



NATIONAL CENTER FOR DISASTER
MEDICINE & PUBLIC HEALTH

ANNUAL REPORT 2015

EXECUTIVE SUMMARY



It is with great pleasure that The National Center for Disaster Medicine and Public Health (NCDMPH), an academic center of excellence in disaster medicine and public health of the Uniformed Services University of the Health Sciences, presents its annual report for 2015.

During the past year, NCDMPH has continued to actively engage in providing the finest in disaster medicine and public health education tools to those who make it their business to be disaster ready and resilient. Our dedication to spearheading new educational tools and novel research also remains strong.

The activities outlined in this report are stepping stones to the development of even more impactful programs and resources in the future. As we look back on 2015, we also eagerly anticipate the fruits of the work yet to come as we consistently strive to fulfill our mission to help build a nation of prepared and resilient communities through education, training and research.

We thank you for your continued interest in the Center and encourage you to learn more about us by visiting ncdmp.h.usuhs.edu.

Sincerely,

A handwritten signature in black ink, appearing to read 'Craig Goolsby'.

Craig Goolsby, MD, MEd, FACEP
Interim Director

OUTCOMES AND IMPACTS

Resilience through Learning Influenza Page

NCDMPH kicked off the year by launching a new web page, Resilience through Learning - Influenza, with resources relevant to protecting people from and preventing the spread of seasonal influenza during the severe 2014-2015 flu season. The page is part of the NCDMPH Resilience through Learning series, which provides NCDMPH and outside resources centered on specific all-hazards events. Other disaster types in the series include Winter Weather, Wildfires, Hurricanes, Earthquakes, Tornadoes, and Explosions & Mass Gatherings.

The page includes resources from the Centers for Disease Control and Prevention (CDC), The United States Department of Health and Human Services (HHS), and the Occupational Safety and Health Administration (OSHA), among others. Information on the page is relevant to both the current flu season and influenza in general, and has links to specifics about flu prevention, flu treatment, and public health impacts of the flu.



Competency Connector

The Center's Competency Connector was introduced in August and enables healthcare professionals to gauge their knowledge in preparing for disasters and public health emergencies. This interactive annotated bibliography contains publications with critical knowledge broken down into six categories of levels: Core, Profession, Organization, Specialist, Deployment, and Focal Areas.

The Competency Connector pyramid provides an at-a-glance view of the six categories and allows users to simply click on the level in which they are interested. Each level is populated with disaster health competency sets including white papers and grey literature, specifically intended for persons engaged in the selected level of involvement. All resources enumerate specific competencies for learning in disaster health, are directed toward a health or health-related profession, and are written in English.



Caring for Older Adults Curriculum

In September, the NCDMPH released a valuable resource for health educators and trainers, “Caring for Older Adults in Disasters: A Curriculum for Health Professionals.” Developed through the support of the U.S. Department of Veterans Affairs, the Caring for Older Adults in Disasters (COAD) curriculum is comprised of 24 lessons in seven modules covering topics ranging from special considerations for older adults in specific types of disasters to ethical and legal issues related to the care of the senior population during a disaster.

The COAD curriculum’s lessons range from 30 to 120 minutes in length based on the particular learning context. They include suggested learning activities for educators to engage their learners, as well as required and supplemental readings for both learners and educators. The curriculum can be used in its entirety, teaching all lessons in the order provided, or trainers may select individual lessons or portions of lessons most relevant to their learners. The curriculum’s material can be adapted to best meet a specific setting and learner needs by substituting resources, modifying activities, or augmenting content.



Access and Functional Needs Video Series

Persons with access and functional needs have special requirements to plan for and recover from a disaster. This population includes people with disabilities, those who live in institutionalized settings, the elderly, children, people with limited English proficiency/non-English speakers, and those who are transportation disadvantaged. The Center created the first in a series of videos that explores how various communities can work together to meet the needs of those with access and functional needs with two additional videos slated for production. The first video “It’s Empowering the Community” documents the relationship established by the members of Oklahoma’s State Emergency Preparedness and Response Services and the state’s Department of Rehabilitation Services, Library for the Blind and Physically Handicapped.

System View of Recovery

Local and state health departments are part of a larger National Planning System that synchronizes planning from the individual to the national level. National Incident Management System (NIMS) and Incident Command System (ICS) are used to coordinate and communicate among levels.



FEMA IS-230.c Fundamentals of Emergency Management

Public Health System Training in Disaster Recovery (PH STriDR)

Public Health System Training in Disaster Recovery (PH STriDR) is the culmination of collaborative work with the Johns Hopkins Bloomberg School of Public Health and funding from the Centers for Disease Control and Prevention. It was designed for local public health agency workers and focuses on individual and organizational contributions to disaster recovery.

Through four 90-minute, interactive, face-to-face sessions, this training program introduces: the concept of community disaster recovery; the disaster recovery roles of the local public health agency and the individuals who work within it; and potential personal/family and workplace considerations in the recovery phase. It also provides an opportunity for learners to create a vision of successful disaster recovery in their agency and community.

PH STriDR also features a 4-1/2 minute video which examines how the increase in disaster frequency and severity inspired the development of the program, and the key role local public health agencies play before, during and after a disaster. The program also includes materials for trainers and materials for learners.

The PH STriDR Trainer Materials include: a Trainer Guide, four PowerPoint presentations with Trainer Notes (one for each session); four Learner worksheets (one for each session); a Master Copy of Session 1: Disaster Recovery Activities Worksheet; and a link to the informational handout for Self Care (Tips for a Survivor of a Disaster or Traumatic Event). The PH STriDR Learner Materials include: four PowerPoint presentations (one for each session), four Learner

worksheets (one for each session), a link to the informational handout for Self Care (Tips for a Survivor of a Disaster or Traumatic Event) and online links to additional resources.

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. Alice O'Donnell serves as managing editor and Center staff provide peer review for articles submitted for publication in the journal.

In 2015, plans were initiated for NCDMPH staff to edit a special section of the journal on Caring for Older Adults in Disasters. The special section, which is due to be published in October 2016, has its roots in the Center's Caring for Older Adults in Disasters curriculum.

Webinar Series

The Center continues to maximize the power of online education through its webinar series. Presentations over the last year covered diverse topics including aiding the elderly in disasters, nursing home disaster preparedness, and integrating pediatric needs into hospital disaster preparedness policies. Presenters included experts from the New York Department of Health and Mental Hygiene, USU, Children's National Medical Center, Emergency Medical Services for Children National Resource Center and NCDMPH staff.

CURRENT AND UPCOMING TASKS

Core Curriculum Development

The Center is currently developing an online core curriculum in disaster health guided by the 11 DMPHP core competencies. The audience for the online learning object is a wide range of health professionals. Once completed by the learner, the curriculum should enable the learner to demonstrate key skills required appropriate to his or her role, to reduce morbidity and mortality in a disaster; develop a personal to-do list to enhance professional knowledge and skills in disaster medicine and public health; and identify key sources of information for additional learning to increase professional knowledge and skills.

Disaster Health Education Symposium: *Innovations for Tomorrow*

The Center is overseeing all logistics of the one-day symposium scheduled to take place on the USU campus in Bethesda, Maryland, on September 8, 2016.

The day will include presentations by David Marcozzi, MD, MHS-CL, FACEP, Associate Professor and Director of Population Health, Department of Emergency Medicine, University of Maryland, School of Medicine;



Arthur Kellermann, MD, MPH, Professor and Dean, F. Edward Hébert School of Medicine, USU; Boris Lushniak, MD, MPH, Department Chair, F. Edward Hébert School of Medicine, USU; and Kobi Peleg, PhD, MPH, Director, National Center for Trauma and Emergency Medicine Research, The Gertner Institute for Health Policy and Epidemiology, Head, Disaster Medicine Department and The Executive Master Programs for Emergency and Disaster Management, School of Public Health, Tel-Aviv University. The day's session topics are scheduled to include Innovations in Practice, Disaster Health Education and Training that Saves Lives, Innovations in Teaching Our Students, and Emerging Infectious Diseases. The symposium will also feature a poster abstracts display.

Stop the Bleed

Dr. Goolsby and Center staff are spearheading the creation and testing of a succinct, effective, just-in-time educational plan to enable non-medical laypeople to render effective point-of-injury hemorrhage control. Study objectives include: evaluating and comparing tourniquet placement; success of non-medical laypersons using different educational tools such as a website, mobile application, instructional card, and audio instructions; comparing user satisfaction with different educational modalities of instruction; gauging successful tourniquet placement and quantifying reasons for failed tourniquet application; and gauging laypeople's ability to distinguish life-threatening bleeding from other bleeding.



This collaborative effort is a testament to the Center's growing reputation as a trusted adviser on matters related to education and training in the field of disaster health.

Caring for Older Adults in Disasters Special Issue of Disaster Medicine and Public Health Preparedness

Kandra Strauss-Riggs and Kelly Gulley are among the list of guest editors for this collection which is scheduled to be published in October 2016. The call for papers opened in October 2015. The journal *Disaster Medicine and Public Health Preparedness*, in collaboration with NCDMPH, will publish a special collection of papers on caring for older adults before, during, and after disasters. The special issue is scheduled to include original research articles, brief reports, editorials, responder tools, and letters to the editor.

As the number of disasters increases and the population ages, the care of older adults in disasters merits special attention. This call for papers aims to bring together the most relevant research, practice, and educational initiatives on the care of older adults in disasters. All submissions will be fully peer reviewed.



ACTIVE ALLIANCES

The Center shares many interests with other organizations involved in disaster medicine and public health. Those shared interests result in numerous partnerships and outreach efforts that benefit the Center, its partners and local communities.

Department of Defense (DOD)

The DOD provides core support and ongoing engagements as NCDMPH is a Center of the Uniformed Services University of the Health Sciences.

Department of Health and Human Services

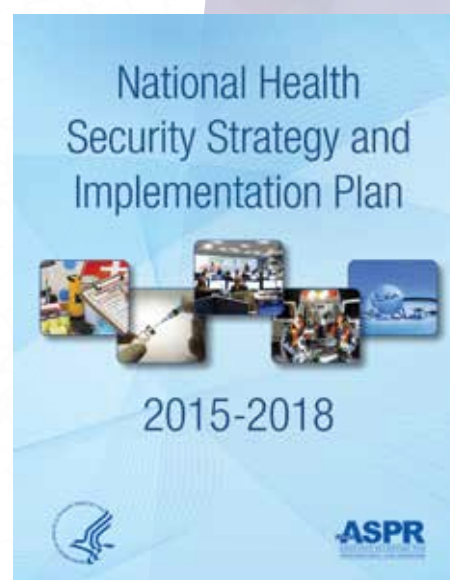
Centers for Disease Control and Prevention (CDC): The Center actively interfaces with the CDC in developing the Public Health System Training in Disaster Recovery training program which the Centers funded.

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

Assistant Secretary for Preparedness and Response, Division of Hospital Preparedness: The Center continued to provide updates to the HPP on the results of its field research on healthcare coalitions. The HPP provided helpful formative input into the multi-year research and the Center has provided the HPP Division periodic updates. Research results were submitted for publication, resulting in the publication of two articles in April 2015.

National Health Security Strategy (NHSS) Input: The Office of the Assistant Secretary for Preparedness and Response (ASPR) published the 2015-2018 National Health Security Strategy and Implementation Plan (NHSS) which identifies a national strategy with the goal of achieving a health-secure and resilient nation. It also published *The National Health Security Review* from 2010-2014 (NHSR), summarizing the progress and continued challenges in national health security during those years.

NCDMPH was mentioned prominently in both documents. In the NHSS, the Center is tasked under priority 4.4 – “Strengthen competency and capability-based health-security-related workforce education.” These duties include working with stakeholders to develop the core curriculum for disaster health education and training and reviewing, adapting, and disseminating existing training materials to healthcare and public health personnel.





The NHSR mentions many of the NCDMPH's efforts, including but not limited to the work on the development of an updated set of all-hazards disaster health competencies, national Pediatric Disaster Preparedness Curriculum Development Conference, Learning in Disaster Health Workshop, and research on long-term community recovery following Hurricanes Irene and Sandy. The NCDMPH is proud to be the "action arm" for leading federal efforts in developing and propagating core curricula, training, and research in disaster medicine and public health.

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 Transportation

The National Highway Traffic Safety Administration Office of Emergency Medical Services provides consistent support on projects aligned with the EMS community.

Department of Veterans Affairs

NCDMPH developed its Caring for Older Adults in Disasters curriculum through the support of the U.S. Department of Veterans Affairs.

Other Organizations

American Academy of Pediatrics: The 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.

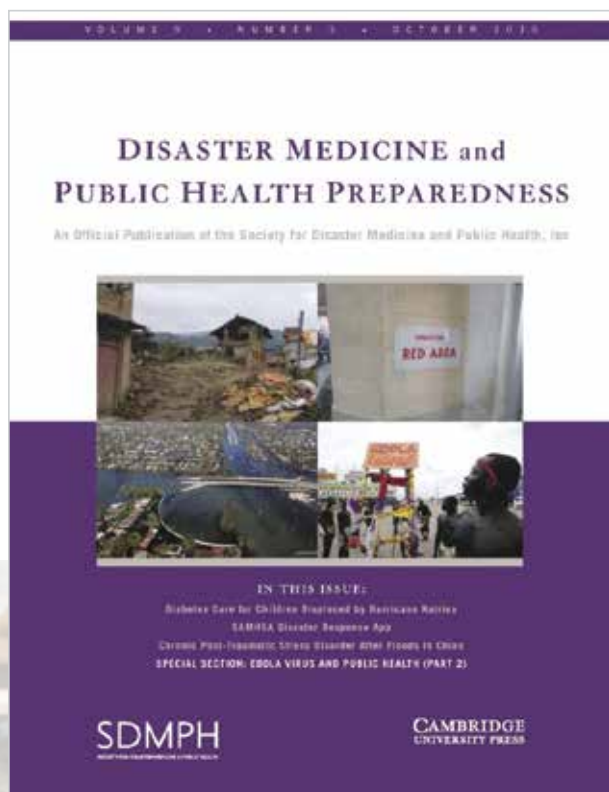
American Public Health Association: The Center is currently active in the APHA Injury Control and Emergency Health Services-Disaster Preparedness committee. Participation in this committee strengthens the Center's engagement with the nation's leading organization of public health professionals.

National Academies of Sciences, Engineering and Medicine: The Center continues its membership with the Academies' Forum on Medical and Public Health Preparedness for Catastrophic Events. Dr. Goolsby is a member of this forum.

Johns Hopkins Bloomberg School of Public Health: NCDMPH worked closely with the school to develop and produce the Public Health System Training in Disaster Recovery (PH STRiDR) training program.

Public Health Foundation TRAIN: NCDMPH is a course provider in TRAIN and serves on the TRAIN Federal Partners Work Group.

Society for Disaster Medicine and Public Health: NCDMPH provides editorial support for the *Disaster Medicine and Public Health Preparedness* journal.



Academic Support

Interim Director Craig Goolsby, MD, MEd, FACEP, is an Associate Professor at the Uniformed Services University of the Health Sciences School of Medicine. In 2015, he served as course director for the Emergency Medicine Clerkship, Combat Medical Skills, and Military Field Practicum 102 (Advanced Combat Medical Experience). He also led Casualty/Simulation teams for Military Field Practicum 202 (Operation Bushmaster), the largest military medical field exercise in the world. His national lectures for the year included "Tactical Combat Casualty Care at America's Medical School: Cutting Edge Education for the Next Generation" at the Committee on Tactical Combat Casualty Care Meeting in Bethesda, MD in August, and "Teaching Combat Casualty Care: War Lessons for your Curriculum," which he presented in April at the Council of Residency Directors in Emergency Medicine Academic Assembly held in Phoenix, AZ. In addition, he serves as an Associate Editor of AMSUS's *Military Medicine*.

NCDMPH Operations Director Kandra Strauss-Riggs, MPH, Education Director Brian Altman, PhD and Project Coordinator Kelly Gulley, MPH, all served as reviewers and contributors of the *Disaster Medicine and Public Health Preparedness* journal in 2015. In addition, 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.





OUTREACH

Hosted Webinars

Reinventing the Conference Poster: Increasing Learning, Interaction, and Discussion

Presented by Kelly Gulley, MPH, Brian Altman, PhD and Hillary Craddock, May 19, 2015.

Elderly in Disasters: An Integrated Review

Presented by Heather L. Johnson, DNP, FNP-BC, FAANP and Catherine G. Ling, PhD, FNP-BC, FAANP, June 23, 2015.

Integrating Pediatric Needs into Hospital Disaster Preparedness Policies

Presented by Elizabeth Edgerton, MD, MPH and Anthony Gilcrest, MPA, EMT-P, August 25, 2015.

Nursing Home Preparedness: A Comprehensive Citywide Approach in New York City

Presented by Danielle Sollecito, LMSW and Marc Jean, MPH, September 22, 2015.

Getting Published: From Peer Review to Print

Presented by Alice O'Donnell, Managing Editor of the *Disaster Medicine and Public Health Preparedness* journal, October 27, 2015.

Published Work

Rasmussen, T., Baer, D., Goolsby, C. The Giving Back - Battlefield Lesson to National Preparedness. *The Journal of Trauma and Acute Care Surgery*. Volume 80(1) January 2016. pp 166-7 (Epub October 29, 2015).

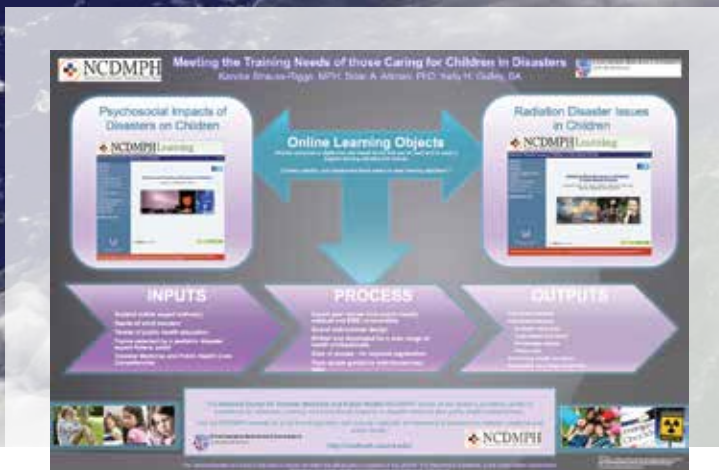
Goolsby, C., Chen, E., Schwartz, J. Patient-Perspective Video Feedback for Trauma Training. *Medical Education*. Vol. 49: November 2015. pp 1165-1166.

Goolsby, C., Branting A., Chen, E., Mack, E., Olsen, C. Just-in-Time to Save Lives: A Study of Layperson Tourniquet Application. *Academic Emergency Medicine*. September 2015;22(9): pp 1113-7 (Epub August 20, 2015).

Walsh, L., Craddock, H., Gulley, K., Strauss-Riggs, K., Schor, KW. Building Health Care System Capacity: Training Health Care Professionals in Disaster Preparedness Health Care Coalitions. *Prehospital and Disaster Medicine*. Vol. 30, April 2015, pp 123-30.

Walsh, L., Craddock, H., Gulley, K., Strauss-Riggs, K., Schor, K. Building Health Care System Capacity to Respond to Disasters: Successes and Challenges of Disaster Preparedness Health Care Coalitions. *Prehospital and Disaster Medicine*. Vol. 30 / Issue 02 / April 2015, pp 112-122.

Walsh, L., Garrity, S., Rutkow, L., Thompson, C.B., Strauss-Riggs, K., Altman, B.A., Schor, K., and Barnett, D.J. (2015). Applying a Behavioral Model Framework for Disaster Recovery Research in Local Public Health Agencies: A Conceptual Approach. *Disaster Medicine and Public Health Preparedness*, 9, pp 403-408. doi:10.1017/dmp.2015.44.



Posters

American Public Health Association Annual Meeting

November 2015

Topic: Meeting the Training Needs of Those Caring for Children in Disasters

National Healthcare Coalition Preparedness Conference

December 2015

Topic: Implementing Flexible Learning in Your Healthcare Coalition: Caring for Older Adults in Disasters

National Healthcare Coalition Preparedness Conference

December 2015

Topic: Coalition Conversation: Building Success from Our Experiences

Presentations

Public Health Preparedness Summit

April 14-17, 2015, Atlanta, GA

Topics: Curriculum Recommendations series, when and how often do healthcare professionals prefer education and training, and Critical Links in Community Resilience: The Untapped Potential of School Nurses and Their Unique Role in Community Preparedness, Response, and Recovery

Emergency Preparedness Conference

April 29, 2015, Towson University, Towson, MD

Topic: Caring for Older Adults in Disasters Curriculum

FEMA EMI Emergency Management Higher Education Symposium

June 1-4, 2015, Emmitsburg, MD

Topic: Preparing to Meet the Needs of Individuals Who Are Blind and Others with Disabilities in Disasters: Simulation-Based, Online Training and Perspectives from the Community

HOSA National Leadership Conference

June 24-27, 2015, Anaheim, CA

Topic: Person with Access and Functional Needs During a Disaster

2015 AHEPP Conference

November 17-18 2015, Omaha, NE

Topic: Caring for Older Adults in Disasters: Activities from a National Curriculum for Health Professionals

Award

In April, the Center was presented with the 2015 Medical Reserve Corps (MRC) National Partner Recognition Award. The award is given annually by the Division of the Civilian Volunteer Medical Reserve Corps (DCVMRC) to highlight the success and impact of the MRC network, their housing organizations, partners, leaders and volunteers. The DCVMRC is the national program office of the MRC and is housed within the Assistant Secretary for Preparedness and Response's Office of Emergency Management in the Department of Health and Human Services.

The MRC is a national network of volunteers, organized locally to improve the health and safety of their communities. The MRC network comprises 993 community-based units and 207,783 volunteers located throughout the United States and its territories.



In coordination with the Uniformed Services University of the Health Sciences (USU), this report fulfills the requirements between USU and the Assistant Secretary of Defense for Health Affairs. The views within this report are solely those of the authors and do not reflect the views of the Uniformed Services University of the Health Sciences and the US Department of Defense.

Report Design
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