

## 2019 USPHS Symposium Track 1 Agenda

**Tuesday, May 7**

Track 1

1:30 PM - Essential Considerations for Cultural Humility for Public Health Responders: A Services Access Team Perspective

***LCDR Iman Martin, Ph.D M.Sc. MPH; LCDR Fahad Alsayyid, MLS (ASCP)***

Background: The breadth and depth of 'culture' conceptually is reflected in its numerous definitions including: "ideas, beliefs, expectations and behaviors that are shared by a particular group of people". Public Health Responders must acknowledge that we, and those we serve, draw upon our cultural perspectives during emergencies. National and international public health and emergency response missions have increased over the past 5 years. During 2013-2018, Officers deployed ~6,000 times, contributing ~116,000 deployment-days to over 110 unique missions. 2017 had the largest number of deployments; more than 2,250, primarily supporting national responses to diverse populations impacted by hurricanes Harvey, Irma Maria. Services Access Team (SAT) 5, for example, deployed 37 officers for ~868 days to that mission alone. SATs see firsthand that one's culture serves as the lens through which stressors are perceived and understood.

Description: The SAT mission includes: Shelter and Needs Assessments, Clinical Care Coordination, Psycho-Social Management, and Reintegration. SAT responders are partners in wellbeing and resilience during and after an emergency. Our presentation will provide current definitions of culture, and present the conceptual principles of the cultural competency continuum. Didactic examples of cultural competence principles: engagement, respect, communication, and understanding, crucial to facilitating symbiotic culturally sensitive SAT responder-community member interactions, will be presented.

Techniques for critical self-reflection during intercultural interactions will be demonstrated.

Lesson Learned and Recommendations: As Public Health responders, our excellence during response will depend in part, on our ability to provide culturally compassionate care. Resources for further cultural competence training will be provided.

At the conclusion of this session participants will be able to:

1. Define culture and describe cultural competence principles, including: engagement, respect, communication, and understanding necessary to facilitate a symbiotic culturally sensitive encounter.

2. Identify methods of responder introspection in applying culturally compassionate care during a Services Access Team response.
3. Demonstrate tactics to improve cultural humility through critical self-reflection and sharing where to seek further resources for a lifelong-commitment to culturally competent public health practice.

Track 1

2:00 PM -  
Facilities

2:30 PM

A High Consequence Infectious Disease Toolbox for Frontline Health Care

***CAPT Rajal Mody, MD, MPH; Ms. Mary Ellen Bennett, MPH, RN, CIC***

Background:

We live in a world where people travel the globe and pathogens evolve - forces that make all health care facilities vulnerable to the risks of High Consequence Infectious Diseases (HCID) that are easily transmissible, highly fatal, and thus far, not preventable through vaccination. A patient with a HCID could present at any facility that provides acute care, including emergency departments, critical access hospitals, urgent care clinics, and primary care settings.

Methods:

To prevent disease spread, these facilities must be prepared to identify and isolate persons with a potential HCID and inform others to ensure a coordinated response. These critical functions are challenging because patients with HClDs typically present with signs and symptoms that are indistinguishable from more common illnesses. Furthermore, given the rarity of HClDs, it is difficult to prioritize HCID preparedness over other infection control needs. Given these challenges, the Minnesota HCID collaborative developed a toolbox to help facilities prepare for HClDs in a manner that is integrated into their routine infection control practices and trainings.

Results:

The core of the toolbox is a HCID screening algorithm that can be integrated into routine clinical workflows. This algorithm is combined with simple planning, training, and exercise tools. In addition, an HCID Readiness Binder has been created which contains point-of-care tools and guidance to aid responses to any suspect HCID situation.

Conclusion:

In this presentation we will describe the components of this freely available toolbox that facilities can use and modify to ensure preparedness components are in place.

At the conclusion of this session participants will be able to:

1. Describe what types of infections are high consequence infectious diseases (HCIDs).
2. Describe why preparedness for HCIDs should be incorporated into routine infection control practices.
3. Apply publically available tools to help healthcare facilities prepare for HCIDs.

#### Track 1

2:30 PM - Outbreaks on the High Seas: Solving Acute Gastroenteritis Outbreaks through International, 3:00 PM Industry, and Public Health Partnerships

***LT Erin Kincaid, MPH, REHS; LCDR Keisha Houston, DrPH***

Background: From July 1 until August 2, 2017, six passenger cruise ships from the same cruise line experienced multiple acute gastroenteritis (AGE) outbreaks. All vessels sailed from Vancouver, Canada to various Alaskan ports. The U.S. Centers for Disease Control and Prevention's (CDC) Vessel Sanitation Program (VSP) partnered with the U.S. Food and Drug Administration (FDA), Public Health Agency of Canada, and the cruise line to conduct environmental health assessment and epidemiologic investigations, test clinical and environmental samples, and provide sanitation and food safety guidance.

Description: One of the six vessels experienced AGE outbreaks on three consecutive voyages. On August 4, an interdisciplinary inspection team of Scientist and Environmental Health (EH) Officers boarded the ship to conduct a retrospective cohort study and EH assessment. The team identified a recall of norovirus contaminated frozen raspberries in Canada that the ship had provisioned in Vancouver prior to the outbreaks. CDC's Calicivirus laboratory confirmed norovirus in clinical specimens and FDA confirmed the same strain of norovirus in frozen raspberries collected from the ship.

Lessons Learned: Partnerships between U.S. and international agencies and industry is critical to timely identification of outbreak exposures to stop the spread of illness. Open lines of communication across agency and geographic boundaries is key to identifying outbreak sources to prevent and control the spread of illness.

Recommendations: Enhanced communications and information sharing about food recalls around the globe can help prevent and control outbreaks in an increasingly mobile global community.

At the conclusion of this session participants will be able to:

1. Identify key community, industry, and international partners that work together to solve acute gastroenteritis outbreaks on cruise ships.
2. Name three ways epidemiologic and environmental health information can help to determine the source of the cruise ship outbreaks.
3. Describe the complex, fast paced, multi-faceted investigation strategy used to identify the cause of the AGE outbreaks described in this case study.

#### Track 1

3:00 PM - Development of an Emergency Preparedness and Response Plan for ICE Health Service Corps  
3:30 PM Pharmacy: A Partnership with the IHSC Public Health, Safety, and Preparedness Unit

***CDR Stephanie Daniels-Costa, PharmD, MPH, BCACP***

The ICE Health Service Corps (IHSC) Pharmacy Department lacked an emergency preparedness and response framework to enable continuity of operations during adverse operating conditions. IHSC provides pharmaceutical care services to over 250,000 immigration detainees annually at 16 facilities nationwide. The secure environment and remote locations pose unique challenges that require consideration during emergency planning, especially for events that can impact the ability to provide medical care beyond an initial mass-casualty response.

IHSC pharmacy leadership cooperated with the Public Health, Safety, and Preparedness (PHSP) unit to develop an emergency preparedness and response plan based on literature review, interviews with pharmacist emergency responders, and survey data from the IHSC's field pharmacists to assess individual facility vulnerabilities to potential hazards, technology and equipment needs, and pre-established preparedness efforts. The survey results indicated that IHSC pharmacists were less than fully prepared to maintain operations during adverse conditions. 11 of 16 facilities (68.8%) reported 1 equipment need, and only 8 pharmacists (47%) reported being involved with preparedness planning at a local level.

PHSP leadership identified the four primary response scenarios that required contingency planning: interruption of critical resources (power +/- network connectivity), evacuation, shelter-in-place, and critically low staffing levels, which may occur sequentially and/or concurrently. IHSC pharmacy leadership worked with the PHSP Unit to develop appropriate plans to mitigate, prepare for, respond to, and recover from the most likely major hazards, including equipment procurement, development of

training, and inclusion of the continuity of operations framework in the 2018 revisions to IHSC pharmacy policy.

At the conclusion of this session participants will be able to:

1. Identify the major elements of both the preparedness cycle and the emergency management cycle
2. Describe the response plan scenarios that can affect capability to provide medical care
3. Summarize the major plan elements that can enable pharmacy staff to provide pharmaceutical care with minimal interruptions during challenging circumstances

#### Track 1

3:30 PM - A behind the scenes look at a Corps deployment

4:00 PM ***CDR Robert Horsch, PHD, MPH, CIH, REHS***

This presentation will review the inner workings of the deployment process allowing for a more thorough understanding by all officers. For many, a surface look at a deployment includes the notification through an email, travel ticket, many phone calls, deploying and returning from deployment. However, this presentation will cover the critical actions occurring prior to, during and post deployment along with agencies collaborating to ensure the officer and the mission are successful (RedDOG, ASPR, DCCPR, Corps Care, ASH, etc.). In order for one officer to deploy, execute and return successful, multiple agencies/offices are involved in mobilizing that officer. During deployment and upon return supportive services are implemented to provide further assistance to complete the demobilizing process.

At the conclusion of this session participants will be able to:

1. Explain the deployment process for officers.
2. List resources available to officers prior to, during and after deployment.
3. Describe RedDOG's multifaceted role in the deployment process.

#### Track 1

4:00 PM - Collaborative Countermeasures: How establishing intergovernmental relationships improved 4:30 PM emergency preparedness and response capacity for a metropolitan federal facility.

***LCDR Patrick Harper, PharmD, MPH, CPH; LT Jonathan Fenner, PharmD, BCPS***

Background

Secure federal facilities represent a unique challenge during public health

emergency response because individuals within such an institution cannot leave to access necessary countermeasures that are available to the public. Therefore, personnel at Metropolitan Correctional Center Chicago (CCC) collaborated with Chicago Department of Public Health (CDPH) and CDC officials to establish an agreement allowing the distribution of medical countermeasures in a manner that was compatible with the secure facility setting.

#### Description

CCC entered into agreement with CDPH to be recognized as a Federal Closed POD for receipt and internal distribution of Strategic National Stockpile (SNS) assets. CCC subsequently participated in a medical countermeasure (MCM) distribution and dispensing full scale exercise (FSE) with CDPH, testing the SNS asset deployment process utilizing "dummy crates" and the institution's internal distribution process utilizing annual influenza vaccinations as a surrogate for SNS MCMs.

#### Lessons Learned

CCC participated in a MCM distribution FSE in 2016 in collaboration with CDPH. It took 30 minutes for SNS assets to be delivered by CDPH and processed by CCC HSU. Six HSU then teams distributed assets to the entire institution in 5 hours. Distribution contacts were tracked via consent/refusal forms. 107 staff members were contacted. Staff contact rate not be calculated. 584 of 634 inmates were contacted representing a 92% contact rate.

#### Recommendations

Establishing a relationship with local stakeholders to become a Federal Closed POD represents a high value, low to moderate input opportunity to expand intergovernmental cooperation while simultaneously addressing important public health emergency response needs.

At the conclusion of this session participants will be able to:

1. Identify key community stakeholders and opportunities for collaboration in order to establish successful partnerships in emergency preparedness and response.
2. Identify and assess possible barriers to intergovernmental collaboration in emergency preparedness and response.
3. Explain the relationship between the CDC, the Strategic National Stockpile, local Departments of Public Health, and local federal entities during emergency response involving medical countermeasure distribution, including the difference between Open and Closed Points of Dispensing.

**Thursday, May 9**

Track 1

- 9:15 AM - Hurricane Maria Response and Recovery in Puerto Rico: Developing Comprehensive Disaster
- 9:45 AM Assessment and Readiness Tools for preparedness activities and use during disaster response and recovery

***LCDR Elizabeth Irvin-Barnwell, PhD***

As part of the Hurricane Maria Response in Puerto Rico, the Comprehensive Disaster Assessment and Readiness Tools (CDART) Team developed and piloted app-based environmental assessment tools used to determine operational status at local health care facilities. Building upon the initial work, the CDART Team, in collaboration with Puerto Rico Department of Health (PRDOH), Department of the Family (PRDF), and Planning Board (PRJP), is developing a suite of tools for preparedness, response, and recovery activities.

After determining the significant amount of time required for data entry, the CDART team developed app-based surveys resulting in a savings of one hour per assessment. As part of the continuing recovery activities, the CDART Team collaborated with PRDOH, PRDF, and PRJP to develop a suite of tools to determine preparedness status and conduct post-disaster assessments for specific facility types, including health care, elder care, and senior living facilities.

In addition to the data entry time savings and reduced data entry errors, the expanded CDART portfolio provides territory partners with enhanced capabilities to routinely collect facility preparedness information and quickly determine operational readiness for rapid response during and post-disaster. The CDART platform provides real-time information allowing for increased situational awareness.

The app's GIS capabilities were deemed extremely important allowing multiple partners to have visibility on daily activities. The CDART portfolio will decrease duplication of effort and respondent fatigue and increase efficiency and data quality while allowing for real-time presentation of key information to response leadership for preparedness activities and during the disaster response and recovery phases.

At the conclusion of this session participants will be able to:

1. Discuss an innovative approach to data collection during emergency response and recovery
2. Describe a federal government and territory partner collaboration that built capacity within Puerto Rico
3. Identify enhanced capabilities for emergency preparedness, response, and recovery activities

Track 1

9:45 AM -  
Planning

10:15 AM

Returning Home: How one RDF/State Partnership Creatively Managed Discharge

During Hurricane Florence

***CDR Keren Hilger, MD; CDR Sharyl Trail, PsyD***

This presentation will offer methods to use flexible RDF assets and state/local collaborators to initiate discharge planning at time of admission. This greatly enhances timely and successful patient discharges, regardless of whether discharge planning occurs with RDF members and/or SAT officers.

RDF 3 responded to Hurricane Florence in North Carolina (NC) in September 2018. The mission was a blended state/federal response providing care in a NC state-run Medical Shelter. Service Access Teams were not deployed; therefore, RDF 3 team members collaborated with state/local assets to ensure displaced individuals were discharged from the shelter in a timely manner with adequate resources.

The RDF 3 Mental/Behavioral Health Team was identified to serve as discharge planners, with a Licensed Clinical Social Worker leading the team. The team functioned as liaisons with state/local assets to confirm which facilities could accept patients, collect patient information, assist with insurance verification and placement options. Additional RDF team members were recruited mid-way to assist with patient data collection and other discharge planning duties. The Chief Medical Officer, Mental/Behavioral Health Supervisor and NC state collaborators, organized and facilitated twice daily discharge meetings to discuss each patient and placement challenges.

There are critical elements for successful and timely discharges: 1)collaborating with state/local assets and 2)initiating the discharge process as soon as possible by collecting data from patients/families/caregivers. RDF teams should identify team members from any discipline with experience in discharge planning. Lastly, establishing a clinical lead during this mission can help to facilitate the needs assessment dialogue.

At the conclusion of this session participants will be able to:

1. Identify roles for both Rapid Deployment Force (RDF) and state assets necessary to successfully discharge patients back to the community.
2. Develop a Discharge Plan model that starts at admission and can be applied to deployments with and without Service Access Team (SAT) assets.

3. Apply detailed discharge workflows, especially when working with vulnerable populations in need of supported or skilled nursing placement, at future FMS missions.

Track 1

10:15 AM - Hurricane Florence: Building Partnerships and Utilizing Multiple Media Platforms to Provide a  
10:45 AM Voice to USPHS Deployments

**LCDR Clara Stevens Clara Stevens, PT, DPT, MPH, OCS**

Rapid Deployment Force (RDF) 3 deployed to North Carolina in response to Hurricane Florence in September 2018. The team supported the state of NC in providing medical care and services to the affected population and their caregivers in a medical shelter housed in a mega-church in Clayton, NC. The deployment presented unique challenges as well as opportunities to build partnerships with local non-governmental organizations, other federal/state personnel, and faith based organizations. Under guidance from the Public Affairs Officer of the Assistant Secretary of Preparedness and Response (ASPR) and the Commissioned Corps, the Public Information Officer (PIO) communicated the activities of the deployment in several ways. She facilitated interviews with local television news stations, an online healthcare news journal, generated frequent reports (including pictures) for the Assistant Secretary for Health and Human Services to bolster positive media images of the Corps in action and created social media postings. The PIO also reinforced a social media policy within the shelter to respect the privacy of the patients and caregivers. This presentation will focus on highlighting the unique partnerships formed during this deployment. In addition, it will discuss the role of social media and partnerships with the media to bring better visibility to the commissioned corps and the deployments in which we serve.

At the conclusion of this session participants will be able to:

1. Discuss the roles and duties of the Public Information Officer during USPHS deployments.
2. Explain the importance of having a social media policy for USPHS deployments.
3. Apply knowledge learned to create successful future partnerships during USPHS deployments.

Track 1

10:45 AM - After the Storms: Applying the 10 Essential Public Health Services Framework for Strategic  
11:15 AM Community Recovery and Population Health Risk Reduction

**CAPT Hugh Mainzer, M.S., D.V.M., Dipl. ACVPM**

Following a naturally occurring or technological disaster, locally-led recovery efforts to address public health priorities in disaster-impacted jurisdictions requires interagency coordination. In recent years, the excess mortality associated with landfall of major hurricanes suggests that being an adult of 65 years of age or older, having a low socioeconomic residents, and chronic health conditions makes persons more vulnerable. These at-risk populations are often impacted by function-based and access-based needs, and during and after a disaster, have additional direct health systems assistance requirements. Recovery efforts are traditionally concerned with actions that involve rebuilding destroyed property, re-employment, and repair of the infrastructure with the goal to return the community to normal or near-normal conditions. When high winds result in a loss of electrical power, assistive devices and communication services, as well as access to and delivery of basic needs services such as water, food, and shelter supplies are impacted. Excess mortality and morbidity can be either a proximal or indirect result of the storm. Using the emergency management cycle as a construct and reviewing experiences during joint Health and social services recovery activities following the impact of Hurricane Maria in Puerto Rico, we will discuss how to cultivate community resilience, and strengthen the public health systems infrastructure post-disaster. The 10 Essential Public Health Services framework will be discussed in the context of community action, the National Recovery Framework and core public health functions to ensure that both National Public Health Performance Standards and sustainable public health emergency preparedness expectations are achieved.

At the conclusion of this session participants will be able to:

1. Identify key public health opportunities to strengthen partnership within and outside the public health disaster recovery sector to address community wellness priorities
2. Identify opportunities to network and collaborate in efforts to take steps to improve the public, health after an environmental threat or natural disaster.
3. Engage in discussion regarding ways to leverage existing programs to assist in responding to a large-scale and complicated public health emergency.

Track 1

2:15 PM -

2:45 PM

Collaborations between NDMS and PHS Commissioned Corps

***LCDR Roberto Garza, MPH, MPA; CDR Elizabeth Degrange, MFS, MSEM***

With increasing requests for health and medical support, the National Disaster Medical System (NDMS), which is, by statute, a collaboration

between the HHS, DoD, DHS, and VA, leverages partnerships to execute its missions. The U.S. Public Health Service Commissioned Corps (Corps) and the intermittent disaster responders from NDMS are two of the most important resource providers for HHS leadership of federal Emergency Support Function 8 (ESF-8) Public Health & Medical support of states/territories. During response operations to natural disasters and public health emergencies, teams that include Rapid Deployment Forces (RDFs), Disaster Medical Assistance Teams (DMATs), and Service Access Teams (SATs) are often the tip of the spear, initiating direct clinical care through emergency department decompression, care in shelters, safe patient movement, and responder force health protection. In recent disaster responses, Corps officers and NDMS staff have worked collaboratively, sometimes as separate teams working together, sometimes in blended teams, to execute medical missions. This session will review recent missions where Corps and intermittent DMAT responders collaborated, and provide recommendations on potential ways in which these two entities can continue to work together more efficiently. This session will also provide Corps officers with critical knowledge on how ESF-8 missions are staffed, thus improving their ability, and the ability of their Corps teams, to participate in future ESF-8 missions. As HHS continues to lead ESF-8 responses, it is important to strengthen collaboration/synergy between partners to ensure the federal government has the best possible public health and medical capabilities to support communities in need.

At the conclusion of this session participants will be able to:

1. Describe the history and statutory authority of HHS' two major public health and medical resource providers
2. Describe ways in which the Corps and intermittent responders can improve collaboration to increase HHS' capabilities to meet ESF-8 mission objectives
3. Improve the ability of individual officers to increase participation in future ESF-8 missions

Track 1

2:45 PM - Taking Care of Our Own: Promoting Resiliency in Emergency Response and Beyond at the CDC

3:15 PM

***CDR Jennifer Bornemann, LCSW-C***

The definition of resiliency used at the CDC and developed by the former Chairman of the Joint Chiefs of Staff ADM Michael Mullen, is "the ability to withstand, recover, and grow in the face of stressors and changing demands." CDC staff are regularly tasked with tackling public health emergencies and diseases throughout the world, often subjecting them

to austere conditions and potential traumatic exposures. Recognizing the need to develop staff resiliency, a program was stood up during the 2014-2015 Ebola crisis. The program is now expanding to proactively support resiliency efforts in order to build a stronger organization through targeted assessments, interactive programming and a robust communication plan in order to expand our reach. In addition, all training and programming conducted through this program use a trauma-informed approach in acknowledgment of trauma and to avoid instances of re-traumatization. An added component is the development of an evaluation plan that would provide regular feedback to the program as well as examine the overall health and resiliency of the agency.

At the conclusion of this session participants will be able to:

1. Describe how this example may inform a potential need within your agency for fostering a community of resiliency.
2. Identify key stakeholders who could influence the development of such a program.
3. Apply lessons learned from this presentation and discussion to further explore and develop a program at your agency.

#### Track 1

3:15 PM - Super Bowl LII. A multiagency approach to food safety and food defense for America's big  
3:45 PM game.

***Ms. Cindy Weckwerth, REHS; Mr. Bob Becker, REHS***

Super Bowl LII was held in Minneapolis in February 2018. The Minneapolis Health Department (MHD) led a team of six cities, three counties and two state agencies in collaboration with the FDA, FBI and FSIS to create a new model for how local agencies approach food safety and food defense for large, national events in their jurisdiction. MHD and partners utilized the FDA's risk-based food flow model for food safety monitoring. Utilizing commonly developed inspection documents and protocols, MHD and partners created a seamless food safety program that ensured food served at official events were safe regardless of where they were prepared or served. The Super Bowl is a SEAR I event, the nation's highest security level under local, non-federal control. With support from the FDA, FBI and the Food Protection and Defense Institute, and in partnership with local law enforcement, MHD developed new protocols for food defense. A system of unified command was implemented during the 10-day operational period. Operation partners was represented at the Multi-Agency Command Center (MACC) allowing instant access to law enforcement, Fire, EMS, DOT and other agencies. Partners reported in with a daily phone call and daily reports uploaded to

a secure shared site established for the operation and hosted on the Homeland Security Information Network (HSIN). Several food defense and food safety issues were identified and mitigated by the partners during the event. No food borne diseases or injuries were reported.

At the conclusion of this session participants will be able to:

1. Explain the use of a risk-based food flow inspection approach to large events.
2. Explain the importance of coordination among multiple governmental agencies during a high profile SEAR I event.
3. Describe food defense risks and methodologies for addressing these risks at large events.

Track 1

3:45 PM -  
Program

Radiological Emergency Response Capacity Building: EPA's Radiation Source

4:15 PM

***LT Steven Merritt, CIH; CAPT John Cardarelli, II, PhD, CHP, CIH, PE***

EPA has a variety of specialized chemical and radiation detection equipment aboard the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft. To calibrate and maintain this unique measurement capability, EPA possesses a number of licensed high-activity radiation sources. Recognizing inadequate radiological response expertise and the need for high-quality radiation response training community, EPA initiated the Radiation Source Program (RSP) to make sources accessible to response partners. The RSP provides these radiation sources along with qualified radiation safety personnel to DHS and DoD to build capacity nationwide. The EPA RSP has deployed health physicists with gamma and neutron sources to over 80 training events from Guam to Puerto Rico, providing unparalleled training to over 1,750 response personnel.

The program, staffed by technical personnel throughout EPA and arrayed to support regional deployments, has rapidly grown through effective partnerships and networking. It has also enhanced EPA's readiness. The authorized users are required to participate in an in-depth training program, to review and demonstrate knowledge of the radiation safety procedures outlined in the NRC license, and to complete a hazardous materials shipping course. These rigorous requirements have sharpened skills and improved the reach-back network within EPA. The authorized users have also gained practical expertise in instrument use, dosimetry, and applied radiation safety as they've taught others how to properly characterize, triage, survey, and mitigate radiation hazards.

The RSP is a model for sustainably building bridges between competing organizations, using available resources efficiently, and sharing technical expertise to enhance domestic preparedness for radiation emergencies.

At the conclusion of this session participants will be able to:

1. Describe the mission and capabilities of the ASPECT and Radiation Source Programs.
2. Identify the unique advantages of training and exercising with multiple high-activity radiation sources.
3. Apply lessons learned from the development and implementation of the Radiation Source Program to similar emergency preparedness and capacity building efforts.