



Clinical Biosafety Awareness Course

This one-hour on-line program is taught by Dr. Alex Isakov, an emergency medicine and EMS physician, who is the medical director for the Emory-Grady EMS Biosafety Transport Program. The target audience for the course is EMS providers of all types/levels/certifications as well as any other clinical personnel who may be exposed to patients with serious communicable diseases. The course aims to increase awareness about standard and transmission based infection control practices, and considers some past and present high consequence infectious diseases like SARS (Severe Acute Respiratory Syndrome), MERS (Middle Eastern Respiratory Syndrome), novel influenza viruses, like H5N1, and seasonal as well as pandemic influenza. By increasing awareness about timely and relevant infectious disease threats and reviewing infection control practice, healthcare workers can better protect themselves in the workplace.

Course Learning Objectives

1. Review standard and transmission based infection control measures used to protect healthcare workers from communicable pathogens.
2. Review select past and present illnesses (novel influenza, SARS, MERS) with a focus on the natural course of illness, available vaccines and treatment, and considerations for prevention of transmission of the disease to the healthcare worker.
3. Increase awareness and knowledge of select high-consequence diseases in the workplace and the procedures necessary to protect the healthcare worker in their workplace.

Module 1 – Infection Control

Upon completion of this module, the learners should be able to:

1. Distinguish between standard and transmission-based precautions for



- infection control.
2. Understand the tenets of standard and transmission-based infection control procedures that include environmental controls, engineering controls and personal protective ensembles.
 3. Recognize infectious pathogens that require transmission based precautions: contact, droplet, and airborne.

Module 1 Readings and Resources

Precautions to Prevent Transmission of Infectious Agents

Key Tips to Washing Hands

Module 2 – Novel Coronavirus SARS and MERS

Upon completion of this module, the learners should be able to:

1. Describe the symptoms and methods of person-to-person transmission of the novel coronaviruses causing SARS and MERS.
2. Describe factors that increase the likelihood of human-to-human transmission of SARS and MERS in clinical settings.
3. Identify ways to recognize patients who are at risk of having MERS.
4. Describe the importance of prescribed donning and doffing procedures for PPE and how these procedures protect the healthcare worker.
5. Identify aerosol-producing procedures and describe their role in transmission of disease.
6. Describe appropriate infection control measures that protect healthcare workers caring for patients suspected of having MERS.

Module 2 Readings and Resources

SARS

MERS



News Report: SARS Outbreak Among Protected Health-Care Workers in Toronto, Canada

Module 3 – Novel Influenza and Pandemic

Upon completion of this module, the learner should be able to:

1. Distinguish between seasonal and pandemic influenza viruses.
2. Identify medical conditions that increase the chance of complications in patients acquiring influenza.
3. Discuss strategies to prevent transmission of the flu, including the benefit of vaccines.
4. Describe the rationale for selection of PPE to protect against novel influenza viruses.
5. Describe treatment options for management of the flu.

Module 3 Readings and Resources

Pandemic Basics

Influenza (Flu)

Module 4 – Identify, Isolate and Inform

Upon completion of this module, the learner should be able to:

1. Describe a strategy to screen patients for possible serious contagious diseases
2. Describe strategies to isolate the patient with the goal of preventing unprotected exposure to the patient's body fluids
3. Describe the benefits of informing other responders, supervisory personnel and public health officials about patients suspected of having a serious contagious disease
4. Identify standards that are in place to help ensure a safe work environment for the healthcare worker



Module 3 Readings and Resources

Identify, Isolate and Inform

Using Identify, Isolate and Inform to identify and manage measles patients

This course can be found at:

<http://www.canvas.net/browse/emory/courses/clinical-biosafety-awareness>

The slides can be found at:

<https://www.dropbox.com/s/61eat0stptamsw9/CLINICAL%20BIOSAFETY%20AWARENESS%20COURSE%202017.pdf?dl=0>