

# From: **STOP TB USA**\*

\*Formerly the National Coalition for Elimination of Tuberculosis (NCET)

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*Do you have colleagues, policy makers, friends in the press, or other acquaintances who believe the disease is no longer a problem? Share the following reports with them.*

*These 40+ TB-related reports (below) from 18 different states and Canada were taken from the Centers for Disease Control's TB-Related News and Journal Items Weekly Update and they all occurred in just the past 3 months (July-September, 2008). These are not all the TB reports and articles - just those that were identified. Many of these reports describe problems that present real challenges for health departments.*

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**CALIFORNIA: Casino Worker Diagnosed with TB;** Desert Sun (Palm Springs), September 21, 2008.

A worker at a casino in Palm Springs has been diagnosed with TB, the Agua Caliente Band of Cahuilla Indians said September 20. Riverside County Department of Public Health officials say the risk of transmission to others is low. The employee is "currently on leave and undergoing treatment," said Nancy Conrad, a tribal spokesperson. "Formal letters are being sent to [casino workers] who were identified as possibly being exposed to the infection," the tribe said in a release. "Only those who have received formal notification will be tested at this time." The casino remains open.

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**CALIFORNIA: TB Case Reported at College Campus;** San Diego Union-Tribune, September 28, 2008.

Officials of the San Diego County Health and Human Services Agency report that a student at a college's higher education center in National City has been diagnosed with TB. The student attended classes during the summer and fall of this year. The college has notified about 75 students and faculty who may have been exposed. Student Health Services on the Chula Vista, National City, and Otay Mesa campuses are offering free testing for potentially exposed students; telephone 619-482-6354 for information. Other persons with concerns should telephone the County TB Control Program at 619-692-8621.

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**USA: Promising New TB Drug Receives Phase 2 SBIR;** Medical News Today; September 29, 2008.

The clinical-stage biopharmaceutical company Sequella, Inc. announced the receipt of a \$2.3 million Small Business Innovative Research (SBIR) grant from the National Institutes of Health (NIH), National Institute of Allergy and Infectious Diseases (NIAID) to develop SQ641, a promising new TB drug. The grant will be used to fund several critical path studies. SQ641 is a potentially powerful antituberculosis drug. Results of the completed Phase 1 grant demonstrated that SQ641 has superior activity against TB compared to all other TB drugs. Also, it shows exceptional activity against all members of the mycobacteria family and other pathogenic nontubercular mycobacteria. Dr. Carol Nacy, CEO of Sequella, commented that NIH is a model example of how strong public and private partnerships help advance new infectious disease therapies into the drug pipelines.

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**USA MILITARY: Suspected Pulmonary Tuberculosis Exposure at a Remote U.S. Army Camp in Northeastern Afghanistan;** Military Medicine; Nevin, R.L et al.

Military personnel serving at remote camps in the border regions of northeastern Afghanistan may experience crowded living conditions and may have frequent interaction with local national (LN) workers, increasing the risk of exposure to multiple endemic diseases including TB. In January 2007,

pulmonary TB was clinically suspected in a LN worker who had close contact with a company of 92 US Army personnel at a remote camp in Konar province, Afghanistan, over four months. This report describes the results of the contact investigation conducted by the US Army, in which four US personnel were found to have evidence of TB exposure. This investigation raises concerns arising from the high prevalence of drug-resistant TB in the region and in neighboring North West Frontier Province, Pakistan, and demonstrates the challenges of conducting contact investigations and using LN workers in deployed wartime environments.

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**NEW YORK CITY: 2008 MacArthur Fellows: Wafaa El-Sadr;** MacArthur Foundation; September 2008.

The infectious disease specialist Dr. Wafaa El-Sadr has received a 2008 MacArthur Fellows Program award. El-Sadr is the director of the International Center for AIDS Care and Treatment Programs and the Center for Infectious Disease Epidemiologic Research of the Columbia University Mailman School of Public Health, and chief of the Division of Infectious Diseases at Harlem Hospital Center. She has developed a varied approach to treating diseases like HIV/AIDS and TB. El-Sadr uses her clinical and public health expertise to study pharmacologic treatment protocols to identify alternative medications for patients who cannot tolerate the conventional therapy. Dr. El-Sadr has led investigations of preventive measures such as trials of microbicide gels to prevent HIV transmission and behavioral factors related to treatment. She has developed treatment strategies by exploring factors such as health care accessibility, education, social status, and economic stress. She has also provided international leadership in prevention of mother-to-child HIV transmission through the use of aggressive drug therapy during pregnancy and beyond. El-Sadr has worked with poor and immigrant communities in Harlem, New York, as well as in countries in sub-Saharan Africa. The MacArthur Fellows Program award provides unrestricted fellowships to talented individuals who have shown extraordinary originality and dedication in their creative pursuits and a marked capacity for self-direction. The award is intended to allow the recipients to pursue their own creative, intellectual, and professional inclinations. It includes a stipend of \$500,000 to the recipient, paid out in equal quarterly installments over five years.

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**U.S.A.: U.S. Barred 33 TB-Infected People from Flying over Past Year: CDC's New "Do Not Board" List Comes as a Surprise to Infectious Disease Experts;** US News & World Report, September 18, 2008, Amanda Gardner.

A recently released federal report revealed that the names of 33 prospective air travelers suspected or confirmed of having infectious TB were placed on the US government's public health "Do Not Board" list in its first year of existence. The list was authorized under the Aviation and Transportation Security Act of 2001, and was instituted June 1, 2007, by the US Centers for Disease Control and Prevention (CDC) and the Department of Homeland Security. During the year after the list was instituted, US state and local or territorial health departments requested that the names of 42 persons be placed on the list because of confirmed or suspected TB, including multidrug-resistant TB (MDR TB) and extensively drug-resistant TB (XDR TB). Names of 33 individuals who met the criteria were placed on the list. The list is reviewed monthly by the CDC to determine who is eligible for removal. A person's name can be removed from the list if that individual is no longer considered contagious. Between June 2007 and May 2008, 55 percent of the names were removed because the individuals were no longer contagious or did not have TB. Dr. Francisco Alvarado-Ramy, a co-author of the report and a CDC Quarantine Public Health Officer in San Juan, Puerto Rico, explained that formerly the system to prevent travel relied mostly on local action. With this list, the system has moved from a decentralized to a centralized one, in which all US government resources are tapped to prevent persons with serious communicable diseases that can pose a serious public health threat from boarding a plane.

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**GEORGIA: Gwinnett County: TB Cases Climb to No. 2 Spot in Georgia;** Atlanta Journal-Constitution, September 18, 2008; Gracie Bond Staples.

Gwinnett County is seeing a spike in TB cases so far this year, said Vernon Goins, Public Information Officer for the East Metro Health District, which includes Gwinnett, Newton, and Rockdale counties. The increase has already drained the agency's resources, he said. Gwinnett has logged 61 confirmed TB cases so far this year, up from 55 in all of 2007. Fulton County has 64 cases, compared to 78 last year; DeKalb County has 43 cases, compared to 74 last year; and 17 cases have been reported in Cobb County, compared to 27 in 2007. Goins speculated that "because we're still such a fast-growing area with so many people in such close proximity, the incidences are going to be higher." An annual TB test is a good idea for residents of Gwinnett, Fulton, and DeKalb counties, said Goins. "I know that sounds strong, but from a public health perspective, it's a reasonable recommendation because you can harbor TB and be contagious without knowing it, and you can spread it without knowing it, as we've seen in the Newton County case." In that case, a Covington man who had TB disease traveled across the state working on construction jobs and kept up a very active social life. Goins said he doubts health workers will be able to locate all of the man's contacts. To date, 140 have been contacted, of whom 102 tested positive for infection. The man is currently confined to a TB hospital in South Carolina for failing to adhere to his treatment.

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**U.S.A: Federal Air Travel Restrictions for Public Health Purposes United States, June 2007 – May 2008;** Morbidity and Mortality Weekly Report: MMWR Report. 2008 Sep 19; Volume 57, Number 37.

Persons with communicable diseases who travel on commercial aircraft can pose a risk for infection to the traveling public. In June 2007, federal agencies developed a public health Do Not Board (DNB) list, enabling domestic and international public health officials to request that persons with communicable diseases who meet specific criteria and pose a serious threat to the public be restricted from boarding commercial aircraft departing from or arriving in the United States. The public health DNB list is managed by CDC and the US Department of Homeland Security (DHS). To describe the experience with the public health DNB list since its inception, CDC analyzed data from June 2007 to May 2008. This report summarizes the results of that analysis, which indicated that CDC received requests for inclusion of 42 persons on the public health DNB list, all with suspected or confirmed pulmonary tuberculosis (TB). From the requests, 33 (79%) persons were included on the list. The public health DNB list enables public health officials to prevent travel on commercial aircraft by persons who pose a risk for infection to other travelers. State and local health departments in the United States and other countries should be aware of this new public health tool.

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**SOUTH DAKOTA: TB Cases Up in South Dakota;** KSFY News, Sioux Falls, SD, September 11, 2008.

According to the South Dakota Department of Health, 10 TB cases have been reported for 2008, compared to 13 cases for all of the previous year. The cases for 2008 include a cluster of six confirmed cases, in persons ranging in age from three months to 27 years among extended family social groups. Dr. Lon Kightlinger, state epidemiologist for the department of health, said that contacts have been identified and are being screened and treated appropriately.

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**MICHIGAN: State finds no more bovine TB in Shiawassee County, lifts 'potential high-risk area' designation; Elizabeth Shaw; The Flint Journal; Tuesday, September 16, 2008**

SHIAWASSEE COUNTY-- State agriculture and wildlife officials say months of rigorous testing have detected no further cases of bovine tuberculosis in Shiawassee County. That's given the all-clear to lift a 10-mile "Potential High-Risk Area" declared by the Michigan Department of Agriculture back in February, when bovine TB was confirmed in a doe killed by a Bennington Township hunter on Dec. 29, 2007. It was the first confirmed case of bovine TB found this far south since the disease was first detected in 1975 on the northeast side of the state. More than 100 beef and dairy herds and 152 deer were tested and found to be free of bovine TB.

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**SOUTH DAKOTA: Cases of tuberculosis infection blossom;** The Argus Leader -September 14, 2008.

Tuberculosis cases in South Dakota are up 25 percent over the state's five-year median, according to the South Dakota Department of Health. Ten cases have been reported this year, compared with 13 for all of 2007. A cluster of six confirmed cases among extended family social groups in the Sioux Falls area make up the majority of the 10 reported cases, state epidemiologist Lon Kightlinger said. Cases in the cluster range in age from 3 months to 27, and the people are being treated for the disease. Tuberculosis is a bacterial disease that commonly attacks the lungs. The disease is spread by coughing, sneezing or talking. The disease can be prevented with a vaccine. Minnesota also has experienced a tuberculosis outbreak this year in the Worthington area, as more than 70 people have tested positive for either active or latent forms of the disease.

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**COLORADO: No Evidence of TB Spread at Denver Financial Firm;** Rocky Mountain News (Denver), September 4, 2008, by Julie Poppen.

On September 3, Denver public health officials said they are not aware of any other TB cases linked to a TIAA-CREF employee who has TB disease. "We don't know whether it's drug-resistant or not, but even if it is drug-resistant, it is treatable," said Dee Martinez, a spokesperson for Denver Public Health (DPH). The air ducts in the financial company's building are being checked for TB bacteria, Martinez said. DPH is contacting and evaluating the patient's co-workers, family, and friends. TIAA-CREF spokesperson Abby Cohen said business is continuing as usual at the building, where some 1,600 people work.

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**CALIFORNIA: Tuberculosis Case Found at Hospital;** Press Enterprise (Riverside), September 4, 2008, by Lora Hines.

A nursing assistant at Corona Regional Medical Center in Riverside County is suspected of having TB disease, hospital spokesperson Linda Pearson said September 3. "During routine annual screenings for all hospital employees at Corona Regional Medical Center, a suspected case of tuberculosis was identified. We notified the Riverside County Department of Public Health and they notified persons of possible exposure to a suspected case of tuberculosis," said Pearson's written statement. About 150 people received the notification. The period of potential exposure is from the early part of 2008 until Aug. 12, said Barbara Cole, Department of Public Health, Disease Control Director. Confirming that the employee has TB disease could take months, according to Cole, who said no positive test results have been reported to her so far.

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**CALIFORNIA: Tuberculosis Patient Put in Medical Isolation;** Associated Press; September 7, 2008.

San Bernardino County health officials have placed a TB patient into medical custody for failing to comply with treatment and ignoring isolation orders. The patient was treated for TB in Las Vegas on Aug. 7, but officials suspected the person was not adhering to treatment or remaining in isolation. On Aug. 28, officials ordered the patient to cease all contact with the public. When the person did not comply, the county placed the patient into medical custody. Jim Lindley, the county's public health director, said this is the first time in county history that such an action had to be taken.

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**TEXAS: Marble Falls Man Resists Required TB Treatment;** KXAN News, Austin, TX, September 5, 2008.

The Burnet County Health Authority sought the intervention of the County Attorney's Office after a patient did not adhere to treatment for TB disease. The 75-year-old man violated treatment orders of the Texas Department of State Health Services. According to Dr. Juliette Madrigal of the Burnet County Health Authority, the patient is a threat to himself and the people of the county. He did not keep required appointments, did not take his medication, and did not remain confined to his home as ordered. District Judge Gil Jones signed an order to have the patient taken into custody and transported to the Texas Center for Infectious Diseases in San Antonio. Despite the diagnosis of multiple doctors, the patient, who participated by speaker phone, told the judge he did not realize he had a contagious disease. The judge ordered him to remain in the hospital. Another hearing was set for September 11.

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**CALIFORNIA: Hundreds Flock to Test Infants for TB at Kaiser;** San Francisco Chronicle, August 29, 2008, by Elizabeth Fernandez.

State and local health officials say nearly 1,000 infants may have been exposed to TB by a nurse in the maternity ward at Kaiser Permanente's San Francisco Medical Center. On Aug. 26, Kaiser officials said a night-shift worker in the postpartum unit of the maternity ward had developed active TB disease. The nurse was an employee of the Oakland-based health maintenance organization from March 10 to Aug. 10. Kaiser learned of the TB diagnosis Aug. 18 and began notifying 960 mothers that they and their babies may have been exposed; 115 staff were also contacted. Hundreds of worried parents have descended upon the hospital for TB testing. "We're trying not to panic," said Nelson Ramos, whose son was born a month ago. "We're told that the worker was the most sick when our baby was born. I just hope everything turns out OK." A TB specialist at the San Francisco Department of Public Health said the nurse exhibited symptoms of TB when she was hired. "They checked their records and found that she did have a cough," said Dr. Masae Kawamura, Director of TB Control at SFDPH. "Before she started at Kaiser, she was screened with a symptom review and an X-ray taken in the past year. She passed..." [The nurse] did see someone outside the Kaiser system in February and there's evidence of a cough," said Kawamura. "She may have been told she had the cough for another reason. TB is called the great masquerader. It is such a stealth illness." Kaiser's response to the exposure has been "exemplary," said Kawamura. About 90 percent of parents were contacted personally by their pediatricians. For the infants who are too young for a skin test, Kaiser is offering antibiotics as a precaution.

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**COLORADO: Denver Public Health Reports Case of Active TB;** Associated Press, September 3, 2008.

A Denver employee of the financial services firm TIAA-CREF has been diagnosed with an active case of TB and is under home isolation, Denver Public Health officials said on September 2. The worker is receiving medication and is expected to recover, said Dee Martinez, a spokesperson for the department. Co-workers are being checked for TB exposure, she said, and investigators are also inspecting the air ducts at the company's office, where some 1,600 people work.

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**WASHINGTON STATE: The Infectious Disease Research Institute of Seattle Receives NIH Funding to Design Adjuvants to Improve New TB Vaccine Protection;** August 26, 2008.

The Infectious Disease Research Institute (IDRI) of Seattle, Washington, announced the receipt of a \$6.3 million grant from the National Institutes of Health (NIH), National Institute of Allergy and Infectious Diseases (NIAID). The four-year grant will be used to develop adjuvant formulations to enhance the immune response to new TB vaccine antigens. IDRI will now be able to select the most promising

adjuvant formulations, evaluate them in preclinical models, and develop manufacturing processes for additional testing and clinical trials. Adjuvants are compounds used to improve the body's immune response to vaccines. Since most new adjuvants are owned by large pharmaceutical companies and are not readily accessible to academics and not-for-profit organizations, IDRI is developing a collection of adjuvants that can be combined to target specific immune pathways and improve vaccine protection. Steven Reed, founder and head of IDRI's Research and Development Program, expressed gratitude for NIH's support of the company's goal of developing safe, effective, and low-cost adjuvant formulations to fight neglected diseases. He commented that the support is essential to allow them to harness the most promising technologies and deliver an effective TB vaccine quickly. IDRI's TB vaccine research has received previous grants and contracts from NIAID, and the company has over 30 researchers working on products to prevent, detect, and treat TB.

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**MINNESOTA: TB Cases at 67;** KSFY.com, Sioux Falls, September 2, 2008; Brian Allen.

The number of TB cases under investigation in Nobles County, Minnesota, has increased from seven active cases in June to 67 persons with TB or TB infection and another 31 persons possibly infected. Brad Meyer, Nobles County Health Administrator, admits that they have had an outbreak of TB. Of the 67 cases under review, five persons have active TB disease, and 62 persons have latent TB infection. Health officials explain that although some people in the county are infected with the TB bacteria, this does not mean that the illness is running rampant.

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**NEW YORK CITY: Self-Reported Tuberculosis Disease and Tuberculin Skin Testing in the New York City House Ballroom Community;** American Journal of Public Health. 2008 June29, 2008: S.M. Marks, et al.

This study described the history of TB disease and tuberculin skin testing among the New York City House Ballroom community, a social network of diverse sexual and gender identities or expressions. Members of the House Ballroom community were convenience sampled, surveyed, and tested for HIV in 2004. The researchers identified characteristics associated with history of TB, tuberculin skin testing, and test positivity and described the timing of skin testing. Of 504 participants, 1.4% reported a history of TB and 81.1% had received a tuberculin skin test. Of those tested, 16 had positive results, which indicated latent infection, and 68% had received a test in the 2 years prior to the survey. Participants with health insurance were more likely and those with little education were less likely to have received a skin test. HIV-infected participants (16%) were not more likely to have received a tuberculin skin test compared with non-HIV-infected individuals. Foreign-born participants and self-identified heterosexuals and bisexuals were more likely to have had positive skin tests. Self-reported history of TB was high among the House Ballroom community. Although many community members had a recent skin test, further efforts should target services to those who are HIV infected, have low education, lack health insurance, or are foreign born.

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**U.S.A.: TB Perspectives among a Sample of Mexicans in the United States: Results from an Ethnographic Study;** Journal of Immigrant and Minority Health. 2008 Apr; Volume 10, H.A. Joseph, et al.

A study was conducted to describe the sociocultural aspects of TB among Mexicans in the United States and to provide TB programs with practical recommendations for serving this population. In depth interviews were conducted with 50 persons from Mexico living in the United States. Local bilingual, bicultural researchers conducted the interviews with respondents recruited from TB clinics and surrounding communities. Diverse TB perceptions and attitudes were found, but few were associated with specific participant characteristics. Widespread misperceptions about TB transmission and low perceptions of risk were detected. Anticipated TB stigma among those with no history of disease was

qualitatively greater than reported stigma among those who had TB disease. The researchers also detected missed opportunities for TB education. Reported barriers to care included lack of transportation, limited clinic hours, cost of services, inconvenient clinic location, and communication problems with staff. To address the diverse needs of Mexican-born clients, it is recommended that TB programs provide culturally-appropriate, patient-centered care. Several strategies are suggested aimed at raising risk awareness and reducing stigma. Finally, the researchers encourage programs to facilitate access by providing language-appropriate services, extending clinic hours, and facilitating transportation.

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**TEXAS: Tuberculosis on the Rise;** Associated Press, July 30, 2008.

The Brazoria County Health Department, Texas, is treating at least 15 cases of TB, double the number of cases it has handled in recent years. Marie Beth Jones, a county spokesperson, said as many as 90 people may have been exposed to TB, and officials are administering skin tests to determine whether they have the infection. However, William Ayres, a spokesperson for the Department of State Health Services in Austin, said the increase is not extraordinary, and there is no cause for alarm.

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**COLORADO: Health Officials Suspect Tuberculosis;** Rocky Mountain News, July 29, 2008.

An employee at the Golden-based Jacobson Companies beverage distribution center is suspected of having TB, officials at Denver Health Medical Center (DHMC) said. The patient, who was referred by his doctor, has been confined to his home until laboratory tests are completed. Officials began testing the patient's co-workers on July 28. DHMC said there is no risk of product contamination at the distribution center. In 2007, Colorado reported 111 cases of active TB disease, down from 124 cases in 2006, state data show.

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**HAWAII: Department of Health Notified of Multidrug-Resistant TB Cases (Hawaii);** EmaxHealth; August 4, 2008.

The Department of Health (DOH) in Hawaii was notified of five patients with multidrug-resistant TB (MDR TB) in Chuuk, Federated States of Micronesia, four of whom have died. The government of Chuuk has requested assistance from CDC. For several years, CDC has been working with the Pacific Island TB Controllers Association to improve TB diagnosis, treatment, and public health services in countries in the Pacific. Because of this collaboration, the cases in Chuuk were diagnosed. Hawaii normally has about one case of MDR TB per year. The DOH is forming a TB task force to keep the rates of MDR TB low in Hawaii, reduce its high rate of TB, and coordinate health care for MDR TB cases. The DOH TB clinic at Lanakila provides free screening and free TB treatment. The task force will consist of representatives from public and private partners in health care; community clinics; CDC; Health and Human Services; the Honolulu Quarantine Station; regional airlines; the Pacific Islands Health Officers Association; the Nations of Micronesia; the military; and other government, community, and Pacific partners.

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**GEORGIA: Hall Holding TB Cases in Check;** AccessNorthGa.com; August 2, 2008, by Jerry Gunn.

The rates of TB appear to be on the rise in Gwinnett County, Georgia, with 55 cases in 2006, second in Georgia to Fulton County; whereas, rates are down in Hall County. Connie Martin, Hall County Health Department TB Coordinator, said that there has been a gradual decrease in TB cases in the last three years. Martin said that there has been only one case reported for this year in Hall County. She said 10 cases were reported in Hall County in 2005, six cases in 2006, and five in 2007. She explained that the at-risk population is carefully screened, contact investigations are done, and referrals are made. She stated that anyone who thinks they have been exposed to TB is urged to contact health officials, and that each health department in the district, including Hall County, has a nurse who specializes in TB.

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**IDAHO: County Inmates Infected with TB;** Idaho Press-Tribune, August 5, 2008, Bryan Dooley.

A patient who tested positive for TB infection in May of 2008 informed health personnel that he had entered work release in Canyon County, Idaho, in January of 2008. As a result, Southwest District Health has notified more than 500 people that they could have been exposed to TB while at a Canyon County work release center. Laurie Boston, a health department spokesperson, said that 181 individuals have been tested so far, and nine persons have tested positive for infection. About 60 notification letters were returned as undeliverable, but some of those persons have been contacted by other means. Chris Smith, Canyon County Sheriff, said that work-release inmates are responsible for their own health care. New county rules require work release inmates to provide proof of testing at their own expense. According to Smith, the last time a county inmate was infected with TB was six years ago.

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**USA: Foreign-Born TB Cases Need Better Control, US Says;** Associated Press, July 23, 2008, Lindsey Tanner.

A recent report by CDC authors finds high rates of TB among immigrants to the United States, even as the nation's overall TB rate continues to fall. Examining data from 2001 to 2006, the researchers noted that the overall US TB rate is less than five cases per 100,000 people. In contrast, rates of at least 250 cases per 100,000 people were found in immigrants from Ethiopia, Kenya, Somalia, Vietnam, Cambodia, and the Philippines. The results show "that it's in the interest of the US to try to enhance global TB efforts," said Dr. Henry Blumberg of Emory University School of Medicine. Foreign-born persons accounted for 57 percent of all US TB cases in 2006, the study said. In addition, foreign-born persons accounted for most US drug-resistant TB cases. Just over 4 percent of TB cases in US-born patients were drug-resistant. But drug-resistant strains were detected in 20 percent of TB-infected immigrants from Vietnam and 18 percent of recent Peruvian immigrants with TB. US law already requires TB screening for prospective immigrants, noted study author Dr. Kevin Cain of CDC's Division of TB Elimination. A further step, he said, would be to identify and treat those with latent TB infections. Dr. Cain said that the report's findings could serve to help target such an effort most efficiently. Most TB cases occur in recent arrivals, the authors noted, but a significant number develop in persons who have been in the United States 20 years or longer, and most of these cases likely developed from latent TB infections acquired abroad years earlier. The 37 million US residents who were born in other countries are not routinely tested for TB; Cain acknowledged that any effort to perform TB skin tests on all of them "would be daunting to say the least." The full report, "Tuberculosis Among Foreign-Born Persons in the United States," was published in the Journal of the American Medical Association (2008;300(4):405-412).

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**NEBRASKA: Omaha-Area Adult Reported with TB;** Omaha World-Herald, July 24, 2008: Michael O'Connor.

Health officials from the state of Nebraska and from Douglas and Sarpy Counties are working cooperatively to investigate a case of active TB disease in an Omaha-area adult. Ten of the patient's co-workers have been tested for the disease; all were negative. The patient, now on leave from work, is avoiding contact with the public and is taking antibiotics, state officials said. No further details were released. The Nebraska Department of Health and Human Services has documented 152 active TB disease cases during the past five years

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**CANADA: Chiefs Demand Ottawa Account for High TB Rates;** Winnipeg Free Press: July 27, 2008, Jen Skerritt.

Grand Chief Ron Evans of the Assembly of Manitoba Chiefs (AMC) said that the AMC has petitioned Canada's auditor general to investigate the actions taken by federal health officials to control rising infection rates among First Nations communities and to educate First Nations' people about disease

prevention. Manitoba health disease statistics show First Nations communities have increasing rates of MRSA, sexually transmitted infections, and TB. The latest available data show that between January and April 2008, 58 percent of the province's TB cases were in a federal health jurisdiction that included First Nations reserves and the Stoney Mountain Institution. First Nations and Inuit Health Branch is responsible for providing health care services on reserves, including preventing chronic and contagious disease. Evans commented that the chiefs felt that the federal health officials are not doing enough because the numbers have continued to rise; hence, the chiefs are calling for an audit to determine exactly what health officials are doing. Evans stated that poor housing conditions, lack of access to health care services, and limited knowledge of health prevention have helped diseases like TB resurface. Evans also stated that the federal government needs to pay attention to the root causes associated with the rise in diseases, or the problems will worsen. Finally, Evans noted that York Factory First Nation recently fought a TB outbreak, and that Manitoba has one of Canada's highest TB rates because of its large First Nations population. Public health officials have also recently stated that Manitoba has a disproportionately high number of aboriginal HIV cases.

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**MINNESOTA: Rise in TB Cases Prompt CDC Response;** Worthington Daily Globe, July 30, 2008, Julie Buntjer.

Nobles County, Minnesota, is experiencing a TB outbreak. According to Deb Sodt, Minnesota Department of Health TB Program Manager, in Nobles County, an outbreak means that there are two or more confirmed cases of the disease in any one location. Sodt said that there are two definite outbreaks in the state, one in the Twin Cities and another in Nobles County. At present, Nobles County has four cases of active TB disease, with two adults and two children under the age of five infected with the disease, and there are nine suspected cases. Normally the county sees one case of active TB disease and 30 to 40 cases of latent TB infections on average a year. The number of latent infections has risen to 72 in 2008, according to Nobles-Rock Community Health Services (NRCHS) administrator Brad Meyer. Health professionals are concerned about this increase and have requested CDC assistance for the first time for a TB outbreak. Sodt stated that the main reason for requesting CDC assistance is that there is evidence that the current outbreak involves more than one state. CDC representatives will be in Minnesota in the next few weeks to investigate. In addition to providing expertise, Sodt said CDC will interview NRCHS staff and community leaders and review the medical records of the patients with active TB disease.

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**OHIO: Overseas Adoptees Should Be Retested for Tuberculosis (TB);** Health News, July 19, 2008; Heather Hajek.

The US government recommends specific tests and evaluation for foreign adoptees in order to treat the children for any ailments, as well as to prevent disease from spreading in the United States. The International Adoption Center of the University of Cincinnati Children's Hospital Medical Center conducted research showing the importance of the initial TB test as well as follow-up tests for children from foreign countries. The initial and follow-up tests are directed by doctors, in case the disease does not show on the initial test and the child could have latent TB infection (LTBI). The International Adoption Center conducted research to illustrate the importance of having children who are adopted from another country screened more than once for TB. The researchers evaluated internationally adopted children who were seen at the University Medical Center and had a tuberculin skin test no later than two months after arriving in the United States. Those who were not diagnosed with TB were retested after at least three months. The evaluation compared the number of children initially diagnosed during the first tests with those diagnosed at follow-up. In the five years of the study, 769 adopted foreign-born children had initial visits to the center. Of 527 children included in the study, 111 had evidence of latent TB infection, and 191 had repeat tests. LTBI was found in 20 percent of the children who were retested. The majority of children diagnosed with LTBI were from Guatemala, Africa, and Russia.

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**CALIFORNIA: Instrument Designed for Biological Pathogen Monitoring Can Detect Tuberculosis Surrogate;** Physorg.com; July 16, 2008,

Researchers at Lawrence Livermore National Laboratory (LLNL) in California have been experimenting with an instrument designed for detecting the malicious use of biological pathogens to determine its usage in the public health sector for rapidly screening people for TB. The system being used is called single-particle aerosol mass spectrometry (SPAMS) and is described in a recent edition of the journal *Analytical Chemistry*. In their experiments, the researchers used SPAMS to detect a TB surrogate, even when it is surrounded by sputum and mucus-like substances. They were able to differentiate between two similar bacteria, distinguishing between a virulent strain of TB and a similar bacterium, *Mycobacterium smegmatis*. Kristl Adams, an LLNL postdoctoral biological physicist and the lead author of the paper, explained that two similar mycobacteria were used in the research because TB-like symptoms in a patient could be caused by many bacterial infections; hence, it is important to differentiate between non-TB and TB infections. LLNL physicist and co-author Matthias Frank said that there is no current method for screening potential TB patients within minutes, and culturing samples can require days to weeks. Without a way to rapidly screen large numbers of possible TB patients, the diagnosis can be difficult and expensive. Adams noted that a rapid TB screening technique could facilitate early detection and limit unnecessary isolation, thus providing better patient care and the reduction of the strain on health care facility resources. Frank and Adams said they believe the procedure could potentially detect TB within five minutes in concentrated samples. The researchers have consulted with doctors at two northern California university medical centers about the possibility of experimenting in a clinical setting to detect virulent TB in sputum samples from infected individuals. According to Adams, the biggest challenge is determining if infectious TB in humans can be detected with their pattern-matching algorithm. The team is evaluating breath trace gas analysis as another possible technique for diagnosing human infections.

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**TEXAS: Bexar Jail Probe Finds 6 Percent Have New TB Cases;** San Antonio Express-News, July 10, 2008; Don Finley.

Health officials are midway through screening Bexar County Jail inmates and staff members for TB following the diagnosis of multidrug-resistant TB (MDR TB) in an inmate who had been held there. The patient was jailed in Maverick and Bexar county jails over several weeks. Screening for about 100 people affiliated with Maverick has concluded, but results were not yet available. In Bexar, 881 people, including staff and volunteers, had prolonged exposure to the patient, and about 407 have been examined. Of 345 skin tests administered, six percent of inmates and staff were found to have new TB infections. Tests administered within a year previous to this investigation were negative. Five more inmates with active disease are being treated, and those testing positive for infection will be offered preventive treatment. Many of those not yet screened had been released from the jail and are being tracked down. "They're going to be offered preventive treatment as if they were exposed to [MDR TB]," said Cara Hausler, an epidemiologist with the Metropolitan Health District. Including MHD staff, the two-county investigation is being conducted by 30-40 personnel from the state health department, the Texas Center for Infectious Disease, and the county jails. "You'll never know definitely" whether those testing newly positive for TB were exposed by the MDR TB patient, said Hausler. Some people might have already been exposed, and it can take weeks before a skin test can detect the exposure, Hausler said.

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**MASSACHUSETTS: Study: Diabetes Increases Risk of Tuberculosis;** Xinhuanet.com, July 15, 2008.

This article reports on a study in which researchers of the Harvard School of Public Health analyzed data on 1.7 million people from 13 studies on the relationship between diabetes and TB. The results indicate that diabetes increased the risk of active TB disease by three times, regardless of geographic region. It

also suggested that diabetes may be responsible for more than 10 percent of the TB cases in India and China. The study was published recently in the Public Library of Science journal *PLoS Medicine*.

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**MISSISSIPPI: Health Workers to Canvass City in Anti-TB Campaign; Clarionledger.com, July 16, 2008; Shelia Byrd; Associated Press.**

Mississippi State Department of Health workers will begin a door-to-door campaign in central Jackson, Mississippi, to ask residents to be screened for TB. This is part of an effort to stop the spread of the disease. In addition, state health officer Dr. Ed Thompson said that the health department is hiring more nurses and disease investigators and holding a two-day TB symposium to prevent the state from returning to being one of the nation's leaders in TB disease. Thompson said that the health department is working with community leaders and others to educate them about the targeted surveillance that was recommended by the Centers for Disease Control and Prevention. The state had reduced its TB rate from the second highest in the nation in the 1980s to below the national average. In 2006, the numbers began to rise. There were 140 cases in 2007. The agency used GPS technology to pinpoint the Jackson area, based on the number of cases found there. State epidemiologist Dr. Mary Currie said that the state department of health is using \$2.5 million in funding from the legislature to begin hiring 66 employees who will work in the field. They will help identify patients, provide treatment, and locate contacts of infected patients.

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**CALIFORNIA: Valley Has New Tool in TB Fight; Fresno Bee, July 7, 2008; Barbara Anderson.**

In the San Joaquin Valley, more doctors are now able to test patients for TB by screening their blood, which generates fewer false-positives than the traditional TB skin test. The Community Regional Medical Center in Fresno, Clovis Community Medical Center, and other Community Medical Center (CMC) clinics began offering the Quantiferon-Gold test in June, and Tulare County's Health Department rolled out the test about six months ago. "We have people working in the lab that have never been able to be tested because they're so allergic to [the skin test]," said Marilyn Mitchell, CMC's supervisor of microbiology. They "now know they're negative, and that's a relief to them," she said. Fresno County reported 42 TB cases last year and so far this year has 27 confirmed cases and 12 likely to be confirmed. "If we continue that trend, we're going to be almost double last year," said Dr. Kenneth Bird, the county's TB control officer. He did not have an explanation for the increase in cases. The blood-based diagnostic is "a much better public health tool" than the skin test, said Dr. Dominic T. Dizon, an associate professor of clinical medicine at the University of California-Fresno's Medical Education Program. Dizon studies TB and recommended that CMC adopt the more specific blood test. Many Valley residents are foreign-born and received a TB vaccine in their home country, and the immunization often causes a false-positive result on later skin tests, Dizon said. This can result in an uninfected patient receiving nine months of unnecessary antibiotic treatment, he said. "The real benefit of the blood test is separating actual infection from a vaccination," Bird said.

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**MARYLAND/COLORADO/ILLINOIS: TB Trials Move into Mice; Africa Science News Service; July 8, 2008, Henry Neondo.**

The TB Alliance, in collaboration with the Johns Hopkins University (JHU) and the National Jewish Medical and Research Center, is ready to begin a combination testing program with mice. In this study, the program will consider multiple new drug combinations. In conventional TB drug development, individual drugs are added or substituted into existing first- or second-line drug combinations. According to Dr. Eric Nuermberger, one of the leaders at JHU along with Dr. Jacques Grosset, it might take 20 or 30 years of human testing if that regimen is followed. The alternative is a methodical study of all potential drug combinations in the mouse model. This in vivo combination testing builds on lessons learned in the first in vitro part of the project that was performed at the University of Illinois at Chicago under Dr. Scott Franzblau. The in vitro testing provided clues about which drugs may work. Thus, 80 total possible three-

drug combinations were selected. Twelve were eliminated, and the rest given priorities for further testing. The test with mice will be divided into three stages: a four-week preliminary test for the ability to kill *Mycobacterium tuberculosis* (M.tb), a more rigorous four-month test of the time required to eliminate all M.tb in the lungs, and an analysis of the treatment time required to prevent relapse. TB drug pharmacologist Dr. Charles Peloquin of the National Jewish Medical and Research Center is helping to match mouse doses to equivalent human doses. Dr. Nuermberger hopes that with the knowledge gained from the mouse models, entirely new combinations of TB drugs may be approved for human trials against drug-sensitive and drug-resistant TB.

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**MISSISSIPPI: State's Health Officer to Fight;** Clarionledger.com, July 9, 2008; Jerry Mitchell.

The Mississippi State Department of Health Laboratory may have its license revoked for a year for violating federal protocol on laboratory tests; however, State Health Officer Dr. Ed Thompson is vowing to appeal the ruling. The Centers for Medicare & Medicaid Services, which oversees 189,000 US labs through the Clinical Laboratory Improvement Amendments (CLIA), regularly sends out "proficiency samples" to the labs to double-check the accuracy of tests. Under CLIA regulations, a lab must analyze proficiency samples itself. When proficiency samples were sent earlier this year to check Mississippi's TB testing, the samples were forwarded to Texas' Public Health Lab, which had been testing Mississippi's TB samples for more than a year. Dr. Luke Lampton, Chairman of the Board, commented that this appears to be an honest misinterpretation of the complex instructions for CLIA's proficiency testing. He felt that the severe sanctions are unwarranted, and that the state lab is of critical importance. The lab director was also barred for two years. Dr. Thompson also called the one-year punishment grossly excessive, as the mistake was made in error, and there was no evidence to defraud. If the revocation stands, there are possible alternatives such as seeing whether the health department officials could possibly work with the University of Mississippi Medical Center to provide necessary lab work for the state.

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**ARIZONA: ASU Research Team Working to Decode TB;** ASU News, July 7, 2008; Rebecca Howe.

Three researchers at Arizona State University (ASU) College of Liberal Arts and Sciences, graduate student Luz-Andrea Pfister; Associate Professor Anne Stone of ASU's School of Human Evolution and Social Change; and Michael Rosenberg, Assistant Professor in the School of Life Sciences are trying to decipher the origins and trajectory of *Mycobacterium tuberculosis*. So far their research suggests that the disease migrated from humans to cattle, not the other way around as has been believed. The research indicates that this evolutionary leap took place prior to the domestication of cows, more than 113,000 years ago, making *M. tuberculosis* much older than previously believed. Their results also support the work of Cristina Gutierrez, an evolutionary mycobacteriologist from the Pasteur Institute, whose work first cast doubt on the cattle-to-human TB transfer and the dates. Pfister, Stone, and Rosenberg use DNA to research TB's development. They also plan to address the biogeography of the disease and what types of TB ancient people had relative to today's strains. Pfister notes that an accurate time frame can help them learn about the development between host and pathogen, can aid in understanding the disease, the way it evolves, and how it creates new strains to stay alive. One of the primary goals is to calculate a meaningful mutation rate. Stone states that the data they generate can be used by clinicians to study the disease and formulate appropriate treatments. Pfister, Stone, and Rosenberg worked with 108 genes and used a program designed by Rosenberg to analyze many of the sequences. The results of the research were presented at the annual meeting of the Society of Molecular Biology and Evolution and the April assembly of the American Association of Physical Anthropologists. It was also reported on in the journal *Science*.

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**GEORGIA: Another TB Case Reported in Houston;** Sun News; July 9, 2008; Jake Jacobs.

After another individual was diagnosed with TB disease, parents of about 80 middle and high school students are urged to have their children tested for TB. Director of the 13-county North Central Health District, David Harvey, said the individual was sick before school was dismissed for the summer vacation, and was diagnosed with TB during a routine screening. Harvey did not indicate whether the individual was a student or adult. Superintendent David Carpenter said that parents would be contacted by telephone soon, and letters would be mailed to them. Parents who receive letters can have their child tested at the Houston County Health Department [Georgia] or at the middle school free of charge. Children of parents who did not receive a telephone call or letter did not have to be tested, but if the parents decided to have the test performed, it would cost \$20.00. Last month, a student at another middle school was diagnosed with TB disease, and parents of children suspected of being in close contact were advised to have their children take a skin test. According to German Gonzalez, Medical Epidemiologist for the Georgia Department of Human Resources, this case is the sixth reported in the district this year. The district has a TB case rate of 3.8 per 100,000 population. It recorded 31 cases in 2006 and 15 in 2007, according to Kathleen Somers, TB Coordinator for Health District V, Division of Public Health.

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If you wish to receive the **STOP TB USA** messages at a different e-mail address, or if you no longer wish to receive these messages, please reply to [jseggerson@tbcoalition.com](mailto:jseggerson@tbcoalition.com)

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