DEPARTMENT OF HEALTH & HUMAN SERVICES Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

TB Notes
No. 3, 2007

Dear Colleague:

We note with sadness the passing of Dr. George Comstock, a distinguished TB researcher and epidemiologist whose work forms the basis of CDC's current guidelines regarding the use of the BCG vaccine and the drug isoniazid. His obituary is excerpted here in the Personnel Notes section of this issue.

Please note that an errata document for the "Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-care Settings, 2005" was posted on the DTBE website on September 25, 2006, and can be accessed at www.cdc.gov/tb/pubs/mmwr/Maj_guide/infectioncontrol.htm. A listing of additional Frequently Asked Questions (FAQs) was also posted for clarification of the guidelines. As additional errata or FAQs are developed, they will be posted on the DTBE website.

The 56th annual Epidemic Intelligence Service (EIS) Conference was held in Atlanta April 16–20, 2007. The primary purpose of the EIS Conference is to give current EIS officers experience in making scientific presentations reflecting their work in applied epidemiology. The meeting also provides an opportunity for scientific exchange; helps strengthen the professional network of new, current, and former EIS officers; and provides a forum for recruitment of new EIS officers. DTBE's current EIS officers gave well-attended presentations. I am pleased to report that Peter Cegielski, MD, MPH, of the International Research and Programs Branch (IRPB) was presented with the Philip S. Brachman Award at the conference. Maryam Haddad has provided an excellent overview of the meeting; please see the article in this issue.

A small number of DTBE staff attended ATS 2007, the annual international conference of the American Thoracic Society, held in San Francisco, California, May 18–23. The ATS International Conference is a prestigious scientific meeting devoted to the presentation and discussion of new research findings and the latest clinical developments in respiratory, critical care, and sleep medicine. The conference, which attracted over 16,000 attendees, offered more than 5,500 original research abstracts related to the prevention, diagnosis, and treatment of respiratory diseases such as TB, lung cancer, chronic obstructive pulmonary disease (COPD), asthma, allergies, sleep-related disorders, cystic fibrosis, and many more. Of note, ATS past president and long-time CDC partner Philip C. Hopewell, MD, was presented with the 2007 World Lung Health Award during the meeting. The 2008 ATS International Conference will be held May 16–21, 2008, in Toronto, Ontario, Canada.

The 2007 National TB Controllers Workshop, hosted by the National TB Controllers Association (NTCA), was outstanding. The meeting was held at the Crowne Plaza Ravinia Hotel in Atlanta June 12–14, with pre-workshop meetings on June 11. The theme of this year's meeting was "Forging Ahead: Challenges in TB Control," and featured a wide array of presentations, posters, and sessions on a range of topics relevant to current TB control challenges. At the risk of redundancy, I reiterate the words of appreciation I sent electronically after the workshop. I thank Phil Talboy, Carol Pozsik, Sherry Brown, and the many others who worked to make the 2007 NTCA Workshop a resounding success, and Phil LoBue, who did an outstanding job filling in for me. Although other commitments kept me away from early parts of the NTCA workshop, I was energized by the meeting and the collegiality of NTCA members. While the weeks prior to the meeting were at times difficult, they helped raise the visibility of our mission while demonstrating the fantastic work of TB controllers across the nation. I felt a renewed sense of pride in being counted among NTCA members, and was energized by your support during those difficult few weeks. Our work is far from complete, but the charge to eliminate TB in the United States is in excellent hands! This is our chance to seize the moment and continue to make additional progress in our marathon race towards TB elimination.

Prior to the General Session of the meeting, a special late-breaking session was held describing the recent XDR/MDR TB investigation. Dr. Ann Buff presented preliminary details on the contact investigation. Dr. Lori Armstrong presented preliminary national surveillance data on XDR TB, which had been updated through the outstanding cooperation and response of the state and local TB controllers on short notice. Subsequently, in the first General Session of the meeting, we heard welcoming remarks from Jim Cobb, President, National TB Controllers Association (NTCA), and Jo-Ann Arnold, President, National TB Nurse Coalition (NTNC), as well as CDC updates and reports given by Drs. Kevin Fenton and Phil LoBue. In addition, Dr. Charles Daley of the National Jewish Medical and Research Center gave a talk entitled "Challenges in Tuberculosis Control: Is it Déjà Vu All Over Again?" on the similarities between the MDR TB outbreaks in the early 1990s and the XDR TB outbreaks occurring now. The next session featured presentations related to foreign-born persons and surveillance issues. During breakout sessions, participants reconvened in smaller groups to hear and discuss updates, case studies, current best practices, and other topics of interest. These included a session on the Emergency Management Assistance Compact; during this session, participants learned how to prepare for disasters, and how states can share resources during such emergencies. During breaks, participants viewed and discussed poster presentations. Tuesday night, many participants gathered to socialize at the luau, which I truly regret missing!

On Wednesday, we first focused on the TB Regional Training and Medical Consultation Centers, with separate updates on the activities and new products of these groups. These sessions were followed by presentations describing some

of the important activities of nurse case managers. In General Session IV, Cutting Edge Lab Science, attendees heard presentations on how laboratory services are improving the ability of TB control programs to detect and control outbreaks and clusters of TB. Breakout sessions that afternoon continued to offer an array of presentations on research addressing TB disparities, cultural competency, and gamma interferon release assays, and updates on proposed revisions to the Report of a Verified Case of TB (RVCT) as well as on CDC's two TB research consortia, the TB Trials Consortium and the TB Epidemiologic Studies Consortium.

Thursday started off with oral presentations of data from three posters which offered solutions to challenges that many TB programs face. The last session on XDR TB provided important and relevant information for all of us in TB control. Dr. Kashef Ijaz, a presenter during this session, was introduced to the attendees as the new chief of the DTBE Field Services and Evaluation Branch. The workshop was officially adjourned at 1 pm; an NTCA press conference and several post-workshop meetings rounded out the day. Again, I convey my heartfelt gratitude and admiration to all participants as well as planners and organizers for your camaraderie and devotion, and for a job exceedingly well done!

Kenneth G. Castro, MD

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TB Notes

Centers for Disease Control and Prevention
Atlanta, Georgia 30333
Division of Tuberculosis Elimination ♦
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

Number 3, 2007

HIGHLIGHTS FROM STATE AND LOCAL PROGRAMS

Georgia Statewide TB Training

Georgia held its Statewide TB Training in April 2007 at the Wyndham Peachtree Conference Center outside of Atlanta. Borrowing the theme from World TB Day 2007, "TB Anywhere Is TB Everywhere," the training concentrated on new guidelines published since 2005. Close to 200 people registered for this 2-day training. Participants represented a variety of health care settings, including public health, hospitals, correctional facilities, nursing homes, community-based organizations, military and mental health facilities, and schools of medicine and nursing. TB professionals including physicians, nurses, epidemiologists, communicable disease specialists, and others came together to share common experiences and learn new ideas. Beverly DeVoe-Payton, Program Manager of the State TB Program, introduced Dr. Kenneth Castro from DTBE, who motivated the audience as he spoke about controlling TB in the United States, followed by Dr. Susan Ray from Emory University School of Medicine, who led the participants through the new infection control guidelines. The Southeastern National TB Center staff, Ellen Murray, RN, and Denise Dodge, RN, were very informative as they spoke about contact investigations, case management, and TB in correctional facilities. A lively discussion and questions followed the presentation of Dr. Michael Leonard, medical consultant for the State TB Program, who discussed diagnostics, treatment, and HIV. Sonia Alvarez-Robinson, from the Georgia Department of Human Resources (DHR), Division of Public Health, was described by participants as "energizing and refreshing" as she discussed public health transformation. Dr. Diana Schneider from the US Public Health Service (USPHS), Division of Immigration Health Services, gave a very educational presentation on Immigration and Customs Enforcement (ICE) detainees, and Carol Pozsik from the National TB Controllers Association (NTCA) inspired the audience with her talk on advocacy. One of the highlights of the training was a surprise appearance by Mr. TB Germ, who delighted the crowd as he danced among them.

—Submitted by Ann Poole, RN, Nurse Consultant, Georgia TB Program

Mr. TB Germ makes an appearance at Georgia's 2007 TB training course.

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Visit DTBE's Internet home page,
http://www.cdc.gov/tb,
for other publications, information, and
resources available from DTBE.

NTCA Workshop Poster Contest

In June 2007, the National TB Controllers Association (NTCA) held its second annual poster contest at the NTCA Workshop in Atlanta. This year, 48 posters were developed and submitted by TB program staff from throughout the country, and were available for viewing during most of the meeting. A panel of judges reviewed and rated the posters on three criteria areas:

1. Relevance to TB control or elimination
Topic provides information that can potentially be transferred to another program; addresses or identifies high priority area of TB program or problematic area; provides strategy for better use of resources.
2. Clarity of information
Information is clearly written, short sentences, bulleted points to enhance readability; adequate amount of information provided to understand project, but not a complete journal article!

3. Graphic presentation
Graphics utilized to clearly present information (photographs to demonstrate or model, graphs and charts to display data); graphics are appealing to the viewer (not crowded, colors are used appropriately).

This year the judges gave multiple first-, second-, and third-place awards because of ties among the entrants. First-place awards were given to two posters:

- "An Ongoing Investigation of Extensive Community Transmission of Tuberculosis as Evidenced by Molecular Genotyping." The authors were C. Clark, T. Agerton, S. Munsiff, L. Fung, K. Ijaz, and P. Moonan.
- "Tuberculosis Genotyping: The Importance of the Re-Interview." The authors were J. Beck, E. N. Pritchett, D. Schlossberg, and B. Dickman.

In addition, the second-place winners were-

- "The Effectiveness of Providing Tuberculosis (TB) Education Sessions during Congregate Setting Contact Investigations." The authors were A. Khilall and M. Wolman.
- "Border TB Photovoice Project." The authors were E. Moya and M. Villa.

The judges gave third-place awards to-

- "Medical and Legal Approach to Noncompliant Patients in the Treatment of Tuberculosis." The authors were E. N. Pritchett, J. Beck, G. Lovett-Glenn, D. Schlossberg, and B. Dickman.
- "Missed Opportunities for Tuberculosis Prevention in New York City." The authors were M. Slopen, F. Laraque, S. Munsiff, and A. Piatek.
- "TB Photovoice: Mobilization and Empowerment in the Hands of TB Affected Communities." The authors

were A. Waller, R. Lacson, E. Moya, and M. Patterson.

Poster topics were varied, reflecting the multiplicity of issues TB programs face and the creative solutions and dedicated actions in response. One of the judges noted that with so many interesting topics, she had to rate all the posters high on relevance to TB control or elimination. The posters ranged from very simple and basic to very dense and data-driven. There was much creative use of graphics and photographs, which aided in attracting viewers and illustrating each poster's message.

Congratulations to the winners of this year's competition, and thank you to all submitters for sharing your data, experiences, and excellent solutions!

—Submitted by Wanda Walton, PhD and Ann Lanner
Div of TB Elimination

2007 EIS Conference a Success for DTBE

CDC's 56th annual Epidemic Intelligence Service (EIS) Conference was held in Atlanta April 16–20, 2007. EIS is a 2-year postgraduate program of service and on-the-job training for health professionals interested in the practice of applied epidemiology (http://www.cdc.gov/eis/). Experienced epidemiologists throughout CDC and in state and local health departments act as day-to-day mentors or primary supervisors to EIS officers. Every year, this conference serves as a robust mix of scientific presentations by current EIS officers and recruitment activities for the incoming class of officers.

At this year's conference, DTBE actively promoted the work of its five current or recent EIS officers and successfully recruited three new EIS officers from the incoming class.

Current/recent EIS Officers

Sekai Chideya, MD, EIS Class of 2005, finishing her second year assigned to the International Research and Programs Branch (IRPB), presented "Sub-Therapeutic Serum Concentrations of Anti-Tuberculosis Medications and Treatment Outcome—Botswana, 1997–1999" in the well-attended TB session entitled "Mass Consumption," moderated by DTBE Associate Director for Science Philip LoBue, MD, on the opening day of the conference.

Michele Hlavsa, RN, MPH, EIS Class of 2005, finishing her second year assigned to the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB), was a finalist for the competitive Mackel Award with her presentation, "Human *Mycobacterium bovis* Tuberculosis—United States, 1995–2005." The Mackel session, which highlights presentations that exemplify a combined epidemiological and laboratory approach to an investigation, was co-moderated by Thomas M. Shinnick, PhD, Chief of the DTBE Mycobacteriology Laboratory Branch.

Eric Pevzner, PhD, EIS Class of 2005, finishing his second year assigned to IRPB, was just back from a TB Epi-Aid in Hawaii and did not have any official presentations at this year's EIS conference, which allowed him to focus his energies on performing in the EIS satirical review skit. This annual tradition gives outgoing EIS officers a forum to reminisce about the past 2 years, poke fun at CDC, and offer "survival tips" to the incoming class.

Ann Buff, MD, MPH, EIS Class of 2006, finishing her first year assigned to SEOIB, had two presentations: "Investigation of *Mycobacterium tuberculosis* Transmission

Among Sailors Aboard USS Ronald Reagan—California, 2006," in the opening TB session, and "Investigation of *Mycobacterium tuberculosis* Transmission Among a Social Network of Family and Friends—Connecticut, 2006," in the fast-paced closing late-breaker session.

Heather Menzies, MD, MPH, EIS Class of 2006, finishing her first year assigned to IRPB, presented "Extensively Drug-Resistant TB as a Risk Factor for Poor Outcome Among MDR TB Patients—Latvia, 2000–2003," to a standing-room-only crowd at a special session about extensively drug-resistant (XDR) TB, entitled "The Perfect Storm," on the second day of the conference.

New EIS Officers

Emily Bloss, PhD, EIS Class of 2007 (incoming), a recent graduate of Tulane University, did her dissertation field research as a Fulbright Scholar with the National Leprosy and Tuberculosis Program in Kenya. Dr. Bloss's international experience also includes work in Nicaragua and Sri Lanka. She is assigned to IRPB for a 2-year EIS term that began in July 2007.

Mitesh Desai, MD, MPH, EIS Class of 2007 (incoming), is completing a primary care internal medicine residency at Johns Hopkins University, where his training has focused on an underserved urban population disproportionately affected by poverty, addiction, and HIV. During Dr. Desai's MD/MPH studies, he interned with the New York City Department of Health and Mental Hygiene. He joined SEOIB in July 2007.

Rinn Song, MD, EIS Class of 2007 (incoming), is completing a pediatrics residency at New York University, where his work experiences have included rotations at both New York City's Bellevue Hospital and a clinic for HIV-infected children in Kenya. An accomplished oboe player, Dr. Song completed medical school in Germany. He joined IRPB in July 2007.

Please see the Personnel Notes section of this issue for more information about these three new officers.

Special Presentations

The EIS Class of 2005 honored Peter Cegielski, MD, MPH, of IRPB, with the Philip S. Brachman Award, a special award for excellence in teaching epidemiology to EIS officers. Dr. Cegielski was recognized for the time he takes out of his busy travel schedule each fall to teach a multivariable analysis course to incoming EIS officers. This in-house course was initially developed in 1999 for DTBE EIS officers but has grown by such word-of-mouth popularity that now many EIS officers beyond DTBE also attend.

As previously mentioned, the XDR TB special session, "The Perfect Storm," drew a big crowd on the second day of the conference. In addition to EIS officer Heather Menzies' talk, other presentations included an overview of XDR TB by Peter Cegielski that included the revised definition[1] and known global magnitude of XDR TB. Citing the work of N.R. Ghandi and colleagues in South Africa,[2] former IRPB Chief Charles Wells, MD, then described the dire implications of the high mortality rates that have been seen in patients coinfected with XDR TB and HIV. The session concluded with a spirited discussion led by DTBE Director Kenneth G. Castro, MD, about the U.S. experience with MDR TB outbreaks during the 1985–1992 TB resurgence and the preparations underway to deal with XDR TB at this new critical juncture.

Finally, a conference highlight was the Alexander D. Langmuir Memorial Lecture, delivered this year by Thomas R. Frieden, MD, MPH, EIS Class of 1990, former Director of the NYC TB Control Program and current

Commissioner of the New York City Department of Health and Mental Hygiene.[3] Reminding the audience, "We are all connected by the air we breathe," Dr. Frieden proposed that if one understands the epidemiology of TB in a given society, then one understands how that society works. Dr. Frieden discussed how lessons learned from TB control apply to evidence-based practice in other areas of public health. He also cited the influence of the late Dr. Karel Styblo and the importance of building accountability into public health infrastructure for curing—not just counting—each TB case.

Special Thanks

Once again this year, the National TB Controllers Association (NTCA) hosted a lunch for the incoming EIS officers to discuss the opportunities available if they matched to a DTBE assignment. In addition to EIS supervisors, many current and former DTBE EIS officers attended the lunch. The great Mexican food and relaxed atmosphere fostered several lively conversations and provided a welcome respite from the week's otherwise formal events. Many stayed well beyond the 1 hour originally scheduled for the recruitment lunch. Ms. Carol Pozsik, the Executive Director of NTCA, was on hand at the lunch meeting to represent the TB Controllers. DTBE is grateful for NTCA's continued support of the EIS program!

—Reported by Maryam Haddad, MPH
Div of TB Elimination

References

1. CDC. Notice to Readers: Revised definition of extensively drug-resistant tuberculosis. *MMWR* 2006 Nov 3; 55(43): 1176.
2. Ghandi NR et al. Extensively drug-resistant tuberculosis as a cause of death in patients co-infected with tuberculosis and HIV in a rural area of South Africa. *Lancet* 2006; 368,1575–1580.
3. Fujiwara PI and Frieden TR. TB Control in New York City: A Recent History. *TB Notes* No. 1, 2000. Atlanta, GA: CDC, Division of TB Elimination; 2000.

National Tuberculosis Indicators Project (NTIP): An Update

Standardized program objectives, and indicators that measure progress toward those objectives, are essential for states to undertake evaluation and program improvement. The Program Evaluation and Surveillance Teams in DTBE, in collaboration with state partners, formed workgroups to build evaluation capacity by establishing a framework for an integrated approach to program planning, monitoring, and evaluation.

Through a collaborative process, 16 high-priority national TB program objectives were identified. Targets for the top four objectives (i.e., completion of therapy, TB case rate, contact investigation, and laboratory reporting) were set, and indicators for measuring progress toward these objectives were proposed.

Modeled after the Tuberculosis Indicators Project (TIP) developed in the California Department of Health, the National Tuberculosis Indicators Project (NTIP) will be a web-based system for monitoring progress that can be used at the national, state, and local levels. This system will reinforce the national priorities for TB programs and standardize measurement for tracking progress using existing reportable data.

The development of the NTIP includes various players and is taking place in multiple stages. Representatives from four states—

Steve Hughes from New York State, Deborah Sodt and Wendy Sutherland from Minnesota, Katie Garman and Erin Holt from Tennessee, and Barbara Stone from Colorado—are integral partners in the development of this project. Public health laboratory staff from Minnesota, Tennessee, and Colorado are also included in the discussion on the laboratory objective. Members of the Surveillance team and Mycobacteriology Laboratory Branch from DTBE serve as the technical review team.

During weekly meetings led by DTBE's Kai Young and John Jereb (and Heather Morrow-Almeida during her assignment here), group members work on refining the objectives and indicators and developing standardized calculation methodologies and report templates. Four standards (utility, feasibility, propriety, and accuracy) are used to assess each element of the individual indicator reports, as well as the reports' expected application to the effort of program evaluation, particularly at the state and local levels.

Currently, 12 of the 16 objectives have been addressed in focus-group meetings since January 2007. The review of the remaining objectives and their respective indicator reports is expected to be completed in summer 2007. The web-based monitoring system to produce the indicator reports is being developed concurrently.

Overall, the process for developing the NTIP has established mutual understanding of and agreement on the national TB program objectives. Moreover, the indicators and calculations for monitoring progress toward objectives are being standardized. DTBE staff as well as state and local programs will be able to use these report templates for measuring progress toward the objectives.

—Reported by Kai Young, Heather Morrow-Almeida, and John Jereb
Div of TB Elimination

Evaluation Team Visits TB Isolation Village in Thailand

Mae La Camp is located in the Tak Province in northwest Thailand. The camp houses about 45,000 refugees, including the largest number of displaced Burmese in Thailand. When refugees in Mae La Camp are diagnosed with active pulmonary TB, they are transferred to an area at the far southwest part of the camp known as TB Village, overseen by Doctors Without Borders/ *Médecins Sans Frontières* (MSF).

To reach TB Village, one must climb a steep, 500-yard footpath up the hillside. Just before TB Village, there is a storehouse for food and medications. At this point, all visitors, medical staff, and village maintenance staff are required to don an N-95 mask, to be worn at all times while in the village.

A TB Program Evaluation Team recently visited Mae La Camp on the Thai-Burmese border to provide recommendations to CDC's Division of Global Migration and Quarantine (DGMQ) and to DTBE for improving the effectiveness and practicality of the new Tuberculosis Technical Instructions; and to provide recommendations to the International Organization for Migration (IOM) for the screening, diagnosis, and treatment of TB in refugees resettling to the United States from Thailand. The evaluation was led by external TB program consultants, Drs. Charlie Nolan and Gisella Schecter (team co-leaders), and Dr. Sundari Mase.

DGMQ, DTBE, and IOM: Each Has its Own Responsibilities

Each year, about 400,000 immigrants and 50,000 refugees enter the United States from overseas locations. These applicants for US immigration are required to undergo medical screening for diseases of public health significance, referred to as inadmissible conditions, which include infectious TB.

DGMQ has regulatory authority to stipulate the requirements of the overseas medical examination via the technical instructions specific to each inadmissible condition (42 CFR Part 34). *DTBE* provides subject-matter expertise to DGMQ in overseeing the TB screening portion of the examination.

IOM is providing the required medical screening and TB treatment for refugees. IOM expects to process 15,000 Burmese refugees from Mae La Camp between April and the end of September 2007 for relocation to the United States. If additional TB cases are identified during the medical screenings, refugees with potentially infectious TB will be transferred from the general camp to TB Village, where they will be placed under a plan of care established between IOM and MSF. Once TB treatment is complete, these refugees will be eligible for relocation to the United States.

Shown here are members of the Evaluation Team, along with MSF and IOM staff, preparing to visit TB Village. Left to right: MSF staff member; Jay Varma, DTBE Thailand; 2 IOM staff in blue shirts; Tom Navin, DTBE; Tom Shinnick, DTBE (partially hidden); Charlie Nolan, TB consultant; Gisella Schecter, California TB Physician Liaison; Pierre King, IOM; Wanda Walton, DTBE; Drew Posey, DGMQ; Dan Bleed, Thailand TB program.

—Reported by Wanda Walton, PhD
Div of TB Elimination

Photo Credit: Sundari Mase, MD, MPH.

TB EDUCATION AND TRAINING NETWORK UPDATES

Member Highlight

Patty Puppet is a First Nations and Inuit Health (FNIH) TB Educator for the Manitoba region of Canada. She became a TB educator after being diagnosed with active TB disease. Patty is very knowledgeable about TB and educational methodology and was well-trained by the staff at FNIH.

Patty comes from Winnipeg, Manitoba, and was made by Patient Puppets, Inc. to help teach people about TB. Miss Puppet has been so successful at her job that more TB puppets are going to be made and given to various nursing stations in the region. Some interesting facts about Patty: she has TB disease although she was vaccinated; if you look on her left shoulder you can still see her BCG scar; and she has a big red bump on her arm showing her positive TB skin test reaction. Patty was diagnosed with active TB disease after having a chest x-ray and a gastric wash. When she opens her chest flap, you can see swollen lymph nodes and a cavity in her lungs. If you examine her really closely, you will see a small amount of

pleural fluid in the lower region of her right lung. Currently Patty only has to take her TB medication 2 days a week. Children enjoy watching her take her medicine because there is a small pocket at the back of her mouth that enables the pills to disappear when she swallows them.

Patty's job responsibilities are to decrease the fears related to TB by providing TB education in a nonthreatening environment, increase client knowledge of TB by providing education to all age groups in a visually stimulating and entertaining format, and decrease the barriers that can be created by linguistic and cultural differences. Miss Puppet also helps her co-workers at FNIH teach people about the importance of getting tested for TB. She works well with children and helps ease their fears during their TB check-ups. Once patients have been diagnosed with latent TB infection or active TB disease, she educates them on the importance of taking their medication as directed by the nurse or doctor.

Miss Puppet first heard about TB ETN while at a TB conference in Winnipeg, Manitoba, last year. She was made an honorary member of TB ETN last August when she attended the conference with her co-worker Barb Nichol who is also a TB educator. Patty's participation at the 2006 TB ETN conference was a first for the network, as she is the only puppet TB educator who has ever attended one of their conferences. The TB ETN conference provided a great networking opportunity for Patty. She was able to share her methods of spreading awareness of TB and eliminating the disease in Manitoba.

Currently, Patty is not a member of any of the TB ETN workgroups but is considering joining one. She hopes that in the future, TB ETN will continue helping communities eliminate TB.

Patty's most recent accomplishment was assisting health educators, nurses, and doctors at FNIH with a 3-day TB conference for nurses who work in First Nations communities in Manitoba. Patty helped with some of the games and learning activities and worked with Beth Oliver, a fellow TB educator, to demonstrate giving a TB test to a child (as Patty herself is only 5 years old).

One of Patty's favorite activities is flying in float planes. Sometimes when she has to travel far for work, she takes a float plane to reach her destination. She always enjoys those trips. Patty also likes fishing in her spare time.

If you'd like to join Patty as a TB ETN member and take advantage of all TB ETN has to offer, please send an e-mail requesting a TB ETN registration form to tbetn@cdc.gov. The registration form is available online as well at www.cdc.gov/tb/TBETN/PDF/RegistrationForm.pdf. You can also send a request by fax to (404) 639-8960 or by mail to TB ETN, CEBSB, DTBE, CDC, 1600 Clifton Rd., N.E., MS E10, Atlanta, Georgia 30333. Please visit www.cdc.gov/tb/TBETN/ if you would like additional information about the TB ETN.

—By Jeuneviette Bontemps-Jones, MPH, CHES
Div of TB Elimination

Cultural Competency Subcommittee Update

The Cultural Competency Workgroup held its second special topics discussion on "*TB in the African American Community*" during its February 2007 monthly workgroup call. Ken Johnson, a TB Program Coordinator from Fulton County, Georgia, and Pamela Lamptey, a High-Risk Project Leader from the TB Prevention and Control Program of the Chicago Department of Public Health, were invited to facilitate the discussion and share their experiences from the field. The goal was to learn about and discuss TB control and prevention efforts in the African-American community and share resources.

Workgroup member Valerie Gunn, from the NJ Medical School (NJMS) Global TB Institute, opened the discussion by describing an interview she had conducted with Dr. Reynard McDonald, medical director of the NJMS Global TB Institute. Valerie shared with the group Dr. McDonald's opinions on TB in African Americans as a doctor in a predominantly black community and as a black physician.

Ken then discussed some of the statistics of Fulton County, and shared what the County has done to reduce the burden of TB in blacks. In particular, Ken discussed the role of stigma in the diagnosis and treatment of TB and ways that the TB program in Fulton County has worked around this. Ken's take-home message was that it all goes back to educating the patient and family, and in the process reducing stigma, identifying contacts, and ensuring treatment completion. Ken reinforced the idea that, as with all communities, compassion and respect are crucial components in developing trust within the African-American community.

Pamela also shared her experience working with the African-American community in Chicago. She began by saying that her focus is on increasing education and community awareness about TB. Pamela talked about her work with nontraditional partners such as owners or staff of business storefronts, daycare centers, coffee shops, and public libraries, to get the word out about TB.

More than 30 workgroup members participated in the discussion, and a lively dialogue ensued about ways TB control staff can better serve the African-American community. Dr. Cornelia White of DTBE encouraged all TB ETN members to visit the *TB in African Americans* website at http://www.cdc.gov/tb/TBinAfricanAmericans/default.htm, to join the Stop TB in the African-American Community listserv, view the *TB Challenge: Partnering to Eliminate TB in African Americans* newsletter, and access additional resources.

—*Submitted by Kristina L. Ottenwess, MPH*
Training Specialist
Southeastern National TB Center
University of Florida

Cultural Competency Tip

"If we were to reduce the six steps of culturally informed care to one activity that even the busiest clinician should be able to find time to do, it would be to routinely ask patients (and where appropriate family members) what matters most to them in the experience of illness and treatment."

Kleinman A, Benson P. Anthropology in the clinic: the problem of cultural competency and how to fix it. *PLoS Med* 2006; 3(10): e294.

COMMUNICATIONS, EDUCATION, AND BEHAVIORAL STUDIES BRANCH UPDATE

A Review of DTBE's First Year Using the CDC INFO Call Center

February 2007 marked the 1-year anniversary of DTBE's use of CDC INFO services, instead of DTBE staff, to respond to TB questions from persons outside of CDC. CDC INFO is a contract service employed by CDC to respond to consumer, provider, and partner inquiries, via phone and e-mail, with the intent of providing a central CDC access point to the public.

CDC INFO was first launched in February 2005, with a limited number of CDC programs utilizing this service. DTBE began using CDC INFO as part of the second implementation phase in 2006, along with several other CDC programs. By 2008, all CDC programs will be using CDC INFO to respond to inquiries from the public and health care professionals.

CDC INFO consists of three staffing tiers, with each group responsible for responding to different levels of inquiries. Those in tier 1 answer questions from the general public and are required to use scripted responses. Tier 2 staff answer basic inquiries from health professionals and may use scripted responses or search DTBE-approved websites for appropriate answers. Those in tier 3 respond to questions from health professionals and have the option to use approved content, information from Internet searches, or personal knowledge to answer questions. Tier 3 employees are required to be health professionals, whereas tier 1 and tier 2 staff are not.

The transition to CDC INFO from an in-house system of answering public inquiries about TB (i.e., the Duty Officer system) required significant input and oversight by DTBE staff. In preparation for the transition, DTBE developed scripted responses about TB for CDC INFO, notified partners and customers about the transition through existing CDC communication systems (e.g., DTBE website, CDC Public Inquiries phone line), developed procedures for DTBE staff to handle complex inquiries escalated from CDC INFO, and provided TB training for CDC INFO staff. As part of continuous quality assurance, DTBE monitors e-mail responses daily and a sample of phone call responses quarterly.

To ensure that CDC INFO employees are capable of addressing TB questions accurately, DTBE created and provided scripts, or prepared responses. DTBE staff

CDC INFO Tier Structure with Corresponding Audiences and Resources to Answer Inquiries

Tier	Audience	Resources to Answer Inquiries
1	General public	Prepared responses only
2	General public (advanced) Health care professionals (basic)	Prepared responses and approved websites only
3	Health care professionals	Prepared responses Internet searches Personal knowledge

provided in-person and teleconference training for CDC INFO staff to ensure everyone knew key facts about TB, such as the difference between latent TB infection and active TB disease. Initial development of prepared responses was based on an internal assessment of DTBE staff previously responsible for answering inquiries from the public. Usage statistics for DTBE's website also helped determine frequently requested information. Material in the prepared responses was customized for CDC INFO by tier to meet the needs of the different types of inquirers. New prepared responses and revisions to existing prepared responses are added to the CDC INFO database as needed.

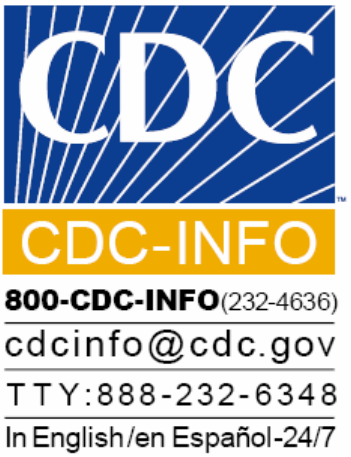
At the conclusion of the first year, DTBE reviewed data on CDC INFO to determine its effectiveness as a communication tool and examine the overall benefits and drawbacks of this system. CDC INFO provides reports to DTBE with process data, such as numbers of telephone calls and e-mails, and TB topics covered.

Between February 2006 and January 2007, CDC INFO received approximately 1,000 e-mail inquiries and about 3,000 phone call inquiries regarding TB. These numbers are estimates because actual numbers of calls and e-mails received per month were not available until October 2006. Nevertheless, the number of inquiries is impressive considering that DTBE did not actively promote the use of CDC INFO beyond the posting notices during the transition period.

Compared to all CDC programs that use CDC INFO, TB topics consistently rank in the top 100 for e-mail inquiries, but have not made the top 100 for phone calls. The three most frequently requested TB topics of inquiry were diagnosis and testing, general information, and transmission. These included questions from the general public as well as from health professionals.

DTBE's rating of how CDC INFO handles inquiries has improved over time. This suggests that as CDC INFO personnel have become more familiar with TB and the inquiry procedures, the quality of the services being provided and DTBE's satisfaction with CDC INFO have both increased.

The majority of inquiries in the first year of use were handled solely by CDC INFO, with only a small percentage escalated for DTBE response. Certain inquiries are automatically escalated to DTBE, such as those from other federal agencies. Others are escalated to DTBE because CDC INFO is unable to answer the question with available resources. Also, CDC INFO often refers inquirers to their state TB control office or their national TB control program, if living outside the United States, for further assistance.



Despite limitations, CDC INFO provides many benefits to its customers and DTBE. Not only do CDC INFO staff provide TB information in English and Spanish 24-hours a day, they are capable of handling an increased volume of inquiries from a wide audience. DTBE would not have been able to provide these services without assistance

from CDC INFO. In addition, CDC INFO provides a means to assess what TB information the public seeks. This has enabled DTBE to create new education materials to address information gaps and helps guide the redesign of the DTBE website.

Contact CDC INFO for information about TB and other health topics. CDC INFO is available by phone at 1-800-CDC-INFO (232-4636) or e-mail (cdcinfo@cdc.gov).

—Reported by Holly Wilson, MHSE, CHES
Div of TB Elimination

SURVEILLANCE, EPIDEMIOLOGY, AND OUTBREAK INVESTIGATIONS BRANCH UPDATE

TB/HIV Surveillance in Ethiopia

Did you know that Ethiopia has "13 months of sunshine"? It's true! The Ethiopian calendar has 12 months of 30 days each, plus an additional 13th month with 5 or 6 days. Currently in Ethiopia it is 1999, and they will celebrate the millennium year (2000) this September.

Imagine reviewing TB registers in an Ethiopian hospital, trying to remember that March 2007 is actually written as 7/1999 in the records! This provided an interesting challenge to me during my site visit from March 26 to April 13 while I was working on a project for DTBE's International Research and Programs Branch.

The purpose of my trip was to assess TB/HIV recording procedures in hospitals and to work with the local partners to determine ways to improve recording of TB/HIV data. I visited eight hospitals and one health center. Half of the sites were in the capital city, Addis Ababa, and the others were in different regions of the country.

Data collected
I reviewed the registers in the TB clinic and in the antiretroviral therapy (ART) clinic at each site and attempted to collect data on the number of--

- Persons diagnosed with TB;
- TB patients who were offered HIV testing;
- TB patients who received HIV testing;
- TB patients who were HIV infected;
- TB/HIV patients receiving ART; and
- TB/HIV patients receiving cotrimoxizole preventive treatment (CPT) to prevent pneumonia.

Results
We were mostly interested in determining the percentage of TB patients who were tested for HIV, since, as you may know, TB is the number one killer of persons with HIV worldwide. In summary, for January 2006–March 2007, I found the following average data for the nine sites:

- 45% of TB patients were tested for HIV (range: 31%–84%)
- 36% of TB patients were infected with HIV (range: 14%–65%)
- 49% of TB/HIV patients started on CPT (range: 15%–97%)
- 65% of TB/HIV patients started on ART (range: 16%–100%)

Many of these percentages are likely underestimates owing to incomplete recording. Following are some of the barriers I faced while trying to collect the data:

- The TB register provided by the Ministry of Health (MOH) does not include a place for HIV information
- TB information is not recorded in the ART register at many sites, even though there is a column for TB treatment in the ART register

- Multiple registers are used at some sites

The photo shows a coworker reviewing TB/HIV registry books at Shashemene Hospital, and two nurses behind him, very happy to put on "I have TB (resources)!" buttons.

Recommendations

Based on my individual site visits and analysis of the data, I recommended that an updated TB register be distributed as soon as possible by the MOH, and that on-site training be provided to hospital staff to emphasize the importance of accurate recording of TB/HIV data and to explain how to complete the registers.

At the end of the day, the main goals are to increase the number of TB patients tested for HIV and increase the number of TB/HIV patients who are started on CPT and ART, ultimately improving the health and quality of life for TB patients.

—Reported by Lauren Lambert, MPH
Division of TB Elimination

TB EPIDEMIOLOGIC STUDIES CONSORTIUM UPDATES

2007 World TB Day: TBESC Sites Across the U.S. Get Involved

Each year, World TB Day (March 24) offers a terrific opportunity to raise awareness about TB in our communities. Several Tuberculosis Epidemiologic Studies Consortium (TBESC) members took advantage of this opportunity and hosted or participated in the events below.

- *Texas:* On March 16, the Texas Department of State Health Services held two of its many organized World TB Day events. At the Houston World TB Day event, TBESC members Drs. Charles Wallace and Ed Graviss gave presentations on "Tuberculosis in Texas" and "New Laboratory Tools," respectively. There was also a media conference with US Congressman Gene Green on March 16. Congressman Green has sponsored the Comprehensive TB Elimination Act, HR 1532, which calls for increased funding to support various mechanisms that aid TB elimination, such as projects that prevent, detect, and control TB in both US-born and foreign-born persons in the United States.
- *Denver:* On March 21, Denver Public Health and Hospitals Authority hosted a TB informational session, where HHS Regional Health Administrator Dr. Zach Taylor and TBESC member Dr. Bob Belknap presented on "Confronting the TB Pandemic," "Multidrug-Resistant TB Case Presentations," and "Role of Newer Blood Tests in the Diagnosis of TB." Other presenters included Annette Choszczyk from RESULTS, who spoke about her parents, who met in a TB sanitarium. Joanie, a 2-year-old girl, who was infected with TB but was treated owing to early testing, and her mother were also part of a presentation. About 55 people attended; many were area health department staff and/or infection control practitioners. The presentations were well received; many of the attendees were particularly interested in Interferon gamma release assays (IGRAs) and asked Dr. Belknap to speak

about TB diagnostics at the local infection controllers meeting in April.

- *North Carolina:* On March 22, the North Carolina TB Control program held a media call with the North Carolina RESULTS group, and included one of their TB patients on the call. On March 23, Duke University and the North Carolina TB Control Program held their 7th Annual Tuberculosis Symposium to commemorate World TB Day 2007. This year the theme was *Tuberculosis: What Doesn't Kill it, Makes it Stronger*. The target audience for the symposium was physicians and other providers interested in TB control, prevention, treatment, and research. The TB symposium was very well-received and had its largest turnout, about 200 individuals at the "live" Duke site and another 70 at the four broadcast sites around the state. Enrollment for the symposium has grown every year since inception. Participants included physicians in the community who work with local TB clinics, as well as infection control practitioners, advance practice nurses, and TB nursing staff throughout the state. TBESC member Dr. Carol Dukes Hamilton presented on the "State of the State in North Carolina Tuberculosis Control."
- *Curry National TB Center:* On March 22, the Francis J. Curry National TB Center participated in San Francisco's World TB Day event, at which Dr. Masae Kawamura, TB Control Director, San Francisco Department of Public Health, presented information to the public about the recent transmission of TB within single-resident occupancy (SRO) hotels. The Center also prepared a World TB Day press release for four low-incidence states. On March 23, one of the Center's state partners, the Utah TB control program, co-sponsored a World TB Day conference with the Utah Chapter of the American Lung Association. There were about 150 participants. Dr. Charlie Nolan from Seattle and King County Public Health, who is involved in TBESC's Task Order 6, "Regional Capacity-Building in Low-Incidence Areas," was invited to speak at the event about TB and global health issues to a gathering of mostly public health nurses.
- *Massachusetts:* On March 22, TBESC member Sue Etkind participated in a media call, "World TB Day 2007: Tuberculosis Experts Give Massachusetts Update on Drug-Resistant TB Emergency," which was sponsored by RESULTS. The media call gave an update on what the drug-resistant TB emergency means for Massachusetts and also gave recommendations to prevent an MDR outbreak like the outbreak that occurred in New York in the 1990s.
- *Minnesota*: On March 22 and March 28, the Minnesota Department of Health participated in two educational sessions about TB. The educational session in Dakota County was about latent TB infection (LTBI) and the epidemiology of TB in Dakota County, and the educational session in Ramsey County was about the epidemiology of TB, treatment for LTBI and TB, and TB-related educational materials. The Minnesota Department of Health also submitted an article entitled "Tuberculosis: Answers to Your Questions" to several local newspapers. The article covered the basics about transmission, active TB disease, and latent TB infection. The newspapers target African, Hmong, and Hispanic populations in and around the Twin Cities (Minneapolis and St. Paul).
- *ALA Chicago:* On March 23, the American Lung Association of Metropolitan Chicago (ALAMC), which is part of TBESC, had an all-day event under the theme *TB Anywhere Is TB Everywhere*. There were presentations on extensively drug-resistant (XDR) TB, local use of QuantiFERON, TB funding concerns and issues, global and local TB statistics, and a CDC "Quarantine Update." Approximately 200 people attended. The ALAMC also had a satellite

and webcast program, "Liver Toxicity and Latent TB Infection," which was viewed by over 200 people. On the day before the World TB Day events, ALAMC staff also distributed information about TB at various public transportation stops in the metro Chicago area and asked individuals to join them in support of increased funding; 2,500 pieces of TB education materials were disseminated in 1.5 hours!

- *Atlanta:* On March 24, the First Annual TB Awareness Walk sponsored by the National TB Controllers Association (NTCA) took place at Grant Park in Atlanta. The walk was very successful; over 600 people registered for the walk and about 500 people actually participated, including several TBESC members. Representatives from NTCA and from the group RESULTS, as well as CDC Director Dr. Julie Gerberding, NCHHSTP Director Dr. Kevin Fenton, and DTBE Director Dr. Kenneth Castro, were all speakers and participants in the event. The event was such a success that there is talk about doing this nationwide next year!
- *Maryland:* On March 28, the Maryland Department of Health and Mental Hygiene, also a part of TBESC, hosted a well-received World TB Day presentation by Dr. Thomas Walsh entitled "TB: the Good, the Bad, and the Ugly." The presentation gave a brief overview of TB, which included a description of TB, consequences of late and missed TB diagnoses, and the success of treatment, once patients are in care, even for those with drug-resistant TB disease.

—Reported by Indhira Gnanasekaran, MPA
Div of TB Elimination

"The First Global Symposium on Interferon-Gamma Assays" 2007

Note: At the First Global Symposium on Interferon-Gamma Assays held in February 2007 in Vancouver, Canada, Naasha Talati, MD, from the Division of Infectious Diseases at Emory University gave a talk entitled, "Poor Concordance between Interferon-Gamma Release Assays and Tuberculin Skin Test in the Diagnosis of Latent Tuberculosis Infection Among HIV-Infected Individuals." This study was funded through the CDC Tuberculosis Epidemiologic Studies Consortium (TBESC) Task Order #5 and through a grant from the CDC Foundation to Emory University. Coauthors on the study include Ulrich Seybold, Bianca Humphrey, Abiola Aina, Jane Tapia, Paul Weinfurter, Rachel Albalak, and Henry M. Blumberg. A synopsis of the study and preliminary results are presented below.

The interferon-gamma release assays (IGRAs) represent a new generation of diagnostic tools for detecting latent TB infection (LTBI). One IGRA is currently FDA-approved for use in the United States. CDC has published recommendations on the use of the FDA-approved IGRA (QuantiFERON-TB Gold) [MMWR 2005;54(No. RR-15)::49-55] but there are few data on the use of IGRAs in immunocompromised patients. CDC has recommended additional research in this area.

Published studies on the use of IGRAs in immunocompromised persons (including those with HIV infection) are limited by small sample size and lack of CD4 T-cell data. The specific aims of this study focused on determining the prevalence of LTBI using three diagnostic tests—the tuberculin skin test (TST), QuantiFERON-TB Gold in Tube (QFT-G) and TSPOT.TB (TSPOT)—and assessing concordance between these diagnostic tests for LTBI. HIV-infected individuals were enrolled at two urban HIV clinics in Atlanta, Georgia, between June 2004 and June 2006. Blood was drawn for the IGRAs, QFT-G, and TSPOT, and a TST was then placed.

The study enrolled 692 HIV-infected persons. Mean age was 42 years, 478 (69%) were male, 547 (79%) were African American, and 62 (9%) were foreign-born. The mean CD4 count was 351/ μl, and median viral load was <400 copies/ml. All patients had a TST and QFT-G performed. Nineteen patients (2.8%) had a positive TST result and 32 (4.6%) of 692 persons had a positive QFT-G result. A subset of patients (n=338) had the TSPOT test performed; 14 (4.2%) had a positive TSPOT. Only one patient had a positive result for all three diagnostic tests and only one patient had both TSPOT and QFT-G positive results. Concordance between the three tests was poor: TST and QFT-G, κ= 0.12 (95% CI -0.01 - 0. 26); TST and TSPOT, κ= 0.2 (95% CI -0.06-0.46); TSPOT and QFT-G, κ= 0.05 (95% CI -0.10-0.20). An indeterminate QFT-G was seen in 32 (4.6%) patients, and an indeterminate TSPOT was seen in 47 (14%) patients. In multivariate analysis, a CD4 count $\leq$ 200/ μl was associated with indeterminate QFT-G and TSPOT results (OR=3.4, 95% CI 1.5-7.7 and OR=3.9, 95% CI 1.8-8.1, respectively.)

Overall there was a low prevalence of LTBI in this urban HIV-infected patient population. Among the two IGRAs, indeterminate results were more likely to occur in those persons with CD4 ≤ 200 / μl. Poor concordance between diagnostic tests for LTBI was documented. This raises concerns about the utility of IGRAs among HIV-infected individuals. Further studies are needed to assess the utility of IGRAs in HIV-infected individuals, particularly in high TB prevalence areas.

—Reported by Naasha Talati, MD and Henry M. Blumberg, MD
Division of Infectious Diseases
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NEW CDC PUBLICATIONS

Akksilp S, Karnkawinpong O, Wattanaa-mornkiat W, Viriyakitja D, Monkongdee P, Sitti W, Rienthong D, Siraprapasiri T, Wells CD, Tappero JW, and Varma JK. Antiretroviral therapy during tuberculosis treatment and marked reduction in death rate of HIV-infected patients, Thailand. *Emerging Infectious Diseases* 2007 Jul; 13 (7): 1001-1007. Also available from www.cdc.gov/EID/content/13/7/1001.htm

Benator DA, Weiner MH, Burman WJ, Vernon AA, Zhao ZA, Khan AE, Jones BE, Sandman L, Engle M, Silva-Trigo C, Hsyu PH, Becker MI, Peloquin CA, for the Tuberculosis Trials Consortium. Clinical evaluation of the nelfinavir-rifabutin interaction in patients with tuberculosis and human immunodeficiency virus infection. *Pharmacotherapy* 2007 Jun; 27(6):793-800.

CDC. Deportation of tuberculosis patients complicated by a medication shortage--Honduras, May-August 2006. *MMWR* 2007 Jul 6; 56(26):655-8.

Cooksey RC, de Waard JH, Yakrus MA, Toney SR, Da Mata O, Nowicki S, Sohner K, Koch E, Petti CA, Morey RE, Srinivasan A. *Mycobacterium cosmeticum*, Ohio and Venezuela [letter]. *Emerg Infect Dis* 2007 Aug; 13 (8): 1267-1269. Also available from www.cdc.gov/EID/content/13/8/1267.htm.

Driver CR, Kreiswirth B, Macaraig M, Clark C, Munsiff SS, Driscoll J, Zhao B. Molecular epidemiology of tuberculosis after declining incidence, New York City, 2001-2003. *Epidemiology & Infection* 2007 May; 135(4): 634-643.

Ferroussier O, Kumar MKA, Dewan PK, Nair PKJ, Sahu S, Wares DF, Laserson K, Wells C, Granich R, Chauhan LS. Cost and cost-

effectiveness of a public-private mix project in Kannur District, Kerala, India, 2001-2002. *Int J Tuberc Lung Dis* 2007; 11 (7): 755-761.

Saukkonen JJ, Cohn DL, Jasmer RM, Schenker S, Jereb JA, Nolan CM, Peloquin CA, Gordin FM, Nunes D, Bernardo J, Venkataramanan R, Sterling TR on behalf of the ATS Hepatotoxicity of Antituberculosis Therapy Subcommittee. Antituberculosis Drugs and Hepatotoxicity. [Letter.] *Am J Respir Crit Care Med* 2007; 175: 858a-859.

Schneider DL and Lobato MN. Tuberculosis control among people in U.S. Immigration and Customs Enforcement custody. *American Journal of Preventive Medicine* 2007 July; 33 (1): 9-14.

Weiner M, Burman W, Luo C-C, Peloquin CA, Engle M, Goldberg S, Agarwal V, and Vernon A. Effects of rifampin and multidrug-resistance gene polymorphism on concentrations of moxifloxacin. *Antimicrobial Agents and Chemotherapy* 2007 August; 51 (8): 2861-2866.

Zhao Z. Early stopping clinical trials of binomial response with an exact group sequential method. *Statistics in Medicine* 2007 Apr 15; 26(8):1724-1729.

PERSONNEL NOTES

In Memoriam

George W. Comstock, MD, an epidemiologist who made major contributions to the treatment and prevention of TB and whom many peers regarded as the world's foremost expert on the disease, died on July 15 at the age of 92. The cause was given as prostate cancer. Two studies by Dr. Comstock in the 1940s and 1950s had a critical impact on the federal government's response to TB. One led public health officials to reject the use of BCG, which had been under consideration for routine use among American children. The second led to the adoption of isoniazid (INH) for the treatment of TB.

In the late 1940s, the US government wanted to further test a BCG vaccine that had been found effective in two trials in the United States. Dr. Comstock led a team in conducting BCG studies among schoolchildren in Georgia and Alabama from 1947 to 1950. The studies found that the vaccine was largely ineffective. Public health officials then decided against routinely vaccinating children in the United States with BCG. On receiving an award from the National Foundation for Infectious Diseases for his work, Dr. Comstock said he suspected he was the first person to be so honored for persuading people not to use a vaccine.

In 1957, Dr. Comstock volunteered to conduct a U.S. PHS study of TB patterns in Alaska, where one of every 30 natives was in a TB hospital, saying he saw an opportunity to study preventive treatment. He conducted a controlled trial in 29 villages near Bethel, Alaska, where TB was rampant. The study showed the effectiveness of INH in preventing TB: after a year, INH produced a 70 percent decline in cases of the disease; a follow-up study 5 years later showed the drug's benefit had been sustained. In the trial, Dr. Comstock and his family took INH themselves to convince the participants of his belief in the therapy's safety. After the trial, Dr. Comstock gave INH to those who had received the placebo. To this day, DTBE's guidelines on INH therapy still use Dr. Comstock's data.

Dr. Comstock was born in Niagara Falls, New York, in 1915. He attended Antioch College, and later earned a medical degree from Harvard Medical School in 1941 and a master's degree and a doctorate in public health from the University of Michigan and

Johns Hopkins, respectively. He interned with the Public Health Service and later became chief of its TB epidemiologic studies unit. After retiring in 1962, he moved to Johns Hopkins. From 1979 to 1988, he was editor of the *American Journal of Epidemiology*.

Dr. Comstock founded the Johns Hopkins Training Center for Public Health Research and Prevention in Hagerstown, Maryland, where for 30 years he oversaw community-based research studies on cancer, heart disease, and an eye disease known as histoplasmosis. The center was renamed for Dr. Comstock in 2005. He was a lifelong advocate of public health efforts and expressed disappointment in later years that more doctors were not devoting their services to it.

In March 2006, DTBE was honored by the presence of Dr. Comstock and his wife at a Brown Bag presentation in which he gave informal remarks and musings about his work and research, then answered questions from the audience. As Dr. Castro has noted, our best tribute to Dr. Comstock's life is to carry on until the eventual elimination of TB in the United States.

The following was contributed by John Seggerson:

Tom Smith, a former CDC Public Health Advisor (PHA), died on July 24 from chronic obstructive pulmonary disease (COPD). He was 73. Tom served as a CDC PHA in Philadelphia's STD program in the early 1960s and became one of the first CDC PHAs assigned to TB. He served for a number of years as the Senior CDC TB representative in Maine and then as the Senior TB representative in Philadelphia for 4-5 years before accepting an assignment in the Philadelphia PHS regional office. He retired from PHS about 15 years ago. He was well liked and was often referred to as "Nerves," a nicknamed conferred by friend and PHA John Supinski, who gave nicknames to many PHAs of that era. Many PHAs remember that, during Tom's assignment in Philadelphia, the city program became the first in the country to use rifampin, then newly developed, as a routine first-line drug for treatment of TB. Tom was widely respected and appreciated by his colleagues. He will be very much missed by his family and by many PHAs and other public health workers who remember Tom fondly.

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Emily Bloss, MPH, PhD, is a new Epidemic Intelligence Service (EIS) Officer who has been assigned to the International Research and Programs Branch (IRPB) for a 2-year EIS term. After graduating from the University of Notre Dame, Emily worked in Chicago for a number of years as a Research Coordinator for orthopedic clinical outcomes research. Upon receiving her masters degree in anthropology at the University of Illinois in Chicago, she pursued a masters degree in public health from the Department of Epidemiology and Biostatistics in the same University. She had the opportunity to conduct the field work for her master's capstone project in western Kenya as a National Security Education Program (NSEP) Boren Fellow. She continued her studies at the School of Public Health and Tropical Medicine at Tulane University where she completed her PhD in International Health and Development. Her dissertation focused on gender differences in risk factors for TB among pastoralist groups in northern Kenya. The field work for Emily's doctorate was supported by the U.S. Fulbright Award for Sub-Saharan Africa and the Woodrow Wilson-Johnson and Johnson Dissertation Fellowship in Women's Health; she worked in collaboration with the National Leprosy and Tuberculosis Program

and the Kenya Medical Research Institute (KEMRI). Emily's international experience also includes work in Nicaragua and Sri Lanka. Emily's assignment began in July 2007.

Jeuneviette Bontemps-Jones, MPH, CHES, of the Communications Team of the Communications, Education, and Behavioral Studies Branch, has left DTBE for a position with the American Cancer Society. Jeuneviette came to DTBE a year ago as an Association of Schools of Public Health (ASPH) fellow. Her work within CEBSB included planning, developing, revising, implementing, and evaluating educational materials, print-based as well as web-based. Jeuneviette earned her BA degree in psychology from Columbia University, NY, then taught elementary school for 3 years in Queens, NY. She then enrolled in the Rollins School of Public Health at Emory University and received her MPH degree in health education. Before starting her ASPH fellowship, Jeuneviette worked at the Morehouse School of Medicine as a Research Coordinator in their Community Oriented Primary Care Department. Her last day in the office was July 26. We wish her luck in her new position!

Betty Bouler of the Surveillance, Epidemiology, and Outbreak Investigations Branch retired on July 31, 2007. Betty began her federal career in April 1972 as an officer trainee for the US Air Force (USAF) in San Antonio, Texas, then spent 3 years as a Procurement Officer before resigning and moving back to her home state of Mississippi. In 1980 she joined the Young Adult Conservation Corps grants program of the US Department of Agriculture (USDA) Forest Service in Atlanta. This was one of Betty's favorite jobs, as it required frequent travel to inspect projects in Arkansas, Kentucky, Louisiana, and Oklahoma, and all the projects were in state and local parks. When that program was discontinued in 1981, Betty went back to the USAF in Warner Robins, GA, as a buyer of computers. It was there that she met and married her husband, John. Seeking career advancement, Betty successfully competed for a position with CDC in Atlanta. She moved to Atlanta in May 1984, and spent over 17 years in CDC's Procurement and Grants Office (PGO). Betty awarded the first contracts for an AIDS hotline, the AIDS advertising campaign, and an AIDS clearinghouse before she moved on to a variety of supervisory positions for over 15 years. In 2001 Betty came to work with the Tuberculosis Epidemiologic Studies Consortium (TBESC). She was with the consortium for over 5 years and participated in the award of Task Orders 3–18. She played a key role in every aspect of building the TBESC, and provided significant input and assistance in all contractual matters related to awarding well over 100 contracts. She also provided critical guidance on the consortium's infrastructure, budgetary, and scientific requirements. Betty's knowledge, experience, and dedication led to the success of the TBESC, and she will be greatly missed.

Michael Chen, PhD, a mathematical statistician, has joined the Division in the Data Management and Statistics Branch. He comes to us from the National Center for Chronic Disease Prevention and Health Promotion, Division of Reproductive Health. He received a bachelor's degree in Applied Mathematics and a master's degree in Mathematics and Statistics from the University of Minnesota, and received a PhD degree in Computational Mathematics from Florida State University in 1993. After graduation, Michael worked as an assistant professor in the Department of Mathematics and Statistics at Western Illinois University. In 1994, he entered the field of public health with the Florida State Agency for Health Care

Administration and the Florida Medicaid Program, where he served as a senior statistical analyst and a team leader for health care program planning, analysis, and evaluation. Since joining CDC in 2002, Michael has provided biostatistical support to several projects, including the Assisted Reproductive Technology Surveillance System, and has conducted international surveys research on maternal mortality. He specializes in mathematical modeling and statistical methodology. Michael's time will be devoted mostly to supporting the work of the International Research and Programs Branch and the Mycobacteriology Laboratory Branch, as well as special (nonclinical trials) studies in the Clinical and Health Services Research Branch.

Jack Crawford, PhD, microbiologist, Mycobacteriology Laboratory Branch, DTBE, retired on June 1. Jack received his BS degree from the Ohio State University and doctorate in microbiology from the University of Florida and completed postdoctoral training at Tufts Medical School, Boston. He began his studies of mycobacteria in 1977 under the mentorship of Dr. Joseph Bates at the VA Medical Center, Little Rock. He was one of the first researchers to apply molecular biology methods to the study of mycobacteria, starting with demonstration of plasmids in mycobacteria in 1978. The research of his student Kathleen Eisenach led to the development of the IS*6110*-RFLP method for genotyping *M. tuberculosis*. He came to CDC in 1990 to head the mycobacteriology reference diagnostic laboratory in NCID with a primary goal of increasing its molecular diagnostic capability. The outbreaks of MDR TB in Miami and New York City provided an immediate challenge requiring rapid implementation of the new genotyping methods. The results firmly established the role of genotyping in support of outbreak investigations and prompted the establishment of regional genotyping laboratories in 1993 to provide service to TB programs nationwide. He oversaw the laboratory activities of the National Genotyping and Surveillance Network, 1995–2002, which demonstrated the value of routine, large scale genotyping, and developed and implemented the current National Genotyping Service which began in 2004. Beginning in 1997, he directed the applied research group, which studies improved molecular methods for genotyping, species identification, and detection of drug resistance. The laboratory branch merged with DTBE in 2004. Jack has over 100 publications and four patents; in addition, he received the Mackel and Shepard Awards from CDC and the Gardner Middlebrook Award from Becton Dickinson. Jack and Kay have moving to Gainesville, Florida, where he plans to relax, tinker with old cars, and ride his beloved Triumph and Norton motorcycles.

Mitesh Desai, MD, MPH, has joined the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB) for a 2-year term as an EIS Officer that began in July 2007. He completed a primary care internal medicine residency at Johns Hopkins University, where his training focused on an urban population disproportionately affected by poverty, addiction, and HIV. Mitesh attended the University of Pittsburgh and graduated with a BS degree in neuroscience, finished his medical degree at the New York University School of Medicine, and while in medical school also completed the requirements for an MPH degree from the Columbia University Mailman School of Public Health. During his MD and MPH studies, he interned with the New York City Department of Health and Mental Hygiene and worked on HIV testing and health literacy campaigns. In addition to biking, cooking, and occasional scuba-diving, Mitesh comes to DTBE with an interest in advocacy for the underserved.

Divia Forbes joined the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB) on April 30 as a Public Health Analyst. She will be assuming many of the duties formerly handled by Tammy Roman, in addition to other responsibilities. She obtained her bachelors degree in business management from Kaplan University and will be pursuing a masters degree in public health from Benedictine University. In 2001 Divia started working for CDC in the National Immunization Program. In March 2002 she joined NCHHSTP in the Division of HIV/AIDS, where she served as the Resource Coordinator and Technical Monitor for grants and contracts, task orders, and activities that support branch conferences and workshops. She served as an active member of the branch's Continuous Quality Improvement and Implementation Team (CQIIT), which coordinates the dissemination of evidence-based HIV prevention interventions for African-American women. Some of the interventions were Sisters Informing Sisters about Topics on AIDS (SISTA); Sistering, Informing, Healing, Living, Empowering (SIHLE), for girls; and one for HIV-infected women called Women Involved in Life Learning from Other Women (WILLOW). Divia participated in several national HIV/AIDS conferences, seminars, and workshops. She also served as a Program Analyst in the Global AIDS Program on a 60-day detail, and served as a Grants Management Specialist with PGO on a 120-day detail. Divia is also fluent in Spanish. She has been married for 27 years to Theodore Forbes and has three wonderful children.

Maryam Haddad has been selected as the new Team Lead for the Outbreak Investigations Team in the Surveillance, Epidemiology, and Outbreak Investigations Branch, DTBE. Maryam received her Bachelor of Arts degree from Furman University and her Associate in Health Science from Greenville Technical College, both in Greenville, South Carolina. She completed simultaneously her Masters of Public Health, Masters Science in Nursing, and Family Nurse Practitioner specialty training from Emory University in Atlanta in 2001. She joined CDC in 2001 as a state-based Epidemic Intelligence Service Officer in Utah, where she helped manage the Utah state public health surveillance team during the 2002 Olympic Winter Games. While in Utah, she also led investigations of invasive pneumococcal disease and outbreaks of varicella, calicivirus, coccidioidomycosis, and West Nile virus. In 2003, Maryam joined the Outbreak Investigations Team of DTBE in Atlanta as an epidemiologist. In that capacity, she has become well-known to staff members at headquarters as well as to state and local TB controllers for her investigations of 11 TB outbreaks. Especially memorable was Maryam's hard work during the Hurricane Katrina deployment, when she worked with other DTBE staff members to assist state and local partners to account for every displaced TB patient and to ensure that each had a secure supply of antituberculosis drugs. She also has become well-known for her innovative work on social network analysis and its application to understanding the complex patterns that occur among cases and contacts and where they intersect with one another. Maryam assumed her new duties on July 9, 2007.

Andrea (Annie) Hoopes, who was the first CDC Experience Fellow assigned to DTBE's Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB), completed her 1-year fellowship at the end of May 2007. Annie's year with DTBE was filled with a multitude of activities and accomplishments. These included evaluating the usage of the Online TB Information System (OTIS) and presenting her findings at an SEOIB Branch meeting; attending the

National Jewish Hospital TB Clinical Intensive Course in Denver and the TB Program Manager's Course in Atlanta; working with Lori Armstrong and Steve Kammerer in analyzing more than 10 years' worth of data in the NTSS database for characteristics and trends in INH-monoresistant TB in the US and presenting preliminary findings of the analysis at a Brown Bag and as a poster at the ATS meeting in San Francisco; writing as first author and submitting for publication a manuscript entitled, "Isoniazid Mono-Resistant Tuberculosis in the United States, Characteristics and Trends, 1993-2005"; participating with Maryam Haddad and Ann Buff on two TB outbreak investigations; and partnering with IRPB staff Peter Cegielski and Allison Taylor and MLB staff Tracy Dalton for 2 weeks in South Africa to collect data for the Preserving Effectiveness of TB Treatment (PETT) (for MDR TB) study. Annie has returned to medical school at the Ohio State University College of Medicine, where she has commenced her third year of studies and first year of clinical rotations. We miss her and her home-baked goodies!

Annie was one of eight medical students chosen from among 50 who competed for the 1-year applied epidemiology fellowship. The CDC Experience: Applied Epidemiology fellowship at CDC provides medical students with a hands-on training experience in epidemiology and public health, with the guidance of experienced epidemiologists.

Kashef Ijaz MD, MPH, was selected as Chief, Field Services and Evaluation Branch, DTBE. Kashef received his medical degree from King Edward Medical College, University of Punjab, Pakistan, and his MPH degree in epidemiology from the College of Public Health, University of Oklahoma. After completing his training, he worked as medical epidemiologist with the Division of TB at the Arkansas Department of Health and University of Arkansas for Medical Sciences, where he held an appointment as Assistant Professor of Medicine in the Division of Pulmonary and Critical Care. During his 7 years at the Arkansas Department of Health, he worked with Drs. William W. Stead, Joseph H. Bates, Kathleen Eisenach, and Don Cave, all nationally and internationally renowned TB experts. While in Arkansas, Kashef investigated numerous TB outbreaks in prisons, homeless shelters, nursing homes, and other high-risk population settings. As a result of his field work in Arkansas, he acquired extensive TB program experience and wrote state requests for CDC cooperative agreements and progress reports. He was also one of the principal investigators for the Arkansas sentinel surveillance site for CDC's National Genotyping and Surveillance Network and the principal investigator for the Arkansas TB Epidemiologic Studies Consortium site before joining the Outbreak Investigations Team in the Surveillance, Epidemiology and Outbreak Investigations Branch (SEOIB), DTBE, in January 2002. Shortly after joining DTBE, Kashef was selected to be the Team Leader for the Outbreak Investigations Team, SEOIB. Since that time, he has been instrumental in developing an excellent team of epidemiologists to investigate TB outbreaks in the United States and other countries. He has been an important liaison for cross-branch coordination related to outbreak response. During his tenure as team leader, his team investigated more than 30 domestic and international TB outbreaks. Kashef has also helped train numerous Epidemic Intelligence Service Officers. He has authored and coauthored several publications in peer-reviewed journals and has presented extensively on TB both at national and international meetings.

Scott McCoy, MEd, has taken an early disability retirement from DTBE/CDC. He came to DTBE in 1999 as a Health

Education Specialist in the Communications, Education, and Behavioral Studies Branch (CEBSB). He came to DTBE with extensive experience in developing, implementing, and evaluating educational programs and materials around the issues of alcohol and substance abuse. Prior to accepting the CEBSB position, Scott had already been collaborating with DTBE for a year and a half in his role as Marketing Communications Specialist with the NCHSTP Office of Communications (OC). In that position, he was the OC lead for the National TB Communication Plan and the TB Partnership Initiative. While in CEBSB, Scott juggled a variety of projects. He took over the planning, coordination, and implementation of the annual Program Managers Course, and carried out this complex responsibility smoothly and expertly each year. He was also regularly involved in coordinating World TB Day activities for the division and for U.S. TB control staff. Scott routinely attended conferences and meetings in order to distribute, display, and discuss TB materials. Other accomplishments include the development and printing of materials such as Forging Partnerships to Eliminate TB; the Cohort Review Process education project; and many other TB health education materials and projects. For example, he annually updated and revised the DTBE Trends document and the "Now Is the Time!" brochure, and developed and revised many TB fact sheets and other educational materials. He was a member of the DTBE Evaluation Team Workgroup as well as a member of the TB Education and Training Network (TB ETN) conference planning workgroup. Whenever Scott was involved in a project, you knew the results would be creative and interesting. To the sadness of Scott's many friends inside as well as outside of CDC, Scott suffered a heart attack in 2006 and has been on medical leave for much of the time since then. Although we will miss seeing Scott on a daily basis, we recognize that his full recuperation is of paramount importance. Thus, we bid Scott all best wishes for a full recovery, and look forward to seeing him at future DTBE social events.

Eugene McCray, MD, has been selected as Chief, International Research and Programs Branch (IRPB), DTBE. A career officer with the U.S. Public Health Service, CAPT McCray retires from the Commissioned Corps effective September 1, 2007, and joins DTBE as a full-time civil service employee on September 2. His extensive experience in global health as well as his technical and diplomatic skills will be an asset to DTBE and the Branch.

Dr. McCray started his CDC career as an Epidemic Intelligence Service (EIS) Officer in 1983 and has since served in various capacities throughout CDC. After completing the EIS program in 1985, Eugene worked as a staff epidemiologist in the Hospital Infections Program (precursor to the Division of Healthcare Quality Promotion), National Center for Infectious Diseases, where his work focused on problems of hospital-acquired infections, including evaluating the risk for transmission of HIV in hospitals following needlestick exposures. He left CDC in July 1986 to work in the private sector as a clinician for 2 years. Eugene returned to CDC in July 1988 to join the Division of HIV/AIDS, where his work focused on establishing programs for sentinel HIV surveillance in special U.S. populations. From July 1993 to February 2000, he served as Chief of the TB Surveillance Section, DTBE, where he directed national surveillance for TB disease and provided technical assistance to a number of countries in South and East Africa on TB and HIV/AIDS surveillance and operations research. Eugene returns to DTBE after many years with the Coordinating Office for Global Health (COGH), where he served as the Acting Deputy Director, COGH, and

Director, Office of Capacity Development and Program Coordination since November 2004. Prior to joining COGH, he was the Director of the Global AIDS Program (GAP) during 2000-2004. As GAP Director, he was responsible for overseeing all activities of CDC's international HIV/AIDS assistance program with offices in 25 countries and three regions around the world including Africa, Asia, and the Caribbean/Latin America regions.

Eugene holds a Doctor of Medicine degree from the Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, North Carolina. He completed his internal medicine residency at North Carolina Memorial Hospital at UNC, Chapel Hill, North Carolina, and an Infectious Diseases Fellowship at University of Washington Medical Center, Seattle, Washington. He has published numerous scholarly articles on public health, especially concerning TB and HIV/AIDS, and has been deserving of numerous awards for his scientific and public health contributions, including the USPHS Distinguished Service Medal and the CDC/ATSDR William C. Watson Medal of Excellence award. We welcome Eugene back to DTBE!

Ted Misselbeck, DTBE Public Health Advisor, has accepted a promotion to join the Houston, Texas, TB program. His report date was June 24, 2007. Ted is leaving a position assigned to the State of Tennessee Health Department TB Program in Nashville, where he has served since 2004. While in Tennessee, his area of responsibilities included 1) serving as the State TB Genotyping Program Leader, which consisted of assisting in the development of a computer-based combination genotype/RVCT data system, design of a user-friendly local program genotyping kit, and initial launch of the statewide TB Genotyping Program, and 2) serving as the Tennessee prisons TB coordinator and acting as a liaison with local, state, and prison officials in managing two TB outbreaks in the state prison system. These duties included developing a database, insuring prompt treatment of new inmate suspects and contacts, and integrating and utilizing the prison cell/bed locator database system in identifying locations of inmates during their infectious periods. Ted also worked on the Memphis TB Program Improvement Program, a project requiring weekly travel between Nashville and Memphis. Ted provided leadership in developing and establishing new TB program methods in the Memphis/ Shelby County TB program. A 72-item improvement plan was designed, which included hiring 15 new personnel; improving the relationship between the Memphis and State TB Health Programs; and establishing several improvements such as a new pharmacy/DOT system, laboratory collection methods, a waiting-time reduction Fast-Track clinic for LTBI, and a quarterly case review meeting. Ted was deployed to Louisiana during Hurricane Katrina/Hurricane Rita and served as a national locator/manager for finding all the TB patients from New Orleans who were displaced by Hurricane Katrina.

From November 2002 to October 2004, Ted was assigned to the City of St. Louis Health Department. While in St. Louis, Ted's responsibilities included efforts to contain a TB outbreak in the city's largest homeless shelter. During a 3-year period, 19 cases and two deaths were reported. Ted was the lead coordinator of an outbreak team that comprised 11 different agencies and vendors. Ted also assisted in getting two pieces of legislation introduced and passed by the Board of Aldermen and signed into law by the mayor. One bill established a TB Ordinance which permitted a nominal fee to be charged for TB skin testing required by clients for pre-employment; all generated

funds are placed into a designated account to be used exclusively to purchase TB treatment incentives and enablers. Another bill updated a century-old quarantine law to include current language terms in reference to bioterrorism, isolation, and quarantine.

Ted's first assignment with CDC DTBE was with the Palm Beach Health Department TB program beginning in January 2001. His duties there included DOT, hospital interviews of new suspects, and case management. Ted assisted in the county's transition from manual to computer documentation reporting. Prior to joining DTBE, Ted worked as a primary therapist with Seabrook House in Seabrook, New Jersey, and as a pharmaceutical sales representative with Sandoz Pharmaceuticals in Middlesex County, New Jersey, and Staten Island, New York.

Heather Peto joins DTBE in the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB) in September as the second CDC Experience Fellow to be successfully matched with that branch. Heather was one of eight medical students chosen from among 45 who competed for this 1-year applied epidemiology fellowship. She is a graduate of the University of Wisconsin, where she received a bachelor of science degree in both biology and political science. She is presently a third-year medical student at the University of Wisconsin-Madison School of Medicine and Public Health. She is interested in pursuing a combined residency in internal medicine and pediatrics, and has a strong interest in public health and community health. Heather interned during her first summer in medical school as a World Health Organization Global Health Fellow. In that position, she assisted with the evaluation of a health service availability mapping (SAM) strategy that combined district-level survey information with GIS data to map distribution of basic health services in developing countries. In addition, Heather has used her Spanish language skills while participating in a community health assessment in Ecuador and while performing volunteer medical work at a clinic for uninsured Spanish-speaking patients in Madison. Bienvenidos a DTBE, Heather!

Charles Rose, PhD, a mathematical statistician, joined DTBE in the Information Technology and Statistics Branch on May 29, 2007. Charles attended Northern Arizona University in Flagstaff, Arizona, from 1992 to 1996, graduating with a BSc degree in Forest Resources. He then attended graduate school at Oklahoma State University (OSU) in Stillwater, Oklahoma, and the University of Georgia (UGA) in Athens, Georgia, receiving an MSc degree in Forest Biometrics in 1998 from OSU and an MSc degree in Statistics and a PhD degree in Forest Statistics in 2002 from UGA. Charles began his career at CDC in August 2002 with the National Center for Infectious Diseases (NCID). Since 2003, after the CDC reorganization, he has been the principal statistician for the safety analysis of the anthrax vaccine clinical trial. The interim analysis was conducted in 2004 and the final analysis will begin in mid to late 2008. In addition, he has worked extensively with a huge surveillance database (approximately 1 billion records) to conduct postmarketing anthrax vaccine safety studies and to study the recent multiple vaccinations and adverse events. Charles's background within CDC has enabled him to design and analyze epidemiological studies using standard techniques such as logistic regression, Poisson, Cox proportional hazards, and zero-inflated modeling, as well as methods for identifying clusters using Bayesian methods. He has made presentations to a diverse spectrum of audiences that have included epidemiologists, medical personnel, and statisticians at venues ranging from statistical to public health forums and conferences. His

primary project here in DTBE will be the development of a TB transmission model to assess the relative impact of potential TB interventions that will enable us to reach the goal of TB elimination. Welcome to DTBE!

Rinn Song, MD, is a new Epidemic Intelligence Service (EIS) Officer working in DTBE. Rinn joined the International Research and Programs Branch (IRPB) in July 2007. He arrives from New York City, where he completed a pediatrics residency at New York University/Bellevue Hospital. During his residency, he worked in a clinic for HIV-infected children in Kenya on clinical and laboratory HIV research projects. An accomplished oboe player, Rinn received his undergraduate degree from the Humboldt University in Berlin and attended medical school at the Ludwig-Maximilians University in Munich, where he was selected for exchange medical student programs at the University of Paris, the University of Barcelona, Harvard Medical School, and Duke University. He received his MD degree and a doctoral degree in medicine with honors from the Ludwig Maximilians University in Munich, Germany. His interests include TB/HIV coinfection and pediatric TB.

CALENDAR OF EVENTS

August 13–17, 2007
TB/HIV Collaborative Activities Management Course
Addis Ababa, Ethiopia
German Leprosy and TB Relief Association (GLRA) Fondazione Maugeri; Univ of Brescia
E-mail: monika.hofmann@dahw.de
Tel: +49 931 7948 111; Fax: +49 931 7948 160; or access the website: http://www.fsm.it or http://www.dahw.de

August 23–24, 2007
Rocky Mountain TB Controllers Meeting
Portland, Oregon

August 29-31, 2007
TB 101 & Facilitator Training
Wichita, Kansas
Contact jeanne.laswell@uthct.edu
Register at: http://www.heartlandNTBC.org

September 4–6, 2007
Tuberculosis Clinical Intensive
San Francisco, California
Francis J. Curry National TB Center
www.nationaltbcenter.edu/training/tb_clinical_intensive.cfm

September 4–7, 2007
Southeastern TB Controllers Meeting
Greenville, South Carolina

September 15–19, 2007
European Respir. Soc. Annual Congress
Stockholm, Sweden
http://dev.ersnet.org/

September 17–20, 2007
47th ICAAC (Interscience Conference on Antimicrobial Agents and Chemotherapy)
Chicago, Illinois
American Society for Microbiology
http://www.icaac.org/future.asp

September 24–25, 2007
Northeastern TB Controllers Meeting
Salem, Massachusetts

September 25–27, 2007
TB Intensive Course
Chicago, Illinois
Heartland National TB Center
Contact maria.robles@uthct.edu
Register at: http://www.heartlandNTBC.org

September 26–27, 2007
Midwest TB Controllers Meeting
Chicago, Illinois
October 4–7, 2007

45th Annual IDSA Meeting
San Diego, California

Infectious Diseases Society of America
http://www.idsociety.org/

October 15–19, 2007
TB Program Managers Course
Atlanta, Georgia
CDC/DTBE

October 20–25, 2007
CHEST 2007
Chicago, Illinois
American College of Chest Physicians
http://www.chestnet.org/

October 29–30, 2007
13th Annual Four Corners TB/HIV Conference
Durango, Colorado
For conference and registration information, go to www.fourcornerstb.org or contact Gayle Schack: gayle.schack@state.co.us or tel: 303-692-2635

October 31, 2007
Southwestern TB Controllers Meeting
Durango, Colorado

November 3–7, 2007
135th APHA Annual Meeting and Exposition
Washington, DC
American Public Health Association
http://www.apha.org/meetings/

November 8–12, 2007
38th Union World Conference on Lung Health
Cape Town, South Africa
Interntl Union Against TB & Lung Disease
http://www.iuatld.org/index_en.phtml

November 12–24, 2007
International Course: Human Resources Development and Management for TB Control
Bangkok, Thailand
International Union Against Tuberculosis and Lung Disease (The Union); India Resource Centre (IRC)
Application deadline: August 15, 2007
For complete information, visit
http://www.iuatld.org/upload/course/Application%20form-HRDM-Bkk-Nov%202007_form_download_1_17.doc

December 4–7, 2007
TB Intensive Course
Tyler, Texas
Heartland National TB Center
For more information, contact
domingo.navarro@uthct.edu
Register online at the HNTC website:
http://www.heartlandNTBC.org