EPI INVESTIGATOR

The Alachua County Health Department

Winter 2013

"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:

Administrator
Paul Myers, MS
(352) 334-8892

Environmental Health
Director Anthony Dennis
(352) 334-7931

HIV/AIDS
Richard Willis, Surveillance
(352) 334-7968
Fax (352)334-8867

Martha Buffington, Ryan White
(352) 334-7967

Epidemiology/Hepatitis
Nadia Kovacevich, MPH, CPH
(352) 334-7981
Fax (352) 955-6464
If you would like to receive the Epi InvestiGator by email or fax, please contact us at the following email address: Nadia.Kovacevich@flhealth.gov, or phone: (352) 334 - 7981.

Immunizations
Michael Smith, RN
(352) 334-7950
Fax: (352) 334-7943

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

Tuberculosis
Geneva Saulsberry, RN
(352) 334-7988
Fax(352) 955-6464

After Hours:
(352)-334-7900

Editor
Sheila Griffis

Influenza Surveillance

Submitted by: Joseph Brew, Epidemiologist

Influenza is a disease of enormous public health significance but is not reportable. The Alachua County Disease Control Unit relies on communication with multiple institutions for the real-time surveillance of flu and flu-like illness in our area. These sources, when combined with one another, allow epidemiologists to paint an accurate picture of the magnitude and severity of the flu season in real time. This is important information for both local practitioners as well as State- and National-level surveillance reports.
The four main sources of flu data are:

1. The Health Department's clinic (a CDC "sentinel" provider)
2. The public schools
3. The Florida Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)
4. Local practitioners and facility managers who report unusual activity or case clusters.

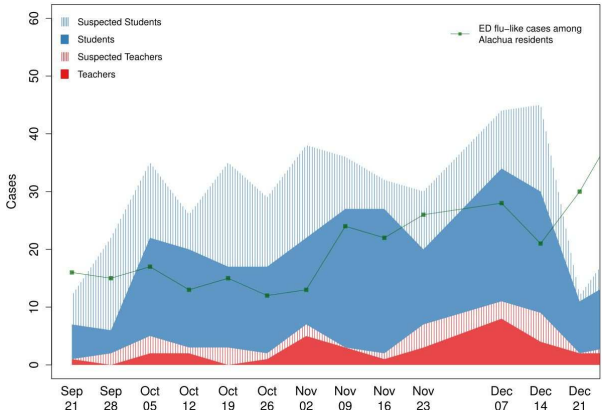
All of these data sources are imperfect, but the combination of them is a powerful tool for public health practice. When a school nurse, an emergency room physician and general practitioners suspect a trend based on their small patient load, they might be unaware that others are experiencing the same trend at the same time. The Disease Control Unit compiles and disseminates this information, informing public health practice so as to best prevent and treat flu.

Surveillance of this year's flu season suggests that, as with the 2012-13 flu season, peak flu will be in mid/late January. The polygon plot, right, shows the cumulative weekly incidence of flu-like illness in local schools; the *green line shows the weekly incidence of emergency cases for ILI among all Alachua residents.

Flu is unpredictable, and some flu seasons have multiple periods of peak activity.

The best way to protect ourselves and our community from flu is by getting the immunization. **It's not too late!**

***View color version at: floridahealth.gov/chdalachua/**



Disease Control Unit Welcomes CDC Associate

By: Nadia Kovacevich, MPH
Alachua County Health Dept.

The Disease Control family is pleased to welcome our new CDC Public Health Associate, Anthwan (Omar) Braumuller. Omar graduated from Emory University with an Associate of Arts in Biology and a Bachelor of Arts in History with concentrations in Pre-Medicine/Law. Omar has been working in the Epidemiology program since the fall and will transition to Environmental Health for his second year. Omar enjoys singing, playing the piano, epigenetic research, and coaching high school sports. He has already contributed greatly to our team, and we look forward to the year ahead! Omar says, "I aspire to use the experiences I develop here with all of you to pursue a career in Public Health Policy very soon."

The Lone Star Tick and its STARI Complications

By: Omar Braumuller, AA,BA
CDC PHAP Associate
Condensed by N. Kovacevich, MPH

Alachua County is home to a variety of tick species, all of which can pose harm to us and the animals we keep as pets. One in particular, the lone star tick *(Amblyomma americanum*), has an affinity for human blood, coupled with a rather aggressive temperament. These little blood-feeding parasites may pose a greater threat to us than just minor irritation. They are easily identified by a single white dot (hence the name "Lone Star") on their backs as adults. They are found primarily in the southeastern United States but can span as far west as the borders of Texas and as far north as Maine. They are also the most prominent human-biting tick in Florida and anything from hiking to camping and other outdoor activities can increase the risk of a bite from these ticks.

Within the past decade, lone star ticks have been considered the carrier of a currently unknown pathogenic agent that causes Southern Tick-Associated Rash Illness, also known as (STARI) or Masters Disease. It has been identified in people with a rash and other symptoms similar to those in Lyme disease that did not have evidence of infection with *Borrelia burgdorferi*. A related bacterium, *Borrelia lonestari*, has been identified and may be the cause of the illness but is not confirmed. There is still much to learn about this unpleasant illness in regards to what causes it and its epidemiological characteristics.

*Photo courtesy of http://en.wikipedia.org/wiki/File:Amblyomma_americanum_tick.jpg

Simple precautions can be taken to prevent exposure to tick bites. While engaging in outdoor activities, walk in the center of a trail, avoiding contact with vegetation. Repellents containing at least 20% DEET and no more than 50% should be used appropriately according to the manufacturer's directions. Make sure to spray your clothing and exposed skin, concentrating your feet, ankles, and legs. Wear appropriate outdoor garments and footwear.

After a period of outdoor activities in high-risk areas, conduct a full body tick check by using a mirror to inspect your entire body. Make sure to also examine your clothes and any other gear to ensure ticks do not ride on them into your home. If you do find ticks on clothing, you can tumble dry them on high heat for an hour to kill them. Finally, inspect your household pets for ticks; and if you are indeed bitten, closely monitor your health, and see a physician as soon as possible if symptoms do arise.

References:

Fritz, C. L. (March 2009). Emerging tick-borne diseases. *Veterinary Clinics of North America: Small Animal Practice*, 39(2), 265-268. Retrieved from http://www.sciencedirect.com/science/article/pii/S0195561608001927

Masters, E. J., Grigery, C. N., & Masters, R.W. (June 2008). STARI or Masters Disease: Lone star tick–vectored Lyme-like illness. *Infectious Disease Clinics of North America*, *22*(2), 361-376. Retrieved from http://www.sciencedirect.com/science/article/pii/S0891552007001286

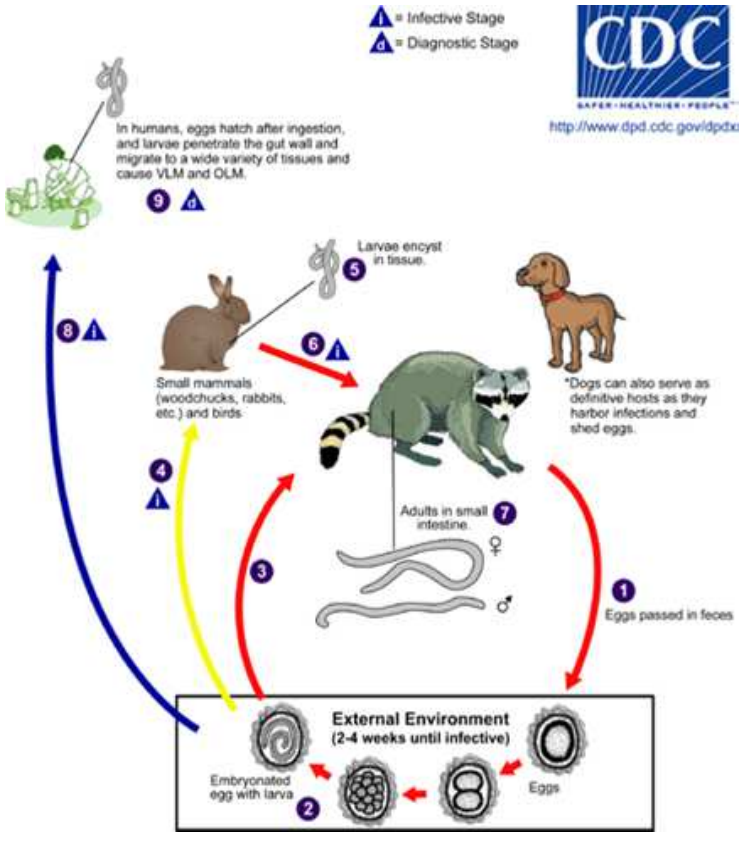
For additional scientific/clinical resources on STARI, please visit the following sites:

Centers for Disease Control and Prevention: http://www.cdc.gov/stari/.

Florida Department of Health: http://www.floridahealth.gov/diseases-and-conditions/tick-and-insect-borne-diseases/stari.html.

Baylisascaris Procyonis Confirmed in Alachua County

Submitted By: Nadia Kovacevich,
Epidemiologist



Baylisascaris procyonis, also known as the raccoon roundworm, is a parasite that is commonly found in raccoons. The parasite was considered to be absent or rare in Florida raccoons until recently when *Baylisascaris* infections were identified in wild raccoons. Counties with confirmed B. procyonis now include: Alachua, Bay, Broward, Escambia, Hernando, Hillsborough, Leon, Orange, Pinellas, Volusia, and Wakulla. The infection in people is severe but rare even in endemic areas, and the infection most often involves young children or those with developmental handicaps (Florida Department of Health [FDOH], 2013).

Raccoons are the primary or definitive host and shed eggs in large quantities in their feces. Fecal material that is left in the environment for more than 11 days may be infectious. The eggs can survive for years in the environment and are resistant to most disinfectants. However, eggs can be inactivated with heat. People who accidentally swallow material contaminated with eggs (fecal-oral exposure) can be infected. Infections in people can result in parasite cyst formation. Symptoms may include fever, nausea, unusual tiredness, loss of coordination, inability to focus attention, loss of muscle control, muscle aches or pain, vision impairment, and respiratory signs (FDOH, 2013). Testing for suspected human cases is available through the Centers for Disease Control and Prevention (CDC).

Reference: http://www.floridahealth.gov/diseases-and-conditions/diseases-from-animals/_documents/baylisascaris.pdf

For additional information:

CDC *Baylisascaris* Infection: http://www.cdc.gov/parasites/baylisascaris/index.html

CDC *Baylisascaris* in pools: http://www.cdc.gov/healthywater/swimming/pools/animals/raccoons-and-pools.html

FL DOH Diseases Infectious from Animals to People (Zoonotic Diseases): http://www.doh.state.fl.us/Environment/medicine/arboviral/Zoonoses/Zoonotic-index.html

FLORIDA REPORTABLE DISEASES *Alachua County 2 year activity*

Disease Activity	2013 Jan-Dec	2012 Jan-Dec
AIDS	35	35
Animal Bites to Humans (07101)	59	65
Anthrax	0	0
Arsenic Poisoning (98080)	0	1
Botulism	0	0
Brucellosis	0	0
Campylobacteriosis (03840)	30	18
Carbon Monoxide Poisoning (98600)	0	2
Chlamydia trachomitis	1831	1883
Cholera	0	0
Ciguatera	0	0
Creutzfeldt-Jakob Disease (CJD)	0	0
Cryptosporidiosis (13680)	5	10
Cyclosporiasis (00720)	4	1
Dengue (06100)	2	0
Diphtheria	0	0
Encephalitis	0	0
Eastern Equine	0	0
Non-arboviral	0	0
Other arboviral	0	0
St. Louis	0	0
West Nile	0	0
Western Equine	0	0
E.coli 0157:H7 (41601)	0	0
Ehrlichiosis/anaplasmosis,HGE, A. Phagocytophilum (08381)	0	20
Ehrlichiosis/anaplasmosis,hme e chaff. 08382	0	2
Escherichia Coli, Shiga Toxin Producing 00800	4	6
E.coli, Other (41603)	0	0
Giardiasis (acute) (00710)	17	21
Gonorrhea	644	659
H. Influenzae Pneumonia (48220)	0	0
Haemophilus influenzae, inv disease(03841)	3	7
Hansen's Disease (Leprosy)	0	0
Hantavirus infection	0	0
Hemolytic Uremic Syndrome 42000	0	0
Hepatitis A	0	1
Hepatitis B (+HBsAG in preg women or child < 24 months (07039)	8	8
Hepatitis B Perinatal (07744)	0	0
Hepatitis B Acute (07030)	1	0
Hepatitis B Chronic (07032)	57	66
Hepatitis C Acute (07051)	0	3
Hepatitis C Chronic (07054)	296	354
Hepatitis E (07053)	0	0
Herpes Simplex Virus in < 6mo of age	0	0
HIV	52	56
Human Papillomavirus (HPV) <12 yrs	0	0
Influenza A, Novel or Pandemic Strains	0	0
Lead Poisoning (94890)	5	4
Legionellosis (48280)	0	1

Disease Activity Con'td.	2013 Jan-Dec	2012 Jan-Dec
Lyme Disease (06959)	0	3
Lymphogranuloma Venereum	0	0
Malaria (08460)	2	2
Measles (05590)	0	0
Meningitis, Group B Strep (32040)	0	0
Meningitis other (32090)	1	2
Meningitis Strep Pneumoniae (32020)	0	0
Meningococcal (*Neisseria Meningitidis*)03630	1	0
Mercury Poisoning	0	0
Monkey Bite (07103)	0	0
Mumps	0	0
Neurotoxic Shellfish Poisoning	0	0
Pertussis (03390)	4	2
Pesticide-Related Illness or Injury	0	2
Plague	0	0
Psittacosis	0	0
Q fever	0	0
Rabies Animal (07102)	6	5
Ricin Toxin	0	0
Rocky Mountain Spotted Fever (08200)	3	3
Rubella	0	0
SARS	0	0
Salmonellosis (00300)	79	105
Saxitoxin poisoning psp	0	0
Shigellosis (00490)	7	10
Smallpox	0	0
Staphylococcus aureus, VRSA	0	0
Staphylococcus enterotoxin B	0	0
Streptococcal Disease grp A inva (03400)	11	6
Strep pneumoniae invasive Disease, Drug resistant (04823)	7	7
Strep pneumoniae invasive Disease, susceptible (04830)	12	19
Syphilis	30	19
Syphilis in pregnant women & neonates	0	0
Tetanus	0	0
Toxoplasmosis (acute)	1	0
Trichinosis	0	0
Tuberculosis	5	2
Typhoid Fever	0	1
Typhus Fever	0	0
Vaccinia Disease	0	0
Varicella (05290)	11	104
Vibrio Parahaemolyticus (00540)	1	1
V. cholerae Serogroup 01/ non 01	1	1
Vibriosis (Vibrio mimicus) 00197	1	0
Vibriosis (Vibrio vulnificus) 00199	0	1
West Nile Virus Neuroinvasive Dis. 06630	1	0

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..

EPI INVESTIGATOR
The Alachua County Health Department
WINTER QUARTER 2013
"Improving Public Health in Our Community Through Cooperation"

Vaccine Information Statements Are you current?

Submitted By: Michael Smith, RN

Does your facility have the most current Vaccine Information Statements available to provide to your client? VISs contain the most up to date information on all vaccines administered and are required to be given to each vaccine recipient/recipient's parent or guardian prior to the vaccination. This process is mandated by the **National Childhood Vaccine Injury Act** [NCVIA]. These statements are published by the *Centers For Disease Control and Prevention* providing the recipient with helpful, informative material regarding:

- Why get vaccinated?
- Who should get the vaccine and when?
- What are the risks from the vaccine?
- What if there is a serious reaction?
- The National Vaccine Injury Compensation Program
- How can I learn more?

To the right is the most recent list of current VISs available as of 1/17/14. VISs not only are written in English, but many other common languages. If your office/facility does not have the most current VIS, they can be located online at two websites:

•www.cdc.gov/vaccines/pubs

•www.immunize.org/vis/

Vaccine	Date
Chicken Pox (Varicella)	03/13/08
DTaP	05/17/07
Hepatitis A	10/25/11
Hepatitis B	02/02/12
HiB	12/16/98
HPV	05/17/13
Meningococcal	10/14/11
MMR	04/20/12
MMRV	05/21/10
Multi-Vaccine	11/16/12
PCV	02/27/13
PPSV	10/06/09
Polio	11/08/11
Rabies	10/06/09
Rotovirus	08/26/13
Shingles	10/06/09
Td	01/24/12
TDaP	05/09/13
Japanese Encephalitis	12/07/11
Typhoid	05/29/12
Yellow Fever	03/30/11
Influenza	07/26/13

Alachua County Health Department
Disease Control Unit
224 SE 24th Street
Gainesville, FL 32641