



Continuation Guidance – Budget Year Five
Attachment I
EARLY WARNING INFECTIOUS DISEASE SURVEILLANCE
Guidance for Supplementary Activities in Support of the Early Warning Infectious Disease Surveillance (EWIDS) Project

Background

Terrorism is an ever-present threat in our times. Of special concern are those forms of bio-terrorism that can inflict mass casualties. A terrorist-induced outbreak of a dangerous and highly communicable disease such as smallpox would require a concerted response by the public health emergency response systems to prevent catastrophic mortality and morbidity. Because pathogens do not recognize or respect geopolitical boundaries and international travelers can spread a contagious disease quickly to other nations, early warning surveillance and prompt sharing of findings of concern among U.S. states, Mexican states, and Canadian provinces along the borders and beyond is a public health and national security imperative.

Funds provided by the Early Warning Infectious Disease Surveillance (EWIDS) project, an activity led by the Office of the Assistant Secretary for Public Health Emergency Preparedness, will enable the enhancement of surveillance and epidemiological capabilities at the US northern and southern borders, with emphasis on creating interoperable systems with Canada and Mexico.

The EWIDS project will enable improvement of cross-border detection and reporting of infectious disease outbreaks, epidemiological investigations, surveillance-specific laboratory capabilities and communications systems as well as surveillance and epidemiology related training in states along the northern and southern borders of the United States. The goal of EWIDS is to assist US border states, in coordination with neighboring provinces/states in Canada and Mexico, to improve surveillance capabilities at the state, local and tribal level to launch an epidemiological investigation promptly, to share surveillance (including laboratory) data and to provide for appropriately trained public health personnel for these activities.

The key elements of an effective early warning infectious disease surveillance system in support of public health preparedness response consists of on-going surveillance to detect the outbreak, formulating the appropriate response to and control of the outbreak through analysis of the surveillance-based clinical and laboratory data, and planning/ implementing adequate health interventions.

The HHS-funded EWIDS project focuses **exclusively** on enhancing infectious disease surveillance and epidemiology along the U.S. northern and southern borders (in coordination with Canada and Mexico, respectively) and the development of associated capabilities and capacities within the 20 U.S. border states.



In accordance with the statutory language authorizing this project, EWIDS funds are **NOT** intended to support non-surveillance-related, broader border health activities in terrorism preparedness. Nor can these funds be used to supplant other surveillance and/or epidemiological activities already supported by the CDC Public Health Preparedness Cooperative Agreements.

Critical Capacities Relevant to Cross-Border Surveillance and Epidemiology

Activities eligible for EWIDS funding are those in CDC’s Focus Areas B, C, E and G. (Please note that, to be considered for EWIDS support, proposed activities in Focus Areas E and G **must** be surveillance and epidemiology related.) There are selected Critical Capacities (see below) within Focus Areas B, C, E and G that represent the core expertise, capabilities and infrastructure that are essential in responding to either a naturally occurring or a terrorist generated infectious disease outbreak. Associated with these selected Critical Capacities are Activities That May be Considered. Though not exhaustive, these lists provide examples of related activities that recipients may propose to develop to achieve the relevant Critical Capacities.

For each **Critical Capacity** that you plan to develop, the work plan, must provide: (a) a brief description of the existing capacity in your jurisdiction along the border, (b) an assessment of whether this capacity is adequate, and (c) where you judge the capacity inadequate, a proposal for effecting improvements during this budget period--including a timeline to guide implementation, measurable milestones to facilitate accountability, and a proposed budget.

I. SURVEILLANCE AND EPIDEMIOLOGIC CAPACITY

A. Public Health Surveillance and Detection Capacity

Critical Capacity: To rapidly detect a terrorist event along the U.S. northern and southern borders through a highly functioning mandatory reportable disease surveillance system, as evidenced by ongoing timely and complete reporting by providers and laboratories, especially of illnesses and conditions possibly resulting from bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies.

Activities That May be Considered:

1. Develop or enhance 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. Develop or improve infectious disease surveillance 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 in a uniform manner. The long-term goal is to unify disease tracking for all illnesses and conditions possibly resulting from bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies in the northern and southern border states.
2. 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.
 3. Communicate and provide feedback to reporting sources in your jurisdiction along the international border about notifiable diseases, conditions, syndromes and their clinical presentations, and reporting requirements and procedures, including those conditions and syndromes that could indicate a terrorist event.
 4. Assign a master's or doctoral trained or equivalent epidemiologist (s) (bilingual, as appropriate) and/or public health nurse(s) to cross-border infectious disease surveillance activities.
 5. Engage border counties and federally recognized tribes along the border in your state to participate with public health officials in cross-border collaborative activities through Mutual Aid Agreements, Memoranda of Understanding, and/or contracts. Where appropriate, include local binational health councils and/or Indian Tribes/Native American organizations in bioterrorism surveillance activities.

B. Public Health Epidemiologic Investigation and Response Capacity

Critical Capacity: To rapidly and effectively investigate and respond to a potential terrorist event, as evidenced by ongoing effective state and local responses to naturally occurring individual cases of urgent public health importance or outbreaks of disease along our international borders.

Activities That May be Considered:

1. Collaborate with Canada or Mexico (as appropriate) to design, develop, and adopt a binational surveillance needs assessment tool to be used by public health officials on both sides of the border to identify gaps in the capacity of the state and local health departments to respond to bioterrorism event or infectious disease outbreak. Specific needs assessment studies may focus on epidemiology and



- surveillance functions and laboratory capacity to address cross-border epidemiological investigations and response needs.
2. With local public health agencies, develop or enhance cross-border surveillance protocols, response procedures, legal or regulatory provisions affecting binational, cross-border public health activities, or communication and information dissemination that improve the effectiveness of the public health epidemiologic preparedness and response, to include planning for surge capacity. Particular attention should be paid to binational cooperation in border regions to facilitate any necessary movement of funds, equipment, supplies, specialized personnel, and/or sharing of surveillance data and diagnostic specimens/biological samples.
 3. Convene binational surveillance and epidemiology planning workshops to discuss and plan cross-border surveillance and/or epidemiology related activities. Such activities could involve a collaborative and regional approach with neighboring US border states as well as Mexico or Canada (as appropriate).

II. LABORATORY CAPACITY—BIOLOGIC AGENTS

Critical Capacity: To develop and implement a program to provide rapid and effective laboratory services in support of cross-border infectious disease surveillance activities.

Activities That May be Considered:

1. In coordination with your state public health laboratory, develop and implement a strategy to ensure laboratory testing (in clinical or public health laboratories) for rapid and specific confirmation of urgent case reports along the border region.
2. Survey and assess the laboratory capacity on each side of the 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 binational regional laboratory response capabilities.

III. SURVEILLANCE-RELATED COMMUNICATIONS AND INFORMATION TECHNOLOGY

Critical Capacity: To ensure electronic exchange of infectious disease related information (that would include clinical, laboratory and environmental data) in standard formats between the computer systems of your public health department and those of your counterpart agency across the international border.



Activities That May be Considered:

1. In coordination with local public health agencies on both sides of the border, apply information technology to develop or enhance electronic applications for reportable disease surveillance, including electronic laboratory-based disease reporting from clinical and public health laboratories and linkage of laboratory results to case report information.
2. 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 alert capacity for emergency notification (e.g., phone, pager) of key staff. Conduct cross-border technology assessments.
3. Achieve an around-the-clock capacity for immediate response to reports of urgent cases, outbreaks, or other public health emergencies, including any events that suggest intentional release of a biologic agent by means of cross-border early warning infectious disease surveillance.
4. Formulate, develop and, when feasible, test a binational 24/7 infectious disease surveillance plan that uses the Health Alert Network as a basic structure and extends its coverage area to jurisdictions on both sides of the border.

IV. EDUCATION AND TRAINING

Critical Capacity: To provide ongoing specialized infectious disease surveillance, epidemiologic and laboratory diagnostic training for public health, clinical, and other healthcare professionals to develop subject matter expertise within the public health system for cross-border disease detection, diagnostics, contact tracing, and outbreak analysis.

Activities That May be Considered:

1. Conduct joint infectious disease surveillance training and exercise session involving a broad range of appropriate participants from both sides of the international border.
2. Develop, train and exercise binational epidemiologic response teams to conduct capable field epidemiologic investigations, rapid needs assessments, exposure assessments, and response activities on both sides of the border.



3. Convene forums to discuss the planning and implementation of cross-border surveillance and epidemiologic response activities. The US border states (recipients of EWIDS funding) might consider using video conferencing capabilities to the extent practical to facilitate the participation of their Canadian or Mexican counterparts in planning or follow-up sessions.
4. Partner with Schools of Public Health and/or CDC's Centers for Public Health Preparedness in developing training activities to enable health professionals in Canadian border provinces and Mexican border states to receive introductory or advanced training in epidemiological surveillance, surveillance based laboratory methods and surveillance related information technologies.
5. Implement a program to enable epidemiologists, laboratorians and information technologists from Canada or Mexico (as appropriate) to perform on the job training and experiential learning field studies for a period of time in your state health department. Selection of "Visiting fellows" should be made based on the relative merits of candidates and matches the most meritorious candidates with previously identified needs within the border provinces/states.