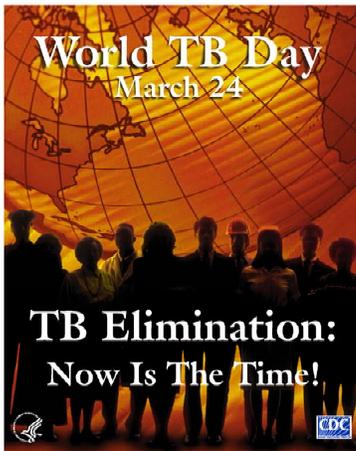




- World TB Day 2005

World TB Day 2005



On March 24, World TB Day marks an occasion for raising awareness about the global health threat of tuberculosis (TB). It is a day to recognize the collaborative efforts of all countries involved in fighting TB. TB can be

cured, controlled, and, with diligent efforts and sufficient resources, eventually eliminated. This edition of Epi News provides information on the incidence of TB in Washoe County and the methods used for prevention and control.

THE GLOBAL FACE OF TB IN WASHOE COUNTY

Washoe County has treated an average of 20 TB cases annually over the last decade. From 2000 through 2004, 41% of cases were persons who had emigrated from the Asian countries of the Philippines, Viet Nam, China, India, Japan, and Bangladesh. Another 18% were persons who had emigrated from the Latin American countries of Mexico, Peru, Guatemala, and El Salvador. In 2004, two cases of TB in Washoe County were in persons who had emigrated from the African countries of Cameroon and Ethiopia.

Most TB cases among the foreign-born are likely the result of reactivation of remotely acquired infection, although some transmission is probably occurring in the United States. For all immigrant groups, the disease risk appears highest in the first five years after U.S. arrival.

As the percentage of reported TB cases among foreign-born persons continues to grow, the elimination of TB both nationally and locally will depend increasingly on the elimination of TB among the foreign-born.

The increase in TB cases among foreign-born persons is attributable to increased immigration as well as changing trends in countries of origin. From 1999 through 2003, the top five countries of origin of foreign-born persons with TB were Mexico, the Philippines, Viet Nam, India and China. During this period, the number of cases increased among persons from the Eastern Mediterranean, approximately doubled among persons from Southeast Asia and more than tripled among persons from Africa.

SCREENING IMMIGRANTS AND REFUGEES FOR TB DISEASE

In 2002, Nevada ranked 22nd in the "25 Top States of Residence by Estimated Legal Permanent Resident Population in the United States". Local physicians designated by U.S. consuls conduct screening overseas for immigrants and refugees wanting to enter the United States. The screening procedure consists of initial radiological screening for persons aged >15 years followed by sputum smear microscopy for acid-fast bacilli (AFB) in those whose radiographs are compatible with active TB.

- Immigrants who are AFB-smear-positive must be treated before departure.
- Immigrants who are smear-negative, but whose radiographs are compatible with active TB or with inactive disease are referred to a health department in the state

of their intended residence for further evaluation.

Washoe District Health Department's Tuberculosis Prevention and Control Program (TBPCP) receives notification of persons planning to reside in Washoe County who fit within these parameters. A public health nurse locates and screens immigrants through tuberculin skin testing (TST) chest x-ray and sputum testing. From 2000 through 2004, 16 cases of TB in this population were identified and treated at Washoe District Health Department TBPCP.

EFFECTS OF ILLEGAL IMMIGRATION PATTERNS

In 1996, Nevada ranked in the "Top Twenty States of Residence" for estimated illegal immigrant population in America. The number of foreign-born persons in the United States who are screened and treated for TB infection through mechanisms other than formal immigration processes is not known. For undocumented persons (e.g., illegal border crossers and those who overstay their visas), there are many barriers that can impede the recognition of TB, not the least of which is their fear of detection and possible deportation.

Persons of foreign origin who enter the country on nonimmigrant visas (e.g., nonimmigrant business persons, students, and dependents) are not required to undergo medical evaluation for TB before entering the country. If they later want to adjust their immigration status to legal permanent resident they must be screened and found free of infectious TB before their immigration status can be adjusted. Physicians designated as "civil surgeons" by the U.S. Department of Justice/Immigration and Naturalization Service (INS) must perform this screening.

BARRIERS TO EFFECTIVE TB TREATMENT IN FOREIGN-BORN PATIENTS

- Language and cultural differences hinder communication between foreign-born patients and health care providers.

- Legal immigrants and refugees may fear that having TB disease or infection will make them subject to legal action, such as deportation. In some states, such as California, physician groups are concerned that legislation requiring physicians to report illegal immigrants to immigration authorities will delay curative care. In Nevada, there are no laws requiring notification of citizenship status to INH or any other governmental agency. In Washoe County, demographics of persons with TB are only obtained for statistical and treatment purposes.
- Many foreign-born patients are unaware of how to gain access to the health care system and may have no health insurance. At least four clinics in the Reno-Sparks area are proficient in evaluation and diagnosis of TB for the medically indigent:
 - St. Mary's Nell Redfield Health Center routinely provides TB screening to all new patients.
 - Orvis Nursing Clinic provides TB screening to the general public with the cost based on a sliding fee scale.
 - Washoe Medical Clinic and the HAWC (Health Access Washoe County) Clinic provide TB evaluation to established patients as indicated.

FACTORS COMPLICATING THE CARE OF FOREIGN-BORN PERSONS

Because resources and infrastructure for TB-control programs are severely limited in many foreign countries, people treated for TB in these countries may receive inadequate or incomplete treatment. This puts them at greater risk for disease recurrence with drug-resistance strains.

Greater risk may be assigned based on the individual's country or region of origin; immigrants from the Philippines, Vietnam, Haiti, Korea, and sub-Saharan Africa have higher rates of reported TB than immigrants from other countries.

Those who enter the United States at an older age have higher rates than their counterparts who enter at younger ages.

Due to the social stigma of TB or cultural beliefs about disease causation, progression, and treatment, some foreign-born persons might deny the presence of symptoms or known disease. Patients often voice the fear that their families will shun them if they know of the TB diagnosis. This delay can result in diagnosis of disease at more advanced stages, which translates into the possible need for hospitalization and more expensive care. Prolonged periods of infectiousness and a greater likelihood of disease transmission may result.

HISTORY OF BACILLE CALMETT-GUERIN (BCG) VACCINE

People born in foreign countries often have histories of BCG (Bacilli Calmette-Guerin) inoculation and erroneously believe they can't get TB. Over 100 countries still use BCG as part of their TB control programs. Sensitivity to tuberculin is highly variable in persons vaccinated with BCG, depending on the strain of BCG used and the group vaccinated. The presence or size of a post-vaccination TST reaction does not predict whether BCG will provide any protection against TB disease. The size of a TST reaction in a BCG-vaccinated person is not a factor in determining whether the reaction is caused by TB infection or by the prior BCG vaccination.

TB skin testing is not contraindicated for people who have been vaccinated with BCG, and the TST results of such persons are used to support or exclude the diagnosis of TB infection. A diagnosis of *M. tuberculosis* infection and treatment for infection should be considered for any BCG-vaccinated person who has a positive TST, especially if there is a likelihood of prior exposure to TB. Nearly all cases of TB in foreign-born persons in Washoe County have some indication of a prior BCG inoculation.

TB PREVENTION AND CONTROL MEASURES IN WASHOE COUNTY

The Centers for Disease Control and Prevention (CDC) sets priorities for eliminating TB in the United States. The CDC recognizes that few resources are available to health departments for large-scale prevention efforts among foreign-born persons.

The TBPCP mission is to reduce morbidity, disability and premature death due to tuberculosis by reducing the number of TB cases per 100,000 persons in Washoe County. All persons with TB disease can be treated by the TBPCP according to the standard of care for treatment via "Direct Observed Therapy"(DOT). Long and short term goals of the TBPCP include determining who is providing health care services to the foreign born, identifying factors that are responsible for delays in TB diagnosis, identifying obstacles to care, and assisting local practitioners to provide TB services for foreign-born populations.

The TBPCP provides consultation and educational seminars on TB screening and diagnosis for private health care providers, especially civil surgeons and others who treat foreign-born persons. Information about cultural beliefs and practices that can hinder case finding, treatment, therapy for latent tuberculosis infection (LTBI) therapy is available upon request (e.g., cultural concepts about TB, BCG vaccination, and/or barriers to effective communication with foreign-born populations).

LEGAL REQUIREMENTS UNDER NEVADA REVISED STATUTES

Active case finding can help identify cases of TB among foreign-born persons. Nevada Revised Statute (441A.150) states, "A provider of health care who knows of, or provides services to, a person who has or is suspected of having a communicable disease shall report that fact to the health authority in the manner prescribed by the regulations of the Board."

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) regulations contain specific language that permits reporting persons with diseases (including TB) and conditions listed in state public health laws and regulations to the District Health Department.

TB remains a threat to the health and well-being of people around the world. Some statistics bear out the reality of this age-old killer:

- Among infectious diseases, TB remains the second leading killer of adults in the world, with more than 2 million TB-related deaths each year.
- TB causes more deaths among women worldwide than all causes of maternal mortality combined.
- In 2003, 81% of all reported TB cases in the United States occurred in racial and ethnic minorities, including foreign-born individuals who accounted for 53.1% of all cases diagnosed.

- The TB case rate in the U.S. among foreign-born persons is now more than eight times higher than among U.S.-born persons.
- Since 2000, the proportion of TB who are foreign-born has increased and consistently comprises more than half of the active TB cases in this county.

Please join the District Health Department in an effort to eliminate TB in Washoe County. For more information or resources, please call 785-4788.

LINKS:

<http://www.thoracic.org/>

<http://www.cdc.gov/nchstp/tb/WorldTBDay/2005/default.htm>

<http://www.cdc.gov/nchstp/tb/>

<http://www.findtbresources.org>

Did you know?

In the late 19th century, TB killed one out of every seven people living in the United States and Europe. On March 24, 1882, Dr. Robert Koch announced the discovery of the TB bacillus. At the time, his discovery was the most important step taken towards the control and elimination of this deadly disease. In 1982, a century after Dr. Koch's discovery the first World TB Day was sponsored by the World Health organization (WHO) and the International Union Against Tuberculosis and Lung Disease (IUATLD). This event serves to educate the public about the devastating health and economic consequences of TB and its continued tragic impact on global health.