

From: **STOP TB USA***

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

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.

Most of these 71 TB-related reports (below) from 19 different states, the District of Columbia, Micronesia, 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 (January –March, 2009). These are not all the TB reports and articles - just those that were identified. Many of these reports describe problems that present significant challenges for health departments.

SOUTH CAROLINA: Homeless Learn About TB Risks: The State (Columbia, S.C.); March 25, 2009, by Carolyn Click.

Each Saturday in March 2009, members of St. David's Episcopal Church in South Carolina were reaching out to inform Columbia's homeless population about TB's risk factors, symptoms, and treatment. "Part of what we have been explaining is that [TB] has been making a resurgence and you have to take the full course of treatment for it," said the Rev. Robert Chiles, St. David's rector. Two members spurred the congregation into action: Tom Alewine, a former board member of the Richland TB Association (RTA), and Carol Pozsik, CEO of the National TB Controllers Association. "Both of them saw an opportunity to do an outreach project that would help to inform the public at large," Chiles said. The church obtained a \$2,000 grant from RTA to help pay for the materials. Members working on the TB outreach have teamed with fellow parishioner C.J. Bilka, whose His Hands Ministry offers a free hot dog lunch that attracts 80-140 men and women each Saturday in the parking lot of a downtown law firm. In addition, St. David's members have distributed TB pamphlets at Trinity Episcopal Church, which hosts a breakfast for the homeless each Sunday, and at Washington Street Methodist Church, which welcomes the needy to a lunch on weekdays, Bilka said.

HAWAII: World TB Day Marked in Hawaii; Associated Press, March 25, 2009.

Hawaii marked World TB Day on March 24. The state has the highest TB case rate in the nation, with 9.6 cases per 100,000 residents. There were 124 active TB disease cases reported in Hawaii last year, mostly on Oahu. Of the state's new TB cases, 88 percent were in foreign-born persons.

MISSOURI: State: TB Not Gone, Sometimes Forgotten; Associated Press, March 24, 2009.

On March 24, Missouri's Gov. Jay Nixon signed a proclamation marking TB Awareness Day, the same day as the World TB Day observance. Missouri health officials hope raising awareness of the disease and its symptoms will boost detection and treatment rates. Last year, the state recorded 107 cases of active TB disease. Some counties have reported a growing number of TB cases in recent years. For more information, visit the state health department Web site at <http://www.dhss.mo.gov/Tuberculosis/>.

CANADA: McMaster Researchers Take Shot at New Vaccine Against TB; Hamilton Spectator, March 20, 2009, Wade Hemsworth

It would be at least five years away from broad use, but researchers at McMaster University say they have created a new vaccine against TB. The McMaster team is one of 12 worldwide working to develop a new vaccine against the infectious disease. "Given the enormous problem that we've got with TB, the more

people involved in trying to move the research program forward, the better,” said Fiona Smaill, Chair of the university’s Department of Pathology and Molecular Medicine. The McMaster scientists’ candidate vaccine, called AdAg85A, uses live adenovirus, like that responsible for the common cold, to ferry the TB gene to create immunity. The cold virus lives just long enough to trigger the body’s immune response and introduce the TB gene. The BCG vaccine has been used against TB for some 90 years; however, it offers protection only against TB in childhood. If approved, McMaster’s vaccine would be used as a booster shot, conferring immunity against TB in adolescents and adults. So far, AdAg85A has been shown effective in animal testing. In April, the team will begin recruiting healthy volunteers for human trials, which will take 12 to 18 months. These will assess the vaccine’s safety and its ability to trigger an immune response.

CALIFORNIA: Cepheid Unveils Fast TB Test to Aid Developing Countries; San Francisco Chronicle, March 25, 2009, by Bernadette Tansey.

The California-based molecular diagnostics firm Cepheid announced on March 24, World TB Day, that it has created a rapid TB test and will offer it at a reduced cost to developing countries. The automated, DNA-based test also detects drug resistance, which will allow patients with drug-resistant TB to receive appropriate treatment immediately and reduce the chances of transmission, said Dr. David Persing, Cepheid’s chief medical officer. A traditional “smear test” looking for TB bacteria in sputum on a slide under a microscope does not always detect disease, and it cannot distinguish between resistant TB and strains vulnerable to front-line drugs. Further tests for more complete information can take weeks, he said. Cepheid’s TB test detects DNA sequences unique to TB and to drug resistance. The firm’s GeneXpert System packs all the lab processes for the test into a cartridge, which is loaded into a machine that can read the results. The readers can be as small as a textbook, which can allow for mobile TB testing far from hospitals, Persing said. Cepheid will sell the test in sub-Saharan Africa and other developing regions for the cost of the equipment and other expenses such as shipping. Cepheid will also seek Food and Drug Administration approval of its TB test for the US market by early 2010, Persing added.

BALTIMORE: TB Hits Historic Low; Baltimore Sun, March 25, 2009, by Kelly Brewington.

Mayor Shelia Dixon announced on March 24, World TB Day, that in 2008 Baltimore recorded its lowest rate of TB since the city began tracking the disease nearly two centuries ago. “Thanks to an aggressive TB control program and effective engagement of community health care workers, the TB rates have steadily declined,” Dixon said at a news conference at Johns Hopkins Bayview Medical Center, the site of a TB hospital in the late 1800s. In 2008, the Baltimore Health Department reported 32 TB cases, for a rate of 5 per 100,000 residents. In 2007, the city had 47 cases, a rate of 7.4 per 100,000. Baltimore was among the first of US cities to institute directly observed TB treatment, in which public health workers visit or meet patients to ensure the patients take their medicine. The approach has since been adopted around the world. City health officials credit the nearly 30-year-old program for helping lower TB rates significantly. “Before this program was instituted, Baltimore consistently had among the top-three rates of TB of US cities,” said Dr. Jonathan Zenilman, Bayview’s Chief of Infectious Diseases. Though anyone can become infected with TB, drug users, people who work or live in prisons or homeless shelters, and people with compromised immune systems are especially at risk. Dr. Joshua Sharfstein, the city’s health commissioner, said the 2008 figures are significant since Baltimore has a high rate of HIV and a large homeless population. According to Sharfstein, the city has continued to fund home visits even as federal TB funding has declined. Despite the decreasing rates, Baltimore will continue to take a proactive approach to TB control, he noted. “It would be a big mistake to be lulled into a sense of security,” he said, adding that TB requires “a vigilant team to prevent resurgence.”

NEW YORK CITY: Queens TB Cases Jump 12 Percent; 299 Struck by Deadly Disease in 2008; New York Daily News, March 25, 2009, by Leigh Remizowski; Nicholas Hirshon.

Queens was the only New York City borough to post an increase in TB cases in 2008. Cases of the bacterial disease in Queens rose 12 percent last year even as citywide figures fell to an all-time low, dropping 5 percent in the Bronx, 7 percent in Brooklyn, and 15 percent in Manhattan. Cases in Staten Island remained level. At a forum in Corona, Dr. Crispin Kambili, the city health department's Assistant Commissioner for TB Control, said immigrants from countries where TB is endemic - such as China, Ecuador, Haiti, Mexico, and the Dominican Republic - comprised many of the 299 TB cases logged in Queens last year. "When you move a population to Queens, essentially you have a microcosm of that country here," he said. While New Yorkers born outside of the United States account for 76 percent of the city's TB cases, the disease can affect anyone, Kambili warned. "The only requirement is that you are alive and breathing air," he said. Immigrants, people with lowered immunity, and anyone with symptoms such as coughing, fatigue, weight loss, and sweating should get screened for TB, said Kambili. "We want to shrink the pool, and the way you do that is by identifying the cases." World Lung Foundation CEO Peter Baldini noted that TB is the leading cause of death for HIV-infected persons, so they should get checked as well. City residents seeking free, confidential TB testing can telephone 311 for more information.

SAN FRANCISCO: A Different Type of TB Patient; San Francisco Chronicle, March 25, 2009, by Elizabeth Fernandez.

Although it has been dropping for the past decade, San Francisco's TB rate continues to be the highest of any US metro area. Now, health officials there say they are seeing a new type of patient - someone who is not poor, or homeless, or a recent arrival to the United States. Increasingly, they say, TB is turning up in low-risk settings. Cases linked to places like schools and bars have triggered hundreds of screenings, pointing to a trend officials say they are watching. "Everybody breathes," said Dr. Charles Crane, Medical Director of the Contra Costa Health Services TB Program. "It isn't just a disease for immigrants; it is a threat to everybody." He believes the increase is largely due to latent cases becoming active. Last fall, a student at a local high school developed active TB disease, and subsequent screening found that 11 students and one teacher were infected. "There is evidence of transmission from the student," said Dr. Christine Ho, a CDC Field Medical Officer assigned to San Francisco TB Control. Then in December, five cases linked to bars prompted the screening of 237 employees in clubs in the Castro and South of Market neighborhoods, with four percent of the workers testing positive. While TB cases in San Francisco fell from 143 in 2007 to 118 in 2008, in Contra Costa County they rose from 51 in 2007 to 79 last year, a 55 percent increase. And medical experts fear that the economic crisis may begin to undo a decade of progress in San Francisco's fight against TB. "I think we'll see later diagnoses as people lose their jobs and health insurance," said Dr. Robert Benjamin, TB Controller for Alameda County. "People are losing housing. Instead of having one family of five living in one household, now there are eight or nine people or more - prime conditions for transmission."

NEW HAMPSHIRE: TB Testing Shows No Spread in N.H. School; Associated Press, March 27, 2009.

The discovery of a student with TB at a regional high school in Swanzey prompted the screening of 30 other pupils on the campus. However, the testing found no other youths who were infected. While public health officials will return to conduct repeat screenings in two months, there is reportedly now no risk of ongoing TB transmission at the school.

NORTH CAROLINA: Students Take on Global Issue; Charlotte Observer; March 31, 2009, by Kristin Collins.

A senior project in the engineering entrepreneurship program at North Carolina State University has led to the invention of a small device that can diagnose TB in seconds. The students Hersh Tapadia, an electrical engineering major, and Daniel Jeck and Pavak Shah, both biomedical engineering majors, are refining the device that looks like a miniature microscope connected to a computer. It is simple to use and can diagnose TB at a cost of less than a dollar. To use the device, a person slides in a stained slide smeared with a patient's sputum. TB bacteria in the sputum glow bright white on a black screen, while the screen remains black if there is no TB bacteria in the sputum. Shah said that he wanted to create a tool that could be used easily by an untrained person who did not have the benefit of a well-stocked laboratory. The students hope to turn their invention into a business and market it.

CALIFORNIA: Tuberculosis is Real Threat in Contra Costa County; Contra Costa Times; Charles M. Crane; 03/25/2009.

Marianne, a preschool teacher, recently went to her doctor to get a TB skin test (TST) required by her job. She had always tested negative in the past. This time, however, the spot on her arm became red and swollen, and slightly tender. Her test was positive.... Was she contagious to the children in her class? Fortunately, like most people with a positive TST (also called a PPD, short for purified protein derivative), Marianne did not have any symptoms of "active" TB — a persistent cough, fever, night sweats and weight loss — but she still needed to get a chest X-ray. Her X-ray was normal, meaning her TB was in the dormant ("inactive") stage. Inactive TB means the germ is alive inside the body, waiting for the opportunity to grow, make the person sick and spread to others. We call that TB infection. Getting the TST had enabled Marianne to find out early that she'd been infected with TB before it harmed her or became contagious. There is also a new blood test called "Quantiferon", which is more accurate than the TST. To cure her TB infection, and to prevent it from growing and causing her to become ill, Marianne was given an antibiotic called isoniazid. Taking the pill once daily for nine months should cure Marianne, so her TB will never become active. Since World TB Day is March 24, now is an appropriate time to increase our awareness of this devastating disease.... The threat of TB in Contra Costa County is real. Last year, active TB cases increased by 55 percent, up from 51 cases in 2007 to 79 cases in 2008.

TEXAS: Private school TB testing; Del Rio News-Herald; March 10, 2009.

Around 20 people in the private school sector will be asked to submit to a tuberculosis skin test, state health officials said Monday. Dr. Sandra Guerra-Cantu, the Texas Department of State Health Services Region 8 Medical Director and Val Verde County Local Health Authority, met with parents of children attending private schools Monday evening, less than a week after announcing that around 2,200 students and staff attending public school would be asked to take a tuberculosis skin test. That testing started Monday. A single case of active tuberculosis, which primarily affects the lungs and can be treated and prevented with a course of antibiotics, was discovered at the Del Rio Middle School in late January. As a result, the state opted to test around 270 people closely linked to the patient. Of those tested in the first round, only 10 returned with a positive skin test, which does not mean they are ill, said Guerra-Cantu, explaining that a person can carry the dormant tuberculosis bacteria all their life and never become ill. During the course of the investigation, another potentially active case of tuberculosis was discovered. Then, a third case unrelated to the original was reported by a local physician, which pushed the state to expand its testing base to

include students and staff at the middle school and the Del Rio Freshman School. It is unclear how those cases are connected with the private school sector as the identities of patients is not being released for protection of their privacy, but Cantu said those asked to submit to a test have had close contact with at least one of the middle school cases. Some parents in the private sector voiced concerns that public school officials kept the original case quiet for more than a year, not properly alerting parents and the state. But Guerra-Cantu said that is not the case. "They have been very good at making sure we get any information readily available," said Guerra-Cantu. "The school district has bent over backwards to help us with this investigation...it has been a pleasure working with them on such a tough issue." ... Guerra-Cantu said there is no ongoing threat at any of the public or private schools, explaining that the disease is only contagious when a tuberculosis patient is actively ill and in close contact with others for extended periods of time. She added that anyone potentially ill from the disease is being removed from campuses for the safety of others.

CANADA: Tuberculosis scare over at university; Saskatchewan News Network; Regina Leader-Post; Thursday, March 26, 2009

The tuberculosis health concern at the University of Regina is over. Earlier this month, a U of R student was suspected of having the disease and the university was notified. TB is an infectious disease caused by bacteria and is usually spread by coughing, sneezing or close face-to-face contact, but only in cases of regular and prolonged contact. On March 18, TB Saskatchewan confirmed the U of R student had tuberculosis and was receiving treatment. A U of R website that provided staff and students with updates also indicated those who had been in close contact were screened for the disease. The final March 19 update states, "TB Control Saskatchewan has indicated the student has responded successfully to treatment and this case is no longer infectious." U of R spokesperson Dale Johnson said no other student contracted TB. He added that no further updates will be made to the site.

INDIANA: Tuberculosis Still A Serious Public Health Threat, Say Indiana State Health Officials; Medical News Today; 23 March.

Tuberculosis (TB) is one of the most common and deadliest diseases, killing millions worldwide. Tuesday, March 24 is World TB Day, and state health officials are taking the opportunity to remind the public TB is still a serious health threat. "While the overall number of new TB cases in Indiana has dropped in the last year, certain counties are seeing significant numbers of new cases," says Loren Robertson, assistant commissioner, Public Health and Preparedness Commission at the Indiana State Department of Health. "It is a reminder we must continue our efforts and dedication to eliminating the threat of TB for all Hoosiers." In 2008, there were 118 active cases and nine TB-related deaths in Indiana, with 50 percent of the state's cases in the three most

populated counties: Allen, Lake and Marion. In 2007 there were 129 active TB cases in the state.... "TB remains one of the leading causes of death among infectious diseases worldwide, even though it is readily treatable and preventable," says Robertson. "Counties, states, and nations need to work together to eliminate TB. That is why the theme of this year's World TB Day is 'Partnerships for TB Elimination'Health officials say ensuring patients with the active TB disease complete treatment is a vital aspect of TB control. "Although evidence suggests the nation is progressing towards elimination, many challenges remain, particularly the increasing impact of the global TB epidemic on the United States, the continued threat of multi-drug resistant TB, and the interaction between HIV infection and TB," says Robertson.

PENNSYLVANIA: Pa.'s Top Health Official Stressing Need for Tuberculosis Awareness;
Times News; March 24.

HARRISBURG – State Health Secretary Everette James is stressing the need to increase public awareness of tuberculosis, or TB, and the importance of efforts to control, and eventually eliminate, the infectious disease. "In 2008, we saw an increase in the number of cases of tuberculosis and we are seeing more cases resistant to medication, which makes the disease more difficult and costly to treat," said James. "We must continue to be diligent in our efforts to educate the public about this disease in order to prevent its spread." In Pennsylvania, the number of reported cases of tuberculosis grew from 318 in 2007 to 345 in 2008. Department statistics indicate 12 percent of those cases were resistant to at least one traditional tuberculosis treatment medication. Despite last year's increase, Pennsylvania's TB case rate fell 23 percent from 1998 to 2008. Today's designated World TB Day recognizes the global fight against the spread of tuberculosis and encourages better education about the importance of TB control. Although TB rates are relatively low in North America and Europe, the disease remains a serious problem in less developed regions. For more information on tuberculosis, visit the Department of Health online at www.health.state.pa.us/tb

LAS VEGAS: Tracking tuberculosis patients - Investigators scramble after man infects eight; Mar. 29, 2009; Las Vegas Review-Journal; Annette Wells.

It began with a telephone call in December 2007. A man in his mid-20s to early 30s had been admitted into a Las Vegas hospital with active tuberculosis. Because tuberculosis is a deadly infectious disease, hospitals must notify the Southern Nevada Health District when they receive a case. But in this case the hospital didn't telephone in a timely manner, and the man left the facility before anyone from the health district could interview him. What transpired next was a near year-long investigation by the health district's TB control staff who contacted more than 500 known associates of the elusive man, an illegal immigrant with more than a dozen aliases. Many of those the district contacted were then tested for TB. Eight tested positive. Two of the infected were young children. And had it not been for the health district's determination in locating the man, one child might have died, said Laurie Hickstein, the health district's senior public health nurse. Eventually, the man's true identity was discovered.in May, nearly six months after that first phone call, the man was located at a hospital in Maricopa County, Ariz., where he spent months receiving antibiotics to treat his active tuberculosis. Stephen Minagil, the health district's former staff attorney, had gotten a court order to keep the man hospitalized until after his treatment. He now is cured, but the investigation will forever remain on the minds of the health district's TB control

staff. For one, it highlights the importance of disease investigators, said Dr. Lawrence Sands, the district's chief health officer. "Disease investigations are critical to prevent further spread of disease in our community," Sands said. "Disease investigators have to be able to identify cases as well as the extent of the illness among those who are sick; identify potential sources; and who should be tested or treated to end an outbreak." Even though countless hours were spent interviewing uncooperative witnesses and running into roadblocks, the health district's TB staff said it was worth it. "We had to put bits and pieces together, because this case was like one huge detective story," Hickstein said. "We potentially saved lives and this state millions of dollars in locating this one individual."

In a March 24 announcement regarding World TB Day, Sands said about 55 percent of Clark County's TB patients are foreign-born. Though deadly, tuberculosis is curable. Adherence to treatment is key to eliminating the risk of spreading TB. That can take six to 24 months and requires supervision. The health district's public health nurses visit or speak with active TB patients five times a week to ensure treatment compliance and make sure other needs, such as nutrition and shelter, are met. But when people don't comply with their regimen, drug-resistant strains of TB can develop. A handful of such cases have been identified in Southern Nevada.... Hickstein said it isn't uncommon for the district's tuberculosis program to use funding from its own budget to house patients as well as provide treatment and transportation. In one instance, roughly \$300,000 to \$400,000 was allocated from the health district's budget over a seven-year period to house a woman with drug-resistant tuberculosis. Including the housing, medications, doctor and emergency room visits this woman had access to in that seven year period, the costs to care for her probably exceeded \$1 million, they said. ... She often was uncooperative. Eventually, the health district worked with other health care providers, namely University Medical Center, to ensure she received proper and timely care in a less restrictive environment. Hickstein said in another situation, a man was placed in involuntary isolation inside his own home. Such cases illustrate dilemmas the health district faces in controlling the spread of diseases in Southern Nevada. Although the infected are considered threats to the community, the health district is limited in its authority. Being sick is not a crime, just as refusing care or voluntary quarantine isn't breaking the law. A court order is needed in cases of involuntary quarantine, usually in cases where people are uncooperative. Almost daily the health district balances protecting the public with being mindful of citizens' civil rights. At what point is involuntary quarantine appropriate? And how much should taxpayers pay to keep a disease from spreading? People need to recognize that the goal of the program is to identify and cure the disease and that we're not the enemy," Sorenson said. "We're not trying to compromise their lifestyles, and I think that's the perception some people have. If we didn't track these people and TB ran rampant in our community, the costs would be astronomical."

CALIFORNIA: Isoniazid Completion Rates for Latent Tuberculosis Infection among College Students Managed by a Community Pharmacist; Journal of American College of Health, 2009 Mar-Apr; Hess, K. et al. College of Pharmacy, Pomoma, CA.

Participants were university students diagnosed with latent TB infection. The authors conducted a retrospective review of pharmacy records from 2000 to 2006. The 9-month completion rate for those being treated for latent TB infection with isoniazid was 59%, and the 6-month completion rate was 67%. Among those not completing treatment, 15.2% experienced fatigue and 2.2% experienced a rash. Latent TB Infection clinics are a unique niche for community pharmacies and can provide individualized patient care to ensure latent TB treatment adherence, monitoring for disease progression, and safety of INH treatment.

CALIFORNIA: TB Tests Follow Report Of Infection; Grunion Gazette; March 25, 2009; Shereen Oca.

Approximately 170 students and staff at Wilson High School will be tested for tuberculosis (TB) next week, according to city Health Officer Helene Calvet. The investigation, which is being conducted by the

Department of Health and Human Services, began after a single case of an active TB infection was identified at the school, Calvet said. "This is just standard public health practice," she said. "We don't think it is part of a high-risk setting. We do these investigations just to be complete." In response to the situation, the Long Beach Unified School District sent letters, e-mails and recorded telephone messages to the entire Wilson High School community earlier this week, notifying them of the confirmed TB case. In addition, roughly 170 students and staff were informed of their possible exposure to the disease. "This is a precautionary and routine measure to ensure all students and staff are safe and healthy," said Robert Tagorda, assistant to LBUSD Superintendent Chris Steinhauser. "But we take it very seriously." TB is a disease caused by myobacteria that spread from person to person through the air. Once an individual is determined to have TB, the first round of tests are conducted on his or her household members and friends to try and prevent secondary transmission, Calvet explained. Then, the investigation extends to those in the individual's work or school setting, she said. "In general, we don't see as much transmission," she continued. "It's not as high-risk. We just do that to be sure." Nurses from the health department, school district, and California State University, Long Beach, will administer skin tests free of charge to any potentially exposed students and staff at Wilson Tuesday, March 31. Students and staff also will be asked to take a brief survey regarding their symptoms. (TB symptoms include weakness, weight loss, fever, coughing, chest pain and night sweats, among others.) The tests will be read Thursday, April 2, and further evaluation, including chest X-rays, and medication will be offered to those who are found to be at risk for infection. A similar investigation was conducted last September at Wilson. City health reports revealed that the infection did not spread to anyone else at the school. Last year, approximately 47 cases of TB were reported in Long Beach. This marked a 20% increase from the all-time low found in 2006 and 2007, which, when combined, saw 39 reported cases, Calvet said. Also, a recent, statewide analysis has shown that drug-resistant strains of TB have increased greatly between 1993 and 2006, as reported by the Associated Press. However, Calvet said she hasn't seen an increase in drug-resistant cases (where an individual shows resistance to a single medication) at the city level. And although drug-resistant cases do not require a different treatment, multidrug-resistant cases do, she continued. Multidrug-resistant cases, which exhibit the same symptoms and can only be determined in a lab, take much longer and are much more difficult to treat, she said. In the past, there have been several multidrug-resistant cases of tuberculosis in Long Beach; currently, there is one, she added.

NEW YORK CITY: NYC reports record low tuberculosis cases; March 26, 2009; UPI.com.

NEW YORK, March 26 (UPI) -- New York health officials said the number of tuberculosis cases in the city has dropped 2 percent to 895 reported cases last year from 914 in 2007. Dr. Chrispin Kambili, the health department's assistant commissioner for TB control, said reported TB cases in 2008 indicate a 78 percent decrease from the high levels seen in the early 1990s, when the city faced a TB epidemic. Immigrants make up 36 percent of the city population and TB disproportionately affects non-U.S.-born residents, Kambili said. In 2008, immigrants accounted for 76 percent of the city's TB cases and almost half of the patients were people born in China, Mexico, Ecuador, Dominican Republic or Haiti -- countries where TB rates remain high. "Tuberculosis is a winnable battle," Kambili said in a statement. "We continue to make progress in New York City, even as the disease remains epidemic elsewhere, but we have more work to do. Tuberculosis is preventable and curable, so New Yorkers at risk should not be afraid to get tested. Screening and treatment in the health department chest centers are free and no one will ever be asked about immigration status." TB remains a devastating problem in much of the developing world, affecting an estimated 9 million people each year and killing more than 1.5 million annually worldwide, the World Lung Foundation.

USA: US Tuberculosis Rate Hits All-Time Low: CDC; Reuters, March 19, 2009

In 2008, there were 12,898 new TB cases in the United States, CDC said March 19. "The TB rate declined 3.8 percent from 2007 to 4.2 cases per 100,000 population, the lowest rate recorded since

national reporting began in 1953,” CDC said. The rate of decline has slowed, however, and new cases are disproportionately hitting the foreign-born and racial/ethnic minorities. “In 2008, the number of TB cases and annual TB rate reached all-time lows in the United States,” wrote Robert Pratt of CDC’s Division of TB Elimination and colleagues. However, the rate of decline has plateaued, falling from 7.3 percent per year during 1993-2000 to 3.8 percent during 2000-2008. “TB continues to disproportionately affect racial/ethnic minorities and foreign-born persons,” the authors said. TB rates among Asians were nearly 23 times higher than among non-Hispanic whites, and rates were nearly eight times higher for blacks and Hispanics than among non-Hispanic whites. The TB rate for foreign-born persons was 10 times higher than the rate for the US-born. In 2008, among the 7,652 TB patients with a known HIV test result, 802 (10.5 percent) were HIV-infected. Multidrug-resistant TB accounted for just over 1 percent of US cases last year, including four extensively drug-resistant TB cases. These figures above were indicated by provisional data, CDC reported. The report, “Trends in Tuberculosis - United States, 2008,” was published in CDC Morbidity and Mortality Weekly Report (2009; 58[10]:249-253).

CALIFORNIA: Tuberculosis Is Real Threat in Contra Costa County; Contra Costa Times, March 18, 2009, Editorial, Charles M. Crane.

An editorial by the medical director for the Contra Costa County TB program appeared on March 18. Since World TB Day is March 24, now is an appropriate time to increase awareness of this devastating disease. Each year worldwide, 9.3 million people become ill with active TB disease, leading to 1.8 million deaths. TB is the biggest killer of people with AIDS. The threat of TB in Contra Costa County is real. Last year, active TB disease cases increased by 55 percent, up from 51 cases in 2007 to 79 cases in 2008. Anyone can become infected with TB because all you have to do is breathe air with TB germs in it. This can happen when someone with active TB disease coughs near you. Certain people are at higher risk of getting TB, however. Recent immigrants to this country had the most cases of TB in Contra Costa County in 2008. People with illnesses that affect their immune systems, such as HIV, diabetes, or cancer, and people who are homeless, who use street drugs, or who have been in jail are at higher risk. People who interact with these high-risk groups, such as doctors, nurses, teachers, firefighters, and law enforcement officials are also at increased risk. Unfortunately, some people with TB don’t seek care until they are really quite sick, perhaps because the cough has worsened so gradually, or they fear the cost of medical care. And the longer the diagnosis is delayed, the more people are likely to become infected. Active TB disease is generally treatable with two to four special antibiotics, taken for six to nine months. TB treatment requires multiple antibiotics taken for many months because the germs can easily develop resistance to one antibiotic. Once treatment is started, TB patients rapidly become non-contagious. For more information, call the county TB program at 925-313-6740, or visit www.cchealth.org/topics/tb.

NEW YORK: New Tuberculosis Drug Shows Early Promise; Wall Street Journal, March 19, 2009.

A report published March 19 on the Web site of the journal *Science* gives encouraging results from a mouse study of a potential new TB drug. The drug, BTZ043, was discovered at the A.N. Bakh Institute of Biochemistry in Moscow. It works by inhibiting an enzyme that helps form the thick coating that protects *Mycobacterium tuberculosis*, and without which the bacterium dies. In the mouse tests, the drug reduced the TB bacterial count in the lungs 10-fold and in the spleen 100-fold. It appears more potent than the existing TB drug ethambutol, and the results suggest it could work against drug-resistant strains of TB. The European Union funded the research through the group Medicines for Tuberculosis. Scientists are anxious to add medications to their arsenal of TB drugs, most of which are 40 years old and must be taken for months. Many patients stop taking the drugs before they are fully cured, which leads to the development of drug-resistant TB. Vadim Makarov, who heads the Moscow lab, said he hopes that when the drug advances to human trials, these trials will take place in Russia, where drug-resistant TB is a growing problem. Drug maker AstraZeneca, which maintains a TB research center in India, took part in the experiments. Balganeshtanjore, chief of research and development at the Indian lab, said the results

constitute one of the most exciting advancements against TB in the past five years, though he noted BTZ043 must pass safety studies before human trials can proceed. The report, "Benzothiazinones Kill *Mycobacterium tuberculosis* by Blocking Arabinan Synthesis," was published in *Science* (2009;doi:10.1126/science.1171583).

CALIFORNIA: As TB Rates Go Down, Drug Resistance Causes Worry; Associated Press, March 22, 2009, by Juliana Barbassa.

Even as TB rates decline in the United States, the worry is that cuts to labor-intensive control programs will fuel longer-term problems such as drug-resistant strains, researchers said ahead of Tuesday's (March 24) World TB Day. In California, the proportion of multidrug-resistant TB (MDR TB) cases that were one drug away from being extensively drug-resistant (XDR TB) grew from 7 percent in 1993 to 33 percent in 2006. California's immigrant communities are especially vulnerable, since many immigrants are born in or travel to countries where TB is endemic, including Mexico, China, and India. Among the state's 451 drug-resistant TB cases during 1993-2007, about 83 percent involved foreign-born persons. San Francisco, where about one-third of residents are foreign-born, has the nation's highest TB rate. The city adopted a more hands-on approach to ensuring treatment adherence after a spike in TB in the 1990s. However, since 1996, city TB control workers have been cut by more than half, said Masae Kawamura, San Francisco Department of Public Health's (DPH) Director of TB Control. About 85 percent of the city's 609 drug-resistant TB cases logged between 1993 and 2006 were found in foreign-born persons, as were 83 percent of its 18 XDR TB cases. That is "just the tip of the iceberg," Kawamura said. San Francisco patients visit DPH's TB clinic for their daily treatment. Field staff members go out to patients who, for work, illness, and other reasons, cannot come to DPH for directly observed treatment. The city's budget cuts have hurt its ability to proactively screen for TB in high-risk areas and treat latent cases, said Jennifer Grinsdale, a program manager and epidemiologist with DPH's TB control program. "Anywhere from two to 10 years from now, we'll see the impact of this," she predicted.

CALIFORNIA: State's TB Rate Lowest on Record; L. A. Times, March 22, 2009, Rong-Gong Li II.

California posted its lowest number of TB cases on record in 2008, but health officials say the state continues to have one of the highest rates in the country. Last year, California's TB rate dropped to seven cases per 100,000, compared to 7.2 cases per 100,000 in 2007. In raw numbers, the state logged 2,696 TB cases in 2008, a 1 percent decline from 2007. Foreign-born persons and racial minorities continue to be disproportionately affected by the disease in California. Asian American residents had a TB case rate of 22.9 per 100,000, followed by blacks (8.7) and Latinos (7.6). The rate was 1.6 per 100,000 for whites and 1.8 for Native Americans. According to CDC, California's TB rate remains substantially higher than the national rate, which was 4.2 cases per 100,000 people in 2008. In a report released March 20, CDC called for "intensified efforts to address the slowing decline" in TB cases. The declining rate of the disease and its relative rarity in the United States have made it difficult for some doctors to diagnose the infection in patients.

ILLINOIS: New TB Cases Hit Historic Lows; Chicago Credits Drug Monitoring; Chicago Tribune, March 24, 2009, Deborah L. Shelton.

New TB cases in Chicago are at historically low levels, and the health department credits directly observed therapy for the improvement. In the 1990s, almost half of all TB patients in the city did not complete the full six-month regimen of prescribed medications. Now the proportion of patients successfully completing treatment has risen above 90 percent. Since 1993, the city's number of new cases has fallen by almost 75 percent. Foreign-born persons accounted for 54.2 percent of TB cases in the city in 2008. Chicago's prevalence rate last year was 7.4 cases per 100,000 residents, compared to the US rate of 4.2 per 100,000 residents.

CALIFORNIA: Students, Staff to Be Tested for TB; Los Angeles Times, March 21, 1009, Seema Mehta.

The news that a person at a high school in Long Beach has TB has prompted plans to test about 170 pupils and staff members there. Parents were being notified by letter on March 16 that the tests will be conducted in early April. Robert Tagorda, assistant to the superintendent of the school district, said the incident has no connection to a similar one in September of 2008, when 400 students and staff were tested for TB.

NEW YORK CITY AND PITTSBURGH: New TB Test Developed That Will Dramatically Cut Diagnosis Time; Science Daily, March 24, 2009

Researchers have developed a method to quickly diagnose TB and drug-resistant TB. The researchers from the Albert Einstein College of Medicine and the University of Pittsburgh engineered bacteriophages, tiny viruses that attack bacteria, with a green fluorescence protein (GFP) implanted in their genome. Bacteriophages spread by injecting their DNA into bacterial cells. When the engineered bacteriophages entered the *Mycobacterium tuberculosis* cell, the GFP gene in the DNA caused the cell to glow. It is then possible for a clinician to visually detect the glow using equipment available at most clinics. According to William R. Jacobs, Jr., Ph.D., one of the authors of the study, this method can shorten the diagnostic process from several weeks to several days, or even hours. Also, the test could be used to determine the treatable TB strains from drug-resistant strains. Researchers treated the TB bacteria with antibiotics at the same time bacteriophages were introduced. The TB strains that were sensitive to antibiotics died, but the drug-resistant cells survived and continued to glow. The research was funded by the Howard Hughes Medical Institute and was published in *PLoS One*, March 19, 2009.

USA: World TB Day – March 24, 2009; CDC MMWR Report. Mar 20, 2009; Volume 58, Number 10: 249.

World TB Day is observed each year on March 24 to commemorate the date in 1882 when the discovery of *Mycobacterium tuberculosis* was announced, the bacterium that causes tuberculosis (TB). Worldwide, TB remains one of the leading causes of death from infectious disease. An estimated 2 billion persons are infected with *M. tuberculosis*. In 2006, approximately 9.2 million persons became ill from TB, and 1.7 million died from the disease. World TB Day provides an opportunity for TB programs, nongovernmental organizations, and other partners to describe problems and solutions related to the TB pandemic and to support worldwide TB control efforts. The US theme for this year's observance is Partnerships for TB Elimination. After approximately 30 years of decline (from 84,304 in 1953 to 22,201 in 1985), the number of TB cases reported in the United States increased 20% (to 26,673) during 1985–1992. This led to a renewed emphasis on TB control and prevention during the 1990s. However, the average annual decline has slowed since 2000. In addition, multidrug-resistant TB remains a threat, extensively drug-resistant TB has become an emerging threat, and persons of racial/ethnic minority populations and foreign-born persons continue to account for a greater percentage of TB cases. Additional information about World TB Day and CDC TB-elimination activities is available at <http://www.cdc.gov/tb/worldtbdays>.

USA: Trends in Tuberculosis --- United States, 2008. CDC MMWR Report. Mar 20, 2009.

In 2008, a total of 12,898 incident tuberculosis (TB) cases were reported in the United States; the TB rate declined 3.8% from 2007 to 4.2 cases per 100,000 population, the lowest rate recorded since national reporting began in 1953. This report summarizes provisional 2008 data from the National TB Surveillance System and describes trends since 1993. Despite this overall improvement, progress has

slowed in recent years; the average annual percentage decline in the TB rate decreased from 7.3% per year during 1993--2000 to 3.8% during 2000--2008. Foreign-born persons and racial/ethnic minorities continued to bear a disproportionate burden of TB disease in the United States. In 2008, the TB rate in foreign-born persons in the United States was 10 times higher than in US-born persons. TB rates among Hispanics and blacks were nearly eight times higher than among non-Hispanic whites, and rates among Asians were nearly 23 times higher than among non-Hispanic whites. In 2008, among persons with TB whose country of origin was known, approximately 95% of Asians, 76% of Hispanics, 32% of blacks, and 18% of whites were foreign born. Among US-born racial and ethnic groups, the greatest racial disparity in TB rates was for US-born blacks, whose rate was seven times higher than the rate for US-born whites. Intensified efforts are needed to address the slowing decline in TB incidence and the persistent disparities that exist between US-born and foreign-born persons and between whites and minorities in the United States.

Two Simultaneous Outbreaks of Multidrug-Resistant Tuberculosis --- Federated States of Micronesia, 2007—2009; CDC MMWR Report. Mar 20, 2009.

In July 2008, CDC responded to a request from the Federated States of Micronesia (FSM) to investigate the first documented cases of multidrug-resistant tuberculosis (MDR TB) in Chuuk State. Compared with drug-susceptible TB disease, MDR TB is resistant to at least isoniazid and rifampin, the two most effective TB medications, making treatment more difficult and outcomes more likely fatal. Second-line TB drugs for treating MDR TB were not available in FSM, and during December 2007--June 2008 four patients with MDR TB had died, including a child aged 2 years. This report describes the investigation by the World Health Organization (WHO) and CDC, which initially identified five confirmed cases in two distinct clusters, characterized by two distinct geographic locations, genotypes, and drug-susceptibility patterns. Extensive transmission has occurred among household contacts; 16 (8%) of the 205 contacts identified have confirmed or suspected MDR TB disease, and 124 (60%) have latent TB infection. Among 21 confirmed and suspected cases of MDR TB identified as of March 13, 2009, ten have been in persons aged <15 years. With the death of a child aged 4 years in November 2008, a total of five persons have died of MDR TB. Multiple U.S. government agencies and other organizations are assisting local health authorities with resources to procure second-line TB drugs, ensure directly observed therapy (DOT), and identify and evaluate contacts. These simultaneous and continuing outbreaks demonstrate how a lack of basic TB control activities can allow the emergence and spread of drug-resistant TB. (NOTE: The Federated States of Micronesia is a sovereign state in free association with the United States. The country was formerly part of the Trust Territory of the Pacific Islands, a United Nations Trust Territory under U.S. administration.)

MASSACHUSETTS: Massachusetts College Student Tests Positive for TB; Associated Press, March 11, 2009.

The news that a state college student has tested positive for TB prompted health authorities to screen about 80 people who may have been in contact with him. Karen Cady, a college spokesperson, said those who need to be screened were notified by letter last month and will be tested without charge. Cady said the likelihood that anyone was infected by the patient, who lives off-campus, is low.

MICHIGAN: Passenger on Frankfurt-to-Detroit Flight Had TB; Associated Press, March 15, 2009.

A passenger who was onboard Northwest Airlines flight 51 from Frankfurt, Germany, to Detroit Metropolitan Airport on March 10 has been diagnosed with TB, CDC reports. Health officials are seeking to contact 17 persons who sat near the ailing passenger so they can be tested for TB in a “cautionary move,” said agency spokesperson Shelly Diaz. The TB patient is being kept in isolation at an area hospital.

TEXAS: Local Health Workers Join Del Rio TB Probe; San Antonio Express-News, March 6, 2009; Don Finley.

Up to 70 health workers from across Texas were expected to take part in a large school-based TB investigation in Del Rio during the week of March 9. "We're kind of challenged that the week after that is spring break, and that's why we're pushing hard to get everything done in a week," said Dr. Sandra Guerra-Cantu, regional medical director for the Texas Department of State Health Services. "We fully understand there's going to be some people we're not going to get during that time, and we will continue to work to get them over the next few weeks." The investigation will seek to test nearly 2,100 students, faculty, and administrators at a middle school, and high school freshmen who attended the school in 2007-08. The first of three people diagnosed with TB went undiagnosed for a year, said Guerra-Cantu: "It was what we consider disseminated TB. That's the fancy word for [TB in] more than one spot. The lungs were the last to show symptoms. That's what finally made somebody say, 'Oh, this is TB.'" In the first round of testing, about 200 close contacts of the initial patient were screened. When two of those persons were found to have active TB disease, public health guidelines called for expanding the probe to include other contacts of the patient. Several of those contacts also tested positive for latent TB infection.

CANADA: TB Awareness on the Fashion Agenda in Montreal; Stop TB Partnership, March 5, 2009.

Visitors to Montreal during Montreal Fashion Week were educated on the effect of TB on the lives of women all over the world. To raise awareness about TB, Results Canada broadcast a 15-second video on a giant outdoor screen located in the most frequented neighborhood of Montreal. The video highlighted TB as the number one infectious killer of women and was broadcast 24 times a day for four days. About 25,000 people attend fashion week, and the city estimates that 50,000 drivers pass through that neighborhood daily.

TEXAS: Lackland DFAC Contractor Infects 11 with TB; Air Force Times, March 9, 2009; Sam LaGrone and Michael Hoffman

A civilian employee who worked in the dining hall at Lackland Air Force Base, Texas, was diagnosed with active TB disease, and 11 other civilians working in the dining hall tested positive for TB infection. According to Domingo Navarro, Program Manager for the TB Section of the San Antonio Metropolitan Health District, the index patient, a native of the Philippines, is the only one with the disease. The other 11 workers are being treated for TB infection and are expected to recover. Oscar Balladares, a Lackland spokesperson, stated that the 11 contract workers continue to work in the dining hall, as they are not contagious. The Air Force is testing other dining hall employees and those close to the original patient. Neither the public nor dining hall patrons are being tested, as the disease is transmitted through close contact with infectious patients. According to Lackland and health spokespersons, the disease has not been transmitted to any military personnel.

USA: Tuberculosis and Substance Abuse in the United States, 1997-2006; Archives of Internal Medicine. 2009 Jan 26; Oeltmann, J.E., et al.

TB control efforts are often ineffective in controlling TB among patients who use illicit drugs or abuse alcohol (substance abuse). This study examined the prevalence of substance abuse among TB cases reported in the United States and assessed the relation between substance abuse and indicators of TB transmission. A cross-sectional analysis was performed of data on US TB cases in patients 15 years or older reported from 1997 through 2006..... Of 153,268 patients with TB, 28,650 (18.7%) reported substance abuse, including 22,293 of 76,816 US-born patients (29.0%)..... Among patients negative for HIV, odds of sputum smear-positive disease were 1.8 times greater among those who reported substance

abuse; this association was weaker among patients with HIV infection. Among female patients, odds of treatment failure were 2.4 times greater among those who reported substance abuse.... Patients who abused substances were more likely to be involved in a county-level genotype cluster. Substance abuse is the most commonly reported behavioral risk factor among patients with TB in the United States. Patients who abuse substances are more contagious (e.g., smear positive) and remain contagious longer because treatment failure presumably extends periods of infectiousness. Increased transmission is consistent with the finding that patients who abuse substances were more likely to be involved in a localized genotype cluster, which can represent recent transmission.

DETROIT: Investigation of a Genotype Cluster of Tuberculosis Cases --- Detroit, Michigan, 2004—2000: CDC MMWR Weekly Report. Mar 13, 2009.

This report describes the investigation of a genotype cluster of eight TB cases in US-born patients in the Detroit metropolitan area. The investigation was conducted in August 2007 by the Detroit Department of Health and Wellness Promotion, the Michigan Department of Community Health, and the Centers for Disease Control and Prevention (CDC). The cases had been reported during December 2004 and April 2007. The first case was in a patient (index patient) whose drug susceptible TB subsequently developed into multidrug resistance. Seven additional cases were reported in patients with *Mycobacterium tuberculosis* genotypes that matched the genotype of the index patient, including a case of multidrug-resistant TB (MDR TB) in a young relative of the index patient. Also, the index patient's parent died from unrecognized TB meningitis. The case illustrates the importance of ensuring that each case of TB disease is promptly diagnosed and successfully treated and that all close contacts of TB patients are identified, evaluated, and treated for latent TB infection if indicated.

NEW MEXICO: Proposals Would Allow Court-Ordered TB Treatment; Associated Press, February 23, 2009, by Sue Major Holmes.

On February 17, the state House of New Mexico passed a bill that would allow the state Department of Health to petition courts to ensure that noncompliant TB patients receive directly observed treatment, isolation, or both. Currently, the department can go to court only when a patient who refuses to adhere to treatment has progressed far enough to be infectious to others. The bill passed the House by a 65-0 vote and is now under consideration by the Senate. The proposed legislation "spells out in great detail exactly what the department must demonstrate in order to get a court order and also spells out in detail the rights of the individual," said Dr. Steve Jenison, Medical Director of the department's Infectious Diseases Bureau. The measure would not allow patients to be forced to take medication; requires regular court review; and gives patients the right to an attorney. "We realized we did not have any legal resources available to us when someone was failing to comply with the prescribed treatment," said Jenison. The legislation would let the department ask a judge to isolate a person "until they're cured of TB or it becomes clear they are going to comply" with treatment, he said. Patients do not adhere to treatment for various reasons, including alcohol abuse, mental health issues, homelessness, or lack of resources, Jenison said. Such patients are at risk of developing drug-resistant TB and spreading these costly and difficult-to-treat strains, he said. The state reported 39 TB cases in 2005 and 58 in 2008, according to the department, and about 10 percent of patients in a typical year refuse to adhere to therapy. The number of TB cases resistant to at least one of the two most effective front-line TB drugs is also on the rise.

TENNESSEE: TB Case Found in Memphis School; Commercial Appeal (Memphis), February 25, 2009; Jane Roberts.

A TB investigation is underway in South Memphis following the diagnosis of an active case in a person at a local high school. Authorities declined to say whether the patient is a student or a staff member. "We're looking at people closest to the suspected case in the home, in the workplace, social environment,

religious environment, everywhere,” said Dr. Helen Morrow, acting health officer at the Memphis Shelby County Health Department. Students and their parents have been notified, and those whose close contact with the patient may have put them at risk are being asked to take a TB test at the school. Of 234 TB cases diagnosed in Tennessee in 2007, 90 (38 percent) were in Memphis.

CANADA: Winnipeg Doctor Failed to Diagnose Case of Tuberculosis, Lawsuit Claims; Ottawa Citizen, February 27, 2009; Jen Skerritt.

A lawsuit filed in Winnipeg alleges that a teenager suffered a debilitating stroke and transmitted TB to several people after a doctor failed to treat his disease. According to court documents, the boy was complaining of severe chest pain when he was rushed to a Winnipeg hospital in April 2008. Although a chest X-ray showed the youth had TB, the emergency department physician discharged him and did not tell his family about the disease, the suit alleges. Court papers say the teen’s condition then went untreated for months, and a subsequent investigation found that the mother’s husband, two younger children, several close family friends and their children tested positive for TB infection. In addition, the untreated TB spread to the youth’s brain, leading to a stroke that causes him to walk with a limp. The legal action names as defendants the doctor, who said he believes the court will vindicate him, and the Winnipeg Regional Health Authority, which declined to comment on the case.

NEW YORK CITY: Study: Old Drugs Might Give TB a 1–2 Punch; Associated Press, February 26, 2009; Lauran Neergaard.

A fresh approach to TB treatment using two old, safe antibiotics could fight even the deadliest form of the bacteria, extensively drug-resistant TB (XDR-TB), a new report suggests. TB bacteria contain an enzyme, beta-lactamase, which disables the penicillin class of antibiotics. “It chews them up and spits them out and they never get to see their target,” said John Blanchard of the Albert Einstein School of Medicine. However, other antibiotics can block beta-lactamase, and Blanchard’s team tried using this enzyme-blocking property to flank TB, hoping to open it up to a wider spectrum of antibiotic treatment. Researchers specifically tapped the antibiotic clavulanate, part of the two-drug Augmentin antibiotic widely used for various children’s infections, to inhibit the TB enzyme. In the laboratory, clavulanate opened TB up to meropenem, an antibiotic in the same class as penicillin, and the combination blocked the growth of 13 different XDR-TB strains. Whether the combination would work in human trials may be revealed soon. US researchers from the National Institutes of Health and New York’s Montefiore Medical Center are planning small patient studies in South Korea and South Africa, which they hope to begin later this year. “It’s very clever,” said Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases. The 1-2 treatment punch “leaves the original drug with the capability of doing what it’s supposed to do.” The full report, “Meropenem-Clavulanate Is Effective Against Extensively Drug-Resistant *Mycobacterium tuberculosis*,” was published in *Science*.

TEXAS: Tuberculosis Breakthrough Could Lead to Stronger Vaccine; Huliq News, March 3, 2009.

Researchers at the University of Texas Health Science Center at Houston investigated mechanisms by which BCG evades immune-stimulating mechanisms. The researchers devised two ways to neutralize them by using (1) genetically modified organisms and by using (2) a drug utilized for organ transplantation, which blocked BCG’s evasive mechanisms and caused it to induce stronger immune responses. According to Chinnaswamy Jagannath, Ph.D., lead author and associate professor at the University of Texas Medical School at Houston, the dual approach to the BCG vaccine was associated with a tenfold increase in the number of TB organisms killed. This dual approach was also associated with a threefold increase in the duration of protection in tests with a mouse model. Dr. Robert L. Hunter, Jr., one of the study’s two senior authors and Chair of the Department of Pathology and Laboratory Medicine at the University of Texas Medical School at Houston, said that the breakthrough was that Dr.

Jagannath has countered the ability of the TB organism to subvert immunization. Hunter said that Dr. Jagannath hypothesized that the drug rapamycin, which modulates the movement of particles in cells, would cause BCG antigens to enter pathways leading to improved immunization. Also, Dr. Jagannath had previously demonstrated that a genetic deletion of the *fpbA* gene has similar effects. The researchers commented that these findings break new ground in vaccine research and make improvements for TB vaccines because they provide a simple and powerful strategy to enhance vaccine efficiency. They plan to add additional antigens to the BCG vaccine to further improve its effectiveness before clinical trials. Collaborators in the study include Devin Lindsey of the University of Texas Medical School, and Yi Xu and Tony Eissa of the Baylor College of Medicine. The study was funded by the National Institute of Allergy and Infectious Diseases and the National Heart, Lung and Blood Institute and published in the March 1, 2009, online publication of *Nature Medicine*.

TENNESSEE: Nashville Tuberculosis Effort Focuses on Blacks; Fox 17, March 2, 2009.

The number of TB cases has declined in Davidson County, Tennessee, over the last ten years. In 2008, the county reported 74 cases; however, 26 of the cases or 35 percent were in US-born African-American patients. According to epidemiologists at the state Department of Health, African Americans make up about 19 percent of the population of the county. Alisa Haushalter, the Bureau of Population Health Director for the Public Health Department in Nashville, said that the county's blacks are five times more likely to have TB than whites. Haushalter stated that a new task is focused on educating people about TB and reaching those most at risk.

INDIANA: Doctors Call for Change in How Non-Active TB in Immigrant Children Treated; EurekAlert, March 2, 2009, by Cindy Fox Aisen.

Researchers from the Indiana University School of Medicine and Riley Hospital for Children have proposed new guidelines for how US pediatricians and family physicians treat latent TB infection (LTBI) in immigrant, internationally-adopted, or refugee children. According to Dr. S. Maria Finnell, the first author of the study, many of the children have lived in crowded conditions in orphanages and are from countries where TB cases have become resistant to the drug isoniazid. The standard US treatment guidelines are to use isoniazid to treat children with LTBI. Dr. Finnell, a pediatrics fellow, with collaborators Dr. John C. Christenson, Indiana University School of Medicine, Professor of Clinical Pediatrics and an infectious disease specialist, and Dr. Stephen M. Downs, Indiana University School of Medicine, Associate Professor of Pediatrics and a Regenstrief Institute-affiliated scientist, all determined that treatment guidelines need to be changed. They propose that children with LTBI who come to the United States from countries with high rates of isoniazid resistance should be treated with rifampin. At present, rifampin is used to treat children exposed to known cases of isoniazid-resistant TB. Dr. Finnell argues that since the actual bacteria cannot be found in patients with LTBI, there is no way of knowing which children have the isoniazid-resistant strain. Their research shows that for children with latent TB from countries with isoniazid-resistant rates above 11 percent, treatment with rifampin would be cost-effective. Although rifampin is more expensive than isoniazid, the total costs would be lower because rifampin would prevent more cases of active TB disease. Also, the course of rifampin treatment is six months, compared to nine months of therapy with isoniazid. The shorter course of treatment may also improve adherence. This study was published in the March 2009 issue of the journal *Pediatrics*.

CANADA: Tuberculosis Eyed on First Nation; Winnipeg Free Press, February 21, 2009, by Matt Goerzen.

Chief Wilfred McKay said that some residents of Rolling River First Nation are being monitored for signs of TB. The Rolling River's Southquill Health Services recently held an information session to answer questions from residents about what may be a TB outbreak in the community. The notice for the meeting

mentioned four names of individuals who had confirmed cases of TB. Members of Health Canada's First Nation and Inuit Health TB Unit were present to answer questions. However, at the meeting, Chief McKay said that the notice was released without his consent and was not an official document. He said that the TB had not been confirmed in the four persons and emphasized that the disease is treatable and that people should not get alarmed. Chief McKay gave no explanation of how the persons were exposed to the disease.

NEW MEXICO: Proposals Would Allow Court-Ordered TB Treatment; Kvia.com, February 24, 2009.

The New Mexico House of Representatives recently passed a measure that would allow the New Mexico Department of Health to go to court when TB patients do not adhere to treatment and subsequently risk transmitting the disease. The danger is that when patients do not correctly adhere to treatment, they can develop resistance to antituberculosis drugs and spread the drug-resistant form of the disease. The bill would permit the state agency to petition the court to provide therapy under observation, isolate the patient, or carry out both actions. The proposal includes regular court reviews of cases and gives patients the right to an attorney, but it does not allow forcible administration of medications. Democratic Representative Joseph Cervantes, one of the sponsors of the bill, commented that 29 other states have similar laws. The measure now goes to the state senate.

CANADA: Second Case of TB at UVic; Martlet; February 24, 2009.

A second case of TB has been reported at a Canadian university. The second student is a close family member of the first patient. Both students are being treated and are not on campus. As a result, in addition to the 200 students already contacted, 90 more students will be notified and will receive skin tests. It is believed that the first student contracted the disease overseas.

MICHIGAN: Detroit Schools Student Has TB; Detroit News, February 10, 2009; Jennifer Mrozowski.

Detroit Public Schools officials confirmed February 9 that a high school student has tested positive for TB. District spokesperson Mattie Majors said letters were sent out February 10 notifying parents about the student and telling them the city's health department will contact them if TB testing is needed. "It would be highly unusual to have another kid at the school test positive," said Majors. She stated that the student who tested positive has not been in school for about a month. "The child is not going to be let in [the school] until cleared by a physician," she added.

CALIFORNIA: Castro TB Scare Averted; Bay Area Reporter (San Francisco), February 12, 2009.

Following a TB scare in Castro area bars last month, the San Francisco Department of Public Health screened nearly all bar workers during a "bar crawl" on Feb. 6. Officials said they found no indication that any employee was exposed to the disease. In January, health officials said a Castro bartender and several neighborhood bar patrons had TB. Preliminary results show no wide outbreak of the disease, officials said.

MARYLAND: Sequella Receives SBIR Funding Grant from the NIH for Further Development of Tuberculosis Drug SQ609.

Sequella, Inc. has announced the receipt of a Small Business Innovation Research (SBIR) Phase I grant from the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), to further develop the company's novel TB lead dipiperidine drug compound SQ609. Sequella

will use the grant to conduct IND-directed preclinical in vitro and in vivo potency, pharmacology, and toxicity tests of SQ609, as a single agent and in combination with other more established therapies.

ILLINOIS and TEXAS: Health Departments Fight Tuberculosis on Both Sides of the U.S. Border with Mexico; Chicago Tribune; Oscar Avila and Margaret Ramirez.

Doctors are having difficulty treating TB patients along the border between Mexico and the United States. TB rates have increased in communities along the border, such as in the state of Tamaulipas where TB cases rose 10 percent since 2007. TB rates have also increased in the South Texas city of McAllen, where TB rates are nearly three times more than the national average. In Illinois, Mexican immigrants make up 18 percent of TB cases, even though they comprise six percent of the population. In a binational initiative beginning in the 1990s, Texas health officials exchange information with their peers in Mexico about patients who have TB, in order for the patients to continue DOTS. In recent years, Mexican patients were being diagnosed with multidrug-resistant TB (MDR TB). Many of these patients began checking into Texas hospitals where they were being treated at taxpayers' expense, as they had no insurance. Treatment can cost up to \$250,000 for each patient. Texas health officials began enrolling many of those patients in the binational program and began offering to send the medication to Mexico. Dr. Brian Smith, Regional Director of the Texas Department of State Health Services in the border city of Harlingen, stated that the program could be controversial, but several hundred thousand dollars that Texas spent on antituberculosis treatment saved millions in uninsured care. The Chicago Department of Public Health reported that immigrants made up 51 percent of Chicago's 258 TB cases in 2007, and that the largest number of these immigrants were from Mexico. Dr. William Clapp, director of Chicago's TB program, expressed concern that TB treatment could fuel discrimination against immigrants.

MINNESOTA: Schools, Clinic Work Together on TB Research; Post-Bulletin, February 12, 2009; Elliot Mann.

The Rochester Healthy Communities Partnership, a health-literacy program within the Rochester school district, and the Mayo Clinic aim to prevent future TB infections and determine why other diseases might be affecting area residents. Researchers, trained Hawthorne Learning Center staff, and community members host sessions with Hawthorne students and community members that deal with what they know about TB, TB treatment, and other related questions. The sessions last more than an hour, and staff record questions and answers. The process is called community-based participatory research, where instead of analyzing information by itself, researchers obtain the data from people in person, and community members are trained in health education. Julie Nigon, the Adult and Family Literacy Program Manager at the Hawthorne Learning Center, and Dr. Irene Sia of the Mayo Clinic and the Principal Investigator, have partnered with the University of Minnesota-Rochester and Winona State University for the program. According to the Minnesota Department of Health, in 2007 Minnesota TB cases rose 10 percent to 238, and in Olmsted County infections rose from 15 to 20 cases in 2007. Eighty-five percent of the TB cases in Minnesota are among people born outside the United States. Since 2,000 early-childhood and adult students at Hawthorne are from 70 different nations, Nigon and Sia wanted to help the students become healthier. Adult students are working with doctors and learning from each other in an attempt to discover why certain people are impacted uniquely by different diseases. The program received a two-year grant from the National Institutes of Health (NIH) to fund the work.

USA: Plan to Combat Extensively Drug-Resistant Tuberculosis: Recommendations of the Federal Tuberculosis Task Force; CDC MMWR: 2009 Feb 13; LoBue, P, et al.

An estimated one third of the world's population is infected with *Mycobacterium tuberculosis*, and nearly nine million persons develop disease caused by *M. tuberculosis* each year. Although TB occurs predominantly in resource-limited countries, it also occurs in the United States. There was an

unprecedented TB resurgence in 1985--1992, in the United States, and an accompanying rise in multidrug-resistant TB (MDR TB). Extensively drug-resistant (XDR) TB, which is defined as MDR TB that also is resistant to the most effective second-line therapeutic drugs used to treat MDR TB. In the United States, the cost of hospitalization for one XDR TB patient is estimated to average \$483,000, approximately twice the cost for MDR TB patients. Because of the limited responsiveness of XDR TB to available antibiotics, mortality rates among patients with XDR TB are similar to those of TB patients in the preantibiotic era. In January 1992, CDC convened a Federal TB Task Force to draft an action plan to improve prevention and control of drug-resistant TB in the United States.

In November 2006, CDC reconvened the Task Force to draft an updated action plan to address the issue of MDR TB and XDR TB. Although the first priority of the Federal TB Task Force convened in 2006 was to delineate objectives and action steps to address MDR TB and XDR TB domestically, members recognized the necessity for TB experts in the United States to work with the international community to help strengthen TB control efforts globally. TB represents a substantial public health problem in low- and middle-income countries, many of which might benefit from assistance by the United States. In addition, the global TB epidemic directly affects the United States because the majority of all cases of TB and 80% of cases of MDR TB reported in the United States occur among foreign-born persons. For these reasons, the Action Plan also outlines potential steps that U.S. government agencies can take to help solve global XDR TB problems. The recommendations provided in this report include specific action steps and new activities that will require additional funding and a renewed commitment by government and nongovernment organizations involved in domestic and international TB control efforts to be implemented effectively.

WISCONSIN: 300 People at Jail to Be Watched for TB: Staff, Other Inmates Came in Contact with Victim; Milwaukee Journal-Sentinel, February 10, 2009; Marle Rohde.

A disease investigation is underway after an inmate with active TB disease, being held under court order to ensure he took his medication, was found dead Sunday in his isolation cell at the Milwaukee County Criminal Justice Facility. It is unclear whether the 50-year-old man died of TB and whether he had antibiotic-resistant TB. However, a list is being compiled of more than 300 inmates, guards, medical staff, and others at the House of Correction, who were in close proximity with the man. "I'm told he was so sick that he had to be helped from his cell to the dining hall," said Kevin Schoofs, president of the guards' union. "He couldn't get his own food. I'm very concerned for the officers and inmates who came in contact with this man." But physician Michael Grebner, who supervises medical care for county jails, said the risk to others is minimal because extended close contact is necessary to transmit TB. Grebner said it would be another two weeks before lab tests can determine if the man's TB was antibiotic-resistant. In the meantime, all staff members who had at least an hour of contact with the man are being tracked. Usually, inmates are screened for TB at intake with a skin test, said Grebner. But the inmate claimed he had been positive on previous skin tests, so no skin test was deemed necessary, as the man did not appear ill. The inmate was not given a chest X-ray..... Prophylactic medication also was not given because the inmate had liver problems, Grebner added.

MASSACHUSETTS: MIT Project Uses Personal Digital Assistants to Track TB Data – Test Results Reach Doctors an Average of 15 Days Faster; Medical News Today, February 11, 2009; Anne Trafton.

Massachusetts Institute of Technology graduate student Joaquin Blaya and colleagues have come up with a timely and efficient way of monitoring patients with drug-resistant TB, by equipping health care workers with personal digital assistants (PDAs). The patients are treated for two years with powerful antibiotics, and keeping track of their laboratory results is very time consuming for health care workers. Blaya connected with Partners in Health and worked with faculty members from the Harvard-MIT

Division of Health Sciences and Technology (HST) and the Brigham and Women's Hospital. He launched the PDA project in Lima, Peru, by working closely with the Peruvian sister organization of Partners in Health, Socios en Salud. Under the old system, a team of four health care workers visited more than 100 health care centers and laboratories twice a week and recorded test results on paper sheets. They returned to their main office twice a week and transcribed the results onto two sets of forms per patient. Using the new system, health care workers enter all lab data into a PDA, using medical software specifically designed for the purpose. When they return to their office, the data is made available to the doctors via computer. The new system reduced the time that it took for doctors to receive the results from 23 days to eight days and eliminated the delay caused by misplaced papers. The program began in two districts in Lima and has now been expanded to all five districts. The research was reported recently in the online edition of the *International Journal of Tuberculosis and Lung Disease*.

USA: A Database of TB Drug Resistance Mutations; Medical News Today; February 11, 2009.

Andreas Sandren and colleagues have established a comprehensive database of mutations associated with TB drug resistance. It lists the frequency of the most common mutations associated with resistance to specific drugs. The interactive database was made publicly available as a resource for development of molecular diagnostics for TB. It can also be used for structural mapping of mutations to study mechanisms of resistance for drug discovery purposes. The research was reported in this week's issue of *PLoS Medicine*.

CALIFORNIA: Desert Regional Nurse Tests Positive for Tuberculosis; January 28, 2009; Denise Goolsby, The Desert Sun.

A nurse who was employed in a California hospital's newborn intensive care unit has tested positive for TB. Dr. Robert Cunnah, Chief Medical Officer at the hospital, stated that the medical center has sent letters to parents of 124 babies who may have been exposed to the nurse over a three-month period. He noted that the hospital takes special precautions because the babies' immune systems are not fully developed. Also, the babies are usually intubated or on ventilators, which means they are breathing filtered air. According to the hospital, the nurse was diagnosed about three weeks ago and is being treated while in isolation at home. Riverside County Department of Public Health is asking parents to bring the 124 babies for testing.

WISCONSIN: Milwaukee Homeless Man with Tuberculosis Held in Jail; Journal Sentinel, February 2, 2009; Marie Rohde.

City officials in Milwaukee have requested that a homeless man in jail on a minor charge of disorderly conduct not be released because he has active TB disease. Paul Biedrzycki, Director of Disease Control and Prevention at the Milwaukee Health Department, advised that the patient remain in the medical ward of the county jail because he is a danger to himself and the public. Biedrzycki noted that the disease is communicable, and the patient might not adhere to treatment. In addition, the patient is homeless and has displayed aggressive behavior by coughing and spitting in workers' faces. The Milwaukee County circuit judge has scheduled a hearing at the city's request in which the patient will participate by video monitor. According to Biedrzycki, the disease was confirmed by lab tests, a CT scan, and a chest X-ray.

USA: TB, Substance Abuse Closely Linked in US: CDC; Reuters, January 26, 2009; by Will Dunham.

The most common risk factor for TB in US patients is abusing drugs or alcohol, CDC researchers said January 26. Substance abusers were more contagious than others with the disease and were contagious for a longer duration. Substance abusers were also less likely to complete TB treatment, they found. The CDC team tracked 153,268 people diagnosed with TB from 1997 to 2006, accounting for nearly every

patient age 15 and older during that span. Roughly half of the TB patients were foreign-born. Overall, 19 percent of the study group reported they had abused drugs and/or alcohol. Among the 76,816 US-born participants, 29 percent reported substance abuse. CDC epidemiologist Eric Pevzner said substance abuse was “the most commonly reported risk factor,” topping HIV infection, homelessness, and other leading risk factors. The study’s findings have important public health implications as the United States attempts to reduce its already low TB rates, said Pevzner. “We can’t treat the TB in isolation,” he said. “We have to bring in people who are experts in substance abuse and also treat life circumstances that people are facing so that we can help cure this disease and help end a chain of transmission.” The study, “Tuberculosis and Substance Abuse in the United States, 1997-2006,” was published in the Archives of Internal Medicine.

ILLINOIS: Court Orders TB Patient into Isolation; The News-Gazette.com, January 22, 2009; Meg Thilmoney.

A 20-year-old man with TB disease who did not follow health department instructions has been ordered by the court in Champaign, Illinois, to be monitored electronically. He will have to stay at home during treatment except when health authorities allow him to leave. The judge ruled that disobedience of the order would constitute a Class A misdemeanor and carry a sentence of up to a year in the county jail. The health district will pay for the patient’s food and medication, and for the global positioning system device that monitors him, and will arrange for him to spend the isolation period in a hotel or motel. The order expires at the end of treatment, or in 30 days. Everyone wore masks at the hearing, and health district officials said all air circulation to the conference room had been stopped for health purposes. Also, persons attending the hearing were instructed about how to remove the masks upon leaving the conference room. Before the hearing, the public health district had difficulty making the patient take his medicine, wear a mask in the presence of others, and stay in his apartment. Senior Assistant State’s Attorney Susan McGrath said that the county had never before held a hearing on an order of isolation or quarantine.

INDIANA: Indiana University-Purdue University Fort Wayne Student Treated for TB; Fort Wayne Journal Gazette, January 13, 2009; Michael Schroeder.

The Fort Wayne-Allen County Department of Health is investigating the case of a commuter college student who is being treated for a suspected case of TB. “This student, who was taking one class, had minimal interaction with the campus community,” according to a campus-wide e-mail from Chancellor Michael Wartell. “It is important that everyone is informed that the risk of exposure is extremely low.” The health department is seeking those who might have had prolonged contact with the student; these people will be offered TB tests, said John Silcox, department spokesperson. In addition to the suspected case, the department has confirmed one TB case so far this year, Silcox said.

USA: Guidelines for New, Faster TB Test; United Press International, January 15, 2009.

CDC has released new guidelines that call for nucleic acid amplification testing to be performed on patients with suspected pulmonary TB. The agency’s recommendations reflect the increasing use of NAA tests in diagnosing the bacterial infection. NAA test guidelines were last updated in 2000. Last summer, CDC and the Association of Public Health Laboratories convened a panel to review existing guidelines and make recommendations to incorporate NAA tests into standard practice. NAA testing can confirm pulmonary TB weeks faster than conventional testing, which includes acid-fast bacilli smear and TB culture. The new guidelines include revised procedures for testing and interpreting results, and provide advice for clinicians to ensure accuracy and cost savings in interpretation of NAA test results. The recommendations, “Updated Guidelines for the Use of Nucleic Acid Amplification Tests in the Diagnosis of Tuberculosis” were published in CDC’s Morbidity and Mortality Weekly Report 2009;58(01):7-10.

TEXAS: Kilgore College Students Notified of TB Exposure; News-Journal (Longview), January 15, 2009.

TB testing was offered January 14 to about 100 college students who may have been exposed to the disease. Just before the holidays, the Texas Department of State Health Services sent letters informing the students of the potential exposure. An international student who attended the college in the fall was diagnosed with TB, said Chris Craddock, college spokesperson. The student did not live on campus and is not registered there now. Craddock did not know how many of the contacted students presented for testing.

CALIFORNIA: TB Confirmed, Testing Starts; Press Enterprise (Riverside), January 17, 2009; Dayna Strahley.

School officials confirmed January 16 that a student at a Riverside high school has TB, and the student's classmates and teachers will be tested for the disease. The Riverside County Health Department is setting up testing. Letters about the matter have been sent home to parents, according to Dawn Brewer, the school board's president. Although school staff members are routinely tested for TB every four years, the infected student's teachers are being retested.

ILLINOIS: Treatment Could Be Forced Upon Champaign TB Patient; The News-Gazette.com, January 21, 2009, by Paul Wood.

The Champaign-Urbana Public Health District has requested a court order to force a patient with TB to adhere to treatment. The district is asking that the patient, a 20-year-old native of the Congo, be isolated in his apartment, wear a mask around others, and take three TB medications. This hearing will be conducted soon. The Provena Covenant Medical Center contacted the Public Health District on December 1, 2008, when the patient was hospitalized with suspected TB. The doctor recommended that the patient, who had not adhered to safety measures at the hospital, be confined to home for treatment after leaving the hospital. Test results confirmed that the patient had TB disease, and the local district sought a legal isolation if the patient did not adhere to treatment. The court document indicates that the patient complied with treatment at first, but refused to remain at home. On December 8, 2008, the patient's significant other tested positive for TB infection. The initial patient was to begin a second course of treatment on January 7, 2009. A public health worker found the patient watching a movie with a friend, and not using a respirator mask, which, according to court documents, was required as part of the treatment. The district held a hearing in the patient's apartment on January 16, 2009, and served the patient an order for isolation the following day, January 17, 2009.

TEXAS: Texas Medical Center Researchers Win Collaborative Grants; Genetic Engineering & Biotechnology News; January 21, 2009.

Rice University, Texas Children's Hospital, and the Methodist Hospital Research Institute have been named the Virginia and L.E. Simmons Family Foundation Collaborative Research Fund's first grant recipients as research collaborators. Four projects, which included finding cures for hearing loss, breast cancer, and childhood cancer, and a way to identify people at risk for TB, were chosen to be awarded one-year seed grants from among 35 proposals. Researchers Margaret Goodell, Katherine King, and Catherine Bollard of Texas Children's Hospital and Edward Graviss of the Methodist Hospital Research Institute received a grant of \$197,500 to study why TB bacteria make some people gravely ill and leave others untouched. The researchers believe the answer lies in differing immune responses, and their studies with mice provide a clue that a signaling molecule, interferon-gamma, triggers the immune system to respond to *Mycobacterium tuberculosis*. When the system goes awry, immune cells cannot digest bacteria, the

bone marrow cannot make blood or more immune cells, and the mice become anemic and die of infection. The researchers suspect similar processes take place in humans and plan to investigate the roles of interferon-gamma and immunity-related GTPase M, a protein similar to one in mice that engulfs and digests bacteria.

CALIFORNIA: TB Cases Linked to Castro Bars; January 8, 2009; Bay Area Reporter; Matthew S. Bajko.

Public health officials in San Francisco have traced several cases of TB to bars in the predominantly gay Castro neighborhood, prompting them to ask 140 area employees to be screened for the disease. More than 50 people reportedly have already been tested. In a fact sheet distributed to bar owners, the San Francisco Department of Public Health expressed concern that a “cluster of highly infectious TB cases” may be “working its way through the SF gay community.” The department is also notifying health service providers with gay and HIV-infected patients to watch for cases of TB. “We don’t want to cause panic in the community,” said Dr. Masae Kawamura, director of the health department’s TB control section. “We are targeting staff of the bars because they would have more exposure than patrons.” The poor ventilation typical of bars puts their employees at greater risk, she said. According to the fact sheet, the first two cases were linked to a retail commercial establishment in the south of Market [Street] neighborhood. Three additional cases were diagnosed, and “contacts of the fifth and third case admitted to going to bars in the Castro and named the bar/club employing the fourth index patient. All three of these individuals frequented many of the bars in the Castro during their infectious periods,” the fact sheet reported. Four of the five cases are in gay men in their 20s; three are HIV-infected. All but one are US natives who would otherwise be considered at low risk for TB. The health department has set up a special screening site at Magnet, the gay men’s health center in the Castro, which is operating during the first two weeks of January. Supervisor Bevan Dufty emphasized that “members of the public are at extremely low risk” and should not be concerned about patronizing Castro bars.

ILLNOIS: County Health Board Assumes TB Role; Hancock County Journal-Pilot, January 14, 2009; Doug Endres.

The TB Board of Hancock County has been discontinued, and its responsibilities have been added to those of the Hancock County Health Department. As a result, the Board of Health, the governing body for the health department, now has 11 members instead of eight. Also, the name of the TB levy has been changed to the public health levy. This levy is used to collect money to help pay expenses related to TB issues. The money is still used for the same purpose, but is maintained as a separate line item in the general fund of the health department. This move was made to protect the county from the potential extra expenses of a TB outbreak. If such an outbreak would occur, the county would be liable for expenses up to the amount of money in the levy, which is currently over \$200,000. Formerly, because there was a TB Board, the county was liable for all the expenses. One other change is that there is now a charge of \$5 for a TB test, and this fee is paid into the TB account. The health department is using money from the levy to help uninsured persons pay for chest X-rays or lab tests to confirm a TB diagnosis.

CALIFORNIA: U.S. Leadership on HIV/TB Coinfection in Developing Countries Could Make “Profound Difference,” Opinion Piece Says; San Francisco Chronicle; January 13, 2009.

In the opinion of Diane Havlir, Professor of Medicine at the University of California-San Francisco, US leadership on HIV and TB can make a profound difference in developing countries. The comment was reported in an article in the *San Francisco Chronicle*. Havlir states that global health issues such as HIV/TB coinfection should be a key component of US foreign policy, and that the United States should double its assistance by 2012. Havlir writes that under the Bush administration, the United States made great progress in global health, particularly in expanding access to HIV/AIDS treatment; however, that

success faces a major challenge that threatens to undermine the progress made. That threat is the rise in drug-resistant TB. Havlir emphasizes the importance of the United States continuing to improve on its commitment to global AIDS and TB, and suggests that the United States should increase efforts to integrate treatment of both diseases, as it does not make clinical sense to continue to treat these two infections separately. Havlir suggests that the United States should provide \$2 billion to the Global Fund in 2009 and \$4 billion for bilateral TB programs over five years. She commented that strong leadership in Congress is crucial to addressing the shortfall faced by the Global Fund and to fulfilling the bilateral funding pledges. She noted that despite comments from others about the financial crisis in the United States, the country has moral and public health imperatives to respond to the epidemic currently being experienced by some of the poorest people in the world. Havlir sees the inauguration of President-Elect Barack Obama and the confirmation of Secretary of State-nominee Senator Hillary Rodham Clinton as an opportunity to reaffirm US leadership and put the US response to global disease on par with other foreign policy challenges.

MISSOURI: Fewer Tuberculosis Cases Reported Locally; News-Leader.com, January 6, 2009; Kathleen O'Dell.

Although new cases of TB have declined in Greene County, Missouri, health officials test the most susceptible individuals: foreign-born residents, and persons living in homeless shelters. According to Kendra Williams, Administrator of Community Health and Epidemiology, Springfield-Greene County Health Department, health officials in Greene County performed 2,156 TB skin tests in 2006, 1,456 in 2007, and 1,917 in 2008. Through the tests, three new cases of TB disease were found in 2008, compared to six or seven in 2006 and 2007. Two additional adults with TB disease identified in 2007 were still being treated in 2008. Williams said that the county is doing more TB testing because a new federal law requires TB testing for people undergoing the immigration process. Targeted testing is being done in high-risk groups, such as people with lowered immune systems who may have been exposed, the homeless, large groups that live in close quarters, and people who work in close quarters or in residential health care facilities. Williams noted that universities can be an issue since people live in close quarters, and many universities have foreign-born individuals from places where TB is endemic. Spokespersons for Drury and Missouri State universities commented that both require international students to have a TB test before admission. People who test positive for active or latent disease are given a free chest X-ray and free drug treatment from the county TB clinic. Also, testing is free for those referred to the clinic or people who believe they have been exposed to TB.

FLORIDA: Targeting Tuberculosis: New Test Offers Speedy Diagnosis of Multidrug-Resistant TB: Advance for Nurses; January 7, 2009, by Michael Gibbons.

The World Health Organization (WHO) has announced that a new DNA-based test to diagnose drug-resistant TB will be used in four African countries. The test can detect multidrug-resistant TB (MDR TB) in hours, compared to the two to four months it now takes. The new line probe assay can detect resistance to the two first-line antituberculosis drugs, isoniazid and rifampin. Dr. Michael Lauzardo, Health Officer for TB, Florida Department of Health, Division of TB and Refugee Health, explained that the test allows the lab to look at the genetic sequence of the organism and see if the more common mutations associated with resistance are present. The Stop TB Partnership has pledged to staff and equip laboratories to perform the \$20 test in four African countries. This test is not effective for patients who cannot produce a sputum sample, and it cannot specifically diagnose extensively drug-resistant TB (XDR TB).

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STOP TB USA
1911 Olde Village Run

Dunwoody, GA 30338
Tel: 202-494-2448