

Poster Presentation Abstracts

The following posters were displayed at the 2014 *Learning in Disaster Health Workshop*. Asterisks indicate the three Outstanding Poster Award Winners selected by attendees on site.

1. Now Trending in Your Community: Social Media Insights Into Health and How it Can Help Your Public Health Mission

Diana Kushner

In today's fast paced world, information is available (and expected) instantaneously. Social media has only fueled this expectation as it had permeated all aspects of our lives. More and more of the population is turning to social media outlets to share their thoughts and update their status, especially during disasters. With all these conversations occurring, it is only reasonable to assume that health status is part of the information being shared. Whether people are talking about being sick themselves or fear of illness in the community, there is a wealth of knowledge to be gained by tapping into this information. This data would then be available for multiple purposes such as serving as an indicator of potential health issues emerging in a population; allaying health fears in a community; or engaging the public on trending health topics. But how do you accomplish this? There are millions of conversations happening on social media every day that would need to be sifted through to get to the health-related topics. No public health entity has the time or staffing for that endeavor. With this problem in mind, the Assistant Secretary for Preparedness and Response launched a challenge competition titled *Now Trending: #Health in My Community* to create a web-based application that analyzed Twitter data for health topics and delivered useful analytics for both specified geographic areas and the national level. The outcome is the *Now Trending Web site* (<http://nowtrending.hhs.gov>). This Web site was launched to provide public health entities with a tool to gain awareness of the health conversations on social media in their communities. This poster will highlight the information provided by the *Now Trending Web site* and provide real world examples of how this site has been used during public health emergencies.

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4. Including At-Risk Individuals and Behavioral Health in Emergency Preparedness, Response, and Recovery

Shulamit Schweitzer

Rachel Kaul

This poster presentation will enhance participants' conceptual and applied competencies related to disaster preparedness, response, and recovery requirements of at-risk individuals (people with functional needs that may interfere with the ability to access or receive medical care) and behavioral health (the provision of mental health, substance abuse, and stress management services to disaster survivors and responders). We will also describe the role of ASPR's Division for At-Risk Individuals, Behavioral Health, and Community Resilience (ABC) to provide subject matter expertise, education, and coordination to internal and external partners to ensure that behavioral health issues and the needs of at-risk individuals are integrated in the public health and medical emergency preparedness, response, and recovery activities of the nation. We will summarize "community resilience" and provide a toolkit of guided fact sheets that will support participants' ability to evaluate and revise their disaster-preparedness plans.

5. A Public-Private-Academic Partnership: creating a novel disaster medicine fellowship

Josh Mugele

Chad Priest

Daniel O'Donnel

Charles Miramonti

Traditionally, cooperation and communication has been lacking between public health entities and hospitals and other health care organizations in the field of disaster preparedness and response. Ongoing cooperation as well as

joint educational initiatives would benefit hospitals as well as public health organizations in disaster planning and ultimately response. Academic medical centers in particular are well-suited to provide expertise and resources in disaster health education. In this poster we describe a unique collaboration between Indiana University School of Medicine Department of Emergency Medicine and MESH Coalition in Indianapolis, Indiana, to create a novel disaster medicine fellowship. MESH Coalition is a nonprofit, public-private partnership between health care entities, public health entities, and various emergency management and response organizations whose charter is to enable health care providers to effectively mitigate and respond to emergency events through planning, policy, and educational services. The one-year fellowship is designed to train clinicians including physicians, nurses, and mid-level providers (nurse practitioners and physician assistants). The objectives of the fellowship include: 1) competency in disaster medicine clinical skills; 2) participation in hospital-based emergency preparedness and response activities; 3) awareness of and participation in municipal and regional public health and emergency management activities and policy development; 4) expertise in disaster health care education, research, and curriculum development. We also describe the experience of the inaugural fellow, an emergency medicine-trained physician from Indiana University. We anticipate that training clinicians through this partnership will benefit local and regional disaster preparedness and response efforts and enhance the collaboration between public health, academic, and health care entities.

6. The Mental Health Minute: Leveraging T-cons to Deliver Key Mental Health Tips

Julie Chodacki

Like many other disaster teams, RDF (Rapid Deployment Force)- 3 is a dynamic multi-disciplinary team comprised of individuals from disparate professional agencies located across the United States, including Alaska. As the budget shrunk, the team lost its opportunity to come together in person outside of real-world emergencies, making it especially difficult to train on topics such as how to maintain team social support and first responder mental health/self-care. In response, the team began a series of short mental health briefings that have become a regular feature on the team's monthly teleconference. The "mental health minute" is intended not only to be informational and relevant, but also the minute contributes to maintaining the psychological readiness of team members, highlighting issues similar to psychological first aid for first responders and raising visibility of the importance of mental health.

Topic choices are driven by seasonal and rotational considerations, as well as informal needs assessments by team members who support team social/mental health. For example, "Seasonal Affective Disorder" was discussed during January; "Differentiating Between Readiness and Preparedness" was a topic proceeding the team's on-call month; and the Nov/Dec call included "Holiday Resilience." Content is posted on the team Web site after it is presented. Recently the Team Commander has decided to include a brief summary of the MH Minute in her Command Update, a newsletter that is distributed to the team via e-mail.

The poster presentation will include a description of the goals of MH Minute, the process/challenges of making time for mental/social health during already full monthly teleconference agendas, and the benefits accrued since implementation, as assessed by a sample of team members. The authors of the poster are the team members responsible for initiating the program, preparing content, and delivering each of the segments.

7. Creating Your Own Disaster in a Disaster Preparedness Workshop

Deanna Dahl Grove

Rashida Woods

Nathan Timm

Pediatric Emergency Medicine (PEM) Trainees are expected to be familiar with concepts of disaster preparedness (DP) upon completion of fellowship, in particular as it pertains to the unique aspects of pediatric patients in the vast health care continuum. The DP education of PEM trainees is variable among the training programs in the country as done by an informal survey of one author. The State of Ohio has 4 ACGME-approved PEM training programs. The Ohio AAP (American Academy of Pediatrics) and Ohio EMSC (Emergency Medical Services for Children) have cosponsored an annual workshop to enhance trainee networking and gain knowledge on topics of interest to all Ohio programs, such as DP. The objectives of this 4-hour workshop were to: understand the basic terminology and concepts as applied to planning for a simulated community disaster; apply triage tools to simulated patients in the simulated disaster; and to create a tabletop hospital disaster drill. During the first exercise, participants in small groups were given a scenario and asked to apply the terms: how to detect an incident and assess for hazards; applying incident command; determine scene security and safety; describe necessary support and evacuation methods and pertinent liability concepts and then report back to the entire group. The same small groups in the second exercise applied different triage modalities to the same group of simulated patients and presented the outcome to the larger group. In the final exercise the whole group identified key components of hospital disaster drill preparation and then divided into small groups to create their own hospital drill and objectives to be tested with report to larger group. This workshop presents a unique method to present DP concepts and allows for small group interaction and large group discussion which are beneficial learning environments for adults.

8. Integrating Responder Behavioral Health Self Triage into the Urban Shield 2013 Full Scale Disaster Exercise and Learning Program*

Merritt Schreiber
Neema Pithia
Elsie Kusel Lauren Sims

Background: The PsySTART disaster mental health triage system was developed and validated for use in identifying disaster victims suffering from psychological stress. The next evolution of this system has been to develop a comparable self-triage of mental health risk in medical responders to enhance their own resilience and preserve local disaster systems of care.

Objectives: Evaluate the perceptions of pre-hospital and hospital disaster responders of their own risk in a complex mass casualty full-scale exercise, "Urban Shield, 2013" using the PsySTART responder self-triage system involving multiple potential disaster and CBRNE stressors.

Methods: 183 participants completed the PsySTART Responder Self Triage System (n = 183) following their participation in the Urban Shield 2013 full-scale exercise. Medical responders completed self-triage on the frequency of exposure to each risk marker and their perceived level of stress on a scale of 1-5 (5 = Extremely Stressful) for each risk factor encountered. For the descriptive purposes of this project, we calculated mean occurrence, perceived stressfulness, and correlations among the risk markers.

Results: See Figure 1 for risk marker descriptions. The risk markers perceived most stressful in Urban Shield 2013 full-scale exercise were in order of stressfulness: factor 18 (mean = 3.96, n = 23), 11 (mean = 3.87, n = 15), 14 (mean = 3.41, n = 119), and 9 (mean = 3.31, n = 35). Risk markers 1-3, 5-8, and 10 all exhibited positive correlation ($p < 0.05$).

Conclusions: The use of PsySTART in this exercise demonstrated that a "just-in-time" use of the PsySTART Responder Self Triage System is feasible as part of an integrated approach to responder disaster learning and suggests further efforts to enhance responder resilience. Response of medical responders to potential risk factors provided the opportunity to construct further item selection and weighting for risk markers for PTSD and depression in disaster medical responders, which is now in use in real-world project following Super Typhoon Haiyan.

9. Lessons Learned Following an EF5 Tornado: Conference Impact on Participants

Sharon Medcalf
Michele Kassmeier
Philip W. Smith

Objective: The goal of this study was to determine if participants amended their organization's disaster plan within 14 months after being prompted to do so at a national conference.

Methods: The investigators developed a 17-question (maximum) cross-sectional survey of conference participants providing their e-mail address, then analyzed the results of the web-based survey.

Results: Of the 331 eligible conference attendees, 110 completed the survey. Professional titles of participants varied, with emergency response coordinators (26.4%) having the highest presence. There were 75.5% of participants who indicated they had personally made changes to their organization's disaster plan as a result of attending the conference.

Conclusions: Having the individuals responsible for disaster plans attend a national conference where the presenters directly experienced a major disaster has proven to have an impact on attendees in making concrete changes to an organization's disaster plan.

10. Disaster Medicine and Triage Ethics in a Medical School Curriculum

Rashida Woods
Deanna Dahl-Grove

Objective: Medical student discussions regarding ethics may include cases such as persistent vegetative states or integration of religious beliefs with medical care. Disaster medicine ethics is rarely taught. The aim of this study is to assess the relevant nature of disaster medicine and ethics as a component in the medical school curriculum.

Methods: Third-year medical students on the surgery/emergency medicine core rotation completed a tabletop disaster scenario using a numbering system. During group discussion, students presented how the victims were triaged while key ethical concepts were identified. The scenario was then repeated applying the START and JumpSTART triage algorithm. The primary objective of the relevance of this topic and its inclusion in the medical school curriculum was achieved through individual student narratives. The secondary outcome compared the student's triage assignments of the victims against those of the primary author's.

Results: During group discussions, many students expressed discomfort in assigning delayed or expectant triage codes making general comments such as "this isn't right, this is not what am I being taught to do." In relation to pediatric victims, comments included "this is an infant, we should make efforts to save them." Similar comments were made for adult patients as well; however, more expressions of discomfort were made toward pediatric patients. This is supported by the manner in which the students triaged the victims after instruction on the START and JumpSTART triage algorithms, with - 10% of students not applying an expectant triage code to pediatric victims.

Conclusion: After completing the module, the majority of the 3rd-year medical students believe that disaster medicine and triage ethics is an important concept that should be applied to the medical school curriculum. However, students note this concept would be more beneficial in the 1st-year curriculum.

11. Educating Hospital Administrators and Clinical Leaders on Pediatric Considerations for Hospital Disaster Preparedness Policies*

Anthony Dilchrest
Elizabeth Edgerton

Children comprise 26.7% of the US population and account for about 20% of all hospital emergency department visits. While there have been marked improvements in many areas of pediatric emergency care over the past decade, in 2010 the National Commission on Children and Disasters reported persistent deficiencies in every functional area of pediatric disaster preparedness.

In 2013, the Emergency Medical Services for Children (EMSC) completed an assessment of over 5000 US emergency departments (EDs) as part of the National Pediatric Readiness Project, a joint quality improvement initiative. More than 4100 facilities responded (82.7%). Preliminary results show that less than half of all US hospitals reported having written disaster plans that address issues specific to the care of children. Based on these findings, the National Pediatric Readiness Project stakeholder group recommended that a multidisciplinary workgroup be convened to develop a tool to help hospitals incorporate pediatrics into existing or future disaster plans.

This Checklist of Essential Pediatric Domains and Considerations for Hospital Disaster Preparedness Policies is intended to educate hospital administrators and clinical leadership on specific considerations for planning for the pediatric population during disasters. The checklist was designed to complement and augment existing disaster resources, both pediatric-specific and general, rather than to serve solely as a stand-alone document. It is the consensus of national subject matter experts that the pediatric domains and considerations in this checklist should be well integrated into existing all-hazards hospital disaster preparedness policies or guidelines. Furthermore, hospital disaster plans are unique to each facility and community. Hence, hospital administrators and managers are encouraged to work closely with their local, regional, and state health care systems and disaster coalitions to adapt these recommendations to their local needs and resource availability. In addition, these essential pediatric domains and considerations should be incorporated into routine disaster education and training curricula.

12. Elderly in Disasters: An Integrated Review*

Heather Johnson
Elexis McBee
Catherine Ling

Disasters unduly affect the vulnerable population of older adults. The purpose of this integrative review was to describe the multi-disciplinary, systems-level knowledge and skills required to care for older adults during domestic disasters and humanitarian relief efforts. Searches of PubMed, CINAHL, and PsycINFO were conducted using a search protocol with terms such as Disasters, Geological Processes, Aged, Disaster Planning, and Vulnerable Populations. Of the 525 articles discovered, 49 met inclusion criteria for the project and were analyzed by at least 2 team members. Following detailed compilation and analysis, five major themes emerged from the literature: biophysical aspects of care, psychosocial aspects of care, logistics, resources, and legal/ethical issues. There were 1 to 13 sub-themes for each theme. The results emphasize the need for incorporation of older adults as subject matter experts and the use of functional capacity in elderly focused disaster planning. Sharing and combining resources ensures

widest possible dissemination and utilization of information. Evacuation & shelter planning and forecasting should be performed by personnel with appropriate experience and training in care of the elderly. A multi-faceted approach to planning and education should include the major themes elucidated in this review. Clarification of legal & ethical standards of care and liability issues is critical at all levels of disaster care.

13. Patient Tracking Education and Implementation: Lessons from Past Events and Possible Future Applications

Maxwell Krasity

Peggy Keller

Public health officials and senior leaders involved in decision making during a disaster must be able to quickly and accurately determine the health needs of their jurisdiction. The application of patient tracking technology, which allows operators to “scan” disaster victims and place important information into a centralized system, is one approach that allows for the maintenance of situational awareness. As disaster victims are scanned, a command dashboard updates in real time and identifies the victim’s location, status, and vital statistics and can even include relevant pictures or videos. Use of tracking technology in a disaster can provide rapid illustration of health needs and indicate where additional resources could productively be deployed.

Successful utilization of patient tracking technology requires the deployment of capable human operators to a disaster site to scan victims and record relevant data that is uploaded to a situational awareness dashboard. Given fiscal and practical constraints, a realistic method to facilitate data collection is to utilize volunteers. A field test of the feasibility of volunteers with a variety of experience levels using patient tracking devices acting as primary data collectors at a large event was provided when the DC DOH deployed medical reserve corps volunteers to conduct patient tracking and family reunification at medical aid stations at the 2014 Washington DC Fourth of July celebration. Just-in-time volunteer training was implemented the morning of the event and consisted of the distribution of handouts and quick reference cards, a 20-minute teaching and technology orientation session delivered by professionals familiar with the patient tracking devices, and continued support provided by floating experts in the field. Given the success of this approach at the Fourth of July event, we propose similar training and deployment techniques could be adopted to extend the benefits of patient tracking technology to disaster responses.

14. Perceptions of Humanitarian and Disaster Relief Missions among Military Medical Providers: Exploring Differences Based on Mission Type and Field of Medical Practice

Garcia Nitasha

Patrick Hickey

Geoffrey Oravec

Artino Anthony

Background: Annually, the United States engages in a multifaceted approach to disaster assistance and global health engagements throughout the globe. The present study explored whether mission type or field of medical practice influenced physicians’ perceptions of medical stability operations and disaster relief.

Methods: Military physicians in the US Army, Navy, and Air Force responded to a 51-item, Web-based survey. This previously validated survey included four survey scales each using a 7-point, Likert-type response scale. The four scales were designed to assess overall satisfaction with the mission and perceived benefits to the United States, the target population, and the service member. This study focused on potential differences in these four variables based on type of mission and field of practice (medical vs surgical).

Results: Of the 667 physicians who responded to the survey, 47% had participated in at least one mission. When compared to physicians who participated in conflict-related missions, those who completed disaster-related missions reported higher levels of satisfaction ($M = 5.95$ vs 4.95 , $p < 0.001$) and higher levels of perceived benefits to the target population ($M = 4.88$ vs 4.46 , $p < 0.01$) and to the US ($M = 5.89$ vs 5.21 , $p < 0.01$). In terms of medical specialty, surgeons believed their work benefited the target population to a greater degree than nonsurgical physicians ($M = 5.35$ vs 4.83 , $p < 0.01$).

Conclusions: Findings from this study suggest that mission type is related to service members’ personal satisfaction and perceptions of benefit to the US and to those being served. These results also indicate that surgeons consider their contributions to be more beneficial to target populations than medical physicians. Given the complexity of planning and executing humanitarian operations, these findings have the potential to inform the larger humanitarian community on factors related to mission focus, training, and planning as well as retention and satisfaction of military medical providers.

15. Active-Duty Physicians' Perceptions and Satisfaction with Humanitarian Assistance and Disaster Relief Missions: Implications for the Field

Geoffrey Oravec
Artino Anthony
Patrick Hickey

Background: This study assessed perceptions of active-duty physicians regarding disaster relief and global health engagements and related these findings to the overall satisfaction and retention of military health care professionals.

Methods: An Internet-based, 51-item survey was sent to military physicians in the US Army, Navy, and Air Force. Four validated survey scales each using a 7-point, Likert-type response scale assessed overall satisfaction with the mission and perceived benefits to the United States, the target population, and the service member.

Results: Of the 667 physicians who responded to the survey, 47% had participated in at least one mission. On a 7-point, Likert-type response scale, physicians reported favorable overall satisfaction with their participation in these missions (mean 5.74). Perceived benefit was greatest for the United States (mean 5.56) and self (mean 5.39) compared to the target population (mean 4.82). These perceptions were related to intentions to extend their military medical service, with the strongest predictors being perceived benefit to self ($p < 0.01$), the US ($p < 0.01$), and satisfaction ($p < 0.05$). In addition, Air Force physicians reported higher levels of satisfaction (mean 6.10) than either Army (mean 5.27) or Navy (mean 5.60) physicians.

Conclusions: Military physicians are largely satisfied with humanitarian missions, reporting the greatest benefit of such activities for themselves and the United States. Elucidation of factors, such as mission profile, training, and resource allocation that may increase the perceived benefit to the target populations is warranted. Satisfaction and perceived benefits of humanitarian missions were positively correlated with intentions to extend time in service. These findings could inform the larger humanitarian community and inform practices for both recruiting and retaining medical professionals.

16. Increasing Community Resilience in Vulnerable Populations in the District of Columbia

Peggy Keller

Background/Purpose: DC DOH protects the public health and safety of residents and visitors, including unique challenges of vulnerable populations, through an all-hazards preparedness and response approach to mitigate public health and health care impacts.

During disasters, those with access and functional needs are particularly vulnerable, due to communications and mobility issues, and frequently stress health care systems. Vulnerable populations include those that are power dependent, home bound, homeless, and non-English speaking. Frequently vulnerable populations are not connected to supporting organizations and lack resilience, the ability to get through and bounce back after a disaster.

Purpose & Objectives: DOH increases community resilience and reduces negative impacts on those with access and functional needs by taking a proactive planning approach, including robust communications, key technologies, partnerships, post-event response evaluation and, most important, preparedness and resilience training.

Methods: DOH partnered with community and health care organizations to establish the Vulnerable Populations Community and Health Care Coalition (VPCHCC). DOH and VPCHCC developed strategies and mitigation plans addressing the needs of vulnerable populations during disasters that build community resilience. DOH conducted four-day preparedness and resilience training programs, consisting of modules, such as, disaster mental health and community resilience for District staff, providers, at-risk youth, and volunteers. In addition DOH conducted shelter in place and COOP planning for residential facilities. The training served to increase community connections and community resilience and reduce the negative impact on the health care system.

Measurable Objective: Community, health care organization partners, vulnerable populations trained.

Results: DOH staff identified those at risk of severe, negative health impacts during disasters and developed mitigation strategies. Increased community resilience, increased ability to shelter in place, reduced stress on the health care system.

Outcomes: Vulnerable populations, support were trained and resilient.

Conclusions: DC addresses needs of vulnerable populations to increase community resilience, reduce stress on health care systems.

17. Nursing Care of Highly Pathogenic Avian Influenza H5N1 Occupational Exposure

Jerod Noe
Leighann Ebenezer
Melissa Hubbard

Human infection with the highly pathogenic avian influenza (HPAI H5N1) is relatively rare with only approximately 640 known human cases. However, HPAI H5N1 is quite pathogenic with a case fatality rate of about 60%. Although there are no known infections of humans or poultry having occurred in the United States, due to the threat of a naturally occurring pandemic involving HPAI H5N1 coupled with the possibility of it being utilized as a biological weapon, research is currently underway to develop relevant countermeasures. However, in order for this research to occur safely, institutions must provide a place to isolate, manage, and, if necessary, treat laboratory workers in the event of an occupational exposure. The core mission of the Special Clinical Studies Unit (SCSU) is to care for patients who have had a known or suspected occupational exposure to HPAI H5N1 or other biosafety level 3 or 4 pathogens. As nurses, our job is to follow evidence-based practice guidelines in order to provide the best care for this special patient population. Upon review of the literature, a large gap was found in the area of written guidelines for optimal nursing care of the occupationally exposed patient. This poster will address state-of-the-art care of the patient exposed to HPAI H5N1 with an emphasis on nursing care guidelines based upon a patient's initial presentation and the known course of HPAI H5N1.

18. The Military Medical Humanitarian Assistance Course (MMHAC): Teaching Disaster Medicine at the Tactical Level

Patrick Hickey
Robert DeFraitas
David Tarantino
Kevin Riley
Ray Handel
Charles Beadling

The Military Medical Humanitarian Assistance Course (MMHAC) is designed to provide training for the provision of contextually appropriate medical care and public health intervention to civilian populations in the austere health emergency setting. Course content is managed centrally at the Center for Disaster and Humanitarian Assistance Medicine (CDHAM) and Uniformed Services University but the course is taught at six sites across the Military Health System using local faculty. Course content domains include disaster typology; cluster approach, SPHERE, and the role of US Government agencies vs international and nongovernmental organizations; ethical considerations; surveillance, prevention, and treatment of the major causes of mortality in a complex humanitarian emergency. Though originally designed for early-career primary care clinicians, the student population has recently expanded to include allied health professionals and medical operations planners. Over the past 2 years, Combatant Commands and operational forces have begun requesting MMHAC as part of their readiness training, with courses being held in Korea, Japan, and as part of the Rim of the Pacific (RIMPAC) Exercise. Course content is delivered in a mixed didactic and small-group exercise format that emphasizes key concepts and provides students with portable resources. Course management innovations include use of online pre- and post-course knowledge assessments and the ability to begin longitudinal assessments of course impact on student outcomes related to self-efficacy, satisfaction with future global health engagement and disaster relief deployments, career focus, and continued education in the field of disaster response and global health. Plans are being developed for MMHAC to be converted into a partially online format in order to allow classroom flipping and enhanced hands on application of concepts.

19. The Geometry of Response: Understanding the angles and interests to prepare for humanitarian assistance and disaster response missions

Colleen Gallagher

Per DoD Directive 5100.46, the military responds to foreign disasters in support of the US Agency for International Development (USAID), the lead federal civilian agency for humanitarian assistance. While it may appear that the DoD has a large footprint in many disaster relief operations, many are surprised to learn that DoD responded to less than 12% of the more than 480 disaster declarations that were issued between FY 2006 and 2012. But while there were a limited number of responses, it does not limit the importance of military support in this area.

The military is traditionally called in to support humanitarian assistance and foreign disaster relief to meet a specific need that goes beyond civilian capacity. In particular, military medicine is one technical area that can provide extensive capabilities and capacities. The extended period of conflict in Afghanistan and Iraq has afforded military medicine professionals extensive

experience with trauma, triage, and evacuation of injured patients—all vital skills equally needed to respond to patients injured in earthquakes, typhoons, etc. But while clinical expertise is important, understanding the guiding principles of the broader international response is just as important. The time for understanding shared space and the rules of the engagement in disaster response is not the emergency moment when DoD is tasked to respond to a foreign disaster.

This poster will outline what we consider the “geometry” of successfully training military actors to respond appropriately to disasters that is built upon three angles: Communication, Coordination, and Cooperation. As part of this preparation, education and training events are recommended that include disaster exercise scenarios and planning input and participation from subject matter experts. The poster will examine training strategies, points of contact, and best practices for building a holistic, integrated, and prepared disaster management coordination plan.

20. Nursing Care of Severe Acute Respiratory Syndrome and Middle East Respiratory Syndrome

Meghan Schlosser
Kimberly Jeffries
Melissa Hubbard

In the last decade, two coronaviruses have emerged with the potential to cause a devastating epidemic. The majority of coronaviruses are not life threatening and merely cause the annoying but not deadly symptoms of the common cold. Severe Acute Respiratory Syndrome (SARS), however, can easily be fatal with a 20% mortality rate that increases to 50% over age 65. Middle East respiratory syndrome (MERS Co-V) is believed to have originated in countries near the Arabian Peninsula in 2012 and has a mortality rate greater than 50%. MERS Co-V is the newest form of SARS, with similar symptoms such as cough, fever, and shortness of breath. Both illnesses are highly contagious and have potential to cause a pandemic. The symptoms tend to mimic the flu or pneumonia but can deteriorate quickly into acute respiratory distress syndrome (ARDS). Safely having a place to isolate, manage, and care for these patients is essential. The core mission of the Special Clinical Studies Unit (SCSU) includes caring for patients who have been exposed to an emerging infectious disease and/or epidemic threat such as SARS and MERS Co-V. As nurses, our job is to follow evidence-based guidelines in order to provide the best care for this special patient population. Because this is an emerging pathogen, research on treatment and management is very limited. This poster will address state of the art care of the patient exposed to SARS and/or MERS Co-V with emphasis on the care guidelines and isolation requirements.

21. Improving Competence within the Preparedness & Response Workforce through TRAIN

Erin Bougie
Samantha Draper

TRAIN, the nation’s premier learning management network for professionals who protect the public’s health, provides a venue through which preparedness and response agencies and organizations can access web-based learning courses and resources. Consisting of 28 affiliates (25 state agencies and 3 federal partners), TRAIN was developed in 2003 in response to state requests for training that would efficiently prepare the public health workforce for disasters and emergencies. TRAIN currently has over 800,000 registered learners who can access over 29,000 courses posted by nearly 4000 course providers.

TRAIN supports the training needs of health departments, states, and national organizations to promote competency-based training for the public health and first responder workforces responsible for emergency preparedness. TRAIN encourages the utilization of competency-based preparedness training by integrating the Public Health Preparedness (PHEP) Capabilities and the Public Health Preparedness and Response (PHPR) Core Competencies into the system. These competencies and capabilities, which standardize public health preparedness and its training, allows health departments to evaluate current gaps and develop plans to utilize resources to ensure that communities continue to be prepared at optimum levels.

This poster will illustrate the growing TRAIN network and will provide examples of courses available to the preparedness and response workforce with the PHEP Capabilities and/or PHPR Competencies assigned to them. Additionally, this poster will showcase how disaster and emergency preparedness organizations can apply to become a course provider on TRAIN and post their own courses, conferences, and training plans to the TRAIN community.