

Keeping Up With the Krisis

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Financial Disclosures

- ▶ Bruce S. Ribner, MD, MPH
 - ▶ I have no disclosures relevant to this presentation.



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Learning Objective

- ▶ Describe when preparation and containment efforts should be ramped up or stepped down

Goals

- ▶ Roles and responsibilities of healthcare facilities in ID emergencies
- ▶ When/how often to hold drills/simulations
- ▶ How to debrief and develop after-action reports
- ▶ How to sustain preparation efforts
- ▶ Barriers to maintaining preparedness

National Ebola Training and Education Center (NETEC)

- ▶ Created in 2015 by the ASPR to establish a sustainable culture of readiness and continual improvement among US public health and healthcare systems regarding the ability to manage patients with EVD and other highly hazardous contagious IDs
- ▶ Web site: netec.org

National Ebola Training and Education Center (NETEC)

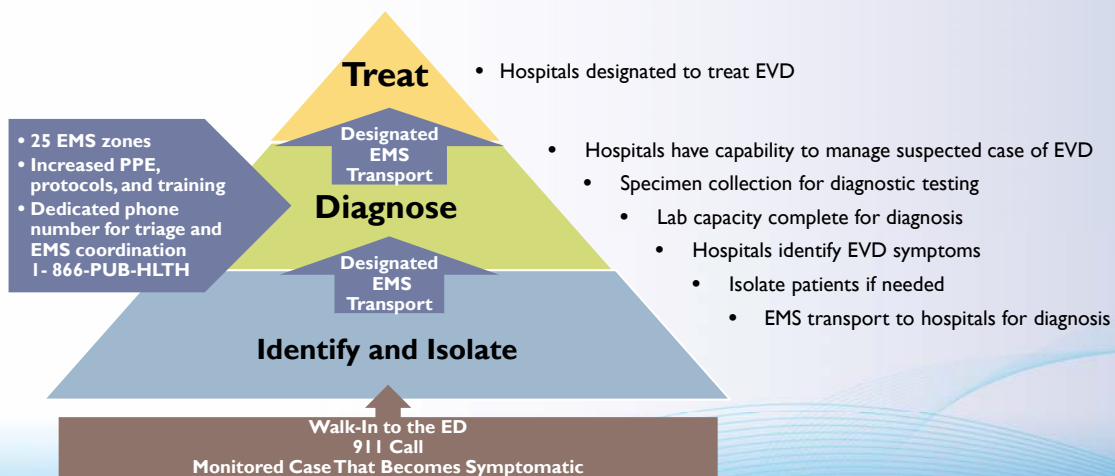
- ▶ Create readiness metrics
- ▶ Conduct peer-reviewed readiness assessments
- ▶ Create and maintain policies and procedures for the care of patients with serious communicable diseases
- ▶ Provide technical assistance
- ▶ Create research infrastructure

Experience of Our Units

- ▶ Emory—established in 2001 to support the CDC, has remained through multiple administrations and the recession
- ▶ UNMC—established in 2005 by homeland security funding
- ▶ NYCHH-Bellevue—established in 2014 to treat a patient with EVD



Tiered Hospital System for EVD



CDC. Interim guidance for U.S. hospital preparedness for patients under investigation (PUIs) or with confirmed Ebola virus disease (EVD): a framework for a tiered approach. www.cdc.gov/vhf/ebola/healthcare-us/preparing/hospitals.html.



Roles and Responsibilities of Healthcare Facilities

- ▶ **Frontline facilities**—Includes most US acute care facilities with emergency care departments, including:
 - ▶ Acute care hospitals, other emergency care settings including urgent care clinics, and critical access hospitals
- ▶ **Capabilities (identify, isolate, and inform)**
 - ▶ **Identify** possible patient with EVD
 - ▶ **Isolate** patient and take appropriate steps to adequately protect staff
 - ▶ **Inform** their hospital infection control and health officials
 - ▶ Transfer the patient to an EVD assessment hospital or EVD treatment center
 - ▶ **PPE:** Have enough EVD PPE for at least 12-24 hours of care

CDC. Interim guidance for U.S. hospital preparedness for patients under investigation (PUIs) or with confirmed Ebola virus disease (EVD): a framework for a tiered approach. www.cdc.gov/vhf/ebola/healthcare-us/preparing/hospitals.html.



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Roles and Responsibilities of Healthcare Facilities

- ▶ **A frontline hospital will need to safely manage this patient for 12-24 hours in the ED; the focus on preparation will be to:**
 - ▶ Have policies in place for screening all patients for travel histories and risk factors
 - ▶ Identify a suitable space within the ED for isolation
 - ▶ Procure PPE and train ED staff for its use to provide 24/7 short-term care of such a patient
 - ▶ Implement procedures for the prompt notification of health department officials and for the safe transfer of the patient to an assessment or treatment hospital

CDC. Interim guidance for U.S. hospital preparedness for patients under investigation (PUIs) or with confirmed Ebola virus disease (EVD): a framework for a tiered approach. www.cdc.gov/vhf/ebola/healthcare-us/preparing/hospitals.html.



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Roles and Responsibilities of Healthcare Facilities

▶ Assessment facility

- ▶ Be prepared to provide care for PUIs for up to 96 hours; facility will need to decide where this can occur
- ▶ Have laboratory testing capability to manage an ill patient, regardless of diagnosis, and explore alternative diagnoses such as malaria or other infectious agents



Roles and Responsibilities of Healthcare Facilities

▶ ASPR Ebola Preparedness 2015: HPP measurement

▶ Assessment facility

- ▶ Isolate within 5 minutes of ED triage
- ▶ Isolate actively monitored patient in 1 minute



Roles and Responsibilities of Healthcare Facilities

- ▶ **EVD treatment center**
 - ▶ Be ready to admit a patient within 72 hours
 - ▶ Care for patients with EVD for duration of illness
 - ▶ Be able to manage advanced stages of disease with ventilator support and dialysis, if necessary
 - ▶ Monitor progress of treatment through daily laboratory testing



Roles and Responsibilities of Healthcare Facilities

- ▶ **ASPR Ebola Preparedness 2015: HPP measurement**
- ▶ **EVD treatment center**
 - ▶ Ensure that rostered staff are trained in safely donning and doffing PPE
 - ▶ Ensure that rostered staff receive Just-In-Time training within 72 hours of being notified of a patient at the regional center
 - ▶ Hold annual exercises, during which data on most of the measures will be collected



Roles and Responsibilities of Healthcare Facilities

- ▶ **ASPR Ebola Preparedness 2015: HPP measurement**
- ▶ **Regional treatment center**
 - ▶ Ensure that rostered staff receive quarterly training in infection control and safety and patient care for EVD
 - ▶ Hold annual exercises, during which data on most of the measures will be collected
 - ▶ Be able to admit a patient within 8 hours



When/How Often to Hold Drills/Simulations

- ▶ **Exercises**
 - ▶ Provide a way to evaluate operations and plans
 - ▶ Reinforce teamwork
 - ▶ Identify resource gaps
 - ▶ Should be planned in a cycle that increases in complexity; each successive exercise should build on the scale and experience of the previous one



When/How Often to Hold Drills/Simulations

- ▶ **Types of exercises**
 - ▶ Seminars and workshops
 - ▶ Tabletops
 - ▶ Games
 - ▶ Drills
 - ▶ Functional exercises
 - ▶ Full-scale exercises



When/How Often to Hold Drills/Simulations

- ▶ **Exercise program management**
 - ▶ Multiyear training and exercise program planning
 - ▶ Budgeting and grant writing
 - ▶ Planning and executing individual exercises
 - ▶ Tracking improvements



When/How Often to Hold Drills/Simulations

- ▶ Exercise program management
 - ▶ As the program evolves, there will be increased involvement of outside resources



How to Debrief and Develop After-Action Reports

- ▶ Develop the draft after-action report
- ▶ Conduct an after-action conference
- ▶ Identify improvements to be implemented
- ▶ Finalize the after-action report and improvement plan
- ▶ Track implementation

Note, this is the most important part of the exercise.



How to Sustain Preparation Efforts

▶ Key factors

- ▶ Support of key leadership
 - ▶ Awareness of outcomes at unprepared facilities
- ▶ Designated physician, nursing, and administrative leads
- ▶ A budget for supplies
 - ▶ Will likely need to look at multiple sources
- ▶ Exercises led by experienced facilitator (NETEC templates are available)
- ▶ Remember, NETEC performs site assessments and offers technical expertise and onsite support for exercises (netec.org)

NETEC. Exercise materials. <http://netec.org/exercise-materials>.



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Barriers to Maintaining Preparedness: Funding, Time, Energy, Interest

- ▶ Funding of a nonrevenue center
 - ▶ Frequently need to use multiple sources
- ▶ Limited government support
 - ▶ Be creative
- ▶ Already-overworked healthcare workers
 - ▶ Give credit for activity in work schedule
- ▶ Competing interests
 - ▶ Make part of a global preparedness program



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Resources

- ▶ National Ebola and Training Center
 - ▶ Materials: netec.org/online-education/
 - ▶ Exercises: netec.org/exercise-materials/
 - ▶ Resources: netec.org/resources/
- ▶ Alves LF, Cagliuso NV, Dunne WJ. Building the bridge between healthcare emergency management and daily operations. *J Bus Contin Emer Plan.* 2015-2016;9(2):137-148.
- ▶ Biddinger PD, Cadigan RO, Auerbach BS, et al. Using exercises to identify systems-level preparedness challenges. *Public Health Rep.* 2008 ;123(1):96-101.
- ▶ Braun BI, Wineman NV, Finn NL, Barbera JA, Schmaltz SP, Loeb JM. Integrating hospitals into community emergency preparedness planning. *Ann Intern Med.* 2006;144(11):799-811.
- ▶ Cagliuso NV. Stakeholders' experiences with US hospital emergency preparedness: Part 1. *J Bus Contin Emer Plan.* 2014-2015;8(2):156-168.
- ▶ Cagliuso NV. Stakeholders' experiences with US hospital emergency preparedness: Part 2. *J Bus Contin Emer Plan.* 2014-2015;8(3):263-279.
- ▶ Thompson AK, Faith K, Gibson JL, Upshur RE. Pandemic influenza preparedness: an ethical framework to guide decision-making. *BMC Med Ethics.* 2006;7:E12.



Thank You



Audience Response Questions



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Audience Response Question

What is the most complex type of exercise?

- A. Tabletop
- B. Full-scale
- C. Games
- D. Functional exercise
- E. Drill



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Audience Response Question

Many people feel that the most important part of an exercise is:

- A. Planning the exercise with outside partners
- B. Writing grants to support the exercise
- C. Developing a draft after-action report
- D. Tracking implementation of the after-action report and improvement plan
- E. Having a party with all of the participants