



Dear Colleague:

I join Dr. Kevin Fenton, Director, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), in congratulating recent recipients of the NCHHSTP Director's Recognition Award. The Global Perinatal Integration Working Group (GPIWG), which includes Heather Menzies, MD, MPH, of DTBE's International Research and Programs Branch (IRPB), and Alyssa Finlay, MD, formerly with IRPB, received the NCHHSTP Director's Recognition Award for August. Dr. Fenton cited the group's "leadership in promoting integrated global maternal, newborn, and early child health (MNCH) services. GPIWG has worked collaboratively to develop a compendium of interventions and 'best practices' for MNCH integration as well as a series of operational research proposals." Andy Heetderks of DTBE's Field Services and Evaluation Branch was awarded the September NCHHSTP Director's Recognition Award for his contributions to addressing multidrug-resistant (MDR) TB in the U.S.-affiliated Pacific Islands. Andy spent a tremendous amount of time and energy in efforts to secure medications for all infected patients and to ensure ongoing support of the program. In large part due to his efforts, 17 patients received life-saving treatment.

The Advisory Council for the Elimination of Tuberculosis (ACET) convened in Atlanta on July 14–15, 2009; a review of some presentations follows. Dr. Hazel Dean, Deputy Director of NCHHSTP, provided an update on Center activities. She reported that the President's 2010 budget includes increased funding over last year's funding level. However, most of it is for the domestic HIV/AIDS program, to focus on high-risk populations.

She also reported on NCHHSTP's H1N1 influenza-related activities. Scientists in NCHHSTP have developed recommendations relative to the novel H1N1 flu for individuals infected with HIV; these recommendations can be found at the CDC website http://www.cdc.gov/h1n1flu/hiv_flu.htm. Providers who are treating TB patients coinfecting with HIV will likely find the website useful.

In my update on DTBE activities, I reported the announcement of the 2010 TB Cooperative Agreement, for which submissions were due August 28, 2009. The competitive continuation will allow the use of unobligated funds.

I also reported on the newly revised Report of Verified Case of Tuberculosis (RVCT), which was introduced in January 2009. The form has been tremendously enhanced by this expansion. At the same time, completing the form has become more complex. To address this, a DTBE team has developed training materials that are being used to introduce and explain the new form. Please see the related article in this issue.

Dr. Drew Posey of CDC's Division of Global Migration and Quarantine (DGMQ) provided an update on immigrant and refugee health issues. The 2007 TB Technical Instructions for TB Screening and Treatment have now been implemented in 24 countries. With thousands of Bhutanese refugees expected to resettle in the U.S. from Nepal, a team representing ACET and NTCA travelled to Nepal in August to evaluate the TB screening and treatment program there. He also shared the news of the recent Notice of Proposed Rulemaking that would remove HIV infection from the list of inadmissible conditions. CDC will review and respond to comments; a final rule will be issued in October 2009 at the earliest.

Dr. Randall Reves reported on *A Call for Action on the Tuberculosis Elimination Plan for the United States*, which was written by the Stop TB USA–convened TB Elimination Plan Committee. At this point it is superfluous to state that the goal of eliminating TB by 2010, called for in the 1989 Strategic Plan for the Elimination of Tuberculosis, will not be met. The Committee further concludes that an elimination date of 2035 mentioned in the Institute of Medicine's 2000 report *Ending Neglect* (but only possible if new tools and strategies had been developed in the last decade resulting in 20% annual declines in TB rates) is also not attainable. Therefore, the Committee recommends a new timeline extending beyond 2035 be developed.

We heard updates from a number of workgroups. Several TB law–related resources have been developed by the Centers for Law and the Public's Health (Centers), including a state “model act.” Regrettably, the Centers and CDC/NTCA concluded that they could not reach an agreement about required revisions to the model act, and a menu of options for states to consider is being developed. The Interferon-gamma release assay (IGRA) Guidelines workgroup recommends the publication of the revised IGRA guidelines with minor edits, recognizing that some areas will need further research in the future. The revised guidelines for controlling TB in foreign-born persons are currently undergoing further revision. And the BCG Workgroup, which is developing guidelines for preventing TB transmission to U.S. health care workers and volunteers working in countries with endemic drug-resistant TB, will recommend the use of BCG as one option among an array of preventive measures. The BCG Workgroup will continue collecting data and comments, and will request final guidance from ACET on the plan.

The Mycobacteriology Laboratory Branch (MLB) recently underwent external peer review, as required by CDC policy. As of September 1, 2009, MLB began offering the new service of molecular detection of drug resistance (while continuing to offer conventional testing). This process involves use of a DNA sequencing–based assay that will detect mutations associated with drug resistance. We also heard about the new MLB laboratory consultant positions. These consultants—Angela Starks, Frances Tyrrell, and Tracy Dalton—are providing advice and assistance to TB control programs in carrying out the lab component of TB cooperative agreements.

The two research consortia have both been undergoing recompetition. The TB Trials Consortium (TBTC) recompetition for its next 10-year cycle has recently concluded. A number of proposals were received, and awards were made in mid-September. More information on the new TBTC sites will be forthcoming soon. The TB Epidemiologic Studies Consortium (TBESC) in its original form conducted studies in a variety of research areas. The new TBESC will conduct research on one priority topic and carry out one major multisite protocol with a number of substudies; all sites will participate in the main study rather than competing with each other. New sites are expected to be selected by summer 2010.

A number of DTBE staff attended this year's National HIV Prevention Conference, which was held August 23–26. This conference, held in Atlanta every other year, offers CDC staff a chance to learn about innovations in the HIV/AIDS arena and interact with our colleagues in that field. With the theme "Innovation and Action to End the Epidemic," the conference featured some topics that have not been addressed at previous conferences, such as new approaches to understanding stigma and discrimination. In addition, several important speakers provided their experiences and perspectives. On August 23, Earvin "Magic" Johnson spoke at the opening plenary session. U.S. Secretary of Health and Human Services Kathleen Sebelius and CDC Director Thomas Frieden also spoke, presenting on August 24 in a special afternoon session. On August 25, Jeffrey Crowley, Director of the White House's Office of National AIDS Policy, held a special Town Hall Meeting to discuss plans for development of a national HIV/AIDS strategy. Finally, on August 26, distinguished members of Congress presented at the closing plenary session, "The Power and Politics of Prevention."

Kenneth G. Castro, MD

In This Issue

Highlights from State and Local Programs	5
Implementing and Revising Louisiana’s Guideline for Disaster Preparedness for TB Control	5
Addressing the Control of TB with Diminishing Resources	6
John Doe #213: An Example of Effective Collaboration at Multiple Levels	7
DTBE’s Comprehensive and Innovative Training Program on the Revised RVCT	9
TB Education and Training Network Updates	10
TB ETN Ninth Annual Conference and TB PEN First Annual Conference	10
Member Highlight	11
TB ETN’s Ask the Experts	12
A Physician’s Perspective: TB in Pakistan	13
Cultural Competency Update	14
Communications, Education, and Behavioral Studies Branch Update	15
Farewell to a Longtime Colleague	15
Mycobacteriology Laboratory Branch Update	16
<i>Col</i> aboration within the Village	16
Surveillance, Epidemiology, and Outbreak Investigations Branch Update	17
2009 ATS Conference	17
New CDC Publications	18
Personnel Notes	19
Calendar of Events	24

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.

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HIGHLIGHTS FROM STATE AND LOCAL PROGRAMS

Implementing and Revising Louisiana's Guideline for Disaster Preparedness for TB Control

In August 2005, Hurricane Katrina caused wide disruption of tuberculosis (TB) services, TB infrastructure, and loss of patient records within the Louisiana Office of Public Health (OPH). Owing to these experiences and the coastal nature of much of the state, the OPH's TB Control Program developed a guideline entitled *Disaster Preparedness for TB Control* for use by state, regional, and parish TB staff. The guideline was designed to provide continuity of TB medications, lessen the disruption of TB services, and retain medical records located in at-risk areas. Several strategies in this document were implemented and shown to be successful 3 weeks after Hurricane Katrina, during Hurricane Rita. Other strategies were subsequently developed and refined over the past 2 years in response to Hurricanes Gustav and Ike.

Key elements in the guideline allow for continuity of patient care, including the provision of TB medications and a follow-up plan for displaced patients. A 30-day supply of self-administered medications requiring physician authorization was issued to all patients in areas under evacuation. Medication regimen and dosage changes were required on all TB patients on intermittent therapy to change them to daily self-administered therapy. Patients received medications from Disease Intervention Specialists (DIS) and were instructed to notify shelter staff of their TB status if they sought housing at a shelter. Patients were asked to

contact their case manager as soon as they were able to return home; those who could not immediately return home were told to contact the local health department in whatever area they temporarily settled. During Hurricane Gustav, TB program staff reviewed 111 case and suspect patient records, wrote prescriptions, and delivered medications within 48 hours. After the storm, all 111 patients were located and returned to supervised therapy. The plan for record retention worked well during the evacuation and no historical or current patient information was lost, despite two health units being destroyed.

There were several other key elements to a successful plan that were not included in the guideline. Louisiana TB Program staff collaborated with the National TB Controllers Association (NTCA) to share information on those patients who relocated to another state. Similarly, a referral center was established within CDC's DTBE to facilitate locating patients and reporting on the return of patients to supervised TB care. Successful strategies not included in the first version will be included in the revised guideline. Before each hurricane season, regional TB managers are instructed by TB Program staff to request additional medications from the state pharmacy to increase the stock supply in each region. The Louisiana TB Program was pleased with how the guideline was activated and implemented, and how successful the regional TB staff were in providing medications to TB patients under evacuation orders in Louisiana. The guideline is currently under revision to incorporate the lessons learned and to make it a more effective and efficient tool.

*—Reported by Kathryn Guillen
Div of TB Elimination*

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 for other publications, information, and
 resources available from DTBE.

Addressing the Control of TB with Diminishing Resources

The implementation, coordination, and maintenance of TB prevention and control activities are resource-intensive endeavors. The recommendations for diagnosis, treatment, containment, investigation, and prevention were drafted and published before the current economic downturn, and were likely based upon the assumption that resources from state and federal entities would be commensurate with demand.

Unfortunately, this is not the case. Reductions in funding due to state budget cuts and federal rescissions have seriously degraded the operational capabilities of TB control programs across the country. Against this backdrop, the individual states seek ways to “work smarter” and identify innovative approaches to control a condition that kills millions each year around the globe. Please note the following example of how Alabama is attempting to address this issue.

Public-private partnerships in TB control

In the past 2 years, staff members from the Alabama Department of Public Health (ADPH) Division of TB Control have conducted three separate contact investigations in a poultry processing plant in the area of Decatur, AL. All seven cases detected in the plant investigation were in persons from the same South American country, and an eighth case from another plant matches one of the two genotypes associated with these cases. A total of 721 tuberculin skin tests (TSTs) were placed and read by TB program field staff, and 235 contacts with latent TB infection (LTBI) were identified. Of the workers identified as contacts, 216 were started on treatment for LTBI. Fully one third (33%) of the workers tested were TST positive. Secondary cases of TB were found in each of the three investigations.

On January 18, 2008, ADPH staff met with poultry plant corporate officials and asked them to consider pre-employment screening of workers, in the hope that implementation of such a voluntary program would prevent the introduction of new TB cases into the workforce and reduce the frequency of large-scale investigations. The ADPH staff felt that successful implementation of a sustainable screening program that included treatment for LTBI would yield benefits beyond the workplace.

As the ADPH staff negotiated with their new corporate partner, the following complicating factors were encountered. First, an aggressive media market (print and television) began distributing xenophobic pieces that upset a number of people in the community, and a significant amount of staff time was required to respond to individual callers to the health department. Second, local politics became involved, and one individual spoke out against the corporate partner—suggesting that the current hiring practices put the public at risk.

The State Health Officer intervened and facilitated a discussion that ended in a “win-win”

agreement that shared credit for the solution and avoided burdensome legislation.

A “memorandum of understanding” between the new corporate partner and ADPH was signed on April 15, 2008. The agreement formalized the relationship and enables ADPH to initiate treatment for those employees found to be latently infected through employment screening, and then to delegate monitoring and ongoing treatment of LTBI. Any employee found to have disease was to be followed up by ADPH staff.

This partnership enables the ADPH to stretch limited public health resources. Once the partnership was in place, the corporate partner became a valued colleague and was included in programmatic and clinical updates. A message to take away from this is that successful partnerships require routine maintenance. After initiating a partnership, stay involved; develop and maintain the relationship to ensure its sustainability. Otherwise, you risk losing all the efforts and gains you had made to that point.

—Reported by J. Scott Jones
Div of TB Elimination

John Doe #213: An Example of Effective Collaboration at Multiple Levels

On April 25, 2008, paramedics responded to a call from a local motel in Jersey City, NJ. When they arrived, they found an emaciated and unidentified 31-year-old Asian-Indian male who was incoherent and could not move. He was admitted to the ICU as John Doe #213. Neurological, cardiology, and infectious disease evaluations were performed. A computed tomography (CT) scan of the brain showed changes compatible with a stroke. A chest x-ray showed bilateral upper-lobe nodular infiltrates and bilateral pleural effusions. Three sputum smears were positive for acid-fast bacilli (AFB). Mr. Doe was moved to respiratory isolation on April 28 and started on an initial four-drug treatment regimen as a TB suspect. The result of

an HIV antibody test was negative. *M. tuberculosis* was subsequently identified on culture, susceptible to all first-line drugs.

The hospital reported the newly identified TB suspect to the Hudson County Chest Clinic upon initiation of anti-TB therapy. Upon initial visit, Mr. Doe was belligerent towards chest clinic staff stating, he was “not sick and did not need to deal with the health department.” As early as April 30, John Doe was threatening to leave the hospital against medical advice, and on May 6 the local health officer issued an isolation order. Health department staff eventually established rapport by paying for television privileges in 5-day increments in exchange for information about himself and his potential contacts. This approach, however, did slow down the acquisition of essential information. During this time it was learned that John Doe had been in the U.S. illegally since 1996. He reported that he had been working in various liquor stores in Newark. He had been sick with a cough since January 2008 and had lost 85 pounds, and had been taken to the Jersey City motel by “friends” from Essex County. Eventually, the address of his residence prior to being taken to the motel was disclosed; it was in Belleville (Essex County).

The contacts at John Doe’s prior residence were evaluated by the Lattimore Practice at the New Jersey Medical School Global Tuberculosis Institute in Newark. This clinic provides TB prevention and control services to the residents of Essex County. Six people lived in his previous residence in Belleville, including children; five had latent TB infection and one had active TB disease upon evaluation. These contacts refused to allow John Doe to return to the residence after hospital discharge, despite assurances that he presented no danger to them or to others who might enter the residence. The head of the household, however, did provide the health authorities with John Doe’s passport, which showed no evidence of legal entry into the United States.

John Doe's TB disease continued to improve clinically with consistently negative smears after 1 week and consistently negative cultures within 1 month of initiation of therapy. His concurrent conditions seriously complicated discharge planning, particularly the residual effects of the stroke. Mr. Doe had no health insurance, and his illegal status made him ineligible to access essential services that would be required post-discharge. Mr. Doe required a leg brace, but could not put it on or stand without assistance, and could not ambulate without the use of a walker. Further complicating matters was his consistently professed unwillingness to adhere to a regimen of DOT upon discharge. He repeatedly stated that upon discharge, "No one will be able to find me." Both of these factors made him ineligible for the American Lung Association's housing program used by the state TB program to provide room and board to homeless patients with active TB disease throughout their course of treatment.

The hospital informed the chest clinic on May 15 of its intention to discharge the patient to the clinic's care. The state TB program intervened to prevent this inappropriate discharge, pending a meeting between all parties on May 29. The aim was to develop a discharge plan that would protect the public health and provide the patient with an opportunity for success in overcoming or coping with his other health issues. During the meeting, it was agreed that the most prudent course of action was to return the patient to the care of his family in India. At this point adversaries became allies, as all parties agreed to their roles in the execution of this plan.

The hospital agreed to pay for the airline ticket to return the patient to his family in India. The Hudson County Chest Clinic staff agreed to attempt to convince him that returning home was his best course of action, since they had been successful in establishing rapport with the patient. The state TB program agreed to work with the Indian Consulate in New York City to secure the documents necessary for the patient

to legally leave the U.S. and return to India. The TB program agreed to transport the patient to Newark Liberty International Airport for his flight and coordinate with the quarantine station at the airport to streamline the boarding process. The TB program advised Indian health authorities of the patient's condition and treatment history, his arrival date, and his family's residence address to facilitate continuity of therapy.

All parties followed through with their respective responsibilities as agreed above. The patient was provided clothing, money for travel, a copy of his medical record, and a 1-month supply of Rifamate, and boarded his flight for India on July 23, 2008.

Lessons Learned

If you are deathly ill and your "friends" want to drop you off at a motel in a different city from where you reside, they might not be your "friends."

Even if your patient is initially resistant to interview or rapport-building efforts, be persistent until you find an incentive that provides the patient a reward sufficient to foster disclosure and cooperation.

Never allow a hospital to inappropriately discharge a TB patient to the street, but do not abandon the hospital to deal with the issue alone. Stay engaged and become a partner to assist in resolving patient management and discharge issues. Such an approach will minimize discharge surprises in the future.

As illegal immigration increases and access to social services and health care decreases for this high TB incidence population group, situations like the one described above will increase in number and complexity. Remain open-minded, explore all options, develop a feasible plan, and assign mutual responsibilities to achieve a favorable outcome for all parties, including the patient.

All interested parties working collaboratively can achieve more than public health working alone—collaborate whenever possible to achieve your objectives.

—Reported by Thomas D. Privett
Div of TB Elimination

DTBE’s Comprehensive and Innovative Training Program on the Revised RVCT

Background

The Report of Verified Case of Tuberculosis (RVCT) is the standardized data collection form of the National Tuberculosis Surveillance System (NTSS). DTBE determined that the RVCT needed to be modified to identify priority issues in TB control and to accommodate the changing epidemiology of TB in terms of risk factors, new drug treatments, and enhanced laboratory capacity for diagnostic tests. The revised RVCT, implemented in January 2009, includes 11 new variables and 25 revised items. The revision is the culmination of years of work by the DTBE-sponsored RVCT Work Group, which included nearly 30 persons from DTBE, the National Tuberculosis Controllers Association, and state and local TB programs.

RVCT Training Course

An interdisciplinary training team at DTBE (see photo) was assembled to develop training materials on the use of the RVCT that would ensure the quality and completeness of the data being recorded on the form. This team created a comprehensive and innovative training program that has been used to teach almost 300 TB health care providers from over 85% of the 60 NTSS reporting areas. To allow training to occur



in multiple settings, the RVCT training materials include a set of modules that can be used in either a facilitated training



course or as self-study. The modules provide instructions for completing each item on the RVCT form, case studies to enable participants to practice applying the instructions to life-like situations, and a post-test to determine participants’ increase in knowledge of the course content. The modules include a facilitator guide for trainers who will teach staff how to accurately complete the RVCT. In addition, a separate training-of-trainers course was developed to build the training capacity at the state and local levels. Over 80 persons have been trained to facilitate the RVCT training course.

Before full implementation, the RVCT training program was extensively field tested and reviewed. In course evaluations, participants indicated that

- The facilitator-led training course was effective
- They were confident that they could accurately complete the new TB surveillance form after having attended the course.

Health care staff have been very enthusiastic about the training program. Following are selected comments from the RVCT training course participants:

“After the RVCT training, I realized there were some items that I thought I was filling in correctly, but now I know that I need to change some things.”

“The exercises were comprehensive and detailed, and the case studies were good for testing knowledge.”

“Excellent and useful scenarios. I will be able to use these materials at home.”

Awards

The RVCT training team has received the following awards for developing the RVCT Training Program:

- 2009 CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Honor Award - Customer Service Award
- CDC/DTBE Director's Recognition Award, 1st Quarter (January-March) 2009

Elvin Magee training health care workers on the RVCT.



Partners

Development of the RVCT training program has been a truly collaborative effort that included many stakeholders from the United States and its jurisdictions. The RVCT training team would like to acknowledge and thank our many partners who provided input and insights into the RVCT training materials.

How to Obtain the RVCT Training Materials

For more information on the RVCT and the training materials, visit www.cdc.gov/tb or ftp://ftp.cdc.gov/pub/Software/TIMS/2009_RVCT_Documentation/RVCT_Training_Materials/

Continuing education units are available free of charge for the RVCT Self-Study Modules.

*—Reported by DTBE's RVCT Training Team:
Elvin Magee, Cheryl Tryon, Lilia Manangan, Al Forbes, and Bruce Heath*

TB EDUCATION AND TRAINING NETWORK UPDATES

TB ETN Ninth Annual Conference and TB PEN First Annual Conference

Conference Highlights

The TB Education and Training Network (TB ETN) held its ninth annual conference July 28–30, 2009, in Atlanta, Georgia, in conjunction with the first annual TB Program Evaluation Network (TB PEN) Conference. Participants numbered 175 and represented state and local TB programs, non-profit organizations, and academia, from across the United States, as well as from Canada, Haiti, Nigeria, Egypt, China, and the Philippines.

This year's theme, *TB Education and Training: Recipes for Success!*, inspired exciting presentations and activities throughout the two-and-a-half day meeting. Plenary topics included understanding generational differences and the implications for educators; program evaluation



and the implications for training and education; and health literacy. Presenters from TB program areas spoke on a variety of topics, including the implementation of a TB education program for adolescents, using the educational process to improve LTBI treatment in a crack cocaine community, and challenges and opportunities of TB program evaluation in Arkansas.

In addition to the plenary sessions, there were a variety of engaging and useful breakout sessions held throughout the conference. Session topics included strategies for evaluating TB education and training, developing logic models, using the systematic health education process to develop materials, and designing effective PowerPoint presentations.

For the first time, a special lunch-time roundtable session was held for TB ETN members who were interested in research design, course development, materials development, and cultural competency. The roundtable sessions provided an opportunity for participants to network, discuss topic challenges, and share common experiences.

Learning and networking continued outside of formal plenary and breakout sessions. Participants viewed posters submitted by their colleagues and visited exhibits featuring TB education and training resources from DTBE, the Regional Training and Medical Consultation Centers, and state and local TB programs, among others. Tuesday evening's social event gave attendees a chance to catch up with old friends and to make new ones.

Although evaluations will not be available for several weeks, many attendees indicated that they enjoyed the conference and they learned a lot. Having the conference with TB PEN this year provided new learning opportunities, as well as a chance to meet some new folks.

—Reported by Peri Hopkins, MPH
Div of TB Elimination

Member Highlight

Editor's note: Rachel is on sabbatical from the public health position described here, and is currently in India.

Rachel Purcell, MPH, served as the Director of Education and Training at the Bureau of TB and Refugee Health, Florida Department of Health. She received a B.S. degree in

Psychology at Illinois State University and an MPH with a concentration in health education at the University of South Florida.

Rachel's main responsibilities were to plan and conduct education and training activities for the state of Florida, specifically for professionals who work in TB. As chair of the Statewide Meeting Planning Committee, Rachel coordinated the planning of their yearly meeting for TB professionals throughout the state. The Statewide Meeting includes expert speakers and cutting-edge content. "But this meeting is definitely a team effort," Rachel noted. In addition, she developed a 1-hour presentation on cultural competency as part of their TB Contact Investigation Course. "Here at the Bureau, we typically work as committees to get input from multiple disciplines," she reported.

Rachel also worked on compiling a packet for primary care physicians and private providers. These packets will include quick-reference material for use by clinicians who rarely work with TB when confronted with a TB patient. The material included will come from a variety of sources, including CDC, the Regional Training and Medical Consultation Centers (RTMCCs), and the Florida Bureau of TB and Refugee Health. "Although I was trained as a Health Educator in public health, my prior interest was in drug abuse prevention, violence prevention, and other social aspects of public health. I had never thought about TB. I have learned so much in the last one and a half years, and it has opened my mind tremendously.

The interconnectedness between the medical and social aspects of TB truly fascinates and inspires me," Rachel stated.

Rachel learned about TB ETN when she began working



for the Bureau of TB and Refugee Health. She was told about TB ETN by co-workers who recommended that she join. She joined TB ETN to network with other TB health educators and professionals, learn from others, and apply new skills in her everyday work. She was also a member of the cultural competency subcommittee. She joined this subcommittee because of her interest in cultural diversity and competency. "I believe this is an area that needs attention in TB care and treatment," Rachel explained. In the next couple of years, Rachel would like to see TB ETN expand its membership by marketing to TB professionals who conduct training, but don't consider themselves "educators."

In Rachel's spare time, she enjoys cooking creative vegetarian food, walking, practicing yoga, and studying philosophy.

If you'd like to join TB ETN and take advantage of all the network has to offer, please send an e-mail requesting a 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 Tuberculosis Elimination, CDC, 1600 Clifton Rd., N.E., MS E10, Atlanta, Georgia 30333. Or, visit the [TB Education and Training Network](#) website for additional information.

—Reported 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 am not very skilled with the computer and until recently have been using photographic slides and overheads when giving presentations. I would like to use PowerPoint but don't know where to start. Can you help?

Answer:

Fortunately, PowerPoint is easy to use, which is why it is used so often. But, it is also easy to overdo things when you are tempted by all the fancy options the software developers added to the program. These 10 tips will help you develop a professional-looking presentation that will keep your audience engaged.

Designing Good PowerPoint Slides

1. *Choose an appropriate color scheme.* For presentations in a well-lit room, choose a light background and dark text. If you are presenting in a darkened room, then a dark background with light text works better. If in doubt, bright yellow text on a blue background is always a good option.
2. *Pick a font size and style and then stick to it.* Use the same font size and style throughout your slides. It is distracting if the appearance of the slides keeps changing. For presentations, font styles that are "sans serif" such as Arial or Tahoma are easier to read than "serif" styles such as Times New Roman. In general, aim to use 40-48 size font for titles and 28-32 size font for slide text.
3. *Maps and Signs Keep the Audience from Getting Lost.* Objectives act as a road map, telling your audience where you are going, and titles act as signposts. They also help you organize your material. The presentation title should be able to tell the story in the same way that a newspaper headline tells the story of the article below. Headlines should be short and "punchy." Put headlines in a larger font than the rest of the slide.
4. *A picture is worth 1000 words.* Use quality graphics and clipart images that are relevant to your topic. Pictures should *add* to what you are saying; don't

use them as “filler,” because the audience may become distracted by them and not listen to what you are saying. Ask yourself: Without reading the text, does the visual tell me what the text says? Is the visual “attached” to the correct text? Does the tone of the graphic match the tone of the text? Equally useful are stories and case examples that act as verbal pictures.

5. *Use simple graphs and charts to illustrate statistics and trends.* Scanning or cutting and pasting tables from journals will give you very small text, and these graphics are often much too complex to see and understand from the back of a large room. If you aren't sure how, ask a co-worker to help you make your own simple graphs and charts to add to a slide. It's easy once you get the hang of it.
6. *Just because you can, doesn't mean you should.* Animations can take a lot of time to set up and rarely enhance a presentation. It may be distracting to have text moving on and off the screen or lines of text being slowly revealed. The audience may find themselves thinking about what is coming next rather than what you are saying.
7. *The audience is there to hear you.* Keep each slide to one core idea, with no more than five points to a slide. If you have a great deal of text on a slide, it becomes very difficult to fit without reducing the font size. Also, the audience will be tempted to read and not listen, and they can do that more easily in their own offices!
8. *Don't start a sentence with:* “This is a really busy slide...” If it's busy for you, then it's certainly busy for the audience, so don't use it! Nor should you say, “You

really don't need to know this, but....” If we don't need to know it, then why include it?

9. *Run Spell Check.* Then have a co-worker (or several) review spelling and grammar. Spelling, typing and grammar errors make it look like you didn't take time to prepare and quickly lose credibility.
10. *Count your slides and time your talk.* Nothing is worse than going to an event that runs over into your lunch hour, or the babysitter's time limit. Think about how long it will take you to get through each slide -- a title slide only takes a couple of seconds, but a graph or picture may take a couple of minutes to explain.

Done properly, PowerPoint presentations can be an extremely effective way to share your message with an audience. Designing a PowerPoint presentation can be a fun and creative activity once you've learned some basic skills. For more information about using PowerPoint, visit www.microsoft.com

Do you have a question about TB education, training, or communication issues? In each issue of *TB Notes*, a TB education and training expert will answer questions about these issues and topics submitted by *TB Notes* readers. Just submit your question to tbetn@cdc.gov. Please keep your questions as brief as possible. Please note, we reserve the right to edit questions.

A Physician's Perspective: TB in Pakistan

Dr. Bashir is a special projects epidemiologist in Arizona and serves as Deputy TB Control Officer for the state. She attended medical school in Pakistan from 1983 to 1989.

Tuberculosis in Pakistan is commonly known by its English names, tuberculosis or TB. It carries a huge stigma; a person who has TB is ashamed

to tell others, and that person is shunned by society. People are scared to talk to or be near someone who has TB. People in Pakistan know TB is a serious disease and that other people can get it. In urban areas, depending on a community's education and exposure to media (e.g., TV), they may or may not understand how TB is spread. Many correctly think TB is spread through respiratory secretions, while in the rural/village areas they know it can be spread to others, but they usually do not know how it is spread. People in Pakistan think TB runs in families and is due to some weakness in the person. Generally, people know the symptoms of TB such as coughing a lot, coughing up blood, and losing weight. People associate this disease with the poor, street dwellers, bad health, and those living in overcrowded conditions.

There are still TB sanatoriums in Pakistan. People know that is where you can get treated for TB. These places will house a person with TB at no charge and treat the disease. The treatment one receives for TB depends sometimes on one's location. In urban areas, a person will tend to go to the physician and hospital first, while in rural areas or villages they may first go to the Hakim (local medicine man who is not a physician) or to a homeopathic medicine man (also a nonphysician). In these situations, the treatment basically consists of herbs and prayers. For most Pakistanis, the trend is to go first to the physician, then to the Hakim.

TB treatment in the community can be a challenge depending on the affordability and availability of the medications, as well as on the impact of stigma. In my own experience as a medical student and from talking with other Pakistani physicians, the TB sanatoriums were the best thing available. Some medical schools in Pakistan offered a clinical rotation in a TB sanatorium, including the one I attended. It provided great hands-on experience. The TB sanatorium where I worked was an open ward, with multiple beds and patients and a lot of windows that were open during the day, allowing

for a lot of exchange of the inside with the outside air. There were no negative-pressure rooms; however, the health care workers and medical students wore surgical masks. Most of the medical students had never heard about directly observed therapy (DOT) when treating TB patients. When I think about it, you could say the TB sanatorium was a form of DOT.

Education on TB in the medical schools was good—detailed and thorough. They put a lot of emphasis on learning about prevalent diseases like tuberculosis. We were taught by lectures, tutorials, and tests (both written and orals) and through the clinical rotations in clinics and the hospital setting, including the TB sanatorium. We had more than an ample supply of TB cases.

The public health programmatic involvement in TB was something most of us did not know anything about. In medical school, the only public health exposure was our community medicine rotation, which included going to the water development plant and learning how pasteurization is done, but there was nothing in the area of public health interventions for TB. We were never taught about the public health aspects of TB or what is done at the government level or the local level. In my own and other colleagues' perspective, public health has a long way to go in Pakistan.

—Submitted by Ayesha Bashir MD, MPH
Arizona Department of Health Services

Acknowledgment

I would like to thank the Pakistani physicians in Arizona who helped me with this.

Cultural Competency Update

TB Screening Program in Minnesota

On February 5, 2009, the TB Education and Training Network (TB ETN) Cultural Competency Workgroup held a special topic discussion call on tuberculosis (TB) in refugees. Marge Higgins,

Immigrant and Refugee Coordinator, Minnesota Department of Health (MDH) TB Prevention and Control Program, joined the call. She gave a detailed overview of refugees' overseas and domestic screening, as well as Minnesota-specific information.

Minnesota has a vibrant, growing refugee population that has brought several rich cultures to the state. Over recent years, Minnesota has received refugees from Somalia and Burma, as well as the Hmong from Laos and Thailand. Minnesota is the third highest recipient of refugees in the U.S., behind only California and Texas. Refugees in Minnesota generally settle in the Minneapolis/St. Paul metropolitan area and in areas where there are jobs not requiring proficiency in English such as meat-packing plants.

The goal of domestic refugee health screening in Minnesota is to control communicable disease among newly arrived refugees through health assessment, treatment, and referral. When screening and treating a new refugee, health care workers strive to prevent the spread of infectious disease while also keeping in mind the cultural stigma that TB may present to the refugee within their community. The process must be navigated by a dedicated and invested group of health care workers.

The MDH refugee screening program assists newly arrived refugees with health examinations and referrals within 90 days of arrival. These examinations include health history, physical assessment, immunization update, and TB screening, including tuberculin skin test (TST) and a chest x-ray. Although the refugees are screened before they leave their home country, they are screened again when they arrive in their new community. This domestic screening process allows Minnesota to follow up with refugees who may have had an incomplete or inadequate health screening prior to U.S. arrival. The Minnesota program maintains a database of

all screening information for tracking and surveillance.

Recent data show that 75% of TB cases in Minnesota are among refugee populations. In 2007, the rate of latent TB infection (LTBI) among 2,643 primary refugees in Minnesota was 45%. The rate of LTBI varied among populations, from 29% of refugees from Europe to 50% of refugees from Sub-Saharan Africa.

In identifying the unique needs of these communities and addressing issues that are important to public health, the Minnesota team has used culturally sensitive and ethnically inviting education tools that have improved the accessibility and quality of health care.

MDH's TB web site is www.health.state.mn.us/tb.

—Reported by LCDR Darla McCloskey, RN, BSN
Health Systems Specialist
Winnebago Hospital, Winnebago, NE

COMMUNICATIONS, EDUCATION, AND BEHAVIORAL STUDIES BRANCH UPDATE

Farewell to a Longtime Colleague



*Chris Hayden
retired at the end
of August 2009.*

Chris Hayden,
who served from
1996 to 1999 as
chief of DTBE's

Communications, Education, and Behavioral Studies Branch (CEBSB), retired at the end of August, following a 41-year career in TB control.

Chris graduated from Gettysburg College with a Bachelor of Arts degree in 1965 and in the same

year began his career with CDC as a Public Health Advisor assigned to the Venereal Disease Control program in New York City. After 3 years he joined the Division of Tuberculosis Control (DTBE), and from 1968 to 1983, he had three field assignments working with the health department TB programs in Pennsylvania, New York State, and Los Angeles County.

He then came to DTBE headquarters in Atlanta and served for 3 years as a Program Consultant for 12 state and major city health department TB programs, followed by 3 years as the Deputy Chief of the Surveillance and Epidemiologic Investigations Branch, and then 7 years as the Chief of the Program Support Section. In 1996, Chris was named Chief of the newly formed Communications and Education Branch, which is responsible for communications, training, education, and information dissemination activities of DTBE; behavioral studies activities have since been added.

In January 1999, Chris retired from federal service after a 33-year career with CDC. He then moved to New Jersey and was hired by the New Jersey Medical School (NJMS) Global Tuberculosis Institute, where he has spent the last 10 years. Now, however, the NJMS Global TB Institute has also bid a fond farewell to Chris - he has finally retired for good.

At GTBI, Chris's vast TB experiences, passion, and attention to detail were all put to good use on a number of projects. When he first came to GTBI, he focused on targeted testing strategies, working on educational products that included *Identifying Missed Opportunities for Preventing Tuberculosis*, and *Facility TB Profile: Working with Community Health Agencies to Strengthen LTBI Activities*.

After GTBI became a Regional Training and Medical Consultation Center (RTMCC) in 2005, Chris's focus changed to include RTMCC activities. He was a key member of the team building the Medical Consultation Network

through developing standardized data collection instruments, and medical consultation protocols for GTBI's Medical Consultation *Infoline*. He also coordinated three very successful, well attended Medical Consultant Meetings at GTBI, and opened each one with an original poem written for the occasion.

Chris also brought his literary gift to the GTBI newsletter, the *Northeastern Spotlight*, where his alliterative articles on GTBI activities and careful planning of content led to an informative and entertaining quarterly missive. After more than 40 years in public health, Chris will be sorely missed at GTBI and by all his friends in the TB community. We thank him for his many years of hard work and dedication and wish him well as he and his wife Carole enjoy their well-deserved retirement.

—From Eileen Napolitano, *Global TB Institute*, and Ann Lanner, *Div of TB Elimination*

MYCOBACTERIOLOGY LABORATORY BRANCH UPDATE

Collaboration within the Village

Laboratory activities had a strong presence at this year's National TB Conference held in Atlanta, GA, June 15–18, 2009. The conference theme was "TB Elimination—It Takes a Village," and the role of the laboratory in achieving TB elimination was described in many sessions and presentations.

On June 15, the 2009 TB Laboratory Meeting was held, and featured presentations by Dr. Beverly Metchock, Dr. Lauren Cowan, and Ms. Kimberly McCarthy, all from DTBE, and also Dr. David Warshauer from the Wisconsin State Laboratory of Hygiene. Ms. Kelly Wroblewski, from the Association of Public Health Laboratories (APHL) and Dr. Angela Starks, DTBE, moderated. Representatives from approximately 50 state and other public health

TB laboratories attended the meeting. The session was very interactive and included electronic polling and online demonstrations.

Dr. Warshauer introduced the newly revised APHL/CDC project: "Mycobacterium tuberculosis: Assessing Your Laboratory," an online tool designed to assist laboratories in assessing the quality of their laboratory's TB diagnostic practices. This year APHL, in conjunction with CDC and clinical and commercial laboratorians, has updated the content of the original 1995 tool to reflect the profound changes to TB diagnostics in the ensuing years. The final version is now available on the APHL website at <http://www.aphl.org/aphlprograms/infectious/tuberculosis/Pages/tbtool.aspx>

Ms. McCarthy presented on the importance of performance indicators for smear, culture, and drug susceptibility testing in mycobacteriology laboratories. Drawing on her vast experience in the global field of TB laboratories, Kimberly explained the importance of laboratory indicators, defined approaches to evaluating lab performance, and outlined eight candidate indicators that could be used by TB labs to assess their overall performance.

Dr. Cowan provided an overview of assays used for universal genotyping in the United States. Session participants were given the opportunity to analyze sample spoligotyping and MIRU-VNTR typing data to generate a report. In addition, Lauren described how genotyping can assist public health laboratories in suspected false-positive culture investigations. Universal genotyping permits TB programs to establish simple algorithms to flag suspected errors and identify possible false-positives, and therefore, help to reduce improper treatment of noninfected persons.

Dr. Metchock's presentation, "On the Hot Seat: Cases from the Reference Laboratory," described actual case scenarios from various state public health labs that elucidated the need

for better communication between labs, TB programs and physicians, and for labs to recognize the need for timely follow-up and investigation of lab results that are outside of normal ranges.

The take-home message of this year's lab meeting was that it is imperative for the laboratory community to provide health care providers and TB controllers with accurate results within acceptable turn-around times, while providing a safe work environment for laboratorians. Currently, plans are being made by APHL to continue the collaboration between the laboratory and the TB program by convening a colocated laboratory meeting in 2010.

—Submitted by Tracy Dalton, PhD, and Frances Tyrrell, MPH, MT (ASCP)
Div of TB Elimination

SURVEILLANCE, EPIDEMIOLOGY, AND OUTBREAK INVESTIGATIONS BRANCH UPDATE

2009 American Thoracic Society International Conference

A real-time outbreak detection system, alternative treatment regimens, and immunogenetic risk factors for TB infection were the focus of the joint Tuberculosis Epidemiologic Studies Consortium (TBESC)/Tuberculosis Trials Consortium (TBTC) session at the 2009 American Thoracic Society International Conference in San Diego. The purpose of the joint session, held on May 20, 2009, was to present data on recent studies performed by the consortia, as well as plans for current and future studies.

Patrick Moonan, DrPH, discussed TBESC Task Order 26, "Improving the utilization and integration of TB genotyping into routine TB program practice: analyzing the impact through program interventions." The ultimate purpose of

Task Order 26 is to develop an algorithm for real-time detection of potential TB outbreaks, therefore promoting the use of genotyping as routine practice for TB programs. The goal, Dr. Moonan said, is to develop a system that is highly sensitive and dynamic, and has good positive predictive value. One of the challenges in creating a real-time algorithm will be to find the best way to group TB cases to detect possible transmission. This study aims to better understand the variables needed to prioritize clusters and maximize public health response.

Stefan Goldberg, MD, presented findings from TBTC Studies 27 and 28, "Controversies in TB treatment: evolving data on moxifloxacin." These studies evaluated the substitution of moxifloxacin for ethambutol and INH, respectively, in the intensive phase of the TB treatment regimen. Study researchers found a suggestion that moxifloxacin was better than ethambutol at 4 weeks in culture conversion, but there was no statistically significant difference between the two regimens at 8 weeks. These findings contrasted, in part, with two other recently published non-TBTC Phase II studies, in Brazil and South Africa, which found advantages to using moxifloxacin during the intensive phase, although microbiological and statistical methods were different between the TBTC and non-TBTC studies. Dr. Goldberg pointed out that Phase III treatment shortening trials are under way and concluded that moxifloxacin would be a safe and efficacious second-line treatment agent.

Tim Sterling, MD, presented data from TBESC Task Order 2, titled "Immunogenetic factors associated with TB." He reported that higher levels of interferon-gamma (IFN- γ) in the first 30 days after exposure to a TB case, and particularly 16–30 days after exposure, were correlated with tuberculin skin test (TST) conversion. Conversely, elevated levels of interleukin-10 more than 60 days following TB exposure may correlate with protection from infection. These findings were important because they may assist us in determining high-risk

contacts for LTBI as well as the best time to perform the TST or an interferon gamma release assay (IGRA) following exposure.

Payam Nahid, MD, MPH, discussed "Validation of biomarkers in CDC/TBTC studies." Biomarkers have a variety of applications in TB, including predicting adverse reactions to medications and performing early assessments of therapy effectiveness. Dr. Nahid delineated the differences between prognostic markers and surrogate biomarkers, the latter being used as a substitute endpoint in clinical trials. In regard to biomarkers of treatment response, factors such as time to culture detection, monthly culture status, immune activation markers, and IGRAs all hold promise but need to be validated as putative surrogate markers in the context of clinical trials with bacteriologically confirmed relapse as an endpoint. TBTC studies provide an ideal platform on which to evaluate promising biomarkers and should be designed with this objective in mind.

Despite its being held on the final day of the ATS conference, the TBESC/TBTC session was very well attended. The talks generated interesting and informative questions and discussion from the audience. These presentations were demonstrations of the productivity of both consortias and the important work being done towards accelerating the development of new tools for TB elimination in the United States.

—Reported by Suzanne Beavers, MD
Div of TB Elimination

NEW CDC PUBLICATIONS

Bliven E, Podewils L. The role of chronic hepatitis in INH hepatotoxicity during treatment for latent tuberculosis infection. *Int J Tuberc Lung Dis* 2009; 13:1054-1069.

Burman WJ, Bliven EE, Cowan L, Bozeman L, Nahid P, Diem L, et al., for the Tuberculosis Trials Consortium. Relapse associated with active disease caused by Beijing strain of

Mycobacterium tuberculosis. *Emerg Infect Dis* [serial on the Internet]. 2009 July. Available from <http://www.cdc.gov/EID/content/15/7/1061.htm>

Chideya S, Winston CA, Peloquin CA, Bradford WZ, Hopewell PC, Wells CD, Reingold AL, Kenyon TA, Moeti TL, Tappero JW. Isoniazid, rifampin, ethambutol, and pyrazinamide pharmacokinetics and treatment outcomes among a predominantly HIV infected cohort of adults with tuberculosis from Botswana. *Clinical Infectious Diseases* 2009 48: 1685-1694.

Cleveland JL, Robison VA, and Panlilio AL. Tuberculosis epidemiology, diagnosis and infection control recommendations for dental settings: an update on the Centers for Disease Control and Prevention guidelines. *J Am Dent Assoc* 2009; 140: 1092-1099

Dorman SE, Johnson JL, Goldberg S, Muzanye G, Padayatchi N, Bozeman L, Heilig CM, Bernardo J, Choudhri S, Grosset JH, Guy E, Guyadeen P, Leus MC, Maltas G, Menzies D, Nuermberger EL, Villarino M, Vernon A, Chaisson RE, and the Tuberculosis Trials Consortium. Substitution of moxifloxacin for isoniazid during intensive phase treatment of pulmonary tuberculosis. *Am J Respir Crit Care Med* 2009;180: 273-280.

Loeffler AM, Lobato MN. Tuberculosis. In: McInerney TK, Adam HM, Campbell D, Kamat DM, Kelleher KJ, eds. American Academy of Pediatrics Textbook of Pediatric Care. *American Academy of Pediatrics Textbook of Pediatric Care*. Elk Grove Village, IL: American Academy of Pediatrics; 2009: 2590-2604.

Manangan L, Elmore K, Lewis B, Pratt R, Armstrong L, Davison J, Santibanez S, Heetderks A, Robison V, Lee V, Navin T. Disparities in tuberculosis between Asian/Pacific Islanders and non-Hispanic whites, 1993–2006. *Int J Tuberc Lung Dis* 2009; 13:1077-1085.

Menzies D, Benedetti A, Paydar A, Royce S, Pai M, Burman W, Vernon A, and Lienhardt C. Standardized treatment of active tuberculosis in patients with previous treatment and/or with mono-resistance to isoniazid: a systematic review and meta-analysis. *PLoS Med* 2009; 6(9). Online publication posted September 15, 2009.

Menzies D, Benedetti A, Paydar A, Martin I, Royce S, Pai M, Vernon A, Lienhardt C, and Burman W. Effect of duration and intermittency of rifampin on tuberculosis treatment outcomes: a systematic review and meta-analysis. *PLoS Med* 2009; 6(9). Online publication posted September 15, 2009.

Modi S, Buff AM, Lawson CJ, Rodriguez D, Kirking HL, Lipman H, Fishbein DB. Reporting patterns and characteristics of tuberculosis among international travelers, United States, June 2006 to May 2008. *Clin Infect Dis* 2009; 49: 885-891.

Okot-Chono R, Mugisha F, Adatu F, Madraa E, Dlodlo R, Fujiwara P. Health system barriers affecting the implementation of collaborative TB-HIV services in Uganda. *Int J Tuberc Lung Dis* 2009 Aug; 13(8): 955-961.

Ramachandran R, Nalini S, Chandrasekar V, Dave PV, Sanghvi AS, Wares F, Paramasivan CN, Narayanan PR, Sahu S, Parmar M, Chadha S, Dewan P, Chauhan LS. Surveillance of drug-resistant tuberculosis in the state of Gujarat, India. *Int J Tuberc Lung Dis* 2009 Sept; 13(9): 1154-1160.

PERSONNEL NOTES

Shanica Alexander, MPH, has been selected by the Field Services and Evaluation Branch for the CDC Public Health Advisor position in the Indiana State Dept of Health in Indianapolis, Indiana. Shanica began her career in public health at the City of St. Louis Department of Health, Missouri, as a Bioterrorism Epidemiologist in June 2006. In that role, she

coordinated emergency preparedness trainings, conducted communicable disease outbreak investigations, and oversaw disease and syndromic surveillance. In December 2007, she was promoted to Program Manager for TB Control Services and Communicable Disease Prevention. As Program Manager, Shanica was responsible for the overall fiscal and programmatic management of communicable disease investigations and outbreaks; TB case management; the TB control clinic; and the refugee health program. Shanica received her MPH degree from Saint Louis University School of Public Health in May 2006. She began her new assignment in Indianapolis on July 6, 2009.

Sandy Althomsons, a contractor with Northrup Grumman, has returned to DTBE after an assignment with Medicins Sans Frontieres (MSF) - France. Starting in February 2008, Sandy served for 1 year as an epidemiologist / data manager for the MSF HIV treatment program in Chiradzulu, Malawi. Prior to that, Sandy had served for 2 years as the Data Manager for the DTBE/SEOIB Surveillance team. During those 2 years, Sandy 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, collaborated 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. In her current position in SEOIB, Sandy is working on the Genotyping Aberration Detection system.

Sapna Bamrah, MD, Lieutenant Commander, U.S. Public Health Service, will join the TB/HIV team in the International Research and Programs Branch (IRPB) for a 180-day detail starting in mid-November. Sapna has been with DTBE on the SEOIB Outbreak Investigations Team since July 1, 2008. She 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 her working 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 her 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, combined with her previous experiences, will be a great asset during her time with IRPB.

Nakia Burgess has joined the Communications, Education, and Behavioral Studies Branch (CEBSB) as an administrative assistant. Nakia grew up in Lawrenceville, New Jersey, and studied business administration and psychology at Mercer County Community College in New Jersey. She held a number of positions with the State of New Jersey; including a position as an administrative assistant with the NJ Department of Transportation. She was there for a little over 2 years before relocating to Georgia. Since relocating here, she has held positions as a claims specialist, a data entry operator, and a medical assistant. In October 2008 she joined CDC as a program operations assistant in CDC's Human Research Protection Office. In that job, she processed the protocol submissions to be reviewed by institutional review board (IRB) staff. She also processed Scientific Ethics Verifications requests and performed records management and various administrative and clerical functions as needed to help the IRB administrators manage their boards. In addition, Nakia has plans to enroll in Georgia State University, where she will be pursuing a degree in public health.

Chris Hayden, who served from 1996 to 1999 as chief of DTBE's Communications and Education Branch (CEB), retired from TB for good at the

end of August, following a 41-year career in TB control. Please see the article in the CEBSB Update section.

Andy Heetderks of DTBE's Field Services and Evaluation Branch was awarded the September NCHHSTP Director's Recognition Award for his contributions to addressing TB in the U.S.-affiliated Pacific Islands. In May 2008, the Federated States of Micronesia (FSM) requested assistance from DTBE in addressing an outbreak of multidrug-resistant (MDR) TB in Chuuk State. At that time, the first four cases of MDR TB had been diagnosed in Chuuk, one in a 2-year-old child. Numerous challenges existed, the most significant being the lack of strict DOTS standards and the absence of second-line medications to treat the MDR TB cases. Andy spent a tremendous amount of time and energy going above and beyond his normal duties to establish relationships and reach agreements between numerous agencies to address this critical problem. Andy spearheaded a working group representing HHS, FSM, the Department of Interior, the World Health Organization, the Secretariat of the Pacific Community, and the Commonwealth of the Northern Mariana Islands to not only secure medications for all infected patients, but to ensure ongoing support of the program. In large part due to his efforts, 17 patients have received life-saving MDR TB treatment. In addition, many programs throughout the region benefited from the ongoing capacity building that he initiated. Andy has been working in this culturally unique and geographically challenging region for over a decade and is extremely well respected within the region. His ability to navigate challenges and remain effective has been exemplified in his tremendous contributions during the MDR TB outbreak in Chuuk.

Kawi Mailutha has joined DTBE's International Research and Programs Branch (IRPB) as a Public Health Analyst. Since 2007, Kawi has served as an HHS Emerging Leader Fellow. During her fellowship, she worked in several

centers and offices at CDC, including DTBE. Her projects stemmed from web development, project officer duties, operational research, country support, and infection control and policy. Prior to coming to CDC, Kawi worked in a multi-service health care clinic in Kenya, where she worked with a team to promote and deliver preventative health programs in the areas of maternal-child health; safe water; and the prevention of HIV, TB, and malaria. In 2005, Kawi served as a Special Assistant to the Chief Executive Officer at Harlem Hospital in New York City. There she spearheaded the creation of a multi-disciplinary Geriatric Center, while working with the Geriatric Committee of clinicians, administrators, architects, and community representatives to analyze data to compile a suite of services, a strategic plan, and an operating budget. She also worked in various nonprofit organizations in New York City, Washington, DC, San Francisco, New Mexico, and London providing budget and program development. She has also supported public health programs and initiatives in Asia and Sub-Saharan Africa. While in IRPB, Kawi will provide administrative support and work with the TB Infection Control Team.

Blen Mekuria has left the division. She worked for a little over a year in the Communications, Education, and Behavioral Studies Branch (CEBSB) as an administrative support contractor. Blen, who has a degree in sociology from the University of Tennessee in Knoxville, provided outstanding administrative assistance to the branch and was a tremendous asset. She will be greatly missed! Her last day was August 24.

Heather Menzies, MD, MPH, of DTBE's International Research and Programs Branch (IRPB), and Alyssa Finlay, MD, formerly with IRPB, are members of the Global Perinatal Integration Working Group (GPIWG), which was awarded the NCHHSTP Director's Recognition Award for August. Dr. Fenton cited the group's leadership in promoting integrated global maternal, newborn, and early child health (MNCH) services. The group members establish

best practices in integrating interventions during the MNCH period, conduct operational research, serve as an information clearinghouse, engage global stakeholders, and provide technical assistance in global MNCH integration. GPIWG has worked collaboratively to develop a compendium of interventions and “best practices” for MNCH integration as well as a series of operational research proposals.

Brittany Moore has joined DTBE’s International Research and Programs Branch (IRPB) as a 2009 ASPH/CDC Rosenfield Global Health Fellow. Brittany is a graduate of Emory University’s Rollins School of Public Health. Before joining DTBE, she served as the Knowledge Management Assistant with CARE USA’s avian and pandemic influenza team, where she was responsible for managing communications with CARE field offices, developing informational and advocacy materials, facilitating trainings and workshops for CARE partners, and conducting operations research. Brittany most recently spent 3 months as a consultant with CARE Lao PDR and CARE Cambodia. In Laos, Brittany led a team of University of Health Sciences (UHS) researchers in analyzing the UHS’ first health-seeking behavior assessment. In Cambodia, she assisted CARE Cambodia with the design, conduct, and analysis of an avian influenza program evaluation. In 2008, she led a research team in conducting an evaluation of CARE’s community-based microfinance program for caregivers of orphans and vulnerable children in rural South Africa. Prior to her work with CARE, Brittany was the public health policy analyst with the U.S. Senate Committee on Health, Education, Labor and Pensions. Her primary domains were emergency preparedness and response, pandemic influenza, and HIV/AIDS programming. In this capacity, she supported development of the Pandemic and All Hazards Preparedness Act, reauthorization of the Ryan White CARE Act, and preparation for PEPFAR reauthorization.

Trang Nguyen, MPH, CHES, has left the division after serving in a 1-year fellowship through the Association of Schools of Public Health (ASPH) in the Communications, Education, and Behavioral Studies Branch (CEBSB). Trang earned an MPH degree in Health Promotion and Behavioral Sciences from San Diego State University (SDSU). While here in CEBSB, Trang worked cheerfully and productively on a number of projects. Some of these included developing a slide set relating to the Tuberculosis Self-Study Modules; developing e-cards to promote TB-related events such as World TB Day; updating the division’s Strategic Plan for Tuberculosis Education and Training; developing a variety of fact sheets; and assisting with the planning, organizing, and presentation of the 2008 and 2009 TB ETN conferences. Trang has recently rejoined CDC as a contractor in the Office of Workforce and Career Development, where she is working as a continuing education (CE) consultant. Her primary duties entail consulting with course developers on their CE applications. She will be missed by her colleagues in CEBSB!

Taraz Samandari, MD, PhD, a medical officer in the International Research and Programs Branch (IRPB), returned to Atlanta in late July 2009 after a 6-year tour in Botswana, where he directed BOTUSA, CDC’s TB-HIV Research Division. He spearheaded a 40-person team in the conduct of a rigorous clinical trial to determine whether continuous isoniazid prophylaxis would reduce the burden of TB in HIV-infected persons. Additionally, he participated in a variety of operational research activities and provided advice to Botswana’s Ministry of Health. Prior to joining IRPB in 2003, he served as an EIS Officer with CDC’s Division of Viral Hepatitis. Before coming to CDC, he was an Assistant Professor at the University of Maryland’s School of Medicine.

Robin Shrestha-Kuwahara, MPH, has left DTBE’s Clinical and Health Systems Research Branch (CHSRB) and is now serving as a Health Scientist on the Evaluation and Community Interventions Team, a group led by Maureen

Wilce (also formerly with CHSRB) in the Air Pollution and Respiratory Health Branch, Division of Environmental Hazards and Health Effects, National Center for Environmental Health. Her new responsibilities include, in part, developing policy and objectives, appraising programs, and initiating guidance for evaluation studies related to building capacity in state respiratory health programs; leading the design and implementation of evaluation activities that reduce health disparities regarding respiratory diseases; and designing, overseeing, and conducting scientific evaluation surveys and projects to identify and solve health system-related problems. In CHSRB, where Robin served for over a decade, she was involved with the hospitalization and contact investigation studies led by Zach Taylor; served as PI on Phase 3 of TBESC Task Order 13 (adherence to TLTB); and directed the development and production of a remarkable series of five ethnographic guides for TB programs caring for foreign-born populations. Most recently she served as the lead behavioral scientist in a TB Leads-funded project whose goal is the development of an improved consent process for human subjects research in the TB Trials Consortium. Robin was highly regarded by her colleagues in DTBE, and she will be greatly missed!

Ralph Anthony Stidham, DHSc, MPH, who goes by "Tony," has been selected for a Public Health Advisor (PHA) position in DTBE's Field Services and Evaluation Branch in Boston, MA. He began his new position on September 14. From 2006, Tony worked as an epidemiologist for the State of Florida in Palm Beach County, Florida, with responsibility for following up with 93 reportable diseases and/or conditions. Prior to that, he served as an epidemiologist for the Nevada State Health Division in Carson City, Nevada. Tony started his public health career with CDC in July 1993 as a Public Health Associate assigned to the Sexually Transmitted Disease (STD) program in Miami, Florida, followed by STD assignments in Detroit, Michigan, Fort Lauderdale, Florida, and back to Miami. He has an undergraduate

degree in sociology from San Diego State University; a graduate certificate in public health from the University of Washington in Seattle, with a concentration in policy development, program planning, and evaluation; and an MPH degree from Emory University's Rollins School of Public Health in 2002. He completed his Doctor of Health Sciences program at Nova Southeastern University in August 2009.

Jessie Wing, MD, MPH, a medical officer in the Field Services and Evaluation Branch (FSEB), has returned to FSEB headquarters in Atlanta after 10 years as Hawaii's TB Control Officer. Jessie trained at the University of Arizona, Emory University, and Brown University, where she completed her medical training before coming to CDC as an EIS Officer. While at CDC, she contributed to asthma epidemiology (she authored the first chapter on asthma epidemiology for the National Heart, Lung, and Blood Institute's first National Asthma Education Guidelines) and domestic and international immunization programs. She worked extensively in Asia and was assigned to Beijing, People's Republic of China, to work on polio eradication with the World Health Organization through the National Immunization Program. In 1999, she was assigned as chief of the TB Program in Hawaii, where she supervised nearly 50 staff in 4 counties and managed a busy program that provided comprehensive clinic services, as well as surveillance, programmatic, and education services. During her 10-year tenure, she oversaw a major renovation of the TB clinic into a state-of-the-art clinic, with new digital radiographic equipment that provided service in over 65,000 annual patient visits. She also introduced research to the TB Program as the Principal Investigator of Hawaii's TBESC site, and updated policies and procedures in targeted testing and contact investigation. As TB Controller and chief, she handled several new legal challenges and many administrative and personnel details. She has returned to FSEB, where she is working on TBESC Task Order 21 (acquired rifamycin-resistant TB), among other projects.

CALENDAR OF EVENTS

October 12–16, 2009

Pacific Island Tuberculosis Controllers Association (PITCA) Meeting

Guam

Division of TB Elimination (DTBE)

October 21–24, 2009

The Denver TB Course

Denver, CO

National Jewish Health

www.nationaljewish.org/education/pro-ed/events/tb-course.aspx

October 26, 2009

Southwest TB Controllers Meeting

Durango, CO

Division of TB Elimination (DTBE)

October 27–28, 2009

Four Corners Meeting

Durango, CO

Division of TB Elimination (DTBE)

October 31–Nov. 5, 2009

Chest 2009

San Diego, CA

American College of Chest Physicians

www.chestnet.org/CHEST/program/about09.php

November 7–11, 2009

137th APHA Annual Meeting

Philadelphia, PA

American Public Health Association

www.apha.org/meetings/

December 3–7, 2009

40th UNION World Conference on Lung Health

Cancun, Mexico

IUATLD

www.worldlunghealth.org/Conf2009/website/

March 11–13, 2010

14th UNION North American Region Conference

International Union Against Tuberculosis and Lung Disease

Orlando, Florida, the Rosen Plaza Hotel