



Dear Colleague:

We have had a busy spring, pursuing our regularly recurring activities and observing some changes. Among the changes, DTBE recently lost two esteemed colleagues. We noted with much sadness the passing on May 22 of a luminary in international health, Dr. J.W. Lee, Director General of the World Health Organization (WHO). Prior to taking this position, Dr. Lee was instrumental in the successful launching of the global Stop TB Partnership, which is now a model for multinational partnerships. We were fortunate to have had such a truly remarkable person devote his talents to the international public health arena. We also lost Dr. Ida Onorato, who was formerly the chief of the DTBE Surveillance and Epidemiology Branch before moving to the Division of HIV/AIDS Prevention. She passed away on May 31 after a battle with cancer.

We will also miss the distinguished presence at CDC of Dixie E. Snider, Jr., M.D., M.P.H., as he retires from his position as Chief Science Officer for CDC after more than 33 years of outstanding service to the agency. Fortunately for CDC, he will continue to provide advice and guidance as a consultant to the CDC scientific leadership team. Dr. Snider joined CDC in 1973 and spent much of his early career as an expert in tuberculosis and other mycobacterial diseases. From 1976 to 1985, he served as Chief, Research and Development Branch, Division of Tuberculosis Control. In 1985, he became Director of the Division of Tuberculosis Control and was the major architect of the strategic plan for the elimination of tuberculosis in the United States, as well as a key player in developing a national plan for addressing multidrug-resistant tuberculosis. He left our division in 1993, and for the past 13 years he has focused his efforts on improving the quality and integrity of science at CDC and on improving the science infrastructure. Most recently, Dr. Snider was the Chief Science Officer for CDC and ATSDR. He was the primary advisor to the Director on scientific and medical matters and provided agency-wide scientific leadership. Dr. Snider's many responsibilities included developing policies and procedures for ensuring that integrity and excellence in science are maintained; articulating and enforcing standards of ethical, equitable, and respectful conduct of all CDC's enterprises; and responding to the CDC Director's requests to engage in and respond to a variety of scientific and management issues. Dr. Snider was the recipient of a number of distinguished honors, including the William C. Watson, Jr., Medal of Excellence, the United States Public Health Service (USPHS) Outstanding Service Medal, the USPHS Meritorious Service Medal, and the Secretary's Award for Distinguished Service.

World TB Day, March 24, was observed in a number of U.S. sites, including here in Atlanta. DTBE staff organized a truly impressive day of events in observance of the day and in celebration of the accomplishments of TB control staff throughout the country. Please see the article in this issue about the events and the activities held here at Corporate Square.

On March 30, 2006, CDC staff members in Atlanta were honored with a visit by Dr. George Comstock, another of TB control's luminaries and a legend in the field of U.S. TB epidemiology. He gave an informal talk entitled "Musings About TB Control," which was followed by a question and answer period. After joining the Commissioned Corps and serving as a USPHS Commissioned Officer during World War II, Dr. Comstock served in several public health assignments from 1946 to 1955, including one in Muscogee County, Georgia. There he conducted research that provided data on the risks of reactivation of TB among persons with latent TB infection, data still being used. During that period he also did research to evaluate the BCG vaccine; his findings resulted in the U.S. recommendation against BCG vaccination of children because of lack of efficacy. In the late 1940s, he joined the Division of TB Control; from 1956 until 1962, when he retired from the Division, he served as its chief of epidemiologic studies. Later, in the 1960s, he conducted research in Alaska that demonstrated the effectiveness of isoniazid preventive therapy—again, data still being used to guide policy. He also served as the first chairman of the Advisory Council for the Elimination of Tuberculosis. The depth and the breadth of his accomplishments are tremendous. We were impressed with his keen insights and charmed by his simple and unpretentious manner, and we consider ourselves fortunate to have had this opportunity.

The 55th annual Epidemic Intelligence Service (EIS) Conference was held in Atlanta April 24 to 28, 2006. The primary purpose of the EIS Conference is to provide current EIS officers training and experience in making scientific presentations. The conference also provides an opportunity for scientific exchange regarding current epidemiologic topics; highlights the breadth of epidemiologic activities at CDC; provides a setting where EIS professional networks can be strengthened among new, current, and former EIS officers; and provides a forum for recruitment of new EIS officers. I want to again congratulate all of our EIS Officers for their outstanding presentations, and I am particularly proud to note that two DTBE staff were honored with awards at the conference: Kevin Cain, MD, who has recently completed his 2-year EIS assignment with DTBE, was the recipient of the Paul C. Schnitker International Award, and Kashef Ijaz, MD, was awarded the Philip S. Brachman Award. To find out more about the awards and the conference, please see the article about the conference in this issue.

On May 16 and 17, staff of the Communications, Education, and Behavioral Studies Branch, along with RTI International, sponsored the "Summit to Stop TB

in the African-American Community,” the second meeting DTBE has convened on this topic. Attendance at this meeting exceeded expectations, and it was deemed very successful. CDC brought together representatives of several diverse organizations to increase their awareness about the importance of TB and to strategize ways to reduce the disproportionate burden of TB in the African-American community. I was on hand, along with Dr. Louis Sullivan, former U.S. Secretary of Health and Human Services (HHS); Dr. Garth Graham, Deputy Assistant Secretary for Minority Health, HHS; and Dr. Kevin Fenton, NCHSTP Director, to address the meeting attendees. Participants proposed a number of action items to be carried out in the next year.

The 101st American Thoracic Society (ATS) International conference was held in San Diego, California, from May 19 to 26, 2006. A limited number of DTBE staff attended this conference. The ATS International Conference is the largest, most prestigious scientific meeting devoted to the presentation and discussion of new research findings and the latest clinical developments in respiratory, critical care, and sleep medicine. During the Conference, more than 15,000 attendees heard over 5,000 original research presentations related to the prevention, diagnosis, and treatment of respiratory diseases such as tuberculosis, lung cancer, chronic obstructive pulmonary disease (COPD), asthma, allergies, sleep-related disorders, and cystic fibrosis.

The 2006 National TB Controllers Association (NTCA) Workshop was held June 13–15, 2006, at the Sheraton Buckhead Hotel, in Atlanta, Georgia. Invited participants for the 2006 workshop included state and big city TB controllers, TB nurse consultants, TB program managers, DTBE field staff, and Regional Training and Medical Consultation Centers leadership. The theme of the meeting was “Eliminating TB: Fighting the Enemy.” I am very happy to state that the meeting was a resounding success. The general sessions were ably moderated by Phil Griffin, TB Control Director of Kansas; John Bernardo, TB Control Officer of Massachusetts and President of the NTCA; and Jane Moore, Nurse Consultant from Virginia. We heard a truly inspiring and entertaining keynote speech, “Remembering Why We’re Here,” from Thomas Daniel, MD, Professor Emeritus of Medicine and International Health at Case Western University, as well as an update from our former CDC colleague, Romel Lacson, on the Amaya-Lacson TB Photovoice Project. Throughout the conference, you probably noted a collection of artwork on display in the covered walkway; these are the result of an art therapy program offered by Bellevue Hospital in New York City to alleviate the mental and emotional stress of isolation for patients. Dr. Irene David, who was on hand at the conference to talk about the artwork, has an article in this issue about the program. On Tuesday, Wednesday, and Thursday, the participants broke out into smaller groups to hear about and discuss the recently issued guidelines on infection control, contact investigations, corrections, and the TB control statement; DTBE research activities; laboratory issues; genotype usage and guidelines; QuantiFERON guidelines; targeted testing and LTBI projects; and issues dealing with multidrug resistance and HIV coinfection. A social event on

Tuesday evening was highlighted by the announcement and presentation of awards, as well as the distribution of numerous door prizes. On Wednesday, we had an opportunity to learn about the four TB Regional Training and Medical Consultation Centers, meet their staff, and hear about their plans. On Thursday, we heard a moving and amazing presentation about Hurricane Katrina and the comments of the TB controllers involved in responding to it: Jim Cobb of Florida, Charles DeGraw of Louisiana, Nancy Keenon of Alabama, Mike Holcombe of Mississippi, and Charles Wallace of Texas. Afterwards, John Bernardo and I “sent the troops out to fight the enemy,” charging participants to eliminate TB; use team work; be prepared through training and skill-building; acquire the proper equipment and tools; and last, but not least, improvise, adapt, and overcome! We hope to have as successful a meeting next year, when we reconvene here in Atlanta June 11–14, 2007, at the Crown Ravinia Perimeter Mall Hotel. Please save the date!

Kenneth G. Castro, MD

In This Issue

Highlights from State and Local Programs	6
Art Therapy Helps Isolated Patients: Exhibition at Bellevue Hospital Center	6
Surgeon General Visits Clinic in Hawaii	8
DTBE World TB Day Activities 2006	9
National TB Controllers' Association Poster Contest.....	11
EIS Conference a Success for DTBE	11
Regional Training and Medical Consultation Centers' Needs Assessments.....	13
Laboratory Update	16
Sessions at 2006 NTCA Workshop Focus on Laboratory Issues	16
Communications, Education, and Behavioral Studies Branch Update	16
"Stop TB in the African-American Community" Summit	16
TB Education and Training Network Updates.....	18
Member Highlight.....	18
Cultural Competency Subcommittee	19
TB Epidemiologic Studies Consortium Updates	19
TBESC Task Order 6 Update: Regional Capacity Building in Low-Incidence Areas	19
New TBESC Study to Be Launched: Evaluation of New Interferon-gamma Release Assays in the Diagnosis of LTBI in Health Care Workers.....	21
New CDC Publications.....	22
Personnel Notes.....	23
Calendar of Events.....	27

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.

HIGHLIGHTS FROM STATE AND LOCAL PROGRAMS

Art Therapy Helps Isolated Patients: Exhibition at Bellevue Hospital Center

In recognition of World TB Day, an evocative art exhibit took place on March 24, 2006, at Bellevue Hospital Center in New York City. The drawings were the result of an active art therapy program offered to patients in an effort to make the experience of isolation more humane and manageable. Art therapy is based on the premise that thoughts and feelings may be effectively expressed through creative processes. Intense emotion and difficult issues find form and constructive release through the nonthreatening, insight-oriented modality.



Engaging in positive activities for hospitalized patients helps dissipate anxiety, reduce agitated behavior, and foster self-esteem. Art-making has been a catalyst in the shift from passivity to activity, disability to ability, victimization to mastery. Not surprisingly, patients in isolation are

often calmer, better adjusted to their restrictions, and, ultimately, more adherent to medication regimens and hospitalization.



The Bellevue program was conceived to assist patients in coping with detention. With the resurgence of TB in the 1980s and the establishment of the hospital's secure unit, Dr. Irene Rosner David initiated an arts program specifically for isolated TB patients. Recently the TB program has received financial support from the New York City Department of Health and Mental Hygiene Bio-Terrorism Preparedness Grant, whereby TB services have been expanded in order to create a model program for potential quarantine. With this funding, the TB program hired a part-time grantee to provide a comprehensive art program, which included a variety of media, styles, and directives. In the past year, art therapist Julie Combal, MPS, has expanded this work and initiated creative interventions to meet the needs of this complex population. The program is a strong component within a broader context of long-standing and valued therapeutic arts services at Bellevue.

TB Notes is a quarterly publication of the Division of TB Elimination (DTBE), National Center for HIV, STD, and TB Prevention (NCHSTP), Centers for Disease Control and Prevention (CDC). This material is in the public domain, and duplication is encouraged. For information, contact

TB Notes Editor
 CDC/NCHSTP/DTBE, Mailstop E10
 1600 Clifton Road, NE
 Atlanta, GA 30333
 Fax: (404) 639-8960

DIRECTOR, DTBE
 Kenneth G. Castro, MD

EDITORIAL REVIEW BOARD
 Ann Lanner, Managing Editor
 Jack Crawford, PhD
 Gloria Gambale
 Michael Iademarco, MD, MPH
 Mary Naughton, MD, MPH
 Scott McCoy, MEd
 Tamara Roman
 Rita Varga
 Elsa Villarino, MD, MPH
 Erika Vitek, MD

Sherry Brown, Mailing List Manager

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

One of the challenges is to integrate the infectious isolated patients with others, despite structural barriers. One-to-one intervention is provided to those in single isolation rooms, but there are also innovative projects such as the production of collaborative murals. Individual patients create sections of a picture that become incorporated into a cohesive whole. The mural pieces are configured by the noninfectious patients in a dayroom setting and photographed. The photo is then provided to each isolated patient, allowing each of them to see his or her pictorial contribution as significant in the completed mural. The psychological message to those alone in their rooms is "you've connected with others...you count...you are part of a community." Another project is in a collective periodic journal



consisting of illustrations, poems, and stories. It is validating for each contributor, and also serves as a vehicle for communication with one another. The most poignant examples are from the more seasoned, noninfectious patients encouraging those still in isolation with messages like "hang in there."

The exhibit also included several images of people wearing hygienic masks. Interestingly, a historic drawing dating from 1945 is strikingly similar to those from 1995 and 2005. The images eloquently convey fear, sadness, and anger. The recent patient whose work expressed anger later drew a forlorn eye looking out into the corridor "in order to be closer to people." The act of dissipating feelings is not only therapeutic, but the imagery conveyed can be revealing and moving to caregivers.

A number of patients were quoted as saying that the experience of enforced hospitalization has helped them. As they are supported through their emotional issues, there is often a validated sense of self. Through the elegance and inherently healing nature of art, they attempt to rotate an untenable situation into one of well-being and commitment to healthier living. This element was reflected in the artwork, and the



exhibit's impact was apparent in the impressive commentary by attendees.

The photos of art from this program, above and below, were taken at the recent NTCA meeting in Atlanta.



For further information on art therapy, contact the American Art Therapy Association at arttherapy.org; for regional art therapists search 'ATA Chapters.'

*—Submitted by Irene Rosner David, Ph.D., ATR-BC, LCAT
(Art therapist registered/board certified/licensed)
Director, Therapeutic Arts, Bellevue Hospital Center*

Surgeon General Visits Clinic in Hawaii

On March 17, 2006, U.S. Surgeon General Richard Carmona participated in a tour of the state-of-the-art Lanakila TB Clinic in Honolulu, Hawaii, which reopened in 2003 after a complete renovation. Derrick Felix, PHA, and Jessie Wing, MD, MPH, the DTBE field staff members

assigned to the Hawaii TB Control Program, were on hand for the visit. Dr. Carmona was in Hawaii to meet with the Commissioned Officers and members of the administration in preparation for a pandemic flu readiness conference held in Hawaii in April.

The state of Hawaii has reported one of the highest state TB incidence rates for several years (8.8/100,000 in 2005, with 73% of cases in foreign-born persons). The Hawaii TB Control Program is fortunate to have this renovated facility and energetic staff working for change in its mission of reducing and preventing morbidity in the Pacific.

*—Reported by Jessie Wing, MD, MPH
Div of TB Elimination*



Dr. Jessie Wing has provided the photo, above, showing the late Dr. J.W. Lee during a visit he made to the Hawaii TB control program in 2003. Shown in the photo with Dr. Lee are several staff members of the Hawaii TB control program. Dr. Lee was in Hawaii to address the University of Hawaii; he received his MPH degree at the University of Hawaii.



DTBE World TB Day Activities 2006

In the late 19th century, TB killed one out of every seven people living in the United States and Europe. On March 24, 1882, Robert Koch, MD, announced the discovery of the TB bacillus. At the time, his discovery was the most important step taken towards the control and elimination of this deadly disease.

In 1982, a century after Koch's announcement, the first World TB Day was sponsored by the World Health Organization and the International Union Against Tuberculosis and Lung Disease. The event was intended to educate the public about the devastating health and economic consequences of TB, its effect on developing countries, and its continued tragic impact on global health.

In observance of World TB Day, DTBE was involved in a variety of activities that included hosting a special program at the CDC Corporate Square campus in Atlanta, publishing two *Morbidity and Mortality Weekly Report (MMWR)* articles, and producing and distributing nationwide World TB Day materials for use in local TB elimination efforts.

The theme of the special program was "Faces and Voices in the Fight Against Tuberculosis." The World TB Day program was promoted CDC-wide through an "In a Snapshot" article on the CDC Connects Intranet page. A variety of speakers from CDC gave presentations as part of the program. Dr. Dixie Snider, Chief Science Officer, addressed CDC's historic role in the fight against TB. Dr. Kevin Fenton, Director, National Center for HIV, STD, and TB Prevention, talked about the changing face of TB in the United States. Dr. Kenneth Castro shared a flash film titled "Actions for Life" that was developed by the Stop TB Partnership about the Global Plan to Stop TB, 2006–2016 (www.stoptb.org). Dr. Janet Collins, PhD, Director, National Center for

Chronic Disease Prevention and Health Promotion, talked about her family's experience with TB. Dr. Jesse Roman, Professor of Medicine and Director, Division of Pulmonary, Allergy & Critical Care Medicine at Emory University, talked about the hope he sees in the patients he treats when they understand TB can be treated and cured.

The highlight of the program was a presentation about the Amaya-Lacson TB Photovoice Project (www.tbphotovoice.org), founded by Romel Saulog Lacson, MPH, after the untimely deaths in 2004 of his wife, Claudia, and child, Emma, due to TB meningitis. Mr. Lacson was a CDC behavioral scientist in the Division of HIV/AIDS Prevention (DHAP) at the time of their deaths.



Through the use of narration, song, and photographs, Mr. Lacson conveyed the story of his meeting Claudia, their marriage, her pregnancy and subsequent illness, the passing of Claudia and Emma, and Romel's inspiration to begin the Amaya-Lacson TB Photovoice Project (see photo). Performing with Mr. Lacson were Steve Cunningham (guitar), Charae Krueger (cello), Kathy Kuczka (narrator), Tom McGivney (percussion), and Yanique Redwood (TB Photovoice presentation). The moving program ended with a video of Romel and Claudia.

Currently, the TB Photovoice Project is underway in El Paso, Texas; Chiang Mai, Thailand; and Rio de Janeiro, Brazil.

Immediately following the “Faces and Voices in the Fight Against Tuberculosis” program, DTBE held a potluck luncheon in Corporate Square, Building 11. Historical items about TB were on display in the room where the luncheon took place, thanks to DTBE’s Dan Ruggiero.



Kicking off the luncheon was a performance by the U.S. Public Health Service Ensemble (see photo). During the course of the luncheon, the winners of door prizes donated by the Atlanta business community were announced.

In addition to the live events on the CDC campus, DTBE published two science articles. One article titled “Emergence of *Mycobacterium tuberculosis* with Extensive Resistance to Second-Line Drugs —Worldwide, 2000–2004,” appeared in the March 24 edition of the *MMWR*. This article was a first-time report on the worldwide emergence of extensively drug-resistant TB.

A second article, appearing in the same *MMWR* edition and titled “Trends in Tuberculosis – United States, 2005,” presented provisional TB case and rate data reported for 2005. The article discussed CDC’s efforts in addressing the high rates of TB among foreign-born persons and blacks in the United States. A Notice to Readers about the history and importance of World TB Day also appeared on the *MMWR* cover. The World TB Day *MMWR* may be viewed and downloaded at www.cdc.gov/mmwr/PDF/wk/mm5511.pdf. The National Center for HIV, STD, and TB

Prevention’s Office of Communications sent the media and TB controllers a fact sheet about the articles along with a statement by Dr. Fenton about the progress being made and the challenges that remain in the battle against TB.

To assist TB controllers and other partners throughout the United States in their TB elimination efforts, DTBE produced and distributed a variety of updated World TB Day materials for use in local efforts. These updated materials, available for order at <http://www.cdc.gov/nchstp/tb/WorldTBDay/2006/resources.htm>, included the following:

- A variety of World TB Day posters
- “TB Elimination: Now Is the Time” brochure, which contains key messages about TB not being a disease of the past, the consequences of neglecting TB control programs, and what must be done to finish the job of eliminating TB in the United States
- “A Global Perspective on Tuberculosis” fact sheet, which contains historical information on World TB Day, the impact of TB worldwide, and global TB data
- “Tuberculosis in Minorities” fact sheet; discusses the disproportionate burden of TB in minorities and factors likely to contribute to this burden
- “Tuberculosis in Blacks” fact sheet presenting TB morbidity rates for black non-Hispanic persons in the United States; these data emphasize the need to eliminate TB and to focus on preventing and controlling TB in this minority group

DTBE created a 2006 World TB Day section on its website that may be visited at <http://www.cdc.gov/nchstp/tb/WorldTBDay/2006/default.htm>. The World TB Day section features a page with the history of World TB Day and its

importance today, a page featuring the materials mentioned above (and other TB educational materials), and an activities page that features an interactive map of World TB Day activities around the United States.

During the week of World TB Day, the CDC website home page featured a World TB Day "Spotlight." Also, the CDC en Espanol website featured a "Spotlight" and a World TB Day page in Spanish.

Finally, DTBE and the National Prevention Information Network (NPIN) created a 2006 World TB Day section on the NPIN webpage that contains information about World TB Day and various TB-related materials. The NPIN World TB Day webpage may be visited at http://www.cdcnpin.org/scripts/features/worldtbday_06.asp.

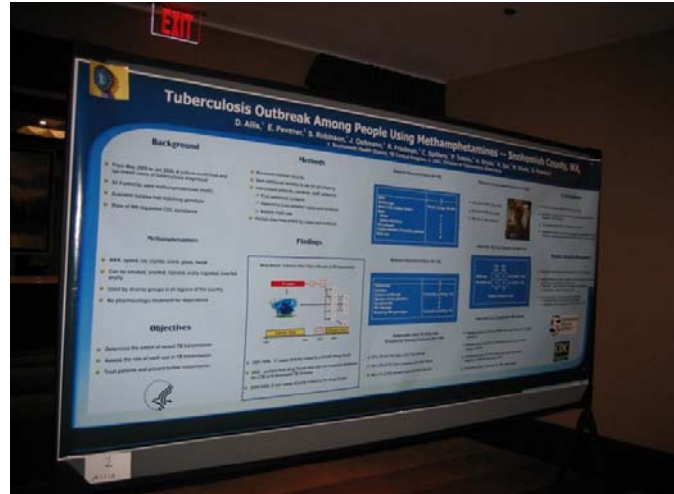
—Reported by Scott McCoy, MEd
Div of TB Elimination

National TB Controllers' Association Poster Contest

The first NTCA poster contest was held at this year's annual meeting. A panel of judges reviewed and rated all 59 posters based on relevance to TB control or TB elimination; clarity of information; and graphic/visual presentation.

The first-place award went to the poster entitled "Tuberculosis Outbreak Among People Using Methamphetamines--Snohomish County, WA." The authors were D. Allis, E. Pevzner, S. Robinson, J. Oeltman, R. Frieden, C. Spitters, H. Bruce, K. Ijaz, W. Hinds, and D. Peterson. The winning poster is pictured above.

The second-place award went to the poster entitled "Factors to Promote Screening for LTBI in Primary Care." The authors were J.C. Jackson, J.W.Y. Pang, S. Bryant, and N. DeLuca.



The third place award went to the poster entitled "Key Findings from the Regional Training and Medical Consultation Centers' TB Education and Training Needs Assessments." The authors were A. Khan, N. DeLuca, D. Ruggerio, R. Bhavaraju, C. Hayden, L. Lam, S. Meyers, K. Simpson, and A. Williamson.

One of the judges noted that what made these posters stand out from all the others were the relevant topics for all TB programs, as well as the use of clear, concise bullets instead of long passages of text. Other award-winning characteristics included a variety of graphic images such as graphs, charts, and photographs that were clear and concise, and the use of "white space" in the poster. The "white space" was beneficial in making the posters appealing to the eye, as well as easy to read.

Thank you to all the submitters for the research and hard work your posters represented, and congratulations to all the winners!

—Wanda Walton, PhD
Div of TB Elimination

EIS Conference a Success for DTBE

The 55th annual Epidemic Intelligence Service (EIS) Conference was held in Atlanta April 24–28, 2006. Every year this conference serves as a

robust mix of scientific presentations by current EIS Officers and recruitment activities for the incoming class of EIS Officers. Members of the incoming class spend the week meeting with representatives of programs throughout CDC, interviewing with programs that interest them, and then being matched to a program for their 2-year assignment.

Every year, DTBE actively promotes the work of its current EIS Officers and recruits from the new class. This year's conference was a big success on both counts for DTBE.



In regards to the presentations, the six current DTBE EIS Officers had eight abstracts accepted for presentation. Five were presented during this year's TB session, "TB or Not TB? That Is the Question," moderated by DTBE Director Kenneth G. Castro, MD. The session was well attended with standing room only. Presentations included summaries of a number of the TB-related epidemiologic investigations that were conducted recently in collaboration with our TB control partners in state and local health departments, and in international settings.

Three papers were presented outside the TB session. Kevin Cain, MD, presented one of his investigations during the opening session moderated by CDC Director Julie Gerberding,

MD. Sekai Chideya, MD, presented her work during the Wednesday poster session, and Eric Pevzner, PhD, presented one of his investigations during the Late-Breaker session, "The Latest and Greatest," moderated by EIS Director Douglas Hamilton, MD. Additionally, Shona Dalal, PhD, EIS Officer assigned to the Global AIDS Program (GAP), presented results from an investigation conducted in Nairobi that was supported by both DTBE and GAP. The tuberculosis presentations are listed below.

Rana Jawad Asghar, MD, an officer assigned to the Surveillance, Epidemiology, and Outbreak Investigations Branch, DTBE, presented "Tuberculosis Outbreak Investigation in a Crack House Reveals Limited Use of Traditional Contact Investigation Methods—Miami, 2004–2005."

Kevin Cain, MD, an officer assigned to the International Research and Programs Branch, DTBE, presented both "An Evidence-Based Approach to Improving Tuberculosis Screening in Persons with HIV Infection—Cambodia, 2005," and "Retrospective Cohort Study of the Impact of Surgery on Treatment Outcomes among Multidrug-Resistant Tuberculosis Patients—Latvia, 1997–2002."

Sekai Chideya, MD, an officer assigned to the International Research and Programs Branch, DTBE, presented "Use of Classification and Regression Tree (CART) Analysis to Develop a Diagnostic Decision Tree to Detect Tuberculosis among Sputum Smear-Negative HIV-Infected Persons in Botswana."

Shona Dalal, PhD, an officer assigned to the Global AIDS Program, presented "Risk for Tuberculosis Among Staff at a Nairobi Hospital: The Price of Serving the Community—Kenya, 2005."

Michele Hlavsa, RN, MPH, an officer assigned to the Surveillance, Epidemiology and Outbreak Investigations Branch, DTBE, presented "Uninterrupted *Mycobacterium tuberculosis* Transmission in a Rural Community—Indiana."

Eric Pevzner, PhD, an officer assigned to the International Research and Programs Branch, DTBE, presented both "Evaluation of Access to and Acceptance of HIV Testing Among Patients with Tuberculosis—Rwanda, 2005," and "Tuberculosis Outbreak Among People Using Methamphetamines— Snohomish County, Washington, 2005–2006."

Sarita Shah, MD, an officer assigned to the International Research and Programs Branch, DTBE, presented "Extensively Drug-Resistant Tuberculosis (XDR TB): Global Survey of Supranational Reference Laboratories for *Mycobacterium tuberculosis* with Resistance to Second-line Drugs."

Awards were presented to Kevin Cain, MD, and Kashef Ijaz, MD. Kevin was awarded the Paul C. Schnitker International Award for having made a significant contribution to international public health. Kashef was awarded the Philip S. Brachman Award for contributions that have made an important difference to the health, welfare, and happiness of the EIS officers and the EIS program. Since 2000, Dr. Ijaz has mentored numerous EIS officers during tuberculosis outbreak investigations.

In the meeting's recruitment activities, DTBE was successful in matching two new EIS Officers to assignments in the Division. Dr. Heather Lynch (soon to be Menzies) will be joining the International Research and Programs Branch, and Dr. Ann M. Buff will be joining the Surveillance, Epidemiology, and Outbreak Investigations Branch. Please see the Personnel Notes section of this issue for more information about these two new officers. They will arrive in July and August 2006 and join Drs. Michele

Hlavsa, Eric Pevzner, and Sekai Chedeya to give the division five EIS Officers.

—Reported by John Oeltmann, PhD
Div of TB Elimination

Regional Training and Medical Consultation Centers' TB Education and Training Needs Assessments: Key Cross-Regional Findings

Regional Training and Medical Consultation Centers (RTMCCs)
Areas of Coverage



In 2005, CDC funded four Tuberculosis (TB) Regional Training and Medical Consultation Centers (RTMCCs):

- Francis J. Curry National TB Center
- Heartland National TB Center
- Northeastern National TB Center
- Southeastern National TB Center

The RTMCCs are regionally assigned to cover the 50 states, the District of Columbia, New York City, Puerto Rico, and seven other U.S. jurisdictions in the Pacific and Caribbean. The goal of the RTMCCs is to build TB training capacity and to provide medical consultation within each Center's region. As part of their first year activities, the RTMCCs conducted extensive needs assessments to determine TB education and training resources and needs in their regions.

Methods

Each RTMCC developed its own strategy and tools to conduct its assessments; however, they all specifically focused on obtaining information on barriers to training; distance and technological training capabilities; preferred training topics and formats; awareness of existing TB resources; as well as preferred product topics and formats. The methods for the need assessments varied across regions but included

- Key informant interviews
- Online and print-based written instruments
- Focus groups
- Review of state TB program, epidemiology, and other data (e.g., Human Resource Development [HRD] plans)

The target audiences for the needs assessments included

- TB controllers
- TB program managers
- TB training focal points
- TB nurse consultants
- Frontline TB staff (local health department staff, physicians, nurses, and outreach workers)
- Private providers
- Others (e.g., HIV/STD, corrections, and substance abuse staff)

Cross-Regional Findings

Although the results from the needs assessments varied by region, below are some common cross-regional findings.

Barriers to Training

Some of the barriers to training included factors such as the lack of staff coverage while employees were attending a training; travel restrictions due to limited funds and policies; lack of awareness of trainings; poor accessibility to trainings due to isolated geography; and limited technological capabilities.

Preferred Training Formats

Live, in-person training at workshops and conferences ranked highly as a preferred training format among most needs assessment respondents. Other preferred formats included in-service meetings and written/self-study format. Telephone and audio-conferencing ranked low as a preference among respondents. The preference for online or computer-based trainings varied across regions and by profession. State TB program staff ranked preference for use of distance-learning technologies (CD ROMs, online courses, and web conferencing) higher than did frontline TB staff.

Distance and Online Learning Capabilities

Technological capabilities for distance and online learning varied across the regions; however, findings suggested that video-conferencing and satellite capabilities are limited throughout the country. Moreover, while most state-level TB program staff have access to computers and the Internet, local level TB staff have limited access.

Training Topics

Training topic priorities (not listed in rank order) varied by region and occupation, but identified priorities included

- Contact investigation (interviewing skills, locating contacts, outbreak response, working with the homeless and substance abusers)
- Case management
- Cultural competency
- TB basics for new employees
- Advanced TB training and CDC TB guideline updates for experienced staff
- Training targeted toward private providers
- Legal issues related to TB
- Multidrug-resistant TB
- Pediatric TB
- TB/HIV coinfection
- Laboratory issues

Awareness of Existing TB Resources and Products

Awareness of existing TB training and education resources differed between central level TB staff and frontline staff. Central level TB staff had a higher awareness of resources such as *The TB Education and Training Resources Website* (www.findtbresources.org), the TB Education and Training Network (TB-ETN), and the TB-Educate listserv compared to frontline TB staff. Lower awareness of such resources among frontline TB staff could be related to their limited access to the Internet. In terms of awareness of existing training products, the CDC Core Curriculum and Self-Study Modules were widely utilized, as were products from the former Model Centers.

Product Topics Desired

Products that help synthesize information in the new CDC guidelines (e.g., QuantiFERON-TB Gold Test, Contact Investigations, and Infection Control) in an easy-to-understand manner were identified as a need. Other desired products included a basic TB information packet for new employees, cultural competency materials, pocket reference lab guide, and products targeted towards private providers, homeless shelter staff, and infection control materials. In addition, patient education materials in low-literacy and multiple languages were also requested.

Preferred Product Formats

Although having access to materials online was considered important, findings also suggested that most respondents preferred printed materials to CD ROMs and other online-only resources. Furthermore, preference was high for products to be developed in quick and easy-to-read, easy-to-use formats such as reference cards, checklists, toolboxes, and videos.

Conclusions

The needs assessment provided the RTMCCs with information that will lead to the development of targeted trainings and products for each region. Moreover, similar findings across RTMCC

Francis J. Curry National Tuberculosis Center

3180 18th Street, Suite 101
San Francisco, CA 94110-2028
415-502-4600 (Phone)
415-502-4620 (Fax)
tbcenter@nationaltbcenter.edu (E-mail)
www.nationaltbcenter.edu

Heartland National Tuberculosis Center

2303 SE Military Drive
San Antonio, TX 78223-3542
800-TEX-LUNG (800-839-5864) (Phone)
210-531-4500 (Fax)
www.heartlandntbc.org

Northeastern National Tuberculosis Center

225 Warren Street
Second Floor East Wing
Newark, NJ 07103
973-972-3270 (Phone)
800-482-3627 (Toll-Free)
973-972-3268 (Fax)
www.umdnj.edu/globaltb

Southeastern National Tuberculosis Center

1329 SW 16th Street
Room 5187
Gainesville, FL 32608
352-265-7682 (Phone)
352-265-7683 (Fax)
<http://sntc.medicine.ufl.edu/>

regions will provide opportunities for cross-collaboration for training and product development. To address barriers to trainings and ensure awareness and access to products, the RTMCCs should consider

- Working with TB focal points to assist them in assessing and addressing local training needs
- Offering trainings in a combination of formats (e.g., stand-up and distance learning)
- Offering more trainings off-site within their regions
- Marketing trainings well in advance to increase awareness and to allow programs

adequate time to plan and allot funding for training and travel

- Marketing products to frontline TB staff
- Ensuring products are available in print format, especially for frontline TB staff

For detailed needs assessment reports for each region, please contact the RTMCCs (see above).

—Submitted by Amera Khan, MPH
Div of TB Elimination

LABORATORY UPDATE

Sessions at 2006 NTCA Workshop Focus on Laboratory Issues

The 2006 National TB Controllers (NTCA) Workshop themed *Eliminating TB: Fighting the Enemy*, was held in Atlanta, Georgia, on June 13-15. There were numerous breakout sessions each day to enhance discussions, as well as to share program and laboratory experiences and successes. This included two sessions aimed at enhancing the integration of laboratory services and diagnostics into TB programs.

The first laboratory breakout session, entitled *Integrating Laboratory Services into Your Program* and held on June 13, was led by John Bernardo, MD (NTCA), Anthony Tran, MPH, MT(ASCP) (APHL), and David Warshauer, PhD (WI). Since accessing appropriate laboratory services is becoming more important in the management of patients with TB infection and disease, the Association of Public Health Laboratories (APHL) published *The Future of TB Laboratory Services* in 2004. This report outlined a series of benchmarks that were recommended by a multidisciplinary task force to integrate laboratory services into a systems approach to TB control. Performing ongoing assessments of these laboratory services and costs, with feedback to programs and providers, is one such method to approach this systems integration. The group used the publication, *Mycobacterium*

tuberculosis: Assessing your Laboratory, currently undergoing revision, as its focus of discussion (<http://www.phppo.cdc.gov/mpep/pdf/mtb/tb-ayl.pdf>).

The second laboratory breakout session, entitled *Laboratory Issues* and held on June 14, was led by Dr. Bernardo and by Ed Desmond, PhD (CA). The new laboratory technologies that are changing the way we manage our patients with *M. tuberculosis* infection and TB disease, coupled with the recent arrival of groups resettled to the United States with high rates of multidrug-resistant disease, have raised concerns among programs and have overstretched already limited resources. Current and potential applications of these technologies for screening and managing high-risk patients, domestically and overseas, were discussed. Topics of discussion included issues such as specific techniques for the screening of high-risk persons; communication of information between laboratories, providers, and public health officials; research needs; and assessing costs of such services.

—Submitted by Anthony Tran, MPH, MT(ASCP)
Association of Public Health Laboratories
On behalf of the APHL TB Steering Committee

COMMUNICATIONS, EDUCATION, AND BEHAVIORAL STUDIES BRANCH UPDATE

“Stop TB in the African-American Community” Summit

More than 100 individuals from a myriad of organizations gathered to participate in the “Stop TB in the African-American Community” summit, which took place May 16–17, 2006, at CDC’s new Tom Harkin Global Communications Center in Atlanta, Georgia. The participants met to discuss the nature of this public health problem, exchange strategies, and identify ways

to help address TB in the African-American community. The summit was sponsored by DTBE and RTI International. The purposes of the summit were to

1. raise awareness about the problem of TB in the African-American community, and
2. create links and build networks that will lead to ongoing activities and strategies to decrease TB in the African-American community.



The photo shows Dr. Benny Primm, Executive Director, Addiction Research and Treatment Corporation – Urban Resource Institute and other attendees at the summit

In 2005, CDC provisionally reported TB cases in 3,927 non-Hispanic blacks, 28% of all persons reported with TB nationally. The proportion of TB in black, non-Hispanic persons is even greater if only U.S.-born persons reported with TB are examined. In 2005, 45% of TB cases reported in U.S.-born persons were among non-Hispanic

blacks. Also in 2005, the TB case rate for this population was more than eight times higher than the rate in white, non-Hispanic persons.

The summit included keynote addresses from Dr. Louis Sullivan, President Emeritus, Morehouse School of Medicine and former Secretary of Health and Human Services (HHS); and Dr. Garth Graham, Deputy Assistant Secretary for Minority Health, Office of Minority Health, HHS. CDC leaders also addressed the group, including Ms. Yvonne Lewis of the Office of Minority Health and Health Disparities; Dr. Kevin Fenton, Director of the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (proposed); and Dr. Kenneth Castro, Director of DTBE.

Summit participants learned about state-of-the-art research and interventions addressing TB in the African-American community, and learned directly from a panel of patients about their experience having tuberculosis. The majority of the summit was devoted to participants working in small groups to strategize actions that their organizations may be able to implement to help eliminate TB in the African-American community. Participants included community and religious leaders, health care providers, public health leaders, policy and decision makers, state and local health department staff, communications professionals, academicians, and others.



Dr. Louis Sullivan



Dr. Garth Graham



...and senior CDC staff

The work of the groups yielded a compilation of specific goals and action items that summit participants committed to trying to achieve in

the next year. A summary of all of the identified action items is forthcoming. Summit participants will maintain communication throughout the next year and measure progress towards implementing the action items.



Breakout session with conference participants

Although modern medicine can prevent and cure TB, only the concerted efforts of the community in partnership with public health and medicine will ensure that TB is eliminated from the African-American community. These partnerships, fostered by the summit, are a key component to mobilizing support for TB elimination as outlined in the 2000 Institute of Medicine's Report, *Ending Neglect: The Elimination of Tuberculosis in the United States*.

—Submitted by Nickolas DeLuca, PhD,
Div of TB Elimination
Rachel Royce, PhD, MPH (RTI International), and
Charles Wallace, PhD, MPH (Texas Department of
State Health Services)

TB EDUCATION AND TRAINING NETWORK UPDATES

Member Highlight

Regina Bess is a Health Education Specialist with the Communications, Education, and Behavioral Studies Branch (CEBSB) of DTBE. She received her bachelor of science degree from Alabama State University in Montgomery, Alabama. Her current duties consist of serving as project lead for the development of the DTBE Image Library; securing continuing education

credits for some of the division's conferences and publications; and assisting with the development of other educational materials.

Regina first learned of TB ETN while working in DTBE. She later had an opportunity to participate in one of the TB ETN conferences and was quite impressed with the content of the conference and the excitement and enthusiasm of the participants and staff. She especially liked the topics that were discussed at the conference as well as the opportunities for meeting and networking with other health educators. At that time she was not a Health Education Specialist; however, after completing the Health Communications Certificate training program at CDC, she was able to transition into her current health education position in CEBSB. Regina says that becoming a member of TB ETN has given her the opportunity to learn more about the health education process and how to best plan for and implement her health education projects. She is also a member of the Conference Planning Subcommittee. She hopes that TB ETN will continue to be an organization that can assist her fellow health educators gain the skills and knowledge they need to develop effective health education materials.

Regina has most recently served as the project lead for the development of the DTBE Image Library. The creation of the Image Library was the result of the combined efforts of CEBSB and CDC's Public Health Image Library (PHIL). It is composed of two parts: an *Intranet-based* system that is available only to DTBE staff, and an *Internet-based* system, available through PHIL, that houses most of the images available on the DTBE Image Library. The PHIL site is accessible to non-DTBE staff and persons outside of CDC. The Image Library promotes the collection and availability of images specific to TB-related subject matter and a wider variety of TB-related images to both the DTBE staff and non-DTBE users. The Image Library allows for the searching, retrieving, and storing of images at

any given time. Users of the DTBE Image Library can also submit images online.

In her leisure time, Regina enjoys shopping, cooking, and listening to music. She is also a gifted and accomplished vocalist and a very talented graphics artist.

If you'd like to join Regina 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 ETN, 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 Education and Training Network, visit the website at <http://www.cdc.gov.nchstp/tb/TBETN/default.htm>.

—Reported by Regina Bess and Ann Lanner
Div of TB Elimination

Cultural Competency Subcommittee

Over the past few months the Cultural Competency Subcommittee has been working on several projects related to their goal of promoting cultural competency among members of the TB Education and Training Network (TB ETN). Most recently, the subcommittee members have begun to focus much of their efforts on the development of an implementation strategy for marketing the Cultural Competency Resource List. The idea of making the marketing of this resource list a priority came about as a result of the needs assessment that was conducted by the subcommittee at last year's TB ETN conference (over 50% of the membership were not aware that it existed). At present, a work group from the Cultural Competency subcommittee will begin the process of developing a marketing strategy.

Other projects of this subcommittee include the review of drafts of the CDC Ethnographic Studies guides. These documents, developed by DTBE staff, are designed to serve as a resource for

health care providers, program planners, and any others serving persons from these countries to facilitate their provision of culturally competent TB education and care. Thus far, the Cultural Competency Subcommittee has reviewed the Mexican and Vietnamese ethnographic guides, and the Somali draft is currently under review.

In other news, the University of Alabama and the Southeastern National Tuberculosis Center will collaborate on the development of a TB-specific cultural competency guide. The guide, tailored for use with persons from the most commonly reported birth countries of U.S. foreign-born TB patients, is intended to improve the cultural competency skills of TB program staff and providers working with foreign-born persons. Long-term plans also include the implementation of a complementary training curriculum that will enable TB program staff and providers to understand and integrate concepts from the guide into contact investigation and patient education sessions with foreign-born persons. A formal evaluation of the guide and the training is planned.

Additionally, the Subcommittee will elect a new co-chair, because current co-chair Margaret Rohter's term ends on August 30. Bill Bower will remain acting co-chair for another year.

—Submitted by Kristina Watkins, MPH
Training Specialist
Southeastern National TB Center
University of Florida

TB EPIDEMIOLOGIC STUDIES CONSORTIUM UPDATES

TBESC Task Order 6 Update: Regional Capacity Building in Low- Incidence Areas

Background. The TB Epidemiologic Studies Consortium Task Order 6 (TO6) focuses on developing and implementing regional tools for TB control and elimination in low-incidence

areas. TO6 is being implemented through the Francis J. Curry National Tuberculosis Center of the University of California, San Francisco. Previous work identified the needs of four low-incidence states in the western region of the United States: Idaho, Montana, Utah, and Wyoming. Each of these states has differing TB epidemiology and TB control program structure, but they share the common challenge associated with maintaining TB control program and clinical expertise in the context of low TB incidence and few resources.

Process. Regional interventions were developed and prioritized through a consensus process that involved the four low-incidence states and many TO6 partners. The TB control programs of Idaho, Montana, Utah, and Wyoming actively participated in the development and implementation of a series of interventions. Advisory groups (AGs), comprised of members of each state's TB control program and/or public health laboratory, national experts associated with TO6 (the principal investigators, nurse consultants, and CDC staff), and TO6 staff were routinely convened to make decisions and communicate progress in each intervention area. For example, the Policy and Planning Advisory Group was convened to develop a TB Manual template to standardize practice and tailor national guidelines to each state's unique public health system. All AGs were facilitated so that the issues of importance to each state were raised and explored, and discussions were guided to ensure interventions will benefit the region. Evaluation plans are being introduced into each intervention to determine if objectives are achieved, and, where applicable, if TB control practice improved. Guidance of the evaluation components will also occur through an AG process.

Interventions. The interventions, which are at various stages of development or implementation, were designed to address the TB control programs' needs and include the following:

- A customizable TB manual template that presents national TB control guidelines for use in the field
- Assessments of regional laboratory practice
- Collaborative regional laboratory trainings
- Case management and contact investigation trainings using a collaborative model
- A short audio course on the medical management of TB
- Collaborative evaluation of a case management teleconference series
- Regional clinical consultation
- Tools for using genotyping and surveillance data to identify potential region-wide outbreaks, and to inform strategic program planning and program evaluation
- An outbreak response plan template
- A regional assessment of TB surveillance systems
- A regional TB elimination plan

Some of the interventions are completed or nearing completion. For example, the TB Manual template will be available online this summer; the audio course on medical management of TB has been completed and is available online at http://www.nationaltbcenter.edu/med_mgmt/; a final report of the evaluation of a case management teleconference series in Idaho has been completed and was presented at the CDC poster session at the ATS conference in May 2006 and at the NTCA conference in June 2006; the regional assessment of TB surveillance systems was completed. Regional laboratory trainings are currently being developed in collaboration with the National Laboratory Training Network. One laboratory survey has been completed and presented in a variety of venues. A follow-up laboratory survey is in progress. The case management/contact investigation training is being developed to precede and complement Utah's annual TB conference held in Salt Lake City. A draft outbreak response template is currently being evaluated in Idaho and will be finalized by fall 2006. The regional TB elimination plan is

currently being developed. Additionally, the surveillance and genotyping interventions are in early stages of development.

Outcomes. The regional interventions were created in order to put the concept of regionalization into practice and to assess whether tools created and implemented in a low-incidence region provide added value to TB elimination efforts. As these interventions are being evaluated, we hope to determine effective practices for eliminating TB in a low-incidence region.

—Submitted by Lisa Pascopella
Francis J. Curry National Tuberculosis Center
of the University of California at San Francisco
and Charles Daley
National Jewish Medical and Research Center

New TBESC Study to Be Launched: Evaluation of New Interferon-gamma Release Assays in the Diagnosis of LTBI in Health Care Workers

Principal Investigator: Chuck Daley
Co-Principal Investigators: Nick Deluca, Jerry Mazurek, Susan Dorman

The TBESC is planning a new study titled "Evaluation of New Interferon-gamma Release Assays in the Diagnosis of Latent Tuberculosis Infection in Health Care Workers." The study will evaluate the test characteristics, feasibility, and cost-effectiveness of interferon-gamma release assays (IGRAs) and the tuberculin skin test (TST) when testing for LTBI in health care workers (HCWs) at 4 to 6 TBESC sites.

HCWs make up a critical study population for IGRAs. According to the Labor Department, there are approximately 14 million HCWs in the United States, most of whom undergo serial skin testing. HCWs represent a diverse yet stable and accessible population with a wide range of rates of LTBI and risks of TB exposure. Testing them is costly and time consuming, but detection of new

infection is necessary for discovering *M. tuberculosis* transmission and for preventing occupation-related TB. The consequences of missing TB in a HCW are potentially disastrous (CDC. MMWR 2004: MMWR 2005).

Until recently the only method for detecting infection was the TST, which requires two-step testing for the initial evaluation. The TST has a number of important deficiencies: it lacks sensitivity and specificity, its results are influenced by BCG vaccination, and it requires two health care visits to obtain results. IGRAs have excellent sensitivity and specificity and provide some advantages over the TST. IGRAs require one health care visit, the result can be available within one day, and interpreting the test results is less subjective than for the TST. Many HCWs in the United States were born in countries where the incidence of TB is high and where BCG vaccination is routine. IGRAs using region-of-difference 1 antigens are not influenced by BCG vaccination, which may increase HCW confidence in the result.

IGRAs must be evaluated longitudinally in HCWs to determine the frequency of reversion and conversion, to determine the optimal definition of conversion, and to study the repeatability and reproducibility of these new tests. Because a switch from skin testing to IGRAs will represent a major change in our approach to testing HCWs, it is important to assess the utilization and acceptability of these new tests among patients and providers. Given the large number of HCWs in the United States, it is important to evaluate the cost-effectiveness of the different testing methods in health care settings.

The specific aims of the study are as follows:

1. To determine and compare the test characteristics (estimated sensitivity and specificity) of two IGRAs (QuantiFERON TB Gold [QFT-G] and T-Spot. TB) compared with each other and to the TST at initial testing.

2. To determine and compare the repeatability and reproducibility of the results.
3. To determine and compare the test characteristics of the two IGRAs compared with the TST in detecting the phenomena of "conversion" and "reversion."
4. To determine and compare the costs, cost differences, and cost-effectiveness of the three methods.
5. To determine and compare the feasibility of the three methods for serial testing of HCWs.
6. To determine and compare the acceptability and usability of the IGRAs compared with the TST among patients and providers.
7. To determine the extent to which, if any, the TST causes boosting of results from the IGRAs.
8. To observe how treating LTBI influences test results longitudinally.

After providing written consent, approximately 3000 HCWs from four to six TBESC sites will undergo a standardized interview and will be tested serially with all three tests, except for subjects who have 15 mm or greater of induration; they will be tested with the two IGRAs. Test results will be recorded as currently recommended by manufacturers' and national guidelines (*MMWR*, December 2005) and numerical output (i.e., the number of spot-forming cells and amount of interferon gamma produced) from the IGRAs will be recorded in order to determine the optimal definition for conversion. For HCWs who have two-step testing, two IGRAs will be repeated with the TST to observe whether the initial TST influences results from the IGRAs. A sample of HCWs will have each test performed twice at the initial testing in order to assess the repeatability of the assays. HCWs will be retested every 6 months after the initial testing until they have been retested at least three times (a total of four testings). The influence of treating LTBI will be studied by comparing longitudinal

test results in HCWs who do and do not receive treatment. Direct and indirect costs will be calculated for each test method for comparing costs for each strategy and determining cost-effectiveness. The acceptability and usability of the IGRAs by providers and the acceptability of the testing procedures by the patients will be assessed using qualitative methodology.

—Submitted by Chuck Daley and Rachel Albalak
TBESC

NEW CDC PUBLICATIONS

Asghar RJ. Promoting regional health cooperation: the South Asian Public Health Forum. *PLoS Med* 2006; 3(5): e108. Published May 2006.

CDC. Prevention and control of tuberculosis in correctional and detention facilities: recommendations from CDC. *MMWR* July 7, 2006; 55 (No. RR-9).

CDC. Tuberculosis control activities after Hurricane Katrina – New Orleans, Louisiana, 2005. *MMWR* March 31, 2006; 55 (12): 332-335.

CDC/DTBE. New Jersey Medical School Global TB Institute. Effective TB Interviewing for Contact Investigation: Facilitator-Led Training Guide and Self-Study Modules, 2006.

CDC/DTBE. Understanding the TB Cohort Review Process – An Instruction Guide, Video, and CD-ROM, 2006.

Holtz TH, Sternberg M, Kammerer S, Laserson K, Riekstina V, Zarovska E, Skripconoka V, Wells C, Leimane V. Time to sputum culture conversion in multidrug-resistant tuberculosis: predictors and relationship to treatment outcome. *Annals of Internal Medicine* 2006; 144(9): 650-660.

McElroy PD, Ijaz K, Lambert LA, Jereb JA, Iademarco MF, Castro KG, Navin TR. National survey to measure rates of liver injury,

hospitalization, and death associated with rifampin and pyrazinamide for latent tuberculosis infection. *Clinical Infectious Diseases* 2005; 41: 1125-1133.

Sterling TR, Bethel J, Goldberg S, Weinfurter P, Yun L, Horsburgh CR, and the Tuberculosis Epidemiologic Studies Consortium. The scope and impact of treatment of latent tuberculosis infection in the United States. *Am J Respir Crit Care Med* 2006; 173:927-931.

PERSONNEL NOTES

Philip Baptiste, M.Ed., left DTBE on June 23, 2006. Philip worked in the Information Technology and Statistics Branch as Project Lead for the NEDSS TB Surveillance PAM. As the Project Lead, Philip provided the leadership in carrying out tasks to ensure that the project met all the established timelines, costs, and performance goals. He was responsible for coordinating and disseminating information to the appropriate public and private groups concerning the project's progress at each lifecycle milestone.

In addition, Phil effectively used the CDC Enterprise System Catalog, an Internet Web application, to inventory all DTBE IT investments and thus allow DTBE to answer Office of Management and Budget and HHS data calls. Phil also conducted regular project analysis meetings to determine the progress of specific DTBE IT investments; excelled in preparing project documentation and other required materials, including those needed for the assessment and evaluation stages of IT project development; reviewed "Work Breakdown Structures" and prioritization criteria prior to and during IT project development and deployment; presented IT project schedule and performance baselines to the DTBE business steward for approval; intervened to prevent slippage of cost and schedule projections; and effectively participated in postdevelopment review of IT projects.

Phil was promoted to the position of Team Leader for the Public Health Information Network (PHIN) Support Section of the Alliance Management and Consultation Division of the National Center for Public Health Informatics (NCPHI), effective June 26, 2006. We will sorely miss him here at DTBE and wish him the best as he faces new challenges in his public health career.

Ann M. Buff, MD, MPH, who attended Dunwoody High School, Atlanta, and received a BA degree in history from the University of Notre Dame, joins the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB) on July 31 as its new EIS Officer. In 1997 she received her MD degree from Indiana University of Medicine in Indianapolis, and in 2003 she received her MPH degree from Tulane University in New Orleans. She comes to CDC from the Navy, where she has been a Preventive Medicine Officer and a Flight Surgeon.

Christine Robinette ("Robin") Curtis, MD, MPH, has left DTBE and accepted an Atlanta-based position with CDC's National Center for Immunization and Respiratory Diseases, effective April 1, 2006. This move was an exciting one for Robin as it will allow her to continue and complete work related to vaccine-preventable diseases and will also permit her to be closer to her family. As a U.S. Public Health Service Commissioned Officer assigned through DTBE to the TB Control Branch (TBCB) of the California Department of Health Services (CDHS), Robin served as Chief of the Outbreak Prevention and Control Section (OPCS), which was launched in July 2005 shortly after Robin's formal transfer to the assignment. In addition to other roles and responsibilities, she supervised the CDHS Multidrug-Resistant TB (MDR TB) Service, which is dedicated to the enhanced detection, treatment, and management of MDR TB cases throughout California. Robin earned her medical degree at the University of North Carolina at Chapel Hill in 1995. From 2001 through 2003 she

served as an EIS officer with the National Immunization Program. From 2003 to 2004 Robin completed CDC's Preventive Medicine Residency Program, during which time she earned an MPH degree at Emory University, and she served in a practicum assignment with California's TBCB from 2004 to 2005.

Andrea (Annie) Hoopes has joined DTBE as the first CDC Experience Fellow assigned to the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB). Annie was one of eight medical students chosen from among 50 who competed for this 1-year applied epidemiology fellowship. Annie graduated magna cum laude from Washington University in St. Louis, Missouri, where she majored in Classics and Humanities. She is presently a second-year medical student at the Ohio State University School of Medicine and Public Health. Annie spent four consecutive summers working on adolescent health research and school-based prevention programming through Case Western University's Center for Adolescent Health, and has co-authored a publication on the impact of adolescent spirituality on depressive symptoms and health risk behaviors. Annie is interested in health disparities research as well as international health. She plans to pursue a career in internal medicine, public health, and infectious diseases. Annie speaks and writes Swedish, Italian, and Spanish. Funded by a grant from Pfizer Inc, the "CDC Experience: Applied Epidemiology" fellowship at CDC provides medical students with an applied hands-on training experience in epidemiology and public health. Up to 10 competitively selected third- and fourth-year medical students from around the country spend up to 1 full year at CDC in Atlanta, Georgia. While at CDC, with the guidance of experienced CDC epidemiologists, they carry out epidemiologic analyses in areas such as birth defects, injury, chronic disease, infectious disease, environmental health, reproductive health and minority health.

Heather Joseph, MPH, left DTBE in June for a position in the Division of HIV/AIDS Prevention (DHAP). Heather is joining the Prevention Research Branch as a Behavioral Scientist on the Individual and Small Group Interventions Team. Heather joined DTBE's Clinical and Health Systems Research Branch (CHSRB) first as an ASPH fellow and became a Health Scientist on the Health Systems Research team a year later. During her 5 years with CHSRB, Heather has made significant contributions to numerous projects. The first was her involvement in a study assessing health care workers' adherence to TB treatment policies and protocols, which culminated in a publication in the *American Journal of Infection Control* for which she was lead author. With a background in anthropology, Heather contributed to the writing of a TB chapter in the *Encyclopedia of Medical Anthropology*, which involved an extensive literature review of the historical contributions made by the field of anthropology and other social sciences to TB control. One of her biggest projects was the ethnographic study of perceptions of TB among five foreign-born groups in the U.S., for which Heather served as co-PI, substantially contributing to the design, development, implementation, analysis, and reporting of the findings. Reporting has been via site reports, oral and poster presentations at professional meetings, and manuscripts that are in progress.

Heather has also made valuable contributions to the development of TBESC Task Order 13 LTBI study of factors associated with acceptance and adherence. One of only a few other social scientists on the study team, Heather helped conceptualize Phase 3 of the study and develop the numerous data collection instruments. She also actively planned and participated in implementing the interviewer and piloting trainings for the 12 participating study sites.

Heather also co-led a collaborative study with HRSA to enhance TB testing and treatment practices among HIV service providers. The project involved analyzing data from Ryan White Care Act funded providers and developing a

study protocol to conduct in-depth case studies among 6 selected HIV clinics. Additionally, Heather led a project to access Marketscan, an administrative claims and encounter database from the private health care sector, to determine its utility for TB health services research.

In addition to her research contributions, Heather played an active role in the development and implementation of activities led by the Evaluation Working Group. Besides helping to develop and deliver program evaluation trainings, Heather served as a member of the Evaluation Tools Team, where she assisted in collecting and assessing evaluation tools used by TB programs. Heather also contributed greatly to the development of the strategic evaluation plan, the TB Program Evaluation Handbook, and the Introduction to Program Evaluation for Public Health Programs. Finally, during her time at DTBE, Heather was offered the exciting opportunity with the International Experience and Technical Assistance program. She spent 3 months in Addis Ababa, Ethiopia working with the CDC-Ethiopia Associate Director of Science to develop a research agenda and build capacity in their local human research protections system. We will surely miss Heather's outstanding contributions and her ever-cheerful, spirited character.

Heather Lynch, MD, MPH, (soon to be Heather Menzies) will be joining the International Research and Programs Branch (IRPB) in August as its new EIS Officer. She arrives in Atlanta from Seattle, where she is working as a primary care pediatrician in public health at King County, and a project development advisor for the University of Washington Child Health Institute. Heather attended the University of North Carolina, Chapel Hill, and graduated with a BA degree in biology and anthropology in 1992, finished her medical degree at the Yale University School of Medicine in 1998, and also received her MPH degree from the University of Washington in Seattle. She has received numerous awards for community service, and

comes to DTBE with an interest in pediatric tuberculosis.

Scott McNabb, PhD, leaves DTBE on July 21 for a new position in CDC. He has been named the new Director, Division of Integrated Surveillance Systems and Services (DISSS), National Center for Public Health Informatics (NCPHI), Coordinating Center for Health Information and Service (CoCHIS). As Director of DISSS, he will lead CDC's efforts to identify, assess, and pursue national and international solutions to integrated surveillance and response efforts. While at DTBE, he led a related effort under Task Order #10 to identify, assess, and pursue integrated and user-friendly monitoring and evaluation tools for TB at the county and state levels.

As Director of DISSS, Scott will also lead CDC's efforts to develop, implement, and maintain common platforms, agency-wide systems, and applications for integrated solutions, including those for integrated surveillance, lab reporting, and response. He will lead the existing NEDSS, NNDSS/NETSS/NNDSS-link, and Epi Info activities, as well as the LRN Real Time Laboratory Information Exchange, the Specimen Tracking and Results Reporting System (STARRS), and the Coordinating Systems for Managing Outbreaks and Health Events (OMS). Since many of these efforts directly impact DTBE, we are happy to have someone who knows about tuberculosis in this leadership position.

Cheryl Scott, MD, has accepted a position as a DTBE/FSEB medical officer in the California Department of Health Services (CDHS). She comes to DTBE with 13 years of CDC experience in the areas of HIV/AIDS and global health, reproductive and child health services, program evaluation, and disaster epidemiology. From 1993 to 1995, Dr. Scott served in CDC's Epidemic Intelligence Service program while assigned to the CDHS Maternal and Child Health section, and later worked for 3 years as New Jersey's State Maternal and Child Health

epidemiologist. While at CDC headquarters, Dr. Scott led an update of postneonatal mortality surveillance and developed an evaluation strategy for the *Guide to Community Preventive Services*. During 2000-2005, while working with CDC's Global AIDS Program and the President's Emergency Plan For AIDS Relief, Dr. Scott established an in-country CDC office and directed an HIV/AIDS infrastructure development, care, and treatment program in the United Republic of Tanzania and Zanzibar. Prior to joining CDC, Dr. Scott provided clinical services to underserved populations in New York City and the U.S. Virgin Islands and worked on global health projects in Africa and India. Dr. Scott received her BA degree from the University of California at Santa Cruz and her medical degree from Boston University School of Medicine. She completed residencies in internal medicine at UCLA/Charles Drew-King Hospital in Los Angeles and in preventive medicine while at CDC. She received an MPH degree in international health from Johns Hopkins University School of Hygiene and Public Health. Dr. Scott has published in the areas of maternal and child health, disaster epidemiology, and HIV/AIDS.

Cheryl Tryon, MS, joined DTBE on June 12 as a Health Education Specialist in the Communications, Education, and Behavioral Studies Branch. Cheryl has over 25 years of experience in designing, developing, evaluating, and implementing health education and training materials. She began working at CDC in 1987, first in the Public Health Practice Program Office (PHPPPO), Division of Professional Development and Evaluation, then in the Global AIDS Program (GAP). Prior to coming to CDC, she developed health education materials for medical schools in Texas. Cheryl received her MS degree in Biomedical Communications from the University of Texas Health Science Center at Houston, and a BA degree in Art/Art Education from the University of South Florida, Tampa.

Cheryl is no stranger to our Division. While in PHPPPO, she worked on the original Self-Study Modules on Tuberculosis that were distributed nationally, and the supporting distance learning satellite broadcast entitled "Satellite Primer on Tuberculosis" back in 1995. She also worked with us on the supplemental Self-Study Modules and the Web-Based Self-Study Modules on Tuberculosis course. While in GAP, she worked with DTBE staff to develop and provide a train-the-trainer course in Botswana on implementation of routine HIV testing in the TB program. And earlier this year, she taught a TB program train-the-trainer class in Russia with CEBSB staff.

Many of the projects she has worked on have won international, national, and CDC awards for excellence in health education materials, including the Freddy award and the International Society for Performance Improvement award which were for joint projects with DTBE.

Holly Wilson, MHSE, CHES, has joined the Communications, Education, and Behavioral Studies Branch as a Health Education Specialist. Holly will be working with Maria Fraire on the Communications Team. Holly comes to DTBE from the Division of Viral Hepatitis (DVH) where she was also a Health Education Specialist. In DVH, Holly served as the acting team lead and her responsibilities included designing, implementing, and evaluating viral hepatitis education and communication campaigns for health professionals and the general public, and monitoring cooperative agreements. She received a BS degree in Health Science Education and a Master of Health Science Education degree from the University of Florida.

CALENDAR OF EVENTS

July 25–28, 2006

TB Program Management Intensive
San Francisco, CA
Francis J. Curry National TB Center
<http://www.nationaltbcenter.edu/training/index.cfm>

July 26–27, 2006

Meeting of the Advisory Council for the
Elimination of TB
Atlanta, GA
CDC, DTBE

August 11, 2006

TB Fundamentals
Columbus, OH
Northeastern Regional Training & Medical
Consultation Consortium
<http://www.umdj.edu/globaltb/courses.htm>

August 14, 2006

First Meeting of the Focal Points for Training
Atlanta, GA
CDC, DTBE
For info, contact: Amera Khan at
ARKhan@cdc.gov or 404-639-6428

August 15–17, 2006

Sixth Annual TB ETN Conference, "TB Training
and Education Magic: Tricks of the Trade"
Atlanta, GA
TB Education and Training Network

September 27–30, 2006

Interscience Conference on Antimicrobial Agents
and Chemotherapy
San Francisco, CA
American Society for Microbiology
www.icaac.org

October 21–26, 2006

Chest 2006 Conference
Salt Lake City, UT
American College of Chest Physicians
www.chestnet.org/CHEST/program/index.php

October 23–24, 2006

Northeast TB Controllers Meeting
Nassau Inn
Princeton, NJ
New Jersey Department of Health and Senior
Services
For info, call 973-972-0979

October 23–24, 2006

12th Annual Four Corners TB/HIV Conference
Radisson Woodlands Hotel
Flagstaff, AZ
For info, contact Gayle Schack
E-mail : gayle.schack@state.co.us
Tel: 303-692-2635
Conference website: www.fourcornerstb.org

October 23–27, 2006

2006 Program Managers Course
Atlanta, GA
CDC, DTBE

October 31–November 4, 2006

37th IUATLD World Conference on Lung Health
Paris, France
International Union Against TB and Lung Disease
www.worldlunghealth.org/Conf2006/