human):			2	2
Dengue				
EEE				
SLE				
WNV			1	1
CA/LaCrosse				
Campylobacteriosis	6	35	40	47
Chlamydia	370	3258	2841	3454
Creutzfeldt-Jakob Disease (CJD)		2		1
Cryptosporidiosis	2	10	15	15
Cyclosporiasis		5	1	1
<i>E. coli</i> O157:H7		2	1	1
<i>E. coli</i> Shiga Toxin (+)		6	12	12
Giardiasis	5	26	22	27
Gonorrhea	115	1231	1268	1516
<i>H. influenzae</i> :		5	3	5
Invasive Disease			2	2
Hansen's Disease			2	2
Hemolytic Uremic Syndrome (HUS)				
Hepatitis, Acute Viral:				
A	1	3	5	6
B	4	21	18	22
C		3	6	7
Hepatitis B: Pregnant Woman +HBsAg	4	32	28	33
Hepatitis, Chronic Viral				
B	7	181	215	265
C	84	1049	1439	1743
HIV	24	259	206	249
HIV, Perinatally exposed infants (# born to an infected mother)	1	19	14	19
Lead Poisoning: Children < 6 years:		3	4	6
Legionellosis	1	6	8	8
Listeriosis		1		1
Lyme Disease	1	9	4	12
Malaria		1	1	1
Meningitis:				
Bacterial, Cryptococcal, Mycotic		3	4	6
Meningococcal Disease		5	1	3
Mercury Poisoning				
Mumps				
Pertussis	2	11	7	8
Rabies, possible exposure	7	47	29	42
Rocky Mountain Spotted Fever				
Salmonellosis	21	167	180	220
Shigellosis	2	6	35	39
Streptococcal Disease, Inv. Group A	2	7	10	15
<i>S. pneumoniae</i> , Inv. Disease (DR)	1	23	34	39
<i>S. pneumoniae</i> , Inv. Disease (Suscept)	4	22	22	24
Syphilis:				
Total	9	115	115	147
Infectious (P and S)	1	51	60	72
Early Latent	4	40	31	46
Congenital				
Late Syphilis (Late Latent; Neurosyphilis)	4	24	24	29
Tuberculosis	4	24	32	39
<i>Vibrio</i> Infections		7	10	11

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_ctr/epi/index.html