EPI INVESTIGATOR

The Alachua County Health Department

Summer 2007

Alachua County

"Improving Public Health in Our Community Through Cooperation"

Alachua County Health Department
(352) 334-7900

To report a disease, phone or fax the appropriate office below:

Director
Tom Belcuore, MS
Tom_Belcuore@doh.state.fl.us
(352) 334-7902

Environmental Health
Director Paul Myers, MS
(352) 334-7931

Disease Control
Emily Wilson, R.S., MPH
(352) 334-7900 ext. 3480

HIV/AIDS Surveillance
Rick Trachsel
(352) 334-7968
Patti Carnuccio
(352) 334-7967

Epidemiology
Isabel Anasco, R.N.,B.S.N.
(352) 334-8827
Fax (352) 334-8818

Sexually Transmitted Disease
George Gibbs, MPH
(352) 334-7900 ext 3471 or 3470
Fax: (352) 334-8818

Tuberculosis
Gail Beard, RN
(352) 334-7988
(352) 955-6464

Alachua County Health Department

www.alachuacountyhealth.org

FLORIDA DEPARTMENT OF HEALTH

MEASLES RESPONSE USING ICS

By: Emily Wilson, R.S.,MPH, Disease Control Administrator

In May, 2007, five cases of laboratory confirmed measles were epidemiologically linked to an imported case who had returned from India in early April. A gathering in a private home upon her return resulted in three cases propagated, including an infant. A household member of one of those cases then became ill, making two generations of measles propagated in Alachua County prior to the disease being reported to health department. All cases were part of an eastern religious sect that has low vaccination rates; 68% were unvaccinated at the charter school on site. The cases each sought medical care at eleven different facilities, yet, only one healthcare practitioner recognized measles and reported it. In reviewing this event, the recognition and early reporting of measles is an essential part of the public health message.

On Sunday, April 29, 2007, a student health clinic contacted the Alachua County Health Department on call nurse to report identification of Koplik spots on a case of suspect measles. Case investigation was initiated immediately. On April 30, a confirmatory visit was made to the home of the student to complete the interview and begin identification of a source and other possible exposures. It became apparent that there was a delayed notification of the initial source cases which indicated there could be an extensive outbreak underway. Besides this was graduation weekend, with many out of town guest arriving.

The use of an Incident Command System (ICS) in the public health response provided a quick and organized operation. It set clear daily objectives, identified who was responsible for which actions, provided for a public information spokesperson, afforded operations command oversight, and allowed for the event sequence to be monitored by the planning section. The operations section included disease investigations, surveillance and vaccine clinics. Daily contact with healthcare practitioners in the city of Alachua, hospitals and contact with over 250 persons exposed to measles provided active surveillance. At the end of May, when two incubation periods had passed without a new case, ICS operations closed.

Avoiding Food borne Poisoning in the Summer

By: Isabel Anasco R.N.,B.S.N, Epidemiologist

Summer is prime time for weddings, picnics, graduation parties, and family cookouts. Last June, at least 81 students from a high school elsewhere in the US, reported signs of food poisoning after a graduation celebration. Many had bloody diarrhea. Stool samples confirmed E. coli as the cause of illness, though the exact food source was not confirmed. Known sources of E. coli include undercooked beef, sausage, and contaminated produce. Typical signs of food borne illness include nausea, vomiting, cramps, and diarrhea.

Bacteria, whether in food or in the air, grow faster in warmer weather. Don't just worry about the potato salad and egg dishes, you have to be careful with any food, including melons, fresh tomatoes, and lettuce.

What can we do?

It seems so basic, but not everyone does it. Wash hands well and often with soap and water, especially after using the bathroom and before cooking or eating. The FDA suggests never leave food out for more than 2 hours. Keep hot food hot and cold food cold.

Those hit by a food borne illness must stay hydrated so they could try chewing on ice chips or sipping clear fluid after vomiting has stopped. In the next day or so, eat only light foods such as bananas, rice, applesauce, toast, crackers, and soup. Seek emergency treatment if severe pain accompanies the illness, if vomiting doesn't stop in a couple of hours, or if bloody diarrhea is experienced.

Have a safe summer!

HIV/AIDS REPORT

By: Rick Trachsel

HIV Surveillance Coordinator

An extensive rewrite of Chapter 64D-3, Florida Administrative Code went into effect November 20, 2006, which will enhance disease reporting efficiency. Newly reportable conditions, as it affects HIV/AIDS, includes reporting all HIV exposed infants or newborns by practitioners; and reporting all CD-4 counts, HIV viral load, and STARHS results by laboratories. In addition, laboratories will now be able to report electronically. This increase in laboratory reporting will require additional effort by surveillance staff to investigate and distinguish between HIV infections and other immunodeficiency illnesses. The results, though, will be an increase in HIV cases not previously reported due to initial testing prior to July, 1997.

Looking at both sides now – using stats for different perspectives on the impact of the HIV pandemic

newly reported cumulative HIV and AIDS cases by year of diagnosis- no DOC							
	2000	2001	2002	2003	2004	2005	total
Alachua	79	63	68	77	93	69	449
Marion	67	54	66	58	59	94	378
Lake	32	54	56	45	47	53	287
Putnam	26	22	29	22	26	24	149
Columbia	15	17	11	20	10	10	83
Sumter	6	15	12	11	10	12	66
Citrus	12	6	4	13	10	14	59
Suwan-nee	7	6	6	10	13	6	48
Levy	7	7	5	6	8	11	44
Hamilton	5	5	3	4	6	7	30
Dixie	2	0	3	3	6	4	18
Union	1	2	1	2	3	2	11
Gilchrist	1	0	2	0	2	3	8
Lafayette	1	0	0	0	2	0	3
Total	264	258	272	275	300	291	1660

Statistics allow for the same data to be looked at in different ways. We are all familiar with typical disease statistics that just enumerate the total number of cases or incidences. For example, in the following chart the number of newly reported cases of HIV and AIDS in Districts 3 and 13 for the last 6 years (2000-2005) are enumerated. It is pretty easy to see which counties have had the most cases.

But, this is only one side of the picture. A different perspective can be seen when the same numbers are applied to a population ratio. The most common method is to develop a ratio based on equalizing the population to 100,000 for each county, then to look at what the number of cases would be if that were its total population. The following chart includes the counties actual population estimates, and then adjusts the total cases as listed to what it would be if populations were equal at 100,000.

newly reported cumulative HIV and AIDS cases by year of diagnosis- no DOC										
	2000	2001	2002	2003	2004	2005	total	Co. pop.	Ratio 100,000	Co. rank
Hamilton	5	5	3	4	6	7	30	14,116	213	1
Putnam	26	22	29	22	26	24	149	73,134	204	2
Alachua	79	63	68	77	93	69	449	239,711	187	3
Columbia	15	17	11	20	10	10	83	63,293	131	4
Marion	67	54	66	58	59	94	378	298,390	127	5
Suwannee	7	6	6	10	13	6	48	39,002	123	6
Dixie	2	0	3	3	6	4	18	15,697	115	7
Levy	7	7	5	6	8	11	44	38,611	114	8
Lake	32	54	56	45	47	53	287	258,665	111	9
Bradford	3	7	6	4	5	2	27	27,887	97	10
Sumter	6	15	12	11	10	12	66	68,605	96	11
Union	1	2	1	2	3	2	11	14,893	74	12
Gilchrist	1	0	2	0	2	3	8	16,616	48	13
Citrus	12	6	4	13	10	14	59	131,534	45	14
Lafayette	1	0	0	0	2	0	3	7,731	39	15
Total	264	258	272	275	300	291	1660			

Now all of sudden counties with apparently small number of cases rank higher because they have relatively fewer residents. Looking at these numbers this way allows you to realize that the impact of what appears to be a small number has a very significant impact in a less populated area, i.e. if your neighborhood has 20 people and 2 people are infected, this affects your community more than if your neighborhood had 200 people and 2 were infected.

FLORIDA REPORTABLE DISEASES *Alachua County 2 year activity*

Disease Activity	2007 Jan-May	2006 Jan-May	2006 Jan-Dec
AIDS	14	24	57
Animal Bites to Humans PEP recommended.	15	8	20
Anthrax	0	0	0
Botulism	0	0	0
Brucellosis	0	0	0
Campylobacteriosis	2	10	19
Chancroid	0	0	0
Chlamydia trachomitis	589	584	1162
Cholera	0	0	0
Ciguatera	0	0	0
Creutzfeldt-Jakob Disease (CJD)	0	1	1
Cryptosporidiosis	0	2	13
Cyclosporiasis	1	0	0
Dengue	0	0	2
Diphtheria	0	0	0
Ehrlichiosis, human	0	0	1
Encephalitis	0	0	0
Eastern Equine	0	0	0
Non-arboviral	0	0	0
Other arboviral	0	0	0
St. Louis	0	0	0
Venezuelan Equine	0	0	0
West Nile	0	0	0
Western Equine	0	0	0
E.coli 0157:H7	0	0	0
E.coli, Other (known sero)	0	0	1
Epsilon toxin of *Clostridium perfringes*	0	0	0
Giardiasis (acute)	12	8	22
Glanders	0	0	0
Gonorrhea	283	280	575
Granuloma Inguinale	0	0	0
Haemophilus influenzae, inv disease	2	0	1
Hansen's Disease (Leprosy)	0	0	0
Hantavirus infection	0	0	0
Hemolytic Uremic Syndrome	0	0	0
Hepatitis A	0	2	3
Hepatitis B	26	21	52
Hepatitis C	114	144	319
Hepatitis non-A, Non B	0	0	0
Hepatitis, Other	0	0	0
Hepatitis B surface antigen + in preg-pregnant women or child < 24 months	3	5	12
Herpes Simplex Virus in < 6mo of age	0	0	0
HIV	27	11	31
Human Papillomavirus (HPV) <12 yrs	0	0	0
Influenza Due to Novel Strains	0	0	0
Lead Poisoning	3	1	1
Legionellosis	0	1	3
Leptospirosis	0	0	0
Listeriosis	0	0	0
Lyme Disease	2	0	1

Disease Activity cont'd	2007 Jan-May	2006 Jan-May	2006 Jan-Dec
Lymphogranuloma Venereum	0	0	0
Malaria	1	1	1
Measles	5	0	0
Melioidosis	0	0	0
Meningitis (Bacterial & Mycotic)	0	4	6
Meningococcal (*Neisseria Meningitidis*)	0	1	1
Mercury Poisoning	0	0	0
Mumps	0	0	0
Neurotoxic Shellfish Poisoning	0	0	0
Pertussis	4	1	1
Pesticide-Related Illness or Injury	0	0	0
Plague	0	0	0
Poliomyelitis	0	0	0
Psittacosis	0	0	0
Q fever	0	0	0
Rabies Human	0	0	0
Rabies Animal	4	9	12
Ricin Toxin	0	0	0
Rocky Mountain Spotted Fever	1	1	1
Rubella	0	0	0
SARS	0	0	0
Salmonellosis	13	17	84
Saxitoxin poisoning p.s.p.	0	0	0
Shigellosis	3	6	27
Smallpox	0	0	0
Staphylococcus aureus, Vancomycin non-susceptible	0	0	0
Staphylococcus enterotoxin B	0	0	0
Streptococcal Disease group A inva		3	4
Streptococcal pneumoniae invasive	11	16	20
Syphilis	13	8	17
Syphilis in pregnant women & neonates	0	0	0
Tetanus	0	0	0
Toxoplasmosis (acute)	0	0	0
Trichinosis	0	0	0
Tuberculosis	4	2	6
Tularemia	0	0	0
Typhoid Fever	0	0	0
Typhus Fever	0	0	0
Typhus Fever Epidemic	0	0	0
Vaccinia Disease	0	0	0
Varicella	1	0	0
Vibrio Infection	0	0	2
V. cholerae Type 01 and non-01	0	0	0
Viral Hemorrhagic Fever	0	0	0
Yellow Fever	0	0	0

Any disease outbreak (e.g., in the community, hospital, or other institution; or food borne or waterborne) ***Any grouping or clustering*** of patients having similar diseases., symptoms or syndromes that may indicate the presence of a disease outbreak

EPI INVESTIGATOR
The Alachua County Health Department
Summer Quarter 2007
"Improving Public Health in Our Community Through Cooperation"

May 2007 was the 12th anniversary of Hepatitis Awareness Month

"Hepatitis" means "inflammation of the liver". The most common viral hepatitis infections that occur in the United States are hepatitis A, B, and C.

The hepatitis A virus is spread through fecal-oral transmission. The incubation period for hepatitis A is on average 15-50 days. To prevent hepatitis A, wash hands after using the bathroom and before preparing and eating food. Hepatitis A is also a vaccine preventable disease. For more information visit www.cdc.gov/hepatitis.

Worldwide, 370 million people have chronic hepatitis B virus, and 500,000-700,000 die annually from HBV-related liver disease. Seventy-five percent of HBV infections occur in Asia (World Health Organization, unpublished data, 2006). It is the leading cause of illness and death in China. The China-GAVI project has provided the 3-dose HepB series to approximately 15.4 million children between 2003-2006 in efforts to prevent chronic infections and future deaths. *(CDC MMWR Weekly May 11, 2007/ vol.56/ No. 18)*

Chronic Hepatitis B means that an individual has a long-term infection. They can transmit the infection to others and may develop liver cancer, or cirrhosis. Antiviral drugs approved for treatment of hepatitis B include: Adefovir, dipivoxil, interferon alfa-2a, lamivudine, and entecavir. It is recommended that household contacts and sex partners of individuals with chronic HBV be tested for hepatitis and offered the vaccine. (http://www.immunize.org/catg.d/p2021b.htm).

Approximately 4.1 million Americans have been infected with hepatitis C virus; 3.2 million of these are chronically infected. Eighty percent of HCV positive persons have no signs or symptoms. HCV is transmitted through blood. The current treatment of choice for HCV is combination therapy of pegylated interferon and ribavirin. There is no vaccine currently available to prevent hepatitis C.

For more information please visit www.cdc.gov/hepatitis To inquire about hepatitis testing and vaccines contact Alachua County Health Dept. Hepatitis Program at 352-334-8842, http://www.doh.state.fl.us/chdalachua/epi/hepatitis.htm.

Submitted by Dina Dolz, RN
Hepatitis Program Coordinator
Alachua County Health Department
352-334-8842

Alachua

Alachua County
Health Department
Epi. Dept.
224 SE 24th Street
Gainesville, FL
32641