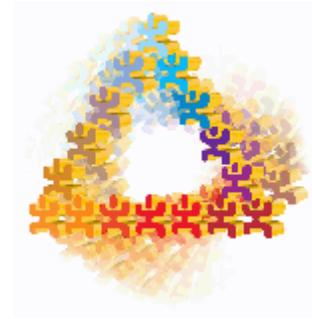




CARMEN Country Profiles: US-Mexico Border



The US-Mexico Border Diabetes Prevention and Control Project

The *US-Mexico Border Diabetes Prevention and Control Project* is unique in that it is the first study to consider the whole US-Mexico Border as one epidemiological unit. The project goal is to reduce the burden of diabetes among persons with type 2 diabetes living in the US-Mexico border region by developing and implementing strategies in collaboration with the ten border states, and conducting activities in two related and chronological phases:

1. Development of a prevalence study and identification of risk factors.
2. Implementation an intervention pilot study for diabetes prevention and control.

Phase I

The *Diabetes Prevalence Survey* was conducted from February 2001 to October 2002 using a stratified, random sample of 4,027 individuals (1,905 on the U.S. side and 2,122 on the Mexican side) representative of the non-institutionalized population aged 18 years or older living in the US-Mexico border region. The survey was conducted in 44 border communities: 28 in Mexico and 16 in the U.S. The survey included a 65-question questionnaire (about diabetes, general health, access to health care, hypertension, physical activity y, diet, eating habits, tobacco use, alcohol consumption, reproductive health, social culture aspects, acculturation, education, work history, and demographic variables, including ethnicity), anthropometric (weight, height, waist and hip circumferences) and blood pressure measurements. In the final part of the survey, a fasting blood sample was collected by a certified phlebotomist to estimate fasting plasma glucose and hemoglobin A1c levels.

Initial results show that along the US-Mexico border there are 7.5 million adults. Approximately 1.2 million of them have type 2 diabetes (15.7%). The *Diabetes Prevalence Study* showed that nearly 500,000 of the individuals living with diabetes are on the Mexican side of the border and more than 700,000 are on the U.S. side.

It is estimated that 5.3 million adults in the US-Mexico border region are overweight or obese. One million of the obese individuals live on the Mexican side of the border, and 1.5 million live on the US side. Obese individuals along the U.S. side of the border have 2.8 times greater risk of developing diabetes than individuals with normal weight, and on the Mexican side, the risk is 2.2 times greater.

The prevalence of prediabetes in the US-Mexico border is 14% in the total adult population. Prediabetes affects approximately one million individuals (51% of women and 49% of men).

Phase II

Using an established, standardized, multi-site, population-based approach, the US-Mexico Border Diabetes Prevention and Control Project will implement and evaluate a family-based intervention delivered by Community Health Workers / *Promotoras de Salud*. The *promotoras* will implement a family-based intervention that involves the Community Health Workers / *Promotoras de Salud* to provide diabetes education classes to patients living with diabetes and their families in the household setting.

The family based intervention will be delivered in 11 communities located along the US-Mexico border; one clinic per state with the exemption of Texas that will have two sites participating in the study. In each community, two groups of people with diabetes will be selected. One group will receive help in managing diabetes from Community Health Workers / *Promotoras de Salud*. The other group will receive the usual diabetes care provided in the community. After a follow-up of eighteen months period, several health outcomes will be compared between the two groups and the effectiveness of the intervention will be evaluated.

Diabetes is the third leading cause of death in the US-Mexico border region, since 1998 it has become the second cause of death in some Mexican border communities, and in 1999 in Ciudad Juarez diabetes became the first cause of death in the productive age population. According to the United States - Mexico Border Health Commission (USMBHC) publication, “Healthy Border 2010”, nearly 4,000 border residents die each year as a result of diabetes with about 1,500 fatalities in the United States and 2,500 in Mexico. Diabetes also causes serious health complications, which result in impaired quality of life and significant disability.

The project expects to improve the self-management of the disease among persons with diabetes, and will help decrease risk behaviors of their family members. Because CHW/PS are an essential component to this intervention, the results are expected to demonstrate their vital role as members of the health care team, and their effectiveness in facilitating access to the treatment of persons living with diabetes, as well as providing prevention skills to patients family members.