Appendix 2: Early Warning Infectious Disease Surveillance (EWIDS) Guidance

Goal 3: Decrease the time needed to detect chemical, biological, radiological agents in tissue, food or environmental samples that cause threats to the public's health.

EWIDS-related Objective 3A:

Develop and implement a program to collaborate with states or provinces across the international border to provide rapid and effective laboratory confirmation of urgent infectious disease case reports in the border region. Once appropriate cross-border laboratory linkages have been established to enable detection and confirmation of clinical, food and environmental specimens, work towards decreasing the time needed to detect **biological** agents in tissue, food or environmental samples collected from border jurisdictions that are threats to the public's health.

Activities:

1. If not already undertaken, survey and assess the surveillance and laboratory capacity on each side of the international border including those of any tribes located within states that share an international border and the connectivity among these laboratories with a view towards (a) identifying and addressing needs or gaps with respect to their consistency or uniformity of testing standards, notification protocols, and laboratory-based surveillance data exchange practices and (b) developing bi-national, regional laboratory response capabilities.
2. Improve cross-border, electronic sharing of laboratory information with public health officials and other partners in neighboring jurisdictions (to facilitate the rapid formulation of an appropriate response to and control of the outbreak). Specific objectives are for jurisdictions on both sides of the international border to: (1) coordinate availability of and access to laboratories with appropriate expertise 24/7/365, and (2) test clinical specimens, food samples, and environmental samples for **biological agents** that could be used for terrorism.
3. Develop and maintain a database of all sentinel/clinical labs in grantee's border region that includes name, contact information, Bio-Safety Level, certification status, and whether they are part of an information-sharing network. The database should also include the names and contact information for reference labs used by the sentinel/clinical labs in the border region.
4. In coordination with local public health agencies on both sides of the border, apply information technology to develop or enhance electronic disease surveillance, including electronic disease reporting from clinical and public health laboratories and linkage of laboratory results to case report information.

EWIDS-related Objective 3B:

Conduct joint training for public health personnel from both sides of the border, including tribes as appropriate in surveillance-based laboratory methods and application of information technologies relevant to infectious disease surveillance and epidemiology.

Activities:

1. Partner with Schools of Public Health and/or CDC's Centers for Public Health Preparedness to develop binational training activities to enable border health professionals in the U.S., Canada and Mexico to receive introductory or advanced training jointly with their U.S. counterparts in surveillance, epidemiology, laboratory methods and information technologies that are relevant to the detection, reporting and investigation of infectious disease outbreaks.

Goal 4: - Improve the timeliness of information regarding threats to the public's health as reported by clinicians and through electronic early event detection in real time.

EWIDS-related Objective 4A:

Rapidly detect a bioterrorist event along the U.S. northern (including Alaska) and southern borders through a highly functioning mandatory reportable disease surveillance system, as evidenced by ongoing timely and complete reporting by providers and laboratories. The long-term objective is to develop and implement cross-border, interoperable disease tracking for all illnesses and conditions possibly resulting from bioterrorism and other infectious disease outbreaks. Continue to support the development or enhancement of reporting protocols, procedures, surveillance activities, information dissemination, or analytic methods that improve the usefulness of the reportable disease system on both sides of the border.

Activities:

1. If not already undertaken, collaborate with Canada or Mexico (as appropriate) to design, develop, and adopt a bi-national surveillance needs assessment tool to be used by public health officials on both sides of the border to identify gaps in the capacity of border jurisdictions to respond to bioterrorism event or infectious disease outbreak. Specific needs assessment studies should focus on availability of expertise, personnel and other resources to carry out epidemiology and surveillance activities essential to cross-border epidemiological investigations and response needs.
2. Work with states and provinces across the international border to develop and agree on a list of notifiable conditions and distinguish between select conditions that require immediate reporting to the public health agency (at a minimum, CDC Category A agents) and conditions for which a delay in reporting is acceptable. For those where a delay is acceptable, describe time frames for notification.

3. Develop or improve infectious disease surveillance in a uniform manner along and across the international border by establishing a network of hospitals, clinics, epidemiologists and laboratories to conduct active sentinel surveillance for emerging infectious diseases and syndromes such as SARS, West Nile Virus, and fever and rash syndromes
4. Continue to develop and evaluate sentinel/syndromic surveillance programs in border hospitals and clinics to rapidly detect (a) influenza-like illness (ILI) and distinguish possible bioterrorism-caused illness from other causes of ILI and (b) severe acute vesicular rash syndromes resembling smallpox and other febrile exanthemas to distinguish possible bioterrorism-caused illness from other causes and assist in case definition through specific clinical entry criteria and differential diagnosis.
5. Continue to engage federally recognized tribes along the international border in your state in cross-border infectious disease surveillance activities through mutual aid compacts, memoranda of understanding, and/or agreements. Where appropriate, include local binational health councils and/or Indian Tribes/Native American organizations in bioterrorism surveillance activities.
6. Assess the timeliness and completeness of your reportable disease surveillance system at least once a year for detecting and reporting outbreaks of infectious diseases in the border region.
7. Formulate, develop and, when feasible, test a bi-national 24/7 infectious disease reporting plan that extends its coverage area to jurisdictions on both sides of the border. State, provincial and/or priority local/tribal public health agencies develop/implement a cross-border early event detection system that:
    - receives immediately notifiable condition and emergent public health threat reports 24/7/365
    - immediately notify the agency-designated public health professional 24/7/365
    - have the agency-designated public health professional promptly respond to immediately notifiable condition or emergency public health threat reports 24/7/365
    - receive reportable disease reports 24/7/365

EWIDS-related Objective 4B:

Ensure electronic exchange of infectious disease related information (that would include clinical, laboratory and environmental data) in standard formats between the computer systems of grantee public health department and those of grantee's counterpart agency across the international border.

Activities:

1. Conduct joint, cross-border assessments of information technology capabilities essential to infectious disease surveillance.
2. Collaborate with public health officials in border jurisdictions to identify how infectious disease outbreak information can be most rapidly and effectively shared across the border. Together, border jurisdictions should explore the interoperability of information technology systems, i.e., the ability of different

types of computers, networks, operating systems, and applications to work together effectively. Jurisdictions on both sides of the border should work towards ensuring the connectivity and interoperability, both vertically and horizontally, of their surveillance and epidemiology relevant information technology (IT) systems.

3. Working with jurisdictions across the border, establish a secure, Web-based communications system that provides for rapid and accurate reporting and discussion of disease outbreaks and other acute health events that might suggest bioterrorism. Include provision for routine communications (e.g., Web, e-mail) and contingency plans for communication systems' failure and alert capacity for emergency notification (e.g., phone, pager) of key staff of counterpart agency across the border.

EWIDS-related Objective 4C:

Conduct joint training of public health personnel from both sides of the border in infectious disease surveillance and epidemiology.

Activities:

1. Work with states, tribes and provinces along the international border to help train personnel regarding notifiable diseases, conditions, syndromes and their clinical presentations, and reporting requirements and procedures, including those conditions and syndromes that could indicate a bioterrorist event.
2. Conduct joint infectious disease surveillance exercises involving a broad range of appropriate participants from both sides of the international border. This exercise should involve not only border health departments but, where feasible, local hospitals, tribal and Public Health Service health facilities, hospital laboratories, major community health care institutions, emergency response agencies, and public safety agencies in order to respond in a coordinated manner.

Goal 5: Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health.

EWIDS-related Objective 5A:

Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by infectious disease threats by rapidly and effectively investigating and responding to a potential bioterrorist event in the border region - as evidenced by effective cross-border state/provincial,local and tribal responses to naturally occurring individual cases of urgent public health importance or outbreaks of disease along our international borders.

Activities:

1. Develop the capability to undertake joint epidemiological investigations of infectious disease outbreaks along the international border. Such capability should include the ability to jointly:

    - assess the seriousness of the threat and rapidly mobilize in response to an emergency
    - investigate to identify causes, risk factors, and appropriate interventions
    - coordinate the tracking of victims, cases, contacts, exposures, prophylaxes, treatments, and patient disposition.
    - contribute information directly to the public, including special populations, that explains and informs about risk and appropriate courses of action.
2. Continue to convene binational surveillance and epidemiology planning workshops to discuss and plan cross-border surveillance and/or epidemiology related activities. Such activities should, where feasible, involve a collaborative and regional approach with neighboring US border states, appropriate tribal nations as well as Mexico or Canada (as appropriate).

EWIDS-related Objective 5B:

Conduct joint training for public health personnel from both sides of the border to develop, train and exercise binational epidemiologic response teams.

Activities:

1. Develop and exercise plans for binational epidemiologic response teams (including tribes as appropriate) to conduct capable field epidemiologic investigations, rapid needs assessments, exposure assessments, and response activities on both sides of the border.