

EPI INVESTIGATOR

The Alachua County Health Department
Winter 2008



“Improving Public Health in Our Community Through Cooperation”

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Editor
Sheila Griffis

Epidemiology / STD Intern, Fall 2008

By: Isabel Anasco, RN

Christian Campbell was the Epidemiology intern for the Fall, 2008.

He was working on his Masters in Public Health at the University of Florida. During his internship he worked with Mr. George Gibbs (STD) and Ms. Isabel Anasco (Epi/Hep) during the Fall term. Christian had the opportunity to assist Isabel with disease investigations and case managements. He also participated in outbreak investigations by doing field investigations with Isabel. He did his research paper on Chlamydia in Alachua County and did an excellent presentation.

While compiling his data, he worked together with Dr. Levy and George.

Chlamydia Infections in Alachua County, Florida

By: Christian A. Campbell BA, BS, MPH
Candidate

Background: Caused by the bacterium *Chlamydia trachomatis*, Chlamydia is the most commonly reported bacterial sexually transmitted disease (STD) in the United States. *Chlamydia trachomatis* can infect the male and female genital areas, including the anus, the urethra, the eyes and the throat. In women, these infections often result in serious reproductive tract complications as Pelvic Inflammatory Disease (PID), infertility, and ectopic pregnancy; in addition, an infected woman can pass the infection to her newborn during delivery. The incidence of this often dormant disease necessitates that health care providers actively look into new strategies to eradicate or reduce the high levels of prevalence and incidence, especially in young women. The prevalence of genital Chlamydia in men is not well known, and fifty percent of men are asymptomatic. In addition, most of the morbidity and economic cost of male Chlamydia infection results from infection of female sexual partners who are asymptomatic. The diagnosis of Chlamydia infection have been difficult to detect because individuals are asymptomatic in most cases, but new diagnostic tests can check rapidly for Chlamydia and individuals can be treated to prevent the spread of the disease. As a result the incidence of Chlamydia

infection and its compli-

cations has been increasing nationwide. The trend in Florida is similar to the national trend, but the incidence in Alachua County is alarmingly higher.

Specific Aims: 1) To determine and compare the rates of Chlamydia in the State of Florida and Alachua County from 1 January 1998 to 31 December 2007, and 2) To determine demographic factors that are associated with the young population in Alachua County.

Methods: Data from the Florida Morbidity Statistics Report from 1997 to 2008 and the Community health Assessment Resource Tool Set (CHARTS) were used to estimate and compare the incidence of Chlamydia infection by age, gender, race/ethnicity over time with specific focus on age group 15-29 years-old in Florida and Alachua County over the last five years.

Study Design: Cross-Sectional Descriptive Study

Results: There were over 57,000 Chlamydia cases reported in Florida in 2007, with an incident rate of 307 cases per 100,000 total population. In Alachua County there were 1650 cases with a n incident rate of 666.03 per 100,000 total population. Since 1998 there was a proportional rate increase in males (79%) and in



females (20%) in Alachua County. The 15-19, 20-24 and 25-29 were the main age groups affected, thus, accounting for 90% of all the Chlamydia cases in Alachua County. African-Americans bear a disproportionately high amount of Chlamydia infection, they account for over 60% of the Chlamydia disease burden in Alachua County.

Conclusions: The upward trend of increase in Chlamydia for both men and women reflects that more interventions to reduce these rates are needed. The burden of morbidity occurs in young women regardless of race and ethnic grouping, but Non-Hispanic Black females have the highest rates compared to Whites and Hispanics populations.

Keywords: *Chlamydia trachomatis*; screening; adolescents; female; African American


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www.alachuacountyhealth.org


FLORIDA DEPARTMENT OF HEALTH

HIV Update

By: Rick Tracschel, HIV Surveillance Coordinator

World AIDS Day 2008

From 2008 UN AIDS Report on the Global AIDS Epidemic (www.unaids.org) :

The global epidemic is stabilizing but at an unacceptably high level. Globally, there were an estimated 33 million people living with HIV in 2007. The annual number of new infections declined from 3.0 million in 2001 to 2.7 million in 2007.

In sub-Saharan Africa, most national epidemics have stabilized or begun to decline. However, new information from Kenya suggest that in 2007, HIV prevalence ranged between 7.1% and 8.5% compared with the 2003 estimate of 6.7%. Outside Africa the estimates are on the rise in several countries.

In 14 of 17 African countries with adequate survey data, the percentage of young pregnant women (age 15-24) who are living with HIV has declined since 2000-2001.

Globally the percentage of women among people living with HIV has remained stable at 50% for several years

Globally, the number of children younger than 15 years living with HIV increased from 1.6 million in 2001 to 2.0 million in 2007. Almost 90% live in sub-Saharan Africa. Since 2003, the rate of annual AIDS deaths among children has also begun to fall due to treatment.

In virtually all regions outside sub-Saharan Africa, HIV disproportionately affects injection drug users, men who have sex with men, and sex workers.

From www.CDC.gov

In the U.S. in 2006 there were 36,828 AIDS cases and 14,016 deaths.

The number of new infections each year in the U.S. is estimated to be 56,300 for a rate of 22.8 per 100,000

From www.FloridaAIDS.org :

Between Jan-Aug of 2007 there were 4,212 people diagnosed with HIV/AIDS

Between Jan-Aug of 2008 there were 5,489 people diagnosed with HIV/AIDS

In 2007 Florida had its first drop in the number of deaths (13%) since 1998 when it stabilized at about 1650 deaths per year with the introduction of the drug cocktail. It dropped to 1526. This decrease occurred in all groups except white females which were the lowest group to begin with

The number of new infections in 2006 in Florida is estimated to be 5,550 for a rate of 36.4 per 100,000 or 13.6 more per 100,000 than the U.S. as a whole.

78% were male, 28% female 48% were Black 33% were White 19% were Hispanic /Other

58% were MSM nationally 53% were MSM 2% were MSM/IDU 10% were IDU 30% were Heterosexual

83% were between the ages of 20 and 49 years old

In Alachua County (from ACHD Surveillance report, www.alachuacountyhealth.org) :

As of June 2008 there were 295 HIV and 917 AIDS cases reported

Of the HIV cases: 61% were male 62% were Black 34% were MSM 32% were Heterosexual 11% were IDU

77% were between the ages of 20 and 49 years old.

Rapid Detection of Multi-Drug Resistant Tuberculosis

By: Gail Beard, RN

The foundation for Innovative New Diagnostics (IND) and Hain Lifescience (Hain) have announced the Hain "GenoType MTBDR *plus*" test, a multiplex polymerase chain reaction line-probe assay that detects *M.tuberculosis* complex and genetic mutations associated with isoniazid and rifampin resistance in one day.

Molecular genetic tests give testing laboratories a considerable time advantage in the differentiation enabling a more rapid initiation of resistance tests and more specific treatments. The Hain test can be used on both culture-based isolates and

directly on smear positive sputum samples from patients with pulmonary tuberculosis. Preliminary data suggests that the test can detect at least 90% of MDR-TB cases in only a few hours.

Not only does the Hain test differentiate the *M.tuberculosis* complex but also simultaneously 12 other mycobacterial species from the culture while conventional, older test methods only allow a differential of a limited number of individual species that can take up to 6-8 weeks to produce results.

If you'd like more information regarding molecular testing, you may contact the Department of Health Bureau of Laboratories at 904-791-1630 or the Alachua County Health Department TB Clinic at 352-334-7988.



FLORIDA REPORTABLE DISEASES *Alachua County 2 year activity*

Disease Activity	2008	2007	2007	Disease Activity	cont'd	2008	2007	2007
	Jan-Nov	Jan-Nov	Jan-Dec			Jan-Nov	Jan-Nov	Jan-Dec
AIDS	37	34	35	Lyme Disease (06959)		2	1	1
Animal Bites to Humans (07101)	32	31	32	Lymphogranuloma Venereum		0	0	0
Anthrax	0	0	0	Malaria (08460)		3	1	1
Botulism	0	0	0	Measles (05590)		0	5	5
Brucellosis	0	0	0	Meningitis, Group B Strep (32040)		0	2	3
Campylobacteriosis (03840)	27	16	17	Meningitis other (32090)		1	1	1
Chancroid	0	0	0	Meningitis Strep Pneumoniae (32020)		0	0	0
<i>Chlamydia trachomatis</i>	1596	1513	1650	Meningococcal (<i>Neisseria Meningitidis</i>) (03630)		1	0	0
Cholera	0	0	0	Mercury Poisoning		1	0	0
Ciguatera	0	0	0	Mumps		0	0	0
Creutzfeldt-Jakob Disease (CJD)	0	0	0	Neurotoxic Shellfish Poisoning		0	0	0
Cryptosporidiosis (13680)	13	8	8	Pertussis (03390)		8	4	4
Cyclosporiasis (00720)	1	3	3	Pesticide-Related Illness or Injury		0	0	0
Dengue (06100)	0	1	1	Plague		0	0	0
Diphtheria	0	0	0	Poliomyelitis		0	0	0
Ehrlichiosis, Human Monocytic (08382)	0	2	6	Psittacosis		0	0	0
Encephalitis	0	0	0	Q fever		0	0	0
Eastern Equine	0	0	0	Rabies Animal (07102)		3	7	7
Non-arboviral	0	0	0	Ricin Toxin		0	0	0
Other arboviral	0	0	0	Rocky Mountain Spotted Fever (08200)		2	0	0
St. Louis	0	0	0	Rubella		0	0	0
Venezuelan Equine	0	0	0	SARS		0	0	0
West Nile	0	0	0	Salmonellosis (00300)		72	73	75
Western Equine	0	0	0	Saxitoxin poisoning psp		0	0	0
<i>E.coli</i> 0157:H7 (41601)	0	0	0	Shigellosis (00490)		1	8	8
<i>E.coli</i> , Other (41603)	0	0	0	Smallpox		0	0	0
Epsilon toxin of <i>Clostridium perfringes</i>	0	0	0	<i>Staphylococcus aureus</i> , VRSA		0	0	0
Giardiasis (acute) (00710)	11	26	26	<i>Staphylococcus enterotoxin B</i>		0	0	0
Glanders	0	0	0	Streptococcal Disease grp A inva (03400)		0	4	4
Gonorrhea	515	624	682	<i>Strep pneumoniae</i> invasive Disease, Drug resistant (04823)		6	8	10
Granuloma Inguinale	0	0	0	<i>Strept pneumoniae</i> invasive Disease, susceptible (04830)		11	9	9
H. Influenzae Pneumonia (48220)	0	2	2	Syphilis		15	27	28
<i>Haemophilus influenzae</i> , inv disease	1	1	1	Syphilis in pregnant women & neonates		0	0	0
Hansen's Disease (Leprosy)	0	0	0	Tetanus		0	0	0
Hantavirus infection	0	0	0	Toxoplasmosis (acute)		0	0	0
Hemolytic Uremic Syndrome	0	0	0	Trichinosis		0	0	0
Hepatitis A	2	0	0	Tuberculosis		5	4	9
Hepatitis B (+HBsAG in preg women or child < 24 months) (07039)	10	10	11	Tularemia		0	0	0
Hepatitis B Perinatal (07744)	0	1	1	Typhoid Fever		1	0	0
Hepatitis B Acute (07030)	1	3	3	Typhus Fever		0	0	0
Hepatitis B Chronic (07032)	71	44	47	Typhus Fever Epidemic		0	0	0
Hepatitis C Chronic (07054)	239	239	250	Vaccinia Disease		0	0	0
Hepatitis, Other	0	0	0	Varicella ((05290)		56	14	17
Herpes Simplex Virus in < 6mo of age	0	0	0	<i>Vibrio</i> Infection		0	0	0
HIV	51	49	59	<i>V. cholerae</i> Serogroup 01/ non 01		0	0	0
Human Papillomavirus (HPV) <12 yrs	0	0	0	Viral Hemorrhagic Fever		0	0	0
Lead Poisoning (94890)	3	2	2	Yellow Fever		0	0	0
Legionellosis (48280)	0	2	2					
Leptospirosis	0	0	0					
Listeriosis (02700)	0	1	1					

Any disease outbreak (e.g., in the community, hospital, or other institution; or foodborne or waterborne) Any grouping or clustering of patients having similar diseases, symptoms or syndromes that may indicate the presence of a disease outbreak. All cases suspected and confirmed are included in this report.

VACCINE INFORMATION STATEMENTS

By: Sherry Windham, HSPM,
 ACHD Immunization Supervisor

Do you have the most current Vaccine Information Statements [VIS] for your practice? VISs are mandated by the **National Childhood Vaccine Injury Act [NCVIA]**, and must be given to the vaccine recipient or to the recipient’s parent or legal guardian with **each** dose of vaccine – prior to the administration of the vaccine.

All current VISs are available on the internet at two different web-sites. The Center for Disease Control [CDC], Vaccines & Immunizations site [www.cdc.gov/vaccines] and the Immunization Action Coalition, which is located at [www.immunize.org/vis/]. On the Immunization Action Coalition website you will also find VIS translations in 30 different languages to assist you with non English speaking patients. You can download the VISs from these sites as pdf files and print. You can also order single hard copies of the VISs using the NIP’s [National Immunization Program] online order form which is located at: www.cdc.gov/vaccines/pubs.

The most recent Vaccine Information Statement to be updated this year is the Pneumococcal Conjugate [Prevnar], with a publish date of 12-9-08. There have been nine [9] VIS updates so far in 2008; so take a minute to visit one of the websites listed above to check your stock of VISs against the most current versions. Should you need assistance or have any questions, I can be reached at 352-334-7951. Check your stock of VISs against this list. If you have outdated VISs, search our website [By Vaccine](#) or [By Language](#) to get current versions.

Current VIS Dates

Chickenpox	03/13/2008	Influenza (LAIV)	07/24/2008	PCV	12/09/2008	Td/Tdap	11/18/2008
DTaP/DT/DTP	05/17/2007	Influenza (TIV)	07/24/2008	PPV	07/29/1997	Td	06/10/1994
Hepatitis A	03/21/2006	Japan. enceph.	05/11/2005	Polio	01/01/2000	Tdap	07/12/2006
Hepatitis B	07/18/2007	Meningococcal	01/28/2008	Rabies	01/12/2006	Typhoid	05/19/2004
Hib	12/16/1998	MMR	03/13/2008	Rotavirus	08/28/2008	Yellow fever	11/09/2004
HPV	02/02/2007	Multi-vaccine	09/18/2008	Shingles	09/11/2006		

