

November 10, 2006

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Epidemiology: The study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to control health problems.

Stedman's Medical Dictionary, Ed. 27

Ed Note: With the December 2006 issue of Epi Update, we will officially "go monthly." That is to say, we'll be publishing the last Thursday of each month only. Beginning immediately, articles should be submitted via email by the 15th of each month to the editor, using the formal guidelines promulgated in July 2006.

Florida Red Tide Beach Exposure Study ***by Rebecca Lazensky, MPH***

From September 21-24, 2006 four first-year Florida Epidemic Intelligence Service (EIS) fellows participated in a Florida red tide beach exposure study at Siesta Key, a barrier island to Sarasota, Florida. The ongoing study titled, "Exposure to Aerosolized Brevetoxins During Red Tide Events," is in its 5th year of operation. Study participants were recruited through the use of print media and television new stories during the fall of 2002. Periodically, study participants are required to visit the study site at Siesta Beach during red tide. Researchers collect health and exposure data on a panel of 120 study participants with obstructive breathing problems such as chronic obstructive pulmonary disease (COPD) and asthma. Their goal is to measure the health effects of breathing aerosolized red tide brevetoxins.

The red tide study is implemented by partner organizations including the Aquatic Toxins Program at the Florida Department of Health, Mote Marine Laboratory in Sarasota, Centers for Disease Control and Prevention (CDC), University of Miami, University of North Carolina at Wilmington, Lovelace Respiratory Research Institute, and the National Institute of Environmental Health Sciences. It serves as a

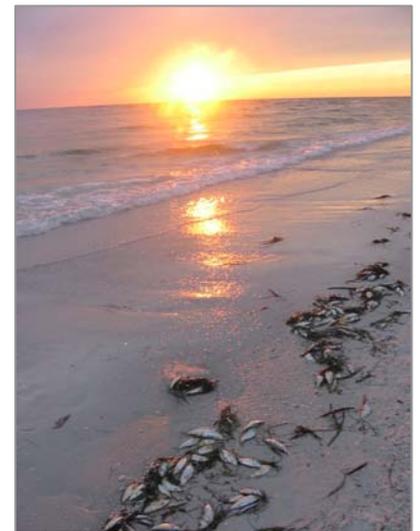


Photo: Rebecca Lazensky

national model for how federal, private, state, and local institutions can conduct collaborative research on environmental

health issues. This Florida red tide project is the first epidemiological study to measure human health effects of exposures to Florida red tide aerosols ⁽¹⁾.

First identified in 1848, red tides have since caused numerous fish, manatee, dolphin, sea turtle, and bird mortalities ⁽³⁾. It is important to note that “red tide” is a generic term often used to describe other harmful algal blooms. Florida red tide “blooms” refer to a dense population of the marine dinoflagellate *Karenia brevis*, a unicellular organism which produces a neurotoxin called “brevetoxin” ⁽²⁾. Red tides are more common in the Gulf of Mexico although ocean currents can transport *Karenia brevis* to the eastern coast of Florida. Inhalation of aerosolized Florida red tide toxins (brevetoxins) is associated with human health problems such as nonproductive cough, bronchoconstriction, pulmonary obstruction, and skin and eye irritation. Neurotoxic shellfish poisoning can occur when brevetoxin contaminated shellfish are consumed ⁽²⁾.

The study site, which included three recreational vehicles adjacent to Siesta Beach, was organized into nine stations. Participants rotated through each station twice, once before their beach exposure and once afterwards. Florida EIS fellows were instructed on how to measure health indicators using equipment at each station. These included participant height and weight; nose swabs to obtain cells (to assess the presence of inflammatory cells for an indicator of immune and/or irritant response); pulmonary function tests using a spirometer and a peakflow meter; and questionnaires on health symptoms using portable laptops inside the RVs. Participants were asked if they experienced symptoms associated with exposure to brevetoxins: non-productive coughing, wheezing, skin and eye irritation, and headache.

During the three-day study period, 60 of the 120 study participants visited the mobile study site for pre/post exposure examinations and a one-hour beach walk during a red tide. Participant selection criteria included a pre-existing breathing condition such as asthma or COPD, a physician’s permission to participate, and a willingness to walk the beach during a red tide and answer survey questions through in-person and telephone interviews five days after the beach walk. Participants were fitted with personal monitoring devices to assess breathing zone concentrations, which are a better indication of individual exposure.

Study researchers also monitored atmospheric brevetoxins concentrations and particle size distribution using high volume air samplers placed along the beach and monitored regularly. Through measuring water samples for brevetoxins and onshore wind direction and strength, researchers can determine how wind patterns impact the level of brevetoxins in the air.

Researchers have discovered that sea foam can contain 50-100 times the level of brevetoxin in ocean water. Bubbles efficiently capture brevetoxins, which may lead to the deaths of manatees. Manatees linger close to the water’s surface while swimming, inhaling greater concentrations of aerosolized brevetoxins ⁽⁵⁾. Surface water samples were collected twice a day and analyzed by Mote Marine Laboratory in a portable laboratory near Siesta Beach. Brevetoxin analyses were conducted at the laboratory after samples were stabilized.

In addition to manual water sampling, Mote Marine operates the “Breve Buster” an autonomous underwater vehicle or AUV. Resembling a small torpedo, it travels through the ocean collecting water samples to measure the amount of brevetoxins in the water ⁽⁶⁾. Scientists control the position of the self-propelled Breve Buster from an on-board AUV cruise plane which can be modified remotely from laboratory computers using the Iridium satellite phone system.

Through collecting data on the human health effects of brevetoxins exposure, concentrations of brevetoxins in the water, and the location of red tides, researchers can provide up-to-date information on how to minimize the adverse health effects associated with the inhalation of red tide brevetoxins as conditions change daily.

Following the red tide study, Florida EIS fellows attended a one-day training at Mote Marine Laboratory on the implementation of a future blue-green algae study, which may serve as a future class project. Mote Marine is a privately funded, non-profit laboratory/aquarium founded by the famous shark researcher, Dr. Eugenia Clark in 1955. Today, the marine operates seven research centers and is a global leader in marine science research ⁽⁶⁾.

The Florida EIS fellows would like to thank the following individuals/organization: Andy Reich MS, MSPH, (FL DOH); Lora Fleming MD, PhD, MPH, MSc, (University of Miami); Barbara Kirkpatrick RRT, EdD, (Mote Marine) Julia Gill PhD, MPH, (FL DOH); Joann Schulte, DO, MPH, (FL DOH); Lori Backer MPH, PhD, (CDC); Mote Marine Laboratory. For further information, please contact.

References:

1. Fleming, L.E. et al. Initial evaluation of the effects of aerosolized Florida red tide toxins (brevetoxins) in persons with asthma. *Environmental Health Perspect.* 113:650-657.

2. Kirkpatrick B, Fleming L, Squicciarini D, Backer L, Clark R, Abraham W, Benson J., Cheng, Y.S., Johnson, D., Pierce, R., Zaias, J., Bossart, J.D. and Baden, D.G. 2004. Literature Review of Florida Red Tide: Implications for Human Health Effects. *Harmful Algae* 3:99-115.
3. Woodcock AH. Note concerning human respiratory irritation associated with high concentrations of plankton and mass mortality of marine organisms. *J. Marine Res* 1948:7:56-62.
4. The Florida Department of Health's Aquatic Toxins Program website: <http://www.doh.state.fl.us/environment/community/aquatic/index.html>
5. Pierce, R.H., Henry, M.S, Blum, P.C., Lyons, J., Cheng, Y.S. Yazzie, D. and Zhou, Y. 2003. Brevetoxin concentrations in marine aerosol: human exposure levels during a *Karenia brevis* harmful algal bloom. *Bull. Environ. Contam. Toxicol.*, 70:161-165.
6. Mote Marine Aquarium website: <http://www.mote.org/>

The following EIS fellows also participated in the study: Anita Lewis, MPH, Escambia County; Leah Eisenstein, MPH, Orange/Osceola Counties; and Karen Alelis, MPH.

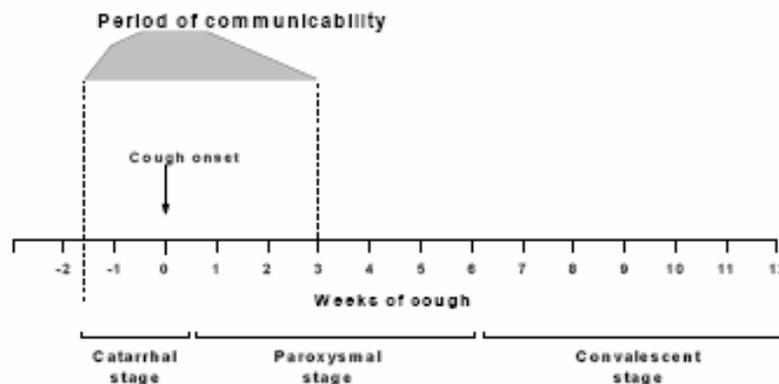
Rebecca Lazensky is a Florida Epidemic Intelligence Service Fellow assigned to the Nassau County Health Department in Fernandina Beach, Florida. She can be reached at 904.548.1800, ext. 5209.

Pertussis PCR Testing Now Available

by Robyn Kay, MPH

Pertussis, a highly infectious respiratory disease, is caused by the bacteria *Bordetella Pertussis*. As illustrated in the *Guidelines for the Control of Pertussis Outbreaks* by the Centers for Disease Control and Prevention, there are three clinical stages related to Pertussis¹.

Figure 1-2: Period of communicability of pertussis



During the catarrhal stage, an individual may exhibit signs and symptoms similar to the common cold (runny nose, fever, mild or occasional cough)². This is then followed by the clinically apparent paroxysmal stage, in which an individual may exhibit a whooping cough or bursts of coughs. The final stage of clinical illness is the convalescent stage, in which the individual slowly begins to recover.

While there are numerous laboratory diagnostic tests to determine if an individual has Pertussis, the gold standard method is isolating the organism by culture. The optimal specimen collection for culture occurs during the catarrhal stage². However, the suspicion of Pertussis may not be considered until the individual begins to “whoop” during the paroxysmal stage.

The Polymerase Chain Reaction (PCR) is the more sensitive, specific, and rapid way to test for *B. Pertussis*. The Pertussis PCR will detect the DNA of the organism, regardless of the stage of infection. The Pertussis PCR is an accepted laboratory test and part of the case surveillance definition for Pertussis.

The Bureau of Laboratories is now pleased to offer polymerase chain reaction testing for *Bordetella Pertussis* at the Jacksonville State Laboratory. All specimens (in Reagan-Lowe transport media) submitted to the Jacksonville State Laboratory will be tested by PCR. However, the state lab will electronically report the PCR test results. The results will be available 3-5 days after the specimen is received. The Bureau of Laboratories has drafted instructions for the Pertussis PCR.

Instructions for Pertussis PCR Specimen Collection and Shipping

There are two options:

1) The preferred method is overnight delivery:

Collect using Copan nasopharyngeal swab, replace swab in the sleeve provided and ship cooler overnight using ice packs. Specimen must be received by the state lab within 24 hours of collection. Copan swab can be obtained from the Jacksonville lab.

2) If specimen cannot be sent to state lab within 24 hours:

Collect using nasopharyngeal swab (Dacron or Copan) and ship in Regan-Lowe transport media using ice packs. This should arrive in Jacksonville within 2 – 3 days.

For further information, contact John Nasir at 904.791.1605.

Note that the real-time PCR procedure for Bordetella pertussis is a molecular procedure that will not distinguish between a carrier state and an active infection.

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1. CDC. Guidelines for the Control and Prevention of Pertussis Outbreaks. Atlanta, Georgia. 2000
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Acknowledgements:

A special thank you to the Bureau of Laboratories - Jacksonville microbiology team: Dr. David Beall, Ron Baker, John Nasir, Maria Pedrosa, Nancy Pickens, Elizabeth Burden, and Ketlande Louis-Jean, Bureau of Immunization - Phyllis Yambor and Catheryn Mellinger, and the Bureau of Epidemiology - Joann Schulte, Aimee Pragle, and Janet Hamilton, for their dedication to this project.

Robyn Kay is an epidemiologist in the Bureau of Epidemiology's Investigative Section. She can be reached at 904.630.3246.

Eleventh Annual Bureau of Epidemiology Seminar Poster Winners Announced

The wait was officially over during the bureau's annual seminar in Tampa in October, but we're happy to reveal the winners of this year's poster session in this issue of *Epi Update*. Drum roll, please ...

Best Post in the Chronic Disease Category

Florida Department of Health, Bureau of Epidemiology *Epi Update*

Disparity in the Prevalence of Crohn's Disease between Medicaid Recipients and Patients with Private Insurance using Hospital-based Data in Florida

Dr. Youjie Huang, MD, DrPH, MPH

Best Poster in the County Health Department Category

Cluster of Hepatitis B False Positive Results among Pregnant Women

Nancy Borgsmiller, RN, BSN; Sharlene Emmanuel, MPH; Cynthia Goldstein-Hart

Best Poster in the Communicable Disease Category

Locally Acquired Hepatitis E Virus (HEV) Infection in the United States – Florida, 2005

Samantha D. Rivers, MS; Ryan T. Novak, PhD; Lisa Lavoie; Karin Marshall; Roger Sanderson, MA; Patricia Ragan, PhD, MPH, PA-C; William A. Bower, MD

Best Poster in the Environmental Health Category

Neurotoxic Shellfish Poisoning (NSP) from Recreationally Harvested Shellfish, Florida, 2006: NSP Outbreak in Lee County, July 5 – 18, 2006

Robin Terzagian, BS; Roberta Hammond, PhD, RS

Best Poster in the Epidemic Intelligence Service Category

Salmonellosis in Collier County: An Analysis of Rates by Zip Code

Nicole E. Basta, MPhil Epidemiology

Best Poster in the Syndromic Surveillance Category

Age Group Differences in Influenza-Like Illness Observed From Emergency Department Visits in Miami-Dade County

Rodlescia Sneed, MPH; Guoyan Zhang, MD, MPH; Erin O'Connell, MPH; Claudio Micieli, MPH; Rene Borroto-Ponce, BS; Fermin Leguen, MD, MPH

***Our thanks and congratulations to all who took the time to participate,
and best wishes especially to the winners!
Their abstracts will appear in follow-up issues of Epi Update.***

Norovirus G1 Outbreak Associated with the Consumption of Salads at a Pizza Restaurant, September 2006

***by Warren R. McDougale Jr, MPH, Elliot Gregos, MPH,
and Mike Friedman, MPH***

Introduction

On Monday October 2, 2006, the Hillsborough County Health Department Environmental Health office received a call concerning a group of six adults and six children who ate pizza and Greek salad at a local restaurant on Thursday, September 28, at 8:00 p.m. Nine of the 12 (75%) persons became ill. Nine of nine who ate salad became ill (100%) while three children who ate pizza only were not ill. There were three different types of pizza and a large Greek Salad served at the party.

On Tuesday October 3, a call was received from another group of three persons who had picked up pizza and Greek salad at 8:00 p.m. on Thursday, September 28 from the same restaurant. All three members of this group ate a half cheese and half mushroom pizza and Greek salad, and subsequently became ill. The person who consumed the largest portion of this salad was the most seriously ill.

On Wednesday October 4, a call was received identifying a third group of approximately 35 persons who had eaten at the restaurant at the same time as the other two groups and had multiple pizzas and a party salad. A portion of this group was a local soccer team and the remainder was a soccer team from Paraguay. The local soccer team was not as cooperative as was desired, and attempts to identify and contact the team from Paraguay were unsuccessful. Only three families and one individual from this group agreed to be interviewed.

The three groups involved in this outbreak had individuals that knew persons in the other groups. The second and third group contacted our office as a result of seeing their friends and mentioning having seen each other in the restaurant and their subsequent illnesses.

On Thursday October 12, an additional party of three persons reported illness after eating lunch at noon the following day, September 29. All three members of this group reported being ill.

Methods

The Hillsborough County Health Department environmental epidemiologist conducted a joint inspection with the Division of Hotels and Restaurants at 3:00 p.m. on Monday October 2, 2006. The restaurant was cooperative and informed the inspectors that an employee had become ill at the same time as the patrons. The manager of the restaurant told investigators that lettuce for the evening meal was routinely produced in large enough quantities to serve lunch the next day. The lettuce used by this facility is head lettuce and the chief cook assured the investigators each head was washed individually by him.

The facility and the produce company provided information on the origin of the lettuce. The source of the product was Salinas, California.

Results

The investigation identified 30 persons who agreed to be interviewed or provide information for the children. Of the 30 persons interviewed 18 (60%) had become ill. Twelve persons (40%) were not ill controls. Stool specimens were collected from three symptomatic adults and delivered to the Tampa Lab on Tuesday October 3, 2006 and all tested positive for Norovirus G1.

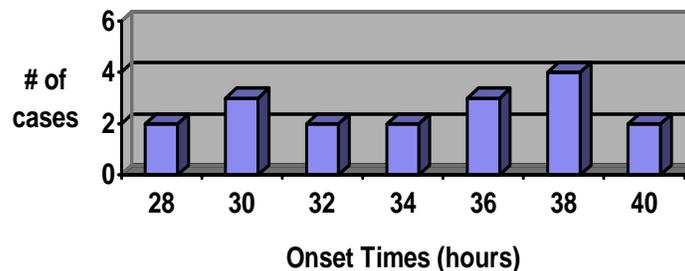
**Table 1 – Frequency of Symptoms
Pizza Restaurant on September 28 & 29, 2006
Hillsborough County**

Symptoms	Frequency	Percent
Weakness	18	100
Vomiting	14	78
Chills	13	72
Headaches	11	61
Diarrhea	9	50
Body aches	7	39
Dizziness	4	22
Fever	2	11

N=18

The reported duration of illness for acute symptoms ranged from 12 to 48 hours. None of the identified cases sought physician care. The outbreak curve is shown on Chart 1.

**Chart 1 – Outbreak Curve
By Onset of Illness**



Twenty of the 30 persons interviewed ate either salad or lettuce with 18 (90%) becoming ill. One employee of the facility ate a sandwich about an hour after the other parties. The sandwich was made using the lettuce prepared for salads. The employee developed symptoms similar to that of the patrons. Only two people who ate salad did not become ill.

The ice with water or soda was evaluated to determine if the ice was a source of the illness. Four of five people who did not have ice, water, or soda from the restaurant became ill. Three of the five persons who consumed soda from home with their pizza and salad were very ill.

Pizza was eaten in each of the groups identified by this investigation. Twenty-nine of the 30 persons interviewed ate pizza. Seventeen of the 29 persons (59%) became ill while 12 (41%) persons were not ill (controls).

Eighteen out of 18 people who were ill reported eating salad/lettuce, while only two of 12 non-ill people reported eating salad/lettuce, for an odds ratio (OR) of 63.3, p value = 0.00005. The OR for the ice/soda/water was 1.14, p value = 0.62, and the OR for the pizza was 3.17, p value = 0.75. No one interviewed who ate pizza but did not eat salad reported being ill.

Conclusion

This is a confirmed outbreak of Norovirus G1 associated with the consumption of salad at this restaurant. The determination was based on the three positive stool tests and the high odds ratio for the lettuce/salad. Persons who ate salad or lettuce were 63 times more likely to become ill than those who did not eat salad or lettuce.

Hillsborough County Environmental Health has investigated three large Norovirus foodborne outbreaks associated with produce consumption. These outbreaks represent the largest foodborne outbreaks reported during 2005 and 2006 in Hillsborough County. In each outbreak, produce consumption was confirmed or suspected as the food vehicle.

Fresh produce, particularly green leafy vegetables, has been recognized as an important and significant source of a variety of pathogens responsible for foodborne illness outbreaks. The ubiquitous use of lettuce in salads and many other menu items often leads to very large outbreaks when it is contaminated with a pathogen as infectious as Norovirus.

Warren McDougle is an environmental specialist at the Hillsborough County Health Department and can be reached at 813.307.8015., ext. 5941. Elliot Gregos is an environmental manager at the Hillsborough CHD and can be reached at 813.307.8015, ext. 5902. Mike Friedman is a regional environmental epidemiologist in New Port Richey and can be reached at 727.816.1240.

2006 Bureau of Epi Statewide Seminar Golden Partnership Award Recipients Honored by Debora Campbell, MS, CHES

We value our partners for many reasons, and were so pleased to have an opportunity during our statewide seminar to share their special qualities with others. We want our readers also to learn about the marvelous work these individuals and organizations do.

Broward County Health Department for their collaboration and team work in the outbreak investigation and partnership for rash illnesses on a cruise ship secondary to Measles and Rubella, February-March, 2006.

The Florida Cancer Data System/ University of Miami for being a good community partner with the Bureau of Epidemiology, making Florida's cancer registry recognized and utilized by our local, state, and federal partners.

Emily Wilson, MPH for being instrumental in developing the core elements of epidemiology and environmental health strike teams and task forces. These models are now the basis for the Region IV states of HHS in building the regional and national response system.

Kim Geib, ARNP MSN for building the epidemiology program at the Nassau County Health Department from the ground up. She excels in the public health practice of epidemiology and has led several outbreak investigations, engaged the hospital in syndromic surveillance, and provided excellent leadership during disaster response.

2005 E.coli Outbreak Investigation Team Dr. Carina Blackmore, Dr. Roberta Hammond, Mr. Dean Bodager; for displaying considerable leadership in coordinating and managing the E.coli outbreak in a petting zoo in the spring of 2005.

Florida Poison Control Information Network Jacksonville-Dr. Jay Schauben Miami-Dr. Richard Weisman Tampa-Former Director Dr. Vincent Speranza; for making a commitment to public health surveillance, which has increased FDOH's ability to detect cases of illness or injury in real-time and rapidly respond to a variety of public health issues.

Coalition on Cultural Communication for inspiring teamwork and collaboration in the Palm Beach County community and providing ongoing leadership in the pursuit of public health excellence, targeting recent immigrants and the non-English speaking population in the county with messages about mosquito-borne illness and influenza.

Debora Campbell is the training coordinator for the Bureau of Epidemiology and was responsible for planning this year's statewide epidemiology seminar. She can be reached at 850.245.4444, ext. 4409.

Nursing Home Influenza Surveillance in Duval County

by Sharleen Traynor, MPH

The Duval CHD Epidemiology Program is preparing to kick-off its Nursing Home Influenza-Like Illness (ILI) Surveillance Program for the 2006-2007 season. The goal of the project is to monitor influenza activity in nursing home facilities to identify possible cases and prevent outbreaks from occurring. Surveillance in nursing homes is important because influenza can be very serious in the elderly. Persons 65 and older are at increased risk for severe infection, accounting for an estimated 90% of influenza deaths, and that risk increases with age.¹ Those 85 and older are at greatest risk for influenza-associated hospitalizations.² In addition, many nursing home residents have underlying health conditions that put them at greater risk for complications associated with influenza infection. Other factors that contribute to increased risk include the crowded institutional environment and being exposed to others who circulate among the community and may introduce the virus into the facility such as visitors, volunteers, and staff members. Given the high-risk population that resides in nursing homes, early recognition of cases and potential outbreaks are critical for successful infection control.

Duval County's Nursing Home ILI Surveillance Program had its first full pilot season last year with five participating facilities—one nursing home in each major geographical region of the county. This year, enrollment has increased to eight facilities, including a new location covering the beaches region. The program is modeled after the sentinel provider influenza surveillance program. Each week, facilities report the number of individuals exhibiting signs of influenza-like illness, which is defined as cough and/or sore throat accompanied by a fever $\geq 100^{\circ}\text{F}$. Separate rates are then calculated for residents and staff. In addition, the program monitors vaccination rates among residents and staff for each facility. Another component of the program is laboratory testing. The Bureau of Laboratories' Jacksonville State Lab has agreed to offer free testing for any suspect cases of influenza. This allows for confirmed diagnoses, identification of strains, and helps dictate infection control measures. Duval CHD epidemiology provides a weekly report to each participating facility that includes the ILI rates for each nursing home, community ILI activity based on information from other surveillance systems such as the sentinel provider program and syndromic surveillance, and state and national influenza reports. The reports also include influenza articles and updates as they are released regarding topics such as vaccination, prophylaxis, or genetic drift. The program lasts the duration of the official influenza reporting surveillance, week 40 – week 20, although year-round reporting is encouraged.

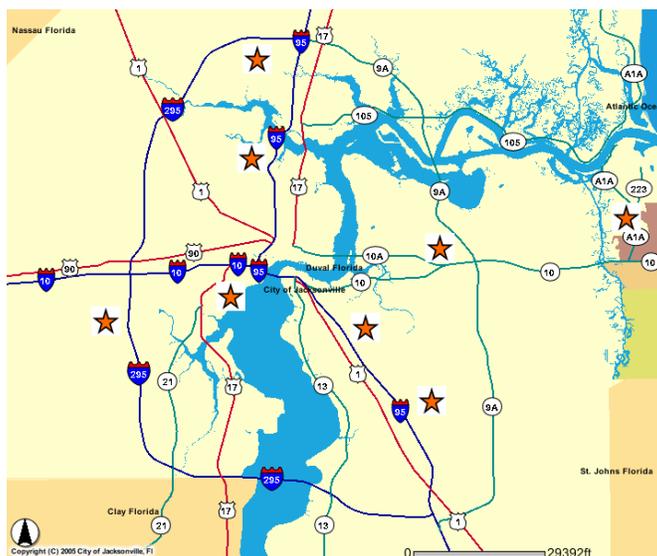
Last year, there was no confirmed influenza activity in any of the participating facilities. However, the experience of another local nursing home that had an influenza outbreak of 63 cases demonstrates the need for surveillance. The outbreak was not reported to the health department until ten days after the initial case was identified and 27 residents and 15 staff had already fallen ill. The outbreak resulted in 12 hospitalizations. Had a surveillance system been in place, the number of cases and overall morbidity could have been minimized.

The surveillance program is not designed to be burdensome or time-consuming for nursing home staff. The report forms are already partially completed to include the contact information and reporting dates. The only pieces of data the facilities are responsible for are the raw counts of ill and vaccinated individuals. Based on evaluations from last year's program, facility staff reported the average time spent gathering the required information ranging from 15 minutes to two hours,

depending on the method of record keeping and staffing shortages. The major challenge of the program is getting the facilities to report on-time. This is especially true at the start and end of the season when there is very little influenza activity in the community. In order to keep up the reporting, epidemiology staff call or email the nursing home contacts to remind them to report. Another challenge that was identified during this program is low vaccination rates among health care staff. While the resident vaccination rate for the 2005-2006 season was about 80% in all facilities, the rates among the staff were closer to 33%. Despite the fact that health care workers are considered a high-risk group and most facilities offer the vaccine free to their staff, vaccination rates remain poor. This is a concern because staff illness often precedes illness in residents, and infected healthcare workers can introduce the virus into the facility. It has been documented that staff vaccination can help reduce influenza mortality among residents.³⁻⁴ Duval CHD epidemiology staff hopes to improve vaccination by stressing the importance of the vaccine through increased awareness.

Any county health department staff interested in the implementation and progress of this surveillance system can contact Sharleen Traynor at 904.791.1688 for more information.

Map of Participating Facilities



References

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3. Carman WF, Elder AG, Wallace LA, et al. Effects of influenza vaccination of health-care workers on mortality of elderly people in long-term care: a randomized controlled trial. *Lancet* 2000;355:93-97.
4. Drinka PJ and Gravestien S. Management of influenza in the nursing home. *Annals of Long-Term Care* 2000;8:23-30.

Sharleen is a Florida Epidemic Intelligence Service Fellow assigned to the Duval County Health Department. She can be reached in Jacksonville at 904.791.1688.

Training News

Field Investigator Response and Surveillance Training A basic course to help public health staff and their community partners who could be called upon to assist epi staff during a surge capacity event, designed to help public health workers develop the abilities needed to assist in epi investigations when staff capacity is full.

Ft. Myers region: November 14, 2006 at the Lido Beach Resort, Sarasota
<http://www.fcphp.usf.edu/courses/course/course.asp?c=FIRST67FTM>

Jacksonville region: December 5, 2006 at the Renaissance Resort at World Golf Village, St. Augustine
<http://www.fcphp.usf.edu/courses/course/course.asp?c=FIRST67JAX>

Tampa region: January 30, 2007 (exact location TBA)
<http://www.fcphp.usf.edu/courses/course/course.asp?c=FIRST67TPA>

Intermediate Field Investigator Response and Surveillance Training An intermediate course to develop knowledge, skills, and abilities needed by public health professionals and their community partners who could be deployed on field epi strike teams during surge capacities.

Ft. Myers region: November 15-16, 2006 at the Lido Beach Resort, Sarasota
<http://www.fcphp.usf.edu/courses/course/course.asp?c=IFIRST667FTM>

Jacksonville region: December 6-7, 2006 at the Renaissance Resort at World Golf Village, St. Augustine
<http://www.fcphp.usf.edu/courses/course/course.asp?c=IFIRST67JAX>

Tampa region: January 31-February 1, 2007 (exact location TBA)
<http://www.fcphp.usf.edu/courses/course/course.asp?c=IFIRST67TPA>

For more information about the courses offered by the University of South Florida, contact Pam Price at pprice@health.usf.edu or 813.974.3718.

Mosquito-borne Disease Summary October 29-November 4, 2006 ***Rebecca Shultz, MPH, Caroline Collins, Daneshia Roberts, Carina Blackmore, PhD***

During the period October 29 - November 4, 2006, the following arboviral activities (St. Louis Encephalitis [SLE] virus, Eastern Equine Encephalitis [EEE] virus, Highlands J [HJ] virus, West Nile [WN] virus, California Group [CE] virus) were recorded in Florida:

EEE virus activity: None this week. A total of 22 counties have reported EEE virus activity so far this year, compared to 50 at this time last year

WN virus activity: Two seroconversions to WN virus were reported in sentinel chickens from Volusia and North Walton counties. A total of 19 counties have reported WN virus activity so far this year, compared to 32 at this time last year

SLE virus activity: Five seroconversions to SLE virus were reported in sentinel chickens from Hendry (1), Lee (3) and Sarasota (1) counties. A total of six counties have reported SLE virus activity so far this year, compared to four at this time last year.

HJ virus activity: None this week. A total of six counties have reported HJ virus activity so far this year, compared to 14 at this time last year.

No locally-acquired human cases of arboviral infection have been reported this year.

Dead Bird Reports: The Fish and Wildlife Conservation Commission (FWC) collects reports of dead birds, which can be an indication of arbovirus circulation in an area. This week, 15 reports representing 52 dead birds were received from nine counties. Of the reported birds, one (a blue jay) was identified as a type of corvid, one was identified as a raptor, and the remaining 50 were identified as other birds. Please note that FWC collects reports of birds that have died from a variety of causes, not only arboviruses. Dead birds should be reported to www.myfwc.com/bird/.

See the web page for more information at <http://www.doh.state.fl.us/environment/community/arboviral/index.html>. The Disease Outbreak Information Hotline offers recorded updates on medical alert status and surveillance at 888.880.5782.



This Week on EpiCom

by Christie Luce

The Bureau of Epidemiology encourages Epi Update readers to not only register on the EpiCom system at <https://www.epicomfl.net>, but to sign up for features such as automatic notification of certain events at EpiCom_Administrator@doh.state.fl.us and contribute appropriate public health observations related to any suspicious or unusual occurrences or circumstances. EpiCom is the primary method of communication between the Bureau of Epidemiology and other state medical agencies during emergency situations.

- Varicella investigation at Manatee County jail
- Sarasota CHS investigating two clusters of chickenpox in two separate schools
- Tetanus case in Orange County involving a 66-year-old female

Christie Luce is administrator of the Surveillance Systems Section in the Bureau of Epidemiology. She can be reached at 850.245.4444, ext. 2450.

Weekly Disease Table

by D'Juan Harris, MSP

Click [here](#) to review the most recent disease figures provided by the Florida Department of Health, Bureau of Epidemiology.

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