

EVD Event Management

Case Scenario 3

A case of EVD on board an aircraft arriving from a country with Ebola Virus Disease transmission, to a non-affected country

Participant Guide

March 2015

This case study was developed in association with WHO Collaborating Centre for the International Health Regulations: points of entry at University of Thessaly, Greece



**World Health
Organization**

PART A

On 8 August 2014, the WHO Director-General declared the Ebola outbreak in West Africa a Public Health Emergency of International Concern (PHEIC). Country C is an unaffected country having four international airports and does not share borders with any country with Ebola Virus Disease (EVD) transmission.

The Ministry of Health in Country C, on 11 of August 2014, organizes a meeting with the aim to review the obligations of the country in regards to preparedness and response as required in IHR and to identify available resources and response capacities specifically to the an EVD event. In this meeting, representatives of the airport C participate and review with the Ministry about the capacities that are available at the airport. A general public health emergency contingency plan has been prepared two years ago and is available at the airport, but has never been activated and has no special content for response to events of EVD.

Question 1 (5 minutes)

What are the core capacities that need to be in place at airports for responding to an event of EVD that constitute a public health emergency of international concern?

References:

- *IHR Annex 1b (pages 41-42).*
- *WHO Interim Guidance for Ebola Event Management at Points of Entry. September 2014 (page 3-4)*
- *ICAO Procedures for Air Navigation Services – Air Traffic Management*
- *ICAO Annex 9 – Facilitation*
- *IHR Annex 9 (Health Part of the Aircraft Declaration)*
- *ICAO Health Related Documents (updated December 2014)*
(<http://www.capsca.org/CAPSCARefs.html>)
- *ACI Airport preparedness guidelines for outbreaks of communicable disease*
(<http://www.aci.aero/About-ACI/Priorities/Health/Documentation>)

Question 2 (20 minutes)

What should be the main content points of the public health emergency contingency plan for the airport C, specifically for the response to an event of EVD?

References:

- *International health regulations (2005): a guide for public health emergency contingency planning at designated points of entry (pages 35-52).*
- *International Health Regulations (2005). Assessment tool for core capacity requirements at designated airports, ports and ground crossings (page 26).*

PART B

On the 28 of August, a traveler (Passenger ABC) on board an aircraft, which is fully occupied with 400 travellers, asks for help from the cabin crew because he has vomited in his seat and feels weak and has a fever. His seat number is 15 C (aisle seat). Cabin crew A realizes that the passenger looks weak and quite ill. His jacket, hands, seat and floor are visibly contaminated with vomitus.

Question 3 (5 minutes)

- a) What are the actions that need to be taken by the cabin crew?
- b) What are the PPE that should be used by the cabin crew?

Reference:

WHO West Africa - Ebola virus disease Update. Travel and transport 2014 Ebola Virus Disease (EVD) outbreak in West Africa

Travel and transport risk assessment: Recommendations for public health authorities and transport sector.

IATA Guidelines <http://www.iata.org/whatwedo/safety/health/Pages/diseases.aspx>

PART C

The Passenger ABC reported to cabin crew A who interviewed the patient that he started his travel from country A (which is a country with EVD transmission) at airport A with aircraft A. His first flight stopped in airport B in Country B; he waited at the terminal of the airport B of country B for 2 hours, before boarding aircraft B to travel to Country C. He first began to feel feverish and nauseous while waiting in the terminal in Country B.

The pilot provides information on the ill passenger to the destination airport in Country C using the ICAO procedure (put link to ICAO graphic for aircraft communication). The pilot sends the Health Part of the Aircraft General Declaration to the competent authority at destination in airport C, country C (see Figure 3.1).

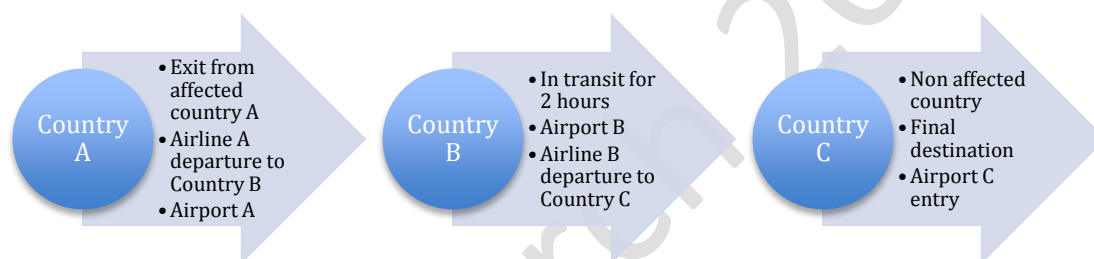


Figure 3 -1. Schematic of Passenger Travel

Health Part of the Aircraft General Declaration

Name and seat number or function of persons on board with illnesses other than airsickness or the effects of accidents, who may be suffering from a communicable disease (a fever - temperature 38°C/100 °F or greater - associated with one or more of the following signs or symptoms, e.g. appearing obviously unwell; persistent coughing; impaired breathing; persistent diarrhoea; persistent vomiting; skin rash; bruising or bleeding without previous injury; or confusion of recent onset, increases the likelihood that the person is suffering a communicable disease) as well as such cases of illness disembarked during a previous stopPassenger ABC, Seat 15C has vomited and appears feverish and weak.

Details of each disinsecting or sanitary treatment (place, date, time, method) during the flight. If no disinsecting has been carried out during the flight, give details of most recent disinsecting: Dry powder applied to vomitus on floor Seat 15C. No other sanitary treatment applied

Signature, if required, with time and date: Captain DaSantos, November 6, 2014 Crew member concerned

Figure 7. Health Part of the Aircraft General Declaration

Question 3 (20 minutes)

What are the actions that the public health authority in airport C, country C should take based on the information received in the Health Part of the Aircraft General Declaration, in order to perform a preliminary assessment (before the arrival of the aircraft)?

Reference:

- *WHO Interim Guidance for Ebola Event Management at Points of Entry. September 2014. See table on pages 7-10, rows "On board aircraft" and "At destination where inbound aircrafts from EVD affected areas are available"*

[http://apps.who.int/iris/bitstream/10665/131827/1/WHO EVD Guidance PoE 14.1 eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/131827/1/WHO_EVD_Guidance_PoE_14.1_eng.pdf?ua=1)

Question 4 (10 minutes)

How should the available information be disseminated from the competent authority at airport C in country C that received the Health Part of the Aircraft General Declaration and performed the risk assessment?

Question 5 (10 minutes)

What information will the public health authorities want to know as part of the initial assessment, in relation to Country A?

Question 6 (10 minutes)

What are the actions that should be taken by the competent authorities in Country A:

- a. In the airport A (start of the travel in the affected country)?
- b. On aircraft A (the first flight of the patient)

Reference

- *Guidance on the management of a case of EVD on board an aircraft is given by WHO at the following link:*

[http://apps.who.int/iris/bitstream/10665/132168/1/WHO EVD Guidance TravelTransportRisk 14.1 eng.pdf?ua=1&ua=1&ua=1](http://apps.who.int/iris/bitstream/10665/132168/1/WHO_EVD_Guidance_TravelTransportRisk_14.1_eng.pdf?ua=1&ua=1&ua=1)

Question 7 (10 minutes)

What are the actions that should be taken by the competent authorities in Country B in relation to the Airport B (in transit)?

Question 8 (10 minutes)

What are the actions that should be taken by the competent authority in regards to the Passenger ABC disembarkation and transportation at Airport C?

Question 9 (10 minutes)

What are the immediate actions that should be taken by the authorities in Country C in regards to the other travelers on the aircraft B?

Reference

- *Guidance on the management of a case of EVD on board an aircraft is given by WHO at the following link:*

http://apps.who.int/iris/bitstream/10665/132168/1/WHO_EVD_Guidance_TravelTransportRisk_14.1_eng.pdf?ua=1&ua=1&ua=1

- *WHO CONTACT TRACING DURING AN OUTBREAK OF EBOLA VIRUS DISEASE. September 2014.*

Question 10 (5 minutes)

What is the personal protective equipment that should be used by:

- a) the persons performing the medical assessment
- b) the persons that will escort the patient to the ambulance
- c) the persons interviewing the asymptomatic travelers;

Question 11 (20 minutes)

- a) What are the steps to put on the personal protective equipment?
- b) What are the steps to remove the personal protective equipment?
- c) What is the correct method for hand hygiene?

Bibliography

Heymann, D.L. (Ed.), Control of Communicable Diseases Manual, APHA, WHO, Washington, 2008

WHO, International Health Regulations (2005), Geneva, WHO, 2008 – 2ed.

WHO, Handbook for Inspection of Ships and Issuance of Ship Sanitation Certificates, Geneva, 2011

WHO, Ebola Virus Disease (EVD or Ebola) Exit Screening at Points of Departure, 2014.

International Health Regulations (2005). Assessment tool for core capacity requirements at designated airports, ports and ground crossings.

WHO Interim Guidance for Ebola Event Management at Points of Entry. September 2014.

International health regulations (2005): a guide for public health emergency contingency planning at designated points of entry. 2012.

Global Alert and Response (GAR). WHO guidance for the steps to put on and to remove personal protective equipment (http://www.who.int/csr/resources/publications/ebola/filovirus_infection_control/en/)

WHO Statement on travel and transport in relation to EVD outbreak management. 18 August 2014.

IATA guidelines for air crew to manage a suspected communicable disease or other public health emergency on board

IATA guideline for cleaning crew for an arriving aircraft with a suspected case of communicable disease

ICAO Health related documents (1) Procedures for Air Navigation Services; (2) Annex 6 – Medical Supplies

WHO Aviation Guide (includes information on sanitizing of aircraft)

Additional information

Personal Protective Equipment

<http://www.who.int/csr/resources/publications/ebola/ppe-steps/en/>

Hand washing and Hand rubbing

http://www.who.int/gpsc/tools/Five_moments/en/

Appendix 1: Passenger health questionnaire



Primary Screening
Passenger Health Que

Appendix 2: Secondary screening form



Secondary Screening
Form.docx