



## **Continuation Guidance – Budget Year Five Attachment B Focus Area B: Surveillance and Epidemiology Capacity**

### **I. PUBLIC HEALTH SURVEILLANCE AND DETECTION CAPACITIES**

**CRITICAL CAPACITY #5:** To rapidly detect a terrorist event through a highly functioning, mandatory reportable disease surveillance system, as evidenced by ongoing timely and complete reporting by providers and laboratories in a jurisdiction, especially of illnesses and conditions possibly resulting from bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies. (See [Appendix 4](#) for IT Functions #1-6.)

#### RECIPIENT ACTIVITIES:

1. **CRITICAL BENCHMARK #7:** Complete development and maintain a system to receive and evaluate urgent disease reports and to communicate with and respond to the clinical or laboratory reporter regarding the report from all parts of your state and local public health jurisdictions on a 24-hour-per-day, 7-day-per-week basis.
2. Ensure legal authority to require and receive reports and investigate any suspect cases, potential terrorist events, unusual illness or injury (e.g., chemical or radiological) clusters, and respond in ways to protect the public (e.g., quarantine laws).
3. At least annually, with the input of local public health agencies, assess the timeliness and completeness of your reportable disease surveillance system for:
  - a. Outbreaks of illness and/or key categories of cases of reportable diseases, particularly those that are caused by agents of bioterrorism concern or those that mimic agents of bioterrorism concern; and others, such as influenza, invasive bacterial diseases, vaccine preventable diseases, vector-borne diseases, and food- and water-borne diseases.
  - b. Acute dermatological conditions/rash illnesses.
4. Based on these assessments, develop or enhance reporting protocols, procedures, surveillance activities, information dissemination, or analytic methods that improve the timeliness, completeness, and usefulness of the reportable disease system.
5.
  - a. Provide ongoing specialized disease surveillance and epidemiologic training for public health, clinical, and other healthcare professionals to develop subject matter expertise within the public health system for disease detection, contact tracing, and outbreak analysis. **(LINK WITH FOCUS AREA G.)**



- b. Evaluate disease surveillance and epidemiologic training for public health personnel.
6. Ensure epidemiologic capacity to manage the reportable disease system at the state and local level by providing necessary staffing, supplies, and equipment for epidemiology, surveillance, and interpretation of clinical and laboratory information. **(LINK WITH FOCUS AREAS C AND G)**
7.
  - a. Educate and provide feedback to reporting sources in your jurisdiction 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. **(LINK WITH FOCUS AREA G)**
  - b. Evaluate training provided to clinicians and other health care providers.
8. Assess and strengthen links with animal surveillance systems and the animal health community to support early detection efforts of illness among animals.
9. In coordination with your public health laboratory, develop and implement a strategy to ensure laboratory testing (in clinical or public health laboratories) for rapid or specific confirmation of urgent case reports. (See Appendix 4 for IT Functions #1, 4, and 5.) **(LINK WITH FOCUS AREAS C AND D)**
10. Improve the adequacy of state and local public health surveillance and reporting capacities related to smallpox, such as active surveillance for rash illnesses, case contact tracing, and monitoring for adverse events following vaccination
11. In coordination with local public health agencies, apply information technology according to established specifications, including NEDSS development or the NEDSS Base System, to develop or enhance electronic applications for reportable diseases surveillance, including electronic laboratory-based disease reporting from clinical and public health laboratories and linkage of laboratory results to case report information. (See Appendix 4 for IT Functions #1-5.) **(LINK WITH FOCUS AREAS C AND E, CROSS CUTTING ACTIVITY SURVEILLANCE AND INTEROPERABILITY OF IT SYSTEMS, Attachment H)**
12. In coordination with your public health laboratory, develop the capacity to apply molecular epidemiologic methods (e.g., pulsed field gel electrophoresis or sequence-based methods) to outbreak investigations and surveillance as appropriate. **(LINK WITH FOCUS AREA C)**
13. Integrate infectious disease surveillance by establishing relationship with state veterinary diagnostic laboratory. Evaluate database system for identification and tracking of zoonotic diseases. Conduct survey of veterinary practitioners regarding laboratory



utilization and specimen submission practices.

**ENHANCED CAPACITY #4:** To rapidly detect and characterize additional information about bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies through other core, cross-cutting health department surveillance systems such as vital record death reporting; medical examiner reports; emergency department, provider, or hospital discharge reporting; or ongoing population-based surveys. (See [Appendix 4](#) for IT Functions #1-4.)

RECIPIENT ACTIVITIES:

1. Enhance the timeliness and completeness of a system, (e.g., death reporting, data kept by medical examiners/coroners, emergency responders, poison control centers, 911 systems, pharmacies, clinics, and veterinarians) through electronic reporting to detect or respond to a terrorist attack. (See [Appendix 4](#) for IT Functions #1-5.)

**ENHANCED CAPACITY #5:** To rapidly detect and characterize additional information about bioterrorism, other infectious disease outbreaks, or other public health threats or emergencies by accessing potentially relevant pre-existing data sets outside the health department, or through the development of new active or sentinel surveillance activities.

RECIPIENT ACTIVITIES:

1. Develop and evaluate surveillance to rapidly detect influenza-like illness (ILI) and distinguish possible bioterrorism-caused illness from other causes of ILI.
2. Develop active, laboratory-based surveillance for invasive bacterial diseases (for example, *N. meningitidis*, *B. anthracis*, *Y. pestis*, and other causes of sepsis or meningitis). **(LINK WITH FOCUS AREA C)**
3. Develop and evaluate surveillance for encephalitis and meningitis or unexplained critical illnesses or deaths. Link clinical reports and laboratory test results. **(LINK WITH FOCUS AREAS C AND E)**
4. Develop and evaluate surveillance for indicators of terrorist events, and catastrophic infectious diseases, including hospital admissions, hospital beds occupied (or available), intensive care unit admissions, or emergency department visits. **(LINK WITH FOCUS AREA E)**
5. Evaluate existing databases (for example, data kept by medical examiners/coroners, emergency responders, poison control centers, 911 systems, pharmacies, clinics, and veterinarians) for use in surveillance systems. **(LINK WITH FOCUS AREA E)**



## II. PUBLIC HEALTH EPIDEMIOLOGIC INVESTIGATION AND RESPONSE CAPACITIES

**CRITICAL CAPACITY #6:** To rapidly and effectively investigate and respond to a potential terrorist event as evidenced by a comprehensive and exercised epidemiologic response plan that addresses surge capacity, delivery of mass prophylaxis and immunizations, and pre-event development of specific epidemiologic investigation and response needs.

### RECIPIENT ACTIVITIES:

1. Confirm that an epidemiological response coordinator for bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies has been designated at the appropriate state and/or local levels.
2. With local public health agencies, coordinate all epidemiologic response-specific planning in this section with your jurisdiction's overall planning conducted in Focus Area A and with hospital preparedness activities being facilitated by the Health Resources Services Administration.
3.
  - a. Provide ongoing specialized competency-based epidemiology investigation and response training for state and local public health staff (including epidemiology response teams) who would respond to a bioterrorism event. (**LINK WITH FOCUS AREA G.**)
  - b. Evaluate bioterrorism epidemiologic response training for state and local public health agency personnel, healthcare providers, policy makers, law enforcement officials, and others who would be involved in responding to an event (drills/exercises).
4. Develop the capacity to track the degree to which persons who have not been exposed to a potential terrorist or emerging infectious agent seek acute care at health care facilities.
5. In coordination with appropriate state and local agencies responsible for food, water, and air safety, develop or ensure capacity of the public health system to respond in a timely and appropriate manner to a food-, water-, or air-borne illness or threat.
6. Develop or acquire information and fact sheets about bioterrorism, other infectious disease outbreaks, other public health threats and emergencies, and other relevant technical information for public use in a terrorist event. (**LINK WITH FOCUS AREA F**)
7. **CRITICAL BENCHMARK #8:** With local public health agencies, identify and maintain a current list of physicians and other providers with experience and/or skills in the diagnosis and treatment of infectious, chemical, or radiological diseases or conditions (including psychological and behavioral) possibly resulting from a terrorism-associated



event (for example, those who have seen and treated smallpox) who may serve as consultants during a public health emergency. (See [Appendix 4](#), IT Function #7, **LINK WITH FOCUS AREA F**)

8. Develop and exercise a large-scale smallpox vaccination plan that will provide vaccine for the project's entire population and can be rapidly executed once a case of smallpox disease has been identified anywhere in the world. This plan will be implemented in conjunction with the smallpox response plan mentioned above that will aid in controlling and containing a smallpox disease outbreak should it occur within the project's jurisdiction. The plan should address: patient screening; clinic operations; outreach; adverse event monitoring and management; reading of takes; and evaluation. (**LINK WITH HRSA CRITICAL BENCHMARK #2-4: SURGE CAPACITY: ADVANCE REGISTRATION SYSTEM**)
9. **CRITICAL BENCHMARK #9:** Establish a secure, Web-based reporting and notification system that provides for rapid and accurate receipt of reports of disease outbreaks and other acute health events that might suggest bioterrorism. Include provision for multiple channels for routine communications (e.g., Web, e-mail) and alert capacity for emergency notification (e.g., phone, pager) of key staff. (See Appendix 4 for IT Functions #6-9.) (**LINK WITH FOCUS AREA E, CROSS CUTTING ACTIVITY INTEROPERABILITY OF IT SYSTEMS, Attachment H**)
10. Conduct bioterrorism sessions at key meetings and conferences of outside organizations involved in epidemiologic detection and response, for example, the Association for Practitioners of Infection Control (APIC), infectious disease societies, healthcare practitioners, and veterinary organizations.

**CRITICAL CAPACITY #7:** To rapidly and effectively investigate and respond to a potential terrorist event, as evidenced by ongoing effective state and local response to naturally occurring individual cases of urgent public health importance, outbreaks of disease, and emergency public health interventions such as emergency chemoprophylaxis or immunization activities.

RECIPIENT ACTIVITIES:

1. **CRITICAL BENCHMARK #10:** At least annually, assess through exercises or after-action reports to actual events, the 24/7 capacity for response to reports of urgent cases, outbreaks, or other public health emergencies, including any events that suggest intentional release of a biologic, chemical, or radiological agent.
2. **CRITICAL BENCHMARK #11:** At least annually, assess adequacy of state and local public health response to catastrophic infectious disease such as pandemic influenza, other outbreaks of disease and other public health emergencies.
3. Based on these assessments, develop or enhance case investigation protocols, response



procedures, legal or regulatory provisions, or communication and information dissemination activities that improve the effectiveness of the public health epidemiologic response.

4. Ensure epidemiologic response capacity to investigate and respond to urgent cases, catastrophic infectious disease such as pandemic influenza, other disease outbreaks, and public health emergency interventions at the state and local level by providing necessary staffing, supplies, equipment, consultation, and training in epidemiology, outbreak investigation, interpretation of clinical and laboratory information, public health control measures, protection measures for emergency response workers, communications systems, and management of secure information.
5. Maintain continuous participation in CDC's Epidemic Information Exchange Program. (See [Appendix 4](#) for IT Functions #7-9.)
6. With local public health agencies, educate, especially in the context of real-life situations, key policy makers, partners and stakeholders in your jurisdiction regarding the nature and scope of public health surveillance, investigation, response and control.
7. With local public health agencies, apply information technology to enhance response capacity (for example, workflow tracking and monitoring systems; field data entry, analysis, and transmission; management of case contacts; and delivery of immunizations and chemoprophylaxis information. (See [Appendix 4](#) for IT Functions #5, 6, and 9.)
8. Develop a comprehensive smallpox response plan that incorporates post-event plans from participating hospitals. Exercise the plan so it can be rapidly executed to control and contain the consequences of a smallpox outbreak should the outbreak occur within the project's jurisdiction.
9. Identify the number and type of healthcare and public health personnel to serve as members on smallpox response (public health and healthcare response) teams who will be target recipients for vaccine.
10. Enhanced Recipient Activity: Develop and maintain a registry of all public health personnel, health care personnel, public health workers, security staff needed to maintain public order, EMS staff needed to transport ill patients, hospital staff, private physicians and their staff who may be occupationally at risk to receive vaccination in the event of the release of smallpox.
11. Enhanced Recipient Activity: Enumerate the number and type of key security staff needed to maintain public order, EMS staff needed to transport ill patients, hospital staff, private physicians and their staff who may be occupationally at risk during a smallpox outbreak who will be target recipients for vaccine.





**ENHANCED CAPACITY #6:** For effective response through the creation or strengthening of pre-event, ongoing working links between health department staff and key individuals and organizations engaged in healthcare, public health, and law enforcement.

RECIPIENT ACTIVITIES:

1. Regularly provide relevant public health information to key partners through an appropriate Web site and/or a jurisdiction-wide newsletter. **(LINK WITH FOCUS AREA E)**
2. With local public health agencies, enhance relationships with infection control professionals through development of a formal public health network or support of state activities that build relationships between the health department and the Association for Practitioners in Infection Control and Epidemiology.
3. With local public health agencies, enhance relationships with infectious disease physicians by participating in infectious disease rounds and conferences, supporting an infectious disease society or network, or supporting a health department-based infectious disease fellow. **(LINK WITH FOCUS AREA G)**
4. With local public health agencies, enhance relationships with emergency department providers and emergency responders by attending and participating at conferences, developing and evaluating surveillance activities, or engaging in NEDSS-related activities for development of electronic systems for emergency department reporting. **(See Appendix 4 for IT Functions #1-2, LINK TO HRSA BIOTERRORISM TRAINING AND CURRICULUM DEVELOPMENT PROGRAM, Attachment 9)**
5. With local public health agencies, enhance relations with medical schools, nursing schools, Centers for Public Health Preparedness, and other schools of public health through joint sponsorship of conferences, teaching, assisting in curriculum development and offering health department electives to students and residents. **(LINK WITH FOCUS AREA G)**
6. With local public health agencies, enhance relations with law enforcement agencies, the business community, and the National Guard by establishing designated points of contact and through cross-training in each discipline and/or joint sponsorship of conferences.
7. With local public health agencies, enhance relations with veterinarians by encouraging infectious disease testing and reporting, participation in veterinary school grand rounds, encouraging relationships with the state board of animal health, department of agriculture, department of natural resources, veterinary school (where applicable), and veterinary diagnostic laboratories.



8. With local public health agencies, enhance relations with members of the medical examiner and coroner response community by providing education, designating points of contact, and providing joint sponsorship of meetings.
9. With local public health agencies, enhance relationships with emergency management agencies to support public health agency role during emergency response activities through cross-training in each discipline, especially enhancing public health's understanding of the Incident Command System.
10. With local public health agencies, enhance relationships with environmental health and management agencies to support the surveillance, investigation, and response activities required in the event of a chemical or radiological terrorism-associated event.
11. With local public health agencies, enhance relationships with worker safety and health agencies and the emergency response community to address issues related to the protection of emergency response workers, health care workers, remediation workers, workers involved in restoring essential public services, and others that may be involved in the response to a terrorist event.