

HEALTHY BORDER 2020: A PREVENTION & HEALTH PROMOTION INITIATIVE

The mission of the U.S.-México Border Health Commission is to provide international leadership to optimize health and quality of life along the U.S.-México border.

*Healthy
Border
2020*



The mission of the U.S.-México Border Health Commission (BHC or Commission)—a binational organization—is to provide international leadership and optimize health and quality of life along the U.S.-México border. The Commission operates in a binational and collaborative framework, respecting each nation’s culture, traditions, and sovereignty. The Commission strives to create consensus between the two countries and build partnerships among the border states endeavoring to improve the health of border residents and quality of life on the border.

U.S. Section Central Office

211 N. Florence, Suite 101
El Paso, TX 79901
Tel: (915) 532-1006
Fax: (866) 785-9867

México Section Central Office

Hospital General de Tijuana
Paseo del Centenario No.10851
Zona Río C.P. 22320 Tijuana, B.C.
Tel: (01152-664) 634-6511
Fax: (01152-664) 634-6551

To obtain the complete version of this report, visit the BHC website at www.borderhealth.org or www.saludfronterizamx.org.

TABLE OF CONTENTS

HEALTHY BORDER 2020: INTRODUCTION1

1. OVERVIEW2

2. THE U.S.-MÉXICO BORDER IN CONTEXT4

2.1 GENERAL CHARACTERISTICS.....4

2.2 HEALTH CONDITIONS.....6

2.3 BACKGROUND AND SOCIODEMOGRAPHIC PROFILE.....10

3. HISTORY OF THE HEALTHY BORDER INITIATIVE.....12

4. DEVELOPMENT OF HEALTHY BORDER 202015

4.1 U.S.-MÉXICO BORDER BINATIONAL TECHNICAL WORKGROUP16

4.2 DEVELOPMENT PROCESS.....17

4.3 PUBLIC COMMENT PROCESS.....19

5. SUMMARY OF PROGRESS - HEALTHY BORDER 2020 DEVELOPMENT20

6. SPECIFIC ACTIONS OF THE COMMISSION.....26

7. MEASURING IMPACT30

8. MONITORING AND EVALUATION.....31

9. FINAL OBSERVATIONS.....32

10. REFERENCES.....34

11. ACKNOWLEDGEMENTS36

12. APPENDIX.....37

This page intentionally left blank.

Healthy Border 2020: Introduction

Healthy Border (HB) 2020 is a binational initiative of the U.S.-México Border Health Commission that focuses on the public health issues prevalent among binational border populations and establishes the Commission's border regional agenda on health promotion and disease prevention.

HB 2020 comprises measurable and binationally relevant goals and objectives that bring together key regional partners to develop and support policy change and culturally appropriate, evidence-based interventions.

It addresses five public health priorities of binational concern, including chronic and degenerative diseases; infectious diseases; maternal and child health; mental health and addiction; and injury prevention. These priorities reflect the work of a diverse group of public health professionals, academicians, and other border stakeholders and organizations assembled to serve as a border binational technical work group tasked to develop a binational strategic plan that border stakeholders can use to coordinate public health responses at the binational, state, and local levels.

The main purpose of HB 2020 is to provide a framework for border region public health goals and the actions needed to improve the health of U.S. and México border residents. This is aligned with the Commission's mission to provide international leadership that optimizes health and quality of life along the U.S.-México border.

The U.S. Department of Health and Human Services and the México Secretariat of Health, as integral to the structure of the U.S.-México Border Health Commission, support this initiative with the goal of eliminating health disparities and improving the quality of life of all border region residents.

Cristina Rabadán-Diehl
Representative
Office of Global Affairs
U.S. Department of Health and Human Services

Hilda Dávila
Delegate for the Commissioner of
the México Secretariat of Health
Dr. Mercedes Juan

1. Overview

The U.S.-México Border Health Commission (BHC or Commission) is a binational entity created in July 2000 through an agreement between the governments of the United States and México for the purpose of identifying and assessing public health and healthcare challenges and needs affecting the border population, thereby facilitating actions and viable, evidence-based solutions.

The federal governments of the United States and México, through the U.S. Department of Health and Human Services and the Mexican Ministry of Health, form part of the organic structure of the BHC and participate actively in pursuit of its mission of eliminating health disparities and improving quality of life. For this purpose, the Commission tasked a U.S.-México Border Binational Technical Workgroup (Binational Technical Workgroup) to develop *Healthy Border 2020: A Prevention and Health Promotion Initiative for the U.S.-México Border Region (Healthy Border 2020)*. This report contains priority topic areas, baseline data and targets, and recommended strategies and actions that provide various governmental, nongovernmental, academic, and other interested sectors and stakeholders in the region with a framework for focusing health improvement initiatives on both sides of the international boundary, guiding and advocating for the allocation of resources, and promoting binational collaboration in addressing the prevailing health issues.

The Healthy Border 2020 framework provides objectives that are measurable and binationally relevant. It will serve to bring together key regional partners to make every effort to develop and support policy change and interventions that are evidenced-based and in the context of the social factors that impact health in the region. Additionally, this initiative will endeavor to increase awareness of these priorities and develop a better understanding of the social determinants of health, identify opportunities for binational cooperation and collaboration, and develop health promotion strategies that address disease and disability.

The United States Congress passed Public Law 103-400 in 1994 following strong advocacy efforts led by public and private entities from both sides of the border to effectively and collaboratively address the region's most salient public health

issues. The Commission was formed in 2000 through the signing of an agreement between the governments of the United States and México. The agreement was signed by the U.S. Secretary of Health and Human Services on July 14, 2000, in Washington, DC, and by the Secretary of Health of México on July 24, 2000, in México City, DF. The Mexican Senate later approved the agreement on November 16, 2000, and published it in the Official Federal Journal on January 8, 2001.

Leading up to and following the signing of the agreement, members were appointed in 1999 and 2000, creating the two sections of the Commission—the U.S. Section and the Mexican Section.

The BHC U.S. Section is formed by the U.S. Secretary of Health and Human Services or represented by a delegate; the four state level health officers, who are members by virtue of their positions and serving their respective governors; and by an additional eight members from the community at large who are nominated by the four border state governors and appointed by the President of the United States. The BHC Mexican Section is represented by the México Minister of Health, or represented by a delegate, and 12 members appointed by the Mexican government.

In addition to its appointed membership, the Commission depends on state outreach offices located within each of the 10 border states along the 2000-mile border (see map below). In the United States and México, the outreach offices are integrated within and responsible for coordinating activities with their respective state health departments.

U.S.-México Border Health Commission Outreach Offices



2. The U.S.-México Border in Context

2.1 General Characteristics

One of the challenges scholars of the U.S.-México border have confronted over the years has been how to adequately define the region. While certain guidelines were established for the purposes of conceptualizing the region from a geographical point of view, the economic, demographic, political, and social implications have eluded these same scholars. Unlike the geography, these other factors are much more fluid and dynamic. Nevertheless, it is important to understand the border region as a microcosm where bilateral relations and prevailing implications are considered when developing targeted solutions to address public health challenges.

Geographically, the U.S.-México border area is defined as a territory that extends along 3,141 kilometers from the Gulf of México to the Pacific Ocean and includes 100 kilometers north and south of the international boundary of each country. The border region includes 48 counties¹ in four U.S. states (Texas, New Mexico, Arizona, and California); 80 municipalities in six México states (Tamaulipas, Nuevo León, Coahuila, Chihuahua, Sonora, and Baja California); and 15 sister cities/regions (Brownsville-Matamoros; McAllen-Reynosa; Starr County-Miguel Alemán-Camargo; Laredo Nuevo-Laredo; Eagle Pass-Piedras Negras; Del Rio-Ciudad Acuña; Presidio-Ojinaga; El Paso-Las Cruces-Ciudad Juárez; Columbus-Palomas; Douglas-Agua Prieta; Nogales-Nogales; Tohono O’odham Nation-Caborca-Puerto Peñasco-Sonoyta; San Luis-Somerton-Yuma-San Luis Rio Colorado; Calexico-Mexicali; and San Diego-Tijuana). The border region has a population of approximately 15 million inhabitants on both sides of the border (Pan American Health Organization, 2014).

Politically, however, it is important to understand the border region as interdependent sister states and sister cities, with unique social and economic relationships.

Nonetheless, they should be recognized as sovereign entities that are bound by their respective jurisdictional and legal frameworks and that play important roles in each of their nation’s development (Alegría, 2000). References in economic terms to California and Texas or Nuevo León and Baja California are not fair comparisons, nor are the interactions between Tijuana and San Diego or between Ciudad Juárez and El Paso (Lorey, 1991).

For Mexican citizens, the border region generally represents the opportunity to secure quality goods, gain employment, and earn higher incomes, especially if employed in the United States, lest problems faced by undocumented workers are overlooked (Coubès, 2000). In the case of U.S. citizens, the border region represents a competitive labor market (for the most part, Mexicans employed in the United States tend to earn less than U.S. citizens doing the same work). However, it can also represent an opportunity to cross the border to avail themselves of low cost medical and dental services,

¹ For the purposes of this report, the border definition is limited only to the 44 U.S. border counties, excluding Maricopa, Pinal, and La Paz in Arizona and Riverside County in California. The terms “area” and “region” are used interchangeably.

pharmaceutical supplies, and medications or to enjoy the many amenities available to foreign visitors.

Similarly, for U.S. entrepreneurs and other foreign investors, the proximity of the international border represents commercial and economic advantages in locating manufacturing plants, known as *maquiladoras*, on the México side, considering the lower costs for skilled and unskilled labor and lower transportation costs for developed products.

The Commission understands that public health imperatives require the creation of mechanisms to improve the quality of life through evidence-based solutions. Challenges impacting the unique populations living and working on the U.S.-México border include acknowledging that the social and cultural characteristics are as diverse as the geography of the region (Bustamante, 2012).

2.2 Health Conditions

Health Status in the U.S.-México Border Region, 2000–2010

Public health is of significant importance along the U.S.-México border because it is a space where many people come together with varying cultural, economic, and political characteristics. Therefore, for purposes of public health, this geographic space requires the joint efforts of local, state, and federal governments as well as non-governmental organizations. The border region symbolizes the similarities and differences that exist between these two nations, where economic, social, and political factors and access to health services are the best determinants of health status in both countries (Rangel & González, 2006).

The Binational Technical Workgroup utilized information included in the report entitled *Progress toward the Healthy Border 2010 Goals and Objectives (A Joint Close-Out Report)* as a frame of reference to examine the health status of the U.S.-México border region between 2000 and 2010.

The following calculation was used to determine if each of the Healthy Border 2010 objectives had improved, remained the same, or did not meet the 2010 target:

$$\frac{\text{Final Year Data} - \text{Initial Year Data}}{\text{Initial Year Data}} \times 100$$

2000–2010 Data Analysis

The following major public health trends represent the challenges of interdisciplinary work on both sides of the border:

- **Access to Health Services:** Between 2000 and 2010, México observed a national decrease of 41% in the number of people who lacked health insurance. When comparing this national indicator with the six northern border states, there was a similar decrease of 37% in the uninsured population. Tamaulipas recorded the largest decrease (52%) during this period, while Coahuila reported only a 23% decrease in the uninsured population. This trend can be explained by the 2004 implementation of *Seguro Popular*, México's publicly subsidized Popular Insurance, which aims to provide greater coverage for the population without social security.

On the U.S. side of the border, national trends differed from those observed in México. While the uninsured Mexican population decreased, the number of people without access to health insurance in the United States increased during the same time period. In other words, the population without health insurance increased by 26% between 2000 and 2010. However, in reviewing this indicator in the context of states bordering México, trends differed compared to national trends. For example, the number of people without access to health care in Arizona decreased by 36%, while Texas recorded no changes during this decade.

- **Breast Cancer:** Breast cancer and cervical-uterine cancer are among the most common diseases experienced by women; conditions that can be cured if detected early. In México, the breast cancer mortality rate increased 15% nationally between 2000 and 2010, compared to 8% within the six border states. Chihuahua was the only state that recorded a slight decrease (2%) in breast cancer mortality, while Sonora registered the highest increase (20%).

In the United States, breast cancer mortality rates significantly decreased (17%) between 2000 and 2010, in contrast to the trend observed in México. Arizona had the greatest decrease at a fourth the rate for this disease.

- **Cervical Cancer:** Mortality from cervical cancer presented a brighter outlook. In México, between 2000 and 2010, both nationally and at the northern border, the mortality rate decreased by 33% and 24%, respectively. The Mexican states that had the highest and lowest decreases in mortality were Baja California (33%) and Sonora (2%). In the United States, the mortality rate showed a smaller decrease. However, the number of cervical cancer cases increased in New Mexico by 65%, which is cause for concern.
- **Diabetes Mellitus:** Currently, the leading causes of morbidity and mortality in both the United States and México are chronic degenerative diseases, especially diabetes mellitus. It is important to emphasize the increase in the number of deaths from this disease between 2000 and 2010 in México. During this time, the national mortality rate reached approximately 65% and 47% in the border region. Chihuahua had the greatest contribution (64%) to this increase, while Baja California had an increase of only 17% during the same period. This concerning situation in México should be noted. In the United States, the opposite trend occurred, with a significant decrease (17%) in diabetes mortality rates reported in the same decade. The highest and lowest decreases by state were seen in Texas (31%) and New Mexico (1%).
- **Injury Prevention:** Another problem affecting the health of the border population is road traffic injuries. Between 2000 and 2010, México recorded an increase of 6% in deaths from motor vehicle collisions. It should be emphasized that this upward trend characterizes the entire last decade. Likewise, motor vehicle fatalities in the border region increased by 7%. When analyzing traffic fatality data for México's six northern border states, most striking was Nuevo León, which recorded a 90% increase between 2000 and 2010. Baja California registered the greatest decrease (20%) in traffic fatalities during this period. By contrast, the data for this indicator in the United States is favorable. During the

same time period, there was a 28% decrease in traffic fatalities with Arizona reporting the largest decrease (41%) compared to the other U.S. border states.

- **Human Immunodeficiency Virus (HIV):** One of the Millennium Development Goals was to decrease HIV transmission. Progress toward this goal differs in México between national and border region rates. According to México's National Center for the Prevention and Control of HIV/AIDS, the national incidence rate decreased 17% between 2005 and 2010, but HIV incidence increased by 13% among the border states. Sonora noted a very sizable increase (94%), with new cases almost doubling during the five-year period. In Chihuahua, the incidence rate decreased by almost three quarters. Meanwhile, in the United States, HIV incidence increased 19% nationally. However, in the four states bordering México, a decrease between 1% in Texas and 20% in Arizona was observed.
- **Tuberculosis (TB):** Similar to the trends observed in HIV incidence, TB incidence decreased 10% in México between 2000 and 2010. Along the northern border, however, there was a small increase in the number of cases in the same period. At the state level, Sonora registered the largest increase in the same period (36%) and Nuevo León registered the largest decrease (20%).

In the United States, TB cases decreased by one-third, with California reporting the largest contribution in the border region.
- **Infant Mortality:** Infant mortality is the best indicator characterizing the health status of an entire population. Therefore, it is important to highlight that infant mortality decreased by 30% in México between 2000 and 2010. In the border region, infant mortality decreased 14%, and Baja California saw the largest decrease in the region. However, there was a concerning increase in Tamaulipas, where the number of deaths in children under five years of age increased by 31% in the same decade. In the United States, infant mortality only decreased 4% nationally. At the state level, New Mexico had the largest decrease (15%) while Texas saw an increase of 9%.

From the above analysis, it is important to highlight that only statewide data was available for the calculation of the U.S. indicators; therefore, the Binational Technical Workgroup was unable to clearly demonstrate the marked differences between the national data, the overall state data, and border region data. This is mainly due to the methods of reporting disease information, as each state has its own surveillance system. In order to improve approaches to monitoring health status as well as diagnosing and investigating health problems in border communities, the creation of a binational surveillance system is necessary to better serve the needs of the U.S.-México border, as it would afford public health authorities the relevant information needed to evaluate at a more regional level.

2.3 Background and Sociodemographic Profile

Early in its development and evolution, the border between the United States and México was considered an arid region not inhabitable or conducive to building desirable communities. The adjoining cities that were established recorded a steady and sustained population growth in the second half of the twentieth century that was above the national average. In 1950, the population of the region represented 15% of the total population of México. In 2000, that proportion grew to 17%. During this period, the population of the counties neighboring the United States grew more than six times, increasing from 934,000 inhabitants to 5.9 million people. During the same time period, Texas, New Mexico, Arizona, and California represented 13% of the total U.S. population. In 2000, this percentage grew to 21.6% (Pick, Viswanathan, & Hettrick, 2001). This greater percentage is due to an intense growth in population within these states. In 1954, the four border states had a population of a little over 19 million inhabitants, which by 2000 climbed to approximately 61 million people.

In México, 7.3 million residents were living in close proximity to U.S. border counties in 2010, representing close to 37% of the Mexican population. Area residents live in six neighboring states. This is due in part to cities experiencing substantial demographic growth in the last 30 years. The Mexican border cities with the largest population growth are Tijuana, Mexicali, Nogales, Ciudad Juárez, Piedras Negras, Nuevo Laredo, Reynosa, and Matamoros. Ciudad Juárez, Chihuahua, and Tijuana, Baja California,

stand out among these cities, as they are the largest urban centers in the region, each registering a population above 1 million inhabitants. As a result, both cities were credited in 2010 for amassing close to 40% of the total population of the Mexican border counties.

The demographic growth in Ciudad Juárez and Tijuana, as well as in other border cities in northern México, is most affected by the intense migratory flow coming from the southern part of the country, as migrants are invariably headed for the main urban centers in the region. Thriving economic development taking place in these cities drives this migratory phenomenon as well as a lack of opportunities in the more rural and poorer states in the country (Cohen & Sirkeci, 2011; Petros, 2006). Another determining factor in attracting this internal and international migratory flow to the region is the location of established border crossings for those seeking to cross into the United States.

On the U.S. side, slightly over 70 million people lived in the four border states in 2010. This represented 23% of the total population. In contrast to México, the two U.S. border cities that recorded a major proportion of the population were San Diego, California, which registered 1,307,402 inhabitants in 2010, and El Paso, Texas, which recorded 649,121 inhabitants. It's important to note, these cities are contiguous to the biggest cities on the Mexican side, Tijuana and Ciudad Juárez.

In addition to the dense population, the border region is the busiest and most traveled in the world characterized by an intensely mobile populace. Several million cars and trucks cross the 24 official ports of entry, millions in trade is conducted along the border each day, and several thousand manufacturing plants are located in this region. The implications for public health are the biggest challenges the Commission faces, particularly with regard to infectious diseases. The border region between the United States and México shares an epidemiological profile with some important differences, but the core health issues confronting the 10-state region includes cardiovascular disease, excessive weight, obesity, and diabetes. However, differences exist in other conditions such as deaths related to road traffic collisions, homicides, and TB among other causes of death.

Finally, environmental health along the shared border continues to challenge communities and affect both adults and children. A primary condition triggered by poor environmental conditions, air quality in particular, is asthma. Adult and childhood asthma episodes can be controlled and prevented with a combination of appropriate medical care and environmental improvements. Today, air pollution and asthma hospitalization present a substantial concern in border communities that are frequently exposed to elevated concentrations of particulate matter PM10 and PM2.5, ozone, toxic air pollutants, and indoor triggers. Emissions from electrical generation and other industrial sources, unpaved roads, diesel trucks, buses and cars (including those idling for long periods of time at ports-of-entry) are significant contributors to poor air quality along the border.

3. History of the Healthy Border Initiative

Healthy Border 2020 is based on the accomplishments of the last decade's initiative entitled *Healthy Border 2010: An Agenda for Improving Health on the United States-México Border* and the subsequent *Healthy Border 2010 Midterm Review: U.S. Border Area, México's Frontera Saludable 2010 Reporte de Medio Plaza: Frontera Norte de México*, and the Border Binational Technical Workgroup's exercise in identifying salient challenges along the U.S.-México border and subsequent root cause analysis.

The Healthy Border initiative was established as the Commission's binational agenda on health promotion and disease prevention in March 2001. This innovative and unique binational initiative draws from the framework of the United States' Healthy People 2010 initiative and México's *Indicadores de Resultado (National Health Indicators)*. The framework of Healthy Border 2010 was composed of 21 health objectives organized in 11 focus areas. The intent of Healthy Border was to provide border stakeholders with a framework for motivating and engaging a coordinated public health response at binational, state, and local levels.

Table 1: Healthy Border 2010 Objectives

Focus Area	United States	Status	México	Status
Access to Health Care	(1) Reduce the population lacking access to a primary care provider in underserved areas by 25%.		(1) Maintain the population lacking access to basic health services at fewer than 5%.	
Cancer	(2) Reduce female breast cancer death rate by 20%.		(2) Reduce female breast cancer death rate by 20%.	
	(3) Reduce cervical cancer death rate by 30%.		(3) Reduce cervical cancer death rate by 20%.	
Diabetes	(4) Reduce deaths due to diabetes by 10%.		(4) Reduce deaths due to diabetes by 10%.	
	(5) Reduce hospitalizations for diabetes by 25%.		(5) Keep hospitalization rate stable.	
Environmental Health	(6) Reduce to zero the proportion of households without complete bathroom facilities.		(6) Reduce the proportion of households not connected to compliant public sewage systems or septic tanks.	
	(7) Reduce the number of hospital admissions for acute pesticide poisoning by 25%.		(7) Maintain hospital admission rate for acute pesticide poisoning.	
HIV/AIDS	(8) Reduce the HIV+ incidence rate by 50%.		(8) Keep HIV+ incidence rate stable at current 3.1 per 100,000.	
Immunization & Infectious Disease	(9) Raise the immunization coverage rate for children 19–35 months to 90%.		(9) Maintain immunization coverage of 95% for children less than 1 year and 1–4.	
	(10) Reduce the hepatitis A incidence rate by 50%.		(10) Reduce incidence of all forms of hepatitis by 50%.	
	(11) Reduce the hepatitis B incidence rate by 50%.			
	(12) Reduce TB incidence rate by 50%.		(11) Reduce TB incidence rate by 10%.	
	(13) Reduce road traffic death rate by 25%.		(12) Reduce road traffic death rate by 20%.	

Injury Prevention	(14) Reduce childhood death rate due to unintentional injuries by 30%.	Yellow	(13) Reduce childhood death rate due to unintentional injuries by 50%.	Red
Maternal, Infant & Child Health	(15) Reduce infant mortality by 15%.	Yellow	(14) Reduce infant mortality rate by 50%.	Red
	(16) Reduce infant mortality from congenital abnormalities by 30%.	Red	(15) Reduce infant deaths from congenital abnormalities by 50%.	Red
	(17) Increase rate of mothers receiving first trimester prenatal care to 85%.	Green	(16) Increase percent of mothers receiving first and second trimesters prenatal care to 70%.	Yellow
	(18) Reduce pregnancy rate in adolescents (15–17 years old) by 33%.	Green	(17) Reduce pregnancy rate in adolescence 10–19 years old by 20%.	Red

Mental Health	(19) Reduce suicide mortality rate by 15%.	Red	(18) Reduce suicide mortality rate by 25%.	Red
Oral Health	(20) Increase proportion of population using oral health services to 75% per year.	Red	(19) Ensure that 25% of the population uses oral health services annually.	Yellow
Respiratory Diseases	(21) Reduce asthma hospitalization rate by 40%.	Red	(20) Maintain asthma hospitalization rate.	Yellow

Yellow=Objective moving toward the target Green=Closer to being met

Red=Objective not met Gray=No data

In the Commission report entitled *Progress toward the Healthy Border 2010 Goals and Objectives (A Joint Close-Out Report)*, the main objective was to assess progress toward Healthy Border 2010 targets. The U.S. and México data is presented using state level data, and, where available, documents data points and trends along the 2000 to 2010 year span (2000, 2005, and 2010). Multiple sources of information were accessed to

analyze and provide the reader with a profile of the health status of residents living on both sides of the U.S.-México border. Considerable information was extracted from México's National Institute of Statistics and Geography (*Instituto Nacional de Estadística, Geografía e Informática*), among other sources related to México. Data sources such as the Behavioral Risk Factor Surveillance System (BRFSS), state hospital admissions data, hospital discharge data, and many other state level sources were used for the U.S. side.

Both the U.S. and México border states observed some gains in health indicators in the last decade. In the United States, progress toward the 2010 goals have been observed in HIV, hepatitis A and B, TB, and deaths from road traffic collisions (BHC, in press).

México has seen improvements in prenatal care, diabetes, teen pregnancy, and breast cancer. Breast cancer, for example, has not yet met its target, but the trend is moving in a positive direction in México's northern states.

All border states have reduced the incidence of hepatitis A by 50%. Texas has seen the greatest gains with an 85% reduction in incidence. In 2000, México reported a high incidence of hepatitis A in Sonora (33.8 cases per 100,000 persons), and Chihuahua reported high rates of hepatitis B. Baja California, on the other hand, reported high rates of hepatitis C. By 2010, a significant decrease in the incidence of hepatitis A and hepatitis B were documented, while hepatitis C continued to increase across all Mexican border states.

Overall, México reported greater gains in meeting their objectives between 2000 and 2010 compared to the U.S. border states. Table 1 provides a quick snapshot on the status of each objective. A full report on the progress toward achieving Healthy Border 2010 objectives is available on the BHC website at www.borderhealth.org.

4. Development of Healthy Border 2020

The development of Healthy Border 2020 was a binational five-phased/five-year effort and guided by the U.S.-México Border Health Commission's *Healthy Border 2010/2020 Strategic Framework* (BHC, 2010). The development of this initiative reflects the work of a diverse group of individuals and organizations convened to serve

as a Border Binational Technical Workgroup and tasked to develop the bilateral strategic plan, which will be disseminated to the border stakeholders and general public for comment using various venues and technologies.

The mission and goals of Healthy Border 2020 will serve to afford U.S.-México border stakeholders and the general public the context and recommendations for addressing and attaining the 2020 objectives. The primary objective of Healthy Border 2020 is to provide a framework to present the public health objectives and actions required to achieve the goals relating to improving health on both sides of the border. As for the mission, Healthy Border 2020 endeavors to align with the overarching mission of the U.S.-México Border Health Commission, which is to provide international leadership to optimize health and quality of life along the U.S.-México border.

Healthy Border 2020 will provide goals and objectives that are measurable, binationally relevant, and bring together key regional partners to make every effort to develop and support policy change and interventions that are evidenced-based and in the context of social factors that impact health in the region. Additionally, this initiative will endeavor to increase awareness of these priorities and develop a better understanding of the social determinants of health; identify opportunities for binational cooperation and collaboration; and advance health promotion strategies to address disease and disability.

4.1 U.S.-México Border Binational Technical Workgroup

The process for selecting Binational Technical Workgroup members relied significantly on recommendations from BHC members, border health office directors, and federal partners. Specifically, the composition of the Binational Technical Workgroup included individuals recommended by their respective states on the U.S. side and included border epidemiologists, in some cases, and directors of Vital Statistics from other states. Other participants and active members of this group involved the Centers for Disease Control and Prevention (CDC) BRFSS director; CDC's Maternal and Child Health border liaison, assigned to the Commission's U.S. Section central office in El Paso, Texas; a representative from the Pan American Health Organization's Field Office in El Paso; and

the CDC Border Infectious Disease Surveillance (BIDS) director based in San Diego, California.

The Mexican members of the Binational Technical Workgroup included the border states represented by the director of Epidemiology from the states of Sonora and Baja California as well as Ministry of Health representatives from various departments at the federal level including HIV/AIDS/STD's, Maternal and Child Health, TB, and Health Promotion Programs. Members provided expertise in epidemiology, health promotion and disease prevention, program planning, and evaluation.

4.2 Development Process

In order to understand and identify challenges in health and related social determinants in the four U.S. and six Mexican border states, the Binational Technical Workgroup engaged in a root cause analysis process, spearheaded and facilitated by the director of Determinants, Competencies, and Social Participation from the Mexican Ministry of Health. The exercise initiated the discussion with the following basic question, "What are the health challenges at the border given the experience and evaluation of Healthy Border 2010 and the changes in health status noted over the last 10 years?" Well received by the Binational Technical Workgroup, the team immediately noted the following issues as very salient: obesity; diabetes; heart disease; asthma; TB; HIV and STIs; acute respiratory infections; acute diarrheal diseases, more so on the Mexican side; reemergence of vaccine preventable diseases such as whooping cough, measles, and hepatitis B; teen pregnancy; neural tube defects; maternal mortality; addictions; depression; and violence of all forms.

The Binational Technical Workgroup subsequently identified the following causes and/or social determinants of each problem as outlined and summarized in Table 2 below:

- *Chronic and Degenerative Disease:* Physical inactivity; poor diet, i.e., high calorie; poverty; Genetics, i.e., non-modifiable determinants; and lack of breastfeeding education and access to information.

- *Infectious Disease*: Poor diet and poor nutrition; migration; poor hygiene, i.e., personal, housing; environmental health, i.e., water, sewer; access to information and education; and access to health.
- *Maternal and Child Health*: Access to and quality of medical care; prenatal/postpartum information and education; poverty; unnecessary cesarean procedures and quality of care; personal hygiene; pre-pregnancy health; and lack of counseling and education.
- *Mental Health and Addiction*: Poverty; genetics/biological family dysfunction of all types; addictions; disability; lack of social support and education information.
- *Injury Prevention*: Addictions; education and information, i.e., seat belt use, use of child carriers; lack of infrastructure; alcohol and other substance abuse.

Table 2: Summary of Root Cause Analysis

What are the health problems at the border?	Categories	Causes and/or determinants
<ul style="list-style-type: none"> ▪ Obesity ▪ Diabetes ▪ Heart disease ▪ Asthma 	Chronic & Degenerative Disease	<ul style="list-style-type: none"> ▪ Physical inactivity ▪ Poor diet (high caloric intake) ▪ Poverty ▪ Genes (non modifiable determinants) ▪ Lack of breastfeeding ▪ Education/access to information
<ul style="list-style-type: none"> ▪ Tuberculosis ▪ HIV/AIDS/STIs ▪ Acute respiratory infections ▪ Acute diarrheal disease ▪ Vaccine preventable diseases (pertussis, measles, and hepatitis B) 	Infectious Disease	<ul style="list-style-type: none"> ▪ Poverty ▪ Inadequate nutrition/poor nutrition ▪ Internal/external migration ▪ Poor living conditions/poor hygiene (personal, housing) ▪ Environmental health (water, sewer services) ▪ Access to Health Education/information ▪ Access to health care and delivery

<ul style="list-style-type: none"> ▪ Teen pregnancy ▪ Neural tube defects ▪ Maternal mortality 	<p style="text-align: center;">Maternal & Child Health</p>	<ul style="list-style-type: none"> ▪ Access and quality of medical care ▪ Education/information on prenatal and postpartum care ▪ Poverty ▪ Unnecessary Cesarean section/quality of care ▪ Personal hygiene ▪ Prenatal care ▪ Lack of health education/counseling
<ul style="list-style-type: none"> ▪ Addiction ▪ Depression ▪ Violence (all types) 	<p style="text-align: center;">Mental Health Disorders</p>	<ul style="list-style-type: none"> ▪ Poverty ▪ Genetic/biological ▪ Family dysfunction ▪ Addiction ▪ Disability ▪ Lack of social support ▪ Education/information
<ul style="list-style-type: none"> ▪ Increase urgent care services ▪ Disability ▪ Mortality ▪ Mental Health 	<p style="text-align: center;">Injury Prevention</p>	<ul style="list-style-type: none"> ▪ Education/information (seat belt use/child car seats) ▪ Built environment/lack of infrastructure ▪ Alcohol use and abuse ▪ Other substance abuse

In summary, the most common causes and/or social determinants identified included poverty, health education/access to information, and an unhealthy diet, followed in frequency by access and quality of medical care.

4.3 Public Comment Process

Public input was sought throughout the development process to ensure that Healthy Border 2020 reflected the needs and priorities of all border residents. Public comment was received during—

- Public comment sessions conducted via the BHC U.S. and México Section websites
- Commission meetings, at which time the Binational Technical Workgroup presented progress on an annual basis and multiple times during the year

- Border Health Research Forum and Expert Panel meetings
- A series of community forums convened along the U.S.-México border

During one of many sessions of the Binational Technical Workgroup, representatives from the U.S. Environmental Protection Agency (EPA) and México's Secretariat for the Environment and Natural Resources (SEMARNAT) proposed the Commission identify opportunities to complement efforts of the EPA and SEMARNAT through the Border 2020: U.S.-México Environmental Program (EPA, 2012). As such, the Commission is committed to collaborating with EPA and SEMARNAT to identify and support future environmental health objectives that complement mutual goals and objectives of the Border 2020 Environmental and Healthy Border 2020 Programs.

5. Summary of Progress - Healthy Border 2020 Development

The Binational Technical Workgroup reduced the focus areas from the 11 adopted for the Healthy Border 2010 initiative to the following five topic areas: chronic and degenerative diseases, infectious diseases, maternal and child health, substance abuse and mental health conditions, and injuries. The following tables present the priority topic area, specific health condition, objectives, and measurable indicators for the entire U.S.-México border region. Related to each of these overarching categories, the Binational Technical Workgroup outlined recommended strategies and specific actions. In addition, the workgroup suggested that potential collaborators for this initiative may include the U.S. Department of Health and Human Services; the Ministry of Health of México; the state and county health departments; academic institutions on both sides of the border; private sector, non-governmental health organizations; and the U.S.-México Border Health Commission, among others.

Table 3: Chronic and Degenerative Disease

PRIORITY	HEALTH ISSUE	OBJECTIVES	STRATEGIES
Chronic & Degenerative Disease		<p>Obesity</p> <ul style="list-style-type: none"> • Increase fruit and vegetable intake (baseline-BRFSS 2011, ENSANUT 2012) • Increase physical activity (baseline-BRFSS 2011, ENSANUT 20102) • Increase breastfeeding (baseline 2011-PRAMS, birth certificates; ENSANUT 2006, 2012) • BMI for women of reproductive age (20 years and older); ENSANUT • BMI for older adults-age adjusted • Oversampling of proposed border BRFSS in two consecutive years 	<p>Establish/advance health promotion and disease prevention activities and promote health lifestyles.</p> <p>Integrate BHC activities with national and state prevention programs that promote healthy lifestyles.</p> <p>Identify and implement evidenced-based interventions that promote healthy lifestyles, such as <i>Pasos Adelante, Meta Salud,</i> and <i>Cinco Pasos.</i></p>
	• Obesity		http://www.implementationscience.com/content/8/1/141
	• Diabetes	<p>Diabetes</p> <ul style="list-style-type: none"> • Maintain mortality rate (2011 baseline) 	http://www.cdc.gov/pcd/issues/2012/11_0324.htm
	• Heart disease	<ul style="list-style-type: none"> • Improve screening in people 20 years of age and older by 10% (2011 baseline) 	http://www.preventioninstitute.org/services/trainings-and-presentations.html?gclid=CKDI2MbSu70CFsDn7Aod1WsAQw
	• Asthma	<ul style="list-style-type: none"> • 50% of patients receive diabetes treatment controlled within normal limits as measured by A1C 	
	• Cancer	<ul style="list-style-type: none"> • Reduce the proportion of diabetic adults with A1C >9% (NHANES) 	http://www.sep.gob.mx/swb/sep1/salud_alimentaria
		<p>Heart Disease</p> <ul style="list-style-type: none"> • Maintain mortality rate to 2011 baseline • Undergoing blood pressure management via medication (BRFSS or NHANES-U.S.; at least 50% of patients undergoing high blood pressure management that are able to control at < 140/90mmhg-MX) 	http://www.spps.gob.mx/
		<p>Cervical Cancer</p> <ul style="list-style-type: none"> • Decrease the mortality in women 25 	http://promocion.salud.gob.mx/dgps/descargas1/estrategia/Estrategia_con_portada.pdf
			http://www.cnegsr.gob.mx/programas/cancer-mama.html
			http://www.cnegsr.gob.mx/programas/cancer-cervico-uterino.html

	<p>years and older by 20%</p> <ul style="list-style-type: none"> • Maintain screening for women 25–64 years (MX) at 80% • Screen for women 21 years and older • Maintain the coverage of HPV vaccinations for girls 9–11 years at 90% <p>Breast Cancer</p> <ul style="list-style-type: none"> • Maintain mortality rate (2011 baseline) • Improve screening by 10% in women 40 years of age and older (2011 baseline) <p>Asthma</p> <p>Reduce asthma hospitalization rates by 25%</p>	<p>http://www.cenaprece.salud.gob.mx/</p> <p>Improve air quality in binational air sheds and reduce asthma triggers in homes, schools, and childcare centers.</p>
--	--	--

Infectious Disease

PRIORITY	HEALTH ISSUE	OBJECTIVES	STRATEGIES
<i>Infectious Disease</i>	<ul style="list-style-type: none"> • Tuberculosis • HIV/AIDS/STI's • Acute respiratory infections • Acute diarrheal disease • Vaccine preventable diseases (pertussis, measles, and hepatitis B) 	<p>Tuberculosis</p> <ul style="list-style-type: none"> • Assist with defined strategies to decrease the incidence of pulmonary TB in 1% annually (2011 baseline) • Reduce the incidence of pulmonary TB (PTB) by 1% annually to 2011 baseline • Support strategies to achieve and maintain an 85% cure rate of PTB cases that initiate treatment • Provide leadership, venue, focus for discussion <p>HIV-PTB</p> <ul style="list-style-type: none"> • Reduce HIV incidence by 1% to 2011 baseline • Screen for HIV diagnosis in patients with pulmonary TB and vice versa; screen for pulmonary TB in patients with HIV for new cases (new 	<p>Promote prevention and advocacy for HIV/AIDS and TBP, treatment adherence, and safer sex practices.</p> <p>Develop a policy proposal that focuses on prevention and care of HIV/AIDS and TBP.</p> <p>http://www.thecommunityguide.org/worksites/index.html</p> <p>http://www.healthypeople.gov/2020/topicsobjectives2020/ebr.aspx?topicid=37</p> <p>http://www.healthypeople.gov/2020/topicsobjectives2020/ebr.aspx?topicid=11</p>

diagnosis)

- Support the detection and reference of returning migrants with HIV/AIDS
- Align BHC actions with national and state programs aimed at HIV/AIDS and PTB prevention and care
- Develop a policy proposal focused on HIV/AIDS and TBP prevention and care

http://www.censida.salud.gob.mx/descargas/biblioteca/guia_enf_09.pdf

Gonorrhea

Decrease gonorrhea rates among 15–44 year olds by 10%

Congenital Syphilis

- Perform the VDRL test for 100% of pregnant women receiving medical services
- Reduce the congenital syphilis rate by 10% per 100,000 live births (CDC)
- Provide leadership, venue, focus for discussion

Hepatitis

- Decrease hepatitis A incidence by 10% U.S. and 1% MX (2011 baseline)
- Decrease hepatitis B incidence by 10% U.S. and 1% MX (2011 baseline)
- Promote binational reporting of select infectious disease cases
- Educate healthcare providers on current treatment guidelines for communicable diseases
- Facilitate access to recommended immunizations for underserved populations
- Educate the public on signs/symptoms and prevention strategies for common communicable diseases

Maternal and Child Health

PRIORITY	HEALTH ISSUE	OBJECTIVES	STRATEGIES
<i>Maternal & Child Health</i>		<p>Teen pregnancy</p> <ul style="list-style-type: none"> • Provide emergency obstetric care services 24 hours, 365 days • Maintain maternal mortality rate (2011 baseline) • Maintain pregnancy-related deaths • Reduce the number of pregnancies in 15–19 year old teenagers • Increase teen pregnancy prevention through adolescent/adult communication programs that can improve reproductive health dialogue • Increase access to prenatal vitamins and supplements • Increase access to prenatal care including appropriate screenings especially in rural areas 	<p>Encourage healthy lifestyles by conducting gender specific health promotion strategies.</p> <p>Ensure availability of both human and material resources.</p> <p>Promote binational training.</p> <p>Promote the use of evidence-based or best practices for all interventions.</p>
	• Teen pregnancy	<ul style="list-style-type: none"> • Develop community-wide campaigns to increase awareness of the benefits of receiving health care in early pregnancy 	<p>http://www.hhs.gov/ash/oah/oah-initiatives/teen_pregnancy/db/programs.html</p>
	• Neural tube defects	<ul style="list-style-type: none"> • Encourage the development of healthy behaviors in women of reproductive age 	<p>http://www.guideline.gov/content.aspx?id=14443</p>
	• Maternal mortality	<ul style="list-style-type: none"> • Expand family planning programs, including provision of confidential services to female and male teens • Expand comprehensive sexual education programs <p>Neural Tube Defects</p> <ul style="list-style-type: none"> • Study risk factors involved in the occurrence of these diseases • Develop community-wide campaigns to increase use of supplements/foods containing folic acid. • Increase access to prenatal vitamins and supplements • Encourage healthy eating, including the consumption of foods rich in folic acid and vitamin B12 	<p>http://www.mchip.net/node/28</p> <p>http://www.uptodate.com/contents/approaches-to-reduction-of-maternal-mortality-in-resource-limited-settings</p> <p>http://www.cnegsr.gob.mx/programas/salud-materna-perinatal.html</p>

Maternal Mortality

- Decrease mortality based on national baseline ratio in border counties
- Strengthen the epidemiological surveillance system for maternal mortality
- Increase access to prenatal care including appropriate screenings, especially in rural areas
- Develop community-wide campaigns to increase awareness of the benefits of receiving health care in early pregnancy
- Encourage development of healthy behaviors in women of reproductive age

Mental Health: Addiction

PRIORITY	HEALTH ISSUE	OBJECTIVES	STRATEGIES
<i>Addiction</i>	Addiction	<ul style="list-style-type: none"> • Reduce the prevalence of first-time illegal drug use in the 12–17 year old population by 10%. • Reduce illicit drug use 	<ul style="list-style-type: none"> • Increase access to services. • Train service providers. • Educate general public to reduce consumption of legal and illicit drugs <p>http://www.healthypeople.gov/2020/topic/objectives2020/abr.aspx?topicId=11</p> <p>http://www.cenadic.salud.gob.mx/</p>

Mental Health: Depression & Violence (All Types)

PRIORITY	HEALTH ISSUE	OBJECTIVES	STRATEGIES
<i>Mental Health</i>	<ul style="list-style-type: none"> • Depression • Violence (all types) 	<p>Depression</p> <p>Maintain or reduce prevalence of depression baseline 2011 (U.S. only)</p> <p>Violence</p> <p>Increase medical and psychological care provided to victims of severe family violence by 10%</p>	<ul style="list-style-type: none"> • Provide or increase access to services. • Train to service providers. • Educate general public to reduce consumption of legal and illicit drugs <p>http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=343</p> <p>http://www.consame.salud.gob.mx/</p>

Injury Prevention

PRIORITY	HEALTH ISSUE	OBJECTIVES	STRATEGIES
<i>Injury Prevention</i>	<ul style="list-style-type: none"> • Increased urgent care services • Disability • Mortality • Mental Health 	<p>Mortality & Road Traffic Injuries</p> <ul style="list-style-type: none"> • Reduce unintentional injury deaths • Increase seat belt use • Reduce mortality rate of road traffic injuries per 1,000 residents • Reduce road traffic-related deaths per 100,000 populations • Reduce alcohol consumption • Reduce disabilities caused by road traffic injuries (U.S. only) • Reduce hospitalizations for nonfatal injuries • Reduce hospitalizations for nonfatal traumatic brain injuries 	<ul style="list-style-type: none"> • Enforce seat belt laws. When used, seat belts have been found to reduce the risk of serious and fatal injury by between 40–65%. • Ensure children are safely and properly restrained when in a vehicle. • Ensure all child safety seats meet industry standards. México could feasibly adopt Canadian, European, or U.S. child car seat standards. <p>http://www.astho.org/Prevention/Preventing-Firearm-Injury-and-Death/Evidence-Based-Strategies-and-Public-Health-Approaches/</p>

6. Specific actions of the Commission

The Binational Technical Workgroup offers recommended actions that the Commission can undertake in line with its mission and in collaboration with multiple community-based stakeholders. Such recommended actions can be incorporated into existing initiatives that address such areas as health promotion and disease prevention, research, education and training, and activities related to Border Binational Health Week and other borderwide prevention campaigns. The following section outlines the recommended actions by topic area.

Chronic and Degenerative Disease

- Undertake training of multidisciplinary workgroups to define necessary mechanisms that tie BHC activities together with programs managed by local and state public health authorities.

- Conduct health promotion strategies that embrace a gender perspective to promote healthy lifestyles.
- Increase knowledge of data sources and data collection procedures among and across the 10 U.S.-México border states.
- Provide human and material resources.
- Provide continuing education and training for public health, healthcare, and allied personnel.
- Promote binational training sessions.
- Adopt and adapt best practices and promising intervention models such as *Pasos Adelante*, *Tu Corazon Tu Vida*, and *Meta Salud*.
- Coordinate and/or improve binational communication between border states, i.e., surveillance and monitoring.
- Promote use of evidence-based best practices and promising practices.
- Implement activities to promote healthy lifestyles and prevention as part of BHC outreach office work plans.
- Integrate and coordinate BHC activities with programs driven by public health authorities.
- Conduct activities to promote health in the community and social mobilization to promote timely demand for medical care.
- Monitor binational case registries for timely follow up.
- Evaluate health indicators in collaboration with the public health authorities along the 10 border states.
- Implement outreach activities that raise awareness and promote comprehensive asthma care and management of indoor and outdoor environmental asthma triggers, including home visits and training for healthcare providers.

- Provide training to public health and healthcare providers as well as the general public.
- Implement strategies that reduce poor air quality impacts in binational air sheds.

Infectious Disease

- Undertake training of multidisciplinary workgroups to define necessary mechanisms to tie BHC activities together with programs managed by local and state public health authorities.
- Promote prevention activities such as screenings for early detection of HIV/AIDS, TB, treatment adherence, and safe sex practices.
- Organize community-based health promotion and prevention activities in collaboration with local stakeholders.
- Provide surveillance monitoring for timely follow up of reported binational cases.
- Provide continuing education and training for public health and healthcare personnel.
- Periodically evaluate health indicators in collaboration with the public health authorities within the 10 border states.
- Assess community health including HIV/AIDS and TB.
- Organize and plan a biennial forum on infectious diseases.

Maternal and Child Health

- Promote maternal, child, and adolescent health activities.
- Organize, plan, and implement activities to promote early detection of high-risk pregnancies as part of BHC outreach office work plans.
- Promote interventions that are evidence-based best and promising practices.
- Plan, organize, and promote community-based health promotion and teen pregnancy prevention activities.

Mental Health

- Undertake training of multidisciplinary workgroups to define necessary mechanisms to tie BHC activities together with programs managed by local and state public health authorities
- Plan, organize, and implement health promotion and prevention activities related to addiction/substance use and abuse.
- Promote and organize prevention screenings for depression, addiction, and family violence.
- Provide continuing education and training to public health and healthcare personnel at both the health district and county levels.
- Evaluate quarterly indicators in collaboration with public health authorities and other stakeholders of the border region.

Injury Prevention

- Undertake training of multidisciplinary workgroups to define necessary mechanisms to tie BHC activities together with programs managed by local and state public health authorities.
- Plan, organize, and implement alcohol use such as checkpoint campaigns.
- Promote road improvements such as *Safe Roads/Carreteras Seguras*.
- Reinforce seat belt use in adults and the use of child safety car seats.
- Provide health education on substance use and abuse.
- Adopt and adapt coalition development models such as *Mothers Against Drunk Driving*.
- Adopt and adapt the U.S.-México *Safe Kids* model across the border region.

7. Measuring Impact

Within the context of the Commission's strategic principles—*Leadership, Focus, Venue*—the following list identifies indicators and areas associated with measuring the Commission's impact towards achieving Healthy Border 2020 objectives:

Chronic and Degenerative Disease

- Number of activities promoting healthy lifestyles and disease prevention documented by BHC outreach office work plans.
- Number of binational meetings related to capacity building and information exchange.
- Number of referrals confirming cases of breast and cervical cancer.

Infectious Disease

- Number of health promotion and detection screenings of HIV/AIDS and TB, treatment adherence, and safe sex practices.
- Number of training and education sessions provided to public health and healthcare personnel and the general public in the border region.

Maternal and Child Health

- Number of health promotion and prevention activities related to teenage and high-risk pregnancies documented by BHC outreach office work plans.
- The percentage of activities organized and coordinated through the Commission and outreach offices in collaboration with state and local public health authorities.

Mental Health

- Number of health promotion and prevention activities related to addiction, substance use and abuse, depression, and family violence.

- Number of continuing education and training opportunities provided to public health and healthcare personnel at both the health district and county levels.

Injury Prevention

- Number of health promotion and prevention activities related to addictions and substance use and abuse.
- Number of preventive measures, campaigns, etc., aimed at promoting injury prevention or the prevention of deaths related to road traffic collisions.

8. Monitoring and Evaluation

One of the greatest challenges for the Healthy Border initiative is having the necessary tools to truly integrate, monitor, and evaluate the 2020 goals and objectives using common survey instruments and sound statistical approaches in a binational fashion. A proposed plan for evaluating and monitoring the Healthy Border 2020 objectives should primarily focus on the following:

- Commit resources for creating a binational surveillance *Public Health Observatory (Observatory)* that maintains a dedicated binational technical workgroup tasked with developing a survey instrument designed to measure the primary social determinants related to Healthy Border 2020 priorities.
- Within this Observatory, create a *Geographic Information System* designed to spatially analyze morbidity and mortality trends within the U.S.-México border.

The proposed Observatory would constitute a network of binational and cross-border institutions established to build a basis for measuring and monitoring health status. The basic task of the Observatory would be to collect and process data as well as conduct statistical transformation. The results would become the foundation for recommending policy. In the context of any research project, getting the right data is always a complicated assignment, but it is even more of a challenge when the purpose is to create comparative indicators in the context of the U.S.-México border. Additionally, availability of data is limited in the region and the conceptual and operational

definitions of the few data available tend to be different because of national differences in the systems created to produce social, demographic, and health-related statistics.

The survey and the proposed Observatory will allow for a common set of indicators, generating timely information and facilitating the tracking of mortality, morbidity, and the social factors that impact health status. The outcome of this effort will serve as a valuable resource for border stakeholders, decision makers, and the general public, giving them the ability to focus public health actions and develop policies based on up-to-date information. This endeavor will further enable and empower decision makers and other stakeholders to meet the goals outlined in Healthy Border 2020, thereby identifying and reducing health disparities and improving the quality of life of residents living and working along the U.S.-México border.

Moreover, the Observatory will equally provide Commission members and allied professionals the tools critical to the success of developing meaningful work plans, and will subsequently implement actions directed at facilitating, managing, and coordinating disease prevention and health promotion initiatives and provide the border workforce continuing education, training opportunities, and research support that can only contribute to achieving the proposed Healthy Border 2020 objectives.

9. Final Observations

With the publication of this document, the U.S.-México Border Health Commission marks another important milestone for its Healthy Border program. The first milestone was published in 2003 and titled *Healthy Border 2010: An Agenda for Improving Health on the United States-México Border*; a second milestone was the *Healthy Border 2010 Midterm Review: U.S. Border Area* published in 2009, then an evaluation of the Healthy Border 2010 objectives titled *Progress toward the Healthy Border 2010 Goals and Objectives (Joint Closeout Report)*, and, finally, the current document *Healthy Border 2020: A Prevention & Health Promotion Initiative*.

While border initiatives using public health-based conceptual frameworks are becoming more common around the globe, this U.S.-México border initiative is unique to the western hemisphere. It speaks to the collaborative efforts between two countries, 10

border states, several distinct cultures, and multiple indigenous populations and languages. The present collection of health indicators will assist governmental, non-governmental, academic, private sector, stakeholders among many others in prioritizing health issues in the design and implementation of programs that address salient health challenges pervasive along the border state region.

The baseline data and targets will assist the many stakeholders in tracking outcomes, evaluating programs, and seeking resources from the various public and private funding entities to address these challenges. In summary, the Healthy Border objectives will help focus health promotion and prevention activities on both sides of the border; influence and guide allocation of health resources; influence policy efforts; promote binational health programming; and cultivate communication, cooperation, and collaboration.

10. References

- Alegria, T. (2000). Juntos pero no revueltos: Ciudades en la frontera México-Estados Unidos. *Revista Mexicana de Sociología*, 62(2), 89–107.
- Bustamante, J. A. (2012). El estudio de la zona fronteriza México-Estados Unidos. Ciudad de México, DF, México: El Colegio de México.
- Cohen, J. H., & Sirkeci, I. (2011). *Cultures of migration: The global nature of contemporary mobility*. Austin, TX: University of Texas Press.
- Coubés, M. L. (2000). Demografía fronteriza: Cambio en las perspectivas de análisis de la población de la frontera México-Estados Unidos. *Revista Mexicana de Sociología*, 62(2), 109–123.
- Lorey, D. E. (1991). El surgimiento de la región fronteriza entre Estados Unidos y México en el siglo XX. *Revista Mexicana de Sociología*, 53(3), 305–347.
- Pan American Health Organization. (2014). Introduction. In *United States-Mexico Border Area*. Retrieved from http://www.paho.org/saludenlasamericas/index.php?option=com_content&view=article&id=63&Itemid=63&lang=en
- Petros, K. (2006). *Motherhood, mobility and the maquiladora in Mexico: Women's migration from Veracruz to Reynosa*. Unpublished manuscript, Center for Latin American Social Policy, Lozano Long Institute of Latin American Studies, The University of Texas at Austin.
- Pick, J. B., Viswanathan, N., & Hettrick, J. (2001). The U.S.-Mexican borderlands region: A binational spatial analysis. *The Social Science Journal*, 38(4), 567–595.
- Rangel, G., & González, R. (2006). Situación de la salud en la frontera norte de México. In G. Ordóñez Barba & M. Reyes (Eds.), *Los retos de la política social en la frontera norte de México* (pp. 181-211). Tijuana, México: El Colegio de la Frontera Norte.
- U.S. Environmental Protection Agency. (2012). Border 2020 program summary and factsheet. In *U.S.–Mexico Border 2020 Program*. Retrieved from <http://www2.epa.gov/border2020/border-2020-program-summary-and-factsheet>

- U.S.-México Border Health Commission. (2003). *Healthy border 2010: An agenda for improving health on the United States-Mexico border*. http://www.borderhealth.org/files/res_63.pdf
- U.S.-México Border Health Commission. (2009). *Healthy border 2010: Midterm review, U.S. border area*. Retrieved from http://www.borderhealth.org/files/res_1815.pdf
- U.S.-México Border Health Commission. (2010). *Frontera saludable 2010 reporte de medio plazo: Frontera norte de México*. Retrieved from http://www.borderhealth.org/files/res_1637.pdf
- U.S.-México Border Health Commission. (2011). *Healthy border 2010/2020: Strategic framework report*. Retrieved from http://www.borderhealth.org/files/res_1728.pdf
- U.S.-México Border Health Commission. (in press). *Progress toward the healthy border/frontera saludable 2010: Goals and objectives (a joint close-out report)*. El Paso, TX: Author.

11. Acknowledgements

The U.S.-México Border Health Commission recognizes the work of the Binational Technical Workgroup for its assistance in planning, analysis, and distribution of this publication. Special thanks to Professor Armando Rosas Solis for his contribution to the introduction and context of the U.S.-México border region.

Border Binational Technical Workgroup

U.S. Members

Texas Department of State Health

Services: Allison Banicki, Michelle Cook, and Jennifer Haussler Garing

New Mexico Department of Health

Services: Vicky Howell, Larry Nielsen, and David Selvage

Arizona Department of Health Services:

Will Humble, Khaleel Hussaini, Robert Guerrero, Christine Cervantez, and Guadalupe Villaescusa

California Department of Public Health/Public Health Institute: Marta Induni

Centers for Disease Control and Prevention: Jill McDonald, Lina Balluz, and Stephen Waterman

Pan American Health Organization, U.S.-Mexico Border Office: Maria Teresa Cerqueira and Marcelo Korc

U.S.-México Border Health Commission: Lorraine Navarrete, U.S. Section Central Office

University of Arizona Mel & Enid Zuckerman College of Public: Cecilia Rosales

Comisión de Salud Fronteriza México-

Estados Unidos: Gudelia Rangel Gómez, Secretaria Ejecutiva; Rogelio Zapata Garibay, Director de Frontera Saludable; Gabriela Escalante, Oficina de Alcance en Baja California; Irma Ortiz Soto, Oficina de Alcance en Baja California; Mercedes Gameros Mercado, Oficina de Alcance en Baja California; Javier Baena Rodríguez, Oficina de Alcance en Sonora

Secretaría de Salud Pública de Sonora:

Francisco Navarro Gálvez

Secretaria de Salud:

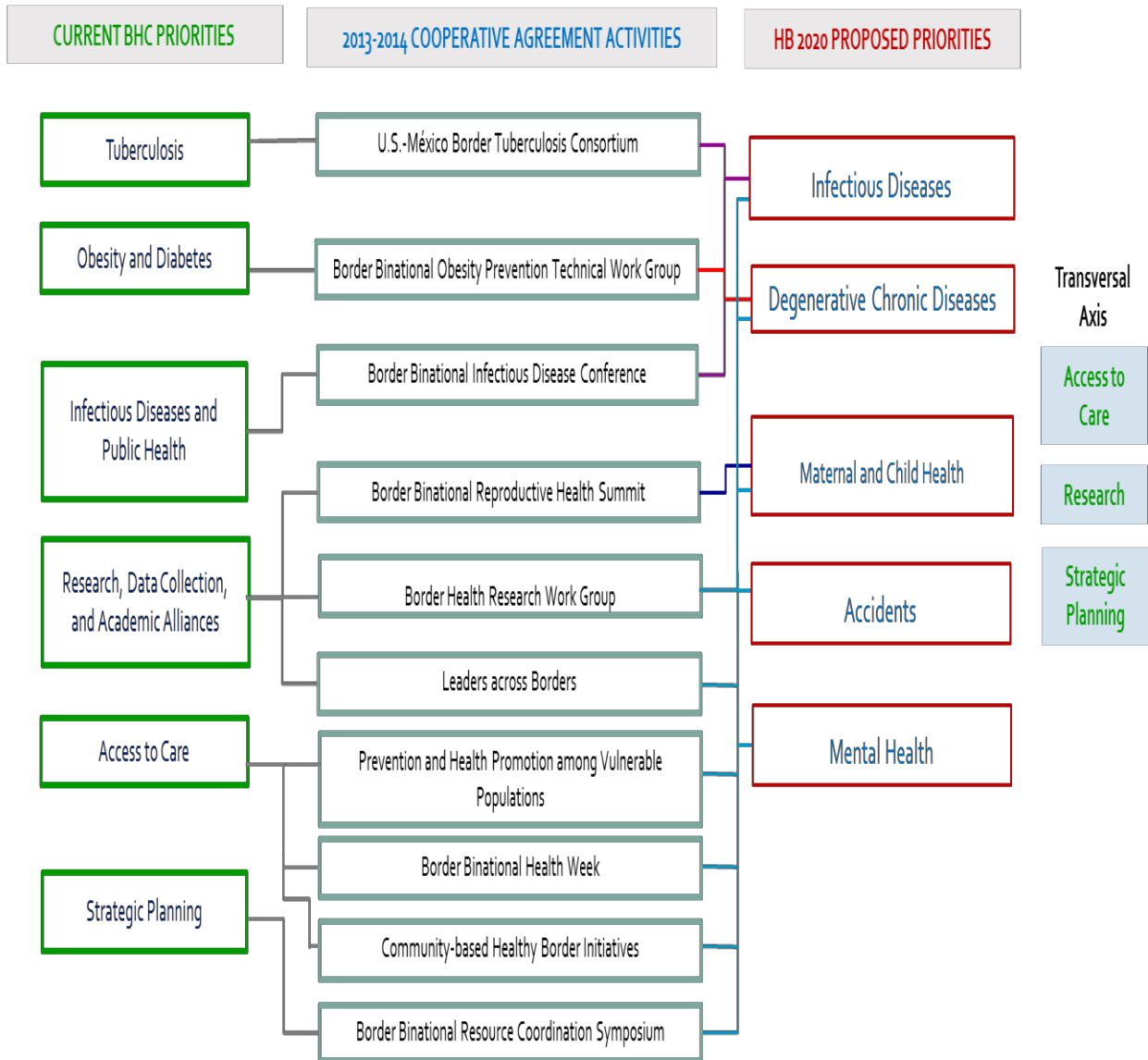
Gabriela Ortiz Solís, Centro Nacional de Programas Preventivos y Control de Enfermedades; Héctor Sucilla, Centro Nacional para la Prevención y el Control del VIH/SIDA; Jorge Alfredo Ochoa Moreno, Director de Determinantes, Competencias y Participación Social; Mario Gómez Zepeda, Centro Nacional Equidad de Género y Salud Reproductiva; Martha Angélica García, Centro Nacional Programas Preventivos y Control de Enfermedades; Laura Rangel Hernández, Salud del Migrante

Consultores: Eduardo González Fagoaga y Ana María López Jaramillo

México Members

12. Appendix

Healthy Border 2010-2020



Healthy Border 2020 Binational Agenda

Priorities	Health Issues	Binational Activities 2013-2014	
Degenerative Chronic Diseases	<ul style="list-style-type: none"> ▪ Obesity ▪ Diabetes ▪ Heart disease ▪ Asthma ▪ Cancer 	<ul style="list-style-type: none"> ▪ Border Binational Obesity Prevention Technical Work Group 	<ul style="list-style-type: none"> ▪ Border Health Research Work Group ▪ Leaders across Borders ▪ Community-based Healthy Border Initiatives ▪ Prevention and Health Promotion among Vulnerable Populations ▪ Border Binational Health Week ▪ Border Binational Resource Coordination Symposium
Infectious Diseases	<ul style="list-style-type: none"> ▪ Tuberculosis ▪ HIV/AIDS/STI's ▪ Acute respiratory infections ▪ Acute diarrheal disease ▪ Vaccine preventable diseases (pertussis, measles & hepatitis B) 	<ul style="list-style-type: none"> ▪ U.S.-México TB Consortium ▪ Border Binational Infectious Disease Conference 	
Maternal Child Health	<ul style="list-style-type: none"> ▪ Teen pregnancy ▪ Neural tube defects ▪ Maternal mortality 	<ul style="list-style-type: none"> ▪ Border Binational Reproductive Health Summit 	
Accidents	<ul style="list-style-type: none"> ▪ Increase urgent care services ▪ Disability ▪ Mortality ▪ Mental Health 		
Mental Health	<ul style="list-style-type: none"> ▪ Addiction ▪ Depression ▪ Violence (all types) 		

