Annex 4

Suggested Pre-Event Activities for State and Local Public Health Authorities

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Development of state and local smallpox bioterrorism preparedness pre-event plans. This annex describes specific recommended pre-event (pre-outbreak) activities for state and local health authorities. Although essential public health activities are outlined in the CDC Smallpox Response Plan and Guidelines (CDC Response Plan), state and local health authorities need to develop their own strategies and outbreak control plans, and the planning and many key activities need to begin immediately. Although CDC will advise and assist state and local health departments in the event of a smallpox outbreak, state and local health departments will have primary responsibility for outbreak control.

The state or local pre-event plan should describe the necessary activities and resources for an effective response by local health staff as well as ensure effective immediate on site coordination with Federal (CDC) roles as outlined in the CDC Response Plan. Ideally, the state or local plan should be part of, or reference, the state or local jurisdiction s all-hazard Emergency Operations Plan.

These plans should address:

1. the establishment of an Executive Planning Committee, including identification and involvement of key partners, stakeholders, and local elected officials;
2. command, control, and management procedures;
3. mobilization of necessary staff, resources, and their availability;
4. surveillance and epidemiologic investigation procedures, including contact identification and tracing, vaccination of contacts, mobilizing laboratory resources, and alerting and training of health care providers about the identification and reporting of suspected cases of smallpox;
5. vaccine management, including storage, distribution, protection procedures, and vaccination of essential personnel;
6. vaccination adverse event monitoring;
7. legal powers for quarantine and selection of isolation sites and plans for how they will be used;
8. decontamination of smallpox-contaminated equipment, waste, rooms, and vehicles;
9. plans for communications with health care providers, the public and the media;
10. training identified health care staff and other first responders (e.g., police, firemen) for outbreak control;
11. establishing security procedures in conjunction with local police and other law enforcement agencies, including operational procedures for essential functions including the maintenance of essential systems such as water, electricity, and waste disposal.

These activities are described briefly later in this document. More detailed descriptions of many of these activities are included in the guides and annexes of the CDC Smallpox

Response Plan and Guidelines.

Federal Role
State and local plans must be compatible with the Federal plan, so that if an outbreak occurs, there can be immediate, on site coordination between CDC and the state and local health department. Some of the Federal roles at present include:

1. Delivery or standby readiness for delivery of smallpox vaccine and vaccination components to designated areas.
2. Laboratory or confirmation of smallpox infection.
3. Immediate mobilization and deployment of CDC personnel to assist local or state public health officials with epidemiological investigations, surveillance, contact identification, vaccination, record keeping for vaccine administration and adverse events, and monitoring vaccine inventory.
4. Development of vaccination strategies.
5. Distribution of guidelines and forms for surveillance, contact identification and tracing, vaccination, isolation strategies, specimen collection and transport, public/media communications, and decontamination.
6. Development and distribution of training and educational materials for the public and health care providers.
7. Provision of technical assistance to the national authority responsible for coordinating the overall efforts for managing the event.

In addition, other Federal roles may be added, such as

- Vaccine research and development
- Coordinating national and international surveillance
- Assessing the need for and scope of a suitable liability program for vaccine manufacturers and persons administering the vaccine
- Managing an adverse events surveillance system at the national level
- Developing a central (national) secure information database/exchange/clearinghouse
- Guidelines for distribution and use of antiviral agents

Funding resources for state and local plan development.
At the present time, limited resources are available for state and local plan development and additional resources are expected from the national level for plan implementation. Possible funding mechanisms include:

- Federal contracts and/or grants for the purchase of vaccine

- Federal grants and/or reimbursement for vaccine distribution and administration
- Federal purchase of antiviral agents, if deemed useful
- Federal grants for enhanced surveillance
- Release of Federal funds under the Federal Response Plan (Stafford Act; Public Law 93-288, as amended), as is done for other natural disasters (NOTE: criteria to be used for the release of funds have not yet been determined)
- Regardless of the options chosen, State and local jurisdictions should, for planning purposes, expect to provide supplementary resources at the time of a smallpox outbreak, including temporary redirection and training of personnel and financial resources from other programs.

Suggested Immediate Pre-Event Preparations for State and Local Health Authorities

Although Federal personnel and assets will certainly be provided to assist local and state health authorities with potential response activities, many key pre-event activities should begin immediately, and take place at the local and state level to help ensure a more effective and coordinated overall response.

(*The Public Health Response to Biological and Chemical Terrorism Guide for State Public Health Officials [www.bt.cdc.gov/Documents/Planning/PlanningGuidance.PDF] and Pandemic Influenza: A Planning Guide for State and Local Officials [www.cdc.gov/od/nvpo/pandemicflu.htm] are additional references for planning content and format)*

The following 11 areas should be given immediate consideration in state and local smallpox preparedness plans:

1. The establishment of an Executive Coordinating Committee

An Executive Coordinating Committee, with a named leader, should be established that is responsible for the overall planning and implementation of pre-event activities; this committee would:

- Select lead persons that will develop each individual plan component and be responsible for overseeing implementation of pre-event activities and coordination with CDC
- Be responsible for ensuring the completion of the pre-event plan and sharing the plan with key partners and stakeholders, other states, and the CDC
- Pilot the pre-event plan using table top exercises and adapt and revise the plan as appropriate
- Review quarantine laws and authorities

- Designate personnel that will participate in a proposed CDC train-the-trainer course

2. Command control and management procedures

Pre-event planning should include establishing roles and responsibilities for managing an emergency situation. Suggested activities to include in command control and management plans follow.

- The state health officer should designate a person to be in charge of developing and implementing smallpox control efforts.
- Individuals should be identified and made responsible for all of the activities listed in the plan
- An outline should be written that describes all necessary administrative tasks needed in response to an occurrence of a smallpox case. This outline should address:
  - the line of command;
  - the person(s) that would make decisions on scope of the response;
  - the personnel that would comprise an initial response team;
  - plans for communicating with health care providers, the public, and media; and
  - coordination with law enforcement agencies, state emergency management, hazard, and response authorities.
- A primary public health authority contact should be named in each local public health and state health department, with at least one backup contact.
- Primary contacts should be named and communication procedures established for:
  - law enforcement agencies (e.g., local police, FBI)
  - medical facilities (hospitals, clinics, private physician offices, laboratories)
  - local emergency response coordinators (including city and county offices)
  - local media
  - the CDC.

3. Emergency Personnel and Resource Mobilization and Needs

In order to ensure a rapid response to a smallpox emergency, certain pre-event activities need to be started now. These activities include the following:

- Identify state and local leads for coordinating surveillance and epidemiologic investigation activities in a smallpox emergency;
- Identify state and local personnel that will conduct smallpox surveillance and manage relevant databases;
- Identify state and local personnel responsible for conducting the initial epidemiologic

investigation that will determine the initial source of outbreak, population at risk, and epidemiological features of outbreak.

- Determine other non health department personnel that will be involved in the initial epidemiologic investigation;
- Identify state and local leads to oversee interviews of confirmed, probable, and suspected cases to determine travel history and contact lists;
- Identify state and local personnel that will conduct the interviews of confirmed, probable, and suspected cases;
- Identify personnel for contact tracing during a smallpox emergency:
  At least 30 people, divided into 2 person teams should be designated, with contingencies for additional people. Potential local and state resources for such personnel include STD/HIV/TB public health staff and community medical training resources such as nursing or medical schools.
- Identify state and local resources for daily telephone monitoring of identified contacts;
- Identify personnel responsible for coordinating the staffing and maintenance of quarantine and isolation activities;
- Arrange public notification procedures and establish the specific roles of state and local public relations offices; and
- Identify reliable smallpox subject matter experts from local and state communities, and establish procedures to direct media inquiries to these experts for reliable disease information (check with CDC for any such experts already in place, such as from the Infectious Diseases Society of America).

4. Pre-event surveillance and epidemiologic activities (including preparing to identify smallpox cases, contact tracing, contact vaccination and surveillance)

Pre-event planning should include the development of enhanced surveillance and epidemiologic protocols to respond to a smallpox emergency. These protocols should include the following:

- Algorithms for investigation procedures (including methods and data sources for rapid case ascertainment under emergency conditions)
- A listing of surveillance partners (hospitals, clinics, private practices, medical examiners, laboratories, county/local health departments, pharmacists)
- Alerting and training health care providers about the identification and reporting of suspected cases of smallpox;
  - Establishing multiple (redundant) mechanisms for reporting confirmed, probable, and suspected cases to public health surveillance personnel (potential redundant mechanisms include: secured fax, secured web-based reporting, telephone reporting, email).

  - Establishing a centralized place for initial reporting and informing potential reporting sources of the location and methods of reporting.
- Establishing points of contact with potential reporting sources and redundant means for communicating information back to these sources in an emergency
- Review and preparing for the use of the CDC surveillance report forms in a smallpox emergency.
- Developing and establishing the laboratory capability for handling specimens, for confirmation of cases, and for secure shipment of specimens to CDC
- Establishing methods for retrieving laboratory diagnosis for probable and suspected cases
- Establishing sentinel surveillance in health care settings; this will involve coordination with infection control professionals from the Association of Professionals in Infection Control (APIC), infectious disease epidemiologists and clinicians, emergency department physicians, National Nosocomial Infections Surveillance (NNIS) and National Surveillance System for Healthcare Workers (NASH) hospitals
- Review CDC procedures and forms for case investigation, and conduct practice sessions of various smallpox exposure scenarios (see Training)
- Review CDC forms for collection of travel and contact information from confirmed, probable, and suspected cases
- Review CDC procedures for collection of specimens from suspected smallpox patients (Guide D in the CDC Response Plan)
- Develop procedures to maintain surveillance of potentially exposed persons
- Identify and establish mechanisms to generate electronic maps for all reported cases to show patient addresses, the geographic presentation of outbreaks and/or patients, and the types of properties surrounding the reported cases that might affect outbreak containment procedures.

- **5. Preparing for the conduct of smallpox vaccination operations (vaccine management and delivery)**

- Guidelines for conducting smallpox vaccination operations are in Guide B and Annex 4. To prepare for the possibility of rapid vaccination if a smallpox outbreak occurs, a number of pre-event activities should be started at the state and local levels.

- Review scenarios 1-6 in the Training section and plan appropriate local responses. The vaccination response will be based on the size of the initial outbreak, the amount of vaccine available, and the probability that new cases will be identified in subsequent days, and as well as consideration of the size and distribution of the

population to be vaccinated, amount of time available to prevent infection after exposure, number of clinic sites, the number of vaccine administrators available, average capacity of each vaccine administrator in doses per hour, number of sessions per site, and number of hours of each clinic session

- Identify sites for vaccination clinics for case contacts and large numbers of the public
- Identify separate non-hospital sites to vaccinate response teams, all health care workers, and other essential community workers (See Annex 2 for a suggested list.)
- Identify potential central, regional and local vaccine storage facilities, and necessary security
- Establish or update vaccine management, storage, handling and secure distribution procedures to include smallpox vaccine. (See Guide B and Annex 2 in the CDC Response Plan)
- Identify supplies and equipment that would be needed for conducting smallpox vaccination clinics - including supplies for patient registration and education, vaccine administration, and response to adverse events
- Develop an outline of the organizational structure, clinic position responsibilities, operational flow and set-up diagram for large clinics (see Annex 2 and Guide B of the CDC Response Plan). This outline should also address security maintenance, parking and traffic control, communications, and client comfort
- Review CDC recommended smallpox vaccination procedures and train immunization personnel with smallpox vaccination techniques
- Develop a description of the precautionary measures and guidelines staff must observe when conducting smallpox vaccination clinics, including vaccine handling, prevention of exposure to blood-borne pathogens, use of protective barriers (gloves and masks), use of sharps containers, and possible re-sterilization of bifurcated needles
- Review CDC suggested sample documents and develop or obtain all documents and forms that will be used in large clinics, including medical standing orders, Vaccine Information Statement (with informed consent if needed because of state regulation or law, or because of Investigational New Drug [IND] regulations), fact sheets, immunization records, adverse reactions, and vaccination follow-up
- Become familiar with CDC protocols for receiving vaccine from the National Pharmaceutical Stockpile. (See Section IV. CDC Vaccine Mobilization and Deployment in CDC Response Plan)
- Review state laws and regulations regarding the qualifications and licensing requirements for personnel to administer smallpox vaccine. If unclear, obtain a legal opinion
- Determine if sufficient local and state public health legal authority exists for

mandating smallpox vaccination
- Establish medical screening procedures for receipt of smallpox vaccine; develop a smallpox vaccination screening tool to detect persons with contraindications to vaccination (See Guide B in the CDC Response Plan)
- Review guidelines for exposed persons who refuse vaccine
- Once CDC has issued guidelines for pre-event vaccination, vaccinated appropriate personnel
- Develop methods to document vaccination and vaccine take; create a database or modify an existing immunization registry for this purpose.

6. Recognizing and monitoring adverse events

The overall risk of serious complications following vaccination with vaccinia vaccine is low. Complications occur more frequently in persons receiving their first dose and among young children (≤ 5 years of age). Details on complications and treatment of complications due to vaccinia vaccine are given in Guide B and Annex 1.

- Review suggested procedures for reporting and follow-up of adverse events following vaccination and plan for possible implementation. (See Annex 3 in CDC Response Plan).
- State and local health departments should prepare an inventory of the documents and forms that will be required to recognize, treat, and report adverse events.

- Documents that each vaccine provider will need include:
  - Vaccine Adverse Events Reporting System (VAERS) report form, instructions on how to access the form electronically, and submit it at www.vaers.org;
  - Vaccine Information Statements (VIS);
  - Clinical descriptions of known vaccinia vaccine complications;
  - Vaccinia immune globulin (VIG) information.

- Each state health department should have in place:
  - A designated state health contact (SHC) trained and available for overseeing vaccine safety activities. The SHC will be responsible for the review of reports for completeness and if not complete, obtaining necessary critical information and ensuring the reporting of adverse event cases to VAERS,
  - Designated staff trained and available for active surveillance tracking, follow up of serious reports submitted to VAERS and for providing assistance in completing VAERS forms.

  - Outline procedures so that at the time of vaccination, vaccine recipients or their parent/guardians will be give a VIS with instructions on how to contact VAERS and the respective State Health Department and a vaccine adverse events diary card and instructions.
- Develop plans for treating and managing patients with severe adverse events, including use of vaccinia immune globulin (VIG), and possibly antiviral agents (e.g., cidofovir).
- Outline procedures for managing persons with severe adverse events.

7. Isolation and Quarantine Preparations

Limiting spread of smallpox virus from patients to others is a critical part of the control strategy. Local or state legal statutes regarding public health authority to isolate or quarantine infectious or potentially infectious and incubating persons need to be reviewed and plans for coordinating with Federal authorities should be made. In addition to isolation and quarantine plans, other transmission control strategies plans should be developed such as for suspension of large public gatherings or closing of facilities. Isolation and Quarantine Guidelines are presented in Guide C.

Suggested pre-event activities for state and local health departments are as follows:

Determine if sufficient local and/or state public health legal authority exists for mandating isolation/quarantine. Legal authorities should include:

Collection of records and data, including
- Reporting of diseases, unusual clusters, and suspicious events
- Access to hospital and provider records
- Data sharing with law enforcement agencies
- Veterinary reporting
- Reporting of workplace absenteeism
- Reporting from pharmacies

Control of Property
- Right of access to suspicious premises
- Emergency closure of facilities
- Temporary use of hospitals and ability to transfer patients
- Temporary use of hotel rooms and drive-through facilities
- Procurement or confiscation of medicines and vaccines
- Seizure of cell phones and other walkie-talkie type equipment
- Decontamination of buildings
- Seizure and destruction of contaminated articles

Management of Persons
- Identification of exposed persons
- Mandatory medical examinations
- Mandatory vaccination of high-risk contacts
- Collect lab specimens and perform tests
- Rationing of medicines
- Tracking and follow-up of persons
- Isolation and quarantine
- Logistical authority for patient management
- Enforcement authority through police or National Guard
- Suspension of licensing authority for medical personnel from outside jurisdictions
- Authorization of other doctors to perform functions of medical examiner

Access to Communications and Public Relations
- Identification of public health officers, e.g. badges
- Dissemination of accurate information, rumor control, 1-800 number
- Establishment of a command center
- Access to elected officials
- Access to experts in human relations and post-traumatic stress syndrome
- Diversity in training, cultural differences, dissemination of information in multiple languages

- Identify persons or organizations empowered to invoke and enforce isolation and quarantine authorities.
- Develop plans for emergent vaccination of personnel needed to implement and enforce quarantine measures during a bioterrorism event (e.g., first responders, health care workers, law enforcement personnel, and essential service providers).
- Identify appropriate facilities for isolation as described in Guide C of the CDC Response Plan and establish procedures for activating them.
- Establish procedures for monitoring access to facilities.
- Establish laundry service arrangements (on-site if possible) and appropriate disposal of medical waste (See Guide F in the CDC Response Plan).
- Arrange for food service support for facility occupants.
- Establish procedures for monitoring health status of facility staff
- Develop campaigns which focus on educating the public and health care providers about smallpox and the potential need for utilizing population quarantine measures as a means to interrupt disease transmission.

8. Decontamination

State and local health authorities should review the CDC Guideline for Decontamination (Guide F) and make plans for resources and personnel to handle decontamination of smallpox-contaminated medical equipment, medical waste, clothing, surfaces, bedding, rooms, and vehicles.

9. Communications Plans

A smallpox outbreak is a communications crisis as well as a public health crisis, and how communications are handled can affect the public, media, and health care providers response and confidence in the government s and public health system s handling of the crisis.

Full details of communication plans and activities are given in Guide E.

State and local health departments should:

- Become sufficiently informed about smallpox to be able to answer questions from media and the public, including general information on smallpox infection, how smallpox is spread, the incidence of smallpox, and recommendations for vaccination
- Develop and produce or obtain informational material such as:
    - fact sheets
    - Frequently asked questions (FAQs) and Question and Answers sheets for the public and media
    - Technical bulletins for health care providers
- Make arrangements to be able to establish a special around the clock hotline on short notice
- Develop an outline of how and through what media the public will be provided information about the availability of smallpox vaccine, clinic locations and who should be vaccinated
- Review and if needed, upgrade, rapid alert communication systems to ensure rapid communication capability between local and state public health and medical communities
- Delineate the relative roles of state and local public relations offices
- Prepare sample alert messages for key public health partners. Consider multiple mechanisms for communicating these message to partners. Offer regular teleconferences to partner organizations
- Prepare sample community alert messages. Format these messages for broadcast and print media; develop plans for conducting regular press conferences

- Assure that spokespersons are technically knowledgeable and trained for media communications.

10. Training

An effective response requires that those overseeing operations as well as those in the field know what is in the response plan and know how to act accordingly. State and local health departments pre-event training activities should focus on:

- Training case investigation and contact tracing personnel to be able to:

- Recognize symptoms and clinical signs of smallpox; identify cases/suspect cases; understand reporting procedures and know which forms are required; know how to arrange for isolation.

- Interview cases/suspect cases on:
  - recent (prior 3 weeks) travel, activities, and possible sources of exposure
  - day-by-day close contacts and contact sites since onset of fever or rash.

- Trace close contacts, arrange for their vaccination, and conduct surveillance of contacts for fever or rash.

- Counsel contacts, household members regarding smallpox symptoms, fever surveillance guidelines/restrictions, what to do and who to contact if fever or other symptoms (rash) occur.

- Administer vaccine to contacts and household members.

- Screen for contraindications to smallpox vaccination

- Assess a smallpox vaccination take

- Counsel vaccinees regarding care of vaccine site, expected vaccine reactions, adverse events.

- Counsel household members with contraindications to vaccination to avoid contact with contacts to smallpox cases, and other vaccinated household members.

- Conducting training exercises based on CDC suggested smallpox exposure scenarios, and include these in state plans:

Scenario 1 - Exposure to substance claimed or suspected to be smallpox
Scenario 2 - A single case of clinically compatible illness presents to hospital; local surveillance detects no other cases.

Scenario 3 - Several clinically compatible cases are identified at a hospital; local surveillance identifies other clinical cases; case investigation may or may not indicate a common exposure of up to a few hundred persons; over the next 2 days a total of 5-10 cases are identified.

Scenario 4 - Several clinically compatible cases are identified at a hospital; local surveillance identifies other clinical cases; case investigation indicates a common exposure at an event/site where up to a few hundred persons may have been exposed; over the next 2 days a total of 50-100 cases are identified.

Scenario 5 - Several clinically compatible cases are identified at a hospital; local surveillance identifies other clinical cases; case investigation indicates a common exposure at an event/site where thousands of persons would have been exposed simultaneously; over the next few days hundreds of potential cases present for evaluation.

Scenario 6 - Several clinically compatible cases are identified at a hospital; over the next 2 days additional cases are identified locally and at hospitals in several other major urban areas; no common exposure is identified leading to a conclusion of multiple exposures.

11. Security

Because the supply of vaccine is limited and the demand for vaccine may be extremely high, plans for securing the vaccine supply are critical. Law enforcement personnel may need to guard vaccine storage facilities, guard vaccine as it is transported, provide a secure environment at clinic sites, and accompany public health field workers that visit contacts at home to provide vaccine. In addition to securing vaccine supplies, extra security measures will be needed for smallpox patients in isolation at hospitals and in quarantine facilities and may be needed for suspect cases and contacts. Health authorities should coordinate their plans and have contact lists for local police or other law enforcement agencies.

In addition, state and local health authorities need to be familiar with emergency procedures for maintaining essential systems such as water, electricity, and waste disposal at vaccine, isolation, quarantine, and other sites.