

## Situation Manual (SitMan)



# 2015-2016 Ebola Treatment Center Tabletop Exercise



Exercise Date: XXX

## Using This Document

1. As the exercise planner, you are responsible for scheduling the exercise and inviting the appropriate individuals to the exercise. It is best to plan for approximately 1-2 hours per module, plus 1+ hours for instructions and hotwash.
2. To ensure the best possible learning opportunity for your team, it is strongly recommended that you already have a plan in place for the processes that are discussed in this document. The scenarios and injects that comprise this exercise are designed to stimulate thought and discussion about your current plans and how to improve them.
3. On the day of the exercise, your team should gather in a conference or training room to participate in the exercise using a single computer, combination computer/LCD projector and/or handouts.
4. Invite your entire Incident Management Team to this Tabletop exercise. If you don't have an Incident Management Team, some suggestions of people to invite would be:
  - Senior Administrative Leadership (e.g., CEO, COO, CMO, CNO or CFO)
  - Emergency Preparedness Coordinator
  - Physicians
  - Nurses
  - Nursing Assistants
  - Facilities Management staff
  - Environmental Services staff
  - Any other staff members that participate in patient care
5. Consider inviting members of your local Public Health, Fire and Rescue, Law Enforcement, and/or Emergency Medical Services (EMS) teams.
6. You will need to assign someone to facilitate and evaluate the exercise at your site and write the After Action Report and Improvement Plan.
7. Have all participants fill out a Sign-in Sheet.
8. It is helpful for each participant to have a handout that includes the scenario and questions for the exercise so they can follow along and reference the scenario as questions arise during the discussion. This document should be developed based on the portion of the exercise that is planned. A sample of this document is included in Appendix C.
9. Have all participants fill out a Participant Feedback form and hand back to you. (Appendix B)
10. To ensure this Tabletop Exercise meets the requirements of Joint Commission, you will need to have additional community members (local Public Health, etc.) in the room for your discussion. This exercise will be an acceptable exercise due to its community involvement and the escalating event in which the local community is unable to support the hospital. (FOR JOINT COMMISSION ACCREDITED FACILITIES ONLY)
11. An After Action Report (AAR) template (Appendix A) is included in this packet. This is a template for you to fill out after the exercise is completed. It will allow for you to easily organize your strengths, weaknesses and improvement planning efforts.

## Preface

This exercise template has been developed by the National Ebola Training and Education Center (NETEC) utilizing the Homeland Security Exercise and Evaluation Program (HSEEP), which provided a “set of guiding principles for exercise programs, as well as a common approach to exercise program management, design and development, conduct, evaluation, and improvement planning.” ([http://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep\\_apr13 .pdf](http://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep_apr13.pdf)). Additionally, the Situation Manual (SitMan) for the West Central Medical Response System 2014 Tabletop Exercise, developed under the leadership of Dr. John Lowe, was also used as a basis for this document.

The 2014 Ebola epidemic was the largest in history, affecting multiple countries in West Africa. An imported case from Liberia and associated locally acquired cases in healthcare workers were reported in the United States. The Office of the Assistant Secretary for Preparedness and Response (ASPR) and the Centers for Disease Control and Prevention (CDC) have established the National Ebola Training and Education Center (NETEC) to increase the competency of healthcare and public health workers, and the capability of healthcare facilities to deliver safe, efficient, and effective Ebola patient care.

This Situation Manual (SitMan) is to serve as a template to support Ebola Treatment Centers (ETCs) that are part of health care coalitions established under the Hospital Preparedness Program (HPP) in their Ebola Preparedness and Response Activities (CFDA #93.817). This SitMan was assembled under the guidance of the NETEC Exercise Design Team and vetted through ASPR and CDC to provide exercise participants with the necessary tools for their respective roles in the exercise, but with the flexibility to adapt to the individualized needs of each coalition along with the varied make-up of each coalition.

*This is a facilitated discussion intended to probe and explore the Ebola Treatment Center’s ability to identify and stabilize a potentially infected patient with EVD; to initiate care and implement special protocols that may be required for the protection of the healthcare facility and its staff; and to coordinate such care with other HCC partners, including EMS, Public Health and Emergency Management. The series of questions included in this document are intended to initiate discussion and description of how the Ebola Treatment Center would respond to such an event. It is not anticipated that every question will be answered in every session, or that every question is relevant to every Ebola Treatment Center setting. Please utilize these questions to explore the many complexities involved in the management of EVD patients, whether it be done in one session, or divided up over a number of sessions in which specific topics (coordination of EMS transport, implementation of patient care protocols, development of joint messaging, etc.) are discussed in greater detail.*

*Please note that there are six (6) specific measures (framed as specific questions in the body of this document) that are REQUIRED to be asked and answered by coalitions that received funding through the HPP Ebola Preparedness and Response Activities funding opportunity announcement.*

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## About NETEC

NETEC is a consortium of Emory University, NYC Health + Hospitals, and the University of Nebraska Medical Center, as equal partners, who support ASPR and the CDC by developing the National Ebola Training and Education Center. All three institutions have safely and successfully cared for patients with Ebola virus disease (EVD) since the beginning of the outbreak in March 2014. The goal of the NETEC, over its five-year funding period, is to increase the competency of health care and public health workers and the capability of health care facilities to deliver safe, efficient, and effective Ebola patient care through the nationwide, regional network for Ebola and other infectious diseases. The objectives are: 1) to develop metrics to measure facility and health care worker readiness (including health care worker training) to care for patients infected with the Ebola virus and other special pathogens (e.g. variola or smallpox, Marburg virus, *Yersinia pestis*, anthrax, or measles); 2) to conduct assessments, monitoring, recognition reporting, and validation of regional and state Ebola Treatment Centers and assessment hospitals; 3) to create and maintain a comprehensive suite of timely and relevant educational materials related to care of patients with Ebola and other special pathogens; 4) to identify and incorporate best practices regarding how health departments and treatment centers collaborate around the care of patients with Ebola virus infection; 5) to establish a web-based repository to support dissemination of timely and relevant materials; 6) to support the public health departments and health care facilities through training and technical assistance.

## Organizational Points of Contact

For more information, please consult the following points of contact (POCs) at your organization(s):

**Exercise Directors (Designate the contact information for Exercise Director (s)):**

**Name:** Insert Name

**Title:** Insert Title

**Street Address:** Insert Street Address

**City, State ZIP:** Insert City, State, Zip

**Phone:** Insert Phone Number

**Email:** Insert Email address.

**Exercise Design Team (Designate the members of your Exercise Design Team:**

<u>Team Member Name</u>	<u>Team Member Organization</u>	<u>Team Member Title</u>

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## Introduction

### Background

The Hospital Preparedness Program (HPP) Ebola Preparedness and Response Activities provided awardees with funds to support this regional, tiered approach. At the state or jurisdiction level, awardees may support health care facilities that are capable of serving as Ebola Treatment Centers (ETCs) and assessment hospitals for their states or jurisdictions. Additionally awardees may support health care coalitions to prepare frontline hospitals and overall health care system Ebola preparedness activities. Ebola health care system preparedness, response, and the development of a regional Ebola treatment strategy were supported by ASPR through HPP. HPP has created *performance measures* to assess progress in meeting the goals of the *HPP Ebola Preparedness and Response Activities (FOA)*.

Hospitals designated as Regional Ebola and Special Pathogen Treatment Centers, with the support of their state or jurisdiction HPP awardee, will serve as the hub of the treatment network, which also includes ETCs, assessment hospitals, and frontline health care facilities. This network will be supported through at least 2019 by regular exercises and plans that describe how Ebola patients under investigation are identified, assessed, diagnosed, and if necessary, safely transferred to the appropriate facility for definitive treatment.

### Purpose

The purpose of the facilitated discussion exercise is to evaluate, review, and measure the response elements related to the Ebola Treatment Centers (ETCs), in which it must: 1) support planning for the development of an Ebola Treatment Center patient care, and 2) develop, support, and maintain Ebola Treatment Centers.

### Required Measures

Conduct of the facilitated discussion should allow sufficient flexibility for exercise participants to initiate the collection of required information in the context of the exercise. **It is anticipated that the results of these measures will be reported to the exercise leader in the allotted timeframe, but likely after the conclusion of the “discussion” portion of the exercise.**

#### HPP required measures (Ebola Treatment Centers):

- **2 A.B.** Proportion of rostered staff that are trained in safely donning and doffing personal protective equipment (PPE) (Goal: 100%).
- **3 A.B.** Time it takes for all rostered staff, upon notification of a patient with Ebola at the regional Ebola and other special pathogen treatment center, to receive just-in-time (JIT) training (Goal: Within 72 hours)
- **4 A.B.** Time until an Ebola Treatment Center is ready to admit a patient with Ebola as evidenced by an exercise or actual patient transfer (Goal: Within 72 hours of confirmation of an Ebola patient at a regional center).
- **5 A.B.** Proportion of rostered staff contacted by hospital within 4 hours of a patient with confirmed Ebola’s admission to a regional Ebola and other special pathogen treatment center (Goal: 100%).

- **6 A.B.** Proportion of rostered staff contacted that indicated they are able to report to fulfill Ebola-related staffing needs within 72 hours (Goal: 100%).
- **7 A.B.** Proportion of Ebola Treatment Centers (ETCs) that can access their PPE supply (i.e., know location and have sufficient quantity of unexpired supply) within 10 minutes of patient with suspected Ebola transfer notification or upon the patient's arrival (if no notification) (Goal: 100%).

Hospital Preparedness Program (HPP) Measure Manual: Implementation Guidance for Ebola Preparedness Measures. July 2015 Version 7.0

<http://www.phe.gov/Preparedness/planning/sharper/Documents/2015-hpp-ebola-prep-measures.pdf>

## Scope

Ebola Treatment Centers: The exercise will focus on the Ebola Treatment Center's responsibilities and response to a patient with confirmed EVD, within the Healthcare Coalition (HCC). Furthermore, it will explore the coordination and interplay between the multiple agencies and emergency response disciplines that comprise the Healthcare Coalition.

## Target Capabilities

The Hospital Preparedness Program (HPP) *Ebola Preparedness and Response Activities* (CFDA #93.817) Funding Opportunity Announcement (FOA) and the NETEC are utilizing a capabilities-based planning approach as directed by National Preparedness Priorities. Capabilities-based planning focuses on planning under uncertainty, since the next emergence of a highly infectious disease in the United States can never be forecast with complete accuracy. Therefore, capabilities-based planning takes an approach to planning and preparation which builds capabilities that can be applied to a wide variety of special pathogens.

The NETEC Exercise Design Team, ASPR and CDC have determined the capabilities listed below from the priority capabilities identified in the current HPP grant year guidance and exercise requirements. These capabilities provide the foundation for development of exercise objectives and scenario, as the purpose of this exercise is to measure and validate performance of these capabilities and their associated critical tasks.

- Healthcare System Preparedness
- Emergency Operations Coordination
- Information Sharing
- Medical Surge
- Responder Safety & Health

## Exercise Objectives

The following objectives evaluate Ebola Treatment Centers' emergency management procedures, air and ground transportation procedures, identify areas for improvement, and achieve communication, coordination and collaboration with internal and external stakeholders.



1. Evaluate the Concept of Operations for the Ebola Treatment Centers (ETCs) to coordinate transportation arrangements, and safely and effectively receive a patient with confirmed EVD or a person under investigation (PUI) for evaluation, treatment and admission within an appropriate time frame.
2. Exercise the notification and communication processes among local, state, and federal public health, EMS, healthcare delivery system partners, assessment centers, ETCs, and the Regional Ebola and Special Pathogen Treatment Center, as well as media management.
3. Evaluate EMS capabilities, and determine the most appropriate method for transportation (e.g., air versus ground.)
  - o Management of Wet patients or PUIs transported by ground EMS personnel
  - o Management of Dry patients or PUIs transported by ground EMS personnel
  - o Evaluate the management of patients undergoing air transportation and coordination with ground EMS personnel for Wet patients or PUIs who are being transferred to a Regional Ebola and Special Pathogen Treatment Center
  - o Evaluate the management of patients undergoing air transportation and coordination with ground EMS personnel for Dry patients or PUIs who are being transferred to an Regional Ebola and Special Pathogen Treatment Center
4. Evaluate just-in-time PPE don / doff training resources and PPE availability for EMS, and healthcare delivery system personnel, including the ETC.
5. Evaluate the management of a PPE breach, fluid breach from patient, and doffing ambulance after transport by EMS personnel.
6. Evaluate planning for risk mitigation (e.g., biosafety containment and management with an emphasis on waste management.)

## Participants

- *Players* respond to the situation presented based on expert knowledge of response procedures, current plans and procedures, and insights derived from training.
- *Observers* support the group in developing responses to the situation during the discussion; however, they are not participants in the moderated discussion period.
- *Facilitators* provide situation updates and moderate discussions. They also provide additional information or resolve questions as required. Key planning committee members may also assist with facilitation as subject matter experts (SMEs) during the tabletop exercise.

## Exercise Structure

This will be a facilitated discussion/tabletop exercise. Modules should be edited and adapted to meet the needs and objectives of the exercising Ebola Treatment Center; the provided modules are only a starting point for your facility and healthcare coalition. The objective should be

designed to measure local concepts of operation specific to these missions. The series of facilitated discussion questions that follow may be asked in a joint session, with all Ebola Treatment Center stakeholders present, or broken up by discipline over multiple days with a focus on specific areas of the Ebola Treatment Center. The following key items will be covered in the corresponding modules:

1. Module 1: Unit Activation following Notification of Pending transfer of Ebola Patient
2. Module 2: Ground Patient Transport from within your State (High Patient Acuity – “wet patient”)
3. Optional Alternate Module 2: Air Patient Transport from Local Airport to your Ebola Treatment Center (High Patient Acuity – “wet patient”)
4. Module 3: Care of Patient at the ETC (High Patient Acuity – “wet patient”)
5. Alternate Module 3: Care of Patient at the ETC (Low Patient Acuity – “dry patient”)

Each module will include an update that summarizes the key events occurring within that time frame. Following the updates, participants review the situation and engage in small or large group discussions of appropriate response issues. The modules provided are a framework for development of an Ebola Treatment Center tabletop exercise. A module should be selected and adapted based upon the needs and objectives of the unique ETC.

### **Exercise Guidelines**

- This is an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, are expected.
- Respond based on your knowledge of current plans and capabilities (i.e., you may use only existing assets) and insights derived from training.
- Decisions are not precedent setting and may not reflect your organization’s final position on a given issue. This is an opportunity to discuss and present multiple options and possible solutions.
- Issue identification is not as valuable as suggestions and recommended actions that could improve response and preparedness efforts. Problem-solving efforts should be the focus.
- This exercise is intended to raise more questions than answers. It is a tool to be used to help assess and improve your current planning.
- Given all of the variables involved in this type of scenario, many questions and potential issues have been omitted in the interests of available time and exercise objectives.

## Assumptions and Artificialities

In any exercise, a number of assumptions and artificialities may be necessary to complete play in the time allotted. During this exercise, the following apply:

- The scenario is plausible, and events occur as they are presented.
- There is no “hidden agenda”, nor any trick questions.
- All players receive information at the same time.
- Information is provided for situational awareness. Participants should realize that in a real event, this information might not be available to them with such immediacy for decision-making. This is an artificiality to allow for a comprehensive discussion.

## Module 1: Unit Activation following Notification of Pending transfer of Ebola Patient

### Initial Response

Scenario Information: You are an Ebola Treatment Center (ETC). A hospital in your region has identified a patient in their emergency department who meets travel, exposure and symptomatic criteria for Ebola virus disease (EVD), and the laboratory testing recently screened positive for EVD.

#### HPP Required Measures:

- 2 A.B. Proportion of rostered staff that are trained in safely donning and doffing personal protective equipment (PPE) (Goal: 100%).
- 3 A.B. Time it takes for all rostered staff, upon notification of a patient with Ebola at the Ebola Treatment Center, to receive just-in-time (JIT) training (Goal: Within 72 hours)
- 4 A.B. Time until an Ebola Treatment Center is ready to admit a patient with Ebola as evidenced by an exercise or actual patient transfer (Goal: Within 72 hours of confirmation of an Ebola patient at a regional center).
- 5 A.B. Proportion of rostered staff contacted by hospital within 4 hours of a patient with confirmed Ebola's admission to a regional Ebola and other special pathogen treatment center (Goal: 100%).

#### Questions:

1. What is your decision making process to accept the patient transfer?
  - a. How will state or jurisdictional health departments be notified about the situation?
  - b. What is your time estimate on when this decision can be accomplished?

Considerations:

    - What current written and signed agreements are in place?
    - What is the origin of patient transfer?
    - What jurisdictional issues might arise?
    - Will there be JIT training for rostered staff?
2. What is your detailed ETC activation process (i.e. preparation of patient room and equipment, stock unit with supplies, notify hospital departments)?
3. How many rostered staff comprise the ETC care team?
4. What proportion of these staff have been trained to safely don and doff personal protective equipment? (Goal 100%) HPP measure 2 A.B.
5. What is the amount of time it takes for all rostered staff at your ETC, upon notification of a patient with Ebola at the regional Ebola and other special pathogen treatment center, to receive just-in-time (JIT) training (Goal: Within 72 hours)? HPP measure 3 A.B.
  - a. How is just in time training delivered?

- b. What are key/critical elements/topics of the training?
6. What is the amount of time until your Ebola Treatment Center is ready to admit a patient with Ebola as evidenced by an exercise or actual patient transfer (Goal: Within 72 hours of confirmation of an Ebola patient at a regional center)? HPP measure 4 A.B.
  - a. What are milestones/key activities that must be accomplished for your ETC to be ready to admit a patient?
7. What is the proportion of rostered staff at your ETC contacted by hospital within 4 hours of a patient with confirmed Ebola's admission to a regional Ebola and other special pathogen treatment center (Goal: 100%)? HPP measure 5 A.B.
  - a. Discuss how staff are contacted and identify redundant methods of communication.
  - b. Who is responsible to staff notification?
8. What three key actions are you asking your response partners to do in order to assist you in the patient transport process?

Consideration:

  - What will you ask of emergency management law enforcement, Fire/EMS and Public Health?
9. Do you have a plan to communicate to your internal staff, and currently hospitalized patients and their families to let them know what is happening?
  - a. What is your external media plan?
10. What are the top three response priorities for your ETC?

## **Module 2: Ground Patient Transport from within your State (High Patient Acuity – “wet patient”)**

### **Initial Response – Preparing for transport**

Scenario Information: It has been determined that the patient will be transported to your facility. The symptomatic patient is a 46 year old female physician who is a medical relief worker in Africa. The febrile patient is expected to have nausea, vomiting, and diarrhea with abdominal cramping prior to and during transport.

#### **HPP Required Measures:**

- 2 A.B. Proportion of rostered staff that are trained in safely donning and doffing personal protective equipment (PPE) (Goal: 100%).
- 3 A.B. Time it takes for all rostered staff, upon notification of a patient with Ebola at the Ebola Treatment Center, to receive just-in-time (JIT) training (Goal: Within 72 hours)
- 4 A.B. Time until an Ebola Treatment Center is ready to admit a patient with Ebola as evidenced by an exercise or actual patient transfer (Goal: Within 72 hours of confirmation of an Ebola patient at a regional center).
- 7 A.B. Proportion of Ebola Treatment Centers (ETCs) that can access their PPE supply (i.e., know location and have sufficient quantity of unexpired supply)

within 10 minutes of patient with suspected Ebola transfer notification or upon the patient's arrival (if no notification) (Goal: 100%).

Questions:

1. How many rostered staff comprise the ETC care team?
2. What proportion of these staff have been trained to safely don and doff personal protective equipment? (Goal 100%) HPP measure 2 A.B.
3. What is the amount of time it takes for all rostered staff at your ETC, upon notification of a patient with Ebola at the regional Ebola and other special pathogen treatment center, to receive just-in-time (JIT) training (Goal: Within 72 hours)? HPP measure 3 A.B.
4. What are the steps necessary to accept this patient as evidenced by an exercise or actual patient transfer (Goal: Within 72 hours of confirmation of an Ebola patient at a regional center)? HPP measure 4 A.B.
5. Can you access your PPE supply (i.e., know location and have sufficient quantity of unexpired supply) within 10 minutes of patient with suspected Ebola transfer notification or upon the patient's arrival (if no notification)? Report this to your state and/or coalition so they can address the question: What proportion of Ebola Treatment Centers (ETCs) in the \_\_\_\_\_ (e.g., region or coalition, etc.) can access their PPE supply (i.e., know location and have sufficient quantity of unexpired supply) within 10 minutes of patient with suspected Ebola transfer notification or upon the patient's arrival (if no notification) (Goal: 100%). HPP measure 7 A.B.
6. What is your ground transport plan?

Considerations:

- What needs to be done for ambulance preparation?
- What medical equipment is needed? Not needed?
- How will air to ground handoff be executed, including location and PPE donning location?
- Are spill (vomiting, diarrhea, etc.) kits available?
- Will there be security/Law enforcement escorts?
- What route will be taken?
- Do severe or inclement weather preparations need to be considered?
- What is the post-transport vehicle decontamination process?

7. What are your personal protective equipment (PPE) plans for transport and patient care during transport?

Considerations:

- What are your patient isolation methods?
  - What type of pain treatment will be administered if necessary?
  - What clinical providers will accompany the transport?
  - What is the plan for body fluid containment?
  - What monitoring devices will be needed or used?
  - How will a combative patient be addressed?
  - What is the doffing location for EMS?
  - What is the protocol for patient expiration in transit?
  - What is the estimated length of transport and process for patient care handoff from EMS to hospital?
  - What is the standard of care for Ebola transports?
8. How do you expect to receive information during transport?
    - a. What information will be disseminated to staff and public pre and post transport?
  9. What role will your Ebola Treatment Center play in:
    - a. Patient care during transport?
    - b. Transport?
    - c. Security?
    - d. Public health response?
  10. What are the top three response priorities for your Ebola Treatment Center?

### **Alternate Module 2: Air Patient Transport from Local Airport to your Ebola Treatment Center (High Patient Acuity – “wet patient”)**

Scenario Information: The patient has been diagnosed with laboratory-confirmed EVD. The patient had been providing health care in western Africa as a nurse. The decision has been made to transfer the patient to your Ebola Treatment Center, by air, due to increasing patient acuity. The febrile patient is having nausea, vomiting, and diarrhea with abdominal cramping prior to and during the transport from the airplane to your Ebola Treatment Center. The flight will arrive at a local airport and require ground transport to your Ebola Treatment Center.

**HPP Required Measures:**

- 2 A.B. Proportion of rostered staff that are trained in safely donning and doffing personal protective equipment (PPE) (Goal: 100%).
- 3 A.B. Time it takes for all rostered staff, upon notification of a patient with Ebola at the Ebola Treatment Center, to receive just-in-time (JIT) training (Goal: Within 72 hours)
- 4 A.B. Time until an Ebola Treatment Center is ready to admit a patient with Ebola as evidenced by an exercise or actual patient transfer (Goal: Within 72 hours of confirmation of an Ebola patient at a regional center).
- 7 A.B. Proportion of Ebola Treatment Centers (ETCs) that can access their PPE supply (i.e., know location and have sufficient quantity of unexpired supply) within 10 minutes of patient with suspected Ebola transfer notification or upon the patient's arrival (if no notification) (Goal: 100%).

Questions:

1. How many rostered staff comprise the ETC care team?
2. What proportion of these staff have been trained to safely don and doff personal protective equipment? (Goal 100%) HPP measure 2 A.B.
3. What is the amount of time it takes for all rostered staff at your ETC, upon notification of a patient with Ebola at the regional Ebola and other special pathogen treatment center, to receive just-in-time (JIT) training (Goal: Within 72 hours)? HPP measure 3 A.B.
  - a. Who is responsible for delivering JIT, what are potential barriers to providing JIT, availability of trainers, competing requirements of trainers, etc.
4. What is the amount of time until your Ebola Treatment Center is ready to admit a patient with Ebola as evidenced by an exercise or actual patient transfer (Goal: Within 72 hours of confirmation of an Ebola patient at a regional center)? HPP measure 4 A.B.
  - a. What milestones or actions must be met/accomplished for ETC to be ready to admit patient?
5. Can you access your PPE supply (i.e., know location and have sufficient quantity of unexpired supply) within 10 minutes of patient with suspected Ebola transfer notification or upon the patient's arrival (if no notification)? Report this to your state and/or coalition so they can address the question: What proportion of Ebola Treatment Centers (ETCs) in the \_\_\_\_\_ (e.g., region or coalition, etc.) can access their PPE supply (i.e., know location and have sufficient quantity of unexpired supply) within 10 minutes of patient with suspected Ebola transfer notification or upon the patient's arrival (if no notification) (Goal: 100%). HPP measure 7 A.B.
  - a. Based on your staffing model, how long is your supply of PPE projected to last?
6. Who are your potential ground transport partners and what resources area available?
  - a. How are you coordinating logistics with these partners and resources?



7. What is your potential air transport plan?

Considerations:

- What will access to the airfield and tarmac be like?
- What will be the staging area for vehicles, media, and any safety officials?
- What is your plan for patient report between physicians and patient care staff?
- Who is responsible for infection control, spill (vomiting, diarrhea, etc.) response, decontamination, security, safety while on airport property?
- Who is responsible once transport has left airport property?

8. What is your ground transport plan from the airfield to the Ebola Treatment Center?

Considerations:

- What is needed for ambulance preparation?
  - What medical equipment will be needed? Not needed?
  - How can patient transport redundancies be minimized?
  - What is the air to ground handoff, including location and PPE donning location?
  - Are spill (vomiting, diarrhea, etc.) kits available?
  - Will there be security/Law enforcement escorts?
  - What route will be taken?
  - Are there preparations for severe or inclement weather?
  - What are the processes for post-transport vehicle decontamination?
9. How will you establish your personal protective equipment (PPE) plans for transport and patient care during transport?

Considerations:

- What patient isolation methods might be used?
- What types of pain treatment will be available?
- What clinical providers might accompany the transport?

- How will body fluid containment be dealt with?
  - What monitoring devices might be needed?
  - What to do in the scenario of a combative patient?
  - What is the doffing location for EMS?
  - What to do in the situation of patient expiration?
  - What is the estimated length of transport and patient care handoff?
10. How do you expect to receive information during transport?
- a. What information will be disseminated to staff and public pre and post transport?
  - b. Who is responsible to develop and disseminate a communications plan for transport?
11. What role will your Ebola Treatment Center (or local or regional partners) play in:
- a. Patient care during transport?
  - b. Transport?
  - c. Security?
  - d. Public health response?
12. What are the top three response priorities for your Ebola Treatment Center at this time?

### Module 3: Care of Patient at the ETC (High Patient Acuity – “wet patient”)

Scenario Information: A patient with laboratory confirmed EVD has been treated at your Ebola Treatment Center for several days with increasing symptoms and early signs of organ failure. Supportive care is ongoing by your ETC team.

#### **HPP Required Measures:**

- 2 A.B. Proportion of rostered staff that are trained in safely donning and doffing personal protective equipment (PPE) (Goal: 100%).
- 3 A.B. Time it takes for all rostered staff, upon notification of a patient with Ebola at the Ebola Treatment Center, to receive just-in-time (JIT) training (Goal: Within 72 hours)
- 6 A.B. Proportion of rostered staff contacted that indicated they are able to report to fulfill Ebola-related staffing needs within 72 hours (Goal: 100%).

Questions:

1. What will be the equipment requirements and costs for 21 days of care for a “wet patient” with EVD?

Considerations:

- What PPE is needed and in what quantities?
  - How will waste management and spill (vomiting, diarrhea, etc.) clean-up be handled?
  - What will be your waste handling and transportation protocols?
  - What other patient care supplies are needed?
2. What is the proportion of rostered staff at your ETC that are trained in safely donning and doffing personal protective equipment (PPE) (Goal: 100%)? HPP measure 2 A.B.
  3. What is the amount of time it takes for all rostered staff at your ETC, upon notification of a patient with Ebola at the regional Ebola and other special pathogen treatment center, to receive just-in-time (JIT) training (Goal: Within 72 hours)? HPP measure 3 A.B.

- a. Who is responsible for delivering JIT, what are potential barriers to providing JIT, availability of trainers, competing requirements of trainers, etc.

4. What is the proportion of rostered staff at your ETC contacted that indicated they are able to report to fulfill Ebola-related staffing needs within 72 hours (Goal: 100%)? HPP measure 6 A.B.

5. What is your staffing model?

- a. Will there be psychological support and resources for the staff?
- b. Will there be psychological support and resources for the patient’s family?

6. What emergency procedures should be in place in caring for an EVD patient?

Considerations:

- What are the evacuation procedures (Fire, building damage, etc.)?
- What are the procedures in place for storm warnings or severe weather (if applicable)?
- Is there a response plan in place for infrastructure challenges (plumbing, air handling, etc.)?

7. Will effluent from the hemodialysis process be disinfected or collected?

Considerations:

- What are the current levels of competency and training on equipment?
- What are the processes in place for equipment decontamination?

8. Do you have special processes related to mechanical ventilation?

Considerations:

- What staffing, PPE and support is required for intubation?
- Are aerosol generating procedures permitted?
- What considerations need to be taken for exhaled air in the breathing circuit?

- What are the current levels of competency and training on the equipment?
- How will equipment be decontamination?

9. Do you have special processes related to handling patient remains?

Considerations:

- Are there considerations in place for family care after the loss of a patient?
- How will highly infectious patient remains be processed?
- What is the chain of custody?
- How will safe transport to crematorium or funeral home be executed?
- What transport safety measures need to be taken into account (i.e. Spill kit, containers, security)?
- Will you take into account the cultural and religious practices of the deceased's family? Can you safely do this?

### Alternate Module 3: Care of Patient at the ETC (Low Patient Acuity – “dry patient”)

Scenario Information: A patient with laboratory confirmed EVD has been treated at your Ebola Treatment Center for several days remaining relatively stable (up to chair, eating a regular diet despite occasional appetite challenges) with good supportive care.

#### HPP Required Measures:

- 2 A.B. Proportion of rostered staff that are trained in safely donning and doffing personal protective equipment (PPE) (Goal: 100%).
- 3 A.B. Time it takes for all rostered staff, upon notification of a patient with Ebola at the Ebola Treatment Center, to receive just-in-time (JIT) training (Goal: Within 72 hours)
- 6 A.B. Proportion of rostered staff contacted that indicated they are able to report to fulfill Ebola-related staffing needs within 72 hours (Goal: 100%).

#### Questions:

1. What is the proportion of rostered staff at your ETC that are trained in safely donning and doffing personal protective equipment (PPE) (Goal: 100%)? HPP measure 2 A.B.
2. What is the amount of time it takes for all rostered staff at your ETC, upon notification of a patient with Ebola at the regional Ebola and other special pathogen treatment center, to receive just-in-time (JIT) training (Goal: Within 72 hours)? HPP measure 3 A.B.
3. What is the proportion of rostered staff at your ETC contacted that indicated they are able to report to fulfill Ebola-related staffing needs within 72 hours (Goal: 100%)? HPP measure 6 A.B.
4. What are the equipment requirements and costs for 21 days of care for a “dry patient” with EVD?

#### Considerations:

- What personal protective equipment is needed and in what quantity?
  - What are the processes for waste management (i.e. liquids, solids, sharps)?
  - What will be your waste handling and transportation protocols?
  - What other patient care supplies are needed?
5. What is your staffing model?
    - a. Will there be psychological support and resources for the staff?
    - b. Will there be psychological support and resources for the patient’s family?
  6. What emergency procedures that should be in place in caring for an EVD patient?

#### Considerations:

- What are the evacuation procedures (Fire, building damage, etc.)?

- What are the procedures in place for storm warnings or severe weather (if applicable)?
- Is there a response plan in place for infrastructure challenges (plumbing, air handling, etc.)?

7. What are your communications plans?

Considerations:

- Do you have strategies in place for consultation services like physical therapy, psychiatry, and medical nutrition?
  - How will you address family interaction with the patient?
  - How will you address the media?
8. How are you handling routine laboratory testing for EVD patients, including performing EVD viral load monitoring as the patient's condition improves?
9. What will be the step-wise process for discharging the patient from the isolation unit/ Ebola Treatment Center?

Considerations:

- How will you maintain a disinfected environment for the patient?
- How will you handle decontaminating unit, equipment, and patient care area?
- What is your mechanism for tertiary cleaning?
- How will risk communication to internal staff be handled?

Appendix A

**After-Action Report/Improvement Plan (AAR/IP)**

(Adapted from Homeland Security Exercise and Evaluation Program (HSEEP))

**\*Edit these fields as applicable**

**EXERCISE OVERVIEW**

<b>Exercise Name</b>	2015-2016 Ebola Treatment Centers Tabletop Exercise
<b>Exercise Dates</b>	
<b>Scope</b>	State-Designated Ebola Treatment Centers: The exercise will focus on the Ebola Treatment Center responsibilities within the Healthcare Coalition’s response to a patient with confirmed EVD. Furthermore, it will explore the coordination and interplay between the multiple agencies and emergency response disciplines that comprise the Healthcare coalition.
<b>Mission Area(s)</b>	
<b>Core Capabilities</b>	<ul style="list-style-type: none"> <li>• Healthcare System Preparedness</li> <li>• Information Sharing</li> <li>• Emergency Operations Coordination</li> <li>• Medical Surge</li> <li>• Responder Safety &amp; Health</li> </ul>
<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. Evaluate the Concept of Operations for the Ebola Treatment Center (ETC) to coordinate transportation arrangements, and safely and effectively receive a patient with confirmed EVD or a person under investigation (PUI) for evaluation, treatment and admission within an appropriate time frame.</li> <li>2. Exercise the notification and communication processes between local, state, and federal public health, EMS, healthcare delivery system partners, assessment centers, ETCs, and the Regional Ebola and Special Pathogen Treatment Center, as well as media management.</li> <li>3. Evaluate EMS capabilities, and determine the most appropriate method for transportation (e.g., air versus ground.) <ul style="list-style-type: none"> <li>• Management of Wet patients or PUIs transported by ground EMS personnel</li> <li>• Management of Dry patients or PUIs transported by ground</li> </ul> </li> </ol>

	<p>EMS personnel</p> <ul style="list-style-type: none"> <li>• Evaluate the management of patients undergoing air transportation and coordination with ground EMS personnel for Wet patients or PUIs who are being transferred to a Regional Ebola and Special Pathogen Treatment Center</li> <li>• Evaluate the management of patients undergoing air transportation and coordination with ground EMS personnel for Dry patients or PUIs who are being transferred to an Regional Ebola and Special Pathogen Treatment Center</li> </ul> <p>4. Evaluate just-in-time PPE don / doff training resources and PPE availability for EMS, and healthcare delivery system personnel, including the ETC.</p> <p>5. Evaluate the management of a PPE breach, fluid breach from patient, and doffing ambulance after transport by EMS personnel.</p> <p>6. Evaluate planning for risk mitigation (e.g., biosafety containment and management with an emphasis on waste management.)</p>
<b>Threat or Hazard</b>	Ebola
<b>Scenario</b>	Highly Infectious Disease Management
<b>Sponsor</b>	Ebola health care system preparedness, response, and the development of a regional Ebola treatment strategy were supported by ASPR through HPP.
<b>Participating Organizations</b>	
<b>Point of Contact</b>	

## Analysis and Improvement Recommendations

**Issue 1:** Record your top areas of improvement here. Be sure to elaborate on your findings (what happened) specific to your organization and what you think should be done to improve your processes.

**Issue 2:**

**Issue 3:**

**Issue 4:**

**Issue 5:**

**Issue 6:**



## ANALYSIS OF CORE CAPABILITIES

Aligning exercise objectives and core capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned core capabilities, and performance ratings for each core capability as observed during the exercise and determined by the evaluation team.

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
<p><b>Ratings Definitions:</b></p> <ul style="list-style-type: none"> <li>• Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.</li> <li>• Performed with Some Challenges (S): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.</li> <li>• Performed with Major Challenges (M): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.</li> <li>• Unable to be Performed (U): The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).</li> </ul>					

**Table 1. Summary of Core Capability Performance**

The following sections provide an overview of the performance related to each exercise objective and associated core capability, highlighting strengths and areas for improvement

# IMPROVEMENT PLAN

<b>Target Capability</b>	<b>Recommendation</b>	<b>Corrective Action Description</b>	<b>Capability Element</b>	<b>Primary Responsible Agency</b>	<b>Agency POC</b>	<b>Start Date</b>	<b>Due Date</b>
<b>Target Capability</b>	<b>Recommendation</b>	<b>Corrective Action Description</b>	<b>Capability Element</b>	<b>Primary Responsible Agency</b>	<b>Agency POC</b>	<b>Start Date</b>	<b>Due Date</b>
<b>Target Capability</b>	<b>Recommendation</b>	<b>Corrective Action Description</b>	<b>Capability Element</b>	<b>Primary Responsible Agency</b>	<b>Agency POC</b>	<b>Start Date</b>	<b>Due Date</b>

# Appendix B

## Participant Feedback Form

Name (optional): \_\_\_\_\_

Facilities represented: \_\_\_\_\_

### Participant Recommendations and Corrective Actions

1. Based on your facility actions and your opinions (not the results of the hotwash), list the top three strengths you identified.


2. Based on your facility actions and your opinions (not the results of the hotwash), list the top areas you identified that are in need of improvement.


The information you provide in this document will be used to inform the After Action Report and After Action Conference.

***Overall program rating:***

- € **Excellent**
- € **Above average**
- € **Average**
- € **Fair**
- € **Poor**

Please provide any recommendations on how this exercise or future exercises could be improved and/or enhanced.

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# Appendix C

## Sample: Participant Handout

### Module 1: Unit Activation following Notification of Pending transfer of Ebola Patient

#### Initial Response

Scenario Information: You are an Ebola Treatment Center (ETC). A hospital in your region has identified a patient in their emergency department who meets travel, exposure and symptomatic criteria for Ebola virus disease (EVD), and the laboratory testing recently screened positive for EVD.

#### HPP Required Measures:

- 2 A.B. Proportion of rostered staff that are trained in safely donning and doffing personal protective equipment (PPE) (Goal: 100%).
- 3 A.B. Time it takes for all rostered staff, upon notification of a patient with Ebola at the Ebola Treatment Center, to receive just-in-time (JIT) training (Goal: Within 72 hours)
- 4 A.B. Time until an Ebola Treatment Center is ready to admit a patient with Ebola as evidenced by an exercise or actual patient transfer (Goal: Within 72 hours of confirmation of an Ebola patient at a regional center).
- 5 A.B. Proportion of rostered staff contacted by hospital within 4 hours of a patient with confirmed Ebola's admission to a regional Ebola and other special pathogen treatment center (Goal: 100%).

#### Questions:

1. What is your decision making process to accept the patient transfer?
  - a. How will state or jurisdictional health departments be notified about the situation?
  - b. What is your time estimate on when this decision can be accomplished?

Considerations:

    - What current written and signed agreements are in place?
    - What is the origin of patient transfer?
    - What jurisdictional issues might arise?
    - Will there be JIT training for rostered staff?
2. What is your detailed ETC activation process (i.e. preparation of patient room and equipment, stock unit with supplies, notify hospital departments)?
3. How many rostered staff comprise the ETC care team?
4. What proportion of these staff have been trained to safely don and doff personal protective equipment? (Goal 100%) HPP measure 2 A.B.
5. What is the amount of time it takes for all rostered staff at your ETC, upon notification of a patient with Ebola at the regional Ebola and other special pathogen treatment center, to receive just-in-time (JIT) training (Goal: Within 72 hours)? HPP measure 3 A.B.
  - a. How is just in time training delivered?
  - b. What are key/critical elements/topics of the training?

6. What is the amount of time until your Ebola Treatment Center is ready to admit a patient with Ebola as evidenced by an exercise or actual patient transfer (Goal: Within 72 hours of confirmation of an Ebola patient at a regional center)? HPP measure 4 A.B.
  - a. What are milestones/key activities that must be accomplished for your ETC to be ready to admit a patient?
7. What is the proportion of rostered staff at your ETC contacted by hospital within 4 hours of a patient with confirmed Ebola's admission to a regional Ebola and other special pathogen treatment center (Goal: 100%)? HPP measure 5 A.B.
  - a. Discuss how staff are contacted and identify redundant methods of communication.
  - b. Who is responsible for staff notification?
8. What three key actions are you asking your response partners to do in order to assist you in the patient transport process?

Consideration:

  - What will you ask of emergency management law enforcement, Fire/EMS and Public Health?
9. Do you have a plan to communicate to your internal staff, and currently hospitalized patients and their families to let them know what is happening?
  - a. What is your external media plan?
10. What are the top three response priorities for your ETC?

## Appendix D: Acronym List

AAR	After Action Report
AAR/IP	After Action Report/Improvement Plan
ASPR	Office of the Assistant Secretary for Preparedness and Response
CDC	Centers for Disease Control and Prevention
ED	Emergency Department
EMS	Emergency Medical Services
ETC	Ebola Treatment Centers
EVD	Ebola virus disease
HPP	Hospital Preparedness Program
HSEEP	Homeland Security Exercise and Evaluation Program
NETEC	National Ebola Training and Education Center
POC	Point of Contact
PPE	Personal Protective Equipment
PUI	Person Under Investigation
SitMan	Situation Manual
SME	Subject matter expert
TTX	Tabletop exercise

**Wet Patient:** Patient exhibiting “wet” or discharge of bodily fluids symptomology including diarrhea, vomiting, profuse sweating, bleeding.

**Dry Patient:** Patient exhibiting “dry” or no bodily fluid discharge symptomology including no discharge of secretions, diarrhea, vomiting.

# Appendix E

## Sample: Airport Planning Template

**Time:**

**Date:**

**Participants:**

Ebola Treatment Center:

Regional Ebola and Other Special Pathogen Treatment Center:

Airport Authority Members:

Ground Transport Emergency Medical Services:

Law Enforcement:

Public Health:

Airline Representative(s) (if an airline is impacted or if materials, such as stairs are needed from airlines)

National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) Division of Healthcare Quality Promotion Representative (if a Quarantine Station is at the Airport)

Items to cover:

- Patient information needed for transport
- Estimated time of patient arrival
- Communication Plan
  - Primary radio channel
  - Back up mobile numbers
  - Distribute communication list
- Command Structure
  - Who is in Command (Security and Medical) of patient movement, when group is on air field, when group leaves air field, how does that exchange occur.
- Security threat assessment
  - Are there credible threats against the transport group
  - What level of security is needed
- Plans (time, location, needs) to stage or pre-position the ground transport group prior to patient arrival
- Anticipated weather issues
  - Is public works prepared to treat transport route in the event of ice or snow
- Equipment needs on tarmac and access



- o Belt loader
  - o Stair car
  - o Spill (vomiting, diarrhea, etc.) containment
- Plans for air-to-ground patient hand off.
  - o Where is plane parked
  - o How does ground transport vehicle and support vehicle enter air field
  - o How is patient removed from plane
- What is the planned primary transport route and what are the alternative transport routes
- Media
  - o Where should media inquiries be directed
  - o Where will media be allowed to stage
  - o What communication strategy will be sent out to those in the airport