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
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  Steven 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
David Townes, MD, MPH, DTM&H

12:00–12:45  Lunch

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 divide into groups and rotate through the following stations, wearing high-level PPE through most of the workshop.*

1. Donning High Level PPE
2. Event-based Simulations: Common Clinical Procedures
   Airway Management, IV Access, Rectal Tube Placement
3. Virtual Reality Participation Exercise
4. TeamSTEPPS and Communication Exercise

*Appropriate attire for wearing BSL3-type PPE is recommended

4:45–5:00  Wrap up and evaluation

Funding for this course is provided by Washington State Department of labor & Industries, Safety and Health Investment Project (2014XH00293-K-1901).
ACCRREDITATION
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 and 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
Steven 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
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.

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. She is an expert in creating care environments that are safe and effective for patients and care providers.
To request disability accommodation, contact the Disability Services Office at least 10 days in advance at: 206-543-6450 (voice); 206-543-6452 (TDY); 206-685-7264 (FAX); or dso@u.washington.edu (e-mail)