DEPARTMENT OF HEALTH & HUMAN SERVICES Public Health Service

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

TB Notes
No. 3, 2008

Dear Colleague:

The 57th annual Epidemic Intelligence Service (EIS) conference, which is held in Atlanta, convened this year April 14–18. The Division of Tuberculosis Elimination (DTBE) had a very successful week of research presentations and recruitment. DTBE has recruited three new EIS officers from the incoming class; we welcome them to the division. Please see the summary of this conference provided by Kevin Cain and Tim Holtz in this issue.

The 2008 National TB Controllers Workshop, sponsored by the National Tuberculosis Controllers Association (NTCA), was held June 10–12 at the Crowne Plaza Hotel in Atlanta. My last *TB Notes* Dear Colleague letter devoted only a paragraph to the workshop; in this letter I will share some of the highlights of this important meeting.

The theme of the meeting was the appropriate and timely message of "Many Cultures, One Cause." Several preworkshop activities were held on June 9, including the Advanced Medical Practitioner's Meeting. At that session, the National Society of TB Clinicians was formed. The Society will function as a section within the NTCA; its purpose will be to advance the elimination of TB in the United States and its Territories. Members of the Society will work in partnership with the TB control officials to provide the clinician's perspective on issues vital to the success of eliminating TB.

The main activities of the workshop began on June 10. The first general session featured a number of welcomes and updates, including a motivational keynote speech by Stephanie Bailey, Chief of Public Health Practice at CDC. Asserting that health protection investments produce health system value, she challenged us to harness the incredible technology at our disposal to reduce health disparities and improve the health equity of all U.S. residents. During breaks, participants were able to view and discuss the posters on display, which represented some of the excellent work being done by TB control staff in this country. Please see the related article in this issue about the winners of the poster contest.

We also heard about some of the challenges of quarantine and global migration, with updates on the Electronic Disease Notification (EDN) system and the new 2007 TB Technical Instructions (TB TI) for Panel Physicians (physicians who examine foreign citizens applying for entry into the United States as immigrants or refugees). Gisela Schecter of the California Department of Public Health described the site visit that was conducted in May–June 2008 to evaluate the screening program for U.S.-bound Philippine immigrants using the new 2007 TB TI. The evaluation team reported that the

Philippines TB screening program has done an outstanding job of developing thorough and effective procedures for implementing the TB TI; more than 21,000 patients have been screened using the TB TI since October 2007. The team found that implementation of mycobacterial culture in the screening process has produced improvements. Through March 2008, the program detected 244 TB cases among screened applicants; among those, 142 were smear-negative and culture-positive for *M. tuberculosis* and would not have been detected using the old screening instructions. The Division of Global Migration and Quarantine (DGMQ) has also updated the Technical Instructions for Civil Surgeons (physicians who perform the medical examinations of aliens within the United States). Please see Mary Naughton's related article in this issue.

The third general session was dedicated to challenges encountered with specific social cultures. We heard sobering statistics that reminded us of the serious health disparities between white, non-Hispanic U.S. residents and racial/ethnic minority populations in this country that make cultural competency so compelling and important. Some of the presentations in this session reminded us that the challenges we face in treating TB patients can arise not only from the patient's culture, but from that of the institution housing the patient. For example, we heard descriptions of the cultural divide between corrections and public health staff; two presenters noted that corrections and public health do not speak the same language, and that each culture must try to understand and respect the other's mission and purpose.

The last general session dealt with the changes in practice and technology that TB controllers are experiencing. Patrick Moonan introduced TB GIMS (the Tuberculosis Genotyping Information Management System), which will advance genotyping information management from local, ad hoc reports to national, standardized reports. This will automate the process of submitting isolate information, reporting genotyping results, and tracking and analyzing data. Dolly Katz, Smita Chatterjee, and Margaret Oxtoby presented results from an NTCA survey about the Translating Research into Practice (TRiP) workgroup. The survey results indicated several key points for successfully translating research into practice: 1) it helps to start small, 2) it's important to show how the change can benefit stakeholders, 3) for change to be institutionalized, it needs to be written down, and 4) remember that legislators and administrators can be your friends. The final session topic dealt with challenges with the patient. These presentations essentially confirmed what we know: that it takes collaboration among TB control, nursing, laboratory, and legal staff to manage challenges with patients. Please mark your calendars: the 2009 NTCA Workshop has been set for June 15–19, 2009. I hope to see you there!

On a final note, I am happy to report that on July 31, President Bush signed H.R. 5501, the Lantos-Hyde U.S. Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008. The bill provides a 5-year strategy for confronting AIDS, TB, and malaria, authorizing $48 billion for these global health programs. The legislation also addresses TB prevention and control, incorporating language from the Stop TB Now Act. The measure allows expansion of the U.S. Agency for International Development's (USAID) global TB control activities, and commits $4 billion over the next

5 years to treat and prevent TB, the biggest killer of people with HIV/AIDS. The authorization supports treatment for 4.5 million TB cases, and diagnosis and treatment of 90,000 new MDR cases by 2013. In addition, Congress recently passed the Comprehensive TB Elimination bill, which reauthorizes domestic TB programs. As of this writing, the measure is awaiting signature by the President. Thanks to the many partners who make themselves available to answer policymakers' questions about TB prevention and control.

Kenneth G. Castro, MD

In This Issue

Note: The use of trade names in this issue is for identification purposes only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

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, 2008

HIGHLIGHTS FROM STATE AND LOCAL PROGRAMS

Florida TB and Corrections Team Wins 2008 Prudential–Davis Productivity Award!

In 2008, the Department of Health (DOH) TB staff in Florida were recognized with a group award for their work with the Lowell Correctional Institution TB Deployment Team. The contribution being recognized involved a case-finding investigation in a women's correctional facility. The group award was one of the Prudential Financial–Davis Productivity Awards given each year in Florida.

The awards were created by the late J.E. Davis and A.D. Davis (co-founders of Winn-Dixie Stores, Inc.) and are sponsored by Prudential Financial. Since 1989, the Davis Productivity Award program has publicly recognized and rewarded Florida state employees and agencies whose work significantly increases productivity and promotes innovations that improve the delivery of services, while saving money for Florida taxpayers and businesses. This year's competition attracted 489 nominations from all over the state for innovation and productivity improvements worth $322 million in cost savings, cost avoidances, and increased revenue for state government. Since 1989, award winners have produced more than $5.9 billion worth of added value.

The official award winners are posted on the web site, www.floridataxwatch.org/dpa .

The accomplishment

The 34-member statewide team combined the resources of two agencies, the Department of Health and the Department of Corrections, to find an undiagnosed inmate with highly contagious TB. The previous year, this correctional facility had experienced a TB outbreak. The contact investigation done at the time was considered to have been not as extensive as it should have been. Therefore, the decision was made to do active case finding as opposed to contact investigation. Working almost around the clock for 3 weeks, the team screened 2,729 inmates and prison employees.

The team's first priority was to conduct symptom screening with individuals who might have active TB. To do this, the team developed an interagency electronic data-sharing system and database with specific inmate and officer medical information. This new system allowed the nurses to view the documented medical history of each inmate prior to assessing the inmate's physical signs and symptoms; this allowed for greater efficiency for the active case-finding investigation. The team combined their expertise to design a system for extracting protected health information from the Offender Based Information System (OBIS), a very antiquated system. Obtaining this needed information was the major obstacle this team encountered. However, through the creativity and expertise of the medical and information staff, they accomplished what was originally thought to be almost impossible. This innovation eliminated the need to review approximately 3,000 paper medical records, thus materializing savings of approximately 500 person-hours, for an estimated cost savings of $5,000.

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resources available from DTBE.

As a result of efforts, the team found an undiagnosed case and prevented further TB spread. Individuals with TB who do not receive treatment can infect as many as 20–30 individuals. The cost of treating one uncomplicated case of TB in Florida is estimated at $21,000 (2003 dollars). By finding this active case of TB, we estimate that at least 20 other people were saved from developing this disease, resulting in a cost avoidance of $420,000 (20 x $21,000=$420,000). After deducting the $92,209 spent on labor and consumables, the team realized a cost savings of $327,791 (annually). The interagency electronic data-sharing system saved an additional $5,000, for a total cost avoidance of $332,791.

This was the first active case-finding investigation conducted within a prison in Florida. The collaborative effort between the two departments added significant value to the active case-finding mission by capitalizing on the abilities and advantages of each agency. Critical factors that ensured the success of the mission included the agencies' sharing information, providing access to the facility, and maintaining ongoing communication. In addition, this investigation was accomplished in a very short period of time. It was a truly successful collaborative venture!

Recognition

This team was recognized at the Florida Department of Health/Bureau of Tuberculosis and Refugee Health Fourth Annual Statewide Meeting in Tampa. The group members were praised by the director of Disease Control for their "noble commitment and outstanding hard work, which far exceeded Department, Division and Bureau expectations."

This innovative project demonstrated best practices to reduce the spread of a potentially deadly respiratory disease, and improved outcomes for all Floridians. Infectious diseases within a prison can spread to local communities through inmates who return home after completing their sentences, as well as through the exposed workforce.

Employee tuberculin skin testing was identified as an area for improvement during this investigation. A Department of Corrections process map was developed and a quality management approach utilized to improve institutional employee testing compliance. The process of improvement is on going, but the initial results indicate incremental improvement.

—Nomination developed by Mary Hackney
Florida Department of Corrections
Submitted to TB Notes by Jimmy Keller, DHSc
Div of TB Elimination

Program Collaboration and Integration Activities in Connecticut

In January 2007, the program manager of Connecticut's Sexually Transmitted Diseases (STD) Control Program also became the manager of the TB Control Program. The integration of these two programs has presented

a great opportunity for staff from these programs to collaborate, offering a variety of services to clients seen for STDs or TB.

In the STD program, Disease Intervention Specialists (DIS) interview clients with certain STDs and follow up with notification, examination, and treatment of exposed sex partners. These staff are also responsible for counseling and interviewing clients infected with HIV and locating their needle-sharing and sex partners for appropriate testing and referral. The DIS staff are able to draw blood, collect urine samples, and collect a swab for HIV testing in the field setting.

In 2007, with the integration of these two programs, Connecticut initiated a cross-training program that is helping the TB program nursing supervisor and the TB case managers become certified HIV counselors. The training, which can take several months to complete, is provided by staff of the Connecticut HIV/AIDS prevention program. To meet the requirements of this training, the TB staff observe the counseling sessions and practice in a variety of settings. For example, they have worked with STD staff in high school settings where students are being screened for STDs and HIV. The TB case managers are able to conduct HIV pretest counseling sessions with students to hone the skills needed for this certification. Once trained and certified, TB staff will be able to conduct HIV counseling and testing for TB patients who have not already been tested for HIV through their medical provider, and can also complete HIV testing on contacts, if there is a need to determine HIV status. This testing can be completed in a nonmedical setting,* which will facilitate the completion of the test and help ensure appropriate management of the TB patient.

*Note: In revised recommendations from 2006, CDC recommends HIV screening for all TB patients after the patient is notified that testing will be performed unless the patient declines (i.e., opt-out screening); however, these recommendations only address health care settings. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR* 2006; 55 (No. RR-14). Fact sheet: www.cdc.gov/tb/pubs/tbfactsheets/HIVscreening.htm

The TB case managers and nursing supervisor also had training in phlebotomy in order to draw blood for QuantiFERON tests (QFTs), which will be performed at the state laboratory. QFTs will be available later in 2008. Protocols will be established on the eligibility requirements for QFTs, but it is expected that the majority of eligible clients will be those seen and managed by the TB staff. The ability to draw blood and deliver the specimens to the state lab promptly is crucial to the processing of the test. Case managers can facilitate this process to ensure accurate results.

Further collaboration is occurring with the STD program. DIS staff are now more familiar with TB and the need for TB testing of high-risk clients (e.g., those who are also HIV infected). They are aware of TB clinics in their area and of the staff in the TB program who can assist to ensure TB testing occurs. Clinicians in STD clinics will also be introduced to the nursing supervisor and case managers in the TB program. Once they are familiar with staff and clinics in the area, there will be a heightened awareness of the need for high-risk STD patients to be referred for TB testing.

Recently, additional collaboration has taken place between the AIDS division and the STD and TB programs. In selected community health centers, anyone receiving a positive HIV test is referred for STD services. This includes comprehensive STD screening, hepatitis A/B vaccination, hepatitis C screening, partner notification services, and referral to care for HIV infection. These clients are also referred for TB testing services. This integrative effort has

provided a very comprehensive approach to anyone receiving a positive HIV test.

In the area of integrated epidemiologic and surveillance capacity, the Connecticut Department of Public Health recently hired Dr. Lynn Sosa, former CDC EIS officer, to serve as the medical epidemiologist for the TB and STD programs. The additional capacity has strengthened the programs' ability to implement collaborations in the areas of epidemiologic analysis, outbreak investigations, and collaborations in screenings.

Looking to the future, preliminary discussions are underway regarding routine HIV screening in TB clinics and other settings serving patients with TB and their contacts. Recommendations will be reviewed, and collaboration with the HIV/AIDS prevention program will again be an integral part of this initiative.

Integration has been effective and productive for these programs. Staff members from the TB and the STD programs are much more aware of the need for comprehensive screening, as well as the availability of appropriate testing and referral sources for follow-up, particularly for the high-risk clients with whom all staff come into contact on a daily basis. Hepatitis C screening and hepatitis A/B vaccinations are available at most STD clinics, another area that CDC is targeting for program collaboration and service integration (PCSI). Through staff training and collaboration on a regular basis, this initiative has been extremely successful in keeping all staff aware of how they can easily and effectively work together and serve the needs of their clients.

—Submitted by Heidi Jenkins
TB/STD Program Director
Connecticut Department of Public Health

Los Angeles County TB Control Program Collaborates with Community Groups to Organize and Present a Successful World TB Day Symposium

For several years, the Los Angeles County (LAC) Tuberculosis Control Program (TBCP) has been forging partnerships with community-based organizations serving populations at high risk for tuberculosis (TB), such as African Americans, HIV/AIDS patients, homeless persons, immigrants, and substance-abusing populations. These partnerships led to the establishment of the TB Coalition of LAC in 2006. The World TB Day planning committee, carved out of this Coalition, planned a half-day symposium to commemorate World TB Day this year. The LAC TBCP and the TB Coalition engaged in extensive outreach to involve participants who would most benefit from increased education and awareness about TB in LAC. Owing to the increasing proportion of foreign-born TB patients in Los Angeles, a concerted effort was made to target organizations and community leaders working

with recent immigrant populations, especially those from parts of the world with high TB prevalence.

On March 15, the LAC TBCP, in collaboration with several local community-based organizations such as Breathe California of Los

Angeles County (BREATHE LA) and the American Lung Association of California, presented the 2008 World TB Day Forum, which took place from 9 am to 12 noon at the California African American Museum in Los Angeles, CA. The theme for the forum was "I Am Stopping TB – A Disease without Borders." The purpose of the forum was to educate community leaders about TB so they could take an active role in TB education and prevention within their communities. Community leaders included those from cultural, educational, health care, political, and religious organizations.

Over 115 people representing 55 organizations attended the forum, which began with a keynote address by CA State Senator Mark Ridley-Thomas. Sen. Ridley-Thomas, who sits on the State Health and Appropriations committees, recognized the potential negative effects of budget cuts on the ability to control TB in LAC, promising, "We will not sit idly by as the TB budget continues to be slashed… I will take your message to the Governor."

The program also included an educational presentation on TB, as well as a TB patient testimonial. A panel of experts discussed cultural myths surrounding TB among the following high-risk groups in LAC: African Americans, Latinos, South Asians, and Southeast Asians. Myths that were discussed included "TB is not a Latino disease, it's an Asian disease," "BCG is a vaccine that protects you against getting TB for the rest of your life," and "Smoking causes TB." A panel of providers later discussed services available to those with TB in LAC. The program concluded with a discussion on advocacy and what each participant could do to help in the fight against TB. As a follow-up to the forum, the director and a nurse consultant, both representing the LAC TBCP, appeared on a television show entitled *Pacesetters* which aired on channel KTLA on April 6.

The LAC World TB Day Forum was successful in employing a community-based participatory approach to informing and galvanizing communities about TB. Specifically, leaders in high-risk communities were educated about the continuing importance of TB and the need to take an assertive approach in fighting the disease. Many participants, by signing letters drafted by a key community partner, were mobilized to educate decision-makers about the potentially devastating impact of funding cuts and the disruption of the TB control public health infrastructure.

—Submitted by Chhandasi P. Bagchi, MPH, Robert Miodovski, MPH, and Annette T. Nitta, MD, Los Angeles County Department of Public Health, TB Control Program; and Romesh Anketell, MPH, Breathe California of Los Angeles County (BREATHE LA)

Arizona TB Nurse Case Management Course

The Arizona Department of Health Services (ADHS) TB Control Program, in collaboration with the Heartland National TB Center (HNTC), developed a TB Nurse Case Management Course which was held February 2008 in Phoenix, Arizona.

The course included presentations given by experts in the field including Drs. Barbara Seaworth and Adriana Vasquez from HNTC, and Dr. Karen Lewis from ADHS. The presenters allowed time for questions and were available after their presentations to address individual concerns.

Some of the topics included Principles of TB Nurse Case Management Techniques, TB Epidemiology, Diagnosis and Medical Management of LTBI and TB Disease, Infection Control, TB/HIV Coinfection, TB Medications and Adverse Effects, the Laboratory's Role in TB Diagnosis and Treatment, Cultural Considerations, and Border and Interjurisdictional Issues.

The training seemed to have been very well received by the participants. To determine if this training was in fact successful, and why, the participants were asked to complete an evaluation form at the end of the conference. In addition, some of the individuals' evaluation responses needed clarification; these attendees were contacted after the training and asked for more specific feedback about the conference.

The responses indicated that the course was a success. Some of the comments were as follows:

- "I've learned more in these couple days than I had working in TB for 8 years."
- "I will immediately re-evaluate my current case load to ensure they [patients] are receiving optimal treatment with the information offered at this workshop. I will be in a better situation to make informed decisions and choices. I will be better able to identify problems or issues."
- "It was not the information as much as the staff/instructors answering our questions and getting back to us in a timely manner."

Other comments included a thank you for not making them play games, role play, or break into groups.

If you are interested in more information or the PowerPoint handouts, please contact Millie Blackstone, RN, MPH, at blacksm@azdhs.gov

Resources:

Case Management Conference
Heartland and the Arizona Department of Health Tuberculosis Control

Tuberculosis Case Management for Nurses: Self-Study Modules
These four self-study modules provide an overview of public health nursing and discuss the fundamentals of TB case management, leadership skills of the nurse case manager and management of the pediatric patient.
http://www.umdnj.edu/ntbcweb/products/tbcasemgmtmodules.htm

Tuberculosis Case Management for Nurses Workshop: The Facilitator's Guide
This resource outlines the process of planning and conducting a two-day, interactive workshop for TB nurse case managers and is available as an online product.
http://sntc.medicine.ufl.edu/rtmccproducts.aspx

Planning & Implementing the TB Case Management Conference: A unique opportunity for networking, peer support and ongoing training
This manual is a step-by-step guide for developing and conducting the case management conference.
http://sntc.medicine.ufl.edu/rtmccproducts.aspx

—Submitted by Millie Blackstone, RN, MPH
Arizona Dept of Health Services

NTCA Workshop Poster Contest

In June 2008, the National TB Controllers Association (NTCA) held its third annual poster contest at the NTCA Workshop in Atlanta. This year, 44 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 2 first- and second-place awards (because of ties among the entrants), 1 third place award, and 1 honorable mention.

First-place awards were given as follows:

Investigating a Prevalent TB Genotype Cluster: Should We Invest our Resources?

McKenna T,[1] Rabley S,[1] Rogers BJ,[2] Desai MA,[3,5] Harris D,[4] Moonan PK,[5] Oeltmann JE[5]
1. South Carolina Department of Health & Environmental Control, Columbia, SC
2. York County Department of Health & Environmental Control, Rock Hill, SC
3. Epidemic Intelligence Service, CDC
4. CDC Epidemiology Elective Medical Student, CDC
5. DTBE, CDC

Human Resource Development: Enhancing the Expertise and Achieving Certification for Competencies for TB Nurse Consultants

Farrell D, Braun J, Navarro C, Robles M, Phillips L, and Seaworth B
Heartland National TB Center (HNTC)

The second-place winners were–

Pack 'em In: Comparing QuantiFERON-Gold Blood Assays to Tuberculin Skin Tests During a Contact Investigation at an Oregon Meat Packing Plant

Hedberg K,[1] O'Neal S,[2] Markham A,[3] Schafer S[1]
1. Oregon Public Health Division
2. Oregon Health and Sciences University
3. Klamath County Health Department

Shelter-Based TB Screening Among Baltimore City Homeless Persons

Lanum A,[1, 2] Reece J,[2] Johnson S,[2] Dorman SE,[2, 3] Brown C[2]
1. CDC
2. Baltimore City Health Department
3. Johns Hopkins University School of Medicine

The judges gave the third-place award to–

Northeastern Regional Medical Consultation Service - Assessing the 2007 Experience

Hayden C,[1] Lardizabal A,[1] Passannante M,[1,2,3] E Napolitano[1]
1. NJ Medical School (NJMS) Global Tuberculosis Institute
2. NJMS Dept of Community & Preventive Medicine
3. UMDNJ School of Public Health

In addition, honorable mention was given to–

A Decade's Experience with Georgia's Alternative Housing Project: A Model for Managing Homeless TB Patients

Sales R-MF,[1] Collins P,[2] Baldwin L,[2] DeVoe-Payton B,[1,3] C White[2]
1. Georgia Department of Human Resources, Division of Public Health
2. American Lung Association of Georgia
3. CDC

Poster topics were varied, reflecting the multiplicity of issues TB programs face and the creative solutions and dedicated actions in response. 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. This year an honorable mention award was added because two of the judges rated this poster with perfect scores.

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 Regina Bess
Div of TB Elimination

2008 EIS Conference a Success for DTBE

CDC's 57th annual Epidemic Intelligence Service (EIS) Conference was held in Atlanta April 14–18, 2008. EIS is a 2-year postgraduate program of service and on-the-job training for health professionals interested in the practice of applied epidemiology. 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, all five of our current EIS officers showcased their work in oral presentations, and DTBE successfully recruited three new EIS officers from the incoming class. In addition, one state-based officer gave an oral presentation on a TB-related topic.

TB-related presentations at EIS Conference

Heather Menzies, MD, MPH, EIS Class of 2006, finishing her second year assigned to the International Research and Programs Branch (IRPB), presented "Epidemiology of Tuberculosis Among Foreign-born Children and Adolescents in the United States, 1994–2006" in the well-attended TB session entitled "Don't Stand So Close To Me — Tuberculosis," moderated by DTBE branch chiefs Eugene McCray, MD, and Thomas Navin, MD.

Ann Buff, MD, MPH, EIS Class of 2006, finishing her second year assigned to the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB), presented "Investigation of an International Traveler with Suspected Extensively Drug-Resistant Tuberculosis — United States, 2007" in the TB session.

Emily Bloss, PhD, MPH, MA, EIS Class of 2007, finishing her first year assigned to IRPB, presented "Treatment-Related Adverse Events Among Multidrug-Resistant Tuberculosis Patients — Latvia, 2000–2003" in the TB session.

Rinn Song, MD, EIS Class of 2007, finishing his first year assigned to IRPB, presented "Impact of Antiretroviral Therapy and Cotrimoxazole Preventive Therapy on Survival of HIV-Infected Patients with Tuberculosis — Cambodia, 2007" in the TB session.

Mitesh Desai, MD, MPH, EIS Class of 2007, finishing his first year assigned to SEOIB, presented "Geospatial Mapping to Investigate a Tuberculosis Outbreak — South Carolina, 2005–2007" during the late-breaker session, which was moderated by Doug Hamilton and Bruce Bernard on the closing day of the conference.

Emily Piercefield, MD, DVM, MS, EIS Class of 2007, finishing her first year assigned to the Oklahoma Department of Health, presented "Transplantation-Transmitted Tuberculosis — Oklahoma, 2007" in the TB session.

New EIS Officers
Following are abbreviated versions of biographical sketches that were included in TB Notes No. 2, 2008:

Phillip Ricks, PhD, MPH, EIS Class of 2008 (incoming) will be one of the new EIS officers in IRPB. A Chicago native, Philip attended Princeton University, graduating with a BA in 1985. From 1985 to 1992 he worked in the commercial sector in New York City, then returned to Chicago in 1993 to pursue an MPH at the University of Illinois at Chicago, School of Public Health (UIC-SPH). To complete his Masters practicum, he interned at the World Health Organization in Copenhagen, Denmark

(WHO EURO), then joined WHO EURO to work in infectious disease surveillance. He spent 6 years in Copenhagen, where he also worked as an epidemiologist for the Danish Institute of Health (Staten Serum Institut) and as the founding lead data manager on an international AIDS/HIV research study. In 2002, he returned to UIC-SPH for his PhD, writing his dissertation on the control of TB among substance users.

Sean Cavanaugh, MD, EIS Class of 2008 (incoming) will be one of the new EIS officers in IRPB. Sean grew up in Washington, DC, and attended Duke University in North Carolina. He returned to Washington, DC, to work as a case manager for several years before enrolling in medical school at Albert Einstein College of Medicine, NYC. He received his MD in 1997, then served an internal medicine residency at New York University and Bellevue Hospital, which he completed in 2000. He stayed on as Chief Resident for a year, then joined the Manhattan Veterans Administration (VA) as an associate program director at NYU. He has been working as a clinician educator since that time and has sent legions of former medical residents to the EIS over the years before taking his own advice.

Krista Powell, MD, EIS Class of 2008 (incoming) will be the new EIS Officer for SEOIB. Krista grew up in Cairo, Georgia. She received her BS degree in microbiology from UGA in Athens, where she was selected for membership in the Phi Beta Kappa Society and graduated summa cum laude. She obtained both her MPH in epidemiology and her MD from Emory University. She is in her last year of a 3-year residency in internal medicine at the University of California, San Francisco. She has already developed an appreciation for the complexities of conducting investigations of TB in her ongoing work on a cross-sectional study of smear-negative TB in persons with HIV infection in Kampala, Uganda, which she presented at the ATS meeting in Toronto.

DTBE congratulates our fine EIS officers on their excellent presentations and welcomes the three new faces to our Division.

—Reported by Kevin Cain, MD, and Tim Holtz, MD
Div of TB Elimination

Release of New Civil Surgeon TB Technical Instructions

The new TB component of the Technical Instructions (TB TI) for the Medical Examination of Aliens in the United States became effective on May 1, 2008. These instructions, developed by the Division of Global Migration and Quarantine (DGMQ) at CDC, supersede the TB section of the June 1991 Technical Instructions.

Civil Surgeons are appointed by local offices of the Bureau of U.S. Citizenship and Immigration Services (USCIS) and perform the medical examinations of aliens in the United States. Aliens who require medical examination include persons applying for adjustment of immigration status (e.g., nonimmigrant visa holders) and other persons requiring a medical examination as determined by the Department of Homeland Security.

The new Civil Surgeon TB TI are to be used in conjunction with the new I-693 form, which was released by USCIS on May 1, 2008. The new I-693 form can be identified by the list of seven TB classifications found at the bottom of its first page.

A letter was sent via e-mail to the National TB Controllers Association on April 4, 2008, regarding the release of the new Civil Surgeon TB TI.

Highlights of the major changes in this release of the Civil Surgeon TB TI are as follows:

Sputum cultures for Mycobacterium tuberculosis*, and drug susceptibility testing for positive cultures, are required for applicants with chest*

radiograph findings suggestive of active TB disease. These new tests are mandatory, in addition to the previously required sputum microscopy for acid fast bacteria. Health department practitioners will decide if these tests are needed for applicants with chest radiographs suggestive of inactive TB and for applicants with clinical presentations consistent with TB.

Applicants with Class A (either smear or culture positive) TB must complete a full course of TB treatment. Completion of therapy is required prior to medical clearance for TB by the civil surgeon, for purposes of this examination and the USCIS.

A chest radiograph is required for all applicants with a tuberculin skin test (TST) reaction of 5 mm or greater of induration, including pregnant (or possibly pregnant) women. Previously, the chest radiograph could be waived for a pregnant applicant if she had a scar or other evidence of BCG vaccination and denied having any TB-related symptoms. This exception is no longer permissible. If the applicant decides to undergo a radiograph during pregnancy, the possible risks of radiation to the fetus should be explained to her and informed consent obtained, confirmed by a signed consent form. *If she wishes, the applicant may defer the radiograph until after delivery, but the civil surgeon cannot sign the medical examination form until the radiograph is performed and interpreted, and treatment for Class A pulmonary TB disease, if needed, is completed.*

A chest radiograph is now required for applicants with a TST reaction of less than 5 mm of induration (including no induration) who have–

- *Signs or symptoms* consistent with active TB disease.
- *Immunosuppression* for any reason (e.g., HIV infection; immunosuppressive therapy equivalent to or greater than 15 mg/day of prednisone for one month or longer; or history of organ transplantation).

Definitions of chest radiographic findings that are suggestive of TB disease are provided to assist the civil surgeon in determining the proper TB classification. These descriptions are presented in Appendix B of the TB Technical Instructions.

A new TB classification (Class B: Latent TB Infection Needing Evaluation for Treatment) should be used for all applicants who are recent arrivals to the United States (less than 5 years) from countries with a high TB prevalence, with a Mantoux TST reaction of 10 mm or greater of induration, and no evidence of TB disease. See Section V of the TB Technical Instructions for other conditions for which referral for evaluation for treatment of latent TB infection is recommended. The civil surgeon should proactively contact the TB control program of the local health department to identify specific sources of treatment for latent TB infection and make the appropriate referral.

Class B3 (consistent with old, healed TB disease) has been eliminated.

TST Instructions. Appendix A includes directions for the proper procedures that civil surgeons must follow in the storage of purified protein derivative (PPD) and the administration and interpretation of the TST.

The new Civil Surgeon TB TI state that QuantiFERON is not currently accepted in place of a TST. When additional information is available, an update to the civil surgeon TB TI will be posted on the DGMQ website. We expect this update to be available in 2009, following a consultancy sponsored by DTBE and other steps necessary to provide information to civil surgeons so that they may best utilize the test.

The following documents can be found on the DGMQ website at www.cdc.gov/ncidod/dq/civil.htm:

- The new civil surgeon TB Technical Instructions.

- A memo to civil surgeons concerning the new TB Technical Instructions
- Frequently Asked Questions (FAQs) regarding the new Civil Surgeon TB Technical Instructions.

The above website also contains links to the 1991 Technical Instructions for the non-TB portions of the medical examination (other infectious diseases, mental health conditions, etc.) and to the Vaccination Technical Instructions. Civil surgeons should continue to follow these other Technical Instructions for the non-TB portions of the examination. Updates to the Technical Instructions are found at the same site.

The I-693 Form is not distributed by CDC/DGMQ. It is available on the USCIS website at www.uscis.gov/portal/site/uscis/menuitem.5af9bb95919f35e66f614176543f6d1a/?vgnextoid=eb1f3591ec04d010VgnVCM10000048f3d6a1RCRD&vgnextchannel=db029c7755cb9010VgnVCM10000045f3d6a1RCRD.

If, after consulting the above website, clarification or further guidance is needed, CDC/DGMQ may be contacted via fax at (404) 639-4441. The fax should be addressed to "Civil Surgeon TB Technical Instructions." Alternatively, Dr. Mary Naughton can be contacted at mnaughton@cdc.gov.

—Reported by Mary Naughton, MD, MPH
Div of Global Migration and Quarantine

Nurses' State and National Partnership Celebration

On May 12, 2008, the Georgia Division of Public Health (GaDPH) and CDC jointly commemorated National Nurses' Week by hosting a tea for nurses. This was the second annual partnership celebration between the two agencies, attended by 70 nurses from Georgia and CDC. "Making a Difference" was the theme of the tea, held at the Tom Harkin Global Communications Center at the CDC Clifton Road Campus in Atlanta.

The attendees were welcomed by Pat Drehobl (Associate Director, Program Planning and Development, Office of Workforce and Career Development [OWCD]) and Carole Jakeway (Chief Nurse, GaDPH). The welcome was followed by an informative discussion of the Public Health Nursing Population Health Template conducted by Diana Gaskins (GaDPH, Public Health State Office [PHSO] Nurse Consultant, Immunization Section, retired), and Judy Gibson (Nurse Consultant, DTBE). An inspiring keynote address, "Public Health Nursing Leadership Makes a Difference," was given by Mary Pat Couig, MPH, RN, FAAN, Rear Admiral, US Public Health Service (retired). Admiral Couig currently serves as the Special Projects Coordinator for the Association of State and Territorial Directors of Nursing. Meshell McCloud presented Georgia Nursing Excellence Awards to Ann Poole, RN (Public Health State Office TB Nurse Consultant) and Pat Brannen, RN (Nursing Clinical Coordinator, Southeast Health Unit).

Refreshments and networking opportunities abounded. An added bonus included the opportunity to tour the Global Health Odyssey. For many non-CDC employees, this was a first and was much appreciated. All are looking forward to the third annual nurses' tea next year.

—Submitted by Kathy Kolaski, RN, Nurse Consultant
Georgia TB Program, and
Judy Gibson, RN, Nurse Consultant
Div of TB Elimination

Partners Recognized for NTIP Development

At the National Tuberculosis Controllers Workshop on June 10, 2008, Steve Hughes from New York, Deb Sodt and Wendy Sutherland from Minnesota, and Barbara Stone from Colorado were recognized by DTBE for their generous contributions, support, and leadership in the

development of the National Tuberculosis Indicators Project (NTIP), a performance monitoring and reporting system.

Steve Hughes receiving award from Dr. Castro at the NTCA meeting

In 2010, TB programs will be expected to report on their progress toward achieving the 15 national TB program objectives. DTBE anticipates that NTIP will help TB programs track and report on their progress using data that they have submitted to CDC through the National Tuberculosis Surveillance System, the Aggregate Reports for TB Program Evaluation, and the Electronic Disease Notification system.

Deb Sodt with the award she received.

To develop NTIP, Steve Hughes, Deb Sodt, Wendy Sutherland, Barbara Stone, and others conferred every week for 10 months to review and develop national TB program objectives and indicators. They shared valuable insights and practical programmatic perspectives on the validity, reliability, and accuracy of these measures, as well as how these measures will impact TB programs.

As a result of their efforts, the performance indicators and calculations have been standardized. This will enable TB programs and DTBE to compare program performance from one year to another, to track progress over time, and to assess the impact of TB control efforts both locally and nationally.

The indicator reports that they helped design will provide information that is programmatically significant and relevant for program evaluation, and help reinforce national priorities for TB control programs.

—Submitted by Kai Young, MPH
Div of TB Elimination

UPDATES FROM THE TB EDUCATION AND TRAINING NETWORK

Member Highlight

In this issue we highlight Pralhad Sadashiv Patki, MD, MBBS, a member of TB ETN from India. Dr. Patki works in the field of pharmacology and is currently employed as head of medical services and clinical trials for the Himalaya Drug Company in Bangalore, India.

Dr. Patki has been a member of TB ETN for the past 4 years. He became interested in joining TB ETN because he wants to improve the plight of TB patients and would like to be able to prevent TB in India. Also, as a former professor of medicine, he says that TB was his specialty subject when he taught at medical school. Dr. Patki relates, “Being a part of TB ETN helps me in getting references and literature searches faster. It helps me to understand the recent advances, not only in chemotherapy of tuberculosis, but also prevention strategies. TB ETN membership has helped me to understand

TB prevention better. It helps me in planning our activities better."

Dr. Patki would like to see TB ETN take on several challenges in the coming years. He would like to see the development of school education programs on health with an emphasis on diseases such as TB. He would also like to see TB ETN communicate and raise awareness about the problems faced by patients with TB, advocate for increased research on the prevention of TB drug (INH)-induced hepatitis, and help create an environment conducive to eradicating the spread of TB.

If you'd like to join Dr. Patki 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 . You can also send a request by fax to (404) 639-8960 or by mail to TB Education and Training Network, CEBSB, Division of TB Elimination, CDC, 1600 Clifton Rd., N.E., MS E10, Atlanta, Georgia 30333. Or, if you would like additional information about the TB ETN, visit the website: www.cdc.gov/tb/TBETN/default.htm.

—Submitted by Regina Bess
Div of TB Elimination

TB ETN's Ask the Experts

This feature is brought to you by the TB ETN Membership Development Workgroup.

Question:

I conduct a TB Update every year for our staff of nurses. What are some methods of presenting the material that will increase interest, yet maintain continuity of content?

Answer:

Engaging participants in a training course can be both challenging and rewarding. Participants are more likely to learn training content and gain skills if they are actively engaged in the training. There are many training techniques that can help in this. Some methods you can readily apply include–

- Following four important training concepts
- Using adult learning principles
- Providing a variety of training methods

Following four important training concepts

Understand and follow these four training concepts to provide a solid foundation for developing an engaging training course for adults:

1. *Facilitate a learning environment; build on the experience of the participants*
   When training adults, it is important that the trainer create a collaborative environment by including the participants' ideas, knowledge and experiences. The trainer's role is to enhance, assist, and foster learning that builds on the experiences of the participants, rather than being the only one providing content.

2. *Training is not education; it should be applied immediately*
   - Training is providing participants with skills, knowledge, and attitudes that they can apply immediately to their job.
   - Education is providing students, patients, and colleagues with content information that they may or may not use at a later date.
   - An example that illustrates the difference between training and education: Driver education teaches one about the rules of the road and the correct procedures for driving, but driver training actually teaches one how to drive.

3. *Telling is not training*
   Simply telling participants things and providing a Power-Point presentation does not mean that they will actually learn the information and gain the skills. Participants

who engage actively in the learning process increase retention.

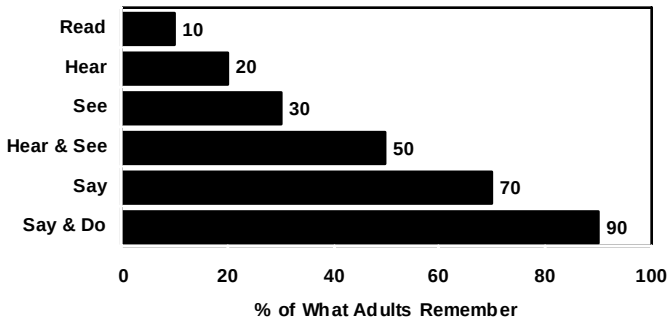
4. *Including more content does not mean that more learning will occur*
   Including more content may mean that too much information is being provided in the time available. It is better to concentrate on the most important or essential information to ensure participants actually learn it. Too much information can overload participants with content and they will lose interest at a certain point.

Using adult learning principles

Many people think that training adults is the same as teaching students in a traditional school system, but this is not true. Adults learn differently from children and require different training approaches. Knowing and applying adult learning principles helps you use the right training techniques to enhance learning, and is critical to the success of your training courses. The following chart describes some important adult learning principles and training techniques you can use to engage the adult learner.

Adult Learning Principles and Training Techniques

Principle	Training Technique
Adults bring a wealth of knowledge and experience and which they want to share.	Encourage participants to share their knowledge and experiences. Include activities that utilize their knowledge and experience, e,g., role play.
Adults are decision-makers and self-directed learners.	Include problem-solving activities such as case studies.
Adults have different learning styles that must be respected.	Provide multiple ways for participants to learn the material, e.g., print materials, question and answer, modelling of the skill.
Adults want to participate rather than just listen to a lecture.	Create a participatory learning environment with various types of activities, e.g., lecture followed by group exercise.
Adults are motivated by information or tasks that are meaningful and applicable to their jobs.	Ensure that the right participants attend the training. This can be done by restricting enrollment via the application process, required prerequisite to training, pre-test with a minimum required score, or limited to a specific job series.
Adults prefer training that focuses on real- life problems.	Relate content to the types of problems they encounter in their jobs. Have participants send questions or a description of problems before the course begins.
Adults expect their time during training to be used carefully.	Follow a realistic time schedule; get started on time; ensure all equipment and supplies are in place before participants arrive.
Adults feel anxious when participating in a group that makes them look uninformed, either professionally or personally.	Avoid criticism. Acknowledge all participants contributions.
Adults learn best in a positive environment where they feel respected and confident.	Create a positive environment by provide positive feedback and showing respect to all participants.
Adults come from different cultures, life-styles, religious preferences, genders, and ages.	Respect all differences and encourage participants to respect each other's differences, as well.



A saying well known in training courses is--

I hear and I forget.
I see and I remember.
I do and I understand.

The following chart provides information on what adults remember. This is very important for knowing how to design your training. If a trainer only lectures, then participants will probably only remember 20% of what is said. Creating a participatory training where participants are active and "saying and doing" will help them remember more from the training. It will help ensure that participants actually gain the desired knowledge and skills. (Source: www.techlearning.com/pdq/showArticle.php?articleID=17501208)

Providing a variety of training methods

If variety is the spice of life, it is also the spice of training. Providing a variety of training methods will help participants stay engaged. In fact, you should change the pace and activity about every 20 minutes.

Following are some methods you can use to create variety in your training.

- *Change the presentation styles.*
  - Change facilitators often. Just having a different facilitator can change the pace and create a different energy in the room.
  - Use two or more facilitators for one presentation.
- *Create participatory learning situations; participants should-*
  - Stay involved and active;
  - Share their knowledge and experiences.
- *Provide various learning activities to help participants apply the content, including the following:*
  - Exercises (e.g., case studies, study questions/tests, problem solving exercises)
  - Group discussions (e.g., large group that involves all the participants, small groups that allow more interaction
  - Role plays (if appropriate)
  - Games
  - Demonstrations/modelling of the new skill
- *Use a variety of media*
  - PowerPoint slides
  - Overhead transparencies
  - Flip charts
  - White boards/black boards
  - Videotapes
  - Audiotapes
  - Music
- *Use a variety of visual aids*
  - Charts, graphs, diagrams
  - Illustrations
  - Photos
  - Props
- *Change how participants work during the different activities*
  - Alone
  - With their neighbor
  - In groups
    - At the same table or several tables together
    - By other factors related to the activity (e.g., location where they work such as region or health facility, job duties such as physician or nurse)

Vary the group composition for the different training activities to ensure participants interact with a variety people in the training course. (Note: This can also help ensure no one person always dominates the same group.)

- *Change seating arrangements*
  - Change where and with whom people sit in the room. It is helpful to have participants sit in different locations and interact with other participants. (Note: This can be an effective tool to manage difficult participants; if two or more participants are continuing to talk together throughout the training, you can split them up.)
  - For a group discussion, have people sit in a circle in a different part of the room.
  - For group exercises, participants can move to different parts of the room.

- *Take frequent breaks*
  - Take at least a 15 minute break at least every 1.5 hours *or*
  - Take a short 5 minute break every hour (make sure participants return from breaks on time)

- *Use various presentation techniques*
  - Use *analogies* to make a comparison. This is helpful for teaching about a complex concept or process. For example, latent TB infection is like having a thimbleful of bacteria in us; with TB disease, it is like having a bucketful.
  - Give *quotes* to provide a clear statement related to the content. For example, "The mind is a wonderful thing. It starts working the minute you're born and never stops until you get up to speak in public." Roscoe Drummond
  - Provide interesting *statistics* to help prove a point or show validity. For example, it takes eight or nine positive comments to undo the damage of one negative comment.
  - Provide *different points of view* to enhance understanding. For example, some people think that training adults is the same as educating students. But training provides adults with skills, knowledge, and attitudes that they can apply immediately to their job. Education, however, provides students and patients with content information that they may or may not use at a later date.

- *Use humor (where appropriate)*

- *Use questions to engage the participants*
  - Encourages all participants to contribute and to share knowledge and experiences
  - Allows for differences of opinions
  - Keeps participants alert

Resources
The following resources provide additional information on engaging participants.

- Instructional System Design – Implementation Phase by Don Clark http://www.nwlink.com/~donclark/hrd/sat5.html
- Common Teaching Situations: Leading Discussions from "Teaching and Learning at the UW: A Handbook for Teaching Assistants," University of Washington http://depts.washington.edu/cidrweb/TAHandbook/LeadingDiscussions.html
- Training Works!: Delivering Training published by JHPIEGO http://www.reproline

TB ETN Cultural Competency Updates

Cultural Self-Awareness Discussion

On May 1, 2008, the Cultural Competency Workgroup held their fifth special topic discussion call. The topic chosen for this call was "Cultural Self-Awareness." The presentation and discussion was led by Julie McCallum, Regional TB Nurse with the American Lung Association of

Michigan; Rachel Purcell, Health Educator Consultant with the Florida Department of Health; and Allison Maiuri, then a Fellow with the Association of Schools of Public Health.

The speakers outlined cultural self-awareness and why it is important in developing cultural competency. The objectives for the session were to identify two cultural values through self assessment and to describe how cultural assumptions affect professional judgments. Prior to the call, organizers e-mailed to the workgroup members a short Ethnic Identity Measure (http://jar.sagepub.com/cgi/content/abstract/7/2/156) and asked them to complete it. The purpose of the assessment was to get each group member thinking about their own cultural identity and the value that they place on it.

A brief presentation was given to the group on cultural self-awareness. According to the research and as stated in the presentation, the first step in developing cultural competence is "cultural self-awareness," which is knowing and understanding one's own culture. Because America is a melting pot of diverse cultures from across the country and around the world, it may be difficult to tease out core cultural precepts, making it challenging for Americans to have a clear understanding of their own culture. Mark Twain once said, "The only distinguishing characteristic of American character that I've been able to discover is a fondness for ice water." Although humorous, this statement is not necessarily true. Culture influences everything we do and because it is a part of us, we may not see it. One article used an example of fish in a fishbowl. The fish are surrounded by water and glass, but are unaware that these elements exist and that they distort their view of the outside world.

Following the brief presentation, the group engaged in discussion. To stimulate discussion, the following American idioms were presented and the values they represented were discussed.

1. A rolling stone gathers no moss. *Preoccupation with mobility.*
2. The early bird gets the worm. *Getting ahead, achievement, having an advantage.*
3. There's no fool like an old fool. *Value placed on youth.*

There was a great deal of discussion regarding these proverbs, and many on the call had differing interpretations of these idioms. The conversation was stimulating and provided much food for thought.

TB affects people from all around the world. Understanding one's own culture and becoming more culturally competent helps TB health professionals work capably and respectfully with people from diverse racial and ethnic backgrounds.

—Submitted by Allison Maiuri, MPH, Julie McCallum, RN, MPH, & Rachel Purcell, MPH TB ETN Cultural Competency Workgroup

Ramadan and TB Medications

Ramadan is the month of fasting in the Islamic calendar. The Islamic calendar follows the lunar cycle, thus dates of the month will vary year to year when using a Gregorian calendar (or solar calendar) as is done in the United States. This year Ramadan started on September 1, 2008.

For 30 days, Muslims who follow the tradition will abstain from ingesting any food or drink from sunrise to sunset each day. This can pose a TB treatment challenge to health care providers who have U.S-born or foreign-born Muslim TB patients, since this also includes abstaining from taking oral medications. In efforts to help health care providers work with their Muslim TB patients who would like to observe Ramadan, some basic information is offered below.

A practicing Muslim is not obligated to fast if a medical condition renders the person too ill to fast or requires oral treatment. In essence, if the illness is life-threatening, the patient can choose

not to fast during Ramadan and thus be compliant with taking their TB medications.

A Muslim TB patient concerned about not being able to fast due to TB treatment generally has two options to "make up" the missed days of fasting. One option is to postpone fasting to later dates when the treatment is completed and the patient no longer ill. The other option is for the patient to provide a meal to another person who is less fortunate (charity). There is no set fee or amount of food that a Muslim is obligated to pay/donate if choosing the second option. The act of donation can be as simple as donating canned food to a shelter or buying a homeless person a food item that is affordable to the client.

If practical and medically appropriate as determined by the client's health care provider, TB program staff can work with their Muslim patients who would still like to fast by offering them directly observed therapy (DOT) before sunrise or after sunset. Likewise, latent TB Infection (LTBI) patients who are fasting can be advised to take their medications before sunrise or after sunset. If additional support or information is needed when working with Muslim clients during Ramadan, TB programs should elicit the help of local Islamic community organizations.

—Reported by Amera Khan, MPH
Div of TB Elimination

Burmese Refugees: Resources and Educational Materials

Background on refugees from Myanmar: Refugees from Myanmar (formerly Burma) began U.S. resettlement in 2006. Over the next 10 years, 140,000 refugees currently in Thai camps will resettle in the U.S., Canada, Australia, and Scandinavia. Most of these refugees, however, are *not* ethnic Burmans (the majority ruling people of Myanmar), do not speak or read Burmese, have little formal education, and are primarily from rural communities. They predominantly consist of other ethnic groups (and speak other languages) including the Karen, Chin, Mon, Shan, and Kachin, and they practice several religions. These refugees will settle all over the United States. The resources below provide historical and cultural background and include patient education materials in Karen and Burmese.

1. Background on Burmese Refugees

TB & Cultural Competency Notes from the Field: Reaching Out to Burmese Refugees. 8 pages, Newsletter Issue #7, spring 2008.
www.umdnj.edu/globaltb/downloads/products/Newsletter%20(Spring%2008).pdf

Karen Refugees from Burma: A Backgrounder, Church World Service, 2 pages, June 2006.
www.churchworldservice.org/Immigration/sponsor-resources.html#asia

Karen Refugees from Burma in Tham Hin Camp: A Profile, Church World Service, 2 pages, 2006.
www.churchworldservice.org/Immigration/sponsor-resources.html#asia

Burmese Resettlement from Tham Hin Camp in Thailand, UNHCR Quick Fact Sheet, 4 pages, Feb. 2007.
www.usaforunhcr.org/usaforunhcr/uploadedfiles/ThailandBurmeseFeb07.pdf

Burmese Refugee Camps in Thailand's Tak Province—Mae La, Umpiem, Nupo. International Organization for Migration–Cultural Orientation Resource Center, 1 page, 2007.
www.churchworldservice.org/Immigration/sponsor-resources.html#asia

Burmese Muslims, International Organization for Migration/Bangkok–Cultural Orientation Southeast Asia Program, 2 pages, Nov. 2007.
www.churchworldservice.org/Immigration/sponsor-resources.html#asia

Who are the Muslim Karen? Karen Konnection, 1 page, Jan. 2008.
http://karenkonnection.org/Docs/012008_Who%20are%20the%20Muslim%20Karen.pdf

Refugees from Burma: Their Backgrounds and Refugee Experiences, Cultural Orientation Resource (COR) Center, Center for Applied Linguistics, Culture Profile No. 21, 88 pages, June 2007.
www.cal.org/co/pdffiles/refugeesfromburma.pdf

People from Burma Living in Chapel Hill and Carrboro, Department of Health Behavior & Health Education, School of Public Health, University of North Carolina at Chapel Hill, May 25, 2007.
www.hsl.unc.edu/PHpapers/Orange_2007.pdf

Burmese Community Profile, Commonwealth of Australia, 28 pages, Aug. 2006.
www.immi.gov.au/living-in-australia/delivering-assistance/government-programs/settlement-planning/_pdf/community-profile-burma.pdf

Welcome to the United States, A Guidebook for Refugees (English). Cultural Orientation Resource Center, Center for Applied Linguistics, 2004. ENGLISH
www.cal.org/co/pdffiles/newwelcomeguide.pdf
Note: KAREN VERSION of this guidebook is available for purchase on the CAL website for $10.00, and video versions in Karen and English on DVD are available for $15.00.

2. TB-Related Resources / Patient Education Materials

"How to Break the Chain of Transmission: Tuberculosis," Communicable Disease Control, Health Messenger, Issue 33, Sept. 2006. Aide Medicale Internationale, Mae Sot, Thailand, pp. 58–69. ENGLISH, BURMESE.
www.ibiblio.org/obl/docs4/HM33-Comm.diseases-2006-09-ocr.pdf

What is TB? USCRI (US Committee for Refugees & Immigrants), 2 pages, 2007.
www.refugees.org/uploadedfiles/Participate/National_Programs/Healthy_Refugees/Brochures/Karen-TB.pdf. KAREN
www.refugees.org/uploadedfiles/Participate/National_Programs/Healthy_Refugees/Brochures/Burmese-TB.pdf. BURMESE
www.refugees.org/uploadedfiles/Participate/National_Programs/Healthy_Refugees/Brochures/English-TB.pdf. ENGLISH

Minnesota Department of Public Health, 2 pages, 2008:
Active TB Disease. KAREN
www.health.state.mn.us/divs/idepc/diseases/tb/factsheets/activekaren.pdf.
TB Contact Investigation. KAREN
www.health.state.mn.us/divs/idepc/diseases/tb/factsheets/cikaren.pdf
Treatment for Latent TB Infection (LTBI). KAREN
www.health.state.mn.us/divs/idepc/diseases/tb/factsheets/ltbikaren.pdf
Instructions for Collecting Sputum. KAREN
www.health.state.mn.us/divs/idepc/diseases/tb/factsheets/sputkhmer.pdf
The TB Skin Test (Mantoux). KAREN
www.health.state.mn.us/divs/idepc/diseases/tb/factsheets/tstkaren.pdf

Georgia Division of Public Health, 2008:
http://health.state.ga.us/programs/tb/phclinicforms.asp
Active TB Treatment Plan. BURMESE
http://health.state.ga.us/pdfs/forms/3144.plan.Burmese.pdf
Medication Information. BURMESE
http://health.state.ga.us/pdfs/forms/Med.Info.Burmese.pdf
Refusal of Care Form—TB Program. BURMESE
http://health.state.ga.us/pdfs/forms/3575.Ref.Burmese.pdf
Consent and Treatment Plan—LTBI. BURMESE
http://health.state.ga.us/pdfs/forms/3609.LTBI.Burmese.pdf

Consent to Treatment Form—Active TB Case/Suspect. BURMESE
http://health.state.ga.us/pdfs/forms/3609.TB.Burmese.pdf
Directly Observed Therapy (DOT) Agreement for TB Treatment. BURMESE
http://health.state.ga.us/pdfs/forms/DOT.Burmese.pdf

Patients Rights and Responsibilities. USCRI (US Committee for Refugees & Immigrants), 2 pages, 2007. KAREN, BURMESE, ENGLISH
www.refugees.org/uploadedfiles/Participate/National_Programs/Healthy_Refugees/Brochures/Karen-PatientsRights.pdf. KAREN
www.refugees.org/uploadedfiles/Participate/National_Programs/Healthy_Refugees/Brochures/Burmese-PatientsRights.pdf. BURMESE
www.refugees.org/uploadedfiles/Participate/National_Programs/Healthy_Refugees/Brochures//English-PatientsRights.pdf. ENGLISH

What is HIV? USCRI (US Committee for Refugees & Immigrants), 2 pages, 2007.
www.refugees.org/uploadedfiles/Participate/National_Programs/Healthy_Refugees/Brochures/Karen-HIV.pdf. KAREN
www.refugees.org/uploadedfiles/Participate/National_Programs/Healthy_Refugees/Brochures/Burmese-HIV.pdf. BURMESE
www.refugees.org/uploadedfiles/Participate/National_Programs/Healthy_Refugees/Brochures/English-HIV.pdf. ENGLISH

Basic Facts about HIV / AIDS. Immigration and Refugee Services of America, distributed by USCRI, 2 pages, 2002.
www.refugees.org/uploadedFiles/Participate/Resources/Books_and_Publications/Burmese_English.pdf. BURMESE/ENGLISH

What is Diabetes? and Brochures on other comorbidities. Immigration and Refugee Services of America, distributed by USCRI, 2 pages, 2007. BURMESE
www.refugees.org/article.aspx?id=1847

—Reported by Stephanie S. Spencer, MA
Program Liaison, TB Control Branch
Division of Communicable Disease Control
Center for Infectious Diseases
California Department of Public Health

CLINICAL AND HEALTH SYSTEMS RESEARCH BRANCH UPDATE

A Ferguson Fellow's Experience

My desire to work at CDC was solidified during my participation in the Ferguson Fellowship program (an 8-week professional development experience providing opportunities for minority students to participate in a broad array of public health activities). This summer I had the pleasure to work in the Clinical and Health Systems Research Branch (CHSRB) in the Division of Tuberculosis Elimination. I have developed a newfound interest in TB, especially as it relates to HIV coinfection.

How did I learn about the Ferguson fellowship? As I was leaving my advisor's office at New York University, I saw a poster advertising the fellowship. I was propelled to apply because of the opportunity to work at CDC.

I spent 10 weeks drafting several chapters of an ethnographic guide entitled, "Promoting Cultural Sensitivity: A Practical Guide for Tuberculosis Programs Providing Services to Karen Persons from Burma" that is expected to be published next year. The objective of this project was to develop a practical guide for TB programs to increase providers' understanding of the Karen people from Burma, and enhance the cultural appropriateness of their TB care and treatment. The guide will provide TB programs with information to use when designing surveys, planning interventions, and evaluating TB programs.

The most memorable part of my experiences as a Ferguson fellowship was my interactions with

CDC employees, through whom I learned about different career opportunities available at CDC. Ultimately, I discovered that my career path would probably lead me to the Public Health Advisor track.

My involvement in the Ferguson fellowship brings me one step closer toward my goal of working with others to stop the spread of infectious diseases in the United States.

—Submitted by Raynal Jabouin, Jr.
Ferguson Fellow, Div of TB Elimination

SURVEILLANCE, EPIDEMIOLOGY, AND OUTBREAK INVESTIGATIONS BRANCH UPDATES

TBESC Task Order 12 Update: Primary Care Management of LTBI and TB Disease among Foreign-born Populations: A Study of Barriers and Facilitators

Project Overview: CDC, Seattle and King County Public Health Department, and the University of Washington have completed a 3-year study about the facilitators and barriers associated with the primary-care management of latent and active TB among immigrant populations. National surveillance data indicate that the highest incidence of TB disease within the United States occurs in recent immigrants from Mexico, the Philippines, and Vietnam. Effective TB control strategies require that primary care providers be adept at identifying active TB as well as managing persons with latent TB infection (LTBI).

The objectives of this study were to-

- Conduct formative research to describe the factors influencing the efficient management of latent and active TB among primary care providers caring for immigrants from Mexico, the Philippines, and Vietnam;
- Design, implement, and assess the impact of an educational intervention to improve LTBI management in primary care; and
- Assess the effectiveness of this intervention on altering knowledge and attitude of primary care providers regarding LTBI testing and treatment.

Methods: This study was implemented in two phases. In Phase I, qualitative interviews were conducted, including focus groups and individual interviews with health care providers to elucidate aspects of primary care practice that impact TB testing and treatment management. Participants had to have practiced in primary care medicine (e.g., internal medicine, family practice, pediatrics, women's health), have 3 or more years of medical experience, have practiced in their current setting at least 1 year, and have a patient population of at least 25% foreign-born individuals.

A total of 80 health care providers were interviewed. Major themes were identified by three reviewers and used to shape Phase II of this study. For the second phase (i.e., the intervention phase), a 1-hour didactic session was developed that integrated national and local TB epidemiology and reviewed the nuances of LTBI testing and treatment. A pre-intervention assessment composed of knowledge questions on the epidemiology of TB within the United States, risk groups for LTBI, interpretation of the tuberculin skin test, and LTBI treatment was administered to a group of primary care providers who did not participate in Phase I of this study.

The didactic session was presented by a local TB control expert to these primary care providers. A post-intervention assessment was administered to each participant 2 to 4 weeks after the didactic session. A comparison of pre- and post-intervention responses was used to assess the effectiveness of this intervention on changing the knowledge and attitudes of primary care

physicians with regard to LTBI testing and treatment. The assessment tool and the didactic session materials can be found at www.ethnomed.org.

Preliminary Results: A total of 92 primary care providers participated in Phase II (intervention phase) of this study. The mean age of participants was 47 years, of whom 52% were male and 64% were foreign born. Eighty percent of participants were either medical doctors (MDs) or doctors of osteopathic medicine (DOs), and 55% practiced in a federally qualified health center. Only 55% reported having some form of TB training in the past.

Responses to the knowledge questions showed that the intervention increased the provider's knowledge about patients who are at added risk for LTBI, particularly those who are HIV infected, and those who have the co-morbid conditions of renal failure, diabetes, and silicosis. The providers showed increased knowledge in the interpretation of the tuberculin skin test, especially in the settings of HIV, previous BCG vaccination, and recent exposure to an individual with active TB. Clinicians were updated to the fact that isoniazid, the mainstay for LTBI treatment, can be offered to all age groups who have latent infection if they have no other contraindications to the treatment.

In the pre-intervention assessment, over 70% agreed that provision of free isoniazid for LTBI treatment, a reliable treatment tracking system, better co-management of patients with the local TB clinic, and a public health effort to educate their patients were "very important."

Private practice physicians were more concerned about reimbursement for LTBI care, more likely to agree that insurance reimbursement impacted the care they delivered for LTBI, and more likely to be concerned about the financial implications of LTBI. In federally qualified health centers and public hospitals, physicians encouraged persons with LTBI to take treatment, even though LTBI conceptually was difficult to explain to their patients. Resources for billing and nursing support were more available to federally qualified health center clinicians and public sector clinicians than for private physicians.
Conclusions: An intervention to improve primary care providers' knowledge about LTBI testing and treatment among primary care providers for high-risk foreign-born groups was shown to increase key measures of knowledge. Measures of attitude generally endorsed the importance of LTBI, and indicated that LTBI was difficult to manage and required additional resources. A subgroup analysis of practice type revealed that private practice physicians worried more about finances and that reimbursement issues affected their care as compared to community-based clinicians. The intervention did not alter these attitudes, nor was it designed to do so. Future interventions to change attitudes toward LTBI testing and treatment should address these unique concerns of clinicians based on their practice settings.

—Submitted by Jenny Pang, MD, MPH, Seattle and King County Public Health Prevention, and Carey Jackson, MD, MPH, MA University of Washington School of Medicine, Dept of General Internal Medicine

13th Semiannual Meeting of the Tuberculosis Epidemiologic Studies Consortium (TBESC)

The 13th Semiannual Meeting of the Tuberculosis Epidemiologic Studies Consortium (TBESC) convened July 16–17, 2008, in Seattle, Washington. The primary purpose of the TBESC is to conduct epidemiologic, behavioral, economic, laboratory, and operational research in TB prevention and control.

Over 80 persons participated in the meeting; attendees included CDC staff, TBESC principal investigators, project coordinators, and project-specific personnel. TBESC members and CDC

staff presented results and gave updates on the status of ongoing research projects and activities.

Presentations included the following:

- Research gaps related to TB transmission
- Modeling of TB rates and implications for future research
- The draft Strategic Plan and ideas for new research
- Administrative updates on consortium-related activities
- Update on the Semiannual Tuberculosis Advisory Review (STAR) process
- Updates from the Publication and Presentations and External Relations Committees
- Update from the Translating Research into Practice (TRiP) Workgroup

In addition, spirited discussions were held at the meeting regarding the focus of future TBESC research; TBESC will undergo a recompetition in 2010. Ideas are currently being generated as to the scope and direction of TBESC projects. At the meeting, members also discussed the Strategic Planning Workgroup, whose purpose is to select a research concept that will provide a unifying focus for TB research in the next several years.

When not attending the meeting, TBESC attendees enjoyed Seattle's scenery, blue skies, and mild weather. Planning for the 14th semiannual meeting, scheduled for February 4–5, 2009, in Atlanta, is currently underway.

For more information on the TBESC, please visit our website at (http://www.cdc.gov/tb/TBESC/default.htm)

—Reported by Brian Sizemore, MBA
TBESC Project Manager
Div of TB Elimination

NEW CDC PUBLICATIONS

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PERSONNEL NOTES

Sandy Althomsons, who served as Data Manager for DTBE's Surveillance team, left CDC and DTBE in January 2008 after accepting an assignment from Medicins Sans Frontieres (MSF) - France. Sandy is serving as the new epidemiologist/data manager for the MSF HIV/TB prevention program in Malawi. During her 2 years with DTBE, Sandy was involved in a variety of projects. She oversaw the creation of two annual surveillance reports, worked with the World Health Organization to create a surveillance workshop at the IUATLD conference in Paris, worked closely with state TB controllers to ensure data quality for the National TB Surveillance System (NTSS), and worked closely with the TIMS team to produce a new reporting platform. She presented data at international conferences in South Africa and was the principal investigator on several DTBE Analytic Steering Committee studies. Sandy served as co-chair of the CDC Health and Human Rights Workgroup (HHRW) in 2007, advancing several priorities of the HHRW. Working with Office of the Chief Science Officer (OCSO), she spearheaded the effort to secure annual funding for the workgroup to do its work. Her last official day in DTBE was January 31, 2008.

Sapna Bamrah, MD, Lieutenant Commander, U.S. Public Health Service, joined the Outbreak Investigations Team of the Surveillance, Epidemiology, and Outbreak Investigations Branch, DTBE, on July 1. Sapna joined CDC in 2006 as an Epidemic Intelligence Service (EIS) Officer with the International Emergency and Refugee Health Branch in the National Center for Environmental Health, an assignment which led to work with displaced populations in Kenya, Nepal, Vietnam, Azerbaijan, and Swaziland, and to a partnership with DTBE during a 2007 TB Epi-Aid in Michigan. Dual board-certified, Sapna completed her residency in internal medicine at Case Western and fellowship in infectious disease at the Cleveland Clinic. With a background in social work before attending medical school, Sapna has also volunteered extensively with homeless service providers. Her longstanding passion, however, is TB, which will be a great asset in her new role as medical officer and epidemiologist with DTBE.

B.A. Blackledge, who worked in DTBE's Office of the Director, left DTBE for a position in the CDC Procurement and Grants Office (PGO), effective July 21. She took this position after completing a 60-day detail to that office. Joining us in June 2005, she cheerfully and efficiently provided expertise and assistance to DTBE staff in contracting and budget analysis. Prior to coming to DTBE, B.A. worked with the National Immunization Program (NIP) for 3 years, and before that, she worked in PGO as a Contract Specialist for 8 years. In her new position in PGO, she will be switching gears a bit to work in the area of construction and architect/engineer design contracts. We wish her all the best in her new position.

Terrance Bright, who is employed by Northrop Grumman Corporation, has joined DTBE in the Surveillance, Epidemiology, and Outbreak Investigations Branch as a new member of the Surveillance Team. He will serve as the data analyst and manager for the new MDR/XDR TB registry. Terrance has served in a variety of positions in his career, including working as a shift supervisor for CVS Pharmacy, marshalling aircraft and passengers at Detroit Metro Airport, serving as an executive secretary for a construction firm, and working as a customer account executive for Comcast. Terrance attended Eastern Michigan University in Ypsilanti, Michigan, and is planning to resume his education in Atlanta in the fall. Welcome, Terrance!

Shannon Burse joined the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB) in April 2008 and provides administrative support for the branch. Prior to joining SEOIB, Shannon provided administrative support for the Director's Office, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP). A native of Michigan, Shannon has also worked as a Support Associate with Bank of America and as a Balancing Agent with Fiserve Bank of Atlanta, and has served in numerous capacities through her

position with Onsite Temporary Services of Tucker, Georgia. Welcome, Shannon!

Kevin Cain, MD, took on the role of TB/HIV Team Lead in the International Research and Programs Branch (IRPB) effective April 7, 2008. Kevin also assumed the role of the primary supervisor for one of IRPB's first year EIS officers, Rinn Song. Kevin joined the branch as an EIS officer on July 1, 2004. After completing EIS in 2006, Kevin remained with IRPB as a medical officer. Kevin has been the project officer for a variety of TB epidemiologic research and program-building efforts in Southeast Asia, Ethiopia, Botswana, and Latvia, mostly related to TB/HIV and drug-resistant TB. He served as a temporary advisor to the World Health Organization for the development of a revised regional framework for TB/HIV in the Western Pacific Region. Kevin has also led epidemiologic research on TB among foreign-born persons in the United States. Before joining CDC, he earned his undergraduate degree at the University of Illinois, where he studied chemistry and economics. He earned an MD degree from the University of Pennsylvania and completed an internal medicine residency at the University of Michigan.

Ken Castro, MD, Assistant Surgeon General, USPHS, Director, DTBE, NCHHSTP, CCID, was selected as this year's recipient of the Juan Carlos Finlay Award at the USPHS meeting in Tucson, Arizona. This Commissioned Corps award was originally established by the Hispanic Officers Steering Committee (HOSteC), predecessor to the Hispanic Officers Advisory Committee (HOAC). The award honors individuals, organizations, or groups who, through work performance and other activities, have demonstrated leadership in the development of programs, methods, or services that improve access to and/or health services for Hispanics and other minorities.

Alyssa Finlay, MD, who served as the TB/HIV team lead in the International Research and Programs Branch (IRPB), left DTBE in June for a position with the CDC Malaria Branch. Board certified in internal medicine, Alyssa completed a year of chief residency combined with a general medicine fellowship at Bellevue Hospital (New York University) in New York City. During her clinical training, Alyssa spent significant time working with immigrants in New York. Her work included providing primary care for refugees with histories of torture, and conducting cancer screening research in collaboration with local Chinese-American community-based organizations. Alyssa joined DTBE in July 2003 as an Epidemic Intelligence Service (EIS) officer (2003–2005). At CDC, Alyssa continued to pursue her interest in the medical and public health consequences of social inequality. She and Timothy Holtz organized and taught a second-year medical student elective entitled "Social Medicine, Human Rights, and the Physician" at Emory University in 2005–2006. (The course continues to be held at Emory for second-year students with Timothy as the chief faculty). While in DTBE, Alyssa worked on several projects, including the Botswana and Russia Annual Risk of TB Infection (ARTI) studies, the South Africa TB treatment default study, and the TB/HIV study in Rwanda, and served as a technical expert in developing the content for a TB/HIV surveillance training manual. She was the division representative for the NCHHSTP Perinatal Working Group, and she also served as an EIS supervisor. In 2007, Alyssa was selected as the IRPB TB/HIV Team Lead. Alyssa has now taken on a new array of responsibilities as the CDC Resident Advisor for the President's Malaria Initiative (PMI) in Madagascar. We wish her well in her new position.

Victoria M. Gammino, PhD, MPH, an epidemiologist in the International Research and Programs Branch (IRPB), is leaving DTBE to join the Global Immunization Division (GID) in the Vaccine-Preventable Disease Eradication & Elimination Branch as an epidemiologist. She has been on a temporary detail with GID; her move becomes permanent in October. During her 6 years with IRPB, Victoria conducted TB outbreak investigations in Maine, Georgia, and the Republic of the Marshall Islands. She conducted a study of MDR TB treatment monitoring and outcomes in DOTS-Plus pilot projects, and participated in TB operations research and training courses in Russia, Malawi, and Botswana. As a technical lead for Botswana, she supported several of the Division's PEPFAR-funded TB/HIV programmatic activities there, including evaluations of routine HIV testing in TB patients and the National Isoniazid Preventive Therapy Programme. She collaborated with the Botswana National TB Programme and BOTUSA staff to revise the National TB Treatment Guidelines manual, and to design and

implement management information systems for TB laboratory data and clinical management of MDR TB patients. She was also a co-investigator of the fourth national TB drug-resistance survey. Victoria received her MPH in epidemiology from Tulane University School of Public Health in 1990. Following her degree, she worked for several American foundations designing and evaluating domestic and international health programs. She received her PhD in International Health from Johns Hopkins University School of Public Health in 2001, where she received the Harry D. Kruse Award for Nutrition Research. We wish Victoria all the best in her new position.

Denise Garrett, MD, MS, has been selected as a CDC Senior Service Fellow, the Project Officer of TBESC, and the Team Lead of the Epidemiology Team of the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB). Denise joined CDC in 1993 as a researcher in the Division of Parasitic Diseases (DPD), and in 1996 became an Epidemic Intelligence Service (EIS) Officer with the Division of Healthcare and Quality Promotion (DHQP). Following EIS, she was hired as a Medical Epidemiologist by DHQP, where she coordinated and implemented several studies on TB among health care workers. In 2000, she joined the Division of International Health (DIH), Epidemiology Program Office (EPO), as a CDC consultant for the Field Epidemiology Training Program (FETP) in Brazil. From 2002 to July 2007, she worked as a CDC/U.S. Agency for International Development (USAID) consultant to the Brazilian National TB Program (NTP). Her responsibilities included providing epidemiologic advice, consultation, and training in TB; implementing and strengthening TB control; and conducting operational research on the diagnosis, treatment, and management of TB, TB/HIV, and MDR TB in Brazil. From August 2007 to July 2008, Denise worked as a Westat contractor on various TB Epidemiologic Studies Consortium (TBESC) activities such as Task Order 18 and numerous TBESC committees, and has been assisting in moving forward the most recent Semi-annual TBESC Advisory Review (STAR) process (this is the process whereby DTBE makes decisions on new TBESC proposals that have been submitted for funding and implementation). She was selected for her new responsibilities on July 28.

Denise Hartline, MT(ASCP), joined the Reference Laboratory Team in DTBE's Mycobacteriology Laboratory Branch on August 4, 2008. Denise is an ASCP board-certified Medical Technologist. From 2004 to 2008, she worked at the Georgia Public Health Laboratory in the Mycobacteriology Section as an assistant manager/clinical laboratory associate. Prior to 2004 she worked for 9 years in the Clinical Microbiology Laboratory at Emory University Hospital. With her 13 years of clinical laboratory experience, Denise brings a wealth of knowledge in mycobacteriology laboratory methods, training, and CLIA guidelines and standards. Denise will be working as part of the Reference Laboratory Team to provide the core laboratory services, drug susceptibility testing, and identification of mycobacteria to U.S. public health laboratories and in support of DTBE special studies and outbreak investigations.

Timothy Holtz, MD, has accepted the position of Team Leader for the Program Strengthening and Epidemiology (PSE) Team (previously the Epidemiology and Evaluation Team) in the International Research and Programs Branch (IRPB). Tim entered CDC as an EIS officer in 1999, serving as a medical officer assigned to the malaria epidemiology branch. He completed his preventive medicine residency through CDC, during which time he was intensely involved with the CDC response to the World Trade Center Disaster and anthrax attacks in 2001. He joined IRPB in 2002 and has worked in southern Africa, Eastern Europe, and South America on multidrug-resistant (MDR) and extensively drug-resistant (XDR) TB control and TB/HIV program capacity building. Tim has served as a consultant to the World Health Organization, and currently is CDC's representative to the STOP TB Partnership's Green Light Committee (GLC), Tim also serves as an adjunct assistant professor of global health at the Rollins School of Public Health at Emory University. He co-teaches a TB course and a health and human rights course, as well as an elective in human rights and social medicine at the Emory School of Medicine. Tim trained in primary care medicine at Harvard University/Cambridge Hospital, Cambridge, MA, after which he worked with the Tibetan Government-in-exile in the Indian Himalayas while on a Health and Human Rights fellowship from the Columbia University College of Physicians and Surgeons. He is board certified in internal medicine and preventive

medicine, and in 2003 was elected a Fellow in the American College of Physicians. Tim is a founding member of Doctors for Global Health, a nongovernmental organization that runs health and human rights programs in Central America, South America, and Africa. He is also one of the founding members of the Health and Human Rights Workgroup at CDC in 2003.

Carla Jeffries, MPH, joined DTBE's Surveillance, Epidemiology, and Outbreak Investigations Branch in March 2008 as a Scientific Data Analyst on the Surveillance Team, through a contract with Northrop Grumman. Carla received her MPH degree from Rollins School of Public Health at Emory University and came to DTBE after spending several years as environmental epidemiologist at the DeKalb County Health Department, Atlanta, GA. Her work at the local health department included outbreak response, surveillance, research, and data analysis and reporting over a wide spectrum of local health issues such as foodborne, waterborne, and vector-borne diseases; lead poisoning, radon, mold, and other indoor air quality problems; occupational health fatality investigation; and built environment programs. Some interesting highlights from her time at DeKalb County included working closely with DeKalb County's refugee community on an EPA grant designed to create partnerships for the purpose of finding solutions to the release of toxic pollutants and minimizing community exposures, as well as a research project to identify built environment risks to DeKalb County's senior citizen population. She also serves on the Board of Directors for *Georgia Bikes!*, a statewide bicycling advocacy association.

Kawi Mailutha, MPA, has joined DTBE in the International Research and Programs Branch (IRPB) as an Emerging Leader Fellow. Kawi completed her master's degree in public administration from Baruch College, and received her BA degree in social work from Warren Wilson College. Starting in 2000, Kawi provided support to Grace Medical Center (GMC), a multiservice health care clinic in Kenya. Her involvement included providing program services support in Kenya and providing part-time technical assistance in New York City. In Kenya, she worked with a team to organize outreach strategies to promote and deliver preventive health programs. Kawi assisted in providing home care services, treatment, and counseling to the surrounding communities in Kitengela. Her services focused on maternal-child health, HIV, TB, malaria, and safe water projects. Kawi initiated partnerships with the Kajiando District Office, local churches, and nongovernmental organizations to obtain food, vitamins, medications, bed nets, immunizations, and family planning kits for GMC. In 2005, she received a graduate fellowship from the National Urban Fellows program to work at Harlem Hospital Center in New York City. There, she spearheaded the creation of a multidisciplinary Geriatric Center, working with other professionals to develop a suite of services, a strategic plan, and an operating budget. Kawi will be working on various projects in IRPB, which will include teaching an operational research course and developing a new staff orientation policies and procedures manual for the branch.

Lakshmy Menon, MPH, joined FSEB on August 4 for a 1-year Association of Schools of Public Health fellowship; she will be working with the Program Evaluation Team. Lakshmy received a bachelors of science degree in biology from Portland State University, and recently graduated with a masters degree in public health with a concentration in infectious diseases from the Rollins School of Public Health at Emory University. While in graduate school, Lakshmy worked as an intern in the International Affairs Department of the American Cancer Society (ACS). While there, she created a department-wide monitoring and evaluation tool to assess the ACS' progress towards lowering global cancer morbidity and mortality. She also adapted materials for the Employer Initiative Program in India to institute workplace solutions to health issues, including programs to advocate lifestyle change, better nutrition, and proper exercise. Welcome, Lakshmy!

Mark Miner joined DTBE headquarters staff in Atlanta on July 6, 2008, as a Program Consultant after 17 years of field work experience, including 15 years in TB control. Mark began his career with CDC in 2002 as a Program Manager assigned to the Baltimore City TB Program. His duties included managing the local TB budget, writing cooperative agreements and contracts, developing local TB policy, directing personnel activities, overseeing surveillance issues, and monitoring the TB clinic patient care and contact investigation issues. In 2005, Mark was promoted to Sr. Public Health Advisor and was assigned to the Maryland Department of Health and Mental Hygiene's

TB Division. While assisting the State TB Controller, his duties consisted of managing the day-to-day operations of the program, including conducting surveillance activities, developing guidelines, evaluating performance measures, writing cooperative agreement reports, and monitoring budgets. Mark has had many temporary duty assignments during his tenure at CDC, including TB outbreak investigations in Baltimore, New Orleans, and Miami, as well as programmatic assignments in Pennsylvania, Kentucky, and Louisiana. From 1993 to 2002, Mark worked as a Public Health Representative with the New York State Department of Health TB Bureau. His duties included monitoring TB cases and suspects for a 14-county region in Central New York. This involved field visits to various county health departments and state correctional facilities, where he reviewed completion of morbidity reports, consulted with prison and county clinical and administrative staff, conducted contact investigations, and monitored targeted testing activities. Prior to working with the New York State Department of Health, Mark worked as a Public Health Sanitarian for the health departments in Oneida and Madison counties in Central New York.

Roque Miramontes, PA-C, MPH, Lieutenant, U.S. Public Health Service, joined the Outbreak Investigations Team of the Surveillance, Epidemiology, and Outbreak Investigations Branch, DTBE, on July 1. Roque joined CDC in 2006 as an Epidemic Intelligence Service (EIS) Officer with the Division of Foodborne and Mycotic Disease in the National Center for Zoonotic, Vector-Borne, and Enteric Diseases. His investigations during EIS were varied and included vaccinia virus, influenza, and cryptococcus in the United States, histoplasmosis in Guatemala, and cryptococcus in Mozambique. Before EIS, Roque, a physician assistant, worked as the sole primary care provider in rural community health centers in Montana and California. Roque first worked with DTBE in an Epi-Aid response to an MDR TB outbreak in Tennessee in the summer of 2007, and the Outbreak Investigations Team is excited about welcoming him back as a staff epidemiologist with DTBE.

Kiren Mitruka, MD, joined the Outbreak Investigations Team of the Surveillance, Epidemiology, and Outbreak Investigations Branch on July 7. Board-certified in both internal medicine and infectious diseases, Kiren completed her residency at Yale-New Haven Hospital and fellowship at New York Presbyterian-Cornell Medical Center. She then worked as the assistant director of the Office of Epidemiology and Disease Control in Miami-Dade County while also serving as a clinician in the health department's TB clinic. Kiren began work for CDC in 2005 as the Quarantine Medical Officer at the CDC Miami Quarantine Station, responding to illnesses and items of potential public health importance involving incoming international airplanes and ships. She also served as the Maritime Team Lead for CDC's 20 quarantine stations; in that role, she worked with DTBE on guidelines for TB contact investigations on cruise and cargo ships. The Outbreak Investigation Team welcomes Kiren, who will be serving as a medical officer and epidemiologist with DTBE.

Patrick Moonan, DrPH, MPH, was promoted to Lead of the newly created *Molecular Epidemiology Activity* within the Surveillance, Epidemiology, and Outbreak Investigations Branch. Patrick began working in TB control in 1998 as a contact investigator for the Tarrant County Public Health Department in Fort Worth, Texas. From 2001 to 2005, he was the TBESC program coordinator and research epidemiologist for the University of North Texas Health Sciences Center under the mentorship of Dr. Stephen Weis. In the summer of 2005, he joined DTBE as an epidemiologist with the Outbreak Investigations Team and was charged with developing and expanding the implementation of TB genotyping in the United States. Under his leadership, the proportion of isolates voluntarily submitted for genotyping per year increased by 95% and now includes isolates from every state in the country. He is also the main architect for designing and developing the forthcoming TB Genotyping Information Management System (scheduled to be released in the winter of 2009). His vision has led to the development of statistical models for detecting potential outbreaks using the National TB Genotyping Service (NTGS) database. Patrick continues to be an active member of TBESC. He is the principle investigator of two funded studies (Task Order 8: "An Analysis of Molecular Epidemiology of Multidrug-resistant *M. tuberculosis* in the United States," and Task Order 26: "Improving the Utilization and Integration of TB Genotyping into Routine TB Program Practice: Analyzing the Impact Through

Public Health Interventions") and co-principle investigator for Task Order 28: "Treatment Practices, Outcomes, and Cost of Multidrug-resistant (MDR TB) and Extensively Drug Resistant Tuberculosis (XDR TB) in the United States." As a member of the Outbreak Investigations Team, he provided field-based epidemiologic assistance in Kosciusko County, IN; in York County, SC; in Manhattan, NY, for the Cluster-333 investigation; and in the international traveler incident of 2006. Patrick has a doctorate degree, as well as a master of public health degree with a concentration in epidemiology, from the University of North Texas Health Sciences Center. He also holds a BA degree in sociology from the State University of New York at Buffalo.

Trang N. Nguyen, MPH, CHES, has joined DTBE in the Communications, Education, and Behavioral Studies Branch (CEBSB) for a 1-year fellowship through the Association of Schools of Public Health (ASPH). Trang is from Los Angeles, California. She received her undergraduate degree from San Francisco State University and her MPH degree in Health Promotion and Behavioral Sciences from San Diego State University (SDSU). Her master's thesis examined the relationship between religiosity and psychosocial correlates of physical activity among churchgoing Latinas living in a border region of San Diego County, California. She will present her thesis findings at the American Public Health Association (APHA) annual meeting this fall. While enrolled at SDSU, she served internships with the school's Research Foundation, a community-based hospital, and Planned Parenthood, in addition to completing an infectious disease field studies course in Kingston, Jamaica. She also served as vice president of her graduate school's Director's Student Advisory Council and coordinated the school's 2008 Public Health Week. Prior to entering her graduate studies, Trang was a senior asthma case manager with the American Lung Association, working on a CDC-funded research project to reduce asthma morbidity among adolescents living in Oakland, California. She also spent a number of years volunteering as an HIV testing counselor. Trang's public health interests include health communications, children's health, community-based research, and infectious diseases. Welcome, Trang!

Mildred Perez, MPH, has accepted the Public Health Advisor position in Trenton, NJ. She started in her new position on August 14. Mildred transferred there from her previous position as Special Projects Coordinator in St. Louis, Missouri, where she had been since 2005. She started her career with CDC as a Disease Intervention Specialist (DIS) with the Division of STD Prevention (DSTDP) in Fort Lauderdale, Florida, after which she transferred to Washington, DC. She then transferred to the Department of Health and Hospitals in New Orleans, Louisiana, where she remained for 12 years. In 2005, Mildred joined DTBE when she transferred from New Orleans to her position in St. Louis, Missouri. Along with her regular DIS duties, she has worked as a community liaison and has been involved in different projects including the promotion of clinical services among the Hispanic population using mass media such as radio and TV; she also established a partnership with the local school board to start STD education among high school students. She has participated in a national HIV project to evaluate HIV service networks and the provision of STD services within them. Mildred graduated in May 2004 from Tulane University School of Public Health and Tropical Medicine, where she received a master of public health degree with a concentration in Community Health Sciences.

Lee Ann Ramsey joined SEOIB in July 2008 as the branch's new Senior Public Health Analyst. Lee Ann began her career at CDC in 1987 while attending Mercer University Atlanta at night, working in the Office of Public Affairs, the National Center for Infectious Diseases, and the National Center for Prevention Services; she left CDC for 1 year to finish college at Mercer University Macon. Graduating in 1991 with a degree in Resource Management, she returned to CDC and was assigned to the STD/HIV program of the Broward County Public Health Unit in Fort Lauderdale, Florida, as a Public Health Advisor with the National Center for Prevention Services (now NCHHSTP). In 1993, she was transferred to Charlotte, North Carolina, where she continued working in STD/HIV prevention until 1997. During that time, she also served on a long-term detail in Baltimore, Maryland, where she worked on syphilis and HIV prevention. In 1997, Lee Ann earned a graduate certificate in Public Health Policy, Program Planning, and Evaluation from the University of Washington at Seattle before becoming a Policy Analyst for the National Immunization Program. In 2000, she pursued a personal interest by accepting a

Public Health Analyst position with the Early Hearing Detection and Intervention Program, National Center on Birth Defects and Developmental Disabilities. Lee Ann joined the Arthritis Program of the National Center for Chronic Disease Prevention and Health Promotion in January 2003. In that position she was Team Lead for the Partnership and Program Development Team, served as a project officer for state-based arthritis programs and the National Arthritis Foundation, and was a technical monitor for numerous health communications contracts. She will be serving as Deputy Branch Chief of SEOIB.

Dan Ruggerio, MHSA, was selected as the new Team Leader for the Field Operations Team I in the Field Services and Evaluation Branch. Dan started his career in 1972 as a public health advisor for the New York City Health Department, first in the STD Program and later as a clinic manager in the TB Control program. During 1980-1993, he was the Program Management Officer for the NYC Bureau of Tuberculosis Control. In June of 1993, he joined CDC and was assigned to the Missouri State Department of Health as Bureau Chief for TB Control Program. During recent years, Dan has served as the lead PHA/program consultant for the northeastern states (New York State, New York City, New Jersey, Rhode Island, Connecticut, Massachusetts, Maine, Vermont, and New Hampshire, plus Puerto Rico and the U.S. Virgin Islands). He also served as Project Officer for the Regional Training and Medical Consultation Centers (RTMCCs) and CDC liaison with the National TB Controllers Association (NTCA). Dan has a master's degree in Health Services Administration and more than 30 years of experience in TB control and public health.

Sarah Segerlind, MPH, has joined DTBE in the Communications, Education, and Behavioral Studies Branch (CEBSB) for a 1-year fellowship through the Association of Schools of Public Health (ASPH). Sarah is originally from Portland, Michigan, a small, quiet town located in the center of the state. After graduating from high school, she relocated to Ann Arbor, Michigan, to attend the University of Michigan. As an undergraduate, Sarah majored in biological anthropology and environmental studies. In preparation for her graduate studies in public health, she worked with the Michigan Department of Community Health, Division of Chronic Disease, for two summers during college. After graduating with a B.S. degree in 2006, she remained at the University of Michigan and attended the School of Public Health to pursue personal and professional interests in community health education, health disparities, rural/migrant health, global health, and health and human rights. Last summer she served in an internship with Migrant Health Promotion, a small nonprofit organization that works with migrant farm workers and their families. While there she created fact sheets and a training manual chapter on emergency preparedness. Welcome, Sarah!

Allison Taylor, MPH, left the International Research and Programs Branch (IRPB) on August 31 to start a PhD program in the Department of Epidemiology at Johns Hopkins Bloomberg School of Public Health. Ali joined IRPB as a CDC Foundation Fellow in 2005 after finishing her MPH at Emory's Rollins School of Public Health. While she was in IRPB, Ali was responsible for field work and data quality assurance for the Bill & Melinda Gates Foundation–funded "Rapid Diagnosis of MDR TB" project in Lima, Peru, in collaboration with Harvard and Peruvian partners. Later, Ali became an ORISE Fellow, with support from USAID, and worked on two large multinational epidemiological studies on MDR TB. In the first, she worked closely with Victoria Gammino, PhD, in combining and analyzing individual data from the first five WHO-approved DOTS-Plus pilot projects. In the second, she coordinated a prospective eight-country study known as the "Preserving Effective TB Treatment Study" (PETTS). She also analyzed the U.S national TB surveillance data to provide medical practitioners with more solid evidence for choosing appropriate treatment for foreign-born persons in the U.S. with active TB and LTBI. Ali was characteristically cheerful, efficient, competent, quiet, extremely helpful, and very sharp. We will miss Ali, and we wish her all the best in her doctoral program at JHU.

Vidya Venkataramanan, MPH, has joined DTBE in the Field Services and Evaluation Branch (FSEB) for a 1-year fellowship through the Association of Schools of Public Health. Originally from Mumbai, India, Vidya grew up in Southeast Asia and moved to Cincinnati, Ohio, for high school. She graduated from Boston University with a BA degree in International Development and an MPH degree in International Health. Between her undergraduate and graduate studies, Vidya interned with Solidarity and Action

against the HIV Infection in India, the Association for Leprosy Education, Rehabilitation & Treatment in India, the American Red Cross Headquarters in Washington, D.C., and with John Snow, Inc. in Boston, MA. Her areas of interest include infectious diseases and ecological sanitation infrastructure in developing countries. She will be working with the Program Evaluation Team in FSEB, and looks forward to a great year. Welcome, Vidya!

Ryan Wallace of the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB) has left DTBE and CDC. He joined SEOIB as a student researcher 3 years ago and quickly became an integral part of the Surveillance Team. He will be greatly missed for his ability to take on challenging projects, his tireless support of other members of the team and branch, and his great sense of humor. Ryan will take on new challenges as he matriculates this fall at the University of Wisconsin-Madison School of Veterinary Medicine; after he obtains his DVM, he hopes to return to CDC in the EIS program. Ryan's last day in the office was Aug. 6. Good luck, Ryan!

Sara Whitehead, MD, MPH, has joined DTBE as a Medical Officer in the International Research and Programs Branch. Sara has been responsible for public health programs at the local, state, federal, and international levels, covering a wide spectrum of public health practice including surveillance, outbreak management, prevention program development and implementation, and epidemiologic research. From 1995 to 2000, she worked at the front lines of direct public health implementation and disease control in remote northern tribal communities as a Medical Health Officer in Ontario, Saskatchewan, Canada. She supervised the local TB control program during this time. During 2000–2003, Sara was a trainee in field epidemiology (Epidemic Intelligence Service) and public health management and leadership (Preventive Medicine Residency) at CDC. As an EIS officer, she was assigned to the Division of Reproductive Health, where she evaluated and revised national surveillance systems, conducted outbreak investigations, and collaborated on a large national health survey. Since 2003, Sara has worked in Thailand conducting HIV prevention research and providing technical consultation on HIV prevention projects. As a principal investigator for clinical trials, she has coordinated and collaborated with teams of Thai and U.S. scientists on all aspects of study preparation and analysis. In her role as a consultant to GAP-Thailand projects related to STD, she has worked with Thai Ministry of Health colleagues and other partner organizations to identify gaps in current systems and develop programs to address these gaps. Sara completed her medical training in Canada at McMaster University and the Northeastern Ontario Family Medicine Residency program, followed by an MPH at Johns Hopkins. Sara will be assigned as the Regional Advisor for TB Elimination and Chief of the TB Program at the U.S. CDC Southeast Asia Regional Office in Bangkok, Thailand. She will oversee a diverse portfolio of public health programs and research in Southeast Asia. Programmatic activities that she will lead include strengthening screening, diagnosis, and treatment of TB in HIV-infected patients; surveillance and control of multidrug-resistant (MDR) TB; and expanding laboratory capacity in Thailand, Cambodia, Vietnam, and Laos. Major research activities include evaluation of new tools for rapid diagnosis of TB and MDR TB, validation of algorithms for TB screening in HIV-infected patients, and epidemiologic evaluations of surveillance and program data.

William C. (Kit) Whitworth, BS, MPH, joined DTBE as an epidemiologist effective September 28, 2008. He is working on Dr. Jerry Mazurek's diagnostics team in the Clinical and Health Systems Research Branch (CHSRB). Kit earned a BS degree in biology from Georgia State University and an MPH degree in epidemiology from Emory University. He brings a wealth of knowledge and experience to his new position. His previous positions included working as a lab assistant for Upjohn and as a lab technician for Carr-Scarborough Microbiologicals. Kit has held several research positions; these include arthritis researcher for Emory University, 1990–2003, research specialist for Emory University's Division of Rheumatology, 2003–2005, and research associate for Emory University's Rollins School of Public Health, 2005–2006. In 2007 he began working as a clinical data manager for CHSRB's TB Trials Consortium, and most recently has worked on TBESC Task Order 2. We welcome Kit to his new position and wish him the very best.

CALENDAR OF EVENTS

October 4–8, 2008
Annual Congress of the European Respiratory Society
Berlin, Germany
European Respiratory Society
http://dev.ersnet.org/415-general-information.htm

October 14–17, 2008
Midwest TB Controllers Meeting
Minneapolis, MN
DTBE/CDC

October 16–20, 2008
39th IUATLD World Conference on Lung Health
Paris, France
International Union Against TB and Lung Disease
www.iuatld.org/upload/home_news/online_submissions_2008_es_278.pdf

October 22–25, 2008
The Denver TB Course
Denver, CO
National Jewish TB Course

October 23–25, 2008
21st East Coast Migrant Stream Forum
Providence, Rhode Island
North Carolina Community Health Center Association (NCCHCA)

October 25–28, 2008
ICAAC/IDSA 2008 – Joint ASM/IDSA meeting
48th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) and 46th IDSA Annual Meeting
Washington, DC
American Society for Microbiology/Infectious Diseases Society of America
www.icaacidsa2008.org/

October 25–29, 2008
136th APHA Annual Meeting
San Diego, CA
American Public Health Association
www.apha.org/meetings/

October 25–30, 2008
Chest 2008
Philadelphia, PA
American College of Chest Physicians
www.chestnet.org/CHEST/program/registration.php

October 27–29, 2008
Southwest/Four Corners TB Controllers Meeting
Flagstaff, AZ
DTBE/CDC
www.fourcornerstb.org

October 27–31, 2008
TB Program Managers' Course
Atlanta, Georgia
DTBE/CDC

November 13–14, 2008
TB Trials Consortium (TBTC) 24th Semi-annual Meeting
Atlanta, GA
Division of TB Elimination (DTBE)

December 1–5, 2008
Pacific Island TB Controllers Meeting
Honolulu, HI
DTBE/CDC

January 25–30, 2009
Keystone Symposia
Keystone, CO
Keystone Symposia