

NCDMPH

National Center for Disaster Medicine & Public Health



Annual Report 2014

Covering the period between January 2014 - December 2014



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Executive Summary

The National Center for Disaster Medicine and Public Health (NCDMPH) is pleased to release its annual report, covering accomplishments and activities undertaken in 2014. In an effort to provide relevant information about the Center in the most transparent and timely fashion, we will begin issuing our annual reports to correspond with the calendar year.

An academic center of excellence, NCDMPH's mission is to "lead federal and coordinate national efforts to develop and propagate core curricula, education, training and research in all-hazards disaster health." Our efforts are made possible through our academic sponsor, the Uniformed Services University of the Health Sciences (USU).

We aim to fulfill our mission through research activities that provide a broad understanding of the disaster health education and training landscape and through the development of educational products that will help build a nation of prepared and resilient communities.

This publication will cover the Center's:

- Outcomes and Impacts
- Current Tasks
- Partnerships
- Outreach
- Selected Future Work

For more information about NCDMPH's work and the activities detailed in this report, please visit us online at ncdmph.usuhs.edu.

Thank you.

Kenneth Schor, DO, MPH, FAAFP
Acting Director

Outcomes and Impacts

National Disaster Health Workshop

Building on the success of its inaugural workshop in 2013, the Center hosted its second Learning in Disaster Health Workshop Sept. 9-10, 2014 in Fort Myer, Virginia, just outside the nation's capital. The meeting attracted more than 100 attendees and brought together presenters from academia, the military, and state, local and federal government. Experts led sessions on implementing inter-professional education practices, building resilience at the neighborhood level, applying disaster behavioral health evidence to learning and other topics.

“Developing, hosting and communicating the contents of this workshop help to partially fulfill our mission ‘to lead federal and coordinate national efforts to develop and propagate core curricula, education, training and research in all-hazards disaster health,’” Kenneth Schor, DO, the Center’s Acting Director, said of the event.

The workshop offered attendees unique networking opportunities through the “Showcase of Practice: A Roundtable Networking Session,” where participants learned about ongoing research and practice from practitioners at a variety of institutions while rotating among 13 tables.

A report of the meeting was published in the December 2014 issue of *Disaster Medicine and Public Health Preparedness*. Workshop proceedings are also available on the Center’s website.

Curriculum Recommendations

With the number of Americans over the age of 65 predicted to double in the years 2000 to 2030, a focus on the older adult population in disaster education is critical. The Center has released curriculum recommendations addressing older Americans.

“Curriculum Recommendations for Disaster Health Professionals: The Geriatric Population” was released in August 2014, becoming the third in the series. The recommendations were written by Catherine G. Ling, PhD FNP-BC and Heather L. Johnson, Lt Col, USAF, (Ret), DNP, FNP-BC, FAANP, both of USU’s Graduate School of Nursing, and Elexis C. McBee, LCDR, USN, DO, FACP, of the University’s School of Medicine.

The National Center also launched “Curriculum Recommendations for Disaster Health Professionals: Public Health Law in Disasters” in October 2014. This resource suggests education and training activities to familiarize public health and medical professionals with the legal issues related to disaster preparedness, response and recovery. It was written by Maxim Gakh, JD, MPH, scholar in residence at the University of Nevada, Las Vegas.

Curriculum recommendations are designed so that educators can adapt the materials to meet their needs and those of their learners. Whether used for continuing education activities, community seminars or as part of a graduate academic



Kenneth Schor, left, presents an Outstanding Poster Award certificate to Anthony Gilchrest who, along with Elizabeth Edgerton, MD, co-wrote the award-winning poster.



course, the curriculum recommendations can be tailored to best suit the instructor and the audience.

Resilience Through Learning

Created to respond to the Boston Marathon bombing, the Resilience Through Learning online resource has grown to include content on a range of other subjects. The newest topic, “Influenza,” was added in 2014 and culls information from the Centers for Disease Control and Prevention, the Department of Health and Human Services, and other sources. Consistent with the other Resilience Through Learning pages, Influenza provides educators and self-directed learners with resources organized under the following sub-topics: Background and Health Impacts, Prevention, Treatment, Healthcare Systems, Healthcare Workforce Preparedness, Psychosocial, and Community Health.

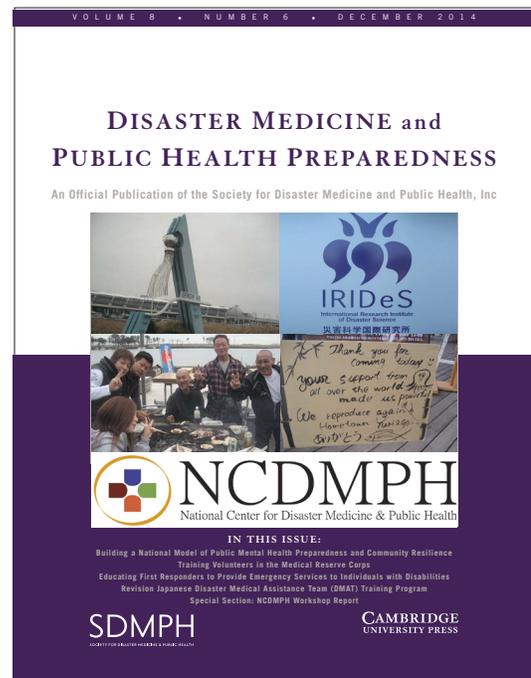
The influenza section also includes information specific to the current flu season, such as which strains are circulating and the efficacy of the vaccines offered.

Each section in the Resilience Through Learning resource includes a Learning Objectives and Activities page, which can assist educators in developing material or activities related to various events.

Disaster Medicine and Public Health Preparedness Journal

The Center advances scholarship through its editorial partnership with the Society for Disaster Medicine and Public Health and its support of the Disaster Medicine and Public Health Preparedness peer-reviewed journal, which the society publishes. Center staff provides peer review for articles submitted for publication in the journal.

In 2014, NCDMPH editorial staff developed a special issue of the journal on the Ebola virus, providing operational and policy-level information



aimed at improving outcomes and decision making. Global experts, responders, and scientific and medical professionals in both the Ebola virus and public health contributed content to the special issue.

The December 2014 issue featured extensive coverage of the Learning in Disaster Health Workshop, held in September.

Webinar Series

The Center continues to maximize the power of online education through its webinar series. Presentations in 2014 covered diverse topics focusing on disaster health education and training, including psychological first aid, socioeconomic factors impacting health outcomes after a disaster, the role of gender in enhancing disaster public health and many other areas of research. Presenters included experts from USU, government agencies such as the Centers for Disease Control and Prevention Office of Public Health Preparedness and Response and other academic scholars and centers, the Minnesota Department of Health, and National Center staff.

Current Tasks

Caring for Older Adults in Disasters: A Curriculum for Health Professionals

Work for “Caring for Older Adults in Disasters: A Curriculum for Health Professionals” began in summer 2014. The curriculum is directed to educators and addresses the unique considerations of providing aid to an older population during and after disasters. The Center is collaborating with more than 20 subject matter experts to develop the resource, which is designed to inform care in hospitals, nursing homes, hospices, long-term or assisted-living facilities, and other settings where health professionals may encounter older adults.

The curriculum reviews conditions already present in older adults before a disaster that may impact their preparedness, response and recovery; outlines special considerations for older adults in particular types of disasters; gives an overview of caring for older adults during the disaster cycle; reviews special considerations for older adults in various settings in which they reside and receive care; and reviews ethical and legal considerations for the care of the older adult population during a disaster. An interactive activity allows learners to apply new knowledge to their specific role and work setting.

Examining and Enhancing Public Health Workers’ Sense of Efficacy Toward Hurricane Sandy Recovery

Throughout the last year, the Center continued its work to help communities recover from Hurricane Sandy, a weather event that damaged hundreds of thousands of homes, forced tens of thousands of survivors into shelters and caused billions of dollars in damage to vital infrastructure systems.

In support of a collaboration with Johns Hopkins University Bloomberg School of Public Health and the State of Maryland’s Department of Health and Mental Hygiene, NCDMPH continues to test ways to increase local health department worker resilience in the wake of Hurricane Sandy. Once initial data gathering was complete, the Center created a research-informed and evidence-based educational

intervention to increase self-efficacy and decrease threat perception among local public health workers during disaster recovery.

This curriculum was considered the educational intervention for the overall research. It was provided to local health department trainers in the identified Sandy-affected counties in Maryland and New Jersey. These local trainers conducted four sessions with their local health department staff. The impact of this training is currently being analyzed and will be reported in scholarly publications. The curriculum developed for this research by the Center will be made nationally available in the fall of 2015.



Selected scenes from the Center’s Hurricane Sandy Recovery Video.



Partnerships

The Center shares many interests with other organizations involved in disaster medicine and public health. Those shared interests result in formal and informal partnerships and outreach efforts that benefit the National Center, its partners and local communities served when crises arise.

Formal Partnerships

Institute of Medicine: The Center continues its membership with the Institute of Medicine's Forum on Medical and Public Health Preparedness for Catastrophic Events, which is now under the oversight of the National Academy of Medicine. Dr. Schor was invited to moderate "Regional Disaster Response Coordination to Support Health Outcomes: Workshop #2" in Irvine, California.

Dr. Schor also participated in regional working groups sponsored by the forum in Irvine and Minneapolis. He was a small group facilitator on social connectedness at the Irvine meeting. National Center staff was also part of a forum-sponsored meeting focused on geriatric issues.

Department of Transportation: The Department of Transportation's National Highway Traffic Safety Administration requested consultative support on the utilization and educational aspects of the Model Uniform Core Criteria for Mass Casualty Triage, a published criteria applied to

mass casualty triage tools. The addendum to the EMS Education Standards was collaboratively developed in 2014. It has been reviewed by subject matter experts and is currently in the piloting phase at five sites throughout the country.

Global Health Working Group: The Acting Director is a member of the Global Health Working Group, co-chaired by the Joint Staff Surgeon and Deputy Assistant Secretary of Defense for Force Health Protection and Readiness, and the working group's Patient Care Committee. These committees have completed the mission of their charters and have compiled and submitted reports to the working group, which has also closed out its reports to higher authority. The reports are internal Department of Defense documents that are not available to the public.

Department of Defense Homeland Defense/ Defense Support to Civil Authorities Working Group: The Acting Director remains involved in the Department of Defense Homeland Defense/ Defense Support to Civil Authorities Working Group as well as its Complex Catastrophe committee. Additionally, he served as a member of the working group's Education and Training Committee.

Boston University Healthcare Emergency Management Program: The Center's partnership with the Boston University Healthcare Emergency



Management Program continues to yield frequent collaborations with adjunct professor John J. Burke, MS. Mr. Burke hosted an exercise with NCDMPH staff in 2014 and co-presented with Dr. Schor at the National Academies of Practice meeting in the session, “Interprofessional Workshop: Evidence Based Teamwork-Reinforce TeamSTEPPS.” The two also co-presented at the University of Pennsylvania Residency Program and continue to collaborate on hybrid exercises that have contributed to the education of occupational medicine residents. NCDMPH Operations Director Kandra Strauss-Riggs retains her adjunct appointment with the Boston University Medical School and is the course director for Community Health in the Healthcare Emergency Management program.

Informal Partnerships

Department of Health and Human Services National Health Security Strategy (NHSS) Input: NCDMPH continued to participate in federal interagency efforts shaping the 2015-2018 NHSS. This resulted in NCDMPH being named a co-leading agency for national health security workforce development objectives. Because of its sustained engagement in this process, the Center’s work is frequently and prominently mentioned in the congressionally mandated National Health Security Review of December 2014.

Disaster Research Responder Project (DR2): The Center is also a contributing stakeholder for the Disaster Research Responder Project, which was launched by the National Institutes of Health/National Institute of Environmental Health and Sciences. The DR2 aims to create an environmental health disaster research system to train research responders.

Assistant Secretary for Preparedness and Response, Hospital Preparedness Program (HPP): The Center continued to provide updates to the HPP on the results of its field research on

health care coalitions. The HPP provided helpful formative input into the multi-year research and the Center has provided the HPP periodic updates. Research results were submitted for publication, resulting in the publication of two articles in April 2015.

All-Hazards Ventilator Working Group: Dr. Schor was a member of the Education and Training subcommittee for this group, which addressed issues relating to the purchase of ventilators for the Strategic National Stockpile and developing capabilities for their use. The CDC-sponsored group has completed its work in support of its charter and filed a report in June.

Medical Reserve Corps: The Center continues to collaborate with the Medical Reserve Corps on its emerging education and training efforts. NCDMPH played a significant role in helping to raise awareness of the Corps and strengthen its core competencies, which now reflect the Center’s core disaster health competencies.

Department of Homeland Security

Federal Emergency Management Agency Region III: Dr. Schor continues to serve as a Subject Matter Expert to the FEMA Region III Regional Advisory Council. The Center has gained a valuable perspective on disaster health issues and their workforce development implications through its partnership with Region III, which includes Pennsylvania, Delaware, Maryland and Virginia.

Federal Emergency Management Agency Emergency Management Institute: In June, NCDMPH instituted FEMA’s first-ever public health track at the Emergency Management Institute, in collaboration with the Boston University Healthcare Emergency Management Program. The key sessions were “Ongoing Innovations in Disaster Health” and “Hybrid Exercise: A New Community Learning Tool.” The sessions’ success resulted in an invitation to present the track at a future meeting.



Federal Emergency Management Agency Geriatric/Elder Disaster Resilience Group: In late 2014, NCDMPH became part of the Geriatric/Elder Disaster Resilience Group, which comprises public, private and academic institutions. It was established to provide information on programs and initiatives in use around the country. The Center participates in national calls and shares knowledge from its curriculum focused on caring for older adults.

Associations

American Academy of Pediatrics: The National Center and the American Academy of Pediatrics enjoy a strong partnership rooted in a shared dedication to pediatric health. NCDMPH works specifically with the academy’s Disaster Preparedness Advisory Council. The council continues to provide briefings on the Center’s latest updates at council meetings and reviews the Center’s pediatric products.

American Public Health Association: The National Center is currently active in the APHA Emergency Health Services-Disaster Preparedness committee. Participation in this committee strengthens the Center’s engagement with the nation’s leading organization of public health professionals.

Academic Support

Dr. Schor remains an active faculty member in the Uniformed Services University of the Health Sciences by teaching the following courses:

- PMB Course Co-Director: PMO 1009 “Domestic Management and Response,” Winter Quarter, AY 2014-2015
- PMB Course Lecturer: “Site Selection” in PMO 613 “Public Health Aspects of Disasters in Developing Countries,” Spring Quarter 2015

- SOM, B3, Small Group Facilitator: Global Health Micromodule
- GSN, Course 970, Lecturer on Humanitarian Assistance and Disaster Response Ethics

Additionally, the Center hosted residents in the University’s Public Health and General Preventive Medicine Residency program.

Dr. Schor and Education Director Brian Altman, PhD, also mentored a Master’s of Public Health graduate student from the George Washington University Milken Institute School of Public Health.



Outreach

Hosted Events

Learning in Disaster Health 2014
Fort Myer, Virginia
September 9-10, 2014

Hosted Webinars

CDC Responder Workforce Needs Assessment
Presented by Gabrielle O'Meara, BA, Silvia M. Trigoso, MPH; Capt. Gail Williams, MPH
March 28, 2014

National Public Health Week: Just-in-Time Disaster Health Learning Tools
Presented by Liz Brasington, BA; Brian Altman, PhD
April 8, 2014

Promoting Resilience in Disaster First Responders: A Psychological First Aid-Based Approach
Presented by David M. Benedek, MD, COL, MC, USA, associate director, Center for the Study of Traumatic Stress; professor and deputy chair, Department of Psychology, Uniformed Services University of the Health Sciences
May 22, 2014

Integrating Community Pediatric Practices into Disaster Preparedness: A Strategic Plan for Pennsylvania
Presented by Esther Chernak, MD, MPH, director, Center for Public Health Readiness and Communication; associate research professor, Department of Environmental and Occupational Health, Drexel University
June 19, 2014

The Measured Impact of Community Disaster Readiness Capability on Response & Recovery Outcomes
Presented by Becky Zukowski, PhD, RN, associate academic dean and chairperson, Division of Nursing, Mount Aloysius College
July 29, 2014

Using Gender Research to Enhance Disaster Public Health
Presented by Elaine Enarson, PhD
August 29, 2014

Health IT and Disaster Preparedness
Presented by Dr. Jinpin Ying and Jason Pomaski
September 30, 2014

Designing for Unconventional Learning Outcomes and Experiences in Exercises
Presented by Minnesota Department of Health Office of Emergency Preparedness staff: Mickey Scullard, MPH MEP; Janice Maine, BS, MEP; Deb Radi, MBA, BSW
October 14, 2014

Published Work

Schor K., Fitzgerald T. Radiation Disaster Issues in Children: A Case-Based Activity. Distance Learning Product. April 2014.

Gulley K, Strauss-Riggs K, Schor K, Guest Editors. Gulley K, Strauss-Riggs K, Schor K, Walsh L, Craddock H, Brasington E. NCDMPH Workshop Report Special Section. Disaster Medicine and Public Health Preparedness. December 2014.

Walsh, L., and K. W. Schor. 2014. Education and Training Opportunities in Long-Term Community Recovery: Preliminary Observations from the Field. Paper presented at IOM Committee on Post-Disaster Recovery of a Community's Public Health, Medical and Social Services Meeting. April 2014.

Abstract

Walsh, L, Craddock, H. American Public Health Association Annual Meeting: Role of Local Public Health in Disaster Recovery: Successes and Challenges after Hurricane Irene and Superstorm Sandy. November 2014.



Book Chapter

Schor, K. Disaster Health Competencies and Their Application: Caring for Seniors. In: Cefalu C, ed. Disaster Preparedness for Seniors: A Comprehensive Guide for Healthcare Professionals. New York, NY: Springer, 2014.



Posters

NACCHO Preparedness Summit
April 2014
Topic: In What Ways Should We Deliver Essential Disaster Health Learning Content?: An Interactive Discussion

NACCHO Preparedness Summit
April 2014
Topic: Effective Practices in Building and Sustaining Healthcare Preparedness Through Healthcare Coalitions

American Public Health Association Meeting and Exposition
November 2014
Topic: Role of Local Public Health in Disaster Recovery: Successes and Challenges after Hurricane Irene and Superstorm Sandy

National Healthcare Coalition Preparedness Conference
December 2014
Topic: Translating Research to Practice: Producing Preparedness Learning Content

Presentations

National Healthcare Coalition Preparedness Conference
December 2014
Topic: Education and Training in Healthcare Coalitions: An Interactive Discussion

Challenges after

Health Services

Provided cleanup supplies, protective equipment, immunizations. Staffed medical needs shelters and mental health services. Provided support to other healthcare entities.

Modifying Plans

Addressed specific needs uncovered by the storms (i.e. canvassing community members that hadn't evacuated) and made plans more flexible.

The Role Public Health Played in Disaster Recovery

Workforce Education

Trained other public health employees in their role during a disaster, and helped train other members of the disaster healthcare workforce (i.e. pharmacists).

Community Engagement

Educated the community and assessed individual recovery needs, built relationships with volunteers and community organizations, participated in active recovery activities and future disaster planning.

Advice for Successful Recovery

1. Know health department role in long-term community recovery.
2. Integrate recovery activities into plans.
3. Communicate expectations of employees.
4. Build relationships with local, state, & federal partners pre-event.
5. Use the Incident Command System.
6. Get advice from disaster survivors.
7. Plan Disaster Recovery Centers with FEMA.
8. Create volunteer management plans.
9. Anticipate non-response from impacted volunteers.

References

1. National Disaster Recovery Framework: Federal Register Volume 76, Issue 217 (November 9, 2011)
2. Presidential Policy Directive 8 (PPD-8): National Preparedness (November 15, 2012)
3. NACCHO: 12th International Piv 148, Version 10, 2012
4. Photo: Survivors drop their home with barrels to thank volunteers for helping to clear debris as part of the recovery process following Hurricane Sandy. © Rosanna Alvin/FEMA

Rachel Kaul at the poster presentations at the 2014 National Disaster Health Workshop.



Selected Future Work

Several projects are under way at the Center in addition to the work outlined in this report. Below are selected efforts in development.

Health Care Coalition Peer-to-Peer Learning

Field research revealed the need for peer-to-peer learning tools to help health care coalitions improve disaster education and training. The Center is seeking to meet that need through a series of online articles written by health care coalition subject matter experts to address those needs, including how to engage health care leaders in preparedness, how to better align coalition exercises with those of other community organizations, how to operate effectively in rural areas and other concerns. Center staff will solicit and curate submissions and make them available on the NCDMPH website.

Access and Functional Needs Project

As part of its efforts to help build resilient communities able to respond to the unexpected, NCDMPH is developing education and training to support the federal Emergency Support Function #8—Public Health and Medical Services (ESF-8), focusing specifically on populations with access and functional needs.

ESF-8 annex can deploy public health and medical resources to aid local, state, tribal, territorial and insular area officials. The Center's access and functional needs project seeks to improve the deployment of those services by demonstrating

ways to develop relationships between health professionals and vulnerable populations. A series of online videos will show how partnerships can be formed and provide suggestions to better equip the ESF-8 when responding to disasters where those with access and functional needs have been affected.

Simulation Evaluation Project

The Center has partnered with the Val G. Hemming Medical Simulation Center to conduct research on the effectiveness of one of NCDMPH's online education products, "Psychosocial Impacts of Disasters on Children." The research participants will be primary care clinicians and some will complete the online training just prior to clinic encounters with simulated disaster victims while the control group will not complete the online training before the clinical encounter. NCDMPH anticipates publishing the results of the study in summer 2016.

Future Plans

- Support the implementation of the older adult disaster health curriculum
- Host "Learning in Disaster Health 2016" in fall 2016
- Provide ongoing support on education and training related to the Department of Transportation's Model Uniform Core Criteria for Mass Casualty Triage
- Conduct a website redesign based on extensive usability testing data



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