



United States–México Border Health Commission

Health Disparities and the U.S.-México Border: Challenges and Opportunities

A White Paper
October 25, 2010



United States–México Border Health Commission

The mission of the United States-México Border Health Commission (BHC) is to provide international leadership to optimize health and quality of life along the United States-México border.


Providing Leadership on Border Health Issues to—

Facilitate Identification, Study, and Research

Be a Catalyst to Raise Awareness

Promote Sustainable Partnerships for Action

Serve as an Information Portal



Executive Summary

The United States-México border region is a unique, dynamic area where various cultures come together and interrelate across geopolitical boundaries. Though border residents may possess different economies and politics, they share a common culture, language, environment, and health status.

The border region poses particular challenges to the U.S. health care system: It is one of the fastest growing in the nation, with a majority Hispanic population, in addition to having lower educational attainment, lower income status, higher rates of unemployment and poverty, and a significant shortage of health care providers.

Challenges

- *Rapidly growing, young, and Hispanic population*
Between 1990-2000, the population of the southwest border counties increased by 29.3 percent. According to 2008 estimates, persons under age 19 comprised 31 percent of the population in border counties. In addition, 52 percent of the population in the border region was Hispanic.
- *Lower educational attainment*
As of 2000, if the border counties were a state, it would rank 50th in the nation in the percent of population at age 25 or above who completed high school (excluding San Diego County).
- *Lower income status*
In 2007, the annual per capita income (\$26,842) in the border counties was only about two-thirds the level in the border states (\$39,013) and the overall U.S. population (\$38,839).
- *Higher poverty rates*
Poverty is almost twice as high in the border region (25%) compared to the United States (13%).
- *Higher rates of uninsured*
Border region residents lead the nation in lacking health coverage: 23 percent of border residents lack health insurance coverage, as compared to 14.7 percent nationally.
- *Inadequate number of health care providers*
Physicians per 10,000 population for all border counties is 16.3 compared to 23.2 for the border states as a whole, 26.2 for non-border counties in the border states, and 26.1 for the United States as a whole.

These challenges contribute to diminished health, well-being, and access to health care.

Despite these challenges, the border region can serve as a source for identifying innovative models that ensure collaboration among various levels of government and the private sector. Some of these opportunities include improving access to health care on the border; creating a culture of wellness and prevention and strengthening the public health infrastructure; and promoting evidence-based interventions and models of excellence.

Opportunities

- *Improving access to health care on the border*
The history of border collaboration and cooperation provides a strong foundation for developing creative solutions and reducing the high uninsurance rates among border communities, especially among children and Hispanics.
- *Creating a culture of wellness and prevention and strengthening the public health infrastructure*
Public health and prevention are the cornerstones of healthy communities. Shifting the focus of the healthcare system from the treatment of disease to health promotion and prevention is the key to overall good community health.
- *Promoting evidence-based interventions and models of excellence*
Drawing on lessons learned and evidence of best practices in improving access to health care along the border can serve as a model for diverse communities in the United States.

Improving access to health care on the border, creating a culture of wellness and prevention, and promoting evidence-based interventions and models of excellence can ensure deliberate and sustained actions to improve health conditions and thereby elevate the health of the nation.



Background

In recognition of the need for an international commission to address border health problems, the United States-México Border Health Commission (BHC) was created in July of 2000 with the signing of an agreement by the Secretary of Health and Human Services of the United States and the Secretary of Health of México. Since its creation, the BHC's sole mission has been to provide international leadership to optimize health and quality of life along the United States-México border.

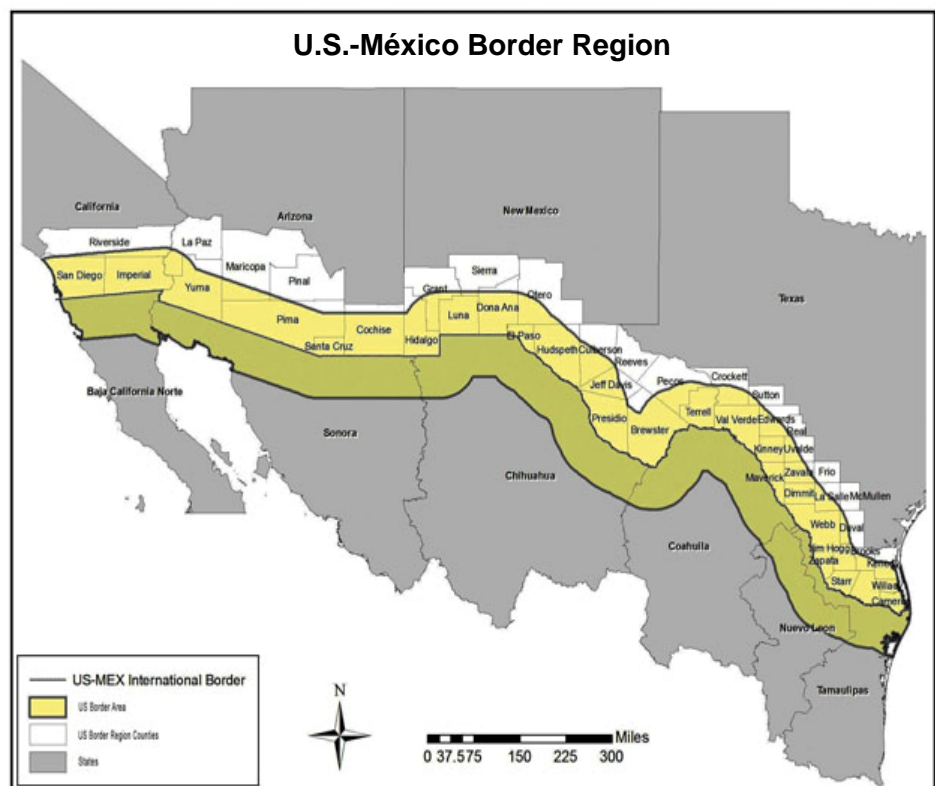
The Commission is seeking to raise the visibility of border health issues that impact health care access as well as identify opportunities for addressing these issues that may extend beyond the U.S.-México border region.

The border is a unique binational region.

The border region is approximately 2,000 miles long and is defined as the area 100 kilometers (62 miles) north and south of the U.S.-México border (Figure 1).¹ This region shares environmental, social, economic, cultural, and epidemiological characteristics, but each side operates under different legal and political systems, health systems and policies. This binational region comprises:

- Two sovereign nations
- Four U.S. states (Arizona, California, New Mexico, and Texas) and six Mexican states (Baja California Norte, Chihuahua, Coahuila, Nuevo León, Sonora, and Tamaulipas)
- A total of 44 counties in the United States and 80 municipalities in México²
- Fifteen pairs of sister cities³
- Twenty-six U.S. federally recognized indigenous tribes (4 in Arizona, 20 in California, and 2 in Texas) some of whom have citizenship rights on both sides of the border.⁴

Figure 1





The United States-México border region is a dynamic area where multiple cultures (U.S., Mexican, indigenous) come together and interrelate across geopolitical boundaries.⁵ Border residents are often bound by inseparable ties among binational families and economically intertwined communities. The mobility of millions of daily legal crossings and a large portion of families who have strong social networks on both sides create vibrant binational communities. This social dynamic requires effective collaboration between government agencies on both sides of the border to address complex policy issues surrounding health care as well as economic and social conditions.

Border health is a range of shared public health issues that span the international border and necessitate binational collaboration to be effectively addressed.

Border Health Research Report
National Latino Research Center, 2004



Border Voices: Daily Crossers

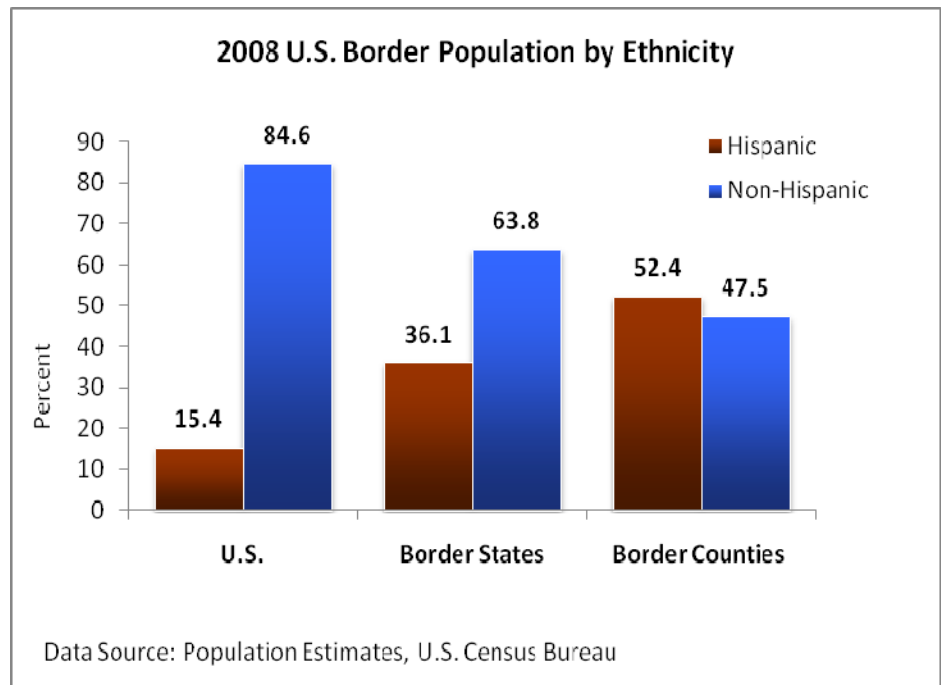
Among the millions of daily crossers is Claudia, who was born in the United States and grew up in Mexicali, Baja California. She now lives with her husband, Alejandro, and their three children: Gabriela (9 years old), Alejandro Jr. (8 years old), and Ana Claudia (5 years old) in San Diego. Every day she crosses the border south into Tijuana to take her children to private school. Claudia explains, “My children [girls] go to a private school in Tijuana for the quality of education and because they can have bilingual education.”⁶

The border population poses challenges to the U.S. health care system: It is one of the fastest growing in the nation with a majority Hispanic population.

Population growth in the border region has increased at a far faster rate than the U.S. population as a whole. In the United States, the four border states have accounted for more than one-third of the nation’s population growth since 2000.⁷ Between 1990 and 2000, the population of the collective southwest border counties has increased by 29.3 percent.⁷

More than 13 million people live in the U.S.-México border region, 53 percent of them on the United States side. If rapid population growth trends persist (more than twice that of the overall growth in each country), the total population, on both sides combined, is expected to reach 20 million by 2020.⁷

Figure 2





In 2008, 52 percent of the population living in border counties was Hispanic as compared to 36 percent in the border states and 15 percent in the United States as a whole (Figure 2). Counties in Texas have the highest percent of Hispanics: Starr 97.3 percent, Maverick and Webb 94.5 percent, and Hidalgo 89.6 percent, followed by Santa Cruz (AZ) at 80.2 percent, Imperial (CA) at 76.7 percent, and Doña Ana (NM) at 64.9 percent.⁸

Five percent of the U.S. border region is tribal. The twenty-six U.S. indigenous tribes contribute to the unique population and health challenges in the border region as well. For example, the Tohono O'odham Nation of Arizona and Sonora, straddle the border with members living on both sides.⁹

According to the 2008 U.S. Census, persons under 19 years of age comprised 31 percent of the population in border counties, 29 percent in border states, and 27 percent in the United States.⁸

Border challenges contribute to diminished health, well-being, and access to health care.

Border residents tend to experience socio-economic vulnerabilities that can lead to poor health, including persistent poverty, low educational achievement, high rates of unemployment, and the impact of rapid population growth.

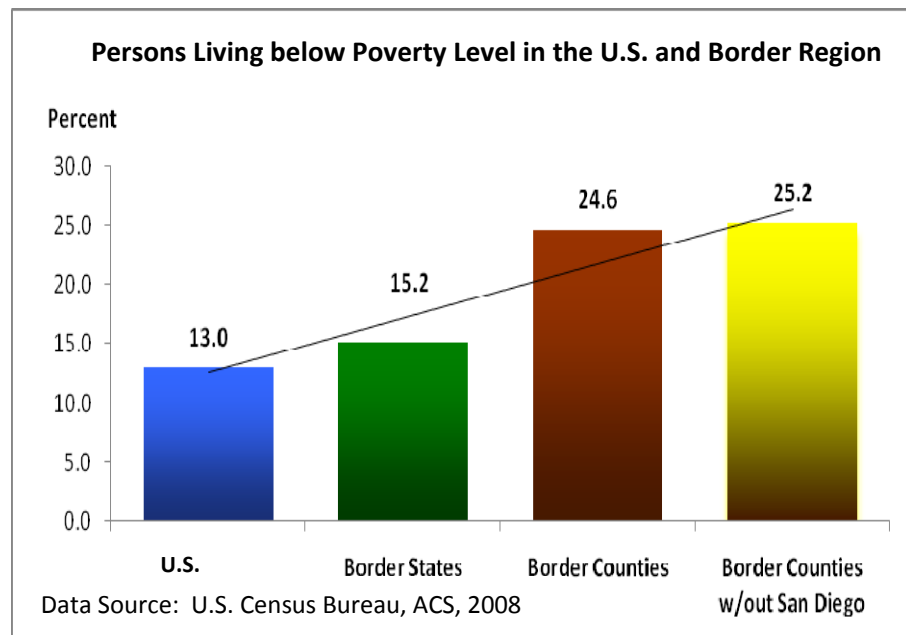
Lower educational achievement

The socio-economic gap between the border counties and the rest of the United States is the widest in the nation. As of 2000, if the border counties were a state, it would rank 50th in the nation in the percent of population at age 25 or above who completed high school (66.1% for border counties, excluding San Diego County, compared to 80.4% for the U.S.).^{7,10}

Lower income status and high poverty rates

In 2007, the per capita annual income (\$26,842) in the border counties was only about two-thirds the level in the border states (\$39,013) and the overall U.S. population (\$38,839). In addition, poverty is almost twice as high in border counties (25%) compared to the United States (13%) (Figure 3).

Figure 3



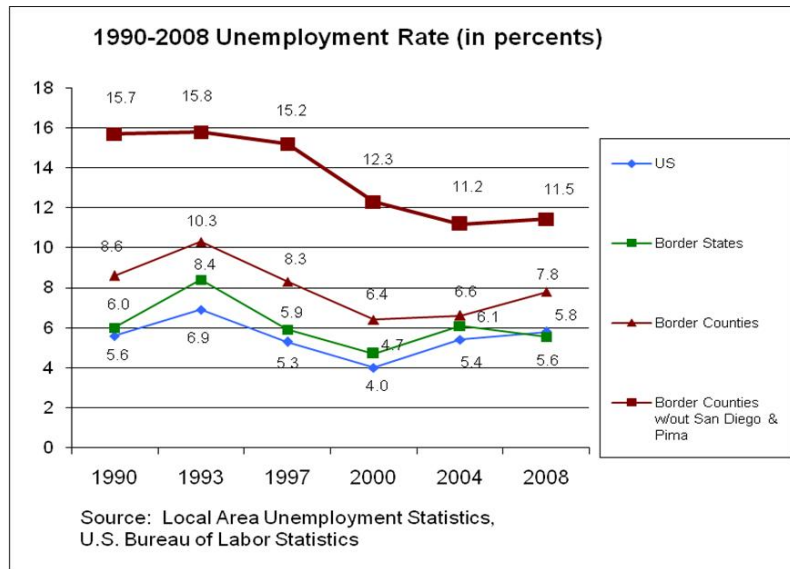


Higher unemployment

The unemployment rate in border counties has been chronically high (excluding San Diego and Pima Counties) ranging from 15.7 in 1990 to 11.5 in 2008 as compared to the United States which was at 5.6 for those respective years (Figure 4).¹¹

The border economy is characterized by low wages and composed mostly of services, manufacturing, and agribusiness industries that typically do not provide employer sponsored insurance coverage. Additionally, 3 of the 10 poorest counties in the United States are located in Texas (Starr, Maverick, and Hudspeth) with 21 of the 44 border counties designated as economically distressed areas.^{2,12}

Figure 4



Border communities often suffer from avoidable health disparities.

As a result of these socio-economic disparities, border residents disproportionately suffer from infectious diseases and health conditions such as tuberculosis as well as chronic diseases, including diabetes and obesity, all of which are potentially avoidable through improved social conditions, prevention, and early detection and treatment.

Tuberculosis

According to a recent 2009 United States-México Border Health Commission (BHC) report, the tuberculosis (TB) rate in the United States is highest among foreign-born persons and racial/ethnic minorities.¹³ In addition, México has a higher case rate of TB, 20 per 100,000 population as compared to the United States at 4.4 per 100,000.¹³ Numerous converging factors contribute to elevated tuberculosis incidence in the border region including the following: 1) widespread poverty and limited access to health care; 2) frequent border crossings into both countries for employment, commerce, health services, and leisure; and 3) lack of coordinated care across health jurisdictions on the U.S.-México border.¹³ Intergovernmental collaborations at all levels are necessary to prevent and control TB and prevent other future infectious diseases and virus outbreaks.¹³ Undoubtedly, the 2009 outbreak of Influenza A (H1N1) was a stark global and binational lesson that diseases do not respect political borders.

Childhood Obesity

Another BHC report recognizes that childhood obesity is reaching epidemic proportions in the border region.¹⁴ For example, the Texas Department of State Health Services' 2004 Youth Risk Behavior Survey (YRBS) shows that among 4th graders, 22.4 percent were obese and 38.7 percent were overweight, which is up to 1.5 times higher than

Border childhood obesity must be integrated into all health reform discussions given the potential impact on the health of our nation.

Eduardo Sanchez, MD, Committee on Progress in Preventing Childhood Obesity, Institute of Medicine



the U.S. average.¹⁴ The health of border children has a huge impact on the nation's future given its unique characteristics as a fast growing and youthful population with higher obesity risks. Thus, as Dr. Eduardo Sanchez has stated, "Childhood obesity along the border must be integrated into all discussions about health care reform given the impact on the overall health of our nation."¹⁴

Diabetes

Diabetes is also a growing concern in the U.S.-México border region. Diabetes prevalence among Hispanics living in the border region is more than twice the prevalence among non-Hispanic whites.¹⁵ In 2007, 9.5 percent of adults in the U.S. border region reported having ever been told by a health professional that they have chronic diabetes. This was slightly higher than the overall U.S. adult population (8.0 %).¹⁶ But, limited access to care may inhibit professional diagnosis of diabetes. Border county residents living in California, Texas, and Arizona have a significantly higher diabetes hospital discharge rate (16.6 per 10,000) compared to their counterparts living in non-border counties (14.9 per 10,000).¹⁷

These are just a few examples of avoidable health disparities that have serious individual and social costs. Border residents who have chronic conditions suffer needlessly as a result of not receiving early diagnosis, appropriate treatment, and guidance on how to manage their disease.



Border Voices: Avoidable Health Disparity

Such is the case of Roberto, an elderly African-American man in his 60s. "After weeks of complaining that my legs were sore, I was taken to an emergency room where I learned that I was suffering from complications from diabetes. Though emergency measures were taken, the slit on my foot had progressed to the point where I needed an amputation."¹⁸

Adverse health conditions in the border region such as tuberculosis, obesity, and diabetes incur high costs to the health care system, the economy, and society. For example, high proportions of obesity and diabetes in adults and children, when left undetected or untreated, result in high emergency room utilization. Uninsured, low income adults with chronic conditions (diabetes, heart disease, and depression) often delay or do not receive needed care because of the cost of primary care leading to expensive hospital care.¹⁹ Second, the long-term consequences of childhood obesity include a shortened life expectancy and a host of other related health problems and diseases into adulthood, which will ultimately become an increased burden on the nation's taxpayers. Finally, research examining diabetes and the labor market in South Texas shows that the indirect costs of diabetes extend to lost labor income due to lost productivity and a reduction of spending to the local economy.²⁰

Lack of health coverage in the border region has adverse consequences for health and health care.

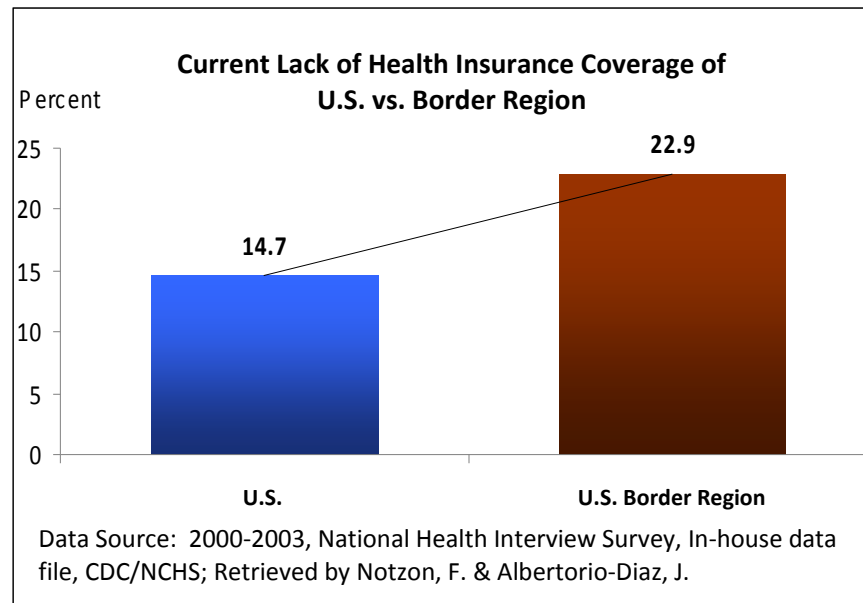
Residents in the border region lead the nation in lacking health coverage. Low coverage rates are partially explained by the fact that fewer workers, particularly those with lower wages, are offered employer-sponsored insurance, and fewer among the workers that are offered such insurance can afford the premiums.²¹ From 2000 to 2003, 23 percent of persons of all ages living in border states lacked health insurance coverage, as compared to 14.7 percent nationally (Figure 5).²² Border states also had the lowest private insurance coverage in the nation with New Mexico ranking the lowest at 57.2 percent, Arizona at 61.1 percent, Texas at 61.9 percent, and California at 65.9 percent compared to the U.S. average at 70.3 percent.²³ In addition, Hispanics living in border counties were significantly more likely than any other



group to be without health insurance coverage for more than a year (86.9% compared to 68.6% non-Hispanic border residents, 82.5% Hispanics, and 68.5% non-Hispanics in the United States).²¹

Children living in the border region are also at high risk for being uninsured. For example, Texas leads the nation in the proportion of children without coverage at 18.7 percent compared to the United States average at 9.3 percent. New Mexico's children are the least likely in the nation to have private insurance coverage at 42.2 percent compared to the United States at 61.5 percent.²³ Furthermore, citizen children in families where one or more parents are non-citizens are more likely to live in poverty than are those in native-born families (21% vs. 13.4%), to be uninsured, less likely to have employer sponsored coverage, and less likely to have a usual source of health care.²⁴

Figure 5



Ultimately, long-term disparities in insurance coverage result in inadequate access to health care services and significantly compromise health outcomes. Without coverage, the uninsured receive fewer services, or no care at all, than their insured counterparts.²⁵



Border Voices: The Uninsured

Such is the case of Guadalupe, a 64 year old Hispanic mother of two who works part-time: "I had a gallbladder attack. It was horrible pain and I could not sit down. I could not have the surgery because we did not have insurance. I would walk the house until the pain went away. It took about four or five years to get insurance and we just did not go to doctors because they were too expensive. We just didn't go, even if we were sick. We took home remedies like aspirin, milk of magnesia, over the counter remedies, herbs. But I would not go to doctors because just the visit was \$75. And that means my kids too; two boys that did not go."¹⁸

Research confirms that many border families experience barriers to obtaining needed preventive and medical care.²² From 2000 to 2003—

- Border residents were more likely to self-report a significant inability to afford and access medical care such as contact with a general doctor, dentist, and professional mental health services.²²
- The adult population on the border was less likely than the average U.S. individual to have seen or talked to a general doctor in the past year (56.7% vs. 68.2%) and a specialist in the past year (19.9% vs. 25.7%).
- Women living on the border were less likely to have an OB/GYN visit in the past year than the average woman in the United States (40.8% vs. 45.6%).



- Border residents were also less likely to have visited a dentist in the past 12 months (61% and only 44% for border Hispanics) compared to the rest of the United States at 64 percent.

Lack of access to appropriate care is even greater for Hispanics living in the border region compared to non-border Hispanic residents in the border states and the overall U.S. population. According to a 2009 study published by the National Center for Health Statistics,²³ Hispanics who live on the border are—

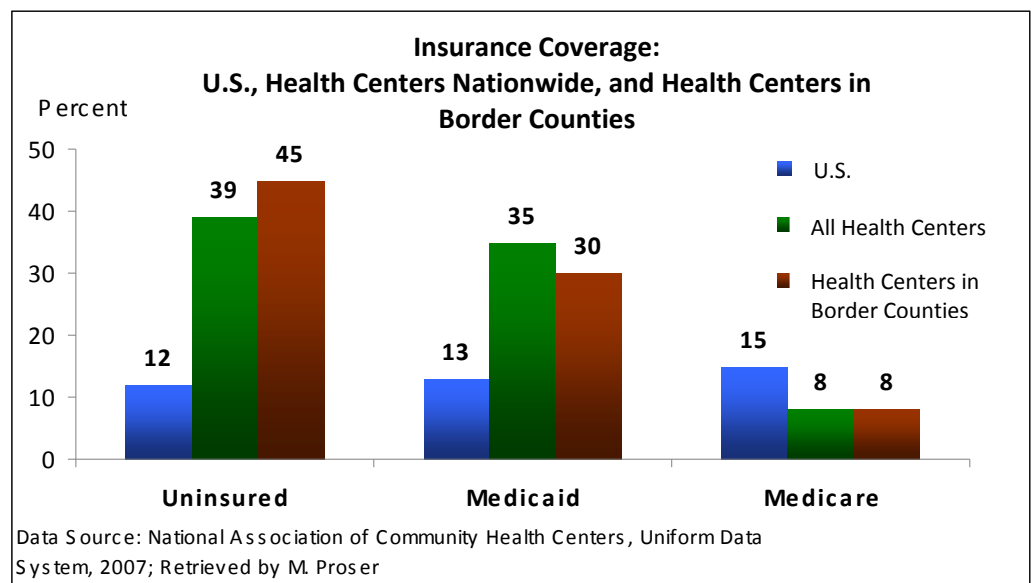
- Less likely than the average U.S. Hispanic to have a usual source of care (31.9% vs. 28.4%)
- Less likely to have seen a doctor during the previous year (45.2%) compared to the non-Hispanic border population (64.2%)
- Less likely than non-Hispanics to report contacts with a specialist (11.7% vs. 25.2%), and
- Twice as likely to report that they could not afford dental services (16.8%) compared to non-Hispanic border residents (8.1%).

High rates of uninsurance and lack of access to care affect the health care for the insured population in the border region. When community-level rates of uninsurance are relatively high, insured adults in those communities are more likely to experience difficulties obtaining needed health care (less likely to report a usual source of care, having seen a doctor or received routine preventive care, and having seen a specialist) and to be less satisfied with the care they receive. For example, analysis of the Community Tracking Study, conducted by the Center for Studying Health System Change, found that women aged 40 to 69 were less likely to report they had a mammogram screening within the last year if they resided in communities with relatively high uninsurance rates.²⁶

Border hospitals, health care providers, and community health centers continue to absorb growing uncompensated health care costs.

According to the American Hospital Association’s annual survey, southwest border county hospitals reported uncompensated care totaling nearly \$832 million in 2000.²⁷ In addition, federally qualified health centers located in the border region provide a primary care home to the largest proportion of uninsured in the nation (Figure 6).

Figure 6



For example, in 2007, of the total border residents served by community health centers, 45 percent were uninsured compared to residents served by health centers nationwide where 39 percent were uninsured.²⁸ While it is critical to



increase access to healthcare services in border communities, it is also necessary to increase the number of health care professionals serving the health needs of border communities.

A national “911” call to report missing persons along the border: health care professionals.

The lack of health care providers is in a state of emergency in the border region because of the shortage of physicians, dentists, and other health providers. Data from the Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services (HHS), demonstrates the state of emergency due to health professional shortages along the border region including physicians, dentists, physician assistants, nurse practitioners, registered nurses, and pharmacists. For example, physicians per 10,000 population for all border counties is 16.3 compared to 23.2 percent for the border states as a whole, 26.2 for non-border counties in the border states, and 26.1 percent for the United States as a whole.²⁹ Other bleak shortage disparities include low rates of dentists (5.1 per 10,000 for border counties excluding San Diego vs. 6.5 for the U.S.); almost half the supply of nurse practitioners than the national rate (1.4 for border counties vs. 2.3 for the U.S.); registered nurses also fall below the national rate (43.1 vs. 57.6); and while a bit more in supply, the rate of pharmacists in border counties (4.4) are lower than the United States (5.3).²⁹



Border Voices: Shortage of Health Care Professionals

Community health center administrators like Marcos struggle to serve the mass of patients needing primary care: “One of the major problems on the border is the lack of doctors. Take El Paso, for example. At this very moment we are in need of at least 600 doctors. Just at this very moment! An individual may come into our health center and they will get an appointment three months from now. If they go to the county hospital, it may be six months. If the person has cancer, [the lack of doctors] is a death sentence.”³⁰

The under-representation of minorities in the health professions and the educational pipeline also affect the availability and quality of health care services for border communities. For example, in 2002, only 3.3 percent of physicians practicing in the United States were Hispanic. African-Americans represented only 2.2 percent and American Indian/Alaskan Natives .05 percent.³¹

The shortage of supply and lack of culturally and linguistically competent providers are barriers to health care. For instance, cultural and linguistic compatibility between patients and providers is shown to improve communication³² and adherence to treatment,³³ promote higher levels of patient satisfaction,³⁴ and improve the likelihood of preventive screening.³⁵

A positive step has been the increased funding for medical and health professional pipeline programs such as the recently inaugurated Texas Tech University Health Sciences Center Paul L. Foster School of Medicine in El Paso, Texas, the first four-year medical school in Texas in the last 30 years. “We are centrally located in border communities and serve as a national model of excellence for training our future health care leaders equipped to tackle the unique health conditions of border communities,” stated Dr. Jose Manuel de la Rosa, Founding Dean of the Texas Tech University Health Sciences Center Paul L. Foster School of Medicine.

We (The Texas Tech University Health Sciences Center Paul L. Foster School of Medicine in El Paso, Texas) are centrally located in border communities and serve as a national model of excellence for training our future health care leaders equipped to tackle the unique health conditions of border communities.

Dr. Jose Manuel de la Rosa,
Founding Dean



Border residents who are uninsured often cannot afford the high costs of medical services in the United States or live in areas where there are no available health care professionals and, therefore, opt to seek care in México for more affordable services such as prescription drugs and dental care.

U.S. residents often head south of the border due to the high cost of health care.

The availability of lower cost health services in México, including prescription drugs and dental care, is considered by many U.S. residents as a cost effective alternative source of care. For instance, a study conducted in Texas border counties found that among those under age 65 who reported no health insurance were 3 to 7 times more likely to use medical care in México than the insured.³⁶ A San Diego study of two urban emergency departments found that 7 percent of those surveyed reported using medications purchased outside of the United States, mostly in México.³⁷ Two studies in Texas found that 41 percent of Hispanic residents residing in Laredo, Texas, utilized cross-border health care services in México³⁸ and that 86 percent of low income El Paso residents surveyed said they received medical care or bought prescription drugs from México. In New Mexico more than 37 percent of uninsured border residents seek medical care in México.³⁹

The border region can serve as a source for identifying innovative models.

The border health care burden offers an opportunity to identify innovative models that bring together multiple levels of government and leaders across geographic and jurisdictional borders by improving access to health care, creating a culture of wellness and prevention, and promoting evidence-based interventions and models of excellence.

■ Improving access to health care on the border.

The history of border collaboration, and cooperation provides a strong foundation for developing creative models for reducing the high uninsurance rates among border communities, especially among children and Hispanics.

Greater access to care will require improved health workforce development, training, placement, and retention. Opportunities could include the following: 1) promoting new exchange programs to train border and binational health professionals, 2) promoting health professions education beginning in primary schools, 3) building on successful models such as the HHS Health Careers Opportunity Program, National Health Service Corps, the U.S. Public Health Service, and 4) increasing culturally and linguistically competent training for health care professionals.



■ Creating a culture of wellness and prevention and strengthening the public health infrastructure.

Public health and prevention are the cornerstones of healthy communities. Shifting the focus of the healthcare system from the treatment of disease to health promotion and prevention is the key to good health. Improvements in the border public health infrastructure as well as the institutional and human resource capacities are necessary to prevent diseases and eliminate health disparities. For example, research demonstrates that increased access to a medical home is “associated with better health, on both the individual and population levels, with lower overall costs of care and with reductions in disparities in health between socially disadvantaged subpopulations and more socially advantaged populations.”⁴⁰ Other health infrastructure strategies could include improved disease surveillance systems such as the Early Warning Infectious Disease Surveillance (EWIDS) and the Border Infectious Disease Surveillance (BIDS) programs, efficient and effective data collection, and the promotion of electronic health records.

■ Promoting evidence-based interventions and models of excellence.

Drawing on lessons learned and best practices can also improve access to health care, not only for border communities, but for diverse communities in the United States. Examples of effective interventions from public health research include the following:

1) Enhance outreach efforts such as the use of community health workers (CHW) or *promotoras(es)*, popular along the border region, as patient navigators who ensure access to and promote optimal patient utilization of health services. CHWs are both a growing model and network that are promising in reducing the disease burden among U.S. border communities.⁴¹ Promotoras are socially positioned to bridge the divide between rural and underserved communities and the health care systems in the United States. In 2003, the BHC conducted the *Border Models of Excellence* initiative to identify promotoras-based best practices and models along the border region.⁴² The *Border Models of Excellence Compendium* can be found on the BHC website at <http://www.borderhealth.org>. The promotoras model was proven to be a successful framework that can be replicated throughout the country as it has in some regions to date.

2) Build on the enterprise of cross-border health care exchanges. Multiple “borderless” innovations have been piloted and have shown positive outcomes for improving health care access and increasing the quality of care. For example, since the 1990s, several organizations from both countries have been exploring the options for binational health insurance. Binational health insurance has been implemented in California, allowing employers to purchase insurance coverage for their employees who either live in México or prefer to use health services in that country.^{43,44}

3) Promote *Healthy Border 2010* and the forthcoming *Healthy Border 2020*, an initiative for health promotion and disease prevention developed by the BHC, as a valuable framework for addressing borderwide health disparities,⁴⁵ and as a model that can be replicated in other multi-state regions in the United States.

Improving access to health care on the border, creating a culture of wellness and prevention, and promoting evidence-based interventions and models of excellence can ensure deliberate and sustained actions to improve health conditions and thereby elevate the health of the nation.



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