This document provides information on Ebola virus disease (EVD) prevention and preparedness for points of entry in the Caribbean.

This information is based on currently available scientific evidence and expert opinion, and is subject to change as relevant new information becomes available. It should be read in conjunction with relevant national legislation, regulations and policies. This document has been adapted and prepared for the Caribbean situation, and therefore may differ from guidance available from other agencies.

Background
The 2014 EVD epidemic is the largest in history. As of November 11, 2014 a total of 14,413 confirmed, probable, and suspected cases of EVD have been reported from six affected countries (Guinea, Liberia, Mali, Sierra Leone, Spain, and the United States of America) and two previously affected countries (Nigeria and Senegal). There is currently only widespread and intense transmission in Guinea, Liberia and Sierra Leone. A total of 5177 deaths have been reported. Up to date case counts and further information on the ongoing outbreaks in Africa can be found on the World Health Organization (WHO) website: http://www.who.int/csr/disease/ebola/situation-reports/en/

What is Ebola Virus Disease (EVD)?
EVD is a severe acute viral illness. Symptoms of EVD can appear 2 to 21 days after exposure to the virus, but the average is 8-10 days. Symptoms usually begin suddenly with fever, sore throat, chills, headache and muscle pain and weakness. Following the initial symptoms, additional symptoms may include rash, nausea, vomiting, diarrhea and internal and external bleeding. Based on past outbreaks, an average of 50% of people infected with EVD die, but this has ranged from 25 to 90%.

EVD can be transmitted through direct contact with:

- Blood or body fluids (e.g., urine, saliva, sweat, faeces, vomit, breast milk, and semen) of a person who is sick with Ebola.
- Objects (e.g., needles and syringes) that have been contaminated with the virus.
- Infected animals (e.g., bats, primates) in the affected countries

Ebola is NOT spread through the air or by water, mosquitoes or consumption of properly cooked food. However, in Africa, Ebola may be spread by handling bush meat.
Only individuals infected with Ebola virus who are symptomatic can transmit the disease. Conversely, persons who are infected with Ebola virus, but not yet symptomatic, are not infectious and do not transmit the disease.

**Guidance for Points of Entry**

To date, there have been NO reported cases of EVD in the Caribbean region.

There are no animal carriers of the Ebola virus in the Caribbean.

The likelihood of a case being imported to the Caribbean remains low.

There are no cruise ships that come directly from the affected West African countries to the Caribbean so passengers would need to use commercial airlines to fly to a port of departure for the Caribbean. There are also no direct flights into the Caribbean from the affected countries. Based on a recently published article in the Lancet that looked at the potential for international dissemination of EVD via commercial air travel, no Caribbean countries were listed as the final destination countries of individuals departing from Guinea, Liberia or Sierra Leone.5

Although the likelihood is low that a case will be identified at a point of entry in the Caribbean, the following information provides guidance for points of entry in the Caribbean. Refer to Appendix A for key resources that provide further information and guidance for points of entry in the Caribbean.

**Travel Restrictions**

As per the WHO recommendations6, **CARPHA does NOT recommend travel bans for individuals coming from affected countries to the Caribbean.**

**Exit Screening for EVD in the Caribbean**

Exit screening is recommended by the WHO only for countries with intense Ebola transmission (Guinea, Liberia and Sierra Leone). In these three West African countries with ongoing Ebola transmission, screening travelers for unexplained febrile illness consistent with potential Ebola infection is recommended for all persons at international airports, seaport, and major land crossings. The CDC reports that at all three countries, exit screening has been successfully implemented, which includes:7

1. All travellers have their temperature taken, answer questions about their health and exposure history and are visually assessed for signs of potential illness
2. Travellers with symptoms or possible exposures to Ebola are separated and assessed further.
3. Ill travellers are not permitted to travel on commercial vessels, and are referred to public health authorities for further evaluation.

**CARPHA does not recommend exit screening at any air or sea departure points in the Caribbean.**
General Recommendations for Points of Entry in the Caribbean

The following recommendations are a guide to strengthen the ability of points of entry to identify, isolate, notify, evaluate and give support to suspected and probable cases of EVD. They are adapted from WHO recommendations\(^8\) for all points of entry:

- In accordance with international best practices, and the revised International Health Regulations (2005), ensure a public health emergency contingency plan and standard operating procedures are in place at each designated point of entry.
- For international airports, the aerodrome emergency plan should include a public health component, in accordance with International Civil Aviation Organization Health related requirements.
- Identify an area at points of entry for interviews and health assessments, in the event of suspected illness detected in a traveller. The area identified should have access to toilet facilities. Interpreters may also be required to interview those who cannot communicate in the main local languages.
- Establish standard operating procedures to move ill travellers to designated hospitals, including the identification of routes through the least populated areas of the point of entry to ensure that ill persons are isolated from others, and that adequate provision for ambulance services is in place.
- Ensure a sufficient number of trained staff at points of entry, with available, appropriate and sufficient Personal Protective Equipment (PPE), disinfectant and access to soap and water.
- Raise awareness among conveyance operators of the need to immediately notify point of entry health authorities prior to arrival of any suspected cases. Ensure that passenger locator forms (a standard form used for any infectious disease suspected during transit - see Appendix B) are on board all 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 point of entry health and security authorities and the national public health authorities.
- 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 point of entry.

In addition to these WHO recommendations, countries should also post visible notices at points of entry with the signs and symptoms of EVD, and instructions for what to do if a traveller experiences symptoms, or witnesses another traveller with symptoms (see Appendix C for useful illustrations that describes key points for Ebola identification and prevention in ports/terminals).

Entry Screening at Points of Entry in the Caribbean

The WHO does not recommend entry screening at points of entry, as it may have a limited effect in reducing international spread and resource demands are significant.\(^6\)

A report released by the European Centre for Disease Control and Prevention (ECDC) states that the use of entry screening for infectious disease has not proven to be effective to prevent or delay
transmission in past epidemics such as SARS. They also note that, when using traveller body temperature as part of entry screening, even the best temperature screening will:

- miss up to 20% of the febrile symptomatic EVD cases;
- miss travellers concealing their fever;
- miss two-thirds of infected cases, still incubating and not presenting with symptoms;
- detect cases of fever related to many, more common, infectious diseases such as malaria or influenza.

The EU has stated that, if exit screening is being conducted effectively, the added value of entry screening is likely to be very small, and the resource implications considerable. Conducting entry screening will result in an increase in the demand for Ebola testing, which countries in the Caribbean may have difficulty fulfilling. In addition, screening measures are expensive and require extensive public health resources, including the development and implementation of protocols to further investigate possibly febrile passengers. Utilizing screening measures at points of entry may reduce staff availability in the Caribbean for other aspects of EVD preparedness and management.

For these reasons, CARPHA does not recommend entry screening at points of entry in the Caribbean at this time.

Although entry screening is not recommended by the WHO, some countries have implemented entry screening at airports (see Appendix D for a summary of selected countries entry screening practices). CARPHA does not recommend entry screening; however, for those countries who wish to implement entry screening, the resource requirements should be carefully balanced against the expected benefits of entry screening, before implementation. Appendix E provides an example of a Travel Health Declaration Form that countries may wish to adapt for use at points of entry, if entry screening is implemented. This tool would supplement existing customs and immigration forms, and may be useful in assessing risk and supporting contact tracing, should the need arise.

This form was modified from the Travel Health Declaration Form used in the United States. Travellers who have been in one of the Ebola affected countries AND who have answered “Yes” to any of the symptom or exposure questions should be immediately referred to national public health authorities for further screening. Travellers who have been in one of the Ebola affected countries, but who did not answer “Yes” to any of the symptom or exposure questions should be given an information sheet about Ebola Virus Disease, with local contact information for whom they should contact with any concerns.
REFERENCES

Appendix A

The following are a list of key resources that provide information on EVD that may be useful for points of entry in the Caribbean.


Appendix B

This public health passenger locator card was developed by an informal transportation working group convened by the World Health Organization. The card provides a way to rapidly collect passenger contact information and can be used if disease transmission is suspected on board an aircraft to assist with contact tracing. This is different than entry screening, which is done for all or targeted passengers upon arrival into a country. The card can be downloaded here:
http://www.who.int/ihr/PLC.pdf?ua=1

<table>
<thead>
<tr>
<th>Flight Information</th>
<th>1. airline name</th>
<th>2. flight number</th>
<th>3. seat number</th>
<th>4. date of arrival (yyyy/mm/dd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Information</td>
<td>5. Last (Family) Name</td>
<td>6. First (Given) Name</td>
<td>7. Middle Initial</td>
<td>8. Your sex (Male/Female)</td>
</tr>
<tr>
<td>Permanent Address</td>
<td>14. Number and street (Separate number and street with blank box)</td>
<td>15. Apartment number</td>
<td></td>
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</tr>
<tr>
<td>Temporary Address</td>
<td>20. Hotel name (If any)</td>
<td>21. Number and street (Separate number and street with blank box)</td>
<td>22. Apartment number</td>
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<td></td>
<td>23. City</td>
<td>24. State/Province</td>
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<td></td>
<td>25. Country</td>
<td>26. ZIP/Postal Code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Contact Information</td>
<td>27. Last (Family) Name</td>
<td>28. First (Given) Name</td>
<td>29. City</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30. Country</td>
<td>31. Email</td>
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<td></td>
<td>32. Mobile phone</td>
<td>33. Other phone</td>
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</tr>
<tr>
<td>Travel Companions – Family</td>
<td>Only include age if younger than 18 years</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Last (Family) Name</td>
<td>First (Given) Name</td>
<td>Last number</td>
<td>Age &lt;18</td>
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<tr>
<td>Travel Companions – Non-Family</td>
<td>Also include name of group (if any)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Last (Family) Name</td>
<td>First (Given) Name</td>
<td>Group (e.g., friend, business, family)</td>
<td></td>
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Appendix C

The following infographics from the WHO and CDC provide examples of illustrated materials for points of entry, to remind travellers what to look for when travelling to and from countries affected by the current Ebola outbreak.


## Appendix D

**Current activities at points of entry in selected countries/areas (as of November 19, 2014)**

<table>
<thead>
<tr>
<th>Country</th>
<th>International Point of Entry Screening</th>
</tr>
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| Canada\(^{10,11}\) | • International points of entry are staffed 24/7 and federal legislation requires travellers to notify a Canada Border Services Agency Officer if they think they might be sick with a contagious illness or have been in close contact with someone else who does  
  • Travellers originating from affected West African countries are identified and asked about their health. There are no direct flights into Canada from Guinea, Liberia or Sierra Leone.  
  • If travellers are ill or identify as having been in contact with an ill person, they are referred to a Public Health Agency of Canada Quarantine Officer. Quarantine Officers have the necessary training and equipment, including temperature monitoring devices, to conduct a health assessment and determine whether additional health measures are required.  
  • Quarantine Officers from the Public Health Agency of Canada are positioned in six major Canadian airports with the highest volume of international travel, to assist in screening of travellers from Ebola-affected regions and delivering public health education to international travellers. |
| United States\(^{12,13}\) | • CDC is working with partners to display Ebola-specific travel messages for electronic monitors and posters at ports of entry.  
  • CDC has developed a Travel Health Alert Notice (T-HAN) that is handed out by Customs and Border Protection to people arriving in the United States from a country with Ebola.  
    o The T-HAN reminds travellers to monitor for symptoms for 21 days after arriving in the US. It also advises people to call their doctor if they were exposed during their time in a country with an Ebola outbreak.  
  • Enhanced screening has been implemented at 5 US airports (JFK International, Washington-Dulles, Newark, O’Hare, Atlanta airports) for travellers who have arrived from or through Guinea, Liberia, Sierra Leone and Mali.  
    o All passengers from the four countries will be observed for “signs of illness” and will be asked a series of questions about their health and potential exposure to Ebola. Medical staff will take their temperature with non-contact thermometers.  
  • As of October 27, a post-arrival active monitoring program was established in the six states that are the destination for approximately 70% of incoming international travellers (New York, Pennsylvania,
<table>
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<tr>
<th>Country</th>
<th>International Point of Entry Screening</th>
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<tr>
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<td>Maryland, Virginia, New Jersey, and Georgia). CDC has reported that active post-arrival monitoring will begin in other states in the upcoming days.</td>
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<tr>
<td></td>
<td>o Active post-arrival monitoring means that travellers arriving from Liberia, Sierra Leone, Guinea or Mali without febrile illness or symptoms consistent with Ebola will be followed up daily by state and local health departments for 21 days from the date of their departure from West Africa.</td>
</tr>
<tr>
<td></td>
<td>o Asymptomatic travellers arriving from Liberia, Sierra Leone, Guinea or Mali are not placed into isolation or quarantine.</td>
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<td></td>
<td>o Travellers will be required to report daily to public health their temperature and the presence or absence of other Ebola symptoms and their intent to travel. If a traveller does not report in, state or local public health will work to immediately locate the individual.</td>
</tr>
<tr>
<td></td>
<td>o Travellers will also receive a CARE (Check And Report Ebola) kit at the airport that contains a tracking log and pictorial description of symptoms, a thermometer, guidance for how to monitor with a thermometer and a wallet card on who to contact if they have symptoms or that the can present to a health care provider.</td>
</tr>
<tr>
<td>United Kingdom¹⁴</td>
<td>• Public Health England has implemented enhanced screening at London’s Heathrow and Gatwick airports and Eurostar terminals for passengers arriving from Guinea, Sierra Leone and Liberia, including: assessing passengers’ recent travel history, contacts, and onward travel arrangements as well as a possible medical assessment. Passengers are also given advice on what to do should they develop symptoms later.</td>
</tr>
<tr>
<td>European Union⁹</td>
<td>• The EU has not recommended entry screening for their member countries, but entry screening for passengers coming from affected West African countries has been adopted by a small number of member states (including the UK – see above).</td>
</tr>
<tr>
<td>Caribbean countries</td>
<td>• CARPHA has not recommended entry screening for its member states, but entry screening for passengers coming from affected West African countries has been adopted by a small number of Caribbean countries.</td>
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Appendix E

Example Travel Health Declaration Form

Each traveller should complete this form in conjunction with the national customs and immigration form (parents/guardians should complete the form for those not able to complete it themselves).

This information is being collected as part of the public health response to the outbreaks of Ebola. The information will be used by [insert country here] public health authorities and other international, national and local public health agencies for that purpose. [Countries may wish to cite legal authority for collecting this information].

Completion of this form is voluntary. However, if an individual refuses to provide the requested information, or is not truthful about the information provided, national public health authorities may quarantine, isolate, or place the individual under surveillance if there is a reasonable belief that the individual is infected with or has been exposed to Ebola.

Section 1. Traveller’s Information

Please check off any of the following countries you have been in during the past 21 days (please check ALL that apply)

☐ Guinea ☐ Liberia ☐ Sierra Leone ☐ I have not visited any of the listed countries

Last (family) name: ........................................... First (given) name: ...........................................

Passport country: ........................................... Passport number: ...........................................

Birth date: ___/___/___ (DD/MM/YY) Sex: ☐ Male ☐ Female

Arrival date: ___/___/___ (DD/MM/YY) Airline: .................................................................

Flight number: ............................................................ Seat number: ...........................................

Primary e-mail address: .................................................................................................................

Alternate e-mail address: ...............................................................................................................  

Primary telephone number (include country code or country name): .............................................

Alternate telephone number (include country code or country name): ...........................................

Home/permanent address:
.................................................................................................................................

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Address for next 21 days:
.................................................................................................................................

.................................................................................................................................
Are you travelling with anyone else on this trip? ☐ Yes ☐ No

**IF YES,** please list the name and a telephone number for each person you are travelling with *if you are travelling with more than four people, please ask for an additional form:*

1. Last (family) name: …………………………………… First (given) name: ……………………………………
   Seat number: ……………………………………………

2. Last (family) name: …………………………………… First (given) name: ……………………………………
   Seat number: ……………………………………………

3. Last (family) name: …………………………………… First (given) name: ……………………………………
   Seat number: ……………………………………………

4. Last (family) name: …………………………………… First (given) name: ……………………………………
   Seat number: ……………………………………………

**Emergency contact information**

Name of person who can reach you while in *insert country name*:

Last (family) name: …………………………………… First (given) name: ……………………………………
Country: ………………………………………………………………… Relationship: ………………………………………………………
Their email address: …………………………………………… Their phone number: ……………………………………………

**Section II. Symptom and Exposure Information**

In the past 48 hours, have you had any of the following symptoms?

   A. Fever, feeling feverish, or having chills? ☐ Yes ☐ No
   B. Vomiting or diarrhea? ☐ Yes ☐ No

In the last 21 days, have you done any of the following?

   C. Lived in the same household or had other contact with a person sick with Ebola or an unknown disease? ☐ Yes ☐ No
   D. Worked in a health care facility or a laboratory in an Ebola affected country? ☐ Yes ☐ No
   E. Attended a funeral or touched the body of someone who died in an Ebola affected country of Ebola or an unknown disease? ☐ Yes ☐ No

*Thank you for helping us to protect your health and that of others.*
For Completion by Immigration [Insert appropriate organization who undertakes screening at your point of entry]

After review of this Traveller Health Declaration Form, the following action was taken:

☐ Individual was referred to national Public Health authorities for further screening

☐ Individual was given an information sheet about Ebola Virus Disease with contact information of who to call in country with any concerns.

☐ No action required

This form can be found on the CARPHA website: http://carpha.org/What-We-Do/Public-Health-Activities/Ebola