

# United States—Mexico

## Border Infectious Disease Surveillance, Epidemiology and Laboratory Capacity Survey



### *Final Report*

Epidemiology and Response Division  
Infectious Disease Epidemiology Bureau



Early Warning Infectious Disease Surveillance Project/EWIDS  
*Funding Provided by the Centers for Disease Control and Prevention*

January 15, 2007

# **Early Warning Infectious Disease Surveillance Project (EWIDS)**

## **United States—Mexico Border Infectious Disease Surveillance, Epidemiology and Laboratory Capacity Survey**

### ***Executive Summary of Final Report<sup>1</sup>***

#### **Introduction**

This document presents the summary findings and conclusions of the survey referred to in the title. In addition, the recommendations emanating from this document reflect the survey results and other information gleaned from interviews and interactions during the application of the survey.

**For a copy of the complete report and results from which this summary is taken**, please contact David Selvage, MHS, PA-C, Surveillance Team Leader, with the New Mexico Department of Health, Infectious Disease Epidemiology Bureau, at [Walter.Selvage@State.NM.US](mailto:Walter.Selvage@State.NM.US) or by calling (505) 476-3563.

#### **Purpose**

The purpose of this survey was to assess infectious disease surveillance, epidemiology and laboratory capacity along the U.S.-Mexico border for both routine and emergent public health issues.

#### **Goals**

The goals of this survey and survey analysis are as follows:

1. To address the following questions:
  - What resources exist for infectious disease surveillance, epidemiology and laboratory functions;
  - What are the mechanisms for reporting both routine and emergent infectious diseases, locally, regionally and nationally;
  - Who is responsible for reporting;
  - Who is responsible for coordinating investigations and epidemiologic response;
  - Which agencies receive infectious disease reports locally, regionally and nationally;
  - What systems exist to respond to infectious disease outbreaks?

#### **Respondents**

The 43 respondents to the survey represented a broad range of public health agencies and private medical providers in Southern New Mexico and El Paso County, Texas, as well as the Chihuahua State Health Services Epidemiology Sub-Directorate in Mexico. Responding entities were distributed into homogeneous groups to facilitate analysis of survey results. The following organizations and their respective representatives participated in the survey:

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<sup>1</sup> Surveys were administered between April and July of 2006, with analysis and final publication of the report on the survey published on January 15, 2007.

- **Community Health Centers**

New Mexico (5 respondents representing 19 clinics)

- Ben Archer Health Centers, with a total of 7 clinics located in Hatch, Truth-or-Consequences (2), Doña Ana, Columbus, Deming and Alamogordo
- La Clínica de Familia, with a total of 9 clinics located in Las Cruces (4), Anthony, Chaparral, San Miguel, Santa Teresa and Sunland Park
- White Sands Family Practice Clinic (Alamogordo)
- Hidalgo Medical Services (Silver City)
- Hidalgo Medical Services Rural Family Practice (Lordsburg)

El Paso County, Texas (2 respondents representing 11 clinics)

- Centro San Vicente, with a total of 3 clinics located in El Paso
- Centro de Salud Familiar La Fe, with a total of 8 clinics in located in El Paso (6), San Elizario and Westway

- **Hospitals**

New Mexico (6 respondents)

- Memorial Medical Center (Las Cruces)
- Mountain View Regional Medical Center (Las Cruces)
- Mimbres Memorial Hospital (Deming)
- Gerald Champion Regional Hospital (Alamogordo)
- Gila Regional Medical Hospital (Silver City)
- Fort Bayard Medical Center (Fort Bayard)

El Paso County, Texas (6 respondents, all in El Paso)

- Thomason Hospital
- Southwestern General Hospital
- Sierra Medical Center
- Providence Memorial Hospital
- Del Sol Medical Center
- Las Palmas Medical Center

- **State and Local Government Agencies**

New Mexico

- New Mexico Department of Health (NMDOH), including nurse managers of 6 Local Health Offices (Southern New Mexico) and 3 regional staff of Region V (Las Cruces), and the Scientific Laboratory Division (Albuquerque)
- New Mexico Environment Department/Las Cruces Area Office
- New Mexico Department of Corrections (Santa Fe)

### El Paso County, Texas

- Texas Department of State Health Services (DSHS)—Region 9/10 (El Paso) and the Laboratory Services Section (Austin)
- El Paso City-County Health and Environmental District

- **Federal Agencies**

- Immigration and Customs Enforcement (ICE)/El Paso Service Facility
- Centers for Disease Control and Prevention (CDC)/El Paso Quarantine Station

- **Correctional Facilities**

#### New Mexico

- Doña Ana County Detention Facility (Las Cruces)
- Southern New Mexico Correctional Facility (Las Cruces)

#### New Mexico and El Paso County, Texas

- Federal Corrections Institution “La Tuna” (Anthony, Texas/New Mexico)

- **Educational Institutions**

#### New Mexico

- New Mexico State University Student and Employees Health Centers (Las Cruces)
- Western New Mexico University Student Health Services (Silver City)

#### El Paso County, Texas

- University of Texas—El Paso Student Health Services (El Paso)

- **Chihuahua State Health Services/Epidemiology Sub-Directorate**

### **Summary**

The goals of the survey were met. The resources that exist for infectious disease surveillance, epidemiology and laboratory functions were identified. Mechanisms for reporting both routine and emergent infectious diseases, as well as the personnel and agencies responsible for reporting, were documented. The systems in existence for infectious disease outbreaks and the coordination of investigations were described. Key personnel and systems responsible for infectious disease reporting, epidemiology, response and laboratory testing are listed in the Directory below.

Surveys were distributed to personnel in agencies from the States of New Mexico, Texas and Chihuahua, Mexico, and medical providers located within this tri-state ‘Border Region’ responsible for infectious disease surveillance and epidemiology.

Results of the analysis of the 43 survey respondents indicates there is currently limited binational coordination of epidemiology, surveillance, and reporting of infectious disease, but that many opportunities exist for improvement. The number of personnel adequately trained to conduct infectious disease investigation and control, and especially those with bilingual capability, is inadequate to meet epidemiology and surveillance demands. Nearly all respondents indicated that they are aware of required procedures for reporting infectious diseases found on the respective States’ Notifiable Conditions lists and report accordingly.

Survey results indicate that medical providers in the US have, essentially, no relationship with their counterparts in Mexico—a role deferred to their respective State Departments of Health. Protocols have yet to be formalized at the level of the US and Mexican Federal governments to facilitate reporting binational infectious disease cases. It was also determined that medical providers, and some members of health departments, have only a limited understanding of what constitutes a binational disease case, are not detecting these as part of their case investigations, and thus do not report them or manage them as binational cases. Correctional facilities are likely to have binational disease cases, but these are not being detected, investigated or managed binationally. Also, a lack of health emergency preparedness plans among responding agencies and organizations is noteworthy, and none of the existing plans is being coordinated binationally.

A series of recommendations is offered to infectious disease reporting authorities, as well as medical providers, in the three-state Border Region. Recommendations are intended to capitalize on the existing strengths and opportunities in surveillance and reporting. Most of the recommendations following from this survey do not require additional funding. Rather, they promote improved communication and coordination among State and Federal public health agencies, as well as medical providers, to align binational operational strategies and activities.

## **Recommendations**

### **1. Recommendation 1: Finalize protocols to decentralize and delegate epidemiology, surveillance and reporting among States**

This is an over-arching recommendation related to the eventual application of all other recommendations that follow. US and Mexican Federal governments should mobilize additional political and technical resources to finalize and promulgate the protocols and agreements necessary to delegate operational authority to the border states for timely epidemiology, surveillance, reporting, and response. Several processes have been initiated between US and Mexican Federal governments to develop agreed-upon guidelines, procedures and protocols regarding epidemiology, surveillance and reporting, as well as health emergency response. One example is the *Guidelines for US-Mexico Coordination on Epidemiologic Events of Mutual Interest* (last draft of December 5, 2005) which deals with most of the issues affecting binational epidemiology, surveillance and response. The issues include:

- legal frameworks in both countries;
- identification and notification of binational cases;
- preparing for and collaborating on binational disease outbreaks and potential terrorism events; and
- laboratory issues.

It would benefit public health to finalize the guidelines and reach agreement on immediate courses of action.

### **2. Recommendation 2: Improve procedures and education for diagnosis, investigation and reporting of binational cases**

Due to the apparent confusion over the definition of binational cases and related procedures for their reporting, each of the States should carry out an awareness and training campaign among their respective public health staffs and medical providers. The United States-Mexico Border Health Commission (USMBHC) could take overall responsibility for developing a bilingual one-day training module and associated materials (guidelines, checklists, questionnaires) for presentation to the Offices of Border Health in the four US States and to State health services offices in the six Mexican states (and their affiliated USMBHC Outreach Offices in all states), for delivery to their appropriate public health personnel medical providers, educational institutions and correctional facilities. The training should also include procedures for detecting, reporting and case management of binational infectious disease cases.

### **3. Recommendation 3: Improve the efficiency of intrastate and binational procedures for reporting of infectious diseases**

Reporting procedures currently used within the three States for notifiable infectious diseases should be clarified and aligned. This is necessary to prevent miscommunication in the event of a disease outbreak or pandemic. Public health agency personnel and medical providers should be alerted and educated about any changes in reporting procedures when they are revised.

Medical providers (including those associated with correctional facilities and educational institutions) should be encouraged to formally *report to only one authority* to avoid confusion. Procedures could be simplified in Texas by having a single 24/7/365 call-in number. As Texas is a geographically large state, a single call in number could be used for each regional office, but each report should be simultaneously reported by the region to headquarters in Austin. Even as El Paso City-County Health and Environmental District is the official reporting authority for El Paso County, that agency should notify Texas DSHS Region 9/10 within the established required time period when a reportable infectious disease case is identified.

In New Mexico, a single location for formally reporting all cases should be used—the 24/7/365 call-in line at NMDOH/Epidemiology and Response Division. NMDOH/Epidemiology and Response Division should also clarify reporting procedures for correctional facilities with the Federal Bureau of Prisons and the New Mexico Corrections Department.

While it is not realistic to expect each US State or the Mexican public health authority to align their respective notifiable conditions lists, agreements can and should be reached on a list of notifiable conditions that will be reported binationally.

### **4. Recommendation 4: Improve interstate and binational communication**

The first step is to develop and distribute a directory of personnel in local, State and Federal agencies and key medical providers with responsibilities for infectious disease epidemiology, surveillance and reporting in both the US and Mexico. The current report includes the *Directory of Key Staffs Responsible for Infectious Disease Surveillance and Reporting in the Border Region of Southern New Mexico, El Paso County, Texas and the State of Chihuahua, Mexico (see below)*. This directory should be revised and updated at least annually.

Once the directory is distributed, a *monthly E-mail bulletin* could be broadcast to all those listed. Preparation of the bulletin could be coordinated by the USMBHC and serve to inform on the status of infectious diseases throughout the Border Region, announce meetings and workshops, as well as serve as a forum for presenting case studies and best practices in infectious disease epidemiology and surveillance. In addition, *periodic coordination forums*, as is currently being conducted under Border Infectious Disease Surveillance (BIDS) and Early warning Infectious Disease Surveillance (EWIDS) projects, should be continued but related more to coordinating the ongoing program of binational infectious disease control and sharing of best practices, and not just be limited to sharing infectious disease data.

### **5. Recommendation 5: Train more infectious disease control staff for investigation and case management, and provide Spanish language instruction and/or hire more qualified bilingual staff**

Currently, most hospitals and clinic systems have infectious disease control tasks assigned to someone as a secondary duty. These facilities and systems would benefit from the addition of personnel with specific training in infection control and outbreak response. Public health offices must have sufficient staff with bilingual capability in order to carry out their duties in a dual-language setting. US State governments are urged to provide resources for appropriate staff to learn Spanish in order to function in the Border Region—especially those that investigate disease cases with Spanish-speaking only clients. For Chihuahua, epidemiologists located in Chihuahua City and jurisdictional offices along the border should also be offered training in English to facilitate binational collaboration on infectious disease surveillance and reporting, and eventual health emergency response.

**6. Recommendation 6: Improve binational professional relationships and epidemiology and surveillance capacity between the US and Mexican States (New Mexico, Chihuahua and Texas)**

The State public health agencies of all three States are urged to consider binational seminars and staff exchanges as vehicles for developing uniform infectious disease epidemiology, surveillance and response capacity. These visits could be helpful in bringing about awareness regarding conditions and challenges in each State and Country. Best practices in epidemiology, surveillance and analytical laboratory techniques could be identified. Specific personnel could participate in cross-border exchange for training and technical assistance to benefit both State agencies.

**7. Recommendation 7: Streamline customs in Mexico and US for importing equipment and transfer of specimens**

This recommendation is related to Recommendation 1, but pertains primarily to Mexican authorities. Federal and State governments in the US already export medical and laboratory equipment to their counterparts in Mexico, as well as receiving medical specimens under a protocol established with the CDC and US Immigration and Customs Enforcement. Mexican Federal health and customs authorities should adopt a standard set of protocols for the prompt import of specialized equipment and reagents, and exporting laboratory specimens to labs in the US. These protocols could then be considered by the CDC and US Immigration and Customs Enforcement for adoption and put in place as soon as possible at all designated border crossings and/or customs entry locations (e.g., international air and seaports).

**8. Recommendation 8: Consolidate current efforts under BIDS, EWIDS, pandemic influenza preparedness and health emergency planning**

While there may be some resistance on the part of certain State and Federal agencies to do so, ongoing activities prescribed under the BIDS and EWIDS projects should be consolidated operationally with current pandemic influenza preparedness activities, which in turn should be used as a springboard for the preparation and operational linking of health emergency management plans of State and local agencies, and medical providers. As different State and local agencies, hospitals, medical providers, educational institutions, and the public at large become engaged in pandemic influenza preparedness, model health emergency plans can be prepared simultaneously to deal with other infectious disease emergencies. Most of the public health agency personnel involved with BIDS and EWIDS on both sides of the border are also involved with pandemic influenza preparation. Coordination of these systems could result in cost savings. Also, the urgency of pandemic influenza preparedness will give a boost to realizing objectives proposed under the BIDS and EWIDS projects in a shorter period of time, and encourage those medical providers who do not yet have health emergency preparedness plans to develop them.

**9. Recommendation 9: Utilize the Offices of Border Health in each State and the USMBHC to better coordinate and follow up on actions related to improved binational epidemiology, surveillance, reporting and health emergency response**

As the Offices of Border Health (OBH) in the respective US border states were established to maintain working relationships with their Mexican counterparts for coordinating binational public health programs, it follows that the State public health agencies should strive to coordinate all binational programs through these offices. Currently, activities related to BIDS, EWIDS, health emergency preparedness (including pandemic influenza preparedness) are being managed differently in each State, with some of the intended binational activities being implemented without systematic coordination with the OBHs. It is suggested that State public health agencies make full use of the unique character of their respective OBHs by coordinating through them all relevant public health activities involving binational connections, thereby avoiding confusion among Mexican counterparts concerning “who does what”.

In a similar vein, US Federal agencies should take full advantage of the unique binational relationships that have been established under the US-Mexico Border Health Commission. At times, there appear to be different binational agendas being managed by CDC, the Secretary of Health and Human Services and, in terms of environmental health, the US Environmental Protection Agency—activities that can be better

coordinated with the USMBHC. As an example, Border 2012, BIDS and EWIDS Project activities could be better coordinated through the USMBHC in connection with the OBHs.

**10. Recommendation 10: Medium to long-term funding streams to finance surveillance and reporting**

While many of the recommendation in this report can and should be implemented without additional funding, there is a need to provide sufficient funding for a longer period of time to sustain binational infectious disease epidemiology, surveillance, reporting and response. This would help eliminate problems associated with discontinuous programming and reliance on short-term project funding that tends to initiate a process intended to be continuous, only to see it disintegrate once the funding period is completed. Funding should be provided by both Federal governments with matching from State and local governments (especially in-kind contributions of staff and logistical support).