PREPAREDNESS PLANNING GUIDANCE

for a

REGIONAL RESPONSE

to a

PUBLIC HEALTH EMERGENCY

April, 2004

Connecticut Department of Public Health
Planning and Preparedness Subcommittee

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INTRODUCTION

The Connecticut Department of Public Health's (DPH) Planning and Preparedness Subcommittee (Focus Area A) is charged with guiding and monitoring the progress of the public health preparedness and response planning initiatives at the local, regional, and state level. A workgroup was formed to develop criteria to assist municipalities and local health departments, acute care hospitals and community healthcare providers to develop regional response plans. The Regional Preparedness Planning Workgroup prepared this document to identify the critical elements for Connecticut's regional preparedness plans that municipalities and facilities must address to minimize the adverse effects upon the population of the facility from weapons of mass destruction, a major disaster or attack; and to manage the immediate emergency conditions caused by such a public health emergency.

All municipalities and healthcare facilities have in place an Emergency Operations Plan (EOP) that identifies the roles and actions to be taken in the event of a municipal emergency. EOPs are designed according to a Federal Emergency Management Administration (FEMA) model all-hazards plan that include annexes to address critical emergency service functions (ESFs) and specific hazards, such as tornados, hurricanes, and floods. Due to recent national and state terrorism threats and events, the CT Office of Emergency Management (OEM), regional planning organizations, and local emergency management directors are currently working to enhance municipal EOPs to include terrorism annexes. DPH and its public health and healthcare partners are contributing to the development and enhancement of ESF 8 annexes that focus on the specific health and medical responses required in any emergency, and to the bioterrorism specific annex for each municipality.

DPH and OEM are supporting the development of regional response plans that will incorporate the local initiatives into a cooperative agreement among municipalities and institutions to respond to a public health emergency in a coordinated effort. The regional response plans will ***not*** supercede municipal emergency operation plans or institutional plans, rather the regional approach recognizes the need to enhance the response strategies to include assets from multiple municipal and institutional resources.

The Regional Preparedness Planning Workgroup recommends that municipal, institutional, and regional partners identified in the attached listing (Attachment 1) convene periodic meetings to accomplish the following objectives:

1. Build collaborative relationships with all regional response partners;
2. inventory the response assets in the defined preparedness regions (Attachment 2);
3. identify the conflicting plans, procedures, or policies among the partners; and
4. address the critical elements identified within this guidance to develop cooperative response strategies.

The guidance prepared by the Workgroup provides key criteria definitions for consistency among users; regional goals for all partners to adopt; a description of the current status of planning activities for this criteria; and specific, critical regional planning elements that must be addressed in each regional plan. It is important to note that the critical elements broadly address public health emergencies. The regional partners must identify how a public health response will be appropriately scaled to fit the emergency. For example, a statewide release of a biological agent will require a full-scale regional response but a site-specific chemical exposure could require a smaller-scale regional response.

The following questions focus the preparedness efforts for each region and are further defined and described throughout this document

- What are the roles and responsibilities of each of the regional partners?
- How will the regional partners assure the use of standardized clinical, surveillance, and response protocols?
- How will the regional partners provide decontamination facilities to serve the entire population?
- How will the regional partners allow volunteers, medical personnel, and public health professionals to provide services throughout the region in an emergency?
- How will the regional partners coordinate local and facility evacuation plans to avoid conflicting use of resources?
- How will information be shared among regional partners? What communication systems are compatible within the region and the state?
- How will public information be coordinated among the regional partners to avoid mixed messages and conflicting directions for the public?
- How will the hospital laboratories in the region coordinate services in a public health emergency?
- How will the municipalities and hospitals in the region provide mass immunization and prophylaxis?
- Is there enough personal protective equipment for the region's emergency responders?
- How will the regional partners isolate contaminated persons from the general population?
- How will the regional partners secure evidence and facilities in a public health emergency?
- How will the regional partners stockpile pharmaceutical and medical supplies for use in an emergency?
- How will the healthcare providers in the region respond to a surge demand for services?

As the regional partners develop response plans, it is important to consider how services or tasks will be provided for special populations (i.e., institutionalized and homebound) and for special needs (i.e., pediatric and mental health). The expectation is that all municipal emergency operations plans and institutional plans will include specific instructions to accommodate these needs in a public health emergency. The regional partnerships can provide additional support to address these needs in a regional event.

The Workgroup recommends that all planning and preparedness partners review the document and begin discussions about how best to address the criteria presented here. Regional partners include the CT Association of Directors of Health and local health departments and districts; Hospital Centers of Excellence for Bioterrorism Preparedness and acute care hospitals, community health centers, skilled nursing facilities, home healthcare agencies, and urgent care centers; emergency medical service providers; municipal public safety departments, including Fire and Police Departments; Local Emergency Planning Committees; HAZMAT teams; regional planning organizations; and other public health and healthcare partners (Attachment 1).

CLINICAL PROTOCOLS

Definition

Clinical protocols are plans or standard operating procedures used to guide clinical personnel actions in the medical management of persons and infectious diseases during an event or occurrence of a public health emergency. The design and implementation of clinical protocols serves to effectively manage the: a) medical treatment of persons affected; b) isolation and quarantine of patients to prevent transmission of any communicable disease; c) decontamination of persons and areas affected; and d) protection of healthcare workers.

Desired Goal

In order to assure consistent diagnosis, treatment, and clinical response, it is important for all regional healthcare providers to agree on the clinical protocols to be implemented in a public health emergency. This includes consensus on the protocols for the rapid detection and treatment of exposure to biological, chemical, incendiary, radiological and/or explosive agents.

Current Status

- Acute care hospitals and other healthcare providers currently have emergency protocols in place.
- There are some variations in clinical protocols as recommended from different sources (i.e., CDC, AMA).
- The CT Department of Public Health (DPH) has issued public health emergency clinical protocols for response to anthrax exposure, smallpox contamination, SARS, influenza, isolation, and URE.
- The DPH Office of Emergency Medical Services, has issued first responder and pre-hospital protocols during emergency and non-emergency events.
- DPH, in collaboration with the Office of Emergency Management, Department of Environmental Protection, Hospital Centers of Excellence, UCONN Health Center, Yale University School of Medicine, and the American Society for Therapeutic Radiology and Oncology, drafted clinical protocols that are included in the *Connecticut Model Radiation Emergency Manual For Hospitals*.

Critical Regional Planning Elements

- Describe the current standard operating procedures or protocols for healthcare facilities in the region related to CBRNE (chemical, biological, radiological, nuclear, and explosive) agents.
- Identify any conflicting procedures or protocols and determine what needs to be standardized.
- Determine how the EMS providers will transport patients to a facility that meets clinical protocol standards.
- Identify the protocol training needs for clinical care providers and utilize DPH Statewide Health Sector Education and Training Plan to assure training program opportunities.
- Contribute to the CT Healthcare Emergency Response Education and Training Advisory Board (CHERET) on the development and delivery of education and training programs around clinical protocols.

DECONTAMINATION

Definition

Decontamination is the rapid physical removal of a contaminant from a victim. Physical removal includes scraping or blotting off visible agent from the skin, disrobing, using absorbents to soak up the agent, and flushing or showering with large quantities of water.

Desired Goal

The desired goal is to have the ability to decontaminate large numbers of victims (and potential victims) both at the scene of a mass casualty incident and/ or prior to entry into an acute care facility.

Current Status

- Fire service based organizations have always had the ability to decontaminate victims by using large quantities of water being supplied from pumper trucks or hydrants. Although inexpensive and efficient, the use of water "right from the ground" during winter months is problematic.
- CT fire service-based first responder organizations are being provided mass decontamination trailers. There are presently 22 trailers in place, with another 12 to be purchased in 2004. There will be at least one trailer provided to the fire department of each town/city that has an acute care hospital.
- Additionally, each of Connecticut's 32 acute care hospitals is capable to provide portable mass decontamination, to be deployed at or near an emergency room entrance.
- The Capitol Region Emergency Planning Committee, Capitol Region Metropolitan Medical Response System, Rapid Access Mass Decontamination Protocol was implemented in the Capitol Region and is under discussion with CTOEM for statewide adoption. The protocol was adopted by the San Diego Fire Department and the California MMRS Council.
- A Standard Operating Procedure and a decon trailer deployment system is under development by CT OEM, in consultation with the Division of Homeland Security and the Fire Service.

Critical Regional Planning Elements

- Describe the local, institutional, and regional notification and activation systems in the region. Describe how the regional partners will coordinate these systems.
- Identify the fixed and mobile decontamination facilities that are available to serve the region's population, and how many are capable of handling non-ambulatory victims.
- Describe how the regional partners propose to deliver the population to fixed facilities.
- Describe how the regional partners can coordinate the delivery protocols for mobile decontamination facilities in the regional, local, or institutional plans.
- Identify the number of trained personnel provided with the mobile facilities, estimated time to deliver and set-up each of the mobile facilities.
- Identify training needs and assure training opportunities with CT OEM
- Describe how the region's hospitals will decontaminate potentially contaminated people who self refer themselves to hospital emergency departments.

DRILLS AND EXERCISES

Definition

Drills and exercises are practical training tools for emergency preparedness. They provide the most direct means of assessing emergency plans and procedures, and demonstrate the preparedness of responders. Drills and exercises can be tabletop, functional, or full-scale applying techniques or knowledge obtained through training or education in a controlled pre-planned manner A drill is an event designed to develop, test, and maintain skills in a particular operation or component of an emergency response plan. An exercise is an event that tests the integrated capability and basic elements of an emergency response plan. Participation provides clarification of roles and responsibilities, and the evaluation of organizational assets and limitations.

Desired Goal

An exercise program that routinely practices the procedures necessary to mount an organized response to a region-wide emergency.

Current Status

- Local first responders and healthcare facilities conduct training and exercises unique to their function in order to maintain qualifications and certifications.
- The CT Office of Emergency Management has the statutory responsibility to conduct a training and exercise program for first responders statewide carried out by the Division of Training and Exercise (CGS Chapter 517 Section 28-5).
- DPH hired a Drill Coordinator who will work with State, regional, and local partners to coordinate exercise and drill programs.
- The DPH Statewide Health Sector Education and Training Plan, as well as programs through CT Office of Emergency Management and the Division of Homeland Security, support a statewide training and exercise system. The CT Association of Directors of Health is coordinating 4 regional tabletop exercises with CT OEM as part of the Local Health Training Blueprint in the Statewide Plan.
- Each of the 47 full-time local health departments and 32 acute care hospitals are conducting response plan exercises in cooperation with local and regional partners in 2004.

Critical Regional Planning Elements

- Establish a formal link between the region and the State coordinators for drills and exercises.
- Initiate a collaborative planning process to connect individual efforts with regional multidisciplinary exercises.
- Develop and maintain a regional drill and exercise calendar.
- DPH will adopt a regional evaluation program for lessons learned from field and tabletop exercises. Various tools and methodologies exist such as the Emergency Management Accreditation Program (EMAP) and the Homeland Security Exercise Evaluation Program (HSEEP).
- Integrate “lessons-learned” into new performance standards. The lessons learned should be multidisciplinary and shared with the region’s response partners.

EMERGENCY CREDENTIALING

Definition

A process to pre-identify a competent and trained clinical, first responder, and public health workforce that is accessible during a public health or other emergency. The process includes the creation and maintenance of a repository of listings of trained, credentialed personnel and volunteers who could be called upon by hospitals and public health departments in an emergency, 24 hours a day, and seven days a week. Personnel include credentialed clinical providers (physicians, dentists, and other licensed independent practitioners-PA, NP, NA, radiographers, RN's, respiratory therapists, pharmacists, behavioral health personnel, laboratory professionals), first responders (paramedics, emergency medical technicians), and public health workforce (sanitarians, epidemiologists, and volunteers).

Desired Goal

To develop a statewide emergency credentialing process that includes the recruitment, assignment, notification, and identification of adequately credentialed public health and healthcare workers.

Current Status

- The CT Public Health Emergency Response Act (Public Act 03-280) provides for indemnification for healthcare professionals who are activated through the emergency credentialing process under the Medical Reserve Corps.
- A state Emergency Credentialing Committee has developed the criteria for the emergency credentialing process. DPH is working with the CT Hospital Association (CHA) and the Yale New Haven Health System Center of Excellence for Bioterrorism Preparedness (YNHHS) to develop an emergency credentialing database of Connecticut physicians, APRNs, and physician assistants. The first copies of the emergency credentialing database of physicians who have volunteered will be available to acute care hospitals from YNHHS CoE by mid-April 2004.
- DPH has developed a Pre-event Vaccination System database to identify public health and healthcare professionals that are available to manage and administer and emergency vaccination program.
- DPH has initiated the TRAIN Connecticut learning management system that provides information on the number of professionals trained and in what capacity.
- The DPH Office of Emergency Medical Services has hired a coordinator to develop a mutual aid plan to assist in the coordination of municipal mutual aid compacts for first responders. Connecticut participates and utilizes a National Registry of first responders to call upon in a large-scale event.
- An emergency preparedness certificate program for public health professionals is under consideration at National and State levels.

Critical Regional Planning Elements

- Encourage public health and healthcare workers to register with the emergency credentialing programs in the region.
- Contribute to the development of statewide protocols for selection, implementation, and verification of emergency credentialing programs for public health and healthcare providers. The protocols must be coordinated within each hospital and local health department in the region.

EVACUATION

Definition

The movement of persons (patients, residents, visitors, and public health and healthcare personnel) from a defined area threatened or affected by an emergency event.

Desired Goal

To develop policies and procedures for the rapid, safe, and coordinated evacuation of the region's residents and workforce, including movement to alternate work and shelter locations. The regional plan will not direct local efforts, but will utilize existing evacuation plans adopted by municipalities and facilities to coordinate a regional approach.

Current Status

- CT General Statutes, Section 28-9(f) states that the Governor "may order the evacuation of all or part of the population of stricken or threatened areas and may take such steps as are necessary for the receipts and care of such evacuees." Connecticut public health and healthcare personnel who may be evacuated from field or work locations may not have alternative work or shelter locations.
- The FEMA Local and Regional Emergency Operations Plan outline includes an Annex E for evacuation. Communities are required to verify if they have an official "Evacuation Plan", which is generalized to all types of disasters and for the community's population. The development of the Evacuation Plan for hazardous materials emergencies may be a simple reference to the overall evacuation plan with some specific amendments pertaining to hazardous materials emergencies.

Critical Regional Planning Elements

- Verify the evacuation plans in the region.
- Identify what public health conditions warrant evacuation of public health and healthcare personnel in the region.
- Review and resolve any conflicting procedures among all local and institutional evacuation plans within the region (including schools, communities, skilled nursing facilities, homebound, and workplace evacuation plans).
- Describe the transfer of personnel and populations from one location to an alternate care site, worksite, and shelters within and outside of the region.
- Evacuation plans needs to be practiced. Drills that utilize the appropriate personnel should be incorporated into the annual exercise of the Plan.

HEALTH SURVEILLANCE AND MONITORING

Definition

The continuous observation, measurement, and evaluation of health phenomenon through which public health and healthcare providers (e.g., infection control practitioners) determine appropriate response and corrective measures.

Desired Goal

Identify health phenomenon that require corrective action in a timely manner. Health surveillance requires close collaboration with physicians, hospitals and other key surveillance partners to ensure the rapid reporting of suspected diseases, conditions, or syndromes.

Current Status

- DPH hired, trained, and placed 6 regional field epidemiologists in local health departments to assist in the investigation of acute disease outbreaks, illnesses that may be related to bioterrorism, and develop instruments and protocols to standardize surveillance for communicable diseases statewide. These epidemiologists are trained to follow up on gram-positive rod and rash illness incidents.
- DPH has an ongoing hospital syndromic surveillance system.
- DPH is developing an emergency department syndromic surveillance system with CHA, and the YNHHS and Hartford Hospital Centers of Excellence. Two or three hospitals will pilot the system in 2004.
- DPH is developing a electronic laboratory reporting system in collaboration with Quest Diagnostics and the YNHHS and Hartford Hospital Centers of Excellence.

Critical Regional Planning Elements

- Understand the roles and responsibilities of DPH, local health department, and the 6 regional epidemiologists in health surveillance and monitoring of specific diseases as described in DPH Public Health Advisories.
- Develop close collaboration with traditional reporting sources (e.g., physicians, school nurses, clinical laboratories, infection control practitioners, other local health agencies, etc.) for timely submission of reportable diseases and public health threats to DPH.
- Identify the surveillance training needs for public health and healthcare providers and utilize DPH Statewide Health Sector Education and Training Plan to assure training program opportunities.
- Establish a communications protocol for notification of regional partners regarding public health threats.
- Establish protocols to communicate regularly with regional surveillance partners during a public health emergency (when passive surveillance evolves into active surveillance).
- Develop protocols and procedures that facilitate rapid expansion of the epidemiological response capacity within the region (e.g., implementing “active” surveillance), including active surveillance of persons in quarantine.
- Establish cooperative procedures / protocols between public health, law enforcement and fire service agencies to support the epidemiological as well as forensic investigation.

INFORMATION SHARING AND TECHNOLOGY

Definition

Coordination and transfer of information during both crisis and consequence phases of a disaster or health and welfare situation among government agencies and response organizations. Emergency communications involves information data transmission, emergency notification, and telecommunications. It requires interoperability and redundancy at the command and operational levels. Information sharing depends on the quality and capacity of the communications technology supporting it.

Desired Goal

To deliver the appropriate information to the appropriate responder at the appropriate time. Information in emergency response must be relevant, accurate, complete, comprehensive, timely, and up-to-date. Systems need to be identified and put in place to be able to handle voice and data communications at the command and control, operational, and tactical levels. The systems need to include hardware, software, communications protocols and procedures. Additionally the system needs to be capable of handling routine day-to-day information data transmission, emergency notification, telecommunications, and utilize a security system that minimizes cyber-terrorism threats.

Current Status

Connecticut has several voice communications systems that range from local to regional to statewide. However, Connecticut does not have sufficient voice communication systems that link the various local and regional systems.

- DPH conducted an assessment of the public health and healthcare emergency communications system, including interoperability and redundancy.
- The acute care hospitals and some EMS providers in Connecticut have a very high frequency (155.340 MHz) radio communications system, (i.e., H.E.A.R. and MedNet) which links each hospital. However, these hospital systems have fallen into disrepair due to lack of attention. Recently, satellite telephones have been procured and established at each of the acute care hospitals to link them on a common voice system.
- CHA communicates with acute care hospitals through an internet email listserv, while DPH communicates with hospitals via medical-satellite telephones and the CMED system.
- C-MED has a regional ultra high frequency (460 MHz) communications system to dispatch and control the movement of emergency medical system (EMS) resources (ambulances and personnel). The CMED system is also used to determine the instantaneous capability of hospitals to accept patients.
- DPH has both a Health Alert Network (HAN) for surveillance and a Wide Area Network (WAN) capable of transmitting both voice and data on a VHF system.
- OEM has several voice radio systems covering the range of spectrum, an emergency alert system and a broadcast fax capability.
- In some areas, the police and fire departments are on the same system. The fire services have a low band (33 & 46 MHz) and very high frequency band (154 MHz) radio system within each of the county boundaries that is part of the Fire Response Plan. The municipal police departments have a limited common regional communications system depending on the location within the State.

- The Department of Public Safety (DPS) operates and maintains an 800 MHz analog International Calling/Tactical voice radio system for the use of any Incident Commander as a command and control system. The DPS Communications Center (also known as the Message Center) has the capability of patching different voice radio systems together regionally and/or statewide.

Critical Regional Planning Elements

- Describe the information-sharing structure within the region, and how it links with the State of Connecticut Emergency Operations Center, the DPH Emergency Communications Center, and local Emergency Operation Centers.
- Identify the communication training needs for the region's partners and utilize DPH, CT OEM, and Division of Homeland Security training programs to meet the needs.
- Determine the communications limitations around interoperability and redundancy that currently exist and that require upgrading to take advantage of emerging domestic preparedness related information sharing.
- Work with DPH to develop universally acceptable terminology and data templates in communications systems.
- Identify and define what information needs to be shared among entities within and with other regions.
- Describe the plans to continue communication with appropriate private sector and critical infrastructure representatives in the event an emergency precludes normal means of communication.
- Determine whether commercial Information Technology reliability standards are sufficient to ensure systems performance in emergency environments.
- Determine requirements for secure communications and ensure that assigned/protected frequencies are available for use by the emergency response community.
- Describe how the region communicates SOPs with internal and external staff and agencies.
- Identify who is designated as the communications personnel within the region's response system and whether they are adequately trained for their role.
- Develop call-down lists with a 2-staff redundancy for communication personnel.

LABORATORY CAPACITY

Definition

The maximum laboratory service that can be provided during a public health emergency. The laboratory capacity focuses on the identification and appropriate utilization of diagnostic capabilities of the state, commercial, and hospital laboratory capabilities with regard to biological agents, as well as providing support for the clinical management of victims of biological, chemical, and radiological agents and protocols in place for dealing with a public health emergency, including a terrorist incident.

Desired Goal

Create and maintain adequate laboratory capacity within the region to provide required laboratory services in public health emergencies, including CBRNE events. State, hospital, and commercial laboratories should have the capability for consistent language and reporting systems, such as Logical Observation Identifier Names and Codes (LOINC). This will support the Connecticut Laboratory Response Network (LRN) through bi-directional communication between the network labs.

Current Status

- YNHHS hired a Laboratory Program Advisor (LPA) to be the primary liaison with all (32) acute care hospital laboratories in the state. The LPA works closely with the DPH Bioresponse Laboratory Coordinator (BLC) who has responsibility for the developing of the Connecticut Laboratory Response Network.
- There is listserv and blast fax communication capability to hospital, commercial, and local public health laboratories for posting alerts, protocol updates, etc., and in-service visits to individual hospital microbiology labs to provide technical updates and reinforce awareness.
- A statewide laboratory BT assessment has been completed and data compiled to indicate where there are laboratories capable of successfully performing Level A laboratory testing and where there is at least the appropriate contact information for those unable to safely perform Level A testing.
- Assessments for chemical and radiological threat response capability have been distributed and responses are being collected for further analysis.
- DPH developed and approved a water collection kit to be used by the FBI, State Police and DEP/HAZMAT for future potential bioterrorism water supply events. This kit includes instructions for collection and appropriately labeled collection containers.
- An Emergency Response Collection Kit for hospitals was developed, approved, field-tested and distributed. The kit includes collection items for biological agents including smallpox and toxin exposures like Ricin. Each kit includes complete directions for specimen collection, individual collection packets for specimens, and evidence chain of custody documentation and decontamination materials.
- The DPH laboratory has purchased a Victor 2 TRF (Time Resolved Fluorescence) instrument providing another methodology for the confirmation of several bacterial agents along with the capability of performing toxin testing for Ricin and staphylococcal enterotoxin B. This instrument is capable of same day assay results.

- DPH laboratory implemented testing support to Connecticut's smallpox vaccination program. This included direct testing for vaccinia virus and smallpox look-alike viruses, plus the ability to collect and ship specimens from suspected smallpox cases to CDC for direct testing. Four cases of suspected adverse effects related to smallpox vaccinations were tested.
- DPH has approved the development of a Biodosimetry laboratory located at Bridgeport Hospital. YNHHS CoE has also hired a biodosimetrist whose role is to develop and staff the lab and to work with DPH and the other labs throughout CT in the event of a radiation/nuclear event.

Critical Regional Planning Elements

- Identify which facilities (public and private) are willing or able to accept clinical specimens and perform preliminary testing as instructed by the State DPH Laboratory – how many and for how long?
- Identify the laboratory training needs in the region and coordinate training programs with DPH Laboratory.
- Ensure that consistent processes are developed by laboratories that address the following:
  - Connectivity with statewide laboratory response network (LRN)
  - Collection
  - Clinical History
  - Labeling
  - Chain of custody for specimens
  - Secure storage
  - Processing
  - Transportation to secondary laboratory
  - Referral to DPH laboratory
  - Contacting Local/State/Federal law enforcement
  - Safe disposal of waste
  - Packaging of suspected BT infectious material for transport to DPH lab
- Assist laboratories in the region with developing backup plans for specimen transport to and from a secondary laboratory.
- Develop regional exercises or drills to evaluate the laboratory procedures and protocols.

MASS IMMUNIZATION AND PROPHYLAXIS

Definition

Mass Immunization – An immunization is the introduction of antigens into the body in order to stimulate the development of antibodies against a particular disease. Mass immunization is the prophylaxis of large numbers of individuals (certain populations) against a specific disease agent, usually within a prescribed period of time.

Mass Prophylaxis – Particular action(s) that lead to the prevention of disease or of the processes that can lead to disease. For the purposes of this plan, mass prophylaxis will refer to the distribution of materiel to large numbers of individuals (certain populations) to prevent them from contracting a particular disease.

A mass vaccination or prophylaxis plan or clinic can be implemented for a variety of public health emergencies. Local health departments provide vaccination or prophylaxis services for the general public in their jurisdiction, whereas hospitals provide these services for their staff and families.

Desired Goal

To ensure the rapid provision of immunization or mass prophylaxis of a population to prevent the acquisition and transmission of a contagious disease and / or reduce the effect of an adverse public health event (e.g., pandemic influenza, smallpox, or anthrax).

Current Status

- Over 120,000 immunizations for influenza are administered in CT public health clinics annually.
- CT has trained smallpox vaccinators within the State and licensed practitioners are appropriately qualified to administer vaccines other than the smallpox vaccine.
- DPH submitted a statewide smallpox mass vaccination plan to CDC in December, 2002. It is currently under revision and will continue to be revised as smallpox planning areas and hospitals develop and refine their mass vaccination plans.
- Local health departments and acute care hospitals have received funding and guidance from DPH to develop smallpox mass vaccination plans as the first attempt to identify assets and needs for mass immunization or prevention efforts.
    - DPH designated 42 mass vaccination planning regions to serve the entire population in a public health emergency. Each of these regions is managed by a full-time local health director. The majority of the planning regions have developed and submitted a smallpox mass vaccination clinic plan for DPH review.
    - Several mass vaccination regions have conducted an exercise of the regional plan (orientation, table-top exercise, or drill). During 2004, all 42 mass vaccination planning regions will be required to exercise their smallpox mass vaccination plan.
    - DPH developed an online database tool (CT PVS) that can be used to manage clinic staffing and volunteer recruitment process.
    - DPH, in collaboration with CADH, developed and distributed a smallpox mass vaccination plan template for public health departments, and in collaboration with the YNHHS and Hartford Hospital CoEs is developing a plan template for acute care hospitals.

Critical Regional Planning Elements

- Identify the vaccination training needs and utilize DPH Statewide Health Sector Education and Training Plan to assure training program opportunities.
- Develop a system of coordinating vaccination and prophylaxis communications and operations among the hospitals and local health departments within the region.
- Develop a system of coordinating vaccination and prophylaxis communications and operations among the mass vaccination clinics within the region.
- Adopt regional consensus on the statewide protocols for appropriate protection, prophylaxis, and treatment for the public, and public health and healthcare providers responding to a public health emergency.
- Identify how regional partners can access resources to address special needs populations for mass immunizations and prophylaxis.
- The regional plans should draw upon the already existing 42 smallpox mass vaccination plans for the following resources:
  - Volunteer Recruitment
  - Rapid Credentialing
  - Immunization / Prophylaxis Training
  - 48 Hour Supply Cache
  - Coordination with other 1st Responders
  - Points of Distribution & Dispensing

MASS MORTUARY (FATALITY MANAGEMENT)

Definition

The identification, removal, storage, and appropriate disposition for large numbers of deceased persons during and after a public health emergency.

Desired Goal

To provide for the appropriate identification, storage, and disposition for mass fatalities in a public health emergency that takes into account safety, timeliness, and cultural and religious values. Temporary morgue facilities will be established to store the bodies of non-survivors for extended periods of time prior to final disposition.

Current Status

- The CT Chief Medical Examiner's Office (CT CME) is responsible for establishing causes of death when the cause is: 1) of unknown or obscure origin; and 2) by violence.
- CT CME will be the lead agency responsible for managing mass fatalities in an emergency, including a terrorist incident. CT CME has limited staff and resources to manage a statewide emergency.
- CT CME shall require State and Federal assistance through the CT National Guard, CT Funeral Directors Association, and the U.S. Public Health Services Disaster Mortuary Teams (DMORTS).
- The US Department of Homeland Security's National Disaster Medical System (NDMS) resources will not be available immediately following a WMD occurrence. Therefore, the region must plan to rely on existing transport resources and mutual aid agreements for the first 72 hours. The NDMS must be considered as a secondary resource for management of deceased persons.
- All local efforts to manage deceased patients, such as instituting plans for augmented staffing and local and regional expanded capacity have been exhausted, or are expected to be exhausted, prior to utilization of NDMS.
- The incident and the number of casualties is of such a magnitude that the participating communities in the region will need assistance from other regions, from the State of Connecticut, and from applicable federal agencies in order to treat and transport such casualties.

Critical Regional Planning Elements

- Develop a graded regional response to a public health emergency that includes considerations for 0-100 deceased, 101–1,000 deceased, and 1,001-10,000 deceased.
- Identify temporary morgue facilities in the region that meet CT CME standards.
- Identify policies and procedures for how the region will manage the necessary procedures that meet CT CME standards for the safe handling, storage, decontamination and final disposition of deceased persons.
- Develop a regional identification system to collect, store, and monitor data related to the forensic investigatory procedures (chain of evidence).
- Determine the cultural norms and sensitivity that will be required as a planning element of disposition of deceased persons.

PERSONAL PROTECTIVE EQUIPMENT

Definition

Equipment or supplies that create a physical barrier between persons and environmental or explosive hazards, including CBRNE agents.

Desired Goal

To protect persons (i.e., patients, first responders, public health workers, healthcare personnel, and public) from the risk of injury or illness by creating a barrier between persons and hazards, including CBRNE agents. Personal protective equipment should be used with administrative and safety controls to ensure the safety and health of employees. PPE must meet consistent standards promulgated by Federal and State authorities.

Current Status

- 29 CFR Part 1910 Personal Protective Equipment for General Industry; Final Rule from OSHA requires employers to conduct inspections of all workplaces to determine the need for personal protective equipment (PPE) and to help in selecting the proper PPE for each tasks performed.
- OSHA and NIOSH offer PPE standards.
- Acute care hospitals have received level-C suits, PAPRs, and decontamination systems through a grant from CT OEM.
- DPH has allocated funding for acute care hospitals to augment their PPE that will establish minimum par levels.
- Congress has encouraged research, testing, and related activities aimed at protecting workers who respond to public health needs in the event of a terrorist incident. In FY2001, Congress allocated funds to support the long-term development of standards and technologies for protecting the health and safety of America's workers who rely on personal protective equipment (e.g., respirators, clothing, gloves, hard hats, and eye and hearing protective devices); these workers include miners, fire fighters and other emergency responders, healthcare workers, agricultural workers, and industrial workers.

Critical Regional Planning Elements

- Emergency responders (police, fire, EMS, public health, clinical personnel, and public works) need to be identified and matched with the level of PPE required to perform their functions.
- Define how the region's responders have been trained to use, inspect, and properly maintain PPE.
- Identify the training needs and utilize DPH, CT OEM, and the Division of Homeland Security training programs to meet these needs.
- Describe how the equipment purchasing is standardized for the region.
- Describe where the PPE equipment are stored and how will the responders access them.

QUARANTINE AND ISOLATION

Definition

Quarantine - The physical separation and confinement of an individual or group of individuals, in a geographic area who are exposed to a communicable disease or are contaminated, or whom the Commissioner of the Department of Public Health, or a designee, reasonably believes have been exposed to a communicable disease or to be contaminated or have been exposed to others who have been exposed to a communicable disease or contamination, to prevent transmission of the disease to the general public. The decision of whether or not to quarantine or isolate individuals will be based primarily on the type of event and the nature of the disease agent.

Isolation - The physical separation and confinement of an individual, or group of individuals, within a geographic area who are infected or believed to be infected with a communicable disease or those who are contaminated, or believed to be contaminated, in order to prevent or limit the transmission of the disease to the general public.

Desired Goal

The region will establish resources for mass quarantine or isolation in the event that homes or institutions are unable to adequately protect the public from exposure to a communicable disease or contamination.

Current Status

- Local health directors have the legislative authority to isolate or quarantine an individual or individuals who are believed to be infected with a communicable disease and pose a significant threat to the public's health.
- Public Act No.03-236 expanded the authority to the Commissioner of DPH or designee in the event of a declared public health emergency. The legislation further allows law enforcement officers to immediately place into quarantine or isolation any individual who refuses to obey an isolation or quarantine order.
- The Commissioner may issue an order to quarantine or isolate any individual who is unable or unwilling to undergo vaccination.
- The Statewide Quarantine Advisory Committee was established to develop guidance documents and draft orders that address the following issues: daily active surveillance, home quarantine, institutional quarantine, home isolation, and institutional isolation.
- A 100 bed mobile and surgical hospital (MaSH) is under development by DPH and the YNHHS and Hartford Hospital CoEs for isolation, surge, and quarantine capacity.

Critical Regional Planning Elements

- All regional partners should be familiar with Public Act No.03-236, An Act Concerning Public Health Emergency Response Authority (http://www.cga.state.ct.us/).
- Identify the capacity of regional facilities that could provide for mass quarantine or isolation of patients, including hospitals.
- Identify regional supply and staffing resources and protocols to house, monitor, and provide basic needs for persons unable to maintain home or institutional quarantine or isolation.

RISK ASSESSMENT

Definition

The prediction and estimation of risk through the process of determining the total risk that a hazard poses to a system. Also known as risk analysis, hazard analysis, hazard-vulnerability analysis, threat assessment, or vulnerability assessment. An inventory and appraisal of the hazards, risks, and vulnerabilities in the region that, if improperly managed or targeted in a terrorist attack, would pose a serious and credible threat to public health. Qualitative risk assessments are generally descriptive and indicate that disease or injury is likely or unlikely under specified conditions of exposure. Quantitative risk assessments provide a numerical estimation of risk based on mathematical modeling. For example, under given specific exposure conditions, it is expected that one person per 1,000 would develop a disease or injury.

Desired Goal

To accurately estimate real risk in order to provide rational evidence to develop risk reduction strategies. To identify the regional vulnerabilities in terms of human health outcomes related to a variety of biological, chemical, and mass casualty terrorist scenarios.

Current Status

- The DPH risk assessment process has focused on identification of facility and organizational preparedness.
- DPH received CDC funding to work with state and local emergency management agencies, environmental agencies, worker health and safety agencies, and others to conduct assessments to identify vulnerabilities in terms of human health outcomes related to a variety of biological, chemical, and mass casualty terrorist scenarios. An RFP will be developed and distributed in Winter, 2003. A contractor will be expected to conduct and report on the assessment by May, 2004.

Critical Regional Planning Elements

- Describe what and where regional vulnerabilities exist. Include all acute care hospitals, healthcare agencies, laboratories, and facilities that have access to or responsibility for chemical, biologic, radiological, and nuclear materials.
- Work with public safety personnel to identify all threat assessment findings in the region.
- Identify who is responsible for continuing the assessment of these risks.
- Identify who is responsible to address these risks.
- Ensure identified risks are adequately addressed and monitored.

RISK and CRISIS COMMUNICATION

Definition

Risk communication is the information about the expected type (good or bad), magnitude (weak or strong), and response (evacuation, quarantine, or immunization) of an outcome from a public health emergency. Crisis communication is the communication of facts concerning a public health emergency from an involved organizations to its stakeholders and the public.

Desired Goal

Consistent, clear, timely and coordinated risk, crisis, and public communication messages to be disseminated regionwide. The regional risk communication strategy should focus on a consistent message intended for the region's residents with specific directions on where to go for medical attention, quarantine facilities, and other information specific to the region. The state strategy, consistent with the DPH Risk Communication Plan, will be implemented by DPH to address the incident(s), exposures, and state protocols.

Current Status

- DPH, in collaboration with CADH and the YNHHS and Hartford Hospital CoEs, conducted needs assessments for local health department and hospital capacity for risk communication procedures and materials.
- DPH is developing the Risk Communication Plan in coordination with the Office of Emergency Management's Emergency Response Plans and to develop message maps for particular topics.
- DPH, in collaboration with CADH, is developing regional training programs using the CDCynergy risk communication training software provided by CDC to develop regional level risk communication trainings.

Critical Regional Planning Elements

- Determine the decision points that would lead to regional leaders activating a regional Joint Information Center (JIC) to communicate messages to and from DPH and the State's JIC.
- Identify the spokespersons in the region with public health or healthcare expertise on a variety of public health emergency conditions, such as infectious diseases (i.e., anthrax, smallpox), chemical exposure, irradiation, or trauma. Establish a network of experts that can be contacted prior to and during an emergency.
- Develop a notification system to automatically share risk communication messages with regional partners to assure consistency and accuracy in messages released from individual partners. Establish a monitoring system that can assure quality control in the various messages released within the region.

SECURITY

Definition

The state of being protected from injury inflicted by others or natural events. In the context of a public health emergency, security refers to the establishment of a secure site – either the site of exposure, distribution of prophylaxis, or treatment facility. A secure site prohibits entry and exit to and from the area, except for designated personnel under prescribed conditions, and provides for an accounting of all personnel and occupants. Security also extends to the protection of the evidence determined to be a contributing factor to the public health emergency.

Desired Goal

To assure adequate security workforce, equipment, facilities, and supplies during a public health emergency through collaboration among local and state public safety forces, public health, and the healthcare community.

Current Status

- Security is an important planning consideration when addressing public health emergencies and most organizations have addressed the issue of security for the occurrence of fires, for example, or other similar public safety concerns. All organizations must now address additional concerns in Emergency Operations Plans to relative to public health emergencies caused by CBRNE agents.
- Over 200 law enforcement, public health, and healthcare personnel attended a DPH-sponsored 2-day Forensic Epidemiology course in December, 2003.
- DPH, in collaboration with acute care hospitals, provided "Chain of Custody" training programs for laboratory personnel.
- Local health departments have worked with local public safety personnel to address security concerns regarding smallpox mass vaccination clinic operations.

Critical Regional Planning Elements

- Identify lock-down protocols for hospital and other healthcare facilities in the region.
- Identify the local and institutional security workforces and training needs in the region.
- Inventory the existing Memorandums of Agreement between any of the public safety, public health, and healthcare organizations and agencies in the region. Consider using these MoAs as models for additional needs.
- Coordinate secure admission and discharge planning procedures with healthcare providers.
- Include provisions in any security plan for the monitoring of ingress and egress including sign in/out sheets and identification badges.
- Consider signage for affected areas which indicate "No Entry" and similar messages.
- Solicit input from all areas and departments which may be affected as to their special security needs.
- Determine how the region's partners will secure the delivery, storage, and distribution of a pharmaceutical or medical stockpile.

STOCKPILING

Definition

In the event of a terrorist attack, public health emergency or a major natural disaster, supplies of critical medical supplies, equipment or pharmaceuticals in the state will be rapidly depleted. In anticipation, the Federal Government established the Strategic National Stockpile (SNS) to augment local supplies of critical medical items.

Desired Goal

Establish local, regional and statewide systems for stockpiling of equipment, supplies and pharmaceuticals required to support communities, public health and healthcare systems prior to the arrival of the Strategic National Stockpile (SNS) or Vendor Managed Inventory (VMI). The other goal of this stockpiling capacity is to describe how Connecticut's public health and medical delivery system will request, receive, manage, repackage, and distribute the SNS to those who need it. In addition, healthcare facilities will be identifying what types of par levels of critical medical supplies and pharmaceuticals needed to ensure continuity of care until the SNS or VMI is on site.

Current Status

- A draft SNS plan has been developed for Connecticut. A subcommittee is working on the final version of the CT SNS plan.
- DPH hired an SNS Coordinator to work with the local public health community, acute care hospitals, and healthcare organizations to coordinate receipt and distribution of SNS or VMI materiel.
- The YNHHS CoE hired a Medical Stockpile Coordinator to work with the SNS Coordinator, acute care hospitals, and healthcare organizations on the development of regional and statewide stockpile operating guidelines which include identification of types and par levels, storage, distribution, security, inventory control, and testing.
- Representatives from Connecticut observed and evaluated a statewide SNS drill that was conducted in Rhode Island.

Critical Regional Planning Elements

- Ensure that enough antibiotics and other pharmaceuticals are on hand for 24-48 hours (allowing time for delivery of outside stockpiles).
- Identification of pharmaceutical/supply experts (physicians, pharmacists, veterinarians, etc.) to participate in the pharmaceutical stockpile and distribution response plan.
- Identification of an internal point of contact (POC) within each of the public health and healthcare entities.
- Ensure that the plan identifies the public health, hospital and other healthcare entity participation in a community, regional or statewide pharmaceutical stockpile plan.

SURGE CAPACITY (HEALTHCARE)

Definition

Surge capacity is the maximum healthcare-related service that the healthcare system can provide during a public health emergency. Surge capacity depends on the provision of an adequate quantity and quality of healthcare facilities, equipment, supplies, pharmaceuticals, and personnel.

Desired Goal

To ensure the provision of an adequate quantity and quality of healthcare facilities, equipment, supplies, pharmaceuticals, and personnel during public health emergencies in order to minimize any adverse health effects of these events. To ensure the region's healthcare delivery system has the capacity to handle a sudden surge of patients requiring care, as determined by the adequacy of:

- Initial staffing and other pre-credentialed clinical specialists who can provide care for patients;
- Appropriate treatment beds, equipment and re-supply capability for treating the patients' needs;
- Adequate supplies and pharmaceutical caches for treating patient needs;
- Adequate medical facilities and organizational support, including acute care hospitals, community health centers (CHCs), urgent care centers (UCCs), skilled nursing facilities (SNFs), home health care agencies (HHCs) that are accessible to treat patients;
- Isolation capabilities; and
- Systems that can handle critical and non-critical patient transport and care enroute.

Current Status

- The acute care hospitals have each identified their surge capacity based on the first 6 and 12 hours of an incident through the needs assessment. Representative samples from the SNFs, HHCs, UCCs, CHCs, and emergency medical services (EMS) have also completed the needs assessment.
- The YNHHS and Hartford Hospital CoEs have prepared hospital surge capacity plan guidance.
- The surge capacity of public health is being addressed in the development of smallpox mass vaccination plans.
- A 100 bed mobile and surgical hospital (MaSH)is under development by DPH and the YNHHS and Hartford Hospital CoEs for isolation, surge and quarantine capacity.
- A proposal has been submitted to the federal government for support of two (2) Mobile Intensive Surgical Care Units (MISCU) to augment the MaSH unit.

Critical Regional Planning Elements

- Develop a regional plan that allows for the maximum number of additional hospital beds, other healthcare beds, and staff that can be created in 6 hours and in 12 hours.
- Develop a protocol to best utilize the pre-hospital care and medical transport capacity of the region's EMS providers.
- Develop memorandum of agreement (MOA) with other healthcare institutions or alternate care sites for transfer of patients and necessary transportation resources.
- Develop a process that insures the public health and medical delivery systems ability to manage large numbers of "worried well."

UNIFIED AND INCIDENT COMMAND SYSTEMS

Definition

Unified Command System (UCS): A standardized organizational structure used to command, control, and coordinate multi-agency, multi-jurisdictional resources and personnel that have responded to the scene of an emergency. A Unified Command System allows operational goals and response strategies to be jointly determined by the various responding organizations.

Incident Command System (ICS): A standardized organizational structure used to command, control, and coordinate the use of resources and personnel that have responded to the scene of an emergency. ICS concepts and principles include common terminology, modular organization, integrated communication, unified command structure, consolidated action plan, manageable span of control, designated incident facilities, and comprehensive resource management.

Desired Goal

All employees in emergency preparedness and response agencies will have a basic understanding of the ICS system. Intermediate or advanced training will be provided to designated persons according to their roles and responsibilities in the ICS system. Routine refresher training must be provided and practical applications established.

Current Status

- ICS/UCS training has been ongoing throughout Connecticut through the CT Office of Emergency Management, the Connecticut Hospital Association, DPH, the Connecticut Fire Academy, CT Association of Directors of Health, and other organizations. Courses have ranged from the level 100 to 400 as well as for interfacing between an incident command center and an emergency operations center.
- DPH, in collaboration with the CT Partnership for Public Health Workforce Development, is offering the Public Health Emergency Preparedness 101 course for state and local public health employees, that includes information on basic ICS.
- DPH, in collaboration with the YNHHS CoE, is offering the Hospital Emergency Management (EM) 101 course for hospital personnel that includes a segment about the Incident Command System.

Critical Regional Planning Elements

- Assure that UCS/ICS training is delivered to key officials and UCS/ICS awareness training being delivered to staff personnel.
- Establish an accepted, commonly used, and universally understood, language among the multiple disciplines of the region's responders that is consistent with the National Incident Management System.
- Describe how a UCS will be activated in the region.
- Identify the ICS/UCS key personnel that will assume responsibility during an emergency.
- Identify what regional policies are needed to support individual and community ICS.

CONTACT INFORMATION

For more information or assistance with the development of regional response plan, please contact any of the Regional Preparedness Planning Workgroup members listed below.

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