Treating Patients with Highly Contagious Infectious Diseases: Using Technology to Advance Safety

APRIL 6, 2016

DATE & LOCATION
April 6, 2016
WWAMI Institute for Simulation in Healthcare (WISH) at Harborview Medical Center
Ninth & Jefferson Bldg.
Room 3NJB365
908 Jefferson Street
Seattle, WA 98104
Phone: 206-685-4747
http://isis.washington.edu/

REGISTRATION
Register online at osha.washington.edu or by calling the Northwest Center at 206-543-1069.
Standard Registration: $100
Students: $50

INFORMATION
206-543-1069 or 800-326-7568
ce@uw.edu
osha.washington.edu

In collaboration with the Institute for Simulation and Interprofessional Studies at Harborview Medical Center and the Carilion Research Institute at Virginia Tech University

Healthcare workers and public health officials—particularly those treating patients extremely ill from a highly contagious agent such as the Ebola virus—must be well-prepared and thoroughly trained for the next outbreak of an emerging infectious disease and have the tools to protect themselves while providing patient care.

This course will offer a basic hazard analysis of various infectious agents and present a framework for mobilizing a public health and hospital response with a focus on occupational safety. Attendees will be introduced to a risk assessment approach for developing work practices, share new communications and training tools, and be offered hands-on simulated practice opportunities. Certain high risk medical procedures performed while wearing maximum personal protective equipment will be discussed and practiced by participants to minimize healthcare worker exposure.

COURSE OBJECTIVES
Upon course completion participants will be able to:

• Describe 3 key factors involved in the development of infectious disease response systems
• Define the purpose of an infection prevention risk assessment
• Describe 5 challenges associated with healthcare worker safety in an emerging healthcare crisis
• Discuss 3 key steps of creating a Failure Mode Effects Analysis risk assessment approach and recognize its potential application to high risk healthcare processes
• Apply event-based simulation design technique when training high risk procedures during practices simulations
• Incorporate 3 TeamSTEPPS (Team Strategies and Tools to Enhance Performance and Patient Safety) principles into the care of patients with highly contagious infectious diseases during practice simulations
• Recognize 2 high risk patient care activities associated with patients diagnosed with highly contagious infectious diseases
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**AGENDA APRIL 6, 2016**

7:30–8:00 am  
**Registration**

8:00–8:15  
**Welcoming remarks** (Course Co-Directors)  
Rosemarie Fernandez, MD  
John Scott Meschke, JD, MSES, PhD

8:15–9:15  
**Responding to the Challenge: Understanding the Need to Mobilize Personnel to Respond to an Infectious Disease Emergency**  
John Lynch, MD, MPH  
Steve Mitchell, MD

9:15–10:15  
**Worker Protection, Hazard Analysis, and Risk of Infectious Agents**  
John Scott Meschke, JD, MSES, PhD

10:30–11:00  
**Using Virtual Reality to Develop Hospital Protocols**  
Dmitri Bouianov

11:00–12:00  
**Lessons Learned from the CDC: Adapting Highly Specialized Protocols for a Local, Frontline Response**  
Debra R. Metter, BSN, MN, CCRN, CCNS

12:00–12:45  
**Lunch**  
*Speaker TBD*

1:00–1:30  
**SHIP (Safety and Health Investment Project): Application of Failure Mode Effects Analysis to Occupational Health**  
Sarah Parker, PhD

1:30–1:45  
**SHIP: Design of Event-based Simulations to Train High Risk Procedures**  
Rosemarie Fernandez, MD

1:45–2:15  
**Leveraging the TeamSTEPPS Framework to Support Communication and Safety During High Risk Patient Care Activities**  
Ross Ehrmantraut, RN, HRET Senior Fellow

2:15–4:45  
**Workshops: Hands-on Skill Practice for High-risk Procedures**  
Attendees will participate in 1 of the 2 workshops. Participants will don and wear high level PPE, appropriate attire is recommended.

**A. Hitting the ABC’s: Airway Management and IV Access**  
Rosemarie Fernandez, MD  
Ross Ehrmantraut, RN  
1. Donning PPE  
2. Airway management, IV access  
3. Virtual reality participation exercise  
4. TeamSTEPPS, communication exercise

**B. The Unspoken Challenge in Ebola Patient Care: Fecal Management and Linen Changes**  
Steven Mitchell, MD  
Debra Metter, BSN, MN, CCRN, CCNS  
1. Donning PPE  
2. Fecal management/ Rectal tube  
3. TeamSTEPPS, communication exercise  
4. Virtual reality participation exercise

4:45–5:00  
**Wrap up and evaluation**

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Funding for this course is provided by Washington State Department of labor & Industries, Safety and Health Investment Project (2014XH00293-K-1901).
ACCREDITATION
CME and CNE are available for this activity. Please visit osha.washington.edu for full accreditation and disclosure details.

INTENDED AUDIENCE
Healthcare providers, infection control practitioners, occupational health professionals, public health professionals, hospital administrators and operations staff

COURSE FACULTY
Dmitri Bouianov, CEO, Context VR
Ross Ehrmentraut, RN, HRET Senior Fellow, TeamCORE Clinical Manager, UW Medicine WWAMI Institute for Simulation in Healthcare
Rosemarie Fernandez, MD, Associate Professor- Emergency Medicine, UW School of Medicine, Harborview Medical Center (HMC)
John Lynch, MD, MPH, Associate Professor- Medicine, Medical Director of Infection Prevention * Employee Health, UW School of Medicine, HMC
John Scott Meschke, JD, MS, PhD, Assistant Professor- Environmental and Occupational Health Sciences, University of Washington School of Public Health
Debra R. Metter, BSN, MN, CCRN, CCNS, Ebola Response Team, Trauma & Critical Care Clinical Nurse Specialist, UW Medicine, HMC
Steve Mitchell, MD, Assistant Professor- Emergency Medicine, Acting Medical Director- Emergency Department, UW School of Medicine, HMC
Sarah Parker, PhD, Research Assistant Professor, Carilion Research Institute, Virginia Tech University

COURSE DIRECTORS

John Scott Meschke, PhD, MS, JD
Professor, Department of Environmental and Occupational Health Sciences University of Washington School of Public Health

Dr. Meschke is an environmental and occupational health microbiologist, specializing in the fate, transport, detection, and control of pathogens in environmental media (Air, Water, Food, and Surfaces). Dr. Meschke's research focuses heavily on the transmission and movement of pathogens, and how risks can be reduced.

Rosemarie Fernandez, MD
Associate Professor, Emergency Medicine Harborview Medical Center University of Washington School of Medicine

Dr. Fernandez is the Associate Director for Education at the UW Medicine Center for Scholarship in Patient Care, Quality, and Safety. Dr. Fernandez completed a Patient Safety Leadership Fellowship at the AHA-National Patient Safety Foundation in 2011. Dr. Fernandez is an expert in creating care environments that are safe and effective for patients and care providers alike.
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