

U.S./Mexico Border and Tuberculosis

The World Health Organization (WHO) estimates that between now and the year 2020, nearly one billion people will be newly infected, 200 million will get sick and 70 million will die from TB if control is not strengthened.

TB, or tuberculosis, is a disease caused by bacteria called *Mycobacterium tuberculosis*. The bacteria can attack any part of your body, but they usually attack the lungs.

TB is spread through the air from one person to another. The bacteria are put into the air when a person with TB disease of the lungs or throat coughs or sneezes. People nearby may breathe in these bacteria and become infected.

TB infection is-In most people who breathe in TB bacteria and become infected, the body is able to fight the bacteria to stop them from growing. The bacteria become inactive, but they remain alive in the body and can become active later. This is called TB infection. People with TB infection

- have no symptoms
- don't feel sick
- can't spread TB to others
- usually have a positive skin test reaction
- can develop TB disease later in life if they do not receive preventive therapy

TB disease is-TB bacteria become active if the immune system can't stop them from growing. The active bacteria begin to multiply in the body and cause TB disease. Some people develop TB disease soon after becoming infected, before their immune system can fight the TB bacteria. Other people may get sick later, when their immune system becomes weak for some reason. People with TB disease

- a bad cough that lasts longer than 2 weeks
- pain in the chest
- coughing up blood or sputum (phlegm from deep inside the lungs)
- weakness or fatigue
- weight loss
- no appetite
- chills
- fever
- sweating at night

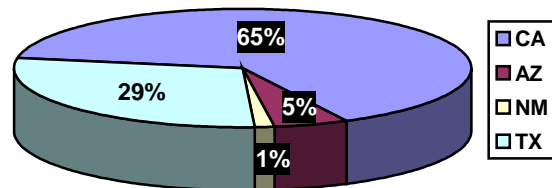
According to the U.S. Centers for Disease Control and Prevention (CDC), TB has to be fought globally to protect locally. A report from CDC's Division of Tuberculosis Elimination states: "In an era marked by increased international travel and a global marketplace, no region of the world is immune from outside influences. International collaboration will be essential to eliminate TB. TB does not stop at the U.S. border, and neither can prevention efforts."

Approximately 1 million persons cross the U.S.-Mexico border daily, with that large volume of influx there are three ways TB is being transmitted into the U.S.:

- a) Persons with active TB disease move northward across the border
- b) Persons with latent TB infection experience active disease after arrival in the United States
- c) U.S. residents touring Mexico, including immigrants, acquire TB disease after returning to the United States (4-7). After a person with TB enters the United States, further transmission might occur, which contributes to TB morbidity in the United States directly from source patients and indirectly from their contacts.

This could happen in the opposite direction also.

Of TB cases among **Mexican-born persons**, three fourths were reported from the four U.S. states bordering Mexico: California, 820 cases; Texas, 364 cases; Arizona, 67 cases; and New Mexico, 17 cases.



The United States Agency for International Development (USAID) put \$16 million into the TB fight along the U.S./Mexico border. Last year, \$3 million facilitated bi-national information exchange systems in the border states. Another \$13 million will be available between 2001 and 2004.

The international workgroup to combat TB along the U.S./Mexico border is named **Ten Again TB** and includes the 4 US border states: Arizona, California, New Mexico, and Texas and the six Mexican border states: Baja California, Chihuahua, Coahuila, Sonora, Nuevo Leon, and Tamaulipas. The goal is to coordinate activities, authorities, resources and TB programs on both sides of the border.

One strategy used to try to prevent multidrug resistance tuberculosis (MDR-TB) from occurring is directly observed therapy or DOT. MDR-TB, which is, defined as the disease due to TB bacilli resistant to at least isoniazid and rifampicin---the two most powerful anti-TB drugs.

With DOT, an outreach or public health worker visits each patient to observe and record patients swallowing the full course of the correct dosage of anti-TB medicines (treatment lasts six to eight months). The most common anti-TB drugs are isoniazid, rifampicin, pyrazinamide, streptomycin, and ethambutol. These treatments may be anywhere from two to 10 times a week, for several months.

Although directly observed therapy goes through exhaustive measures to ensure the client adheres to the prescription for the cure to be achieved of TB, treatment in this form is definitely a practical and positive achievement towards the battle to eradicate TB.

Project "Juntos" was the first binational TB program established 10 years ago by Texas Department of Health, CDC, Chihuahua Department of Health (Mexico), and supported by New Mexico DOH to reduce the incidence of TB in El Paso-Juarez-Las Cruces region.

On a personal note, in the 1940's TB was raging war on individuals in Europe as we now see here on the U.S./Mexico Border. My mother, being of French decent worked in a hospital and was caring for World War II German soldiers. She contracted TB and she did recover, but to this day tests positive on a TB test, although the TB is not active.

Comments are welcome concerning this enormous effort to combat this disease, which "Does not need a visa or passport to cross the border", as Dr. Hugo Vilchis, Epidemiologist and Director of the BEC would say.

"Border Voices"

Deborah Jackson-writer

References:

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