



Dear Colleague:

The end of 2003 brought the departures of two long-time and distinguished DTBE staff members. Rick O'Brien, MD, Chief, Clinical and Health Systems Research Branch, accepted a position with the Foundation for Innovative New Diagnostics (FIND) after 33 years of service to the federal government. His last day with CDC was December 31, 2003. John Kuharik, senior public health advisor for Chicago, retired on January 2, 2004, after 31 years of service with CDC. Both made outstanding contributions to CDC and to public health and will be missed.

The Advisory Council for the Elimination of Tuberculosis (ACET) met on February 4 and 5 in Atlanta to discuss current TB control issues. The council heard summaries of the TB Behavioral and Social Science Research Forum and the Fourth Annual Border Binational Health Commission Meeting, both held in December. We reviewed the status of several documents, including the current correctional TB control guidelines, the Federal TB Task Force Plan, and the Strategic Plan for TB Education and Education. In regard to the correctional TB control guidelines, ACET agreed with the recommendation of their Workgroup on Corrections to revise and update the current 1996 ACET guidelines "Prevention and control of tuberculosis in correctional facilities," *MMWR* 1996; 45 (No. RR-8). The council also heard reports from the Association of Public Health Laboratories, the TB Education and Training Network, the ACET Workgroup on Foreign-born Persons, and the Global AIDS Program.

World TB Day 2004 — March 24 — was observed by many groups throughout the world. DTBE joined the Tuberculosis Control Section of the Georgia Division of Public Health in a March 24th World TB Day observance in Atlanta. The theme of the event was "TB Elimination: Now Is the Time!" David Satcher, MD, former Director of CDC and former Surgeon General of the United States, was the keynote speaker. Dr. Satcher spoke on the topic of "TB Health Disparities in Fulton County." Representing DTBE in the program was Zachary Taylor, MD, Chief of the Field Services and Evaluation Branch of DTBE.

For those who are still not accustomed to DTBE's new branch names, a table reflecting the old and new names is attached at the back of this issue.

This year's National TB Controllers Association (NTCA) Workshop is planned for June 9 through 11, 2004, in Atlanta, Georgia, with preconference meetings to be held on June 8. This year's theme is "Critical Partnerships for TB Elimination," and will focus on the importance of the laboratory in TB control. Presentations and breakout sessions will highlight genotyping, new technology, and the collaborative activities of TB control programs and laboratories. Please note that the deadline for registration for the Workshop is May 28. I hope to see you there!

Kenneth G. Castro, MD

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

Number 1, 2004

HIGHLIGHTS FROM STATE AND LOCAL PROGRAMS

Missed Diagnosis Leads to the Death of a 15-Year-Old in Detroit

On Wednesday, March 19, 2003, the Detroit TB Prevention and Control Program was notified by the Wayne County Medical Examiner's Office of the death of a U.S.-born 15-year-old female foster child. The child died on March 1, 2003, and tissue specimens (lung and spleen) collected during the autopsy on March 2 were reported as positive for acid-fast bacilli (AFB). The laboratory results were available on March 19 and at that time the deceased was diagnosed with pulmonary and miliary TB.

On March 20, a meeting was held at the request of the Medical Examiner's Office with representatives from the Detroit TB Program, the Family Independence Agency (FIA), the Detroit Public Schools, and a foster child placement agency. During this meeting, the TB Control Program was informed by FIA that the child had been placed in foster care by the child placement agency in January 2002. This was her only placement; during most of 2001 she lived with an older sister. She had attended a middle school in suburban Detroit from September through November 2002 and later transferred to a school in the City of Detroit in January 2003, which she attended until her death. According to school records, her last day of attendance was February 21, 2003. During the meeting it was noted that the child had been under the care of a Detroit private physician and had been regularly examined during 2002. Medical record review revealed that signs and symptoms consistent

with TB, including cough, weight loss, fever, fatigue, and possibly night sweats, had been exhibited by the child throughout 2002. However, neither a tuberculin skin test nor a chest x-ray had been ordered. Information shared in the meeting indicated that at various times the private physician had prescribed treatment for other respiratory illnesses. The last known visit to the private physician had been in early February 2003.

An official autopsy report was obtained by the Detroit TB Program, according to protocol, in order to initiate mandated follow-up, which included reporting the case to the Michigan Department of Community Health and to CDC and implementing the case investigation. The autopsy report indicated extensive damage to most major organs, in particular the lungs. According to the medical examiner who performed the autopsy, the lungs of the deceased were completely replaced by infection and were adhered to the chest lining and diaphragm. The lung damage could possibly have been evident on a chest x-ray at least 6 months prior to death. In addition, extensive cavities were indicated and were filled with necrotic granulomas. The Public Health Director of the Detroit Health Department submitted a written request to the Physician Licensing Board within the Michigan Department of Consumer and Industry Services to initiate an investigation of the private physician, in accordance with the Michigan Compiled Laws, to determine whether the life of this child could have been spared with the proper medical intervention. The deceased was neither a current nor a past patient of the Detroit TB Program.

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After further examination and closer review of the autopsy findings, the Medical Examiner's Office ruled the cause of death as homicide, based on the malnourished condition of the body. An investigation of the foster family as well as of the private physician is currently underway.

Contact Investigation/School Screening

The contact investigation conducted by the Detroit TB Program identified 26 contacts: 24 household and neighborhood contacts and 2 casual contacts. The close contacts consisted of the foster mother, foster siblings, case workers, and neighbors. The casual contacts consisted of neighbors who had limited contact with the patient. The biological parents of the deceased were notified for testing but did not respond; they had not had contact with their child in nearly 2 years. Three of the close contacts and two casual contacts were not tested. Sixteen (61.5%) of the 26 were tuberculin skin tested by the Detroit TB Program; 12 were negative, 3 were positive, and 1 had a normal chest x-ray (this individual was a known reactor). Five of the 26 were tested by their private medical provider; 4

tested negative and 1 had a normal chest x-ray (this individual was also a known reactor). The three with positive reactions were further evaluated by the medical staff at the Detroit TB Program; all three had normal chest x-rays and two of them were placed on treatment for latent TB infection.

The initial school screening was conducted by the Detroit TB Program staff at the most recent school that the deceased attended. Eighty-two students were identified; 74 as close contacts and 8 as casual contacts. Seventy (85.3%) were screened and evaluated for *M. tuberculosis* infection. Sixty-seven (95.7%) tested negative and two (2.9%) tested positive. One student did not return for the skin test reading. Six students were tested by their private medical provider and all received negative readings. Six students were not tested. Eleven (11) faculty members were identified as close contacts to the deceased; all were tested by the Detroit TB Program and were negative.

The second school screening was conducted by the Oakland County TB Program staff, a suburban county of the City of Detroit. The deceased attended this school for approximately 3 months before moving to Detroit. A total of 178 contacts were identified; 152 were students and 26 were members of the staff. Forty-two (23.6%) were tested for *M. tuberculosis* infection; one reactor (5 mm) was further evaluated and found to have a negative chest x-ray via private provider follow-up.

Lessons Learned

Family Independence Agency: The rules and regulations regarding routine TB screening and testing of foster care placements — the foster family as well as the child being placed — should be reinstated. This would consist of tuberculin skin testing, with chest x-rays and full evaluations for persons with positive reactions. The state of Michigan currently has rules regarding testing of the foster parents but none requiring TSTs for the children being placed; thus, some of the children have been from home to home and frequently exposed without detection.

Private Provider: Even though the private health care provider had an opportunity every month for at least 6 months to evaluate the child, a skin test or chest x-ray or referral to another physician was never done.

Education and Awareness: Despite the clarity of symptoms presented by the child, no one made the association with TB; instead, numerous unlikely speculations were explored. The "Think TB" message should be circulated and communicated by the health department to private physician offices, and it should be the focus of CME topics. Teachers should also be educated about TB to ensure that they have the ability to identify TB symptoms presented by their students.

*—Submitted by Kathy Harris, PhD
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Linda Dix, Detroit TB Control and Prevention
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**Seminar Series – Collaboration
Between the New York State
Department of Health Bureau of
Tuberculosis Control and the Medical
Society of the State of New York**

As the science around diagnosis and treatment of TB evolves, and as new guidelines for management of infection and disease are issued, it is critical to ensure new information is disseminated to those actively engaged in managing patients. One of the challenges faced by TB control programs is developing strategies or forums for providing new and updated information. Physicians, as a group, are sometimes difficult to access for continuing education. Recognizing the challenges associated with reaching the practicing physician, the New York State Department of Health, Bureau of Tuberculosis Control (BTBC), contracted with the Medical Society of the State of New York's (MSSNY) educational subsidiary, the Medical, Educational and Scientific Foundation, Inc. (MESF), to collaborate on a series of TB educational programs.

The MSSNY contacted local medical societies to establish date, time, location, registration information, and a contact person, and subsequently promoted the educational initiative to its 27,000 members. The BTBC also identified local physician experts to present the programs and customize the presentation to highlight local data. The program was presented as a 2-hour dinner-lecture, which included a 45-minute presentation with an additional 15-minute question-and-answer period. Handouts included a copy of the PowerPoint presentation, the CDC Core Curriculum, national guidelines and recommendations, case report forms, local data, and resources for additional TB information at the local and state level.

The contract with the MSSNY operated in two successive years. The first year's program, "TB: The Continuing Challenge," was held in 10 sites over a 3-month period and reached over 300 physicians. The core elements of the program included epidemiology and current TB trends in New York State, targeted testing and treatment of latent TB infection, an update on new treatment recommendations and guidelines, and state and local reporting requirements. Since over 60 percent of reported TB cases in New York State are among foreign-born populations, the second program series focused on "TB and Other Health Issues in Refugee and Immigrant Populations." The topics addressed in this program were related to newly arrived immigrants and refugees who have a high risk for communicable diseases. The program outlined the geographic areas of origin of immigrants and refugees, described recommendations for medical examinations, and gave the mandatory reporting procedures. In a 3-month period, 392 physicians attended one of the 14 sponsored seminars throughout the State.

Results from the 287 evaluations submitted in the second year showed more than 80 percent of the attendees felt the information they received would positively influence their practices. Over three-quarters of those surveyed felt the information provided was new and helpful in raising awareness and insight into the medical and social problems of newly arrived immigrants

and refugees. Most attendees felt the information provided an enhanced understanding of TB and other diseases, and having the opportunity to network and discuss these types of patients with colleagues, as well as confer with the local leading expert in the field, proved to be a valuable experience.

—Submitted by Judi A. Bulmer and
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A Statewide Targeted Tuberculin Testing Program In Tennessee

Dr. Connie Haley, TB Controller for Tennessee, came to CDC in 2002 and gave a presentation to DTBE staff about Tennessee's targeted tuberculin testing program among foreign-born persons. In the following article, she provides an update on the program.

While the tuberculosis (TB) case rates in Tennessee have steadily decreased over the last decade, there continues to be a significant disparity in the rate of TB in foreign-born (FB) residents compared to U.S.-born residents (31.4 per 100,000 and 4.7 per 100,000, respectively, in 2002). Since 1996, the proportion of TB cases in Tennessee occurring among foreign-born residents has increased from 7 percent to 18 percent. During the same time period there has been a 42 percent annual increase in Hispanic persons receiving services at Tennessee's local health departments. According to the 2000 Census, approximately 160,000 Tennessee residents were born outside of the United States, the majority in TB-endemic countries. In consideration of the growing foreign-born population residing in Tennessee, a statewide Targeted Tuberculin Testing and Treatment Initiative (TTI) was implemented to address the potential of TB transmission within this and other high-risk groups, whose health directly affects that of the entire population.

In 2001, the Tennessee State Legislature increased the TB Elimination Program budget by \$5 million annually to provide foreign-born persons with tuberculin testing, clinical

evaluation, and treatment for TB or latent TB infection (LTBI), and new public health staff were hired to provide these services. The funds also enabled clinic renovations, the purchase of new clinic and laboratory equipment, transportation of patients to clinics, translation and interpretation services, and expanded physician services. Outreach was implemented in local communities to identify and establish a relationship with foreign-born populations that would benefit from TB services. Two concurrent arms of the TTI were developed. The first arm involves ensuring that TB services are provided to foreign-born persons already coming to the local health departments for other services such as immunizations, prenatal care, STD/HIV treatment or primary care visits. The second arm involves the provision of TB services at community sites where foreign-born persons can be accessed. Specific community sites where TTI services can be delivered include churches or other religious gatherings, factories, grocery stores, restaurants, community centers, and residential sites such as apartment complexes.

A statewide needs assessment indicated that to effectively implement planned TTI services, the following barriers must be addressed: cultural and linguistic diversity, Title VI requirements,¹ lack of education among foreign-born clients, fear of the government and the health department, misconceptions and stigma surrounding TB and LTBI, and competing priorities of work schedules or family care. In reviewing these issues, the TB Elimination Program recognized that a successful initiative must strive to improve the quality of services provided to the foreign-born in addition to increasing the number of individuals tested and treated for LTBI. All health department TB staff received extensive cultural and linguistic competency training, and trained interpreters and telephone interpretation services were hired to facilitate communication. Standardized procedures for performing tuberculin skin testing, evaluation, treatment and follow-up were developed. In addition, written guidelines have been developed and in-person training was provided to TB control staff statewide. To enhance access to TTI services, public health staff provide tuberculin testing, dispensation of TB or LTBI medications, and routine clinical and

laboratory monitoring during treatment at local community sites as well as at local health departments.

In order to overcome patient fear and misconception about both the health department and about TB, avoid the appearance of discrimination by “targeting” a specific population, and increase acceptance of TTI services, a new policy of performing individualized TB risk assessment and counseling prior to tuberculin testing was established. A Risk Assessment Tool (RAT) was developed to serve as a flow chart for assessing an individual’s risk for TB or LTBI and to determine the need for tuberculin testing. The tool also serves as a data collection instrument and as documentation of services provided. Specific information obtained using the tool includes demographic information and patient identifiers, risk factors for TB infection, medical conditions associated with progression to active TB once infected, HIV risk factors, TB symptoms, and history of previous tuberculin testing or LTBI treatment. To ensure effective and accurate education of all patients, as well as encourage disclosure of personal information, a standardized script has been developed for use with the tool. This script outlines specific teaching points regarding TB and LTBI diagnosis, evaluation, treatment, follow-up, and clinical outcomes.

Persons whose individualized risk assessment detects evidence of active TB are referred immediately to a physician. Persons who are identified as high risk for TB or LTBI or who have a history suggestive of untreated LTBI are provided tuberculin skin testing. Persons with a positive tuberculin skin test (TST) are then referred to regional health department TB clinics for evaluation by experienced TB providers and are placed on appropriate therapy as indicated. Persons with no risk factors, medical conditions, TB symptoms or history suggestive of TB or LTBI are counseled that they are low-risk for developing active TB disease. Tuberculin testing is strongly discouraged for all low-risk persons, and these persons are dismissed with a health department card stating that they have been evaluated and found to be free of infectious TB. The card also contains written instructions to

return if their risk of TB or LTBI changes or if they develop symptoms of TB disease.

During the first year of the initiative (March 2002 to February 2003), over 40,000 persons received education and individualized risk assessment for TB and LTBI. Almost 23,000 of the individuals screened and educated were identified as having increased risk for TB infection and subsequently received tuberculin skin testing. Of note, five cases of active TB disease were detected as a direct result of targeted testing activities. LTBI was diagnosed in 15 percent of all high-risk persons tested, and in 36 percent of foreign-born persons tested. In contrast, only 1 percent of low-risk individuals were found to have a positive TST, and many of these could represent false-positive results due to environmental mycobacteria. These data indicate that tuberculin testing programs targeting high-risk populations enable early detection of active TB cases and identification of persons with LTBI who would benefit from treatment. Persons born in TB-endemic areas appear to have the highest rate of TB infection and are thus an appropriate priority group for tuberculin testing and treatment of LTBI. Furthermore, our findings indicate that tuberculin testing of low-risk persons has low yield and thus is not an effective use of limited public health resources.

Several significant challenges have been encountered during the early phases of this program. While a large number of high-risk persons were identified and provided services, over 17,000 low-risk persons were also provided TB or LTBI screening and education and over 10,000 of these were given tuberculin skin tests. Public health workers were initially resistant to the idea of refusing to provide requested services such as skin tests, even to persons with no apparent risk for LTBI or TB. However, the extremely low rate of tuberculin positivity among low-risk persons has slowly convinced our staff that limiting testing of low-risk persons is unlikely to result in a missed opportunity to detect or prevent active TB. Another barrier to reducing skin testing of low-risk persons is the existence of various licensure rules and broad administrative policies that require tuberculin testing regardless of TB or LTBI risk. For example, TSTs have

routinely been required for school teachers, bus drivers, day care workers, foster care parents and children, and volunteers who provide nonmedical personal services for the elderly, among others. In addition, some large employers have required skin testing for employment. Even though the targeted tuberculin testing and treatment guidelines published by CDC in 2000 recommend that routine testing for administrative purposes be discontinued,² current regulations are difficult to change. To date we have had to address this problem one group at a time. In 2002, we implemented a joint policy with the Department of Education to discontinue required skin testing of teachers and bus drivers, and in 2003 we implemented similar policies at the Department of Human Services and the Tennessee Commission on Aging and Disability.

Another unanticipated challenge we have encountered has been defining the concepts of high- vs. low-risk and determining who should have a tuberculin skin test. Frequently, health department personnel who provide tuberculin testing are not designated TB staff but rather work in other programs such as WIC, immunization or primary care. We have recently determined that some staff do not understand what factors determine whether a person has increased risk of LTBI or TB disease and symptoms that are more likely attributable to causes other than pulmonary TB may be overreported (i.e., chronic cough or COPD or acute symptoms of upper respiratory infections). In addition, risk factors such as "travel to high-TB risk areas," "children exposed to adults in high-risk categories," "patients receiving immunosuppressive therapy," and "residents and employees of high-risk congregate settings" are hard to define for persons who infrequently perform TTI services. We are currently revising our state guidelines and providing more specific written protocols to enable all public health personnel to better identify persons who would benefit from TB testing and treatment versus those who should be counseled and dismissed. In addition, we hope that statewide retraining and a highly coordinated "train-the-trainer" approach will help us overcome these problems to provide more effective TTI services to the appropriate populations statewide.

A final limitation to implementing a statewide targeted tuberculin testing and treatment program is certainly the high cost and large number of staff required to deliver the needed services. However, by reallocating the cost and staff time that are currently expended providing TST and other preventive services to low-risk persons, perhaps local TB control programs can accomplish targeted testing of a specific high-risk group. Given the great success of our TTI during the initial year, we are optimistic that this statewide initiative will reduce the incidence of active TB among Tennessee residents, particularly the foreign-born. Implementation of this program is thus a big step toward our goal of TB elimination in Tennessee.

—Reported by *Connie Haley, MD, MPH*
TB Control Officer, and
Katie Garman, MPH, CHES, Epidemiologist
Tennessee Department of Health

References

1. Title VI of the 1964 Civil Rights Act (42 U.S.C. 2000d-1) states that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title VI bars intentional discrimination as well as disparate impact discrimination (i.e., a neutral policy or practice that has a disparate impact on protected groups).
2. CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* 2000;49(No. RR-6):1-51.

The Renovation of Hawaii's Lanakila TB Clinic

In many areas, TB control has been neglected with diminished funding, support, and interest. The Hawaii (HI) State TB Control Program is uniquely fortunate to be supported by the State Legislature, Governor, health partners, community, and CDC to aggressively address the state's continued high TB morbidity.

After 15 months, the Lanakila Tuberculosis Clinic returned from temporary quarters to a completely renovated 13,000-square-foot headquarters in Honolulu. A dedication ceremony celebrated on August 7, 2003, began with a beautiful Hawaiian chant by Makia Malo, a local Hawaiian storyteller. Dr. Chiyome Fukino, Director of the Hawaii State Department of Health, hosted the ceremony with several distinguished guests, including Dr. Ken Castro of CDC, HI Representative Dennis Arakaki, HI Senator Suzanne Chun-Oakland, and HI Representative Felipe Abinsay. The Honorable U.S. Representative Neil Abercrombie gave poignant remarks on the achievements and dedication of the U.S. Public Health Service in public health and TB control in Hawaii and the United States.

This grand opening celebration showcased over 2 years of detailed planning toward the development of a model TB Clinic with separate clinics for screening and treatment. Two capital improvement bills totaling over \$3 million dollars were approved in 2000 by the Hawaii State Legislature and former Governor Ben Cayetano to completely demolish and renovate the old TB clinic and procure a digital X-ray imaging system. The TB Program worked closely with Teresa Seitz and Ken Martinez of the National Institute for Occupational Safety and Health to optimize infection control features. Highlights of the renovation include the following:

- Dual TB clinics: The Screening Clinic and Chest Clinic are separated, with independent ventilation and air conditioning systems to prevent potential mixing of air between low-risk and high-risk populations.
- Negative air pressure clinic: The entire Chest Clinic (including all waiting rooms and examination rooms) is under negative air pressure and is serviced by a one-pass ventilation system that exhausts HEPA filtered air externally. These engineering controls are augmented by the use of stand-alone HEPA filters and wall-mounted ultraviolet germicidal irradiation lamps which offer

optimal infection control for clients and staff.

- Computed radiography: A complete digital X-ray and image database system was installed. This state-of-the-art system offers rapid processing of X-rays; decreases radiation exposure for clients and staff; and eliminates the need for film, chemical film processing, and storage of analog films for the approximately 16,000 X-rays taken annually, with the ease of computer access, manipulation, interpretation, and storage of electronic images.
- The Bishop Museum installed a permanent exhibit chronicling the history of TB in Hawaii (done in partnership with Leahi Hospital and the American Lung Association of Hawaii). The exhibit presents a timeline beginning in January, 1778, when Captain Cook brought two shipmates with TB to Waimea, Kauai. In the early 20th century, TB sanatoriums and preventoriums for children were established on each island before widespread use of surgery and antibiotics.
- The Hawaii State Art Museum's Art in Public Places Programs loaned over 20 pieces of original art, including paintings, statues, photographs, and ceramics from local artists for display in public areas throughout the clinic. A noted Hawaiian artist with family ties to the TB Program also loaned several of his pieces for display.

Several hundred people enjoyed the grand opening festivities, which included an open house, tours, Hawaiian story telling, local food, and entertainment. The event was covered by all local television news stations and documented for video presentation by community access television.

Below: TB consult room with digital x-ray monitors and analog light box



Above: Photo of mobile x-ray survey unit, Honolulu, Hawaii, 1947

Background, below: History of TB in Hawaii exhibit by the Bishop Museum

Back: PHA Jason Nehal, DTBE FSEB Chief Dr. Zach Taylor, DTBE Chief Dr. Ken Castro, CDC TB Program Consultant Andy Heetderks

Front: TB Outreach Workers Lowella Albores, Jo Barroga, Young Min Kim, Wah Berman; TB Branch Chief Dr. Jessie Wing



A small team of visitors from the CDC's Division of TB Elimination was led by Dr. Ken Castro. The team met with Dr. Boz Tucker of the Pacific Island Health Officers Association, representatives of Pacific Resources for Education and Learning, and the Hawaii State TB Laboratory Staff. Dr. Zachary Taylor provided an in-service training session to TB Program staff. Dr. Castro was the featured speaker in a presentation on international TB issues, teleconferenced live to Bangkok from Tripler Army Medical Center. In partnership with the American Lung Association of Hawaii and the Hawaii Thoracic Society, Dr. Castro also inaugurated the new TB conference room with a presentation on the new ATS/CDC/IDSA TB Treatment Guidelines to a large group of physicians and nurses.

The CDC Team also reviewed program data with local CDC personnel (Dr. Jessie Wing, CDC Medical Officer and Hawaii TB Program Chief, and Jason Nehal, CDC public health advisor) and TB Program staff in Honolulu, Maui, and the Big Island of Hawaii. The State of Hawaii has reported the highest annual state TB incidence rate for most of the past decade (11.9/100,000 in 2002) with over 80% of its cases in foreign-born persons each year.

The busy CDC team visit was capped off by a very enlightening visit to Kalaupapa Settlement for Hansen's Disease on the island of Molokai, hosted by Mike Maruyama, Branch Chief of the Hansen's Disease (HD) Program. In the World Health Organization model, TB and HD are placed under the same program. Closer collaboration with the HD program is helpful since HD and TB have similar at-risk populations in Hawaii and the Pacific region.

The Hawaii TB Control Program plans to build on the momentum afforded by this new beginning to maintain a high profile in the community and with the legislature. The program will continue to work collaboratively with its partners to promote engagement, collaboration, and funding to advance the goals of TB elimination. Ninety-three years after the Hawaii Bureau of TB was established, the Hawaii TB Control Program is

proud to have a cutting-edge facility to develop more responsive and progressive initiatives for Hawaii and the Pacific region and go forward in the 21st century.

I mua a lanakila: Go forward to victory.

—Submitted by Rachel Blair, Ricardo Silva, Dzung Thai, Jason Nehal, and Jessie S. Wing
Hawaii State TB Control Program

OSHA Withdrawal of Proposed TB Standard

In 1993, the Occupational Safety and Health Administration (OSHA) was petitioned by the Labor Coalition to Fight TB in the Workplace (a coalition that included the American Federation of State, County, and Municipal Employees [AFSCME], the Service Employees International Union [SEIU], as well as some local organizations) to develop an occupational health standard against TB transmission. The Coalition requested a permanent standard that would protect against the workplace transmission of TB to workers caring for or overseeing persons with active TB disease. OSHA initially concluded that, for some workers in some settings, a significant risk of occupational transmission of TB exists and began developing a proposed standard.

On October 17, 1997, OSHA published its proposed rule for occupational exposure to TB (62 FR 54160). The proposal would have required employers to protect workers using infection control measures consistent with those recommended by CDC and known to be highly effective in reducing or eliminating work-related TB transmission. The measures include promptly identifying individuals with infectious TB disease, isolating persons with infectious TB in appropriately ventilated rooms, using respiratory protection in certain situations, and providing skin testing and training for employees.

In January 1998, OSHA revised and updated its 1971 respiratory protection standard, 29 CFR 1910.134.¹ However, the agency decided not to require compliance with the updated standard during the rulemaking process. Instead, OSHA redesignated the old standard as 29 CFR

1910.139,² and permitted temporary compliance with this old standard throughout the rulemaking proceedings.

After the close of the written comment period for the proposed standard, OSHA held informal public hearings in Washington, DC, Los Angeles, CA, New York City, NY, and Chicago, IL. The posthearing comment period closed on October 5, 1998. On June 17, 1999, OSHA reopened the rulemaking record for 90 days in order to submit the Agency's report on homeless shelters, as well as certain other documents that had become available after the close of the posthearing comment period. During this limited reopening of the rulemaking record, OSHA also requested comments and data on the Agency's preliminary risk assessment in order to obtain the best, most recent data and provide the most accurate estimates of the occupational risk of TB.

At the request of Congress, the Institute of Medicine of the National Academy of Sciences (IOM) conducted a study of OSHA's proposal and of the need for a TB standard. That study, completed in January 2001, determined that an OSHA standard was needed to maintain national TB rates at their current levels among health care workers and other employees and to prevent future outbreaks of multidrug-resistant TB and other forms of TB among these workers. Based on IOM research and new information on the changing epidemiology of TB, the report posed questions regarding the relationship between OSHA regulations and CDC guidelines. OSHA reopened the record to obtain comments on the IOM study, the draft final risk assessment, and the peer reviewers' comments on the risk assessment.

In May 2003, OSHA announced its decision to withdraw the proposed TB rule.³ A number of factors were given for the decision, including a broad range of CDC and community initiatives that have resulted in a steadily declining rate of TB since OSHA began work on the proposal in 1993. Hospitals, the settings in which workers are most likely to have the highest risk of exposure to TB bacteria, have come into substantial compliance with federal guidelines for preventing the transmission of TB (particularly

CDC's 1994 infection control guidelines).⁴

Overall reductions in TB mean that all workers are now much less likely to encounter infectious TB patients in their workplaces. In addition, OSHA concluded that a standard would not be likely to result in a meaningful reduction in workplace exposure to individuals with undiagnosed TB, because workers are often unable to identify these undiagnosed TB cases quickly enough for isolation procedures and other precautions to be implemented before exposure occurs.

However, OSHA acknowledged that continued vigilance is necessary to maintain the current low risk of TB transmission in the health-care setting. OSHA committed to provide guidance to workplaces with less medical expertise and fewer resources than hospitals, and to use cooperative relationships with employers, public health experts, and other government agencies to promote TB control. OSHA announced it would continue to enforce the General Duty Clause of the OSH Act (the 1970 Act that created OSHA as well as NIOSH, CDC's National Institute for Occupational Safety and Health) and relevant existing standards in situations where employers' failure to implement available precautions exposes workers to the hazard of TB infection.

OSHA has now withdrawn its 1997 proposed rule concerning occupational exposure to TB.^{5,6} The revocation was effective as of December 31, 2003. At the same time, it also withdrew the respiratory protection standard for TB, 29 CFR 1910.139, that had been in effect during the rulemaking process. With the termination of the rulemaking, OSHA is now applying the standard that was revised and updated in 1998, 29 CFR 1910.134.

What does this mean for health care workers? Probably the main implication is the change in the respiratory protection standard. As described above, health care workers had been covered under temporary respirator regulations for TB (29 CFR 1910.139) during the rulemaking process, and these regulations have now been revoked. Employers must now comply with the general industry respirator regulations (29 CFR 1910.134). This means that employers of health

care workers exposed to TB must develop a comprehensive respiratory protection program. The program should include assignment of responsibility; standard operating procedures; medical evaluation of health care workers; training, selection, annual fit testing, and inspection and maintenance of respirators; and program evaluation. You can find further information and details in OSHA's *Federal Register* announcements (see references 3, 5, and 6 below, particularly 6).

We recognize that these are complex and highly technical issues and that health care workers may have further questions as programs seek to comply with these regulations. We are working to obtain further clarification, and will share this in a future issue of *TB Notes*.

—Reported by Ann Lanner
and Paul Jensen, PhD
Div of TB Elimination

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UPDATES FROM THE COMMUNICATIONS, EDUCATION, AND BEHAVIORAL STUDIES BRANCH

Get Online for TB Education and Training Materials!

DTBE is pleased to announce the release of the *TB Education and Training Resources Web Site* at www.findtbresources.org. Launched in October 2003, this Web site includes a searchable database of TB training and education resources that can be used by educators, health care providers, patients, and the general public. The Web site, which builds upon the print-based *Tuberculosis Education and Training Resource Guide* published in May 2003, features materials from DTBE, the National Model TB Centers, and numerous other national and international organizations. You can search for materials by categories such as topic, format, audience, language, author, and date of publication. Many of these materials can be printed directly from the Web site.

In addition to searching for TB education and training materials, you can use this Web site to

- Find out how to order TB materials
- Locate funding opportunities
- Get information about TB organizations
- Find out about upcoming events
- Sign up for TB-related listservs and digests
- Locate TB-related Web links

You can also submit materials produced by your organization for inclusion in the database. Please

use the submission request form at the back of this issue to provide information on any materials you produce that are not already included in the database. This will enable us to continue to expand and enhance this resource.

For further information about the *TB Education and Training Resources Web Site*, please send an e-mail to info@findtbresources.org.

—Submitted by *Hsin-Hsin Foo, MPH*
Div of TB Elimination

TB Weekly Update

The TB-Related News and Journal Items Weekly Update is an electronically distributed TB-related news service that provides subscribers with weekly updates about TB. The weekly update includes summaries of newspaper articles, citations and abstracts of medical and scientific journal articles including CDC's *Morbidity and Mortality Weekly Report*, job announcements, conference and meeting announcements, and other items of interest to individuals in the field of TB. If you are not a subscriber, you can sign up today and start receiving the updates this week. Just go to the URL

<http://www.cdcnpin.org/scripts/subscribe.asp#journal>.

Click on either link that says [TB-Related News and Journal Items Weekly Update](#) and follow the easy steps for subscribing. There is no charge for the subscription, and you can unsubscribe yourself from the distribution list at any time if you no longer need the service.

—Submitted by *Ann Lanner*
Div of TB Elimination

Updated Mantoux Tuberculin Skin Test Wall Chart Now Available

DTBE is pleased to announce the release of the newly revised Mantoux Tuberculin Skin Test Wall Chart. The wall chart is one of many new and updated educational materials on the Mantoux tuberculin skin test. This wall chart illustrates and lists the key steps in administration and reading of the skin test, and describes the cutpoints for interpretation of the test.

The Mantoux Tuberculin Skin Test Wall Chart can be ordered in the following ways:

- Through DTBE's online ordering system: www.cdc.gov/tb
- By mailing or faxing the DTBE Educational and Training Materials Order Form
- Through the CDC Voice and Fax Information System by calling toll free: 1-888-232-3228, then selecting 2, 5, 1, 2, 2, and requesting order #00-5564.

For more information about the wall chart, please send an e-mail to tbinfo@cdc.gov.

—Reported by *Hsin-Hsin Foo, MPH*
Div of TB Elimination

2003 Program Managers' Course

Overview of the TB Program Managers' Course

The overall purpose of the TB Program Managers' Course is to improve the planning and managerial capabilities of new TB program managers throughout the country. The course is designed for TB controllers, program managers, public health advisors, and nurse consultants with programmatic responsibilities at the state, city, territory, and regional (within a state) levels. Optimally, a course participant should have occupied a TB program management position for at least 6 months but no more than 3 years.

2003 TB Program Managers' Course, Oct. 20-24, Atlanta, GA

The Communications, Education, and Behavioral Studies Branch (CEBSB) would like to thank the faculty and participants of the October 2003 TB Program Managers' Course for making the course a success. CEBSB appreciates the faculty's hard work in preparing the materials for their sessions and the participant's hard work during the course.

This year's 5-day training was divided into 18 sessions. Each session stood alone as a block of instruction, but was sequenced to build logically on the sessions preceding it. The sessions covered topics important to TB control managers such as surveillance, epidemiology, regimens

and case management, treatment completion strategies, infection control, testing and treatment of latent TB infection, reaching high-risk populations, contact investigations, outbreak investigations, program planning and evaluation, the Aggregate Reports for TB Program Evaluation (ARPEs), quality assurance, and training and education efforts. The sessions were taught by subject matter experts from DTBE and other CDC programs and from state and big city TB control programs, as well as by other partners.

The course stressed the practical application of planning, management, and evaluation concepts to the specific issues and concerns of TB programs. Skills essential to TB program management were presented, followed by exercises that encouraged participants to practice using the skills in the classroom setting. At the end of each session, participants were asked to address specific questions in a Planning Guide, which required them to synthesize concepts presented in the session and apply them to their own programs. The Planning Guide was a tangible product that participants took home from the course, to serve as a record of personal course discoveries and, more importantly, as a road map for improving the effectiveness of their TB prevention and control efforts.

An initial look at the TB Program Managers' Course participant evaluations indicates the course was very well received. In the final session participants shared one thing that they will change in their program as a result of taking the course. Some of the items mentioned included the following:

- Implementing a cohort review process
- Establishing new partnerships
- Applying logic models to program evaluation activities
- Conducting even more targeted testing and treatment of LTBI programs
- Including targeted patient education programs in conjunction with targeted testing

For the participants, the course is not entirely over. Each will be mailed a 6-month follow-up questionnaire in April 2004. Once this questionnaire is completed and returned, each participant will receive a certificate of completion for the course.

The next Program Managers' Course will be offered in October 2004 in Atlanta, Georgia. Any individual interested in attending the next course should contact his or her DTBE Program Consultant and request to be nominated (see criteria for nomination described in the first paragraph).

*—Submitted by Amera Khan, MPH, and
Scott McCoy, MEd
Div of TB Elimination*

TB EDUCATION AND TRAINING NETWORK UPDATES

TB ETN Member Highlight

Far from being new to the education and training field, Suzy Peters is a dedicated TB ETN member who holds three degrees (BS, MS, PhD) in health education. Suzy is a Health Education Consultant with the Florida Department of Health, Bureau of TB and Refugee Health, and is one of the newest steering committee members for TB ETN.

In Florida, Suzy channels her experience and energy into a plethora of projects. She has developed a comprehensive TB Education Resource Center of printed and video materials for patients, the general public, and professionals. In addition, she has developed and maintains one of the most comprehensive state TB Web sites in the United States (http://www.doh.state.fl.us/disease_ctrl/tb/). Suzy also provides valuable assistance to the corrections community in the development of a corrections-oriented communicable disease newsletter entitled "Disease Lockdown."

Suzy partners with state health department nurse consultants and the A.G. Holley State TB Hospital in developing and promoting a variety of programs in Florida. In addition, she is partnering

with the A.G. Holley State TB Hospital to develop field-tested TB drug fact sheets that will be translated into Spanish, Haitian, Creole, and Vietnamese. Her most ambitious project for 2004 is the video project "Mr. Sputum Goes to the Lab."

Having been a member of TB ETN since it was established in 2001, Suzy has become one of the most active members in the network. She states, "When I went to my first conference, I was totally hooked. I got excited about the potential of what TB ETN could do for me as a TB Educator and how we could share the neat things we were doing in Florida with others." Suzy has shown great interest and dedication to TB ETN by serving as Communications/Membership Subcommittee Co-chair during 2002-2003 and was recently elected to serve on the Steering Committee during 2003-2004.

Suzy's energy reflects her younger days when she was active in all types of sports. These days she is mostly a spectator on the playing field, with the exception of an occasional set of tennis or round of golf. Her primary hobby is woodworking. She is the founder of the Tallahassee Woodcrafters Society and helped to build the log cabin in which she lives today. Her other passion is animals. She has 5 dogs, 2 cats, and a tank of fish. Only two of the dogs are actually hers. The rest are ones who have adopted her or that she acquired from people who thought she would be a good "pet mom."

Suzy sets her goals high for TB ETN in the next few years. She hopes to increase the visibility and membership of TB ETN. She states, "By virtue of membership, a professional will be exposed to frequent communication about everything new and exciting in TB education and training. The more we share and communicate with one another, the less resources spent on reinventing the wheel."

—Submitted by Betsy Carter, MPH, CHES
Div of TB Elimination

Cultural Competency Subcommittee: Update

The Cultural Competency Subcommittee began its activities in January 2003. The first activity was to conduct a needs assessment of the TB ETN membership to determine how best to assist members in the development of the knowledge, skills, and abilities required to 1) train their staff in cultural competency and 2) develop culturally appropriate educational materials and services. Most respondents wanted to learn more about health beliefs and practices of different cultures and believe that cultural competency is important to their work. Respondents also felt that an index of cultural competency resources, access to online resources, and access to cultural competency assessment tools would be beneficial. Results of the needs assessment guided the development of the subcommittee's goals, objectives, and tasks.

The goal of the Cultural Competency Subcommittee is to promote cultural competency among members of TB ETN. The objectives are to

- Identify tools, materials, and other resources in the area of cultural competency and make these available to TB ETN members,
- Provide a forum for TB ETN members to network with others in the area of cultural competency, and
- Promote the availability of the cultural competency subcommittee as a resource for input on cultural/linguistic issues.

The subcommittee has created a cultural competency resource spreadsheet, which was shared with other TB ETN members at the annual conference in Atlanta. The subcommittee will continue to update and maintain this list. If you are aware of any resource (such as a Web site, article, report, manual, assessment tool, or professional contact) that would be helpful to others interested in cultural competence, please contact subcommittee member Heather Joseph (Hjoseph1@cdc.gov). You may also contact her to obtain a copy of the resource spreadsheet for your own use.

In addition, the subcommittee will be sharing "Cultural Competency Tips" in each issue of TB Notes. Look for the tip in this section.

The Cultural Competency Subcommittee is composed of TB trainers and educators who are dedicated to cultural competency and its application to TB control activities. If you are interested in joining this subcommittee, please send an e-mail to tbetn@cdc.gov.

Cultural Competency Quote

"Managing illness cross-culturally depends on communication, but communication depends on understanding the socially and culturally determined references and performances associated with a diagnosis and its treatment. Because people, their communities, and the process of acculturation is dynamic, there are no simple rules of thumb or tactics that are eternal. In my opinion what the management of TB cross culturally requires is a living system that can adapt with the target population as it adapts to the forces acting on it. It also requires a system that can educate and intervene in the culture of medicine and in the target community on both an individual and community level."

- Carey Jackson. From "Linguistic and Cultural Aspects of Tuberculosis Screening and Management for Refugees and Immigrants" presented at the International Union Against Tuberculosis and Lung Disease Conference, March 1-2, 1996, in Chicago, Illinois.

—Submitted by Gabrielle Benenson, MPH
Div of TB Elimination

UPDATE FROM THE CLINICAL AND HEALTH SYSTEMS RESEARCH BRANCH

New Web Site for Clinicians Treating TB and HIV

In a "Notice to Readers" published in the *Morbidity and Mortality Weekly Report* dated January 23, 2004 (*MMWR* 2004; 53[2]: 37), the Division of Tuberculosis Elimination of the Centers for Disease Control and Prevention announced the launch of a new Web site for clinicians treating tuberculosis (TB) disease in patients taking certain antiretroviral drugs for human immunodeficiency virus (HIV) infection.

This site, entitled *Updated Guidelines for the Use of Rifamycins for the Treatment of Tuberculosis Among HIV-Infected Patients Taking Protease Inhibitors or Nonnucleoside Reverse Transcriptase Inhibitors* and available at http://www.cdc.gov/nchstp/tb/TB_HIV_Drugs/TOC.htm, was produced by CDC scientists and a group of outside experts to provide clinicians with the latest dosing guidelines for this complex and rapidly-evolving field.

The data on this Web site supercede the information contained in previously published guidelines ("Notice to Readers: Updated Guidelines for the Use of Rifabutin or Rifampin for the Treatment and Prevention of Tuberculosis Among HIV-Infected Patients Taking Protease Inhibitors." *MMWR* 2000; 49 [9]: 185-89). In addition to the information on antiretroviral drugs reviewed in the previous guidelines, the update contains suggested dosing for the following:

- lopinavir/ritonavir
- atazanavir
- fosamprenavir

Because of the need to frequently update these guidelines, future recommendations will be made accordingly and be available at the aforementioned Internet link.

We hope that this Web site will enhance clinicians' efforts to effectively manage patients with HIV infection and TB disease, and thereby optimize efforts to eliminate TB.

—Reported by Philip R. Spradling, MD
Div of TB Elimination

INTERNATIONAL UPDATE

NOTICE: Tuberculosis Among Arriving Liberian Refugees

Approximately 8,000 Liberian refugees from Côte d'Ivoire (Ivory Coast) are being resettled to the United States over the next eight months. Overseas health assessments by the International Organization for Migration among approximately 2,000 Liberian refugees have identified nine cases of infectious TB (smear-

positive, i.e., Class A) and 38 cases of clinically active, smear-negative TB (Class B1). Most of these cases are among adults 20-32 years of age.

Because of the relatively high rates of TB and HIV reported among these refugees and the high risk of developing TB disease once infected, we recommend that all Liberian refugees be evaluated for active tuberculosis and tested for latent TB infection as soon as possible upon their arrival in the United States.

—Reported by Susan Maloney, MD, MPH
Div of Global Migration and Quarantine

NEW CDC PUBLICATIONS

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PERSONNEL NOTES

Andrey S. Borisov, MD, MPH, a contractor with Northrop Grumman – BCA, has joined the

Clinical and Health Systems Research Branch of the DTBE as a Public Health Analyst for the Tuberculosis Trial Consortium (TBTC). He will be working on data management, quality assurance and patients' safety profiles in Study 26, a randomized clinical trial administered by the TBTC. Andrey received his medical degree from the Far Eastern State Medical University, Russia, and his MPH from the Department of Epidemiology of Emory University School of Public Health. Working in both clinical and academic settings, Andrey acquired extensive experience in methodology, management, and analysis of clinical studies. Prior to coming to CDC he worked at the Emory University School of Medicine where he studied risk factors for developing depression among patients receiving interferon alpha for Hepatitis C virus (HCV) infection.

Susan Conner has been selected for the contract surveillance data manager position in SEOIB. As a Northrop Grumman contractor, Susan worked as the Project Manager for the Gonococcal Isolate Surveillance Project (GISP) and Adolescent Women Reproductive Health Monitoring Project in the Division of STD Prevention, NCHSTP, beginning in May 2001. At DSTDP, Susan conducted data management activities for the large GISP database, and managed data collected from non-traditional surveillance sites such as school-based clinics and homeless shelters. She provided technical assistance to funded sites, including data quality assurance, database management, data analyses and reporting, and budget review. Susan developed and maintained the GISP website and developed innovative data collection methods for project sites, for which she won the NCHSTP Director's Recognition Award in July 2003. Susan's data management experience began in 1999 at Emory University, where she handled data collection, data quality management, and data analyses for several ongoing projects in HIV/AIDS and STD research. Susan has an MPH from the Department of Environmental and Occupational Health from Emory University in 2001, and a BS in Exercise Movement and Science from the University of Oregon in 1998. Susan begins her new position with the Surveillance Team on March 3.

Tracina Cropper has been selected for the public health advisor position in Austin, Texas, where she will serve as the Assistant to the Senior Public Health Advisor assigned to the state project area. Tracina began her career in public health on September 23, 1991, when she joined CDC as a public health associate with the Division of Sexually Transmitted Diseases (STD) and was assigned to the STD Disease Intervention Specialist training center in Decatur, Georgia. In October 1992, she was assigned to the Philadelphia STD program as a public health advisor/disease intervention specialist. Tracina was selected to participate in a TDY from July to September 1997 to combat a syphilis outbreak among crack cocaine addicted prostitutes in the Winston-Salem/Greensboro, NC, area. Tracina's interest in TB control led her to leave CDC in February 1998 and join the City of Philadelphia TB control program where she rapidly advanced to the position of outreach team leader. Tracina returned to CDC/DTBE on December 17, 2001. As the Preventive Therapy Coordinator in Philadelphia, Tracina prepared various statistical reports detailing cases, DOT, DOPT, performance measures, and service levels. Tracina was also responsible for scheduling and conducting large contact screenings. In February 2003, Tracina participated in a TDY in Seattle, WA, to assist in a TB outbreak among the homeless. In July and August of the same year, she was temporarily detailed to the State TB Program in Harrisburg, PA. Tracina began her new assignment in Texas on October 6, 2003.

Reuben Granich, MD, MPH, has returned to the International Research and Program Branch of DTBE/NCHSTP/CDC/Atlanta. Reuben has concluded an 18-month secondment to the World Health Organization, assigned as their Medical Officer in tuberculosis to the Revised National TB Control Program (RNTCP) in India. During his tour, Reuben contributed immensely to the expansion of access to DOTS services, from 459 million (45%) to 772 million (72%) population. Additionally, he provided co-leadership in the recruitment and training of TB project staff from India, in a variety of technical consultations and operational research activities (including the growing problem of TB/HIV in India), and in the coordination of the external

2003 RNTCP-WHO joint monitoring mission. Reuben will now be serving in a crucial role, drawing from past and this most recent experience, as DTBE endeavors to provide very much needed technical support to TB/HIV treatment and care in close collaboration with the Global AIDS Program.

Jimmy Keller has accepted the public health advisor position with the North Carolina Tuberculosis (TB) Program. After completing a 20-year Air Force career and taking some time off, Jimmy started his public health career with CDC as a public health associate II in the STD program in Miami, Florida, in May 1991. From there, he moved to New York City, New York, in October 1992 to continue in the STD Program. In January 1995, Jimmy accepted a position as a supervisory public health advisor in the New York City TB Program. In May 1998, Jimmy moved to Detroit, Michigan, to work in their TB Program in a re-created position as the senior public health advisor. Then, in January 2001, he moved to Columbus, Ohio, to fill a vacancy as the senior public health advisor for the Ohio TB Program. Continuing in the role as a senior public health advisor, Jimmy started work in the North Carolina TB Program on November 17, 2003.

Philip LoBue, MD, has transferred to DTBE headquarters after a 4½ year assignment in San Diego, California. Phil is serving as Team Leader for the Medical Consultation Team in FSEB. Phil graduated from the University of Pennsylvania in 1985 with a BA degree in biochemistry. He earned his MD degree from the same institution in 1989. He completed an internship and residency in Internal Medicine at the University of California-San Diego Medical Center, followed by a fellowship in Pulmonary and Critical Care Medicine, also at UCSD. Phil subsequently became a faculty member in the Division of Pulmonary and Critical Care Medicine at UCSD in 1995, appointed as a Clinical Instructor and then as an Assistant Clinical Professor of Medicine. During this time, he was Principal Investigator at UCSD for the Quantiferon Study 1 and Co-investigator at UCSD for USPHS Study 22 (rifapentine), both conducted by DTBE. Phil joined FSEB/DTBE in September 1999 and was assigned as Medical Epidemiologist for the TB

Control program in San Diego County. In this assignment, his primary responsibilities were to assist the local TB program with epidemiologic data collection, analysis, and reporting, provide clinical consultation and oversee clinical and epidemiologic studies. During this time, Phil served on numerous local, state, and national committees and workgroups including the NTCA/CDC Contact Investigation Recommendations Working Group, California Department of Health Services Tuberculosis Indicators Project Advisory Committee, CDC RVCT (Report of Verified Case of Tuberculosis) Revision Working Group and CDC Tuberculosis Surveillance Program Area Module Steering Committee. He also maintained his affiliation with UCSD, acting as medical director of the medical center's Chest Clinic from 1997 through 2003.

Richard J. (Rick) O'Brien, MD, Chief, Clinical and Health Systems Research Branch, DTBE, has left CDC for a position in Geneva with FIND, the Foundation for Innovative New Diagnostics, which has recently been established with support from the Bill and Melinda Gates Foundation to promote the development, evaluation, and implementation of new diagnostic tests for TB. During his 32 years in public health, Rick made significant contributions to TB control and elimination that brought him international renown in the scientific community. He joined the USPHS in 1970 as Chief, Epidemiologic Studies Branch, Appalachian Laboratory for Occupational Respiratory Disease, National Institute for Occupational Safety and Health (NIOSH). There, he directed an important national epidemiologic study of coal workers' pneumoconiosis (black lung disease). In 1972 he left that position to complete his medical training through a PHS-supported residency in internal medicine at Grady Hospital in Atlanta before going on to teach at West Virginia Medical School from 1974 to 1975. He joined the CDC in 1975 as an Epidemic Intelligence Service (EIS) officer in the Viral Disease Division of the former Bureau of Epidemiology. He assumed responsibility for supervising and coordinating national influenza surveillance during the Swine Influenza Immunization Campaign. During this time, Rick developed definitions to categorize the extent of an influenza outbreak that remain in use today.

He also completed a pulmonary fellowship and academic work in respiratory epidemiology in London.

In 1979 Rick returned to CDC, joining the Tuberculosis Control Division. By 1982, he had been promoted to chief of the Division's Clinical Research Branch. In this role, he helped to oversee USPHS Study 21, one of the largest TB treatment trials during the 1980s, several times rescuing it from being terminated owing to lack of funding. In Study 21, Rick's team tested short-course (6 month) therapy for TB. Results of this trial led to the adoption of this treatment as the standard treatment regimen. During the 1980s, Rick conducted innovative research into treatment for TB in persons living with AIDS and led an initiative that broadened the distribution of rifibutin to patients with life-threatening *Mycobacterium avium* infections.

In 1991 CDC seconded Rick to the World Health Organization (WHO) Tuberculosis Programme to re-establish a global research program in tuberculosis. Over a period of 5 years, he built a network of support for the research program and implemented several major trials of TB prophylaxis in developing nations. While at WHO, Rick contributed to the development of the DOTS strategy and conducted epidemiologic research on TB among the HIV-infected population in Tanzania and sub-Saharan Africa.

Since returning to CDC in 1996, Rick has continued to serve as Chief of the Research and Evaluation Branch (recently reorganized as the Clinical and Health Systems Research Branch) in DTBE. His leadership was important for the formation of the TB Trials Consortium (TBTC). In 1998 Rick's testimony led to FDA approval for rifapentine, the first new drug for TB treatment in more than 25 years. In addition, he was directly involved in securing the involvement of Bayer, a major pharmaceutical company, in upcoming trials to examine the efficacy of moxifloxacin as a treatment. In 2000, Rick played a pivotal role in the establishment of the Global Alliance for TB Drug Development. Rick has also contributed to the development and dissemination of guidelines in tuberculosis control, both nationally (at CDC) and internationally (with WHO and the IUATLD).

In 2003, he served as co-chair of the 50-member ATS/CDC committee that developed new guidelines on targeted tuberculin testing and treatment of latent tuberculosis infection.

In 1999 Rick reached the length of service at which retirement is mandatory for USPHS Commissioned Corps officers, at which time he transferred to the US Civil Service. Thus when Rick left CDC at the end of December 2003, he had already retired from the Commissioned Corps but was not eligible for retirement under the regular Civil Service. In January 2004 he relocated to Geneva to begin his new position with FIND. His wife Rose Pray is a nurse epidemiologist who has also worked at CDC for a number of years in the fields of TB and HIV. We hope Rick continues to have time for his hobbies of woodworking, gardening, and cooking. We will miss his onsite presence here in Atlanta a great deal, but certainly look forward to continued collaborations with him as he continues the fight against TB in a new capacity.

Maureen O'Rourke was selected for the public health advisor (PHA) position in Harrisburg, Pennsylvania. She transferred from the Tennessee TB Elimination Program in Nashville, Tennessee, where her responsibilities included writing Tennessee's yearly Progress Reports and Cooperative Agreement Applications. Maureen completely redesigned Tennessee's yearly statistical report, and also coordinated World TB activities for the state. Maureen also assisted in conducting quality assurance activities for the regions/metropolitan areas in Tennessee. During her last 6 months in Tennessee, she independently revised Tennessee's guidelines for conducting effective contact investigations as well as redesigned the contact interview sheet. Maureen began her career with CDC in Columbia, South Carolina, as a PHA in the Sexually Transmitted Diseases (STD) program. Before that, she was a state Disease Intervention Specialist (DIS) for a year and a half in Hillsborough and Manatee Counties of Florida. Her job experiences also included clerical and administrative positions at the Veterans Administration and with a National Guard MASH unit. As a state and federal DIS, Maureen was trained and educated in the fundamentals of

public health delivery and epidemiology. In 1995 she was reassigned to Dallas, Texas, where she planned, coordinated, and implemented special screening activities at homeless shelters, detention centers, and other special target populations. Maureen also presented educational and training programs.

Todd Wilson, MS, CHES, has been selected for an Epidemiologist position on the Surveillance Team in the Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB). While Todd's duties (producing DTBE's annual surveillance report, responding to data requests, data management, data analysis and dissemination, and the proverbial "other duties as assigned") will not change, we welcome Todd now as a career federal civil servant, effective December 29, 2003. Todd joined SEOIB as a Fellow in September 2002 after completing a Public Health Prevention Service (PHPS) Fellowship. Todd's PHPS experience included rotations at CDC's Division of Adolescent and School Health and the Division of Viral and Rickettsial Diseases, and assignment to the Las Cruces District Office of the New Mexico Department of Health. Todd has a BA degree in Journalism (1991) and an MS degree in Health Promotion/Health and Sport Sciences (1999) from the University of Oklahoma. He is also a Certified Health Education Specialist.

CALENDAR OF EVENTS

April 28, 2004

TB Update Anaheim, CA

Francis J. Curry National TB Center
Website for information and to apply:
[http://www.nationaltbcenter.edu/catalogue/trainin
g_courses.cfm](http://www.nationaltbcenter.edu/catalogue/trainin
g_courses.cfm)

May 21-26, 2004

ATS 2004: American Thoracic Society International Conference Orlando, Florida

Website for information:
<http://www.thoracic.org/ic2004/conference.asp>

June 8, 2004

NTCA Preworkshop Meetings: NTCA Business Meeting, NTNCC Nurses Training / Meeting, PHA Field Staff Meeting, Medical Officer Field Staff Meeting Atlanta, GA

National TB Controllers Association (NTCA),
National TB Nurse Consultant Coalition
(NTNCC), and DTBE/CDC
Contact: Ms. Christina Williams, NTCA, at (678)
503-0503 or Mr. Paul Poppe, DTBE, at (404)
639-8120

Web site for information and to register:
[http://www.signup4.net/Public/ap.aspx?EID=2004
37E](http://www.signup4.net/Public/ap.aspx?EID=2004
37E)

June 9-11, 2004

2004 National TB Controllers Workshop Atlanta, GA

Theme: "Critical Partnerships for TB Elimination"
National TB Controllers Association (NTCA),
National TB Nurse Consultant Coalition
(NTNCC), and DTBE/CDC
Contact: Ms. Christina Williams, NTCA, at (678)
503-0503 or Mr. Paul Poppe, DTBE, at (404)
639-8120

Website for information and to register:
[http://www.signup4.net/Public/ap.aspx?EID=2004
37E](http://www.signup4.net/Public/ap.aspx?EID=2004
37E)

June 14-18, 2004

AG Holley Clinical Course Lantana, FL

Florida Dept. of Health
Bureau of TB and Refugee Health
Website for information and to register:
www.doh.state.fl.us/disease_ctrl/tb

June 21, 2004

AG Holley TB Skin Test Trainer Course Lantana, FL

Florida Dept. of Health
Bureau of TB and Refugee Health
Website for information and to register:
www.doh.state.fl.us/disease_ctrl/tb

June 23-24, 2004

Meeting of the Advisory Council for the Elimination of TB (ACET) Atlanta, GA

Contact: Paulette Ford-Knights
Tel: (404) 639-8008

June 23-26, 2004
2004 IUATLD European Region 3rd Annual Conference
Moscow, RUSSIA
 E-mail: gbmigliori@fsm.it
 Website for information: The 3rd Conference of the UNION

July 7-9, 2004
TB Nurse Case Management Course
Ft. Myers, FL
 Florida Dept. of Health
 Bureau of TB and Refugee Health
 Website for information and to register:
www.doh.state.fl.us/disease_ctrl/tb

July 13-15, 2004
TB Intensive
San Francisco, CA
 Francis J. Curry National TB Center
 Website for information and to apply:
http://www.nationaltbcenter.edu/catalogue/trainin_g_courses.cfm

July 28-30, 2004
Florida Corrections TB Program
Polk County, FL
 Florida Dept. of Health
 Bureau of TB and Refugee Health
 Website for information and to register:
www.doh.state.fl.us/disease_ctrl/tb

August 11-13, 2004
TB Education and Training Network (TB ETN) 4th Annual Conference
Atlanta, GA
 TB Education and Training Network
 Website for information:
<http://www.cdc.gov/nchstp/tb/TBETN/default.htm>

September 20, 2004
AG Holley TB Skin Test Trainers Course
Lantana, FL
 Florida Dept. of Health
 Bureau of TB and Refugee Health
 Website for information and to register:
www.doh.state.fl.us/disease_ctrl/tb

September 20-24, 2004
AG Holley Clinical Course
Lantana, FL
 Florida Dept. of Health
 Bureau of TB and Refugee Health
 Website for information and to register:
www.doh.state.fl.us/disease_ctrl/tb
 September 28-October 1, 2004
 Southeast TB Controllers Course
 New Orleans, LA

October 13-15, 2004
TB Nurse Case Management Course
Gainesville, FL
 Florida Dept. of Health
 Bureau of TB and Refugee Health
 Website for information and to register:
www.doh.state.fl.us/disease_ctrl/tb

November 2-5, 2004
TB Case Management and Contact Investigation
San Francisco, CA
 Francis J. Curry National TB Center
 Website for information and to apply:
http://www.nationaltbcenter.edu/catalogue/trainin_g_courses.cfm

December 6-10, 2004
AG Holley Clinical course
Lantana, FL
 Florida Dept. of Health
 Bureau of TB and Refugee Health
 Website for information and to register:
www.doh.state.fl.us/disease_ctrl/tb

December 13, 2004
AG Holley TB Skin Test Trainers Course
Lantana, FL
 Florida Dept. of Health
 Bureau of TB and Refugee Health
 Website for information and to register:
www.doh.state.fl.us/disease_ctrl/tb

ATTACHMENTS

New DTBE Branch Names

Former Branch Name	New Branch Name
Communications and Education Branch (CEB)	Communications, Education, and Behavioral Studies Branch (CEBSB)
Computer and Statistics Branch (CSB)	Information Technology and Statistics Branch (ITSB)
Field Services Branch (FSB)	Field Services and Evaluation Branch (FSEB)
International Activities (IA)	International Research and Programs Branch (IRPB)
Research and Evaluation Branch (REB)	Clinical and Health Systems Research Branch (CHSRB)
Surveillance and Epidemiology Branch (SEB)	Surveillance, Epidemiology, and Outbreak Investigations Branch (SEOIB)

TB Education and Training Materials Submission Request

Please mail, fax, or e-mail completed request to the CDC National Prevention Information Network (NPIN), Attn: Manager, PO Box 6003, Rockville, Maryland, 20849-6003; fax: 301-562-1050; e-mail: info@findtbresources.org. For additional information call 800-458-5231 and press "1" for reference and referral staff who will direct your call.

Title of Material:			
Language:		Country of Origin:	
Author:		Date of Publication:	
Available From (organization that distributes the material):			
Contact/Ordering Information: (address, telephone, e-mail)			
Web Site Address (if applicable):			
Cost of Material:		Continuing Education Credits Available:	
Material Format: Please circle the most appropriate format			
Audiotape	DVD	Manual	Promotional Item
Bibliography	Fact Sheet	Module	Report
Book	Flipbook	Newsletter	Slide Set
Booklet	Game	Online Course	Study Guide
Brochure/Pamphlet	Guideline	Online Resource	Teaching Guide/Training Curriculum
CD-ROM	Information Card	Photo Novella	Tool
Coloring Book	Information Kit	Pocket Guide	Videotape
Comic Book	Journal	Poster/Wall Chart	
Target Audience: Please circle the appropriate target audience(s)			
Advocates	Government Agencies	Lab Personnel	Outreach Workers
African Americans	Health Educators/Communicators	Long-term Care Residents	Parents
Asians/Pacific Islanders	Health Professionals	Long-term Residential Care Providers	Persons with HIV/AIDS
Business and Labor Organizations	Hispanics	Managers and Supervisors	Persons with LTBI
Children/Adolescents	Homeless	Medical and Nursing School Students	Persons with TB
Civil Surgeons	Infection Control and Occupational Health Workers	Migrant Workers	Physicians
Community Leaders	Inmates	Native Americans	Policy Makers
Correctional Personnel	Interest Groups	Nurses	Racial/Ethnic Minorities
Foreign-born/Immigrant	International Agencies		Social Service Providers
General Public			Substance Abusers
Topic Area: Please circle the appropriate topic area(s)			
Advocacy/Communications	• Screening	• Respiratory Protection	Racial/Ethnic Minorities
BCG and Other Vaccines	• Skin Test	Long-Term Care Facilities	Schools/Universities
Case Management	• Skin Test Practice Arms	Managed Care	Shelters
Children	• Skin Test Rulers	Migrant Workers	Substance Abuse Facilities
Comprehensive TB Materials	• Sputum Smear Examination	Multidrug-resistant TB	Surveillance
Contact Investigation	Extrapulmonary TB	Outbreaks	Training and Education
• Interviewing	Foreign-born/Immigrant	Partnership Building	Treatment
Corrections	General TB Information	Pregnant Women	• Adverse Reactions
Cultural Competence	Guidelines, Policies, and Protocols	Program Evaluation	• Directly Observed Therapy
Diagnosis	History of TB	Program Management	• Latent TB Infection
• Chest Radiographs	HIV/AIDS Co-infection	• Directly Observed Treatment, Short-Course (DOTS)	• Medication Information
• Culture Examination	Homeless Persons	• DOTS-Plus	• Patient Adherence
• Laboratory Procedures	Infection Control		• TB Disease
	• Engineering Controls		Workplace Settings
	• Health Care Workers		
Please list format, audience, or topic area for your material if the appropriate option is not listed above:			

