

Security and Prosperity Partnership of North America (SPP)
Trilateral Workshop on Early Warning Infectious Disease Surveillance (EWIDS)
Workshop Proceedings
May 31, 2007

INTRODUCTION

The United States (U.S.) Department of Health and Human Services' (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR), in cooperation with the Federal Secretariat of Health of México (SSA), and the Public Health Agency of Canada (PHAC), convened a conference on cross-border early warning infectious disease surveillance in El Paso, Texas, March 7-9, 2007. More than 182 participants attended the workshop, which included state/province-based, local and tribal/First Nations border representatives, public health epidemiologists, laboratorians, health alert communicators, trainers, and federal health officials from the PHAC, SSA, and HHS.

Primary workshop objectives included:

- Coordinating and strengthening cross-border preparedness and response planning with stakeholders at the federal, state, and local levels;
- Identifying mechanisms for sharing information between SPP/EWIDS partners during routine and emergency situations; and
- Improving integration of domestic and cross-border public health surveillance and detection programs.

The workshop included plenary sessions designed to inform and educate participants about ongoing federal and state/provincial initiatives and programs related to cross-border surveillance and health alert reporting. Approximately 15 speakers, presented during these plenary sessions. The workshop also included three separate trilateral breakout sessions, moderated by 25 subject matter experts, on the following topics:

- Epidemiological surveillance;
- Laboratory support for surveillance activities; and
- Health alert messaging and information technology.

These breakout sessions were designed to share best practices and lessons learned on the collection and exchange of early warning infectious disease surveillance data during real and exercise scenarios.

Bilateral working sessions were also convened by topic (as listed above) and by border (U.S./México and U.S./Canada) to enable experts working in similar fields to discuss the

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

commonalities and differences of the public health epidemiology surveillance systems in each country, mechanisms for sharing surveillance information across borders, and barriers and possible solutions for improving cross-border epidemiological, laboratory support for surveillance activities, and health alert reporting. On the final day of the conference, the moderators of each of these bilateral working sessions presented summaries of their discussions, including next steps to improve cross-border early warning infectious disease surveillance.

FIRST DAY OVERVIEW

Plenary Sessions

Welcoming Address

The workshop was opened with an address by RADM Patrick O'Carroll from U.S. Government (USG)/HHS, who welcomed the audience and presented a brief overview of the conference. In his remarks, he emphasized that the security and economic prosperity of Canada, México, and the U.S. are interconnected and mutually reinforcing. He also noted that Canada, México, and the U.S. have a history of working well together to achieve public health goals, and that this workshop was an example of our collaborative endeavors.

Plenary Panel 1: Security and Prosperity Partnership of North America

A panel containing federal government representatives from Canada, México and the U.S. explained that the Security and Prosperity Partnership of North America (SPP) is an ongoing trilateral effort to increase security and enhance prosperity among the U.S., Canada and México through greater cooperation and information sharing. They further detailed that this initiative is led by the three countries' Presidents/Prime Minister. They then described the SPP priorities identified during the Leaders Meeting held in March 2006, which include cooperation on avian and pandemic influenza, and North American emergency management.

The presenters gave updates on several high-priority SPP deliverables, including:

- *Protocols of Mutual Assistance*: Ms. Mary Kosinski, from USG/HHS, reported that each country was working to develop mutual assistance protocols designed to delineate how SPP countries will give and receive aid during a public health emergency. She explained that these protocols would address the exchange of personnel, medical supplies and goods, and samples, specimens and reagents. A goal has been set to have the first of these protocols drafted for internal federal government consideration by April 2007.
- *North American Avian and Pandemic Influenza Plan*: Dr. Ethel Palacios-Zavala of the SSA explained that SPP partners had recently held a trilateral drafting session to work through problematic language in the most recent draft of the *North American Avian and Pandemic Influenza Plan*. She described the table of contents of the plan and the human

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

health elements in the Pandemic Influenza Chapter, including the sections on epidemiological surveillance and laboratory support for surveillance activities. She then described next steps to complete the plan and noted the trilaterally agreed upon timeline for release of this plan is June 2007.

- Exchange of Full-Time Liaison Officers: Dr. Frank Welsh, of the PHAC, reported that SPP partners were working together to develop position descriptions and to determine the desired placement of full-time public-health liaison officers, within the health ministries of SPP partner countries. A goal has been set to have the first pair of liaison officers, between Canada and the U.S., in place by the end of 2007.
- Preparedness Exercises: Dr. Welsh emphasized the importance of conducting and participating in joint emergency preparedness and response exercises. He mentioned that pandemic influenza outbreak exercises will assist in practicing communications with each other and will test the ability to respond in an emergency situation. Lastly, he reported that SPP partners were working together to identify opportunities to participate in joint international exercises and to identify mechanisms for collaboration in the areas of public health emergency management.

Plenary Panel 2: Early Warning Infectious Disease Surveillance (EWIDS) Program

The EWIDS Program panel included federal presenters from Canada, México, and the U.S. and state presenters from México and the U.S. The presenters introduced the audience to ongoing U.S. EWIDS efforts, the EWIDS-México project, and the Canadian Federal Syndromic Surveillance System.

Mr. Raúl Sotomayor, USG/HHS/ASPR, gave a brief overview of the U.S. Border States EWIDS Project and the EWIDS-México Project. Both projects, comprising the EWIDS Program, were created to improve the rapid detection, identification, reporting and response to infectious disease outbreaks associated with potential bioterrorism agents and other emerging infectious diseases at the borders. The U.S. Border States EWIDS Project is domestically focused and exclusively funds cross-border activities for the 20 U.S. border states neighboring Canada and México. EWIDS-México, on the other hand, is a project with México, through which funds are provided to the six México northern border states and the Federal Secretariat of Health in México City.

The following topics were discussed during this plenary panel session:

- The U.S. Border States EWIDS Project: Ms. Stephanie Dopson, from the U.S. Department of Health and Human Services' Centers for Disease Control and Prevention (HHS/CDC), explained that the U.S. Border States EWIDS Project was created in 2003 to enhance the ability of border states to rapidly detect infectious disease outbreaks along the border. She explained that this ongoing project is funded by the USG/HHS/ASPR and managed by the HHS/CDC. Ms. Dopson also reported that EWIDS funding is

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

distributed through the HHS/CDC Terrorism Preparedness Cooperative Agreement and that the amount of funding received by a U.S. border state is dependent on the number of inbound land border crossings.

Some of the requirements needed in order to be eligible to receive EWIDS funding included:

- Planning and participating in binational terrorism preparedness tabletop exercises;
- Conducting binational surveillance, epidemiology, and laboratory training workshops;
- Developing a functional Health Alert Network (HAN); and
- Developing functional, cross-border, secure internet information exchange.

Dr. R.J. Dutton, Texas Department of Health Services; Dr. Wayne Turnberg, Washington State Department of Health; and Mr. Richard Buck, New York State Department of Health; each gave presentations describing ongoing regional EWIDS activities and recent accomplishments, which included:

- Southern Border: Dr. Dutton described completed and ongoing EWIDS activities in the southern border states. Dr. Dutton mentioned the EWIDS activities and accomplishments of each state, California, Arizona, New Mexico and Texas, to improve epidemiological/surveillance capacity, laboratory capacity, information technology and communication capacity and training and education. Examples of each state's accomplishments with these activities included:
 - Texas - Built laboratory capacity in Laredo and El Paso Health Departments by purchasing needed equipment to meet Lab Response Network (LRN) requirements;
 - New Mexico - Conducted a surveillance, epidemiology and lab capacity survey in the Paso del Norte region, (New Mexico, Texas, Chihuahua), and compiled a directory of institutions and personnel;
 - Arizona - Developed public health information sharing protocols, binational infectious disease list, and binational health alert communications capabilities; and
 - California - Implemented binational training on surveillance, epidemiology, and health alert messaging and intends to offer binational training on laboratory support for surveillance activities and mutual assistance.
- Pacific Northwest: Dr. Turnberg reported on the annual Pacific Northwest Cross Border Workshop and described completed and ongoing EWIDS activities that include on-going cross-border workgroups. Workgroups focused on Epidemiological/Surveillance Response, Public Health Laboratory, Emergency Management/Surge Capacity, Communications, Exercise Planning, and Public Health Law. Activities in these areas include sharing and testing emergency contact lists, compiling a list of surveillance and

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

response resources and notifiable conditions common to the region, and finalizing a Memorandum of Understanding (MOU) between Washington State and British Columbia. Major accomplishments included the integration of the British Columbia Public Health Laboratory in to the HHS/CDC Laboratory Response Network (LRN) and the ability to share secure electronic information with cross-border partners.

- Great Lakes and Eastern Border Health Initiatives: Mr. Buck underscored the importance of the EWIDS project by describing the geographic and economic interconnectedness between the U.S. and Canada. He described the states, provinces, and tribes that make up the Great Lakes and Eastern Regions, as well as the organizational structure of these groups. He then explained that the focus areas of the EWIDS program were the same for these regions, which included agreeing upon methods to communicate with one another, improving collaborative infectious disease surveillance and laboratory information, agreeing upon types of infectious disease information to be shared, and signing a memorandum of understanding. He explained that both regions were currently working to identify critical partners from each state and province on the border, develop an understanding of public health and emergency response systems, and develop a communication infrastructure.
- The EWIDS-México Project: Mr. Francisco Solís-Aguirre, from SSA, explained that USG/HHS awarded cooperative agreement funding to the U.S. - México Foundation for Science (FUMEC) to finance the EWIDS-México Project in 2006. He explained that this project will support the six Mexican states on the U.S. - México border and the Federal Secretariat of Health to enhance capabilities along México's northern border by improving epidemiological surveillance capacity. The project is designed to enhance existing:
 - Epidemiological surveillance and related laboratory support capacity and capabilities for infectious bioterrorism agents and emerging infectious diseases;
 - Surveillance-related information technology systems;
 - Rapid health alert messaging capabilities; and
 - Training to create a well-trained and ready public health workforce.

He reported this project is attempting to identify gaps in the current infectious disease surveillance public health infrastructure. He then gave a brief overview of the chronology, areas of interest, and activities that were conducted to meet the project objectives. He also presented the timetable of accomplishments since it was initiated in December 2003 to the actual awarding of funds in March 2006.

Dr. Homero Guerra-Mena gave a presentation describing ongoing regional EWIDS-México activities in the State of Nuevo León, which included:

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

- In the epidemiology and surveillance sub-project, six nurses were hired to assist with training and contingency response. In addition, laptops and handheld data processing palm computers were purchased;
 - In the laboratory capacity for biological agents and toxins sub-project, the state hired 2 microbiologists, acquired protective equipment, and installed a biosafety level 2 laboratory hood;
 - In the information technology capacity sub-project, main internet access was implemented to share information regionally and with the federal departments through the 'Notificamex' website; and
 - In the training and education capacity sub-project, 32 physicians were trained in laboratory and surveillance techniques.
- Canadian Syndromic Surveillance Systems: Dr. Victoria Edge, from the PHAC, described a multi-retailer pilot study called the Alternative Surveillance Alert Project (A.S.A.P.). She reported that this study is designed to investigate the efficacy of a syndromic surveillance system, which monitors the quantity of over the counter products sold for symptoms arising from acute gastrointestinal illness and some infectious respiratory diseases. Initially the pilot involved providing trend information, based on data from one major retailer to 5 public health units in Ontario and one in Manitoba. She explained that now this pilot has expanded to include multiple, major retailers that provide electronic aggregate daily sales volumes of products of interest from pharmacy locations across Canada. Currently, data from over 2,000 locations are collected, categorized and analyzed for trends within the Canadian Early Warning Alert System, which is a module of the secure web-based Canadian Network for Public Health Intelligence (CNPHI). Registered public health officials access this site to obtain information on general trends and alerts of aberrant sales for regions and time frames of interest.

Plenary Panel 3: Revised International Health Regulations (2005)

The final session of the first day dealt with the 2005 revised International Health Regulations (2005) (IHRs). Dr. Christopher J. Hickey, USG/HHS/Office of Global Health Affairs, chaired a panel on the afternoon of March 7, 2007, on the recently-revised IHRs. Dr. Hickey and guest speaker, Dr. Luís Gerardo Castellanos, México Country Office of the Pan American Health Organization (PAHO) addressed delegates regarding the IHRs. Dr. Castellanos discussed the importance of the IHRs as a mechanism for strengthening national capacities for pandemic-influenza preparedness and response. Dr. Castellanos described the broad contours of the IHRs, requirements, obligations, and importance in increasing core capacities in international infectious-disease surveillance and response capacities. He also discussed the role of PAHO and the World Health Organization (WHO) in helping WHO Member States to implement the IHRs. While Dr. Hickey addressed the process through which the IHRs were revised, as well as their

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

structure and content of the Regulations, he focused most of his comments on three challenges facing the U.S. Government as it implemented the IHRs: the development of standard operating procedures and decision trees for conveying information to and receiving information from the WHO; the unique challenges faced at points of entry with regard to conveyance operators, where HHS holds statutory authority, but both the U.S. Departments of Homeland Security and Transportation, hold implementing responsibility; and finally, how the federal government should engage key stakeholders, including state and local health authorities in the implementation process.

SECOND DAY OVERVIEW

Plenary Sessions

Welcoming Address

Dr. Miguel Betancourt-Cravioto, General Directorate of Epidemiology, Secretariat of Health, México, thanked colleagues for organizing the workshop. He explained since the attacks of 9/11, the commitment to strengthen collaborations with their neighboring countries has taken on added importance in México. Dr. Betancourt-Cravioto went on to illustrate how the Pandemic Influenza Working Group of the Global Health Security Action Group, which includes representatives from the U.S., México, and Canada, has focused on exchanging ideas to improve health security. He also mentioned that the work done along the U.S.-México border through the SPP is proposed as a model program for Europe and may be exportable to yet other international borders.

Subsequently, Dr. Betancourt-Cravioto listed some of the different programs in which the U. S., Canada, and México participate: SPP, the Global Health Security Initiative (GHSI), WHO/PAHO, and EWIDS. Taken together, these initiatives and the IHRs will set the stage for continued collaborative work in public health emergency preparedness at the borders.

Dr. Betancourt-Cravioto ended his remarks by encouraging everyone present to propose concrete next steps to improve cross-border early warning infectious disease surveillance, stating that the single objective of the workshop was to learn from other's experiences with the intent to protect the health of the population.

Trilateral Breakout Sessions – Best Practices

The objective of the morning breakout sessions was to provide a trilateral forum for sharing best practices, exercise results, and lessons learned from exchanging epidemiology and surveillance information across borders. More than 25 subject matter experts presented on the following topics:

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

- Epidemiological Surveillance;
- Laboratory Support for Surveillance Activities; and
- Health Alert Messaging and Information Technology.

Epidemiological Surveillance

In the epidemiology and surveillance breakout session, subject matter experts from Canada, México, and the U.S. presented on:

- A cross-border preparedness assessment checklist;
- Existing binational collaborations and information systems;
- Case studies and lessons learned from SARS and Dengue Fever outbreaks; and
- Exercises that had been completed and are planned.

RADM Patrick O'Carroll, USG/HHS, opened the morning session by describing the Regional Assessment Checklist, which was developed by the Region X Office of the Regional Health Administrator and the Northwest Center for Public Health Practice. He explained that this checklist is a tool to aid regional officials, as they work with state health officials, in their public health preparedness planning efforts. It is divided into categories which encompass the public health resources that may need to be moved across borders during an event, and issues that would influence the movement of these resources. These categories include both functional and cross-cutting areas dealing with the work of public health professionals. The four functional areas include emergency management, epidemiology, laboratory, and environmental health. The cross-cutting areas include communication, legal, and governance.

Next, several presenters discussed existing binational collaborations and described their activities. Dr. Navarro-Gálvez, from State Health Services in Sonora, México, provided the audience with an overview of the Binational Collaboration between Sonora and Arizona. He explained that the objectives of the collaboration were to develop relationships with public health professionals across the border, and to integrate projects and share materials and public health investigations when appropriate. Through this collaboration, Sonora and Arizona are ready to share epidemiological information across the border. In addition, laboratory capacity has been reinforced and both states are now jointly conducting epidemiological studies. The Binational Collaboration between Sonora and Arizona is working to develop protocols for transporting samples and has agreed to develop a binational pandemic influenza plan.

Dr. Alfredo Rodríguez-Trujillo, from State Health Services in Tamaulipas, México, described how Tamaulipas and Texas were working together to develop a binational information system. He explained that public health partners across the border are working to develop a binational format for sharing information, identify a list of diseases that are of interest, determine the triggers for when to exchange information, and define the appropriate mechanism for information exchange.

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

Mr. Robert Guerrero, from the Office of Border Health, Arizona Department of Health Services (ADHS), described the U.S. - México Border Governors Conference, created in 1980. He explained that this group includes members from all ten states at the U.S.-Mexico border and provides a platform for communication and collaboration between the leaders of each state. He added that as a result of the U.S. - México Border Governor's Conference, sector-specific working groups called "work tables" were developed to address different aspects of cross-border collaboration, including agriculture, border crossing, economic development, and health. The U.S. state health officers from Arizona, California, New Mexico and Texas are delegates for the health work table. On the Mexican side, the state health officers from Baja California, Chihuahua, Coahuila, Nuevo León, Sonora and Tamaulipas are also delegates. He reported that the health work table delegates conducted strategic planning across the state health agencies, promoted integration of systems and plans, and advocated for additional resources and funding sources.

Dr. Leticia Wong-López, from State Health Services in Baja California, México provided the audience with an overview of the binational collaboration between Baja California and California. She explained that the purpose of this collaboration was to identify the appropriate public health partners and establish mechanisms for information exchange. Dr. Wong-Lopez also mentioned that the first binational EWIDS meeting was held in Tijuana, Baja California in October 2006.

Several presenters reported on completed and/or upcoming international exercises. Dr. Wong-López described two joint emergency preparedness exercises sponsored by the binational collaboration between Baja California and California, which included pandemic influenza and a toxic chemical spill scenario. Ms. Katherine Allen-Bridson, from the Michigan Department of Community Health, summarized an after-action report from an international pandemic influenza tabletop exercise conducted in 2005. She reported that the exercise identified several areas where additional work is needed in their region:

- Identifying triggers for cross-border notification, which allows for the health of the economy without undue risk to public health;
- Determining how to ensure consistent investment by partners across jurisdictions; and
- Improving knowledge of reportable diseases across jurisdictions.

Ms. Susan Schoenfeld, from the Vermont Department of Health, reported on an exercise conducted by the Eastern Border Health Initiative, involving a food-borne outbreak scenario. The Eastern Border Health Initiative, identified areas where additional work is needed:

- Identifying legal issues surrounding sharing confidential information;
- Gaining a better understanding of the public communications role of the different jurisdictions; and

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

- Solving potential language barriers.

Presenters also described their experiences during outbreaks of Severe Acute Respiratory Syndrome (SARS) and Dengue Fever. Dr. Felix Li, of the PHAC, served as the Canadian liaison to HHS/CDC during the SARS outbreak. Dr. Li focused on the objectives and optimal measures of lessons learned based on the SARS experience. In his presentation, Dr. Li emphasized the importance of communications and information exchange during this outbreak and suggested that outbreak response was greatly enhanced by the exchanging of liaisons under these circumstances. According to Dr. Li, a liaison ensures that everything is shared with one point of contact, promoting accurate and timely exchanges, and minimizing the possibility of generating conflicting information. He then reported that Canada, México and the U.S. were examining the possibility of exchanging routine full time liaison officers in the public health agencies of each country to improve communications prior to an emergency scenario.

Dr. Allison Abell, of the Texas Department of State Health Services, reported on the lessons learned from an outbreak of Dengue Fever on the U.S.-Mexico border. She explained that while public health leadership rapidly mobilized teams to respond to the outbreak, command structures were not in place. She also suggested that although staff were able to set up the tracking database, additional individuals should be trained in the database to maximize its use and benefit. She reported that the EWIDS program is addressing many of the areas of concern such as the cross-training of staff in additional areas. Dr. Abell stated that this outbreak experience revealed the need for standardized protocols for sharing epidemiological information.

The morning session ended with an overview of USG/HHS/CDC's Epi-X Program by Dr. Rossanne Philen, the Medical Director of Epi-X. She explained that Epi-X was an internet-based system for the exchange of information among public health officials about emerging and ongoing public health threats. She explained that, through Epi-X, public health professionals from various jurisdictions can access and share preliminary outbreak information quickly and securely. Dr. Philen reviewed the key features of Epi-X, which includes 24-hour/7-day per week scientific and editorial support, controlled user access, digital credentials and authentication, peer-to-peer consultation, and rapid notification of public health emergencies by phone, pager, and e-mail.

Laboratory Support for Surveillance Activities

Ms. Laura Jevitt, from USG/HHS/CDC, presented an overview of the Laboratory Response Network (LRN), described LRN activities in Canada, and described ongoing efforts to establish an LRN laboratory in México. She described the role of sentinel, reference, and national laboratories in the LRN and the information, materials, reagents, and other core services that laboratories receive as members of the LRN. Currently in Canada, one national laboratory and one reference laboratory are members of the LRN. In addition, four border provincial laboratories are in the process of joining. She closed her presentation by describing next steps to establish an LRN laboratory in México, which includes establishing a professional relationship

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

with the newly appointed Laboratory Director, completing facility renovations, and conducting a site visit.

Dr. Paul Mehta, from USG/HHS/CDC, explained that the HHS/CDC and the U.S. Department of Agriculture (USDA)/Animal and Plant Health Inspection Service (APHIS) regulate the possession, use, and transfer of select agents and toxins that have the potential to pose a severe threat to public health and safety. He further explained that the HHS/CDC Select Agent Program registers all laboratories and other entities in the U.S. that possess, use, or transfer a select agent or toxin, with the goal of protecting public health and deterring bioterrorism by ensuring safe and secure possession, use, and transfer of these agents within the U.S. He reported that the program is federally mandated and funded, and requires the registration and inspection of private, academic, military, and public health research and diagnostic laboratories that conduct research on these agents. Dr. Mehta explained that the USG/HHS/CDC has the authority and responsibility to regulate select agents and toxins that affect human health, and that APHIS has the authority and responsibility to regulate select agents and toxins, along with the USG/HHS/Food and Drug Administration (FDA), that may affect animal and plant health and products. He then discussed the select agent requirements and the USG/HHS/CDC Import Permit Program.

Dr. Stephen Lindstrom, from USG/HHS/CDC, reported on different mechanisms to exchange influenza information and materials between laboratories both domestically and internationally. He described the WHO Collaborating Centers, which are reference centers for antigenic and genetic characterization of influenza isolates, as one priority mechanism for influenza information sharing. He then briefly reported on strategies that USG/HHS/CDC implemented for sharing information and materials necessary for detection of influenza viruses, including avian H5N1. In the last portion of his presentation, Dr. Lindstrom described the importance of, and need for, the ability to ship samples internationally, and explained considerations for shipping samples to the HHS/CDC.

Ms. Irma López-Martínez, National Institute of Epidemiological Diagnosis and Reference (*InDRE*), Secretariat of Health, México, mentioned that outbreaks of measles have occurred in México, from cases originating outside of the country. She explained that the role of the *InDRE* is to confirm the diagnosis from samples to facilitate rapid response and to provide Mexican health officials with the information needed to make decisions during any outbreak for which the *InDRE* has confirmatory and referential capacity. In addition, she said México has been working bi-nationally with the U.S. in the Border Infectious Disease Surveillance (BIDS) Project to improve quality control and draft operations manuals for the sampling and shipping of laboratory specimens for measles, hepatitis, rickettsias, West Nile Virus and others. She also described that a close inter-relationship with HHS/CDC exists for the evaluation and diagnosis of influenza and Dengue Fever. She reported that *InDRE* staff had participated in international training courses with representatives from countries, the USG/HHS/CDC, Institut Pasteur, and others. *InDRE* personnel took part in the Global Mercury exercise with the goal to improve the

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

appropriate and timely management of information. In closing, Ms. López-Martinez explained that México's National health authorities have strengthened the public health laboratory network to enhance health security and to be able to respond to emergencies.

Dr. Timothy Booth, from the National Microbiology Laboratory (NML), PHAC, presented on the lessons learned from the SARS outbreak, and suggested that the main lesson from that experience was the need to develop and maintain strong and direct linkages among multi-disciplinary and inter-jurisdictional levels of laboratory and epidemiologic counterparts. He gave a brief overview of the NML's functions, vision, unique research role, surveillance and reference services, as well as the Canadian Public Health Laboratory Network. Dr. Booth also highlighted the key role of NML in enhancing global public health through strong links with the international public health community in research and laboratory network collaborations. He also highlighted NML's state of the art diagnostics, as well as the surveillance, alerting, and coordinating and response functions of the Operations Centre. Finally, Dr. Booth presented the future vision of the NML to expand into BioMed City, an International Infectious Disease Complex focused on fighting the threat and impact of infectious diseases for Canada.

Ms. Kelley Hise, from USG/HHS/CDC, explained that PulseNet USA is a HHS/CDC and Association of Public Health Laboratories-coordinated national network of state and local public health and food testing laboratories that perform standardized molecular typing of food borne disease-causing bacteria. She described the objectives of the PulseNet Program as detecting clusters of cases that may become widespread outbreaks; providing real-time molecular surveillance of bacterial food borne diseases; assisting epidemiologists in outbreak investigations; and enabling rapid and effective communication between all PulseNet participating laboratories. Ms. Hise explained the rationale for making PulseNet an international program and described ongoing collaborations with Canada and Latin America, including México. She emphasized that PulseNet is a proven, cost-effective early warning system for domestic and international food borne outbreaks which is being replicated internationally.

Mr. Román Escobar-López presented on binational collaboration activities in the Public Health Laboratory of Sonora, México. Mr. Escobar-López mentioned that the Sonora State Public Health Laboratory provides the necessary technical support for the development of epidemiological surveillance programs. The laboratory also determines the quality of and any health risks from food items, beverages, and water for human consumption, as well as those products and consumables subject to epidemiological surveillance and control. He presented an example where the laboratory played an important role in the identification and epidemiological surveillance of West Nile Virus (WNV). He highlighted elements of a case study in which the first WNV isolate in México was identified in collaboration with the *InDRE*, the Medical Entomology Laboratory of the Autonomous University of Nuevo León, and the University of Texas Medical Branch in Galveston. Mr. Escobar-López concluded that the laboratory aims to have trained personnel, the necessary infrastructure and supplies, and external and internal quality assurance and control systems to allow for the strengthening of all sanitary and

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

epidemiological surveillance activities established to safeguard the health of the community. He stated that it is imperative to fortify communication channels among the involved countries to share mutual prevention strategies.

Dr. Joan Baumbach, Epidemiology and Response Division, New Mexico Department of Health, presented on the Border Infectious Disease Surveillance Epidemiology and Laboratory Capacity Survey, which was designed to assess infectious disease surveillance, epidemiology and laboratory capacity in the U.S. - México border region. The survey was sent to federal agencies, state and local governments (including public health and environmental health authorities), hospitals, clinics, correctional facilities, and educational institutions in the 'Paso del Norte' region on the U.S. - México border including New Mexico, Texas, and Chihuahua. She reported that the survey results indicated that 87% of respondents had disease reporting capabilities, 55% had bilingual capacity, 67% had routine epidemiological surveillance capabilities, and that 31% reported cases to México. She also reported that 88% of respondents had 24/7/365 laboratory capabilities and that laboratory results were shared with México 15% of the time. Dr. Baumbach then discussed the barriers to effective and efficient bilateral sharing of surveillance information and offered some recommendations for how to overcome these barriers. Several of these suggestions included: a) finalize protocols for sharing epidemiological data between states and across borders; b) hire bi-lingual staff; c) streamline customs in México and the U.S. for the transfer of equipment and specimens; d) consolidate current efforts under the Border Infectious Disease Surveillance Project, EWIDS, pandemic influenza preparedness and health emergency planning; and e) identify medium to long-term funding streams to finance cross-border surveillance and reporting activities.

Dr. Theodore Kuschak, from the NML, PHAC, presented on the Canadian Public Health Laboratory Network (CPHLN), and explained how this network links Canada's federal and provincial public health laboratories and addresses Canada's laboratory public health challenges through a variety of sub-committees and working groups. He discussed the big picture perspective, which includes expanded laboratory focus, alignment with the Pan Canadian Public Health Network, and the global public health framework of the network. Dr. Kuschak described how CNPHI collaboration centers support the Canadian Public Health Laboratory Network and its subcommittees and working groups and gave a brief overview of PulseNet Canada and its nexus to PulseNet USA.

Ms. Rita Flores-León, from the *InDRE*, Secretariat of Health in México, presented a brief overview of the *InDRE*. She described *InDRE*'s work as the National Reference Laboratory in México, which is the leading national level authority within the framework of the National Plan for Preparedness and Response for Pandemic Influenza. The *InDRE* is tasked to carry out activities related to the preparedness and response for pandemic influenza emergencies.

Subsequently, Ms. Flores-León mentioned activities of the *InDRE* during 2005-06: acquiring laboratory equipment, forming a strategic reserve for this area, updating diagnostic techniques,

Disclaimer:

The following text describes presentations and discussions that took place during the SPP Trilateral Workshop on Early Warning Infectious Disease Surveillance and does not reflect the opinions or policies of the United States Department of Health and Human Services.

