

Epi Notes



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Closing the Gap: Jail-Based HIV/Syphilis Prevention and Support Project, Cumberland County, N.C.

Prepared by Marti Nicolaysen and Rick Hedenquist, N.C. HIV/STD Prevention and Care Branch

Background and Morbidity

Founded by Ashley Rozier, II, the Cape Fear Regional Bureau for Community Action, Inc. (The Bureau) is the oldest grassroots HIV/AIDS/Substance Abuse street outreach community-based organization (CBO) in North Carolina. Since 1989, the Bureau has provided prevention counseling, testing and referral services for HIV/AIDS, STDs, substance abuse, hepatitis and many other chronic needs to persons of African American descent, as well as, high-risk minorities and the disenfranchised, in the Cape Fear Region. Statistically, in 2005, Cumberland County ranked sixth among the state's 100 counties for cumulative reports of AIDS (1983-2003), with 550 cases, and sixth for cumulative reports of HIV, with 1,246 cases reported. Persons of African descent represented only 34.9% of Cumberland County's population but an alarming 83.9% of AIDS cases. Additionally, African Americans represented 63% of chlamydia cases, 79% of gonorrhea cases and 70% of early syphilis cases in 2004.

"Closing The Gap" Program

After extensive preparation and planning with local and state partners, in January 2006, the Bureau, the Cumberland County Sheriff and the Cumberland County Health Director initiated the "Closing The Gap" program. This program offers both a traditional jail screening component and a unique **community outreach** component to provide services both in the jail and in the community. Bureau staff, trained to conduct HIV/syphilis counseling and testing, target incarcerated men and women. Sessions are offered on Friday, Saturday and Sunday evenings from 7:00 p.m. to 11:00 p.m. Tests are processed through the Cumberland County Health Department, and special efforts are made to ensure that all test results are provided to the client regardless of whether they are still incarcerated. Those

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(Closing the Gap, continued from page 1)

inmates testing positive for HIV and/or syphilis are linked to medical care, prevention case management, partner notification services, and other case management services, including housing, food and social support services, as needed. This program focuses on early identification of HIV and syphilis through testing, linking clients to appropriate medical care and prevention services—including identification and enrollment of high-risk women in prenatal care programs,—and supporting HIV-positive clients in adhering to treatment regimens and in adopting and sustaining HIV risk reduction behavior.

Exceeding Their Goals

The Bureau had estimated it would provide, by June 30, 2006, education/risk reduction messages to 300 incarcerated men and women, provide HIV/syphilis testing services to 240 detainees, post-test counsel 192 clients, make appropriate referrals upon discharge. From January 1 to March 31, 2006, the program tested 538 inmates for HIV, from which one new HIV case was identified, and 539 inmates for syphilis, from which six new syphilis cases were identified. Of special note is that 348, or 65%, of the clients tested were post-test counseled, and all positive HIV and syphilis clients were referred for medical care/treatment, partner notification services and case management services.

For additional information, please contact Marti Nicolaysen, NTS Coordinator, at 919-733-2030 ext 53, or Rick Hedenquist, Corrections, at 919-733-2030, ext 51. ♦

Public Health Responds to Pepsi America Sails Tall Ships

Prepared by Julie Casani, MD, MPH, Branch Head, Office of Public Health Preparedness and Response



Coordinated through Carteret County Health Department, staff from PHRST teams and Public Preparedness and Response staffed several roles during the recent Pepsi America Tall Ships event in Beaufort. Surveillance teams were imbedded in all of the SMAT and DMAT aid stations. This event was the first time real-time health surveillance was performed utilizing the pilot patient tracking system. In addition, data was collected through direct contact with providers. Roving public health staff also monitored crowds

for heat-related illness and assured that hand-washing stations were maintained at sanitary facilities. CHEMPACK modules were pre-deployed to Beaufort in case they were needed. Kentucky is the only other state to pre-deploy the CHEMPACK.

On the second day of the event, the surveillance teams identified a small cluster of rashes in workers and volunteers whose primary assignment was at a single location. Public health staff then evaluated the location for toxic chemicals, toxic plants, and other environmental hazards. Other than the heat, none were found. Meetings were held with the Incident Command and the event leaders to prepare advisories for workers, cordoning off areas of potential risk, and to consider other actions should the cluster broaden. In total, ten people sought care for rashes during the event.

On another day, it was rumored that “several” workers had nausea, vomiting and diarrhea in connection with eating the lunch provided. A public health team went to evaluate the scene at the aid station while several members prepared for dealing with a foodborne outbreak. Investigation showed the rumor was unfounded, but resources were nevertheless available to conduct the evaluation including case investigations, food inspections, and laboratory sampling within one hour of the report.

As reported below, PHRST 3 also launched its mobile command center, a terrific success.

While this event provided public service, it also proved to be an excellent opportunity to establish relationships with our partner agencies, provide training for them as well as the public health team, and have a wonderful venue to do all of this in. We appreciated being invited. ♦

PHRST 3 Mobile Command Post: Updated and Wired for the Future

*Prepared by Keith F. Henderson, D.O. FACEP,
Deputy Director of Public Health for Medical Affairs,
Cumberland County Department of Public Health*

When responding to requests for assistance for man-made and natural disasters, the North Carolina Division of Public Health, Office of Public Preparedness and Response will have a new weapon in its arsenal. In conjunction with Public Health Regional Surveillance Team (PHRST) # 3, located in Fayetteville, public health emergency responders and local health departments will now have the ability to access the internet and utilize an entire portable IT system that is all wireless, and is satellite-based and wireless.

The system is completely self-contained and can be transported to any location via the PHRST #3 Mobile Emergency Operations Command Post. The Mobile Command Post also features a 19-foot long conference area, satellite-based TV system for up-to-date news acquisition, and radio systems that include VHF, UHF and an 800 Megahertz *VIPER*-compliant base station/repeater system.

The wireless network capability of the system uses an innovative WiFi Mesh system that allows for a VPN secure network up to 1.5 miles around the Command Post. Five voice-over internet phones are also included with the system, which use the WiFi network for communication and which can be directed through the IT system into the satellite to become satellite-based telephones, assuring communications during condition where normal telephones are not operational or available.

The system has been designed to be self-supporting for up to five days through the use of an on-board generator system. The new system's debut was at the Tall Ships Festival in Carteret County, over the July 4th holiday. The system provided the platform for public health surveillance, and for the federal and state medical assistance teams who were present during this high profile event. ♦



External tripod WiFi Mesh node extends range of internal WiFi radio



Backside of satellite antenna and view of dual WiFi broadcast antennas connected to internal WiFi Radio



Inside view of integrated network and control rack

North Carolina Men's Health Initiative...Lessons Learned

Prepared by Debra Bost, BS, CHES, Social Research Associate, HIV/STD Prevention and Care Branch



The North Carolina Department of Health and Human Services (N.C. DHHS) identified an increased number of HIV cases among college-aged students from January 2001 through May 2003. Eighty-eight percent of these cases were black males; almost all were men who have sex with men (MSM). Centers for Disease Control and Prevention (CDC) and N.C. DHHS responded to this public health crisis by funding a demonstration project entitled the N.C. Men's Health Initiative (MHI), targeting African American men aged 18-30. The intervention, based on Jeffrey Kelly's popular opinion leader model (POL), serves to identify, train and enlist key opinion leaders to help change social norms in the community by delivering effective risk reduction conversations among peers and acquaintances.

POL had been proven effective in reducing sexual risk-taking behaviors for white gay men; the challenge for North Carolina was to establish whether or not this intervention could meet the needs of young African American MSM.

MHI was implemented in four areas of North Carolina by community-based organizations engaged in HIV prevention – Wake County (Alliance of AIDs Services-Carolina), the Triad (Triad Health Project), and metropolitan Charlotte (Metrolina AIDs Project, Inc.) A college-based site was selected in Durham County (North Carolina Central University) to test the feasibility of reaching all African American men in the target age group, regardless of sexual orientation.

Select bars frequented by black gay patrons were chosen as community venues to recruit popular opinion leaders. Student housing was selected as the primary venue on the college campus to recruit popular opinion leaders.

A comprehensive behavioral survey was developed by CDC that included variables such as socioeconomic status, educational level, sexual risk-taking behaviors, drug and alcohol use, and history of sexual abuse. A comparable survey was developed for the campus. Quarterly data collections were conducted in the bars and on the college cam-

pus. Eligible participants took the survey and were provided monetary incentives for their involvement and time.

A series of focus groups was conducted in September 2004. The first step required DHHS to give attention to core components of the intervention needing adaptation to meet the needs of the target population. Focus group participants provided opinions on a broad range of topics dealing with sexual orientation, whether they thought African American men would participate in POL training, or if they might accept HIV risk-reduction messages delivered by peers. Prominent themes from discussions were woven into role plays used in POL trainings. Other themes were used to modify training materials, marketing materials/strategies, and to design culturally appropriate project logos/brands.

At project midpoint, a second round of focus groups was conducted including men who completed POL training. DHHS assessed project impact through the eyes of the POLs; issues such as community acceptance and project process changes were explored. Suggestions included the need to hold training sessions away from HIV service organizations due to stigma associated with HIV/AIDS. Ideas were then used to make adjustments to the project's operation.

Conclusions

Does POL work in meeting the needs of African American MSMs 18-30? Preliminary data suggest that with adaptation, this intervention holds much promise.

- 308 popular opinion leaders were trained in the community venues, with 822 documented conversations.
- 108 popular opinion leaders were trained on the campus, with 1,562 documented conversations.

Over 1,500 behavioral surveys collected for analysis will yield additional information when planning other HIV prevention interventions targeting young African American MSMs. CDC will provide the outcome of the behavioral survey findings in August 2006. DHHS staff remains hopeful these results will be equally promising.

Survey findings, process data, and opinions captured from focus groups will serve as a point of reference for planning future interventions for African American MSMs. The process of moving from identifying a problem to finding a culturally appropriate solution remains at the forefront as we work to eliminate health disparities. ♦

Maureen O'Rourke Named New Public Health Advisor for the N.C. Tuberculosis Control Program

Prepared by Ashley Ewing, TB Educator, General Communicable Disease Control Branch



Maureen O'Rourke was selected for the senior public health advisor (PHA) position with the N.C. Tuberculosis Control Program in the General Communicable Disease Control Branch. Maureen was previously the PHA with the Pennsylvania TB Program in Harrisburg, Pennsylvania, where

her responsibilities included developing goals and objectives consistent with national standards and incorporating them into the cooperative agreement application. She independently wrote the Human Resources Training Plan and assisted with the development of a TB program evaluation plan for Pennsylvania. In addition, she provided TB technical assistance and consultation throughout Pennsylvania, made presentations, and served as the surveillance coordinator as well as the lead TB program representative for Pennsylvania's National Electronic Disease Surveillance System (PA-NEDSS).

From 2002 to 2004, Maureen was assigned to the Tennessee TB Elimination Program in Nashville, where her responsibilities included writing Tennessee's yearly progress reports and cooperative agreement applications. Maureen completely redesigned the state's yearly statistical report and coordinated World TB Day activities for the state. She also assisted in conducting quality assurance activities for the regions and metropolitan areas in Tennessee. During her last six months in Tennessee, she independently revised the state's guidelines for conducting effective contact investigations and redesigned the contact interview sheet.

Maureen began her career with the Centers for Disease Control and Prevention (CDC) in Columbia, South Carolina, as a PHA in the Sexually Transmitted Diseases (STD) program. Prior to that, she was a state Disease Intervention Specialist (DIS) in Hillsborough and Manatee counties of Florida. As a state and federal DIS, Maureen was trained and educated in the fundamentals of public health delivery and epidemiology. In 1995 she was reassigned to Dallas, Texas, where she planned, coordinated, and implemented special screening activities at homeless shelters, detention centers, and other sites serving high-risk populations. Maureen also presented educational and training programs. Maureen began working in the N.C. TB Control Program on March 5, 2006. With her many years of experience in Public Health and tuberculosis programs will be a great asset

to the N.C. TB Control Program. In her new position she will be providing technical assistance to the N.C. TB Control Program as well as the local health department TB Control programs. ♦

Goode Becomes N.C. Pandemic Flu Coordinator

Prepared by Jeffrey Engel, MD, State Epidemiologist and Chief, Epidemiology Section



Brant Goode, who recently completed his two-year Epidemic Intelligence Service assignment with North Carolina, is staying on with the state as a Centers for Disease Control and Prevention (CDC) Career Epidemiology Field Officer (CEFO) to oversee pandemic influenza prepared-

ness efforts.

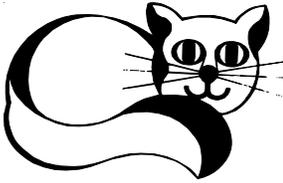
Brant's background includes over 15 years of public health practice with the Missoula Montana city-county health department. While working at the local health department level there, he directed the immunization clinic and communicable disease response programs, and served as the regional health department co-chair for HIV prevention community planning. He gained a deep understanding of the challenges and strengths of public health, including the importance of healthy relationships with partner agencies. His educational background includes baccalaureate in nursing and master of public health degrees. His public health degree built on completion of a certificate in public health that was created in response to the shortage of public health professionals with advanced and specific public health education. In addition to his formal education, he served 8 years with the U.S. Army Reserve as a medical surgical nurse with the 4225th U.S. Army Hospital.

For the past two years, Brant has worked as a CDC EIS officer assigned to the N.C. Epidemiology Section's General Communicable Disease Control Branch. He participated in many investigations and worked with public health partners statewide to advance epidemiological capacity and expertise. Some of the infections and events investigated included severe invasive community-associated MRSA infections, invasive Group A Strep, a cluster of stillbirths, and a perceived excess in child mortality. Brant lead the epi-investigation of an outbreak of *E. coli* O157:H7 at the 2004 State Fair, along with an EpiAid from the Foodborne Disease Branch at CDC. Their work clearly and sufficiently implicated a specific petting zoo in the outbreak, and supported a recently enacted state

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Cats and Influenza Virus Infection Information for Veterinary Professionals in North Carolina

Prepared by Carl Williams, Public Health Veterinarian,
Occupational and Environmental Epidemiology Branch



Highly pathogenic Avian influenza A viruses (of the H5N1 subtype) have been documented to cause illness in 98 different species of animals (as of 3/24/06) (1). Included in this group are the domestic cat (*Felis domestica*) and large cats, including tigers (*Panthera tigris*) and leopards (*Panthera pardus*). Because of the likelihood of the H5N1 virus someday reaching the United States, this information about cats and influenza infection was prepared. As time passes and more information about avian influenza infections in other species is learned, this document will be updated.

Background information on influenza, including H5N1

There are three types of Influenza viruses in existence—type A, type B and type C. From a public health perspective, only types A and B viruses are considered important. However, type A viruses are of most concern because of their ability to cause more severe illness. These viruses, referred to by their hemagglutinating and neuraminidase protein subtypes (*i.e.*, H5N1) are known to infect humans and a wide variety of other species. Generally subtypes are restricted to certain species, but through alterations in their genetic code through genetic shift and drift they may become capable of infecting other species. A good example of this is influenza A H3N8, which has been known to infect horses in the United States since the early 1960s. But in 2004, H3N8 was found to infect dogs, a species not previously known to be infected with influenza viruses (2). Influenza A H3N8 is not known to infect any other species.

Similar to that canine example, influenza A H5N1 has demonstrated an ability to infect species other than its historical reservoirs, which are various species of birds. Birds in the orders Anseriformes (ducks, geese) and Charadriiformes (shorebirds) are the natural reservoir for all influenza A viruses. In their natural hosts, the influenza viruses replicate in the intestinal tract, are shed with feces into water, and are transmitted from bird to bird by the fecal-oral route.

Cats and H5N1

Although influenza viruses do exist in reservoir species in the United States, the highly pathogenic types (those which can cause severe disease in domestic poultry and people), such

as H5N1, have not been identified in this country. However, in those countries where they have been identified, illness and fatality resulting from infection with H5N1 has been documented in feline species. It is therefore likely that feline species in the United States will be susceptible to disease, and may pose a public health risk.

Initial reports of the death of large felines to H5N1 were first documented in Thailand in 2003 after the cats were fed fresh chicken carcasses from a local slaughterhouse (3). Subsequently it was shown that domestic cats could be infected with H5N1 after eating infected chickens and could spread the infection to other cats (4) and presumably to other species. In domestic cats, viral infection has been associated with severe necrosis and inflammation and was documented to be spread via the respiratory and digestive tracts (5). Based on these studies and others that have followed, it is reasonable to assume that infected cats may pose a risk to other cats, and potentially to people; however, it should be noted that transmission of H5N1 from cats to people has not been documented. Nonetheless, illness in cats in H5N1 endemic areas should be closely scrutinized.

Surveillance in North Carolina

Recommendations to reduce or prevent infection of felines with H5N1 are appropriate if H5N1 infection has been documented or is highly suspected in poultry or wild birds. As previously mentioned, the United States is free of highly pathogenic H5N1 virus at this time (August 1, 2006). The North Carolina Department of Agriculture and Consumer Services, in cooperation with producers and industry, will conduct surveillance for avian influenza in poultry flocks. The North Carolina Wildlife Resources Commission (N.C. WRC) is conducting surveillance for avian influenza in wild birds in various parts of the state. In the event that H5N1 were to infect wild birds in North Carolina, it is likely that migratory waterfowl and shorebirds would be affected most severely. Songbirds may also be affected and would likely die in large numbers. If you witness a large die-off or are suspicious of avian influenza in wild birds, you should contact the N.C. WRC or your local game warden.

Recommendations if H5N1 has been documented in wild birds or poultry

Based on recommendations of the Food and Agriculture Organization of the United Nations

Advice for your clients:

- Contact between cats and wild birds and/or poultry should be minimized. Ideally, cats should be kept inside. H5N1 virus infection in a domestic cat infected by eating

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(*Cats and Influenza Virus*, continued from page 6)

a pigeon carcass has been recently reported (6). Keeping cats inside will have the added benefit of protecting cats from endemic diseases such as rabies.

- Stray cats should be kept outside the house and contact with them should be avoided. Again, this will have the added benefit of protecting people from cat bites and scratches, the medical costs of treating a cat bite, and associated diseases such as rabies and cat scratch disease.
- Sick cats and those with respiratory symptoms should be evaluated by a licensed veterinarian.
- Stray or feral cats may represent a nidus of infection. Contact between them and poultry and other mammals, including humans, should be minimized.
- Persons handling animals should wash their hands thoroughly after contact, especially after cleaning litter boxes or having contact with feces and/or saliva. This will have the added benefit of protecting persons from other diseases transmitted from animals to humans.

Advice for veterinarians:

- Ensure that your practice has implemented standard infection control practices, including the appropriate use of personal protective equipment, to protect you and your staff. This will have the added benefit of protecting you from numerous other transmissible agents.
- Use a 2 – 3% bleach solution to disinfect cages or other surfaces/items in which sick animals have been transported or with which they have come into contact.
- Wash animal blankets and laundry that has come into contact with sick animals. Use detergent and dry at high temperature. ♦

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National HIV/AIDS Awareness Day, Raleigh, North Carolina

Prepared by Monique Y. Gary, Public Health Program Consultant, Prevention and Community Planning Unit, HIV/STD Prevention and Care Branch

On February 7, 2006, community leaders and community-based organizations in North Carolina responded to the impact of HIV and AIDS in black communities during the sixth annual observance of National Black HIV/AIDS Awareness Day (NBHAAD). A march and a community event were held in Raleigh to encourage citizens to **get educated, get tested, get involved, and get treated** as the HIV/AIDS epidemic continues to devastate black communities.

The observance began at 10 a.m., with a 30-minute HIV/AIDS Awareness march led by North Carolina Central University's Marching Band and Dr. Leah Devlin, North Carolina's State Health Director. It ended with a community educational event at the North Carolina Museum of History. A march of this magnitude, highlighting the educational HIV/AIDS epidemic in North Carolina, proved to be a great way to raise community awareness and involvement. The march drew a crowd of over 250 participants.

Following the march, Dr. Devlin encouraged participants to get involved by unifying and energizing friends and family to get tested and know their status. She also encouraged the faith community to take a stand at their places of worship, and spread the prevention message and empower others to take control of health behaviors that might put them at risk.

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Dr. Leah Devlin, State Health Director

(NBHAAD, continued from page 7)

Evelyn Foust, head of the HIV/STD Prevention and Care Branch, encouraged the people of North Carolina to stop the spread of HIV/AIDS through prevention and treatment. March participants then assembled inside the Museum of History to heed prevention messages aimed at reducing and/or eliminating the devastation of communities due to HIV/AIDS. The audience heard perspectives from youth in the community, elected officials, the faith community and African American consumers who were infected with and/or affected by HIV/AIDS. The program featured an educational skit performed by Rev. Judy Johnson of Duke University Medical Center Partners in Caring, who demonstrated how HIV may be transmitted by engaging in unprotected risk behavior. Volunteers from the audience assisted in this demonstration to heighten the awareness of HIV/AIDS and let people know that HIV is preventable and that individuals can, and must, protect themselves.

Why do we need to heighten awareness? Over the past five years (2000-2004), AIDS has increased in the African American community: 76% increase in black females, 61% in black males and 66% overall in African Americans. African Americans make up approximately 12% of the population of the United States, yet 38% percent of total AIDS cases reported in this country are among members of that community. In 2003, North Carolina ranked 6th in the nation in the proportion of African Americans living with AIDS; 76% of the people in North Carolina who have been diagnosed with HIV/AIDS are black. For this reason alone, observances of this nature are very important to heighten awareness and persuade African Americans to get educated, get tested, get involved, and get treated in an effort to prevent HIV/AIDS.

National Black HIV/AIDS Awareness Day is co-funded and sponsored by the Community Capacity Building Coalition (CCBC), a national coalition of organizations committed to halting the spread of HIV/AIDS in African American communities. The coalition is funded by the Centers for Disease Control and Prevention (CDC) through the National Minority AIDS Initiative.

For more information about the annual National Black HIV/AIDS Awareness & Information Day visit the website at www.blackaidsday.org. ♦

Health Effects from Arsenic in Drinking Water, January 2000-June 2006

Prepared by Ken Rudo, PhD, Toxicologist, Occupational & Environmental Epidemiology Branch



Arsenic is a human carcinogen strongly associated with lung, bladder and skin cancer in humans from exposure to elevated levels in drinking water over a 20-30 year exposure period. These effects can occur at levels seen in drinking water wells in North Carolina.

Arsenic can also pose non-cancer risks to humans from drinking water exposure both short-and-long term. These effects can be seen dermally, with skin changes and hyper-keratotic warts or corns appearing on palms and soles, along with hyperpigmentation on the face, neck and hands. Neurological, cardiovascular and gastrointestinal tract effects can also be seen after exposure to arsenic in drinking water at levels that have been detected in drinking water wells in North Carolina.

Arsenic in groundwater can be caused by the leaching of arsenic from past pesticide usage, and from gold and tin mining, but it is more commonly found as a naturally occurring problem due to specific geologic formations that have resulted in arsenic deposition in the groundwater of several large areas of North Carolina.

Arsenic exposure in drinking water is a potential concern from a duration standpoint if the contamination is from naturally occurring arsenic. Residents who have just had arsenic detected by a first-time water test may have had these levels in their drinking water for the entire time they have used their well if the arsenic is naturally occurring. Residents are potentially at an increased cancer risk, if they have arsenic-contaminated water that is naturally occurring and they have lived and used their well water for 10 years or more. At this point they may be entering the latency periods of arsenic-associated cancers.

The N.C. Division of Public Health has recommended a drinking water level of 0.0016 ppb for arsenic. A long-term cancer risk level of 1 in a million is considered a safe level for cancer-causing chemicals in groundwater. At the detection limit for arsenic of 1ppb, the cancer risk is 1 in 1500 if you drink 2 liters of water a day. The N.C. Division of Public Health considers this cancer risk unacceptable, as well as

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(Arsenic in Drinking Water, continued from page 8)

levels of 10ppb (1 in 150 cancer risk), 50 ppb (1 in 30 cancer risk), or any level higher than this. Any level of arsenic therefore poses an unacceptable cancer risk over time and it is recommended that steps be taken to lower this risk.

Over 3,100 private wells in North Carolina were identified as contaminated with arsenic from January 2000 to June 2006. Union county had both the highest number of private wells contaminated with arsenic and the highest levels of contamination. Over 47% of the wells surveyed in Union county are contaminated with measurable levels. Other counties with high numbers of arsenic-contaminated wells include Orange, Stanly, Randolph, Chatham, Lincoln, Moore, Guilford, New Hanover, Gaston, Nash, Montgomery, Alamance and Wake.

When arsenic is detected in a drinking water well, bathing, showering, washing clothes and dishes should not pose any risk. However, consumption does pose an increased risk. Since most water consumption takes place in the kitchen (cooking, tea, coffee, etc;), reducing exposure in the kitchen by utilizing a clean water source (bottled water or a filter system) will significantly reduce any risk from arsenic in drinking water. Please contact Dr. Kenneth Rudo at the N.C. Division of Public Health at 919-707-5911 to get information on filter systems that may eliminate arsenic from drinking water before you purchase a system. Some do not work and you may not be able to get your money refunded if it does not work—a very common problem. ♦

New Orientation Workshop at the N.C. State Laboratory of Public Health

Prepared by M. Kristy Osterhout, Laboratory Improvement Supervisor, N.C. State Laboratory of Public Health

For many years, participants of workshops conducted by the N.C. State Laboratory of Public Health (NCSLPH) have requested a chance to see the NCSLPH facility and to meet the people responsible for all the testing performed. In response to these requests, the Laboratory Improvement Unit has developed the NCSLPH Orientation workshop. Our objective for this program is to provide personnel from county health departments, physician office laboratories, hospitals and other health care professionals the opportunity to interact with testing and administrative personnel. This allows workshop attendees the chance to put a face to the voice they have interacted with for so many years.

The NCSLPH Orientation program is an overview of the administrative, clinical, and environmental laboratory services provided here at the NCSLPH. Participants tour the eight functional units of the NCSLPH, meet the testing personnel,

learn about the equipment or methodologies used in our testing, and have the opportunity to ask questions of laboratory employees. The eight functional units include the following:

- Administration (Director's Office, mailroom, stockroom, purchasing, invoicing)
- Cancer Cytology
- Environmental Sciences (inorganic and organic chemistry, radiochemistry, environmental microbiology, laboratory certification)
- Laboratory Improvement (training and consultation)
- Laboratory Preparedness (Bioterrorism and Emerging Pathogens, Chemical Terrorism)
- Microbiology (Mycobacteriology, Bacteriology, PFGE, Parasitology, Mycology)
- Newborn Screening and Clinical Chemistry
- Virology/Serology (Viral Culture/Rabies, Bacterial STDs, Serology and Special Serology)

We conducted two NCSLPH Orientation workshops in early 2006 and received very good feedback from our participants. Many workshop attendees arrive with questions about just one Unit, but then find that new and exciting testing is taking place in other laboratory areas. Most visitors are amazed at the high volume of specimens received by NCSLPH (over one million samples annually!) and the wide variety of tests that are performed. Almost all workshop attendees have remarked that NCSLPH employees demonstrate enthusiasm and obvious love for their jobs. This workshop has given us the opportunity to showcase our employees, our facility and the comprehensive testing services provided for the citizens of North Carolina, as well as to put names and faces together for our community partners. ♦

(Brant Goode, continued from page 5)

law and rules affecting petting zoos and similar exhibits. This legislation should reduce risks to young children while still encouraging appreciation of the state's proud agricultural traditions.

Brant's new role involves a topic of great current interest, pandemic influenza. Preparing the state for a serious pandemic that could easily overwhelm resources is no easy feat. Fortunately, many partners are working to advance preparations using CDC funding. Brant will aid these efforts as the state's second CDC Career Epidemiology Field Officer (CEFO) in addition to Dr. Megan Davies. Brant has already begun work as our Pandemic Influenza Preparedness Coordinator. He says that while we do not know when such a pandemic might emerge, we should not delay implementing effective preparedness efforts. He will be coordinating over \$6 million in new funds to the state for pandemic planning. ♦

Reported Communicable Disease Cases, N.C., January-June 2006 (by date of report)*

Disease	Year-to-Date (Second Quarter)			2 nd Quarter 2006	Comments / Notes
	2006	2005	Mean (2001-2005)		
Botulism, foodborne	1	0	0	1	
Brucellosis	2	1	0	1	
Campylobacter	404	312	253	183	
Chlamydia, laboratory reports	17821	16899	13534	8166	
Cryptosporidiosis	36	25	23	13	
Cyclosporiasis	1	0	0	0	
Dengue	1	5	2	0	
E. coli, Shiga toxin-producing	33	19	15	14	Note 1
Ehrlichiosis, Granulocytic	1	1	0	0	
Ehrlichiosis, Monocytic	19	6	4	5	
Encephalitis, California group	1	0	1	1	
Foodborne, other	98	134	105	38	
Foodborne, C. perfringens	7	0	1	5	
Gonorrhea	7921	7875	7925	3608	
Haemophilus influenzae	23	52	30	9	
Hepatitis A	45	38	59	11	
Hepatitis B, acute	86	86	102	37	
Hepatitis B, chronic	506	487	428	283	
Hepatitis B, perinatal	2	0	-	0	Note 2 & 3
HIV/AIDS	1049	936	887	384	Note 4
HUS/TTP	1	0	1	1	
Legionellosis	19	14	11	10	
Leptospirosis	1	0	0	1	
Listeriosis	13	11	6	2	Note 5
Lyme disease	11	24	29	3	
Malaria	13	15	9	1	
Measles	1	0	0	1	
Meningococcal disease	19	19	25	8	
Meningitis, pneumococcal	28	25	24	14	
Mumps	2	9	3	1	
Q fever	2	2	0	1	
Rabies, animal	199	251	323	122	
Rocky Mountain Spotted Fever	327	146	86	109	
Salmonellosis	560	580	481	227	
Shigellosis	92	88	202	36	
Staph. aureus, reduced suscept. vancomycin	1	-	-	1	Note 6
Strepto. A, invasive	93	79	81	59	
Syphilis, total	307	199	297	141	Note 7
Tuberculosis	157	101	140	100	
Toxic Shock Syndrome (TSS)	1	3	2	0	
TSS, Streptococcal	7	6	2	3	
Tularemia	1	0	1	1	
Typhoid, acute	2	2	2	1	
Typhus, epidemic	1	0	0	0	
Vibrio, other	4	4	4	2	
Vibrio vulnificus	2	0	0	1	
Whooping cough	101	41	44	49	

*Preliminary data, as of 7/14/2006. Quarters are defined as 13-week periods. Only diseases with cases reported in the year 2006 are listed in the table. Notes: 1. Including E. coli O157:H7 ("E. coli O157:H7" was disease name until 2/15/2003); 2. Not reportable, or not reportable as such, in this entire time period; 3. Coded as such since 2002; 4. Earliest report with HIV infection or AIDS diagnosis; 5. Reportable since 7/2001; 6. Became reportable effective 1/1/2005; 7. Primary, secondary and early latent syphilis

Upcoming Event: North Carolina Clinical Laboratory Day

Prepared by Colleen Miller, BS MT(ASCP), Laboratory Improvement Consultant

Mark your calendar for an exciting educational event that is planned for Friday, August 4, 2006 at Wake Technical Community College. The focus of the 2nd annual **North Carolina Clinical Laboratory Day** is “*The Diabetes Challenge: Diagnosis, Education and Management*”. The Texas Health Foundation, the North Carolina State Laboratory of Public Health, and the North Carolina Diabetes Prevention and Control Branch will co-host the conference. Participants will find the forum an opportunity to learn about the disease that is the sixth-leading cause of death in the United States. Diabetes has become a major public health threat to millions of Americans, causing debilitating complications such as coronary artery disease, renal failure, adult-onset blindness, stroke and neuropathy.

The conference is designed for healthcare professionals, including physicians, medical technologists/technicians, nurses, educators and others involved in the diagnosis, care and management of patients with diabetes. Exciting lectures are scheduled throughout the day. Exhibitors will provide free samples and information on tests for diagnosis and management of diabetes. For more information, call the Laboratory Improvement office at 919/733-7186, or visit <http://slph.state.nc.us>. ♦

Julie Casani Named New Branch Head of the Office of Public Preparedness and Response

Prepared by Patsy West, Administrative Assistant, Epidemiology Section



Please welcome Dr. Julie Casani as the new branch head of the Office of Public Health Preparedness and Response. Dr. Casani started her career in Maryland’s Emergency Medical Services, where she was a member of the Maryland State EMS (Governor’s

Advisory Board. From there, she went on to work as an emergency room physician at John Hopkins Hospital and was Assistant Professor in the Department of Emergency medicine, School of Medicine and later Clinical Director, Department of Emergency Medicine. Since 2003, Dr. Casani has been the director of the Office of Public Health Preparedness and Response for the state of Maryland.

Dr. Casani brings to North Carolina Public Health extensive experience in Public Health Preparedness operations

and planning as well as emergency medical services. We are very fortunate to have Dr. Casani’s leadership on the public health team! ♦

Employee Recognition: Dr. Luanne Williams - Employee of the Quarter

Prepared by Patsy West, Administrative Assistant, Epidemiology Section



Dr. Luanne Williams received the Epidemiology Recognition Award for the first quarter of 2006. Dr. Williams was nominated in the category of Service Excellence.

Dr. Williams began her state service career in 1992 in the Division of Waste Management as an Environmental Toxicology Specialist, and in 1993 she was promoted to the Epidemiology Section’s Occupational and Environmental Epidemiology Branch as an environmental toxicologist.

Dr. Williams’ duties and responsibilities are varied and include developing and updating health-protective environmental standards for North Carolina; reviewing fish tissue chemical analyses and recommending issuance of fish consumption advisories; developing and reviewing health risk assessment documents; and providing technical assistance and consultation on health and environmental issues. She also provides technical support to various boards and commissions such as the North Carolina Pesticide Board, the Environmental Management Commission, the Commission for Health Services, and the North Carolina Scientific Advisory Board on Toxic Air Pollutants. Through her hard work and dedication, Dr. Williams has initiated programs that have led to important changes in state rules for regulating toxic chemicals. As one example of her outstanding work, Dr. Williams initiated and took the lead role in an assessment of health risk for children exposed to arsenic from CCA-treated wood and the recommendation of procedures for reducing children’s exposure to arsenic in treated wood. This work led to the North Carolina Commission for Health Services adopting rules for childcare facilities that now require sealing of treated wood play structures and covering of soil beneath these structures. Dr. Williams is recognized as an expert in her field of work and provides valuable guidance to state government as a whole as well as guidance to her branch.

Dr. Williams received a certificate of recognition for the service excellence she has made to her branch and a gift certificate to a local restaurant from the Epidemiology Section Management Team. ♦

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Epidemiology Section • www.epi.state.nc.us/epi/

Dr. J. Steven Cline, Deputy State Health Director
Managing Editor, J. Steven Cline
Layout and Typesetting, Angela Green

Epidemiology Section Office (919) 733-3421
General Communicable Disease Control Branch (919) 733-3419
HIV/STD Prevention and Care Branch (919) 733-7301
Occupational and Environmental Epidemiology Branch (919) 707-5900
State Laboratory of Public Health (919) 733-7834
Office of the State Medical Examiner (919) 966-2253
Office of Public Health Preparedness and Response (919) 715-0919
Rabies Emergency Number - Nights, Weekends, Holidays (919) 733-3419
EMERGENCY NUMBER - Nights, Weekends, Holidays (919) 733-3419

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