TUBERCULOSIS PROGRAM
In the Texas-Mexico Border

Lupe Gonzalez
Program Specialist
Binational Tuberculosis Project Manager
Texas Dept. of State Health Services
Health Service Region 9/10
Ports of Entry Along the U.S.–Canada and U.S.–Mexico Borders

Texas is one of the most unique states in the nation.

- The state is second to Alaska in geographic size among the states,
- Second to California in population
- Texas is comprised of 254 counties covering approximately 267,277 square miles.
- A variety of climates, landscapes, animals, plants, cultures, and people.
- Counties with the largest percentages of Hispanics are in South Texas and Border County areas.
Border counties are based on Article 4 of the La Paz Agreement between the United States and Mexico (1983).

- Border counties are not just those fourteen that are contiguous to Mexico, but 32 counties in the South Texas and West Texas Regions with at least part of the county located within 100 km of the international border.
Texas Border Counties

Brewster  El Paso  La Salle  Sutton
Brooks  Frio  McMullen  Terrell
Cameron  Hidalgo  Maverick  Uvalde
Crockett  Hudspeth  Pecos  Val Verde
Culberson  Jeff Davis  Presidio  Webb
Dimmit  Jim Hogg  Real  Willacy
Duval  Kennedy  Reeves  Zapata
Edwards  Kinney  Starr  Zavala
Health Service Region 9/10
US-Mexico Border

• The border between the United States and Mexico is more than 2,000 miles long.
• The boundary between Texas and Mexico is defined by the Rio Grande and it stretches for 1,254 miles (2,019 kilometers).
• The border between Texas and Mexico is unique in that is bound historically, geographically, and commercially; a place with different nationalities, languages, and cultures
• The border cities El Paso/Cd. Juarez; makes up one large bi-national community with an estimated combined population of 2.5 million people.
• In 2010, over 26 million people crossed into the United States through the El Paso/Cd. Juarez International Ports of entry as a pedestrian or vehicular passenger (personal vehicle or bus).

Addressing TB in the Border

- Texas Department of State Health Services (TDSHS), El Paso City Department of Public Health and the Mexican Secretariat of Health (Secretaria de Salud)(SSA) agreed that the two countries must work collectively to control and prevent TB in El Paso and Ciudad Juarez.

- A proposal was submitted to the Centers for Disease Control and Prevention (CDC) to enhance bi-national TB control.

- The CDC approved a modest grant in August 1991 and the Binational Tuberculosis Prevention and Control “Project Juntos” was born.

- Then followed by Los Dos Laredos, Grupos Sin Fronteras, and recently Amistad Binational TB Projects.
Funding for TB Control in The Border

• Funds are utilized to finance health personnel and related expenses to the Projects’ activities.
• The funding from CDC provides the opportunity to build and maintain the infrastructure and develop the capacity needed to enhance binational TB control in the Binational TB Project’s areas of jurisdiction.
• These Projects have been recognized nationally and internationally as model projects for Binational TB control.
• The Project Juntos, since its inception, has focused on diverse activities needed to reduce the impact TB has in the region.

• Its focus has been well-rounded to address Prevention & Control and this has been achieved with collaboration among the following organizations:
  – Centers for Disease Control and Prevention
  – Texas Department of State Health Services
  – Secretaría de Salud de México
  – Servicios de Salud de Chihuahua/Tamaulipas/Coahuila
  – Pan American Health Organization
  – El Paso City Department of Public Health
  – FEMAP
PROJECTS Role

The needs in public health are many and the necessary resources to attend to them are limited. **Binational TB Projects** have taken the task to provide support in a direct and specific manner to fight TB. Specific focus areas include:

- **Provide follow-through of bi-national patients**: Those patients that for whatever reason have contact with persons that live or travel to the United States. Also those persons that started treatment or have been treated for tuberculosis by health services in the United States.

- **Provide DOT at home**: Those persons that are difficult for them to attend daily to a Health Center; patients that are Non-compliant with TB Treatment or who have history of treatment abandonment; **MDR (multi-drug resistant) TB patients**, and those with TB/HIV binomial.
A \textit{binational} case is defined as meeting at least one of the following five criteria:

- Patient lives in Mexico but has relatives in the U.S.
- Patient has dual residency in the U.S. and Mexico
- Patient has contacts on both sides of the border, in the U.S. and Mexico
- Patient starts treatment in the U.S. but returns to live in Mexico
- TB patients referred from the U.S. for treatment or follow-up in Mexico
PROJECTS Activities

- Identification of new TB Cases
- Support to the infrastructure of health services
- Have a bi-national information system
- Provides trainings on prevention and control of TB to medical personnel and paramedics
- Provides, free of charge, diagnostic and treatment services to local TB control programs
- Provide first and second line medications
- Provide free consult services on complicated cases through Texas Center for Infectious Disease, South Texas Hospital, and National Jewish Hospital (Denver)
PROJECT Activities

• Refer patients to United States, Health Centers in Chihuahua and other Mexican states
• Deliver, administer and supervises treatment
• Take sample of secretions for studies and send out to Texas Dept. of State Health Services Laboratory in Austin, TX (Smears, cultures and sensitivity testing)
• Case Manage patients with Drug-resistant bacteria
• Conduct contact investigations and testing, including PPD
• Provide support to various hospitals with TB cases that are severe or difficult to manage
Direct Observed Therapy

• The World Health Organization (WHO) recommends to all countries to administer treatment under Direct Observed Therapy (DOT).
• Mexico has adopted this recommendation in their official norm, but due to the great volume of sick people and the limited resources, the Jurisdicción Sanitaria see their patients in their Health Centers;
• There are instances in which patients cannot go to the Health Centers, for which they run the risk of suspending their treatment.
• **Projects personnel** go directly to patients’ homes and provide them treatment under direct observation.
Multi Drug Resistance (MDR)

- In cases of patients with MDR TB, where the treatment is lengthened for more than a year and second-line medications are used, of which Secretariat of Health do not have, the Projects, through TDSHS, provides the medications free of charge and provides them under DOT.

- **Projects** also have the support of Laboratory Services thru the Texas Department of State Health Services in Austin where culture are performed and studies of secretions for antibiotic sensitivity and susceptibility are conducted for better diagnosis and control of TB. These laboratory services are also free of charge to the patient.
Expert Guidance

- **Projects are** supervised by the Texas DSHS and the Secretaria de Salud in their respective Mexican State.
- Projects are also part of a Bi-national Multi-drug Resistant Committee headed by Dr. Manuel Rivera in Region 9/10 and Dr. Wing in Region 11, known experts in TB and supported by Texas DSHS Region 9/10.
- During monthly case review meetings, discussion takes place on every MDR TB case in the Projects and decisions are made in regards to treatment based on laboratory results of cultures and sensitivity of antibiotics, as well as the evolution of the patients until their discharge from the program.
PROJECT JUNTOS Measurable Success

The results are measured depending on the impact on indices of health/illness of the attended community.

Project Juntos Goal
The overall goal of the Juntos project is to reduce TB morbidity and mortality in the border cities, Juarez and El Paso.
By the end of 2011:
• Maintain a cure rate over 90%. The cumulative cure rate over the last 3 years is 81.2%. In 2010 the rate was 95%.
• Ensure that less than 3% of the patients abandon treatment. In 2010, 3% of enrolled patients abandoned treatment compared to a baseline of 13.5%. The abandonment due to the type of patients who have increased. (e.g. drug users and HIV+)
• By December 2011, we anticipate to investigate more than 4 contacts per patient”. We had 5.2 contacts per patient during 2010.
• The Project Juntos personnel will continue to participate in training events, regarding DOT, TB awareness, use of PPD, etc. The target audiences include community associations, health workers in both sides of the border and international students from Caribbean and Central America (e.g. El Paso Community College, UTEP, etc.)
• Binational TB Project Manager (Lupe Gonzalez) – based in El Paso, TX

• Project Juntos Coordinator (Dr. Esteban Vlasich) – based in El Paso, TX with sub office in Cd. Juarez at the Servicios De Salud, Jurisdicción Sanitaria II

• 2 field nurses (Maria Francisca Flores, aka Mini; and Gloria Cardenas) – based at the Servicios de Salud, Jurisdicción Sanitaria II

• 1 Chauffer (Santiago Rivas) - based at the Servicios de Salud, Jurisdicción Sanitaria II

• 1 Administrative Support/Clerk (Adrian Garcia) - based at the Servicios de Salud, Jurisdicción Sanitaria II
Lupe Gonzalez
Program Specialist
Binational Tuberculosis Project Manager
Office: (915) 834-7792
Fax: (915) 834-7799
Cell: (915) 549-1062
E-mail: lupe.gonzalez@dshs.state.tx.us