



WHO Interim Guidance for Ebola Event Management at Points of Entry

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I. Introduction

As the Ebola virus disease (EVD) continues to claim lives and put pressure on health systems in West Africa, its transmission across borders has prompted a need to manage suspected cases at Points of Entry (PoE).¹ This should be conducted according to WHO recommendations and risk assessments, and adapted according to the unique characteristics of each PoE. It should also be consistent with international best practices and standard operational procedures (e.g. for air points of entry – by the International Civil Aviation Organization and International Air Transport Association).

This interim guidance document is intended for National Focal Points for the International Health Regulations (IHR)(2005)(1), PoE public health authorities, PoE operators, conveyance operators, crew members and other stakeholders involved in the management of Public health event

It should be used as a reference and in conjunction with WHO publications on contingency planning at PoE, local established capacities and emergency plans. It is recommended that the contents of this document be adapted to the present situation, local requirements and common practice.

Public health emergency plans and standard operational procedures should be in place at designated PoEs, in accordance with international best practices, agreements, and the IHR. The aim is to provide early detection of potentially infected persons; to assist in implementing WHO recommendations related to Ebola management; and to prevent the international spread of the disease while allowing PoE authorities to avoid unnecessary restrictions and delays.

To mitigate the risk of infectious travellers boarding aircraft and other modes of transportation, and minimize the interference to PoE operations, the following measures should be established.

States with Ebola virus disease (EVD) transmission:

- Conduct exit screening of all persons at international airports, seaports and major land crossings for unexplained febrile illness consistent with potential Ebola infection.
 - At a minimum, the exit screening should consist of a questionnaire, a temperature measurement and, if there is a fever, an assessment of the risk that the fever is caused by EVD.

For all points of entry:

- Ensure a public health emergency contingency plan is in place at each designated PoE. For international airports, the aerodrome emergency plan should include a public health

¹ PoE- Points of Entry: a passage for international entry or exit of travellers, baggage, cargo, containers, conveyances, goods and postal parcels as well as agencies and areas providing services to them on entry or exit. From the International Health Regulations (2005).

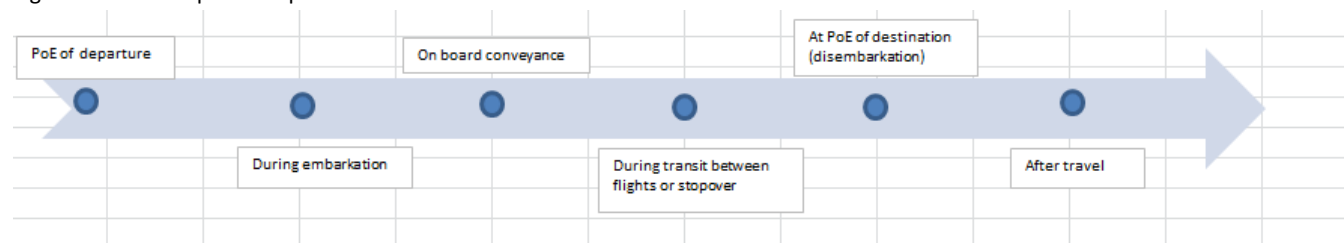
component, in accordance with International Civil Aviation Organization Health related requirements.

- Allocate a place at PoE for health assessments, in the event of suspected illness detected in a traveller.
- Establish standard operating procedures for refer ill travellers to designated hospitals, including the identification of adequate ambulance services.
- Ensure a sufficient number of trained staff, with appropriate and sufficient Personal Protective Equipment (PPE) and disinfectant.
- Raise awareness among conveyance operators of the need to immediately notify PoE health authorities **prior to arrival** of any suspected cases. Ensure that passenger locator forms are on board flights and at the airport, and that airport ground staff and flight crew are trained in managing EVD and environmental contaminants.
- Maintain effective and rapid communication between PoE health authorities and the national health surveillance system.
- Promptly establish lines of communication between public health and transport sector officials, e.g. representatives of the national civil aviation authority, airport operators and aircraft operators. Raise awareness of EVD and disseminate information among all relevant stakeholders at PoE.

II. Management of events

During travel, a potential case may be detected at various points. The appropriate response depends on the nature of the exposure, the status of global alerts and awareness of various parties. (Figure 1)

Figure 1. Potential points of public health hazard detection or notification.



Preliminary standard response at PoE: recommended actions to be taken at specified stages of travel (see figure 1)

Steps	Questions	Sources of information	Recommendations for action
Detection at PoE at departure	<ul style="list-style-type: none"> ■ Does the passenger appear to be unwell? ■ Are the symptoms consistent with suspected EVD? Symptoms may include: fever, weakness, muscle pain, headache, sore throat, vomiting, diarrhoea, rash, or bleeding ■ If the country is unaffected by Ebola: <ol style="list-style-type: none"> a. Has the passenger had previous contact with anyone suspected or confirmed to have Ebola? b. Does the passenger's recent travel history include a country where there is an EVD outbreak? <p>If Yes to any of the above questions, please refer to recommendations for Ebola case management at PoE of origin in countries with EVD transmission.</p>	Health authority at PoE and other PoE staff (customs, border security, ground staff, etc.)	<p>The PoE health authority should consider making prior arrangements in coordination with the PoE operator, conveyance operator, other stakeholders at PoE, and the national health authority for early detection and to prevent ill persons with symptoms of EVD from disembarking provide information to travellers at points of entry on the potential risk of EVD</p> <ol style="list-style-type: none"> a. provide regional or national public health contact information b. ensure any person with an illness consistent with EVD is not permitted to travel unless the travel is part of an appropriate medical evacuation, if PoE is at the countries with EVD transmission c. identify interpreters if needed. <ul style="list-style-type: none"> ■ If the traveller has recently travelled to an EVD-affected area, and is showing symptoms indicative of EVD, the PoE health authority should consider the following actions: <ol style="list-style-type: none"> a. activating the public health emergency plan at the PoE b. arranging medical examination c. arranging transport of suspected cases to designated hospitals d. arranging collection of clinical specimens or environmental specimens e. arranging transport and delivery of clinical specimens to an appropriate laboratory f. strengthening surveillance and public health measures at PoE g. maintaining effective and rapid communication between PoE health

			<p>authorities and the national health surveillance system.</p> <p>At the PoE of a country with EVD transmission, exit screening of all persons should be conducted at international airports, seaports and major land crossings, for unexplained febrile illness consistent with potential EVD infection. At a minimum, the exit screening should consist of a questionnaire, a temperature measurement and, if there is a fever, an assessment of the risk that the fever is caused by EVD. Ensure personal protective equipment (PPE) and hand hygiene practice and products are available (alcohol-based hand-rub solutions, running water, soap, and single-use towels). Staff conducting exit screening should be trained in the correct use of PPE and infection control in handling suspected cases.</p>
<p>Additional actions for travellers with suspected EVD at PoE, prior to embarking (either at the counter, in the passenger lounge prior to boarding or at the time of boarding)</p>	<ul style="list-style-type: none"> ■ Is the traveller/crew symptomatic (number of affected passengers/crew)? ■ What was the time/date of illness onset? ■ Does travel history imply contact with anyone suspected of having EVD, or with a history of previous travel in EVD- affected areas? ■ Has any death occurred? ■ What is the traveller's health status? (Symptomatic? High risk of EVD exposure?) 	<p>Conveyance operators, agents, staff, passengers, PoE persons, or other authorities</p>	<ul style="list-style-type: none"> ■ For PoE of countries with EVD transmission, any person with an illness consistent with EVD should not be allowed to travel unless the travel is part of an appropriate medical evacuation ■ Air Travel/Aircraft <ul style="list-style-type: none"> If traveller/crew member displays symptoms related to EVD or is considered to be in close contact with EVD (or other communicable diseases) <ol style="list-style-type: none"> a. Medical clearance is required by the airline b. If a traveller does not present medical clearance to the airline and refuses to delay his/her travel, the airline may exercise its right to refuse boarding, in the case of air travel c. Ensure Public Health Passenger Locator Forms (PLFs) - see http://www.capsca.org/CAPSCARefs.html are available on board the aircraft and/or at the destination PoE. ■ Maritime/Ship <ol style="list-style-type: none"> a. If traveller/crew shows symptoms related to EVD or is considered to be in close contact with EVD), the traveller should disembark and be placed under public health observation and arrangements made for a medical examination b. The PoE health authority should <ul style="list-style-type: none"> --consider activating the contingency plan at the PoE, including adequate protection of staff in contact with the suspected case and his/her immediate environment --arrange transport of suspected cases to designated hospitals --arrange collection of clinical specimens or environmental contaminant samples --arrange transport and delivery of clinical specimens to an appropriate laboratory --Strengthen surveillance and public health measures at PoE --maintain effective and rapid communication between PoE health authorities and the national health surveillance system ■ If there is a death linked to the event, the PoE health authority should <ol style="list-style-type: none"> a. contact medical services and the security sector to investigate the cause of death; b. check if contact tracing is needed

			c. ensure that the death has been registered
On board flight/ship	<ul style="list-style-type: none"> ■ Are the symptoms consistent with EVD? Symptoms may include: fever, weakness, muscle pain, headache, sore throat, vomiting, diarrhoea, rash, or bleeding ■ Is the environment of the plane/ship contaminated (by vomit, spilled blood, other body fluid)? ■ How many passengers and staff were exposed? ■ Is there a doctor on board? ■ For aircraft, does the operator have access to ground-based medical support? ■ Has the traveller received medical assistance during the flight? ■ Does the traveller require medical attention upon arrival (clinical signs and symptoms among travellers and severity)? ■ Has the captain/ master been informed of the incident and have the PoE authorities been notified? (For aircraft, see ICAO Procedures for Air Navigation Services – Air Traffic Management: In ICAO Health Related Documents: http://www.capsca.org/CAPSCARefs.html) ■ Are any enhanced precautions for the disembarkation of ill and healthy travellers needed? ■ Air Travel/Aircraft <ul style="list-style-type: none"> a. Is the distribution of passenger locator forms warranted to conduct contact tracing? b. Does the traveller have additional travel planned (currently in-transit)? c. Was there personal protective equipment or a universal precaution kit on board? Was it used? Were appropriate medical supplies available and used? 	<p>Aircraft: -Health Part of The Aircraft General Declaration -Passenger Locator Form</p> <hr/> <p>Ship: -Maritime of Health Declaration -Ship sanitation certificates -Medical log book, including information regarding the health status of passengers/crew members, health control measures including medical/prophylaxis treatment administered, en route; -List of medicines according to national regulations, etc.</p>	<ul style="list-style-type: none"> ■ The PoE health authority should make prior arrangements in coordination with the PoE operator, conveyance operator, other stakeholders at the PoE , and the national health authority to <ul style="list-style-type: none"> a. prepare in advance basic disease/health information in several languages b. provide regional or national public health contact information c. ensure access to radio medical support, if needed (for aircraft, in collaboration with the aircraft operating agency). ■ If the traveller has recently been to an EVD-affected area, and is showing symptoms indicative of EVD, the PoE health authority should consider: <ul style="list-style-type: none"> a. collecting information from crew and include what (if any) medical assistance was administered prior to arrival b. arranging a medical assessment upon arrival of the aircraft/ship/ground vehicle at the PoE or send a doctor to board the ship en route c. identifying PoE space requirements for arriving travellers for interview and health assessments, with access to toilet facilities and seating d. collecting clinical specimens and/or environmental samples according to national practice, if needed e. for air Travel/aircraft: <ul style="list-style-type: none"> -- public health authorities should coordinate with aircraft and airport operators and ensure that passenger locator forms are available on the flight and/or at destination airports. Airport personnel and cabin crew should be appropriately trained and medical and universal precaution kits (see below) for managing EVD cases/contacts should be available on board, in accordance with ICAO guidelines, and at points of entry. -- crew should follow IATA SOPs on the management of communicable disease on board http://www.iata.org/whatwedo/safety/health/Pages/diseases.aspx and WHO 2014 Ebola Virus Disease (EVD) outbreak in West Africa - Travel and transport risk assessment: Interim guidance for public health authorities and transport sector 4.2.3 Guidance for international air transport, http://www.who.int/csr/disease/ebola/en/ -- Identification of contacts. <p>Ensure passenger locator forms (see http://www.capsca.org/CAPSCARefs.html) are available on board the aircraft and/or at the destination PoE.</p> <ul style="list-style-type: none"> a. Ensure the capacity to collect, use and securely store personal information on passenger locator forms b. Identify close contacts or persons exposed and ensure they receive information about health measures c. Communicate with the health authorities at the destination of the close contacts

			<p>f. For Maritime/Ship</p> <ul style="list-style-type: none"> -- Raise awareness among shipping companies of the need to immediately notify the port health authority prior to arrival if a person on board is suspected of having contracted EVD -- Ensure the ship's master, doctor or crew member appointed for health issues on board is fully informed and is educated about the risks of EVD, and the precautions and protective measures to be taken by crew members to prevent them from contracting the virus -- Crew should follow WHO 2014 <i>Ebola Virus Disease (EVD) outbreak in West Africa - Travel and transport risk assessment: Interim guidance for public health authorities and transport sector 4.2.4 Guidance for ships and shipping companies</i> http://www.who.int/csr/disease/ebola/en/
<p>Detection during transit (from affected to unaffected area, or from unaffected to affected area, or to and from affected areas)</p>	<ul style="list-style-type: none"> ■ Have the appropriate measures been taken on board the conveyance? ■ Is a human life in danger? ■ Does the traveller require medical attention upon arrival at the PoE (clinical signs and symptoms among travellers and severity)? ■ Are any precautions for the disembarkation of ill and healthy travellers needed? 	<p>Flight:</p> <ul style="list-style-type: none"> - Health Part of The Aircraft General Declaration - Passenger Locator Form <hr/> <p>Ship:</p> <ul style="list-style-type: none"> - Maritime of Health Declaration - Ship sanitation certificates - Medical log book - List of medicines according to national regulations, etc. 	<ul style="list-style-type: none"> ■ The PoE health authority should make prior arrangements in coordination with the PoE operator, conveyance operator, other stakeholders at the PoE , and the national health authority to <ol style="list-style-type: none"> a. ensure sufficient availability of PoE staff, personal protective equipment for responders and disinfectants b. provide regional or national public health contact information c. identify interpreters if needed. ■ If traveller/crew shows symptoms related to EVD or is considered to be a close contact with EVD, the PoE health authority should consider the following actions: <ol style="list-style-type: none"> a. identify space requirements for interview and health assessments. The space should have access to toilet facilities and seating b. conduct an investigation if the travel history indicates previous travel to an EVD-affected area. c. inspect the conveyance for environment contamination and supervise cleaning staff to apply public health measures (decontamination and disinfection, etc.) d. ensure access to medical support, if needed e. ensure visa and customs clearance if disembarking for medical support is needed f. ensure patient locator forms are available at Port Health at the destination airport (template can be found at http://www.capsca.org/CAPSCARef.html)

<p>At destination where inbound flight/ship from/passing through EVD affected areas are available</p>	<ul style="list-style-type: none"> ■ Is there a potential to spread the infection and to contaminate the environment? ■ Are special measures needed upon arrival at the points of entry? ■ Does the conveyance need any supplies? ■ Does the situation demand that health authorities/experts be involved (clinicians, epidemiologists, environmentalists, experts in responding to chemical or radiological events?) ■ Is the conveyance coming from an affected area where WHO has recommended measures? ■ Have clinical specimens or environmental samples been collected or do officers of the responsible health authority need to collect them? ■ When is the conveyance scheduled to depart? ■ Are there a large number of connections to international or domestic points of entry? 	<p>Aircraft:</p> <ul style="list-style-type: none"> - Health Part of the Aircraft General Declaration - Passenger Locator Card 	<ul style="list-style-type: none"> ■ The PoE health authority should make prior arrangements in coordination with the PoE operator, conveyance operator, other stakeholders at the PoE , and the national health authority to <ul style="list-style-type: none"> a. ensure sufficient Port health staff, personal protective equipment, and disinfectants are available. b. determine a suitable product for disinfection with the aircraft operator. Sodium hypochlorite (bleach) is not an acceptable disinfectant on board an aircraft. c. raise awareness among relevant stakeholders and personnel at PoE, including cargo handlers, that packages that are visibly soiled with blood or body fluids should not be handled d. identify interpreters if needed.
		<p>Ship:</p> <ul style="list-style-type: none"> a. Maritime of Health Declaration b. Ship sanitation certificates c. Medical log book d. List of medicines according to national regulations, etc 	<ul style="list-style-type: none"> ■ If traveller/crew shows symptoms related to EVD or is considered to be a close contact with EVD the, PoE health authority should consider: : <ul style="list-style-type: none"> a. activating the contingency plan at the PoE if necessary. The aerodrome emergency plan should include a public health component. b. arranging delivery of supplies that the conveyance may need (e.g. personal protective equipment, medicines, cleaning and disinfection, waste disposal) c. communicating with other authorities/ experts, where appropriate, to assess the risk to protect public health and determine the necessary control measures and evaluate their effectiveness d. authorizing disembarkation of travellers without illness or suspected EVD and conducting medical follow up with passengers as needed e. minimizing contact between ground staff and ill travellers or the contaminated environment f. inspecting conveyance on board for environment contamination g. arranging the collection of clinical specimens or environmental samples according to national practice, if needed h. supervising cleaning staff to apply public health measures, as appropriate (decontamination and disinfection, etc.). Please refer to WHO 2014 <i>Ebola Virus Disease (EVD) outbreak in West Africa - Travel and transport risk assessment: Interim guidance for public health authorities and transport sector</i> http://www.who.int/csr/disease/ebola/en/; and http://www.iata.org/whatwedo/safety/health/Documents/health-guidelines-cleaning-crew.pdf and i. reporting the event to the IHR NFP if appropriate, for further assessment and notification to WHO according to national plans and protocols if necessary j. arranging interview and health assessments. The space should have access to toilet facilities and seating, water and washing facilities. k. arranging transport of suspected cases to designated hospitals

			<ul style="list-style-type: none"> i. arranging transport and delivery of clinical specimens to an appropriate laboratory m. preparing for triage to minimize flight disruptions n. in the case of maritime/ship, additional concern should be given to: <ul style="list-style-type: none"> --discussion (consult/interview) with the ship master, ship medical staff and if necessary travellers who are ill and may be in quarantine or isolation on board already --keeping records of the findings and taking notes of the evidence found (e.g. infection on board/hazards identified) and measures taken (to comply with/recommended by) in the Ship Sanitation Control Certificate, according to IHR article 39.5 --establishing communication, nationally or internationally, with competent authorities at the next known port, to promptly inform them if they are unable to carry out the required control measures at the port. <p>Maintain ongoing communication with conveyance operators (airlines, ships, ground vehicles), airport and air traffic services, maritime and port authorities.</p> <p>Further details on civil aviation procedures related to public health see http://www.capsca.org/Documentation/ICAOHealthRelatedSARPsandguidelines.pdf).</p>
<p>After travel</p>	<ul style="list-style-type: none"> ■ Are the symptoms consistent with EVD? Symptoms may include: fever, weakness, muscle pain, headache, sore throat, vomiting, diarrhoea, rash, or bleeding ■ Does previous travel history indicate contact with anyone suspected of infection with Ebola virus? ■ Does the passenger have a history of recent travel in the areas affected by the Ebola outbreak? 		<p>The ill person should seek medical assessment and care at a hospital</p> <ul style="list-style-type: none"> ■ If their recent travel history indicates contact with anyone suspected of having EVD, or with a history of recent travel in EVD-affected areas, contact tracing should be undertaken to identify close contacts (eg. passenger/crew one seat away from ill traveller on the same flight). ■ PoE health authorities should make arrangements to facilitate repatriation of cases and transportation of specimens. ■ Strengthen communication between national health surveillance and PoE.

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