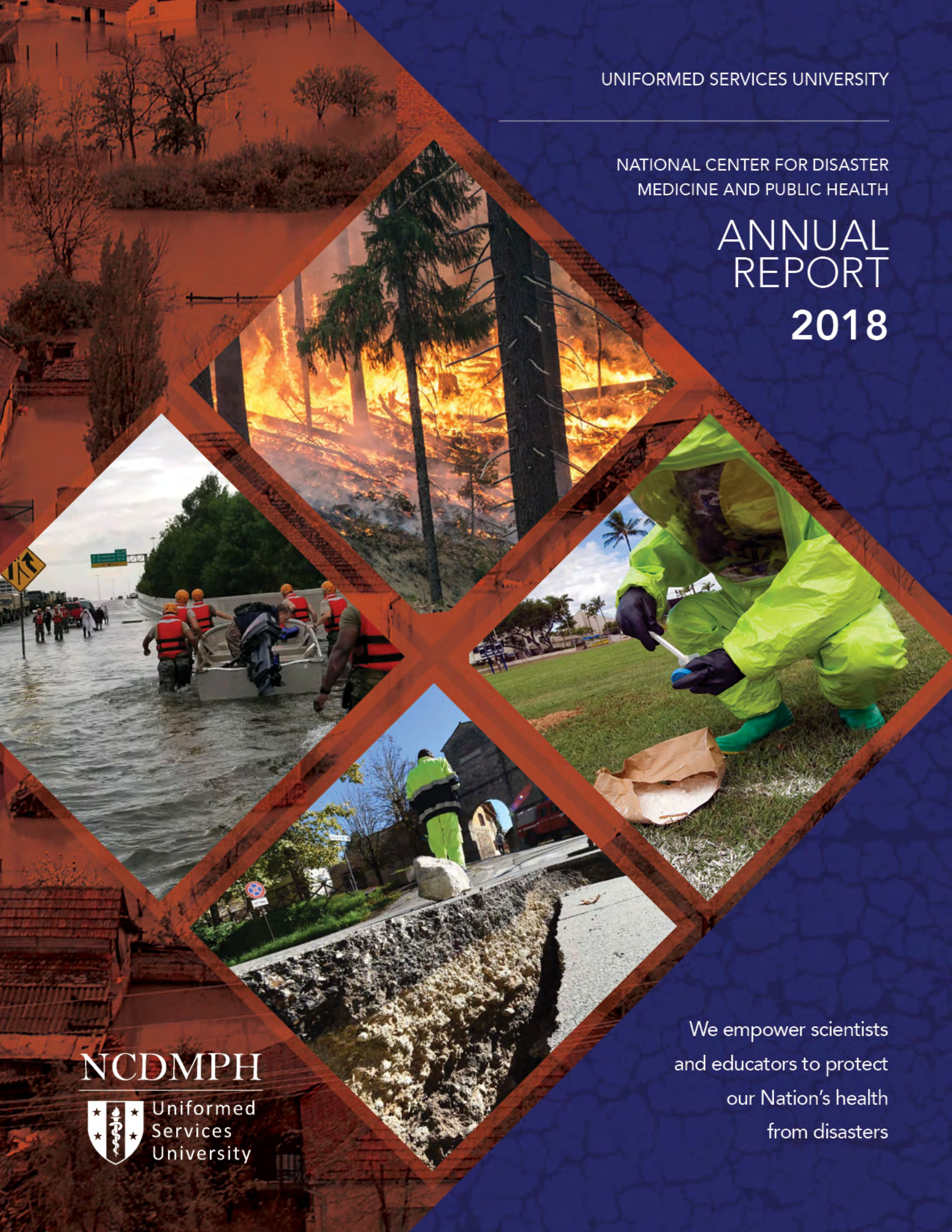


UNIFORMED SERVICES UNIVERSITY

NATIONAL CENTER FOR DISASTER  
MEDICINE AND PUBLIC HEALTH

# ANNUAL REPORT 2018



NCDMPH



Uniformed  
Services  
University

We empower scientists  
and educators to protect  
our Nation's health  
from disasters



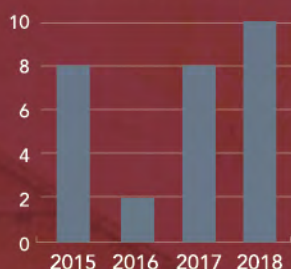
# 2015-2018 TIMELINE

National Center activities are taking off!  
NCDMPH highlights from FY 2015-2018:

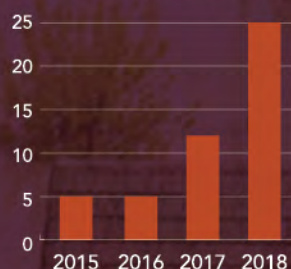
Event/Webinar participation	Speaking Engagements	Partnerships/Collaborations	Journal articles and reach	Social media
<b>2015</b>				
Hosted eight webinars/events and reached 400 people.	Five presentations and posters.	15 active engagements.	Two publications.	Not applicable.
<b>2016</b>				
Hosted two webinars/events and reached 100 people.	Five presentations and posters.	More than 18 active engagements.	One publication.	71 Twitter followers.
<b>2017</b>				
Hosted eight webinars/events and reached 400 people.	12 presentations and posters.	Approximately 22 active engagements.	12 publications.	2,093 Twitter followers, 224 LinkedIn connections/300 followers and 180 Facebook followers/likes and 90 YouTube subscribers and approximately 16,000 views.
<b>2018</b>				
Hosted 10 webinars/events and reached 600 people.	25 presentations and posters.	Over 35 active engagements.	More than 16 publications.	2,386 Twitter followers, 596 LinkedIn connections/602 followers, 504 Facebook followers/likes and 117 YouTube subscribers and more than 18,000 views.

For more information about NCDMPH visit, [ncdmph.usuhs.edu](http://ncdmph.usuhs.edu) or follow us on social media or subscribe to our listserv: Twitter, Facebook, LinkedIn, Listserv or YouTube

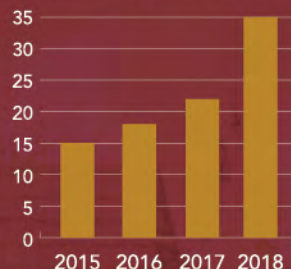
Event/Webinar



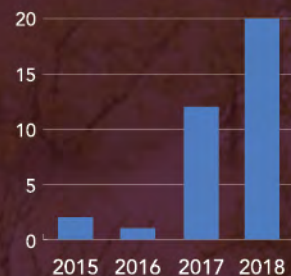
National Presentations



Partnerships/Collaborations



Journal Articles





# NCDMPH FISCAL YEAR 2018 SNAPSHOT

The following snapshot highlights National Center for Disaster Medicine and Public Health (NCDMPH) key areas of focus in fiscal year (FY) 2018:



Disaster Health  
Core Curriculum

More than  
**8,000**  
page views



Stop the Bleed App  
downloads:

More than  
**3,500**  
on Android and  
Apple devices



Meetings/Speaking  
Engagements:

10 Events/Webinars and reaching  
more than **600**  
Presented or participated in more  
than **25**  
conferences/events in  
approximately **17**  
cities across the country



Partnerships/  
Collaborations

Expanded partnerships with  
**35**  
active engagements, a significant  
increase over prior years.

Stop the Bleed  
Website views:

**10,500**

Stop the Bleed  
YouTube  
video views:

**15,000**



Journal articles,  
editorial and book  
chapters

More than  
**16**  
Publications

Increased Social Media  
engagement and following  
significantly



**2,386**  
Twitter followers



**596**  
LinkedIn connections  
**602** followers



**504**  
Facebook  
followers/likes



**117**  
YouTube subscribers and more than  
**18,000** video views



## Partners and Presentations:

The National Center partners with a variety of organizations in the United States and has **22** active partnerships.

NCDMPH staff have presented at more than

**25** conferences/events/meetings across the country in FY2018.

- A.** Navy War College  
April 3, 2018, Newport, RI
- B.** USU National Faculty Development Retreat  
October 26, 2017, Bethesda, MD
- B.** Fifth annual Federal Interagency discussion hosted by the NIH Disaster Research Response (DR2) Program  
March 16, 2018, Bethesda, MD
- B.** Walter Reed National Medical Center Trauma Symposium  
Apr 19 - 20, 2018, Bethesda, MD
- B.** USU Centers Forum, Uniformed Services University  
Bethesda, MD, September 11, 2018
- B.** Advanced Team Physician Course  
December 7, 2017, National Harbor, MD
- C.** International Institute for Race Medicine Sports Medicine Conference Series  
October 20, 2017, Washington, DC
- C.** Metropolitan Washington College of Occupational & Environmental Medicine  
November 9, 2017, Washington, DC
- C.** International Association of Emergency Medical Services Chiefs  
Conference, December 9, 2017 Washington, DC
- C.** Georgetown University's School of Continuing Studies  
March 16, 2018, Washington, DC
- C.** National Academies of Sciences, Engineering, and Medicine (NASEM)  
Mar. 20-21, 2018, Washington, DC
- D.** TRAIN Learning Network Annual Meeting  
Apr 24-25, 2018, Arlington, VA
- D.** Serious Play Conference  
July 10-13, 2018, Manassas, VA
- E.** Military Health System Research Symposium  
August 21, 2018, Kissimmee, FL
- F.** 2018 Preparedness Summit  
Apr 16-20, 2018, Atlanta, GA
- F.** National Disaster Medical Summit Training  
July 24-26, 2018 Atlanta, GA
- G.** American Occupational Health Conference  
Apr 29 - 30, 2018, New Orleans, LA
- H.** Association of Healthcare Emergency Preparedness Professionals Annual Conference  
November 7-9, 2017, Irving, TX
- H.** Committee on Tactical Combat Casualty Care  
San Antonio, TX
- I.** National Healthcare Coalition Preparedness Conference  
2017, November 28 - 30, 2017, San Diego, CA
- K.** 43rd Annual Natural Hazards Research and Applications Workshop, July 8 - 11, 2018, Broomfield, CO
- 2018 Joint Staff J-7 Integration & Exercise Workshop  
Jan/Feb 2018
- NORTHCOM Tabletop exercise - Kirsch  
1 Feb 2018



### External

#### Federal government (original partners)

- Department of Defense (DoD)
  - D1** ▶ Office of the Assistant Secretary of Defense for Health Affairs - Falls Church, VA
  - C1** ▶ Office of the Assistant Secretary of Defense for Homeland Defense and Global Security - Washington, DC
  - D1** ▶ National Guard Bureau - Arlington, VA
- Department of Health and Human Services (HHS)
  - C1** ▶ Office of the Assistant Secretary for Preparedness and Response (ASPR) - Washington, DC
  - B1** ▶ National Library of Medicine (NLM) - Bethesda, MD
- Department of Veterans Affairs (VA)
  - I1** ▶ Veterans Emergency Management Evaluation Center (VEMEC) - North Hills, CA
- Department of Homeland Security (DHS)
  - C1** ▶ Federal Emergency Management Agency (FEMA) - Washington, DC
- Department of Transportation (DOT)
  - C1** ▶ National Highway Traffic Safety Administration (NHTSA) - Washington, DC

#### Federal government (other partners)

- C1** ▶ National Institute of Standards and Technology (NIST) - Gaithersburg, MD

### State and local governments

#### Academic institutions

- J1** ▶ Columbia University, National Center for Disaster Preparedness - New York, NY
- N1** ▶ Harvard University, National Preparedness Leadership Initiative and Harvard Humanitarian Initiative - Boston, MA
- B1** ▶ Johns Hopkins School of Public Health, Center for Humanitarian Health - Baltimore, MD
- B1** ▶ Johns Hopkins Applied Physics Laboratory - Laurel, MD
- K1** ▶ University of Colorado, Natural Hazards Center - Boulder, CO
- L1** ▶ University of Hawaii, Pacific Disaster Center - Honolulu, HI
- M1** ▶ University of Delaware, Disaster Research Center - Newark, DE

#### Professional associations

- O1** ▶ American Academy of Pediatrics (AAP) - Itasca, IL
- H1** ▶ American College of Emergency Physicians (ACEP) - Irving, TX
- O1** ▶ American College of Surgeons (ACS) - Chicago, IL
- C1** ▶ American Public Health Association (APHA) - Washington, DC

#### Other partners

- C1** ▶ National Academies of Sciences, Engineering, and Medicine (NASEM) - Washington, DC
- C1** ▶ American Red Cross (ARC) - Washington, DC





We empower scientists and educators to protect our Nation's health from disasters

## TABLE OF CONTENTS

Fiscal Year 2018 Snapshot.....	C1A
Fiscal Years 2015-2018 Timeline .....	C1B
Select Partners and FY2018 Presentations .....	C2
About NCDMPH.....	2
Executive Summary/Letter From the Director .....	3
Staff.....	4
State of the Science.....	5
Disaster Education/Disaster Science Core Curriculum .....	7
Disaster Science Student Rotation and Visiting Scholars .....	8
Stop the Bleed Initiative.....	9
Citizen Ready© STOP the BLEED Insert.....	11
Collaboration and Leadership.....	13
Educational Activities .....	17
Publications and Presentations .....	19
Looking Forward: 2019 Priorities .....	Inside Back Cover





# About NCDMPH

## MISSION

The mission of the National Center for Disaster Medicine and Public Health is to improve our Nation's disaster health readiness through education and science.

## VISION

NCDMPH will be the Nation's academic center of excellence leading domestic and international disaster health education and research efforts. In collaboration with partners, we create and translate science and education to improve readiness.

NCDMPH is uniquely positioned to be a bridge between federal agencies and academia.

- The National Center was founded under five federal agency partners: Department of Health and Human Services (HHS), Department of Defense (DoD), Department of Homeland Security (DHS), Department of Transportation (DOT), and Department of Veterans Affairs (VA).
- The National Center is both a federal organization and an academic center, located in an academic health institution, the Uniformed Services University of the Health Sciences (USU).

NCDMPH Objectives Include:

- **Leads and collaborates** with governmental and nongovernmental partners to advance disaster medicine and public health education and research agendas.
- **Acts** as a *neutral coordinator* across federal, state, tribal and local governments; academia and non-government associations; and non-governmental organizations.
- **Convenes** experts from diverse professional backgrounds to define disaster health issues and recommend policy solutions.
- **Provides** *consultations* to partners within and external to the federal government regarding disaster health education, training and science.

The National Center for Disaster Medicine and Public Health was established under the Homeland Security Presidential Directive 21 (HSPD 21) to be "...an academic center of excellence in disaster medicine and public health...", and "...shall lead Federal efforts to develop and propagate core curricula, training, and research related to medicine and public health in disasters."

The National Center is listed as an implementing organization in the **National Health Security Strategy 2015-18**, and has an important role to play in implementing Strategic Objective 4- *Enhance the integration and effectiveness of the public health, healthcare, and emergency management systems.*



# EXECUTIVE SUMMARY/ LETTER FROM THE DIRECTOR



Fiscal Year 2018 has been a great year for the National Center for Disaster Medicine and Public Health (NCDMPH or "National Center"). We published research, launched training curricula, collaborated with new partners, held events and webinars, and grew as an organization with new staff Visiting Scholars. It is with tremendous pride that I present our annual report highlighting our key activities. This past year, we accomplished a great deal including:

## *Disaster Response Support Activities*

For the first time, the National Center provided support for disaster response.

- Following Hurricane Maria's landfall in Puerto Rico in September 2017, NCDMPH provided expert consultation to USNORTHCOM for their After Action Report of the response in Puerto Rico and conducted follow-up work with the University of Puerto Rico School of Medicine and Public Health.
- NCDMPH is collaborating with the National Institute of Standards and Technology (NIST) in an assessment of the health and public health impacts of Hurricane Maria in Puerto Rico.
- NCDMPH supported a Federal Emergency Management Agency (FEMA) Medical Assessment Team visit to Houston, Texas to assess hospital damage from Hurricane Harvey.

## *Education Activities*

- Launched the Disaster Health Core Curriculum - a free, online training program for health professionals based upon the disaster medicine and public health preparedness core competencies.
- Stop the Bleed training initiative continued strong with the launch of the mobile application (Available on Google and iTunes App stores), which has garnered more than 3,500 downloads.
- Initiated a Visiting Scholar program to engage and collaborate with disaster experts from around the country.
- Led the Crisis Leadership Symposium on April 26 with Admiral (retired) Thad Allen as the keynote speaker. Convened the Disaster Health Education Symposium on Sept. 12 to highlight the gaps and opportunities in disaster health education.
- NCDMPH staff engage with Uniformed Services University of Health Sciences (USU) students directing and teaching two courses at the USU School of Medicine as well as assisting with teaching medical student courses.

## *Research Activities*

- NCDMPH published more than 16 peer-reviewed papers, editorials and book chapters to add to our disaster scientific knowledge.
- In collaboration with the American Red Cross and the University of Virginia, NCDMPH conducted research related to the lay public's ability to use hemostatic dressings to stop life-threatening bleeding.
- NCDMPH published the nation's first epidemiologic review of autopsy data to determine potentially survivable bleeding deaths from extremity hemorrhage.
- NCDMPH conducted a review of the U.S. Department of Defense (DoD) humanitarian assistance disaster response training and education. Also, reviewed the current state of disaster funding from the federal government

The activities referred to in this report are the foundation upon which we will develop future collaboration, research and education. As we start 2019, we eagerly anticipate the opportunity to build upon our accomplishments and continue embarking upon critical projects with our diverse partners.

Thank you for your support of the National Center and please continue to stay in touch with us via our website [ncdmph.usuhs.edu](http://ncdmph.usuhs.edu) and social media: Twitter, Facebook, LinkedIn, Listserv or YouTube.

Sincerely,



Thomas Kirsch, MD, MPH, FACEP  
Professor and Director, NCDMPH



# STAFF



**Thomas Kirsch**, MD, MPH, FACEP, Director

Dr. Kirsch brings over 30 years of domestic and global disaster health and public health experience to the National Center, which he draws upon to strategically build partnerships and advance the NCDMPH vision and mission.



**CAPT Paul Reed**, MD, Deputy Director

Appointed in February 2018 to help expand NCDMPH's DoD and interagency strategic partnerships, CAPT Reed (U.S. Public Health Service) brings extensive experience in domestic and international humanitarian assistance and disaster response.



**Craig Goolsby**, MD, MEd, FACEP, Science Director

Dr. Goolsby is an Air Force combat veteran who brings extensive experience in battlefield medicine, field training and medical education. He leads the Stop the Bleed portfolio, positioning NCDMPH as a key leader in the field.



**Kandra Strauss-Riggss\***, MPH, Education Director

Ms. Strauss-Riggs was promoted to Education Director this year, leveraging her years of disaster health work, teaching, and curriculum development to advance the NCDMPH education portfolio. Ms. Strauss-Riggs is pursuing a PhD in health professions education.



**Mark Keim**, MD, MBA, Senior Science Advisor

Dr. Keim is a renowned disaster health expert who lends his public health and medical expertise to build the NCDMPH research and public health portfolio.



**Karyn J. Condie**, MD, MPH, PhD, FAAFP, Colonel, USAF, MC, CAsP, SFS, Military Disaster Response Coordinator

Col. Condie is a member of the National Capital Region Trauma Systems strategic group, working towards "zero preventable deaths."



**Kelly Harrison Gulley\***, MPH, Program Manager

Ms. Gulley welcomed her first child, Connor Gulley, on Jan. 24, 2018. She was promoted to Program Manager in April 2018 and now provides critical support to all National Center activities.



**Alicia Acevedo\***, Administrative Assistant

Ms. Acevedo joined NCDMPH in July 2018 and provides programmatic and administrative support to the Center Director and other senior technical and professional staff. She is also responsible for supporting analytical and educational projects in collaboration with the NCDMPH team.



**Nicole Dacuyan\***, MPH, Project Manager

Ms. Dacuyan joined NCDMPH in August 2018 and supports activities to develop a research-informed novel hemorrhage control device. Nicole came from the Center for the Study of Traumatic Stress where she spent four years working in research focused on PTSD, ecological momentary assessment, and military mental health.



**Victoria Klimczak\***, Project Coordinator

In June, Ms. Klimczak received the NCDMPH Superior Performance Award for her outstanding contributions to numerous projects including Crisis Symposium, Stop the Bleed Initiative and more.



**Elaine Myada\***, Communications Associate

Ms. Myada developed and implemented a communications plan for the National Center, which resulted in increased engagement, reach and visibility.



**Alice O'Donnell\***, Managing Editor, Disaster Medicine and Public Health Preparedness

Ms. O'Donnell manages the National Center financed, Disaster Medicine and Public Health Preparedness journal and published more than 200 manuscripts from 32 countries for the DMPHP journal this year.



**Norma Quintanilla\***, BS, Project Assistant

Ms. Quintanilla joined NCDMPH in February 2018 to support education projects, particularly the Crisis Leadership and Disaster Health Education Symposium. In July, she volunteered to conduct research and teach preventive health education in Lima, Peru.



**Raphaëlle Rodzik\***, MPH, Project Coordinator

Ms. Rodzik joined NCDMPH in August 2018 from the Tennessee Department of Health with a background in healthcare associated infections and disaster research. She provides support for our health and public health research efforts.



**Luis Rojas\***, MS, Research Associate

Mr. Rojas continues to support our Stop the Bleed research efforts and received the Superior Performance Award in May for his exemplary support of multiple educational research projects.

\* Employee of The Henry M. Jackson Foundation for the Advancement of Military Medicine



# MAJOR ACOMPLISHMENTS

## DISASTER SCIENCE

The NCDMPH scientific strategic mission is to: Conduct, translate, and propagate research that changes readiness practice and policy.

- Build the science and education evidence base to improve the Nation's preparedness.
- Translate disaster-related research into practice and policy solutions for U.S. federal, state, tribal and local partners.
- Collaboratively develop and drive a coordinated national disaster science and research agenda.

## STATE OF DISASTER SCIENCE

*US governmental spending for disaster-related research, 2011-2016: Characterizing the state of science funding across five professional disciplines*

This study characterizes U.S. federal funding for disaster-related research for five professional disciplines: medicine, public health, social science, engineering and emergency management during a seven-year period.

*National public health preparedness capability standards, 2008-2017*

This study describes the level of U.S. federal funding allocated for research related to national public health preparedness capabilities during a 10-year period.

*Characterizing the current state of disaster science for 3 scientific disciplines: A qualitative analysis*

This study characterizes the current state of disaster science using qualitative indicators of developmental status as characterized by leaders of three scientific disciplines: medicine, public health and social science.


## DISASTER EDUCATION

NCDMPH's strategic education mission: Identify educational needs in disaster medicine and public health preparedness and create content to better prepare the nation.

- **Drive** the national disaster health and public health education agenda by creating evidence-based curricula objectives and content with academic partners and validating training activities.
- **Create** collaborative and coordinated activities with academic partners, professional organizations and the private sector.
- **Integrate** NCDMPH educational activities into the greater national healthcare preparedness and response framework.

The National Center has been working with partners to describe the current state of disaster and public health education in the U.S. These assessments will help direct future education efforts at the Center and across the field. The following studies were completed during FY18 and have been submitted for publication.





### **Current state of online courses available to US disaster professionals**

This study characterizes U.S.-based disaster training courses currently available to disaster medicine and public health professionals. This article is in press and will appear in Disaster Medicine and Public Health Preparedness (DMPHP).

### **Humanitarian Assistance Disaster Response Competencies Research**

The National Center conducted research to identify existing Department of Defense (DoD) education and training opportunities related to disaster health professional competencies for the military health system.

Once these are published, citations will be posted to the NCDMPH website and social media. To learn more about NCDMPH's research efforts or view links to previously published articles visit,

<https://www.usuhs.edu/ncdmph/research>



# DISASTER HEALTH CORE CURRICULUM



the pulse

Menu

4 The Latest | NCDMPH Launches Its Education Rotation for Disaster Health Science | **VIDEO** Student Exams

Home / education / NCDMPH / NCDMPH Launches Free Online Disaster Health Core Curriculum

## NCDMPH Launches Free Online Disaster Health Core Curriculum

July 23, 2018 | By Elaine Myada | NCDMPH

**DISASTER HEALTH CORE CURRICULUM**

**CORE COMPETENCY 1 TOPIC MENU**

**Topic Menu**

To help you get the most out of this learning experience, this lesson is divided into three topics. Once you complete each topic, you will return back to this screen to select the next one.

Once you complete all topics, the Next button will become active, and you will then proceed to a brief engraved quiz followed by a realistic scenario-based exercise to help you put your knowledge into practice.

Note that the entire lesson is 20 minutes in duration, including the introduction you already viewed and the quiz and scenario-based exercise that you will complete at the end of this lesson.

<b>TOPIC 1: Make a Disaster Plan</b>	<b>5</b> mins
<b>TOPIC 2: Gather Supplies and Equipment</b>	<b>5</b> mins
<b>TOPIC 3: Plan &amp; Practice Your Disaster Plan &amp; Evacuate Readiness</b>	<b>5</b> mins

**20 MINUTES**

**NCDMPH**  
National Center for Disaster Medicine and Public Health

Courses are designed to empower health professionals who may play a role in disasters

By Elaine Myada

Uniformed Services University's (USU) National Center for Disaster Medicine and Public Health (NCDMPH)

In May, the National Center launched a free eight-hour, online training course titled, the *Disaster Health Core Curriculum*. The Disaster Health Core Curriculum consists of 11 lessons covering a variety of disaster health topics such as personal or family preparedness, communication, and ethical and legal issues encountered in disasters. The foundation for the Disaster Health Core Curriculum is the Core Competencies for Disaster Medicine and Public Health. The courses were designed for a wide range of health professionals who may play a role in a disaster. Continuing medical education (CME) and continuing nursing education (CNE) available. As of Sept 30, 2018, the courses have been taken by more than 8,000 health care professionals. To learn more about the Disaster Health Core Curriculum watch the introduction at: <http://bit.ly/2mAwYbT> and visit <https://www.usuhs.edu/ncdmp/core-curriculum>.



# DISASTER SCIENCE STUDENT ROTATION AND VISITING SCHOLARS

The National Center's education efforts include the Disaster Science Student Rotation (DSSR) and Visiting Scholars program. Both programs provide opportunities to collaborate and engage with recent graduates and practicing professionals.

The National Center launched DSSR in June. This educational rotation is designed for individuals currently attending (or recently graduated from) an accredited graduate education program in the fields of medicine, public health or social sciences interested in future disaster health careers.

The first two students to participate in the education rotation were Ashley James and Veronica Abraham. Veronica Abraham has a medical doctorate from the Pontificia Universidad Catolica del Ecuador in Quito and her Masters of Public Health from Drexel University in Philadelphia, Pennsylvania. Ashley James is currently studying for her MPH Epidemiology at Benedictine University, located in Illinois. She received her Baccalaureate Degree from the University of the District of Columbia in Health Education, located in Washington, DC.

As DSSR students, they actively participated in prestigious, real-world disaster programs and had the opportunity to meet world experts during a comprehensive course of webinars, case studies, journal reviews and inspiring lectures. The DSSR students also were able to tour The Anatomical Teaching Laboratories (ATL) at USU.

## Visiting Scholars

The National Center provides an academic home for disaster health scientists within the federal environment. NCDMPH welcomes diverse and respected visiting scholars in a variety of disciplines. The 2018 visiting scholars were:



Dr. Jeff Freeman currently serves as the Senior Scientist for Disaster Health in the National Health Mission Area of the Johns Hopkins University Applied Physics Laboratory (JHU/APL), which is the nation's largest and longest serving University Affiliated Research Center (UARC).

Dr. Freeman's primary responsibilities include the development of a Disaster Health Initiative for JHU/APL in support of the United States Government (USG).



Daniel Barnett, MD, MPH serves as an Associate Professor in the Department of Environmental Health & Engineering at the Johns Hopkins Bloomberg School of Public Health, where he has a joint appointment in the Department of Health

Policy and Management and is on the Core Faculty of the Office of Public Health Practice & Training. His research interests include evidence-based approaches to organizational enhancement of public health emergency preparedness.

Each year, NCDMPH will host 1-2 Visiting Scholars to collaborate on critical disaster science and education projects.

The DSSR is offered on a rolling basis year round. Learn more about DSSR and Visiting Scholars at: <https://www.usuhs.edu/ncdmph/research-education>.



# STOP THE BLEED INITIATIVE

The National Center continued to advance national Stop the Bleed (STB) efforts to train, equip and empower laypersons to help in bleeding emergencies. Key accomplishments and activities included:

## Stop the Bleed App

The National Center launched the free STB app in May. The app provides action steps to take during a bleeding emergency – from determining whether a bleed is serious to putting on a tourniquet. To date, there have been more than 3,500 downloads of the app, which is available at:

<https://play.google.com/store/apps/details?id=edu.usuhs.stb>

<https://itunes.apple.com/us/app/stb/id1336173602?mt=8>





## STB Research

NCDMPH has published several studies to improve America's preparedness for bleeding and mass-casualty events. These included studies to evaluate the best way to educate laypeople on how to stop the bleed and how to use a tourniquet, and a study to identify preventable hemorrhagic deaths. In addition, NCDMPH is conducting research to evaluate laypeople's ability to apply hemostatic dressings successfully.

## STB Preparedness at the USU

The National Center is collaborating with USU to train students and install STB kits across its campus in Bethesda. On Sept. 21, USU and NCDMPH hosted an education event with tourniquet application demonstrations. The kits will be installed by the end of 2018.

## STB Education Consortium

NCDMPH continued to lead the Stop the Bleed Education Consortium (SBEC), a group of subject matter experts that collaborated to develop and publish the first national education standards for hemorrhage control training. The consortium is working on a series of projects related to STB policy, assessment tools, research planning and future directions of the campaign.

## Transforming Technology for the Warfighter (TTW) Grant

The National Center, led by Dr. Craig Goolsby, received a \$2 million TTW Grant to develop novel hemorrhage control technology. The research will be conducted in partnership with Harvard-Brigham and Women's Hospital, Mayo Clinic, Linköping University in Sweden, and InnoVital Systems.

## Community Education and Outreach

NCDMPH staff conducted STB research, education and outreach at several events including:

- B'More Health Expo on March 3, 2018  
– Baltimore, MD
- Maryland Day, April 28, 2018  
– University of Maryland, College Park
- Silver Spring Health Festival on June 3, 2018  
– Silver Spring, MD
- Defense Health Headquarters (DHHQ), April 26, 2018  
– Falls Church, VA

## NCDMPH STB in the News

NCDMPH's work on STB has been featured in the news and on USU's online newsletter, The Pulse.

- New York Times – After the Las Vegas Shooting, Concertgoers Became Medics, New York Times  
– <https://www.nytimes.com/2017/10/15/us/las-vegas-shooting-civilian-first-aid.html>



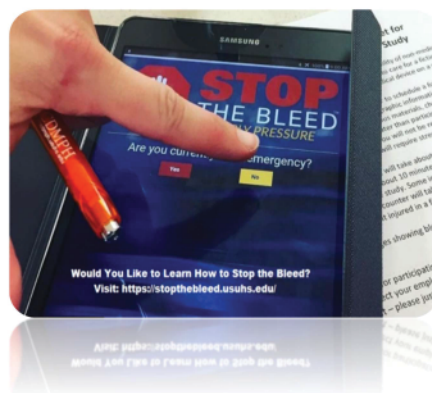
- Federal News Services Radio – New app uses battlefield training to help the public assist in case of emergency bleeding - <https://federalnewsradio.com/federal-drive/2018/07/new-app-uses-battlefield-training-to-help-the-public-assist-in-case-of-emergency-bleeding/>
- Stop the Bleed App News Release - <https://www.newswise.com/articles/new-app-teaches-citizens-to-%E2%80%98stop-the-bleed,%E2%80%99save-a-life#.WzEM2wmcOU.facebook>
- EMS1 – New App Teaches Civilians How to Stop the Bleed - <https://www.ems1.com/ems-products/technology/articles/384670048-New-app-teaches-civilians-how-to-Stop-the-Bleed/>
- The Pulse – In an emergency, Experts say 'Stop the Bleed,' Save a Life - <https://usupulse.blogspot.com/2018/04/in-emergency-experts-say-stop-bleed.html>

Learn more at <https://stopthebleed.usuhs.edu/>.





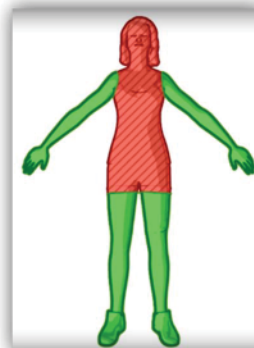
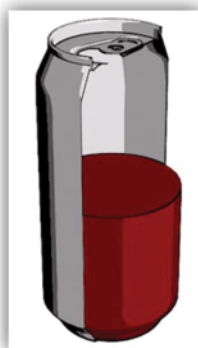
**T**rauma is the leading cause of death for people 1-40 years old.<sup>1</sup> Bleeding can often be stopped with **direct pressure** by using your hands or available materials such as a towel or shirt to apply firm, steady pressure to a wound. Life-threatening bleeding from the arms or legs can be stopped by a **tourniquet**. *Stop the Bleed* is a national campaign to teach and equip the public to save lives during bleeding emergencies.<sup>1</sup> To further the *Stop the Bleed* initiative, the National Center for Disaster Medicine and Public Health at the Uniformed Services University developed a series of educational tools to facilitate tourniquet application by the public.



#### These tools include:

- Stop the Bleed website - [stopthebleed.usuhs.edu](https://stopthebleed.usuhs.edu)
- 5-minute instructional video
- Stop the Bleed app (free at Apple App Store & Google Play)
- Just in Time (JiT) instructional card

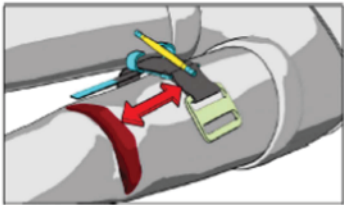
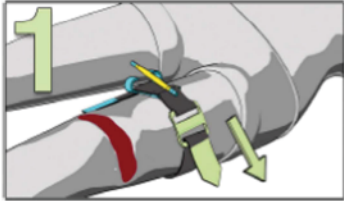
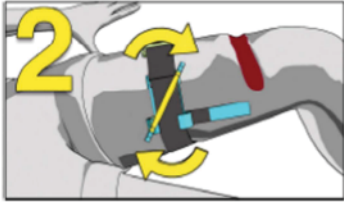
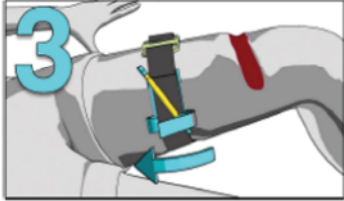
Life-threatening Bleeding	Non Life-threatening Bleeding
<p>You can determine if bleeding is life-threatening by looking at the volume of blood and the flow. Bleeding is life-threatening if:</p> <ul style="list-style-type: none"> <li>• Blood is continuously flowing or squirting</li> <li>• There is a half can of soda's worth of blood on the ground, or pooling on the surface</li> </ul>	<p>Non-life-threatening bleeding resolves on its own or with direct pressure. A paper cut or a minor cut while cooking is considered non-life-threatening types of bleeding.</p>



Apply tourniquet on the arms or legs only



**Determine that you are safe where you are.  
Tell someone to call 911.**

Place the tourniquet 2-3 inches above the wound. It should be between the torso and the wound.

**PULL** the free end of the Velcro strap. Thread it through the buckle. Securely fasten it back onto itself.

**TWIST** the rod. Keep twisting until bleeding stops. It is normal for this to cause some pain.

**CLIP** and secure the rod with the small Velcro strap so that it does not untwist. If bleeding hasn't stopped, apply a second tourniquet above the previous one, closer to the torso.

**Continue to monitor and comfort the injured person until help arrives.  
Do not loosen or remove the tourniquet.**

### About the Authors

National Center for Disaster Medicine and Public Health, Uniformed Services University, Rockville, Maryland.

Correspondence and reprint requests to: Luis E. Rojas, National Center for Disaster Medicine and Public Health, Uniformed Services University, 11300 Rockville Pike, Suite 1000, Rockville, MD 20852 (email: [luis.rojas.ctr@usuh.edu](mailto:luis.rojas.ctr@usuh.edu)).

### Disclaimer

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc, supports the National Center for Disaster Medicine and Public Health through a grant sponsored by the Uniformed Services University of the Health Sciences. The views expressed here are those of the authors and do not reflect the official policy or position of the Uniformed Services University of the Health Sciences, the US Department of Defense, or the US government.

### REFERENCE

1. Goolsby C, Strauss-Riggs K, Klimczak V, et al. Brief, Web-based Education Improves Lay Rescuer Application of a Tourniquet to Control Life-threatening Bleeding. *AEM Education and Training*. 2018;2(2):141-161.





# COLLABORATION AND LEADERSHIP

Collaboration and leadership strategic mission: *Engage and re-engage key internal and external partners to coordinate disaster research and education activities across the federal government.*

The National Center was created as a collaborative entity; therefore, collaborating and coordinating across the federal government and with academic institutions is a primary goal.

- Lead and collaborate with government and nongovernment partners to advance disaster medicine and public health education and research agendas.
- Act as a neutral coordinator across federal, state, tribal and local governments; academia and non-government associations; and organizations.
- Convene experts from diverse professional backgrounds to define disaster health issues and recommend policy solutions.
- Provide consultations to partners within and external to the federal government regarding disaster health education, training and science.

## National Alliance for Hazards and Disaster Science

The National Center led efforts to form the National Alliance for Hazards and Disaster Science (NAHDS), which is a national association for university-based, academic disaster research centers. NCDMPH partnered with the Natural Hazards Center, University of Colorado Boulder; National Disaster Preparedness Training Center, University of Hawai'i at Manoa; Institute for Catastrophic Loss Reduction, Western University; and Pacific Earthquake Engineering Research Center, University of California Berkeley.

## Disaster Mortality and Morbidity Consensus Conference

Along with the National Institute of Standards and Technology (NIST) the National Center hosted a meeting of disaster scientists from the fields of engineering, public health, health and sociology to discuss the optimum methods to assess direct and indirect deaths following Hurricane Maria in Puerto Rico.

## Department of Defense

NCDMPH amplified its relationship with the Department of Defense in 2018. Activities included:

### Supporting Military Readiness

NCDMPH provides important readiness expertise to the Office of the Secretary of Defense for Policy (OSD-P), Office of the Assistant Secretary of Defense for Health Affairs, the Defense Health Agency, the Joint Staff, Services, U.S. Combatant Commands and the National Guard Bureau. NCDMPH consults on DoD disaster preparedness exercises, provides opportunities to publish lessons learned and extends the military Tactical Combat Casualty Care principles into layperson training, facilitating the bridging of battlefield lessons to the American public. Additionally, NCDMPH consults on Humanitarian Assistance Disaster Response (HADR) activities and preparation with the U.S. government.





### Pandemic Preparedness, Policy-level Table Top Exercise

National Center senior leadership facilitated a two-day table top exercise (TTX) and debrief for senior OSD-P officials. This TTX, hosted at the National Defense University and attended by diverse DoD and interagency stakeholders, elucidated key DoD policy-level gaps for international and domestic response to escalating public health emergencies.

### Puerto Rico

The National Center provided support for several projects in Puerto Rico following Hurricane Maria.

- Supported U.S. Northern Command and hosted After Action Report analysis of Puerto Rico response
- Conducted follow-up work with Puerto Rico Dept. of Public Health and School of Medicine
- Attended “pre-exercise” in anticipation of Ardent Sentry 2018

### Civil-military HADR Coordination

NCDMPH leadership continued work with the U.S. Navy War College and other aligned private academic partners as well as non-governmental partners to address the civil-military interface in humanitarian action, particularly focusing efforts on developing a more mature education/research agenda in this space.

### USU

The National Center accentuated its collaboration with USU with various projects and activities including:

### USU Committees

NCDMPH staff are involved with several USU committees including the USU Council of Center Directors, USU Student Promotion Committee and USU Korea Working Group.

### Teaching

NCDMPH staff lead two disaster-related courses and have lectured in a number of other medical and public health areas.

### Academic

The National Center collaborated with numerous academic institutions to formalize activities in disaster health science and education.

### Memorandums of Understanding (MOU) With Academic Partners

In an effort to formalize collaboration with academic partners, the National Center completed science and education MOUs with the University of Hawaii Center for Excellence in Disaster and Johns Hopkins Applied Physics Laboratory.

### Other Agencies

The National Center partnered with federal agencies on projects and activities including the following:

### Collaboration with NIH/NIEHS on Healthcare Infrastructure Modeling for Disasters

The Center collaborated with NIH and NIEHS to host a series of webinars, workshops, pilot studies and regional preparedness exercises to discuss the current state and future direction of critical healthcare infrastructure modeling for disaster events, Building the Evidence Base for Disaster Risk Reduction for Health Systems in Response to Natural Disasters. Webinar 1: State of the Science <http://bit.ly/2EV5OZ6> and Webinar 2: Engaging Stakeholders <http://bit.ly/2GKEjxM>





### Federal Emergency Management Agency (FEMA) Course Mapping Tool Demonstration

NCDMPH hosted an overview and discussion of FEMA's course mapping tool with its developer, Dr. Gerry White, Analytics Team Lead of FEMA's National Training and Education System. The tool helps to better integrate training and education within the National Preparedness System and to the National core capabilities.

### NIH Disaster Research Response (DR2) Program

The National Center participated in the 5th annual Federal Interagency discussion on March 16. The meeting explored federal efforts for enhancing our collective ability to conduct timely health research in response to disasters and other time-critical situations.

### Walter Reed National Military Medical Center (NCR)

As part of the NCR Walter Reed integrated trauma system effort, the National Center provides support for the following projects and activities:

- Madigan Army Medical Center Trauma Plan 2018
- San Antonio Military Medical Center Trauma System Plan 2017-2018
- South Texas Regional Advisory Council (STRAC)

### Trauma Plan/MOU/MOA 2017-2018

- Member of the National Special Security Event Team (NSSE)

## Overview of NCDMPH Stakeholders

Interagency collaboration is a foundational aspect of the National Center. A knowledge of and working relationship with key internal and external stakeholders is essential to the success of the National Center. The following depicts a snapshot of the National Center's collaborators, with an understanding that partnerships will continue to evolve and expand over time.

### Internal - Uniformed Services University

- Armed Forces Radiobiology Research Institute
- Department of Military and Emergency Medicine
- Department of Preventive Medicine and Biostatistics
- Center for Global Health Engagement (CGHE)
- Center for the Study of Traumatic Stress
- Leadership Education and Development Program





## External - Federal government (original partners)

- Department of Defense (DoD)
  - ▶ Office of the Assistant Secretary of Defense for Health Affairs
  - ▶ Office of the Assistant Secretary of Defense for Homeland Defense and Global Security
  - ▶ Combatant Commands
  - ▶ Defense Health Agency (DHA)
  - ▶ Services: Army, Navy and Air Force Offices of the Surgeons General
  - ▶ National Guard Bureau
- Department of Health and Human Services (HHS)
  - ▶ Office of the Assistant Secretary for Preparedness and Response (ASPR)
  - ▶ Centers for Disease Control and Prevention (CDC)
  - ▶ National Institutes of Health (NIH)
  - ▶ National Library of Medicine (NLM)
- Department of Veterans Affairs (VA)
  - ▶ Veterans Emergency Management Evaluation Center (VEMEC)
  - ▶ Veterans Health Administration (VHA)
    - Office of Employee Education
- Department of Homeland Security (DHS)
  - ▶ Federal Emergency Management Agency (FEMA)
- Department of Transportation (DOT)
  - ▶ National Highway Traffic Safety Administration (NHTSA)

## Federal government (other potential partners)

- National Institute of Standards and Technology (NIST)
- National Oceanographic and Atmospheric Administration (NOAA)
- U.S. Geological Survey (USGS)

## State and local governments

### Academic institutions

- Arizona State University Public Health Law and Policy Program
- Columbia University, National Center for Disaster Preparedness
- George Washington University, Department of Emergency Medicine
- Harvard University, National Preparedness Leadership Initiative and Harvard Humanitarian Initiative
- Johns Hopkins School of Public Health, Center for Humanitarian Health
- Johns Hopkins Applied Physics Laboratory
- University of Colorado, Natural Hazards Center
- University of Hawaii, Pacific Disaster Center
- University of Delaware, Disaster Research Center

### Professional associations

- American Academy of Pediatrics (AAP)
- American College of Emergency Physicians (ACEP)
- American College of Surgeons (ACS)
- American Nurses Association (ANA)
- American Public Health Association (APHA)
- Association of State and Territorial Health Officials (ASTHO)
- National Association of County and City Health Officials (NACCHO)
- World Association for Disaster and Emergency Medicine (WADEM)
- Society for Disaster Medicine and Public Health (SDMPH), Inc.

### Other partners

- National Academies of Sciences, Engineering, and Medicine (NASEM)
- American Red Cross (ARC)
- Trust for America's Health





# EDUCATIONAL ACTIVITIES

The National Center's educational activities includes events and webinars that seek to meet the needs of the disaster medicine and public health community.

## **Crisis Leadership: Promoting Emotional and Mental Well-Being Symposium**

The National Center hosted a half-day symposium in April with more than 100 attendees to explore the unique aspects of crisis leadership in health emergencies and disaster responses. The event was co-sponsored by the USU Center for the Study of Traumatic Stress (CSTS) and the Leadership Education and Development (LEAD) program and featured retired Coast Guard Admiral Thad Allen as the keynote speaker.

## **Disaster Health Education Symposium**

The Center hosted a full-day disaster medicine and public health education and training symposium in September with over 80 attendees from federal, state, local and tribal governments as well as academicians and disaster responders from around the country. The event featured keynote speaker RADM Scott Deitchman, MD, MPH, USPHS Retired, from the CDC.

## **Model Uniform Core Criteria for Mass Casualty Triage**

In collaboration with the National Highway Traffic Safety Administration (NHTSA), NCDMPH developed and released the *Model Uniform Core Criteria for Mass Casualty Triage Instructional Guideline Addendum*, which teaches the 24 SME-developed criteria for mass casualty triage.

## **USU Teaching Contributions**

NCDMPH staff engage with USU students across the University, directing and teaching courses in domestic disaster preparedness and international humanitarian action as well as assisting with teaching a variety of courses for medical, nursing and other graduate students. Below are some of the courses taught by NCDMPH staff.

- Dr. Craig Goolsby directs the education program for Military Emergency Medicine as Vice Chair, Education. He spends approximately 600 contact hours in a series of four field exercises, a clerkship and other courses. This is the only department of military medicine in the U.S.
- Winter 17/18 PMO 1009 – Domestic Disaster Management and Response– Senior NCDMPH faculty direct and teach along with USU colleagues and adjunct faculty from our federal partners. Students represented a diversity of disciplines to include health policy, public health, occupational medicine and veterinary medicine.
- Spring 2018 PMO 613 – Public Health Issues of Disaster in Developing Countries – Senior NCDMPH faculty direct and teach this course, which tackles broad issues of policy, strategy and operations associated with complex humanitarian crises and disaster.
- Disaster health curricula is also incorporated into numerous other programs at USU, to include: CBRNE Module Curriculum for Military Emergency Medicine (MEM), Toxicology Disaster Response Concerns Module for Toxicology, Forensic Analysis during Disaster Response Module for Aerospace MISHAP, Disaster Response Distance Learning Curriculum, USU Bushmaster didactics and exercise, and Aerospace Physiology.





### Podcast



The National Center released two episodes of Disaster Dialogues: Perspectives from the Field, which was hosted by Dr. Kirsch and featured Dr. Brian Flynn, Associate Director of Health Systems at CSTS, and an Adjunct Professor of Psychiatry in the Department of Psychiatry at USU, about his current role

and his career and experiences in disaster mental health. Both episodes can be found at <https://soundcloud.com/hjfmilmed>

### Webinars

The National Center hosted or participated in well-attended webinars on specific disaster health topics for its stakeholders. Below are details about the webinars:

- On Dec. 14, NCDMPH hosted a webinar featuring Dr. Craig Goolsby focused on the Stop the Bleed: <https://www.usuhs.edu/content/stop-bleed-battlefield-lessons-national-campaign>
- On Jan. 24 and Feb. 1, NCDMPH co-sponsored a two-part series with the National Institute for Standards and Technology (NIST) and the National Institute of Environmental Health Sciences (NIEHS) with coordination through the Global Change

Research Program. The first webinar focused on the framework and concepts and mechanistic considerations of these models, rather than on specifics of any one of the modular components. The second webinar focused on practical applications from the end-user perspective. <https://www.usuhs.edu/content/building-evidence-base-disasters-parts-12>

- On Feb. 7, NCDMPH participated in a webinar hosted by NHTSA's Office of EMS titled, Teaching Mass Casualty Triage: Implementing the new MUCC Instructional Guidelines. The webinar was moderated by Gam Wijetunge, NRP and featured panelists Dr. E. Brooke Learner, a former EMS field provider and researcher at the Medical College of Wisconsin who served as lead investigator for the development of MUCC; NCDMPH's Kandra Strauss-Riggs, who partnered with NHTSA to develop the new instructional guidelines; and Leageay Barnes, an EMS educator who piloted the use of the instructional guidelines. <https://youtu.be/oLkwGQ6fchl>
- On June 14 the National Library of Medicine hosted a Disaster Health Training webinar featuring Kandra Strauss-Riggs, Education Director and Victoria Klimczak, Project Coordinator, discussing the NCDMPH Disaster Health Core Curriculum and Stop the Bleed app. Listen at <https://disasterinfo.nlm.nih.gov/webinars#2018>

# PUBLICATIONS AND PRESENTATIONS

## Disaster Medicine and Public Health Preparedness Journal

The National Center continued to provide financial and administrative support to ensure the publication of high-quality science for the Disaster Medicine and Public Health Preparedness journal. In 2017 the DMPHP Journal received 240 manuscripts from 32 countries. The acceptance rate was 63 percent. A special issue on Serial Hurricanes is scheduled for publication in February 2019 after all submissions have been peer-reviewed. Drs. "Skip" Burkle and Mark Keim are the senior guest editors for this collection of papers. Visit the Journal at <https://bit.ly/2DfTv3z>

## Publications by NCDMPH Faculty and Staff

The National Center published 16 papers in various peer-reviewed journals in FY2018. These are listed below. Three additional papers are "in press" with an expected publication date in late 2018.

### Journal

**Rojas, L., Dacuyan, N., Klimczak, V., & Goolsby, C.** (2018). Citizen Ready ©. Stop the Bleed. Disaster Medicine and Public Health Preparedness, 12(4), 549-550. doi:10.1017/dmp.2018.109

**Kirsch TD**, Benjamin, G., Kivela, P., Dvjack, DT, **Keim, M.**, National Disaster Safety Board—Objective Measures, Improved Outcomes, Health Affairs, July 24, 2018. <https://www.healthaffairs.org/doi/10.1377/hblog20180720.168527/full/>

**Goolsby, C.**, Rouse, E., **Rojas, L.**, Goralnick, E., Levy, M., **Kirsch, T.**, Eastman, A., Kellermann, A., **Strauss-Riggs, K.**, Hurst, N. Post-Mortem Evaluation of Potentially Survivable Hemorrhagic Death in a Civilian Population. Journal of the American College of Surgeons. Epub ahead of print Sep 7 2018. pii: S1072-7515(18)31992-6. doi: 10.1016/j.jamcollsurg.2018.08.692.

Upton L, **Kirsch TD**, Harvey M, Hanfling D. Health care coalitions as response organizations: Houston after Hurricane Harvey. Disaster Medicine and Public Health Preparedness. 2017;11 (6), 637-639. doi:10.1017/dmp.2017.141.

Morton Hamer, M., **Reed, P.**, Greulich, J., & Beadling, C. (2018). Enhancing Global Health Security: US Africa Command's Disaster Preparedness Program. Disaster Medicine and Public Health Preparedness, 1-11. doi: 10.1017/dmp.2018.17

TariVerdi M, Miller-Hooks E, & **Kirsch TD**. Strategies for Improved Hospital Response to Mass Casualty Incidents. Disaster Medicine and Public Health Preparedness, 2018;1-13. doi:10.1017/dmp.2018.4.

**Goolsby C. Strauss-Riggs K., Klimczak V., Gulley K., Rojas L.**, Godar C. Raiciulescu S., Kellermann A., **Kirsch TD**. Brief, Web-Based Education Improves Lay Rescuer Application of a Tourniquet to Control Life-Threatening Bleeding. Academic Emergency Medicine Education & Training. Accepted for publication. April 2018; 2(2): 154-161. Epub ahead of print February 27, 2018, DOI: 0.1002/aet2.10093

**Goolsby C.**, Jacob, L., Hunt R., Goralnick E., Singletary E., Levy M. Goodloe J., Epstein J., **Strauss-Riggs K.**, Seitz S., Krohmer J., Nemet, I., Rowe D., Bradley R., Gestring M., **Kirsch TD**, Stop the Bleed Education Consortium: Education Program Content & Delivery Recommendations. Journal of Trauma and Acute Care Surgery. January 2018;8 4(1): 205-210. doi: 10.1097/TA.0000000000001732.

Muck, A., Givens, M., Bebart, V., Mason, P., **Goolsby, C.** Emergency Physicians at War. Western Journal of Emergency Medicine. May 2018; 19(3); 542-547. Epub ahead of print March 8, 2018, DOI: 10.5811/westjem.2018.1.36233.

**Keim M.**, Defining Disaster-Related Health Risk: A Primer for Prevention. Prehospital and Disaster Medicine, Volume 33 / Issue 3, June 2018, pp 308 – 316.

**Keim M.**, Assessing Disaster-Related Health Risk: Appraisal for Prevention. Prehospital and Disaster Medicine, Volume 33 / Issue 3, June 2018, pp 317 – 325.

**Keim M.**, Managing Disaster-Related Health Risk: A Process for Prevention. Prehospital and Disaster Medicine, Volume 33 / Issue 3, June 2018, pp 326 – 334.



Courtney CS, **Kirsch TD**. Orthopedic Knowledge and Need in the Provincial Philippines: Pilot Study of a Population Based Survey. *Prehospital and Disaster Medicine*. 2018. doi:10.1017/S1049023X18000122.

Levin S, Toerper M, Hamrock E, Hinson JS, Barnes S, Gardner H, Dugas A, Linton B, **Kirsch T**, Kelen G. Machine-learning-based electronic triage more accurately differentiates patients with respect to clinical outcomes compared with the Emergency Severity Index. *Ann Emerg Med*. 2017 Sep 6. pii: S0196-0644(17)31442-7. doi: 10.1016/j.annemergmed.2017.08.005. [Epub ahead of print]

**Goolsby C**. Branting A., Ausman J., Williams D., Ausman C., David J., Allard R. Systematic Review of Live-Tissue v. Simulation Education for Pre-Hospital Trauma Providers. *Military Medicine*. September/October 2017, vol 182, 9/10:e1824, doi: 10.7205/MILMED-D-17-00026

Leeper WR, Haut ER, Pandian V, Nakka S, Dodd-o J, Bhatti N, Saheed M, Dalesio N, Miller C, Schiavi A, Hunt E, **Kirsch TD**, Berkow L. Multidisciplinary Difficult Airway Course: An Essential Educational Component of a Hospital-Wide Difficult Airway Response Program. *J. Surgical Ed*. 2018 Apr 5. pii: S1931-7204(17)30684-0. doi: 10.1016/j.jsurg.2018.03.001.

## Books/Book Chapters

Cyrus Shahpar and **Thomas D Kirsch**. Who's Who in Humanitarian Emergencies. Chapter 3. Health in Humanitarian Emergencies: Principles and Practices for Public Health and Healthcare Practitioners. Cambridge University Press. 2018. Edited by David Townes.

Disaster Nursing and Emergency Preparedness, Fourth Edition. (2018) Chapter 38. Directions for Disaster Nursing Research and Development. Authors: Janice B. Griffin Agazio, Lynn A. Slepiski, Roberta Proffitt Lavin, Mary Pat Couig, **Kandra Strauss-Riggs**, and Richard Ricciardi. Edited by T. Veenema. Springer Publishing Company.

## Professional Association/Meeting Presentations and Participation

The National Center staff share information about the NCDMPH and its work through participation and speaking engagements at national and local events, conferences and meetings. In 2017-2018, NCDMPH staff spoke or participated at more than 25 events. Highlighted below are key events/meetings:

- **International Association of Emergency Medical Services Chiefs Conference, Washington, DC**  
Topic: Stop the Bleed: Building Capacity & Public Resilience presented by Dr. Craig Goolsby

- **2018 Joint Staff J-7 Integration & Exercise Workshop, Washington, DC**

Topic: Health Panel presented by Dr. Thomas. Kirsch

- **National Academies of Sciences, Engineering, and Medicine (NASEM), Washington, DC**

Topics: Federal Perspectives on the National Capability to Respond to Threats to Health, Safety, and Security presented by Dr. Thomas Kirsch

- **Walter Reed National Medical Center Trauma Symposium, Bethesda, MD**

Topic: Overview of NCDMPH and update on current efforts and Regional Healthcare System Preparedness for Catastrophes presented by Dr. Thomas Kirsch  
Stop the Bleed and Active Shooter Training and AAR for AS Scenario presented by Dr. Craig Goolsby

- **TRAIN Learning Network Annual Meeting, Arlington, VA**

Topic: Disaster Health Core Curriculum presented by Kandra Strauss-Riggs

- **2018 Preparedness Summit, Atlanta, GA**

Topic: Stop the Bleed: Training Laypeople to Stop Life-threatening Bleeding presented by Dr. Craig Goolsby and Disaster Health Core Curriculum for Health Professionals presented by Luis Rojas and Victoria Klimczak

- **National Disaster Medical Summit Training, Atlanta, GA**

Topic: What Wilderness Medicine Can Teach Disaster Responders presented by Dr. Thomas Kirsch

- **Civilian-Military Humanitarian Assistance Workshop, Providence, RI**

Topic: CAPT Reed co-led a two-hour breakout session on planning for a large-scale exercise on epidemics in urban environments.

- **Military Health System Research Symposium, Atlanta, GA**

Topic: Stop the Bleed Initiative Panel, panelist Dr. Craig Goolsby

- **Committee on Tactical Combat Casualty Care, San Antonio, TX**

Topic: Stop the Bleed leadership presented by Dr. Craig Goolsby



# Looking Forward: 2019 Priorities

As we move into 2019, we are excited about our planned activities and projects, focused toward the National Center's mandate set under HSPD 21. We will leverage our unique interagency and academic position to empower scientists and educators to protect our nation's health from disasters. With a growing, dedicated and talented team, we will continue to achieve our founding mission.

## Collaboration

- Partnership with the DoD to survey existing examples and work to develop health systems modeling that will benefit DoD planning for preparedness
- Collaboration with the U.S. Navy War College, U.S. interagency and other academic and non-governmental partners to develop and deliver an operational-level simulation exercise focused on the roles of military and civilian responders to an emerging public health crisis in an urban environment
- Work with the NIST and subject matter experts to assess the health impacts of Hurricane Maria

## National Meetings

- Host events and webinars including:
  - ▶ State of the Science meeting to convene the disaster science community and identify the needs of disaster scientists in order to provide a collaborative forum that can work to address the community's needs.
  - ▶ Crisis Leadership symposium to explore the unique aspects of crisis leadership in health emergencies and disaster responses.

## Education

- NCDMPH has partnered with the American Public Health Association (APHA) to offer continuing education credits (CME) and continuing nursing education (CNE) credits for the Disaster Health Core Curriculum, a free, online training program for health professionals covering the *Core Competencies for Disaster Medicine and Public Health*.

- Continue to lead the Stop the Bleed Education Consortium and educate laypeople on how to stop the bleed and how to use a tourniquet.
  - ▶ Co-develop a national "Stop the Bleed" citizen training program with the American Red Cross. The training programs will reach 2,000,000 people a year.

- Engage with graduate students, directing and teaching two disaster health courses at the USU School of Medicine, as well as assisting with teaching other courses across the university.

- Identify and host Disaster Science Student Rotation and Visiting Scholars to provide opportunities to collaborate and engage with recent graduates and practicing professionals.

## Science

- Use the \$2 million Transforming Technology for the Warfighter grant to develop a novel hemorrhage control device with partners from Harvard-Brigham and Women's Hospital, Mayo Clinic, Linköping University in Sweden, and InnoVital Systems.
- The Center received a phase I grant to design and develop a School-Age Trauma Training (SATT) for mass casualty events. The training will focus on enhancing the ability of students to take action to assist victims with injuries and ultimately help save lives.
- Pursue Grant opportunities to further conduct research and develop tools for disaster science and education as well as related public health efforts.
- Research and publish scientific articles related to disaster science, public health and education.

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 view of USU, and the U.S. Department of Defense.

Report Design  
Henry M. Jackson Foundation for the Advancement of Military Medicine





# NCDMPH



Uniformed  
Services  
University

11300 Rockville Pike  
Suite 1000  
Rockville, Maryland 20852  
P: 1-240-833-4444

[www.usuhs.edu/ncdmp](http://www.usuhs.edu/ncdmp)



@NCDMPH1



NCDMPH



NCDMPH