

The CDC El Paso Quarantine Station will provide administrative support and overall technical guidance for Fellowship activities. The Quarantine Station collaborates closely with the Texas Department of State Health Services Region 9/10 Medical Director (located in El Paso) through a community epidemiology research and surveillance consortium that facilitates communication and coordination. Members in the consortium include decision makers and technical experts from West Texas & Southern New Mexico Health Departments, Fort Bliss (USDOJ) Army Medical Center, the Pan American Health Organization (PAHO), and the U.S. /Mexico Border Health Commission. The CSTE fellow will be an active participant in the research consortium, thereby facilitating communication and other community research activities.

Daily activities will emphasize research priorities, but will also include routine Quarantine Public Health Officer duties at the ports of entry within the El Paso Quarantine Station's jurisdiction. The latter may include participation in community and federal Public Health Emergency Preparedness meetings and human illness and cargo clearance response at international land border and air ports of entry. The fellow will interact with border and bi-national authorities on specific research and surveillance project activities at the state and federal (i.e., U.S. Border Patrol, U.S. Customs and Border Protection, U.S. Department of Agriculture, U.S. Food and Drug Administration) levels. The Fellow will have ample opportunity to consider and discuss research interest and select a project from among several possible proposals.

Possible Projects:

Illness surveillance among International Bus Passengers

There were approximately 60,000 international bus crossings through U.S./Mexico land border ports in 2005, which ferried over 2 million international travelers from the interior of Mexico to distant cities in the interior of the U.S. Bus conveyance is the principal international transportation medium for Mexican immigrant farm workers and recent immigrants. Rates of Tuberculosis and other diseases of public health interest are higher in this population compared to most populations who use the international flight conveyance. This surveillance and research project will assess the prevalence of sick bus passengers that meet the federal legal quarantine definition, with particular emphasis on active Tuberculosis and Influenza-like Illness (ILI). Findings of the study will help guide important elements of the El Paso Land Border Quarantine Station illness detection and response priorities, as well as play a role in pandemic influenza preparedness and planning.

Assessment of Health Status of recent Mexican immigrants

The health status of newly arrived Mexican immigrants (documented and undocumented) is not well known, although it is believed to be marginal. New immigrants are widely believed to be heavy users of emergency room and community health center services in the U.S. Ironically, certain health indicators, such as infant mortality, are comparable to that found among more affluent groups in the U.S. This project will assess overall health status of newly arrived immigrants and refugees (legal and illegal) housed in immigrant and refugee health shelters in the area through the use of health survey tools and methods. We will attempt to assess health status indicators through analysis of data from the immigrant medical exam performed by Mexican Panel Physicians on all new immigrants and refugees approved for permanent/long-term residence in the U.S.

Diabetes risk factor in Mexican and Indigenous patients with active Tuberculosis

Rates of Diabetes and active Tuberculosis are significantly higher in patients of either Mexican or Indigenous descent. Members of the largest indigenous tribe in Northern Mexico (the Tarahumara), known for having extremely high rates of TB, have migrated to the border city of Ciudad Juarez in the last decade. Approximately 20% of local patients diagnosed with active tuberculosis are found to have Diabetes as a co-morbid condition. The epidemiologic link between Diabetes and active TB has been established, although specific epidemiologic, immune status and genetic risk factors are not well known. This project will analyze a ten year TB registry of Binational TB project Juntos (Together) to assess risk factors for active Tuberculosis among diabetes patients on the basis of descriptive and case control study designs.

Descriptive case management analysis of Binational TB Patients

This project will evaluate a recently established program that uses TB Card registries as a means to provide continuity of care to TB patients referred across the border for case management by U.S. and Mexico TB programs. Analysis will include assessment of the quality of care of the TB patient, including risk for developing drug resistance, use of preventive therapy, and continuity of care. The project will include collaboration with staff that administers the Binational TB Health Card and the Binational TB programs throughout the Texas-Mexico Border.

Epidemiologic Assessment of Cross Border Patient Ambulance Transfers

There are approximately 13,000 patient responses across the international land ports in the Paso Land Ports transported by EMS services. Approximately 120 of these calls are for conditions that meet the federal syndromic case definition for conditions of Public Health Interest. This project will assess EMS patient transfers with respect to diagnoses, severity of illness, with special emphasis on contagious diseases. Medical provider records would be reviewed, especially those of individuals that are hospitalized following the ambulance transfer. This analysis will provide a better understanding of health conditions linked with these cross border ambulance transfers, and will help in the evaluation of the usefulness of these data for surveillance across this international border.

Assignment Location: El Paso, TX

Primary Mentor:	Miguel A. Escobedo, M.D., M.P.H. Medical Officer El Paso Quarantine Station
Advanced Degrees:	M.D., Stanford University MPH, University of California, Berkeley
Secondary Mentor:	Luis Escobedo, M.D., M.P.H. Regional Director Texas Department of State Health Services, PHR 9/10
Advanced Degrees:	M.D., Stanford University

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M.S., Harvard University
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Secondary Mentor: Todd Wilson
Officer in Charge
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Advanced Degrees: M.S., University of Oklahoma