National Center for Disaster Medicine and Public Health

Annual Report #2

Covering the Period Between April 2010 and April 2011

May 23, 2011

In coordination with the Uniformed Services University

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UNIFORMED SERVICES UNIVERSITY
of the Health Sciences
Executive Summary

The National Center for Disaster Medicine and Public Health (NCDMPH or “the Center”) was established in response to Homeland Security Presidential Directive – 21 (HSPD-21) at the Uniformed Services University of the Health Sciences (USU). Dr. Kenneth Schor remains the Acting Director and is supported by 6 additional full-time staff and two part-time support staff. See Appendix A for additional information.

With the approval in June 2010 of a strategic plan by the Center’s Interagency advisory board (the Federal Education and Training Interagency Group, FETIG), significant progress has been made in shaping the academic Joint Program as required by HSPD-21. Core initiatives included in the academic Joint Program are a disaster health workforce analysis, pediatric disaster medicine curriculum development project, and a structured educational program for the Continuing Promise 2011 training exercise. The approved Strategic Plan is provided in Appendix B.

Interagency funding is gradually becoming a reality due to the determined efforts of the FETIG Executive Committee. Currently identified funding will allow the NCDMPH to move from an initial to an enhanced initial operating capability. Sustained funding remains uncertain.

Reports on current academic Joint Program initiatives will be released during the next reporting period. It is expected they will provide value to the Federal Interagency and the Nation in fulfillment of the NCDMPH Mission:

“The NCDMPH leads Federal and coordinates national efforts to develop and propagate core curricula, education, training, and research in all-hazards disaster health.”

Interagency Support

Three Interagency Agreements (IAA) have been executed between USU on behalf of the NCDMPH and core federal departments to support the development of the academic Joint Program. A fourth IAA is in review.

Department of Defense (DOD)

DOD provides core support for NCDMPH. USU placed Department of Defense (DOD) funds on contract with the Henry M. Jackson Foundation for the Advancement of Military Medicine (HJF) to establish the Center. The Center coordinates across DOD by
engaging with stakeholders in all services at a variety of levels, primarily through military medical conferences. At the invitation of the US Naval Forces Southern Command (COMUSNAVSO) Surgeon, the NCDMPH contributed to the education and training of the embarked joint medical group of Operation Continuing Promise 2010 (CP-10) aboard USS Iwo Jima and is in the process of assessing CP-11 training aboard USNS Comfort. As an outgrowth of the Workforce project, NCDMPH staff were invited by the NORTHCOM Surgeon’s office as observers to National Level Exercise 2011 in order to gain a more dynamic perspective on knowledge needs in a catastrophic disaster.

**Department of Health and Human Services (HHS)**
HHS requested NCDMPH assist in fulfilling Strategic Objective 2 of the National Health Security Strategy, “Develop and maintain the workforce needed for national health security”, by conducting a workforce analysis reaching across all five core Federal Departments and through a case study to state and local government levels. Additionally, the Senior Medical Officer of the National Institute of Health’s National Institute of Child Health and Development served as Chair for the NCDMPH Pediatric Disaster Preparedness Curriculum Development Conference.

**Department of Veterans Affairs (VHA)**
The DEMPS National Program office in the VHA Office of Emergency Management provided key consultative support in recruitment of the NCDMPH Education Coordinator position. VHA continues to provide key contacts for the workforce analysis. Additionally, an interagency agreement between USU and VHA is finalized and funds transfer is in process.

**Department of Transportation (DOT)**
The Office of Emergency Medical Services at the National Highway Traffic Safety Administration is developing an interagency agreement in support of the NCDMPH strategic plan.

**Department of Homeland Security (DHS)**
FEMA Deputy Administrator Rich Serino gave supportive opening remarks at the NCDMPH Pediatric Disaster Preparedness Curriculum Development Conference. NCDMPH hopes to receive support in-kind as documented in FETIG Executive Committee minutes.

The following table summarizes Interagency financial contributions by Department and specifies the dollar amount, the utilization of the funding, and pertinent comments.
Financial Summary

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<td>To support approved strategic plan</td>
<td>FY11 funds with two option years</td>
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Focus Areas: The following section details how the NCDMPH is implementing the five goals outlined in the strategic plan (Appendix B).

Workforce Analysis

In September 2010, the NCDMPH received funding from the Department of Health and Human Services (DHHS) to conduct a workforce analysis of those responding to a domestic natural disaster.

The goals of the project are to produce a report by September 2011 that will:

1. Survey core federal departments supporting Emergency Support Function #8 of the National Response Framework (primarily DOD, DHHS, Department of Homeland Security, Department of Veterans Affairs, Department of Transportation) and sample representative state, county and city agencies to describe the structure and function of their natural disaster response workforce.

2. Select three core occupational groups (for example, physicians, nurses, and Emergency Medical Services) constituting the natural disaster response workforce at the federal, state and local level. Based upon the information
obtained in #1, enumerate their numbers and describe the expectations of their response, including but not limited to: competencies, standards, credentialing, licensing, liability issues and training requirements.

Pediatrics

The NCDMPH convened a Pediatric Disaster Preparedness Curriculum Development Conference on March 8-9, 2011 in Bethesda, Maryland. The purpose of the conference was to begin addressing the unmet education and training needs of medical responders who care for children in a disaster.

The conference was a first step in fulfilling the NCDMPH strategic objective 2c and in support of a recommendation from the National Commission on Children and Disasters (NCCD). The needs of children and pregnant women in disaster situations are not addressed explicitly in any of the competency sets currently in development, nor are they overtly addressed in most curricula.

The conference objectives were:

1) To initiate the infrastructure and methodology to create a competency based pediatric disaster preparedness training program.

2) To demonstrate this approach by developing prioritized, role-specific education and training recommendations for select healthcare roles.

In addition to high-level representatives from the National Commission and a variety of Federal government departments, the conference brought together over 90 internationally-renowned pediatric disaster medicine experts who contributed significantly to the initial framework of a pediatric disaster medicine curriculum. The conference proceedings and curriculum templates will be available on the NCDMPH website this spring.

The NCDMPH views the conference as a critical beginning to a process of developing standards and curricula in pediatric disaster medicine. It is also expected that lessons learned from this pediatric project will facilitate curriculum development for other unique populations disproportionately affected by disaster.

Supporting Continuing Promise

Consistent with NCDMPH goals, US Naval Forces Southern Command (COMUSNAVSO) Surgeon invited NCDMPH to contribute to the education and training of the embarked joint medical group of Operation Continuing Promise 2010 (CP-10)
aboard USS Iwo Jima. The NCDMPH immediately responded with a quality improvement proposal to conduct a learning assessment of embarked medical staff officers during CP-10, seeking to provide quantitative and qualitative feedback to the component command for application in subsequent missions.

Both Presidential Directive-21 and the Charter of the NCDMPH explicitly recognize there is significant overlap in the knowledge, skills, and attitudes for domestic and for international disaster response. Thus, the work of the NCDMPH in support of COMUSNAVSO Surgeon not only enhances partner nation and regional preparedness and stability, but it also will translate directly into DoD medical department competency in domestic disaster response. Since this activity directly supports the mission of the NCDMPH and the Presidential Directive—highest quality training and education in the Continuing Promise missions provides a 2-for-1 payback in workforce competency. Few opportunities to date have provided such a robust value.

The NCDMPH conducted a formal learning assessment aboard the USS Iwo Jima during CP-10 to achieve the following objectives:

- Describe the CP-10 workforce and associated knowledge, skill, and experience relative to humanitarian and disaster response (HADR) missions
- Identify self-reported knowledge and perceived preparedness for HADR of the CP-10 workforce
- Review the educational and training received by CP-10 embarked medical personnel (formal and informal)
- Identify gaps in education and training as perceived by CP-10 embarked medical personnel
- Assess free-text comments by participating medical staff to identify how some aspects of mission execution might affect the training value of the mission
- Formulate recommendations for improving future missions requiring HADR competencies

These objectives were designed to provide the COMUSNAVSO Surgeon with a targeted assessment of the education and training needs identified on CP-10 for application to future humanitarian and disaster response missions. While it should be noted the use of the “gray hull” USS Iwo Jima presented additional challenges to education and training not typically encountered during a hospital ship (T-AH) mission, the NCDMPH evaluators identified findings which transcend the environment and are related to multiple HADR response environments. Lessons learned from this assessment include those that directly relate to education and training, as well as those that indirectly impact the training value of the mission. The report on our CP-10 findings is available upon request.
At the request of the COMUSNAVSO Surgeon, the NCDMPH will be contributing to the education and training of the embarked medical staff on Operation Continuing Promise 2011 (CP-11) by providing a curriculum focusing on:

- Cultural competency
- Team roles and responsibilities
- Ethical considerations
- Baseline disaster education
- Host nation health system information
- Force health protection and personal safety

Integrated into the CP-11 project is an evaluation strategy to measure the impact of education and training.

**Workshops**

The Center is fulfilling a tasking from US NORTHCOM to partner with Yale New Haven Health Center for Emergency Preparedness and Disaster Response (YNH-CEPDR) as they conduct six workshops intended to:

1. Clarify the federal disaster medicine and public health education and training products currently in existence
2. Identify needs and explore strategies to fill education and training gaps, and
3. Synthesize long-term expectations of competencies

Successful workshops were held in May, September and November of 2010 and March 2011. The After Action Reports for the first three workshops are available at [http://ncdmph.usuhs.edu/JointProgram/JP_Workshops.htm](http://ncdmph.usuhs.edu/JointProgram/JP_Workshops.htm). Subsequent workshops are scheduled for June and August.

**Outreach**

March 25-26, 2010 - NCDMPH presented at the Center for the Study of Traumatic Stress "Stigma & Barriers to Care" Working Conference
June 1-6, 2010 – NCDMPH displayed at the Integrated Medical, Public Health, Preparedness and Response Training Summit


August 5-6, 2010 – NCDMPH presented at the CDC Terrorism Injuries Information, Dissemination and Exchange (TIIDE) Project Competency Summit

October 14, 2010 - NCDMPH staff participated in Collaborative Multiagency Exercise (CMAX) at National Naval Medical Center

November 19, 2010 – NCDMPH staff served as discussants on a panel at the Public Health, Schools and Community Resilience Workshop Sponsored by George Mason University

December 14, 2010 – NCDMPH staff briefed the CP10 Assessments Workshop in Mayport, FL on findings from USS Iwo Jima learning assessment and plans for CP11. NCDMPH staff presented assessment plans for CP11 at the CP 11 Mid-Planning and Final Planning Conferences.

Presented at the National Association of County and City Health Officials (NACCHO) Public Health Preparedness Summit.

Displayed at the Military Health Systems Conference

Provided half hour and three hour CME sessions at the 2011 Armed Forces Public Health Conference with over 75 in attendance.

**Website**

A measurable example of the NCDMPH’s growing impact can be found in the analysis of the Center’s website analytics. In the time period between April 1, 2010 and January 1, 2011, the NCDMPH has seen great improvements in all areas.

Since April 1, 2010, the website has logged 4,200 visits from over 2,100 individual users. Those numbers represent an impressive jump from the 1,300 visits from 500 users in the previous 10-month window. These visitors also nearly tripled the pages viewed from 4,800 up to 13,300. The significant growth in website statistics can be attributed to a number of factors – re-designing the layout, expanding the newsletter distribution and increasing our presence at national meetings. However, the essence of
the website growth will always come back to content. Thus, the level of quality work being conducted by the NCDMPH is reflected in the content, and growth, of the NCDMPH website. Additionally, the Center distributes a newsletter three times a year outlining its activities.

**Future Plans**
The NCDMPH continues developing its capabilities to become a national center of excellence in disaster health education and training in fulfillment of HSPD-21. The Center seeks to meet national needs for coordinated disaster health core competencies, curricula, and supporting education and training research through the development of an academic Joint Program. We are excited to add to the staff a full-time Education Coordinator in June 2011.

Upcoming activities include:

- Reports on current academic Joint Program projects (e.g., workforce, Continuing Promise, and pediatrics
- Supporting the CDC TIIDE competency development project to by gathering stakeholder input on a draft set of core disaster medicine and public health competencies
- Preparation of a Memorandum of Understanding with the National Library of Medicine to pursue partner activities.

The NCDMPH academic Joint Program production schedule outlines the ongoing work of the Center and planned deliverables. Appendix C provides the detailed schedule.

Our accomplishments are enabled by the leadership of the Uniformed Services University of the Health Sciences and the support of the Federal Education and Training Interagency Group.

Respectfully submitted,

Kenneth W. Schor, DO, MPH
Acting Director
APPENDIX A

Additional Historical Background

Homeland Security Presidential Directive 21 was released on October 17, 2007. HSPD-21 established a new national vision to focus the U.S. on all-hazards medical and public health preparedness, community engagement, integrated medical and public health response, and coordination vertically, horizontally, within, and across a very wide range of federal and non-federal entities. HSPD-21 specifically called for the establishment of an academic Joint Program for Disaster Medicine and Public Health at a National Center for Disaster Medicine and Public Health (NCDMPH) housed at the Uniformed Services University (USU). HSPD-21, paragraph 38 directed, “[NCDMPH] will lead Federal efforts to develop and disseminate core curricula, training and research related to medicine and public health in disasters.”

DoD and USU responded with a charter that reads in part, “the National Center [for Disaster Medicine and Public Health] shall promote standardized education and training in public health and medical disaster preparedness and response based upon collaboratively developed and accepted core competencies, procedures, and terms of reference. The National Center will share findings with Federal, State, local and tribal governments; academia and the private sector.”

HSPD-21 also specified in paragraph 37 the creation of an interagency body, separately constituted as the Federal Education and Training Interagency Group for Public Health and Medical Disaster Preparedness and Response (FETIG), to serve as a coordinating mechanism for education and training in disaster medicine and public health. The FETIG thus became an advisory body to the NCDMPH as codified through a separate five-department (DoD, DHHS, DVA, DHS, DoT) charter. This charter directed the FETIG to meet regularly and make recommendations for the establishment and maintenance of the academic Joint Program, housed at the NCDMPH.
APPENDIX B

NCDMPH Strategic Plan

Approved on June 23, 2010 by the FETIG.

Vision and Mission:

Vision: A nation of resilient communities with a competent disaster health workforce prepared to respond to and mitigate all-hazards disasters.

Mission: The NCDMPH shall lead federal and coordinate national efforts to develop and propagate core curricula, education, training and research in all-hazards disaster health.

Building upon HSPD-21 and the Pandemic and All-Hazards Preparedness Act (PAHPA), the National Health Security Strategy and guidance from the Federal Education and Training Interagency Group, the NCDMPH will pursue a set of goals and objectives consistent with this vision and mission.

Goals:

Initial operating capability for the NCDMPH was resourced by the Department of Defense and reached, per a memo to Dr. David Marcozzi, on July 19, 2010. The Department of Health and Human Services supplied FY10 year-end funds to support an initial effort to characterize the disaster health workforce, in support of goal 1. Multi-agency funding will be required going forward to fully support the capabilities required to meet the ambitious goals envisioned. These goals are as follows:

1. Lead the characterization of the disaster health workforce
2. Lead the identification, integration and promotion of national core competencies in disaster health across multiple disciplines and professions
3. Provide leadership in the efforts to identify and/or design, develop, propagate and evaluate core curricula for disaster health education and training
4. Contribute to the development and implementation of an evidence-based continuous improvement framework supporting evolving best practice competencies, training methodologies and disaster health lifelong learning
5. Become a trusted national resource for disaster health education and training.

A phased approach towards the fulfillment of goal-specific objectives began in fiscal year 2010 (FY10) and will continue to develop over the next 2 fiscal years.
Short Term Objectives (through FY12):

- Characterize the disaster health workforce as a basis for the identification, integration and promotion of national core competencies in disaster health across multiple disciplines and professions
- Identify evidence-based evaluation strategies to assess operational outcomes of competencies
- Identify and integrate federal disaster health core competencies
- Identify and integrate national disaster health core competencies
- Identify gaps between learning outcomes and both individual and team performance
- Identify core disaster health curricula, education and training standards
- Inform the federal disaster health education and training process
- Collaboratively advance the development of national standards for education and training in disaster health
- Develop an analysis framework to identify gaps between core competencies, curricula and response requirements
- Utilize after-action reports and lessons learned in a continuous improvement framework
- Communicate information about the Joint Program within federal, state, local, tribal and territorial communities
- Support Federally-sponsored disaster health task forces
- Contribute to research in the related specialties of domestic medical preparedness and response, international health, international disaster and humanitarian medical assistance and military medicine (per USU/ASD(HA) Charter)

Long Term Objectives (FY13 and beyond):

- Establish a multi-disciplinary Disaster Health Fellowship designed to expand scholarly research, education, and training in the discipline of disaster health
- Develop multi-disciplinary certification in Disaster Health
- Continue to implement evolving evidence-based best practice competencies, curricula, and education and training standards in disaster health lifelong learning
## APPENDIX C

### Academic Joint Program Schedule

** Assumes funding at “Enhanced Initial Operating Capability” level **

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<th>Item</th>
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<th>Time-frame</th>
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**New Products**
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