Binational Health Initiatives
On the Mexico-U.S. Border

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BACKGROUND

The United States-México Border Health Commission (USM-BHC) is a binational body created in July 2000 by an accord between the two countries’ governments to identify and evaluate the border population’s health problems and facilitate actions for dealing with them in a bilateral framework, seeking to promote alliances and strategies to improve medical care and quality of life for the region’s inhabitants.

Among its functions, the USM-BHC supports the efforts of public bodies and not-for-profit organizations in health promotion, prevention, and care. It also aims to strengthen informational systems about health along the border, train human resources involved in the different public health activities in the region, and establish links with diverse binational actors to meet the health challenges prevailing there.

MIGRANT FLOW

A correlation exists between the dynamic of migrant flows toward the United States and toward Mexico’s northern border. In the case of Mexicans, in 2012, the flow decreased to one-third that of 2007, an unprecedented development given the relative stability in labor flows at least over the last two decades (see Graph 1).

There is a growing trend for the young and people with higher professional and schooling levels to migrate. And, between 2009 and 2012, there was a decided drop in the volume of voluntary flows, which restricts the circularity of the labor market, increasing the duration of stays in the United States.

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Graph 1

FLOW OF MIGRANT WORKERS FROM THE SOUTH TOWARD THE UNITED STATES AND MEXICO’S NORTHERN BORDER

Source: EMIF Norte.
The number of repatriations by the United States remains stable, despite the important drop in the South-North flow, and much more aggressive anti-immigrant policies have increased compared to the years before 2007 (see Graphs 2 and 3). The age of those repatriated has increased, as have their schooling levels, the number of parents among them, and the duration of their stay prior to repatriation. The most critical aspect of the repatriations is the growing dynamic of family separations. In 2005, the percentage of those repatriated without their relatives was 10 percent, and by 2012, it had risen to 80 percent.

HEALTH CONDITIONS IN THE REGION

One of the main things that must be considered when evaluating health conditions of any population is its access to health services and institutions. In the case of the border, a large part of residents lack this access, although we should recognize that between 2000 and 2010 conditions have improved in the Mexican case due to the launch of the Popular Health Care Program.

MAIN CAUSES OF DEATH

Cancer

Among the main causes of death are certain types of cancer, with an important incidence of breast and cervical-uterine cancer. On the Mexican side, the mortality rate from breast cancer has jumped, while on the U.S. side, between 2000 and 2010, it dropped significantly (see Graph 4). The implications of this transcend women, since cancer presents in people of working and reproductive age.

Obesity, Overweight, and Diabetes

Other main health problems are obesity, overweight, and diabetes. On the Mexican side, they have grown steadily, which is reflected in an increase in the mortality rate from diabetes. On the U.S. side, the rate has dropped (see Graph 5). This must be analyzed in a context of greater access to treatments that make it possible to increase the quality of life and life expectancy of diabetes patients.

HIV-AIDS

While in Mexico, people continue to think that the HIV-AIDS epidemic is concentrated in the so-called “high-risk populations,” Mexico’s border states report an important number of cases. Nevertheless, between 2005 and 2010, the infection rate declined in those states, except Sonora (see Graph 6). On
the U.S. side of the border, the rate has also dropped, most notably in California and Texas where, paradoxically, the highest proportion of new cases in general has been detected.

Traffic Accidents

Traffic accidents are another important public health issue, not only because of the injuries and disabilities they can cause, but also because of the high degree of mortality associated with them, which is often more intense in the United States. On the Mexican side, the states of Chihuahua and Sonora have registered hikes in accident-related mortality rates (see Graph 7).

USMBHC Projects

The United States-México Border Health Commission's specific projects for dealing with these health and mortality problems are:

Graph 5
Diabetes Mortality Rate

Source: Informe preliminar Frontera Saludable 2010.
1. The Border Infectious Diseases Surveillance Project (BIDS): epidemiological monitoring of exanthematic diseases (such as varicella, rubella, mumps, and measles), hepatitis, and West Nile virus;
2. Early Warning Infectious Disease Surveillance (EWIDS): epidemiological monitoring of influenza, anthrax, botulism, plague, tularemia, and smallpox;
3. Project Concern International: broaden detection of and follow-up for tuberculosis (TB) patients;
4. Project Together: prevention and tight control of TB cases;
5. USMBHC-UC San Diego-Inesalud-University of Wisconsin at Madison: on HIV/AIDS and injectable drug users;
6. USMBHC, U.S. Section in Arizona, Ministry of Health, El Colegio de Sonora, and the ITeSM: Leaders across Borders diploma course;
7. Binational Health Councils, which reemerge as forums for fostering specific projects in the border states; and
8. The Border Governors Conference.

STUDIES OF BORDER RESIDENTS AND MIGRANTS’ HEALTH CONDITIONS

Since 2008, the Baja California Outreach Office has strengthened this area by collaborating with U.S. universities. It is currently developing the following research projects financed by the National Institutes of Health, the National Institute on Drug Abuse, and the Department of Health and Human Services:

1. Impact of Drug Policy Reforms in the Context of HIV Risk among Injectable Drug Users in Tijuana, Mexico (El Cuete IV). The University of California at San Diego (UCSD) and the USMBHC participate.
2. Risks for HIV and Sexually Transmitted Infections (STIs) among Female Sex Workers and Their Non-commercial Male Sexual Partners in Mexico (Couples): studies the context and epidemiology of HIV and STIs, as well as the behavior between sex workers and their main partners (who are not clients), and evaluates the viability of an intervention designed for couples. The UCSD, USMBHC, and the Autonomus University of Ciudad Juárez (UACJ) participate.

Tuberculosis is the infectious disease that causes the second largest number of deaths worldwide. Baja California currently occupies first place nationally in terms of rate of incidence and mortality.

GRAPH 6
HIV/AIDS

U.S. Border States: Newly Reported HIV Cases

<table>
<thead>
<tr>
<th>States</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>5,708</td>
<td>5,257</td>
<td>5,139</td>
</tr>
<tr>
<td>Arizona</td>
<td>439</td>
<td>508</td>
<td>407</td>
</tr>
<tr>
<td>New Mexico</td>
<td>128</td>
<td>174</td>
<td>149</td>
</tr>
<tr>
<td>Texas</td>
<td>4,824</td>
<td>4,296</td>
<td>4,242</td>
</tr>
</tbody>
</table>

Please Note: New Mexico data listed under 2005 is from 2006.

HIV Incidence Rates (per 100,000) in the Mexican Border States (2005-2010)

<table>
<thead>
<tr>
<th>State</th>
<th>2006</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baja California</td>
<td>13.82</td>
<td>8.29</td>
</tr>
<tr>
<td>Coahuila</td>
<td>4.15</td>
<td>4.11</td>
</tr>
<tr>
<td>Chihuahua</td>
<td>5.84</td>
<td>5.67</td>
</tr>
<tr>
<td>Nuevo León</td>
<td>2.80</td>
<td>8.34</td>
</tr>
<tr>
<td>Sonora</td>
<td>6.11</td>
<td>5.67</td>
</tr>
<tr>
<td>Tamaulipas</td>
<td>8.34</td>
<td>8.34</td>
</tr>
</tbody>
</table>

Source: Informe preliminar Frontera Saludable 2010.
3. Safer Sex for Male Clients of Female Sex Workers in Tijuana, Mexico (Safe Man): The objective of this study is to evaluate the efficacy of a behavioral intervention with clients of women sex workers to increase their use of condoms. The UCSD and the USMBHC participate.

4. Evolution of the Context of HIV/STI Contagion among Women Sex Workers on the U.S.-Mexico Border (Health Map): This aims to determine the social, spatial, and physical factors that affect female sex workers in Tijuana and Ciudad Juárez, and their links to the transmission of HIV/STIs, drug use, and their access to services. The UCSD and USMBHC participate.

5. Access to Health Services among Mexican Migrants: This is to measure health service access and use by Mexican migrants both inside the United States and in Mexico, as well as certain risk conditions linked mainly with chronic-degenerative diseases. The University of Wisconsin at Madison and the USMBHC participate (see Graph 8).

**Research Projects with an Impact on Public Policies**

The following projects have had an impact on public health and migration policies given their importance and results:

**HIV Risk and Access to Health Care Among Mexican Migrants**

This project analyzes the relationship between HIV/AIDS and migration, starting at the beginning of the epidemic, taking into consideration migrants as dispersion agents, their vulnerability, and risky practices.

It looks particularly at the case of Mexican-U.S. migration, underlining its importance, which comes to an average net flow of 400,000 persons a year, and exposure to the infection, which is more prevalent in the United States. It took into account the fact that certain previous studies found a high number of risk factors for HIV and other STIs among Mexican migrants to the United States. It also found evidence linking the development of the HIV epidemic in Mexico to migration to the United States. Nevertheless, the data utilized in that research were obtained using small, non-representative samples of the population under study.

When a higher incidence was found among repatriated migrants, support was sought from Censida and the Baja Cal-
ifornia Ministry of Health to set up a facility for comprehensive health care for them in the installations of the El Chaparral (Tijuana) inspection booth, where they are handed over.

**High Tuberculosis Treatment Adherence Using Mobil Phone Video Directly Observed Therapy (vDOT)**

The objectives of this project are to determine the viability, acceptability, and cost of directly observed treatment in high- and low-income sectors, as well as to estimate the level of adherence to the treatment using VDOT. An innovative strategy was presented in 2013 to monitor tuberculosis through cellular phone videos. It is based on successful results in Tijuana and San Diego, in collaboration with the University of California at San Diego (UCSD), Isesalud, and the USMBHC from 2010 to 2012.

Tuberculosis is the infectious disease that causes the second largest number of deaths worldwide. Baja California currently occupies first place nationally in terms of rate of incidence and mortality. Despite the fact that the directly observed therapy has been a proven strategy for improving patients’ adherence to treatment and their cure, it is very expensive and lengthy, restricts patients’ mobility, compromises their privacy, requires transportation, and is not very practical in rural areas, or areas with uneven terrain or difficult access. The VDOT option offers a promising solution compared with the high cost and workload associated with directly observed therapy for following up on TB treatment and that of other diseases that require strict therapy adherence.

**BINATIONAL PROJECTS ON THE BORDER**

The following is a list of the projects that the USMBHC is developing jointly and binationally:

1. Border Binational Health Week
2. United States-México Border Tuberculosis Consortium
4. Leaders across Borders
5. Healthy Border 2010-2020 Strategic Plan
6. Border Binational Infectious Disease Conference

**MAIN OUTCOMES**

To conclude, I should mention the most outstanding results of the binational health initiatives along the Mexico-U.S. border:

1. Greater importance is accorded to training health personnel;
2. Greater technical capabilities and competencies for border epidemiological surveillance;
3. Strengthening the existing capacity through state laboratories, improving timely diagnosis;
4. High-level forums to set health priorities;
5. Recognition of the border region as a differentiated epidemiological unit;
6. The design of binational plans and programs based on trust and complementarity;
7. Dynamic information flow for timely organized responses;
8. Binational management for accessing sustainable resources; and
9. Federal attention to collaboration on border and binational public health.

CONCLUSIONS

All the border states in both Mexico and the United States have seen their health indicators improve over the last decade. In the U.S., progress has been made regarding the 2010 Healthy Border Plan with regard to HIV, hepatitis B, tuberculosis, cervical-uterine cancer, and deaths due to motor vehicles. In the case of Mexico, improvements have been registered regarding prenatal care, diabetes, teen pregnancy, and breast cancer.