ANNUAL REPORT
ON PUBLIC HEALTH PREPAREDNESS

SUBMITTED TO
GOVERNOR DANIEL P. MALLOY
AND THE CONNECTICUT GENERAL ASSEMBLY

BY THE
CONNECTICUT DEPARTMENT OF PUBLIC HEALTH
PUBLIC HEALTH PREPAREDNESS ADVISORY COMMITTEE

DECEMBER 30, 2011
In accordance with Connecticut General Statutes, Section 19a-131g, the Connecticut Department of Public Health (DPH) and the Public Health Preparedness Advisory Committee do hereby submit a status report on public health emergency preparedness planning in Connecticut.

**PUBLIC HEALTH PREPAREDNESS ADVISORY COMMITTEE**

Maryann Cherniak-Lexius, Director of Health for the Manchester Health Department and Jim Paturas, System Manager with the Yale-New Haven Center for Emergency Preparedness and Disaster Response continued as Chair and Vice-Chair, respectively.

The Advisory Committee met four times during the year. The January meeting included a statewide and community capabilities assessment. The April meeting was devoted to discussion of the public health preparedness capabilities and setting community priorities for 2011-12. The July meeting focused on the 2012 merging of the PHEP and HPP Cooperative Agreements and Connecticut’s implementation strategies. The Committee also was introduced to the Columbia and Harvard Centers of Public Health Preparedness providing services to Connecticut’s local health departments. The October 2011 meeting provided an opportunity for partners to share best practices and lessons learned from their experience during Tropical Storm Irene.

In the past, the Advisory Committee served as the Public Health Subcommittee to the Connecticut Emergency Management and Homeland Security Coordinating Council and reported monthly to the Council through the DPH member representative. The Department of Emergency Management and Homeland Security became a Division under the newly formed Department of Emergency Services and Public Protection. Under this re-organization, the DEMHS Coordinating Council was replaced by a Coordinating Advisory Board with Maryann Cherniak-Lexius as a member representing local public health. As of this writing, the Public Health Preparedness Advisory Committee has not been requested to serve as an adjunct to the Coordinating Advisory Board.

**STATUS OF PUBLIC HEALTH PREPAREDNESS FUNDING FOR CONNECTICUT**

DPH oversees public health preparedness funding from two sources within the Department of Health and Human Services: the Centers for Disease Control and Prevention (CDC) and the Office of the Assistant Secretary for Preparedness Response (ASPR).

The 5-year grant cycle of the CDC’s Public Health Emergency Preparedness (PHEP) Cooperative Agreement was closed out August 9, 2011 and a new grant cycle began August 10, 2011. A total of $7.5 million was appropriated to Connecticut for the 2011-12 budget period; $6.9 million in basic, all-hazards funding and $586,000 for the Cities Readiness Initiative (CRI) to enhance the state’s ability to dispense medical countermeasures.
Funding for 2011-12 represents a 12% reduction in funds appropriated the previous year. Connecticut is required to contribute 10% (or $755,000) in matching funds. Federal legislation also requires states to institute maintenance of effort to sustain preparedness activities. Failure to do so will impact the level of future federal funding.

As the chart below illustrates, the majority of funding (49%) was allocated to contracts. DPH issued contracts to the 50 full-time local health departments/districts totaling $3.4 million. Funding to local health represents 92% of all contractual funds and 45% of all PHEP funding. Funding to local health was reduced by 10% from the previous year due to reductions in overall funding. Funds (42%) are utilized to support 22.5 FTEs at DPH to carry out preparedness activities required by the cooperative agreement. The 7% of funds in the “Other” category represents maintenance agreements for lab equipment and information technology as well as risk communication, including media campaigns.

The ASPR Hospital Preparedness Program is in its final year of the grant cycle and a new cycle will begin in July 2012. Funding received under the ASPR Hospital Preparedness Program (HPP) for 2011-12 was $4.2 million, representing a 9% reduction in funds from the previous year. As with the PHEP Cooperative Agreement, Connecticut is required to contribute 10% (or $422,000) in matching funds for Hospital Program.

The majority of funding (76%) was allocated to contracts. HHP provides contractual funding support to the two Hospital Centers of Excellence, which provide planning coordination and technical support to hospitals in each of the DEMHS regions. The two Centers include Hartford Hospital that serves Regions 3 and 4, and the Yale New Haven Health System that serves Regions 1, 2 and 5. Funding is also directly provided to the 30 acute care hospitals and 4 specialty hospitals. Contracts are also provided to community health centers, school-based health centers, centers serving children with special health care needs, the Poison Control Center, local medical reserve corps, and the Department of Mental Health and Addiction Services.
The CDC’s Public Health Emergency Response Grant concluded and was closed out July 30, 2011. Connecticut received a total of $16.8 million over a two-year period that supported the public health response to the H1N1 Influenza Pandemic. No additional funding under this grant will be provided.

Connecticut received competitive grant funds for the Emergency System for the Advanced Registration of Volunteer Health Professionals (ESAR-VHP) to support the integration of local Medical Reserve Corps (MRCs) volunteers into the statewide registry. Funding is also available to encourage large municipalities and Mass Dispensing Areas (MDAs) to start up their own respective MRCs.

**PROGRAMMATIC CHANGES IN PUBLIC HEALTH PREPAREDNESS FUNDING**

**A. Public Health Preparedness Capabilities**

CDC implemented a systematic process for defining a set of public health preparedness capabilities to assist state and local health departments with strategic planning. The resulting body of work, *Public Health Preparedness Capabilities: National Standards for State and Local Planning*, creates national standards to assist state and local planners in identifying gaps in preparedness, determining the specific jurisdictional priorities, and developing plans for building and sustaining capabilities. These standards are in sync with the *National Preparedness System* as outlined in Presidential Policy Directive 8 and the *National Health Security Strategy*.

The key building blocks to the 15 public health preparedness capabilities include Resource Elements and Functions. Resource elements include written operational plans, staff competencies, and equipment and technology that are needed to carry out functions. In turn, the Functions describe the actions that need to occur to achieve the capability. In addition, Functions contain Performance Measures that can be tested during exercises or real events to determine how well the public health system is meeting the capability.

**B. Alignment of Cooperative Agreements**

In response to White House National Security Staff requesting better alignment of federal emergency preparedness grant programs, CDC, ASPR, FEMA, DOT, and HRSA are collaborating to streamline processes and improve emergency response. A result of this collaboration is the alignment of the PHEP and HPP cooperative agreements. Beginning with the 2011-12 budget year, these programs will have a joint funding opportunity announcement and application process, joint capabilities, integrated
technical assistance and program oversight, and a single source for data management and reporting.

C. Mechanism for Emergency Response Funding

The PHEP Cooperative Agreement also includes a separate mechanism for awarding emergency response funding that may be issued as supplemental awards in the event of a pandemic or an all-hazards public health emergency in one or more jurisdictions. Specific implementation activities and requirements for contingent emergency supplemental funding awards would be issued at the time of the event. Having response funds linked directly to the cooperative agreement will streamline the application process and expedite funding in the event of an emergency.

KEY ACCOMPLISHMENTS

A. Planning

- At its April 2011 meeting, the Public Health Preparedness Advisory Committee recommended five capabilities to be addressed at the local level during the 2011-12 budget year. The group also identified capabilities for ongoing discussion by the Committee, including mass fatality, mass care, medical surge, and medical countermeasure distribution and dispensing.

- The Department’s Public Health Emergency Response Plan was revised in July 2011. The Plan applies to large-scale emergencies that would cause severe illness, injury and/or fatalities sufficient to overwhelm local public health and/or healthcare service capabilities. The Base Plan provides an overview of the concept of operations, organizational responsibilities, and response functions. The Plan also includes a Functional Annex of 12 plans that address DPH functions during any emergency; an Incident-Specific Annex of 12 plans that provide operational procedures for response to specific public health hazards; and a Support Annex that provides reference documents and forms.

- As part of the local health contract requirements for the Public Health Emergency Response Grant, local mass dispensing areas (MDAs) updated their mass vaccination plans based on after action findings from the H1N1 Pandemic.

- In response to the new requirements under the PHEP cooperative agreement, DPH issued an RFP to conduct a statewide Hazard Vulnerability Analysis to determine impact on the public health and health care system. The Harvard Center for Public Health Preparedness was selected as the contractor for the analysis, which will assist in prioritizing future preparedness planning and funding.

- The Environmental Chemistry Section of the Laboratory continued to expand the radiological response plan to address a range of incidents, such as the event at the Fukushima nuclear plant in Japan.
The **Connecticut Guide to Emergency Preparedness** was updated to include a section on pandemic influenza and formed the basis of an educational campaign initiated in summer 2011. The guide was translated into seven languages and distributed to local health departments throughout the state. Television, radio, transit, online banner, and ethnic newspaper advertisements encouraged state residents to prepare for emergencies. Magnets with important phone numbers and wallet information cards were also developed and distributed. Materials for this campaign were focus-tested and a post-evaluation for the campaign is planned.

The document, *Standards of Care: Providing Health Care during a Prolonged Public Health Emergency*, provides an ethical framework for decision-making when resources are limited. A PowerPoint presentation and presenter’s guide were also developed for health care professionals to guide discussion of the document within their organizations.

Long-term care facilities are part of hospital surge capacity plans and have large numbers of people most at-risk for complications from most seasonal influenza outbreaks. Yet, DPH has been reliant on antiquated methods of communicating with the facilities. Information boards were developed in WebEOC whereby facilities will enter status updates such as bed counts, quarantine activation, vaccine administered, and antivirals needed.

Information boards in WebEOC were also developed to track the activation and operational status of Mass Dispersing Areas (MDAs) in “real-time.” This system will greatly enhance the ability of DPH to manage and report on public mass dispensing/vaccination in the future.

The Environmental Health Section of DPH developed a chemical response guide to assist local health departments in responding to acute chemical releases.

The Environmental Health Section of DPH partnered with the Connecticut Poison Control Center to enhance surveillance of chemical exposures. DPH now reviews poison center cases to act on public health threats and worker safety issues. A collaborative relationship with the Department of Energy and Environmental Protection’s Emergency Response and Spill Prevention Division also was developed, allowing DPH to conduct surveillance of chemical spills in the state.

Food Safety and Laboratory collaborated to develop protocols to maintain chain of custody for laboratory samples and a foodborne outbreak investigation manual for local health departments.

DPH staff continued participation on Northeast Regional Food Biosecurity Committee that includes federal, state, and local food protection officials from the 6 New England states and New York, and food industry representatives.
• Three additional MRC units were added in Connecticut, one in Greenwich, one in Bridgeport, and one in Wallingford.

• Mass Dispensing Plans for all 41 Mass Dispensing Areas in the state were evaluated using the CDC's Technical Assistance Review Tool.

• Connecticut underwent its annual evaluation by CDC of the state’s Strategic National Stockpile plan and received a score of 92 out of a possible 100.

B. Training

• DPH is coordinating training and educational activities with the Public Health Emergency Response Learning Centers at Columbia and Harvard Universities. Both universities offered training and assessment services this year including risk communication training and exercise evaluation principles. Columbia University conducted a hurricane seminar and tabletop exercise for public health partners in the NYC MSA and a capacity and preparedness of the workforce response to Hurricane Irene. Harvard completed a training needs assessment on preparedness competencies for state and local employees and has offered risk communication and CAMEO training.

• During the H1N1 Pandemic, three issues were identified as rationale for providing infection control guidance: (1) Closing schools to perform extensive disinfections is unnecessary and expensive; (2) Extensive overuse of disinfectants poses potential adverse exposure to students and staff; and (3) Extensive overuse of disinfectants may result in more resistant strains of viruses and bacteria. A total of 19 training sessions on infection control were conducted for school-based custodial and facilities staff this year.

• Instructors from Yale University conducted 4 sessions of the N95 Respirator Train the Trainer Course. A total of 42 practitioners from public health, health care, EMS, schools, police, and fire were trained.

• Two sessions of Hazmat Awareness Training were held. A total of 23 state and local public health and EMS personnel completed the training which is also a requirement for FEMA’s Emergency Responder Credentialing System for Medical and Public Health.

• Three training sessions for pediatric influenza vaccination were conducted in central Connecticut facilities. Sessions were held throughout the state and were conducted by the New Milford VNA. A total of 17 nurses were trained.

• The Bioterrorism Section of the Laboratory, in conjunction with Hartford Hospital, continued to conduct training seminars in, “Packaging and Shipping Infectious Substances Category A and B.” The training updates individuals on the regulations issued by the Federal Department of Transportation and the International Air Transport Association governing the shipment of infectious substances.
The Bioterrorism staff of the Laboratory collaborated with the Centers for Disease Control and Prevention, and the Association of Public Health Laboratories to present the “Biosafety and Biosecurity in the Laboratory” training program. A total of 49 students attended the training.

DPH conducted WebEOC training to 134 DPH, local health, hospital and EMS staff.

DPH conducted training on the Local Health Management System to 89 state and local public health staff.

C. Exercises

The Bioterrorism Section of the Laboratory, in conjunction with the State Police, 14th Civil Support Team, Poison Control Center, Division of Emergency Management and Homeland Security, U.S. Department of Homeland Security and the Federal Bureau of Investigation conducted its eighth training exercise for first responders regarding the safe and effective response to terrorist events. The training program analyzes the response to a biological, chemical, or radiological event. The most recent training and exercise was conducted in April 2011, with more than 200 first responders in attendance.

DPH conducted two drills that tested staff notification and assembly, development of incident action plans, and after action reporting, including an improvement plan. One of the drills was conducted in tandem with an exercise in DEMHS Region 3 that involved a public health emergency. Through these drills, DPH successfully met the performance measures for Emergency Operations Center, including the High Performance Measure for the PHEP Cooperative Agreement.

DPH participated in the federally-evaluated, interagency drill that exercises the state's response in the event of an accidental nuclear release at the Millstone Power Plant. This year's drill assumed pathway ingestion of radiation, requiring those effected to take potassium iodide.

A tabletop exercise was conducted for DPH staff to walk through the Crisis and Emergency Risk Communication Plan to identify areas for improvement using an influenza pandemic scenario.

DPH conducted a tabletop exercise involving a foodborne outbreak to address communication issues, especially with school food service personnel and long-term care dietary departments that were identified in previous exercises.

CDC and DPH conducted a full-scale exercise of the Strategic National Stockpile staging warehouse to test the state's field operation guide.
D. Response to Real Events

- During the 2010-2011 influenza season, over 2,700 specimens were received for influenza testing by the DPH State Laboratory. This was the second largest seasonal volume received outside the 2009 pandemic. The laboratory successfully detected all three circulating strains: the pandemic 2009 influenza type A (H1N1), influenza type A (H3N2), and influenza type B.

- DPH received and reviewed 144 Foodborne Alert Complaint reports to evaluate for possible common foods or exposures, linking single cases to an outbreak. Investigated 5 foodborne disease outbreaks and 1 suspected case of botulism.

1. Tropical Storm Irene and Winter Storm Alfred

- Responded in coordination with the Governor’s Office, other State agencies, local health partners, the healthcare system, and Federal partners to assure public health and safety for state residents.

- Conducted surveillance of hospital inpatient admissions, carbon monoxide exposure, and injuries presenting at emergency departments.

- Successfully implemented the state Forward Movement of Patients Plan, overseeing the evacuation of a hospital during Storm Irene.

- Worked with Text4Baby to disseminate carbon monoxide messages via SMS messaging to their users. This partnership allowed DPH to reach a very specific community and target messages for pregnant women and mothers with infants.

- Developed and distributed consumer food safety messages.

- Monitored public water systems and prepared daily drinking water safety messages.

- Monitored the operations of nursing facilities for resident care and staff capacity.

- Conducted outreach to community-based providers to minimize interruptions to critical services for vulnerable populations.

- Coordinated and communicated situational awareness and expectations to emergency medical services statewide to ensure the safety of patients and response personnel.

- Participated in the Governor’s Mass Shelter Task Force to provide assistance with sheltering issues.

- Develop an After-Action Review and Improvement Plan for the next emergency.
E. Public Health Infrastructure

- The StratigeneMx3000P Real Time PCR Sys 1120V wi/Notbk Computer was ordered and received at the laboratory in March 2011. This equipment will enhance the through-put of Influenza PCR testing by 20%.

- Laboratory testing for influenza has been automated providing for greater specimen load, even with the addition of subtyping. Influenza specimens are now transported in 4°C transport containers. The new Laboratory Information Management System (LIMS) was enhanced to provide quicker electronic access to specimens. Reporting of specimens was enhanced with the addition of autofaxing.

- A web portal was developed to allow Laboratory clients, with appropriate authentication and permissions, to access data on a real-time basis.

- The Environmental Chemistry Section of the Laboratory continued development of resources to respond to a radiological event. There is a nationwide lack in capacity for a radiological response, and Connecticut was one of three states that received an Environmental Protection Agency award to address this gap in preparedness.

- The Bioterrorism and Environmental Chemistry Sections of the Laboratory successfully completed proficiency tests conducted by the CDC and EPA.

- The Web-Based Electronic Death Registration System (EDRS) was tested and implemented. From October 2010 through April 2011, training was completed for EDRS testing and scenarios for each of the three primary EDRS external users - funeral home personnel, town vital record registrars and medical facility personnel. The final phase of training provided hands-on, classroom Train the Trainer sessions for funeral home and town registrar personnel at regional locations during May and June 2011.

- Preparedness funds partially supported the development of an electronic immunization registry, which was identified as a area for improvement after the H1N1 Pandemic. The web-based system includes a pre-registration process for recruiting vaccine providers and will be used for ordering vaccines. The new system will also allow DPH to identify population(s) the provider typically serves and project the number of vaccines he/she would likely administer. This latter information is important for identifying those at high risk of complications from the virus and for targeting vaccination when the vaccine supply is limited.

- In June 2011, DPH completed development of a secure public health messaging system. When fully functional, the system will be able to send and receive data electronically from our public health partners, including the CDC, hospitals, and commercial laboratories.

- The Connecticut Health Alert Network (HAN) successfully achieved direct alert certification on 9/30/10.
CONCLUSION

The Connecticut Department of Public Health works in collaboration with the Public Health Preparedness Advisory Committee and its members' constituencies to prepare for and respond to any kind of emergency that affects the public’s health and safety. The partnerships have been fostered over the past decade thanks, in part, to federal funding requirements, but more importantly to the commitment of health departments, hospitals, nursing homes, drinking water systems, laboratories, and community providers to support a public health system. The system has met a number of challenges successfully, both in training and in real emergencies.

Connecticut is working to coordinate planning, training, and exercises to maximize capabilities and efficiencies in many emergency preparedness and response activities. DPH is recognized as a leader in these areas and expects to continue our mission to serve the residents of Connecticut. However, DPH and other state health departments are experiencing significant federal funding reductions. The recent 12% cut in federal funds for public health preparedness and response has resulted in fewer resources at the state and local levels. The merger of CDC and ASPR Cooperative Agreements with DPH will require an objective assessment of the State’s capacity to respond effectively to a chemical, biological, radiologic, nuclear emergency.

DPH will inform the legislature on the assessments and recommended improvements as we continue our efforts through 2012.