

North Carolina Department of Health and Human Services | Division of Public Health | www.epi.state.nc.us/epi

Annual One-Medicine Symposium Focuses on Vector-Borne Diseases

On December 8, 2010, the N.C. Division of Public Health and the N.C. Department of Agriculture and Consumer Services hosted the annual One Medicine Symposium at the Sheraton RTP Convention Center. For eight consecutive years, the state agencies have collaborated with planners from the NCSU College of Veterinary Medicine (NCSU CVM) and the UNC Gillings School of Global Public Health to create a cross-disciplinary meeting that provides relevant and timely information to practitioners of medicine, veterinary medicine, public and environmental health.

The objectives of the 2010 meeting included: discussing similarities and differences of vector-borne disease ecology, diagnosis and case management in humans and in animals; discussing the impacts of our changing ecology on wildlife and disease risks for people and pets; and how surveillance in both populations can benefit one another. The keynote speaker, Michael Yabsley, PhD, of the Southeastern Cooperative Wildlife Disease Study, (www.scwds.org) gave an overview of tickborne disease of man and animals of the Southeast U.S. and presented a variety of new research. Dr. Yabsley was followed by Christopher Paddock, MD, from the Centers for Disease Control and Prevention (CDC) and Edward Breitschwerdt, DVM from the NCSUCVM who presented on rickettsial diseases of man and dogs and specifically how emerging rickettsial pathogens are potentially confounding surveillance for Rocky Mountain spotted fever (RMSF) in the United States. This presentation was particularly timely, given the struggles local health departments face regarding surveillance for RMSF.

Continuing on the topic of mosquito-borne diseases, James Whitehouse, MD, from Asheville Infectious Disease Consultants talked about the clinical presentation, management, and surveillance of LaCrosse Encephalitis. This is the most common mosquito-borne disease of man in North Carolina. Barry Engber, ScD, from NC DENR, discussed the N.C. avian sentinel surveillance program for mosquito-borne diseases.

Following lunch, an expert panel discussed the human, veterinary, and ecological aspects of Lyme disease (and surveillance for Lyme disease). Paul Lantos, MD, from Duke University and a member of the 2010 IDSA Lyme disease review panel (*www.idsociety.org/lymedisease. htm*) spoke about diagnosis and management of Lyme disease in people. Susan Little, DVM, from Oklahoma State University Center for Veterinary Health Sciences, spoke about the diagnosis, management and surveillance for Lyme disease in dogs. Charles Apperson, PhD, from NCSU spoke about the variety of *Ixodes* species ticks and their complex ecology in the southern United States.

The final session of the day included presentations by Susan Montgomery, DVM, from CDC, about Chagas disease and Edward Breitschwerdt about *Bartonella* species as human and animal pathogens and their potential to cause chronic unrecognized infections. Adam Birkenheuer, DVM, from NCSUCVM, and Abelardo Moncayo, PhD, from the Tennessee Department of Health concluded the day by presenting on human and canine babesiosis. These presentations were very timely as human babesiosis has recently been added to the Nationally Notifiable List by the Council cont. on page 2

CONTENTS

Guidelines for Foodborne Disease Outbreak Response	.Page 2
Distance Learning Tool Available for Laboratory Continuing Education	.Page 3
News from the Chief Medical Examiner's Office.	.Page 4

of State and Territorial Epidemiologists (*www.cste.org/ ps2010/10-ID-27.pdf*).

The symposium allowed nationally renowned speakers to address multiple issues of medical and public health interest. As always, the symposium offered at least six hours of continuing education credit for physicians, nurses, veterinarians, veterinary technicians, environmental health specialists, and remained a great value with only a \$50 registration fee. This year's symposium was well attended with over 350 participants, which is the second highest attendance in the history of the symposium. If you are interested in reviewing individual presentations, they are available online at *www.ncagr.gov/oep/oneMedicine/ OneMedicineSymposium2010.htm.* Stay tuned for information about the 2011 symposium at *www. onemedicinenc.org.*

Submitted by:

Carl Williams, DVM, NC DPH and Kelly Jeffer, DVM, NC DA&CS

As an active participant in the Council to Improve Foodborne Outbreak Response (CIFOR), NC Division of Public Health is pleased to share the newly released toolkit for the *Guidelines for Foodborne Disease Outbreak Response.*

The Guidelines are a reference document that complements existing procedures to update agency-specific policies, to identify gaps, and to target training of program staff. The document is intended to aid government agencies responsible for investigating, managing, and preventing foodborne disease. This toolkit has been developed to aid in the implementation of the *Guidelines for Foodborne Disease* Outbreak Response at the state and local levels. The toolkit is intended to further the ability of states and cities to implement appropriate recommendations from the Guidelines without having to develop a new set of tools or aids.

The toolkit walks public health practitioners through a series of worksheets designed to help jurisdictions identify which recommendations from the *Guidelines*



are most relevant to be implemented. The worksheets divide the *Guidelines* into 12 focus areas, which cover the most critical elements of outbreak response that are likely to be common to most jurisdictions and outbreaks. The worksheet process guides users through describing current activities and procedures, prioritizing CIFOR Guidelines recommendations to address needed improvements, and making plans to implement the selected recommendations.

Users have found that the electronic versions of the documents are optimal for use in group settings. **To view the electronic version, please visit** *www.cifor.us/toolkit.cfm.* Hard copies, including a CD, may be obtained

by contacting Lauren Rosenberg at the CSTE National Office at (770) 458-3811 or lrosenberg@cste.org.

Distance Learning Tool Available for Laboratory Continuing Education

Due to ongoing travel restrictions and diminishing budgets, staff from the North Carolina State Laboratory of Public Health (NCSLPH), local health departments, hospitals, preparedness centers and other healthcare facilities across the state may be challenged to obtain required continuing education (CE) credits. The Laboratory Improvement Unit of the NCSLPH recently purchased licenses for Adobe Connect web conferencing software that will allow staff to complete required trainings and continuing education at their worksite using a computer with internet and phone access.

On January 21, 2011, Laboratory Improvement held the first statewide web conference to introduce local health department laboratory managers to the capabilities of this new product. The presentation demonstrated the numerous features that make this system an effective teaching tool. Conferences and meetings may be customized for different audiences, program presenters and participants have the ability to interact, cameras may be interfaced to view images from microscopes and other equipment, screens may be shared with the audience for visual comments and edits, and a list of attendees may be viewed as they enter the online conference room.

Approximately 80 participants attended the conference. For many, this was their first exposure to a web conferencing tool. Participants were asked to complete an evaluation after the presentation to indicate their level of satisfaction with Adobe Connect. The comments indicated that the majority felt the system was easy to use, and the ability to interact was very beneficial. Laboratory Improvement plans to develop a number of online trainings throughout the year in response to the positive feedback. As one participant stated, "I really enjoyed the format. It was easy to use. I love the fact that I don't have to travel. Very cost effective for CE."

Submitted by:

Patricia Atwood, BSMT (ASCP) Laboratory Improvement Coordinator, NCSLPH

Epidemiology Section Employee Recognition Fall 2010

Dr. Zack Moore

Dr. Zack Moore demonstrates service excellence, as well as leadership, in his role as respiratory disease epidemiologist for the Medical Consultation Unit of the Communicable Disease Branch, and other areas for which he is a subject matter expert, such as vaccine preventable diseases, hepatitis A, and investigation of outbreaks of healthcare associated infection. Examples of his skills and expertise include: his outstanding ability to integrate and disseminate multiple and rapidly changing guidance directives from the



Zack Moore (center) is congratulated by Evelyn Foust, Communicable Disease Branch head, Megan Davies, State Epidemiologist and Section Chief, and Jean-Marie Maillard, Medical Consultation & Disease Report Unit director.

Centers for Disease Control and Prevention during the H1N1 Influenza Pandemic of 2009; implication of unsafe injection practices at a health care facility initiated through the investigation of a single case report that led to improved related state regulation; and demonstration cont. on page 4 of waterborne transmission of hepatitis A rarely seen in our state while investigating an outbreak at a farm hosting temporary residents.

Dr. Moore's impact on the health of North Carolinians is mostly not visible because success in this area of public health is measured in the absence or lowering of illness, yet it is very real. The countless hours he spent organizing surveillance and investigations and disseminating new guidelines to clinicians in the state during the 2009 Influenza Pandemic benefited all North Carolinians, ensuring the best protection science and public health officials could offer in response to this pandemic. His contributions to the promotion of infection control and safe injection practices in particular contribute to improve the level of care in the state. He also is increasingly recognized as a clear communicator conveying public health messages in North Carolina.

News from the Chief Medical Examiner's Office

Dr. Deborah L. Radisch, MD, MPH, was named Chief Medical Examiner by DHHS Secretary Lanier Cansler effective July 1, 2010. Dr. Radisch received her undergraduate degree from the University of North Carolina at Chapel Hill and her medical degree from Wake Forest University. She completed her residency in Anatomic and Clinical Pathology at UNC-CH followed by a two-year fellowship in Forensic Pathology at the Office of the Chief Medical Examiner (OCME) in Chapel Hill. Dr. Radisch earned her MPH (HPAA) from the UNC-CH School of Public Health during which time she also was a Preventive Medicine Resident in the Department of Social Medicine, UNC School of Medicine.

Dr. Radisch served several tenures as Associate Chief Medical Examiner at the OCME first from 1986 through 1994. She was a part-time pathologist covering weekends and holidays beginning in 1995, returning to full time employment in 2001. In addition to her duties as Associate Chief Medical Examiner, she has been the Director of the North Carolina Child Fatality Prevention Team since 1999. She also serves as Co-Chair and Executive Committee member of the North Carolina Child

Fatality Task force and is a member of the Wake County Child Fatality Prevention/Child Protection Team. She holds an appointment as Clinical Associate Professor of Pathology at the UNC School of Medicine.



Dr. Deborah L. Radisch, MD, MPH



Dr. Radisch is board-certified in Anatomic, Clinical and Forensic Pathology. She is a Fellow of the American Academy of Forensic Sciences and the National Association of Medical Examiners. In her career, she has performed more than 5,000 medical-legal autopsies, testified in numerous criminal and civil proceedings and has taught, mentored and guided medical students and residents.

New Deputy Chief Medical Examiner

Dr. Clay Nichols, MD, became the state's new Deputy Chief Medical Examiner on January 3, 2011. He received his undergraduate and medical degrees from the University of Oklahoma. He completed his residency in anatomic and forensic pathology at the Medical College of South Carolina. Dr. Nichols is board-certified in Anatomic and Forensic Pathology. He is a Fellow in the College of American Pathologists. Dr. Nichols was previously employed as a forensic pathologist in South Carolina for 20 years. In addition to his medical examiner and pathologist duties while at the Medical College of South Carolina, he was the Residency Director for the

Department of Pathology and Laboratory Medicine and Director of Undergraduate Education. He held a governor's appointment to the South Carolina Child Fatality Review Committee including a year as the Chair and served on the South Carolina Mass Disaster Committee.

Reported Communicable Diseases, North Carolina, January-December 2010 (by date of report)*

Year-to-Date (Fourth Quarter)		4 th Quarter			
Disease	2010	2009	Mean (2005-2009)	2010	Comments / Note
Brucellosis	1	1	3	0	
Campylobacter	851	587	656	267	
Chlamydia, laboratory reports	45,190	43,734	35,406	11,100	
Cholera	1	0	0	1	
Creutzfeldt-Jakob Disease	13	13	4	7	
Cryptosporidiosis	94	160	115	21	
Cyclosporiasis	1	2	2	1	
Dengue	6	0	7	1	
E. coli Shiga Toxin-producing	97	112	122	51	
Ehrlichiosis, Granulocytic	36	3	1	11	Note 1
Ehrlichiosis, Monocytic	148	73	47	20	Note 1
Gonorrhea	15,125	14,811	15,774	3,785	
Haemophilus Influenzae	123	105	74	19	
Hepatitis A	48	41	69	7	
Hepatitis B	115	104	138	32	
Hepatitis B Carrier	693	898	865	267	
Hepatitis B Perinatal	1	1	2	1	
Hepatitis C, Acute	39	24	24	7	
HIV/AIDS	1,620	1,791	2,009	327	Note 2
Hemol.Urem.Syn/TTP	6	4	6	2	
Influenza, Adult Death	25	75	N/A	0	
Influenza, Pediatric Death	0	9	2	0	
Lacrosse (California)	23	169	34	12	
Legionellosis	63	65	47	13	
Leprosy (Hansen's Disease)	1	0	0	0	
Leptospiosis	1	0	1	0	
Listeriosis	22	27	28	6	
Lyme Disease	417	252	58	44	Note 1
Malaria	46	33	32	11	
Menincoccal Invasive Disease	14	32	27	2	
Meninigitis, Pneumococcal	31	29	35	8	
Q Fever	1	1	3	0	
Rabies in Animals	397	473	476	81	
RMSF	505	325	587	115	Note 1
Salmonellosis	2,346	1,806	1,739	1,246	
Shigellosis	254	358	228	116	
Strep A Invasive Disease	146	107	138	23	
Syphilis, Total	728	937	621	168	Note 3
Toxic Shock Synd.,Strep	8	4	7	0	

		Year-to-Date (Fourth Quarter)			
Disease	2010	2009	Mean (2005-2009)	4 th Quarter 2010	Comments / Note
Toxic Shock Synd, non-Strep	2	0	4	1	
Tuberculosis	296	250	326	103	
Tularemia	3	1	1	0	
Typhoid, Acute	9	5	6	4	
Vaccinia	1	1	N/A	0	
Vibrio vulnificus	7	3	4	0	
Vibrio, Other	17	12	14	7	
VISA/VRSA (Staph aureus)	3	2	1	1	
Whooping Cough	153	216	250	17	

* Preliminary data, as of 01/01/2011. Quarters defined as 13 week periods. Diseases reported in 2010 define those listed in this table.

Notes: 1. Suspect, Probable and Confirmed cases reported for 2009 and 2010. The five-year average for these events is based on confirmed and probable classifications only, because suspect classifications were not reportable prior to 2008; 2. Earliest report with HIV infection or AIDS diagnosis; 3. Includes primary, secondary and early latent syphilis.



Epidemiology Section Office	(919) 733-3421		
Communicable Disease Branch HIV/STD Program Tuberculosis (TB) Control	(919) 733-3419 (919) 733-7301 (919) 733-7286		
Occupational and Environmental Epidemiology Branch	(919) 707-5900		
State Laboratory of Public Health	(919) 733-7834		
Office of the Chief Medical Examiner	(919) 966-2253		
Public Health Preparedness and Response	(919) 715-0919		
Public Health Preparedness and Response(888) 820-0520Emergency Number 365/7			
Rabies Emergency Number Nights, Weekends, Holidays	(919) 733-3419		
Emergency Number Nights, Weekends, Holidays	(919) 733-3419		