Public Health Challenges in the U.S.-Mexico Border Region

Paul Dulin, Director
Office of Border Health
1170 N. Solano Dr., Suite L
LAS CRUCES NM 88001

TEL: (575) 528-5154
FAX: (575) 528-6045
CELL: (575) 642-0321
NET: paul.dulin@state.nm.us
NM-Chihuahua Binational Border Region
About 25% of US and 18% of Mexico live in the 10 US-MX Border States (2010)

- US (300 million)
- MX (110 million)
- US Border States (69 million)
- MX Border States (19 million)
- US border cities (7 million)
- MX border cities (7 million)

Nearly 225,000,000 people legally cross northbound from Mexico into the U.S. annually (600,000/day), with an equal number crossing south.
Percent of people 25 years and older who have completed high school

Source: U.S. Census Bureau, 2006-2008 American Community Survey
Mapped at http://factfinder.census.gov (thematic maps section)
Birth rates by age and ethnicity, USA and US-MX Border, 2004

Source: Natality data, NCHS/CDC.
Percent of county residents with household income below the poverty threshold

Border Crossings into US, 1995-2009
The combined impact of the militarization of the Border, the economic downturn and Violence in Mexico

Pedestrians Plus Passengers in Trains, Buses & Cars
(SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Border Crossing/Entry Data; based on data from U.S.DHS, 6/1/2010)
Fewer illegal entries

The number of illegal immigrants apprehended along the Southwestern border has declined dramatically over the last decade.

**Number of apprehensions, by Border Patrol sector**
(In thousands)

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>San Diego</th>
<th>El Centro</th>
<th>Yuma</th>
<th>Tucson</th>
<th>Total**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>151.7</td>
<td>238.1</td>
<td>108.7</td>
<td>616.3</td>
<td>1,114.9</td>
</tr>
<tr>
<td>2010*</td>
<td>68.6</td>
<td>32.6</td>
<td>7.1</td>
<td>212.2</td>
<td>320.4</td>
</tr>
<tr>
<td>% change</td>
<td>-55%</td>
<td>-86%</td>
<td>-93%</td>
<td>-66%</td>
<td>-71%</td>
</tr>
</tbody>
</table>

*Numbers are unofficial  **Total apprehensions for these 4 sectors
Source: U.S. Customs and Border Protection

Mark Hafer Los Angeles Times
Border health disparities?

- Lack of health insurance & providers
  - Leads to less access to quality health care
- Diabetes/obesity/overweight (all four states)
- Infectious/communicable disease
  - Tuberculosis (especially Texas & California)
  - Hepatitis A, salmonella & other GI infections
  - Dengue fever (South Texas & Tamaulipas)
  - Influenza H1N1 (most recent issue)
HEALTH INSURANCE COVERAGE ESTIMATES
Percent Uninsured, 2007

All Races, Under Age 65

Source: U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE) Program, July 2010
Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

Seguridad Social

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Secretaría de Salud

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud

Sector Privado

Contribución gubernamental
Contribución del empleador
Contribución de los empleados
Impuestos generales
Contribución Usuario

Empleadores
Individuos

Aseguradoras privadas/HMOs
Proveedores privados

Clases media y alta

58% del gasto total en salud
42% del gasto total en salud
Obesity Trends* Among U.S. Adults


(*BMI ≥30, or about 30 lbs. overweight for 5’4” person)
Prevalencia de obesidad según entidad federativa

Promedio Nacional 30%
13 millones de Mexicanos

FIGURE 1. Rate* of tuberculosis (TB) cases, by state/area — United States, 2008†

* Per 100,000 population.
† Data updated as of February 18, 2009. Data for 2008 are provisional.
§ TB rate cutoff points were based on terciles: 18 states had TB case rates of <2.0 (range: 0.46–1.99) per 100,000, 17 states had TB case rates of 2.0–4.0 (range: 2.03–3.92) per 100,000, and 15 states and the District of Columbia had TB case rates of >4.0 (range: 4.02–9.63) per 100,000.
Morbidity of Pulmonary Tuberculosis in Mexican States
2009

Fuente: SINAVE, DGE, SSA. PRELIMINAR. Población a mitad del año. Indicadores demográficos 1990-2030. CONAPO. *Tasa por 100 mil habitantes.
Immigrant and Migrant Deaths in the US

- With the increase of immigrants and migrants in the US, the number of deaths attributed to various causes has increased concomitantly.

- Rates of injuries and deaths of immigrants and migrants in the workplace are twice the rate of non-immigrants.

- Immigrants and migrants occupy jobs involving hazardous conditions, often with inadequate training and without protective gear.
Causes of Death to Mexican Immigrants in the United States
2007

ACCIDENTE AUTOMOVILISTICO
AHOGADO
ATROPELLADO
DROGAS (ABUSO DE COCAINA)
PROBLEMAS DE SALUD
CANCER
NEUMONIA

ACCIDENTE DE TRABAJO
APUÑALADO
BALEADO
INTENTO DE CRUCE
SE DESCONOCE
DERRAME CEREBRAL
PANCREAS

ASESINADA
CONGESTION ALCOHOLICA
MUERTE NATURAL
SUICIDIO
DIABETES
PARO CARDIACO
The Rural Character of the Border Region outside of Metro Areas creates Health Access Issues

Of the U.S. border counties:
- 73% are Medically Underserved Areas (MUAs)
- 63% are Health Professional Shortage Areas (HPSAs) for primary medical care

(Source: Health Resources and Services Administration, Bureau of Primary Health Care)
Migrants to Immigrants: the Changing Paradigm

- Since 1994, the number of true migrants has gradually been decreasing, as migrants settle into enclave communities throughout NM and the US.
- The number and size of federally-recognized *colonia* communities has increased concomitantly.
- Demographics are in flux as the number of immigrants and percentage of Hispanic residents has rapidly increased since 1995, but began leveling off in 2006 due to border security, and especially in 2008 due to violence and the economic downturn.
- The level of indigence in the border population has increased significantly with the increase in immigrants.
- The impacts on the education and health delivery system have been manifold.
If the U.S. Border Region were the 51st State, it would rank:

- Last in access to health care
- Last in per capita income
- First in numbers of school children living in poverty and are uninsured
- Second in death rates due to hepatitis
- Third in deaths related to diabetes
- Vaccine-preventable measles and mumps are twice the national rate
- Tuberculosis, which is becoming drug resistant, is 6 times the national rate on the border.
The New Mexico Border Region
Transmobility within the TX-NM Border Region

- Each day, 43,000 automobiles and trucks cross legally into the US from the State of Chihuahua via El Paso, and Columbus and Santa Teresa Border Crossings in New Mexico.

- In 2007 a total of 32,600,000 people crossed from the State of Chihuahua into the U.S. via El Paso, Texas and Columbus and Santa Teresa, New Mexico.

- This is the equivalent of 89,237 people per day.
For 2009, NM estimated border population was about 250,000 (Counties of Doña Ana, Luna, Hidalgo and southern Otero), with population increase of 16% since 2000 (versus a 10.5% increase for the State)

Population is of this population is 65% Hispanic

In 2008, 19.4% of the border population lives below the poverty line (versus 17% for the State)

But 35% of those living in poverty are Hispanic and more than 40% are children; but higher still in immigrant enclave communities (colonias) where more than 75% are poor
New Mexico’s Border Population

- One-third of the border population is uninsured; but this reaches up to 75% and higher for adults in the 50+ Colonia communities found in the region.
- About 70% of border residents under 21 years of age are enrolled in Medicaid—a proxy expression of poverty.
- The border and immigrant population is young, with a high rate of fecundity, teen mothers, and a high rate of indigence.
- Approximately 13% of NM border population is 1st generation Mexican Heritage, while 32% of the border population is 2nd or 3rd generation Mexican Heritage.
- Residents self-identified as Mexicans make up approximately 20% of the State’s population.
New Mexico’s Border Population

- About 20% of NM Border Region population is Spanish-speaking only, or has minimal proficiency in English; BUT Spanish is spoken in more than 50% of the households.

- Pew Hispanic Center estimated the total of “unauthorized migrants” in New Mexico for 2005 at 50,000-70,000; but a more realistic number for undocumented residents is 150,000—7.5% of the State population.
Access and Workforce Issues (2003-2004 data)

Physician to population ratios – per 100,000

- US-------------------------278/100,000
- New Mexico-----------------214/100,000
- NM border counties --------138/100,000
- Non-metro NM border counties-126/100,000

New Mexico border counties have less than half the number of physicians compared to the national average

- In New Mexico 72% of all Physicians are classified as primary care
- In the NM border counties 55% are classified as primary care (GP/FP/IM/Ped/OB/gyn).
- This further compounds our access issue.
Access and Workforce Issues

Dentists Per 100,000 people
- US-----------------------------61
- NM-----------------------------43
- NM border counties-------------30
- Non-Metro Border Counties--26

Again half the national average on our border.

Registered Nurses per 100,000 people
- US-----------------------------782
- NM-----------------------------745
- NM border counties-------------612
- Non-Metro border counties---59
Impact of Immigrants and Migrants to the Healthcare System in New Mexico

- Increasing alcohol abuse and alcohol-related injuries and deaths
- Majority of all new TB cases in the State are linked with Mexico, with 33% in just two border counties
- High rates of STDs in border counties and migrant and immigrant enclave neighborhoods (especially among teens)
- High-risk births (diabetics), high and low birth weights, congenital syphilis, fetal alcohol syndrome, all related to erratic or lack of prenatal care
Impact of Immigrants and Migrants to the Healthcare System in New Mexico

- High teen birthrates
- Increasing rates of obesity and diabetes among youths (Hispanic Cohort)
- Poor oral health
- High rates of indigence and uncompensated care, especially for catastrophic cases
- High rates of emergency room usage
- Increasing demand of the healthcare safety net
Diabetes Mellitus Mortality* by Ethnicity
New Mexico Border and Non-Border Regions, 2006-2008

ICD 10: E10-E14

*Age-Adjusted to the U.S. 2000 population.
Source: N.M. Vital Records and Health Statistics via N.M. Indicator-Based Information System
Homicide Mortality* by Ethnicity
New Mexico Border and Non-Border Regions, 2006-2008

Rate/100,000 population, 95% C.I Error Bars

<table>
<thead>
<tr>
<th></th>
<th>Border</th>
<th>Non-Border</th>
<th>Border</th>
<th>Non-Border</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>3.2</td>
<td>2.4</td>
<td>5.8</td>
<td>3.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4.0</td>
<td>3.0</td>
<td>9.3</td>
<td>4.5</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>1.5</td>
<td>1.2</td>
<td>2.8</td>
<td>1.5</td>
</tr>
</tbody>
</table>

ICD 10: X93-X95, *U01.4, X85-X92, X96-Y09, Y87.1,*U01.3, *U01.5-*U01.9,U02
*Age-Adjusted to the U.S. 2000 population.
Source: N.M. Vital Records and Health Statistics via N.M. Indicator-Based Information System
† Statistical instability--low case number
Challenges to the Health Services Delivery Model in the Binational Border Region

- Deficient erratic health care infrastructure and personnel in Chihuahua, with erratic preventive/primary care (except immunizations)
- Lack of health education in schools k-12
- Transmobile population with people crossing for work or commerce, to attend school, visit family, recreation, shopping, etc. on both sides;
- Tradition of Mexico residents to use health services in Luna and Doña Ana Counties, including hospital births
Challenges to the Health Services Delivery Model in the Binational Border Region

- Numerous uninsured indigents and undocumented patients with no way to pay; with high levels of write-offs by healthcare services providers

- The “closed border”, with increased militarization, raids and fencing by ICE driving undocumented and their families underground

- Absence of a logical, equitable and comprehensive immigration policy that exacerbates efforts to establish medical homes and services to residents
Challenges to the Health Services Delivery Model in the Binational Border Region

- Poverty is structural barrier affecting the great majority, with a higher proportion of this population living in absolute poverty than the state average.

- Difficulty balancing the costs of preventive versus critical care, unless such services are heavily subsidized or free.

- Care is self-deferred until health conditions reach a level of criticality that requires that they access an emergency room (costs ultimately borne by state, federal and county programs, and/or written off by providers at a loss).
Current System for Providing Healthcare to Mexican Immigrants and Migrants

- Immigrants and migrants currently receive a host of healthcare services in NM provided through community health centers, Local Public Health Offices, private providers in rural areas, and hospitals.

- In the interest of public health, nobody is turned away, and residence status is not a question posed to clients as to eligibility of services.

- The first barrier to immigrants’ and migrants healthcare is learning the US healthcare system (pay-fee-for-services).
Funding Sources to Provide Healthcare Services to Immigrants and Migrants

- Medicaid and Medicare,
- New Mexico Rural Primary Care Act,
- Seasonal Farmworker Healthcare Grants,
- Insure New Mexico Kids,
- County Indigent Healthcare Funds,
- Specific federal and/or state grants and/or earmarks,
- Sole Provider agreements w/ hospitals (fed/County match),
- Section 1011 (undocumented receive emergency healthcare services underwritten by U.S. Government,
- Sliding-scale self-pay agreements between clients & providers
Mission and Role of the New Mexico Office of Border Health (NM-OBH)

- **Mission of the OBH:** Improve health status and health services in the New Mexico border region and other border-impact areas of the State.
- **Role of the OBH:** Serve as both catalyst and facilitator in ensuring that public health objectives are met in our shared culturally and socio-economically unique US-Mexico Border Region and immigrant and migrant populations throughout the State.
<table>
<thead>
<tr>
<th>NM-OBH Strategic Approaches to increasing Healthcare Access to Immigrants &amp; Migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address structural health disparities and access issues of border/immigrant subpopulations throughout the State (<em>State policies and strategies</em>)</td>
</tr>
<tr>
<td>Directly address binational public health needs in the shared Border Region with Chihuahua State Health Services (<em>invest resources in Mexico</em>)</td>
</tr>
<tr>
<td>Truly binational public health programming and development of a coordinated binational network of care for patients on both sides of the border</td>
</tr>
<tr>
<td>Strengthen the role of Binational Health Councils as forums for prioritizing and coordinating public health programming in the binational border region</td>
</tr>
</tbody>
</table>
NM-OBH Strategic Approaches to increasing Healthcare Access to Immigrants & Migrants

- Comprehensive Public Health Management Plan for the Luna County, NM—Palomas, Chihuahua Binational Corridor (a truly binational strategic plan)

- New Mexico-Chihuahua Bilateral Framework Health Agreement signed on May 7, 2008 (formal political support to achieve plan objectives)

- Work with other border states, the US-Mexico Border Health Commission, Mexican Health Secretariat, Pan American Health Organization, Centers of Disease Control and Prevention, and Border Governors Conference to align priorities and resources to address issues borderwide
Comprehensive Public Health Management Plan for the Luna County, NM—Palomas, Chihuahua Binational Corridor

- Reconstruction and staffing of the Palomas Public Health Clinic
- Improved infectious disease surveillance & control of binational cases (TB, STDs, Influenza)
- Binational infectious disease case reporting and continuity of care
- Binational health emergency preparedness & response
- Improved & coordinated binational prenatal care (*binational card*)
- Obesity/diabetes screening, education, prevention
- Substance abuse reduction among youth
- Comprehensive emergency management services & response
- Binational protocols to regulate Mexican access to health services in Luna County based on a typology of conditions/situations
- Multi-agency & multi-source funding to implement the Plan
Specific Actions of the Office of Border Health

- Border Influenza Surveillance Network
- “Four Corners” Cocci (Valley Fever) Project
- New Mexico-Chihuahua TB Control Pilot Project
- NurseAdvice New Mexico Tele-Triage
- Ventanilla de Salud w/ Mexican Consulate/Albuquerque
- Health fairs/screenings with Mexican “Mobile Consulates”
- Production of culturally and linguistically-appropriate media targeted to the diverse sectors of the border population
- Binational Health Insurance (*children’s catastrophic care*)
Endemic Areas for Coccidioidomycosis in Border States. Based on skin testing in 1957, it is estimated that 5 to 30% of New Mexico’s population contracts Valley Fever.
PROYECTO “CUATRO ESQUINAS”
Assimilation of Immigrants: Some Thoughts

- A “Nation of Immigrants” now intolerant of migrants and immigrants?
- Discounting the contribution of migrants and immigrants to our economy and our culture is absurd and dangerous.
- Walling off international borders is a sign that diplomacy and governance has failed.
- It takes three generations to integrate immigrants into the mainstream, including aspects of culture, nationalism and language.
Assimilating Culture: It Takes Three Generations

Fluency in Spoken English Rises Across Hispanic Generations (% who speak English very well)

First generation: 23%
Second generation: 88%
Third and higher generation: 94%

Source: Pew Hispanic Center
"If you build a 15-foot wall, they will just build a 16-foot ladder" (Janet Napolitano, then Governor of Arizona)