

Exit Screening in Ebola Affected Countries and Entry Screening Experience in the U.S.

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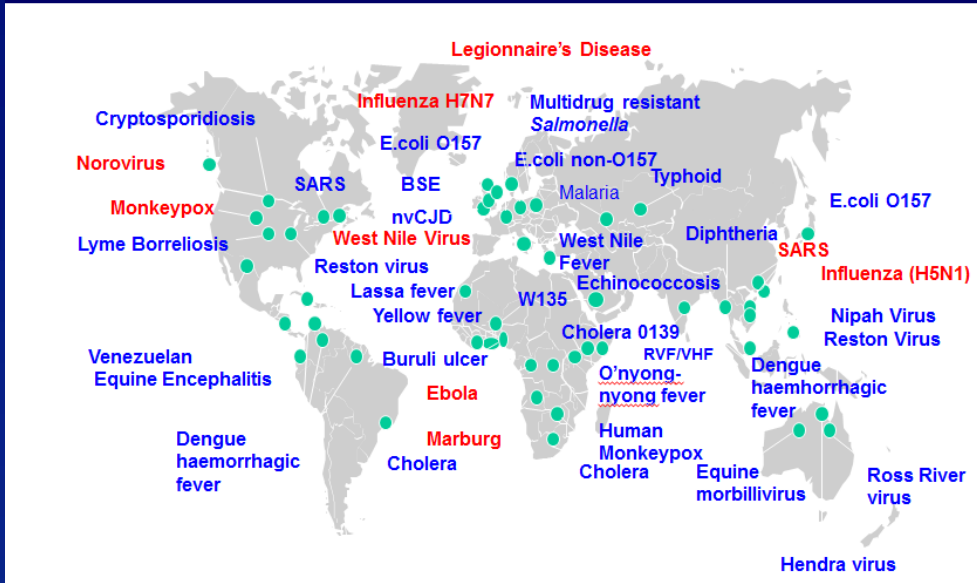
National Center for Emerging and Zoonotic Infectious Diseases

Division of Global Migration and Quarantine



International Health Regulations (2005) at Points of Entry (or Departure)

Emerging / re-emerging infectious diseases 1996 to 2005



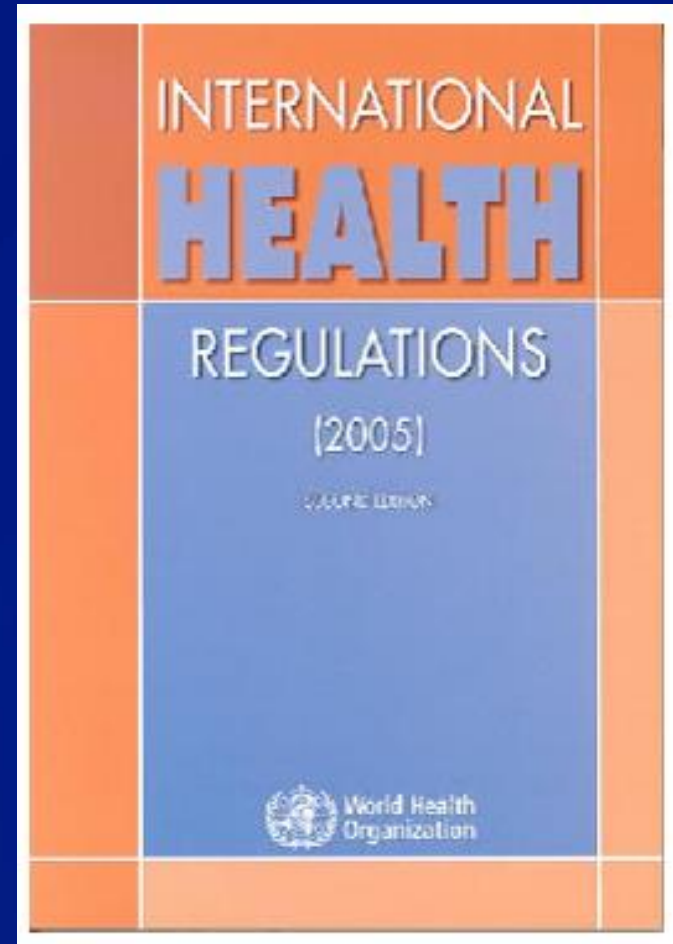
GLOBAL HEALTH SECURITY

EPIDEMIC ALERT AND RESPONSE



International Health Regulations (2005)

- A legally binding international agreement between WHO and its 194 member states
- Focus on Public Health Emergency of International Concern (PHEIC)



International Health Regulations (2005)

Assessment tool for core capacity requirements at designated airports, ports and ground crossings

October 2009

B) Checklist for core capacity requirements for designated airports, ports and ground crossings

1) At all Times (Routine)

CORE CAPACITIES
MEASURE OF COMPLIANCE

(a) Provide access to (b) appropriate medical service including diagnostic facilities located so as to allow the prompt assessment and care of ill travellers, and (d) adequate staff, equipment and premises

I. Assessment and care of ill travellers	Status of Implementation (Check 'Yes' or 'No')			Describe status of implementation of capacities and/or actions to be taken (e.g. programs, gaps and resource and training, etc.) <i>To be filled in by user at end of assessment and care of ill travellers</i>
	Yes	Partial	No	
I.1. Access to medical and diagnostic facilities Administrative arrangements and MoUs are in place to grant access to medical and diagnostic facilities for assessment and care of ill or suspect travellers, in consultation with local and/or nearby health services. If on-site, specialized warehouse for medicine and medical instruments and records for their use and employment.				
I.2. Assessment of requirements concerning vaccination or prophylaxis Capacity to do on-site assessment of proof of vaccination and prophylaxis recommended by WHO, such as for yellow fever, as applicable, and accordingly to the epidemiological situation, risk analysis and national requirements.				
I.3. Key information regarding medical and diagnostic facilities List of all facility names and key contact information (address, phone number, distance from Point of entry and map of routes) created, maintained and updated disseminated, regularly tested for accuracy and accessible to all relevant personnel, to which (i) or suspect travellers from the Point of entry are to be transferred.				
2. Adequate staff, equipment and premises				
2.1. Staff Sufficient personnel Access to appropriate number of trained personnel assigned for these duties, in relation to volume and frequency of travellers and complexity of the Point of entry (regarding terminal facilities, destinations and multimodal practice in place among other factors). Arrangements for translation and interpreters where needed. Presence of qualified personnel (or programs) to recognize disease symptoms and are familiar with procedures regarding prompt assessment, care and reporting of ill travellers.				

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Standard Operating Procedures: Air, Maritime, Land, Isolation, Travel Restrictions; Animal Importation

WHO Declaration

- On August 8, 2014 WHO declared the current Ebola outbreak a Public Health Emergency of International Concern (PHEIC)
- PHEIC declaration underscored the need for a coordinated international response to contain the spread of Ebola
- For countries with Ebola transmission, recommendations were made to conduct exit screening of all persons at international airports, seaports and major ground crossings for “unexplained febrile illness consistent with Ebola infection.”
- Fifth meeting of the Emergency Committee convened April 9, 2015. Conclusion:
 - Continued need for exit screening in three affected countries
 - Must be maintained for at least 42 days after the last case has twice tested negative for EVD
 - Countries are encouraged to maintain exit screening until human-to-human transmission has stopped in the entire subregion

Outbreak Challenges In West Africa

- Overburdened public health and healthcare systems
- High population mobility
- Porous borders



West African Border





Exit Screening

- **Rationale**

- Reduce likelihood of international spread of Ebola
- Successful exit screening at the source lessens need for entry screening
- Boost confidence of travelers, airline crew, and airline management
- Deterrent to travelers feeling ill or with risk factors

- **Invitation**

- WHO, CDC and other global partners invited by the ministries of health of Guinea, Liberia, and Sierra Leone to assist in developing and implementing exit screening procedures

- **Implementation**

- In August, CDC sent teams to Sierra Leone, Guinea, Liberia and Nigeria

Exit Screening, con't

- Includes a health questionnaire (symptoms and exposure) and temperature check
- Successful exit screening requires input and collaboration between airports, airlines, and ministries of health and transportation.
- Major stakeholders may be state specific such as a ministry of foreign affairs.
- Technical assistance to develop exit screening and travel restrictions includes:
 - Assessing capacity of Ebola-affected countries and airports to do exit screening
 - Assisting with development of exit screening protocols
 - Developing tools such as posters, screening forms, and job aids
 - Training staff on exit screening protocols and appropriate Personal Protective Equipment (PPE) use
 - Training in-country staff to provide future trainings

Messaging in Countries with Ebola





AVIS SANITAIRE: EBOLA

Ebola se propage par contact direct avec le sang ou les fluides corporels (notamment la salive ou l'urine) d'une personne infectée.

Comptez-vous quitter la Guinée?



Surveillez les symptômes éventuels de fièvre, de maux de tête et de courbatures dans les 3 prochaines semaines.



Si vous tombez malade, appelez un médecin.

Dites au médecin que vous avez séjourné dans un pays touché par Ebola.



3 SEMAINES													
Dim.	Lun.	Mar.	Mer.	Jeu.	Ven.	Sam.							
1	2	3	4	5	6	7							
8	9	10	11	12	13	14							
15	16	17	18	19	20	21							
22	23	24	25	26	27	28							
29	30	31	1	2	3	4							

CS250513

Exit Screening

Are You Going to the Airport?

Do **NOT** Travel if You Feel Sick



Travelers and Airport Employees **ONLY**



Only travelers with tickets and airport employees will be allowed at the airport.

Everyone Will Wash Hands and be Screened



Please wash your hands.

Please wait to get your temperature checked.



Developed in collaboration with the U.S. Centers for Disease Control and Prevention.
November 21, 2014 1528114

EBOLA KEY MESSAGES unicef

What is Ebola ?
Ebola is a killer disease caused by a virus. It spreads quickly from person to person. Ebola is a short time, BUT can be prevented.

Signs & Symptoms

How is Ebola Spread?
It is spread through:

- Direct contact with mucous, body fluids like blood, saliva, vomitus, sweat, urine of an infected person or handling of their fluids from an infected person to another person and contaminated objects.
- Using and sharing instruments that have been used by an infected person.
- Direct physical handling of persons who have died of Ebola.
- Eating bush meats, especially monkey, chimpanzee, bats, or other animals.
- Eating fruits that bats or wild animals have partly eaten and used.

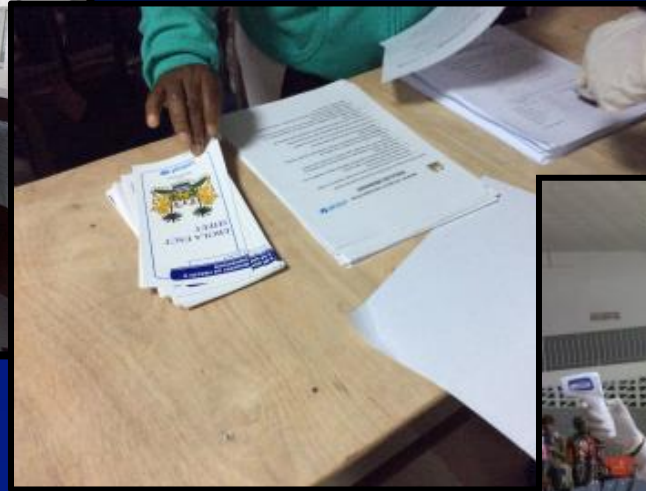
How to Prevent Ebola

Treatment for Ebola

For More Information Call FREE 117

Public Health Messaging
for Airport Screening

Exit Screening in Action



Airline:

Temperature of Traveler (°C):

Flight Number:

Date of Interview (DD/MM/YYYY):

Republic of Sierra Leone



HEALTH DECLARATION FORM: FORMULAIRE DE DECLARATION SANTE

This form is to be used to obtain important information from passengers entering or leaving the country, through the Freetown International Airport, on any possible exposure to the Ebola virus.

The data received through this form will be treated confidentially in accordance with the International Health Regulations.

Reporting Tools

- Reporting tools for cabin crew and pilots
 - Online
 - Responsive design for mobiles and tablets
- RING cards
- Slides on how to use these

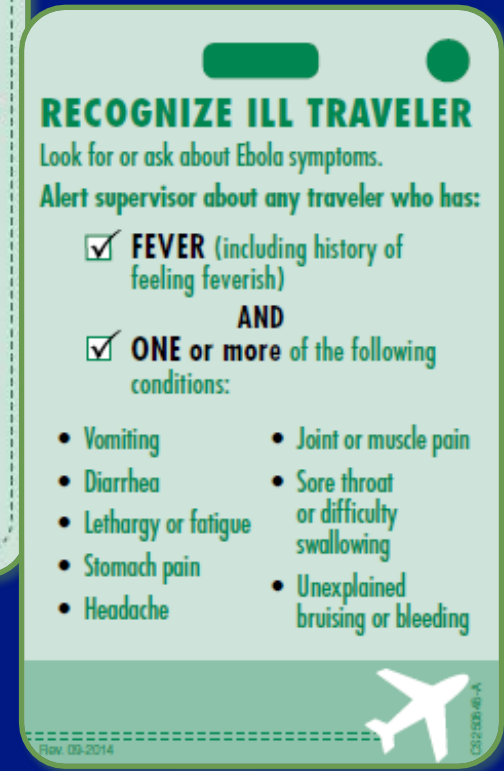


RECOGNIZE
• Ill traveler (see back of card).

ISOLATE
• Separate the ill traveler from others to the extent possible.
• **If at gate** and having direct contact (within one meter) with the ill traveler, use appropriate personal protective equipment such as face mask, gloves, and face shield or goggles.
• **If during flight** and having direct contact (within one meter) with the ill traveler, use universal precaution kit.

NOTIFY
• **If at gate**, follow your airline or airport's procedures to request a medical evaluation or assistance. A traveler may be denied boarding.
• **If during flight**, pilot reports to Air Traffic Control per ICAO requirement.

GIVE SUPPORT
• Follow instructions from your airline or public health authority.



RECOGNIZE ILL TRAVELER
Look for or ask about Ebola symptoms.
Alert supervisor about any traveler who has:

- FEVER** (including history of feeling feverish)

AND

- ONE or more** of the following conditions:

• Vomiting	• Joint or muscle pain
• Diarrhea	• Sore throat or difficulty swallowing
• Lethargy or fatigue	• Unexplained bruising or bleeding
• Stomach pain	
• Headache	

Flow 09-2014

Working in Countries with Ebola

Nigeria



Sierra Leone



Guinea



Liberia



U.S. Experience with Exit Screening from Affected Countries

- In a 3 month timeframe (August-October, 2014), approximately 80,000 travelers from the 3 affected countries were screened.**
- Approximately 12,000 of these travelers came to the U.S.**
- It is estimated that less than 0.06% of total travelers into the U.S. arrive from the 3 countries.**

Brown et al., Airport Exit and Entry Screening for Ebola- August – November 10, 2014. MMWR. 2014, 63(49);1163-1167.

Exit Screening Success

- **Since exit screening has started, no person with symptomatic Ebola has boarded a flight.**

U.S. Population & Travelers



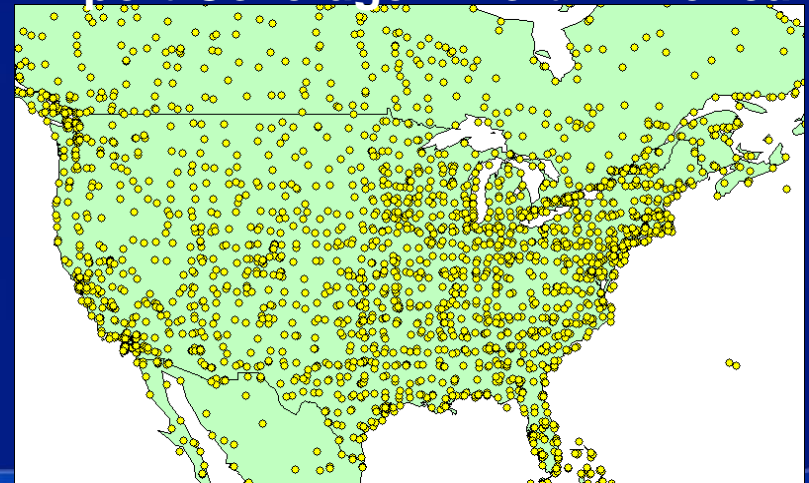
- ~ 310 million population
- ~ 40 million foreign-born
- > 300 official ports of entry



Border Crossings per Year

Mode	Millions
Air	78
Sea	26
Land	237
Total	341

Airport Coverage – North America



DGMQ Regulatory Authority

Regulatory
Policy

Part 34

Medical
Examination of
Aliens

42
CFR

Part 70/71

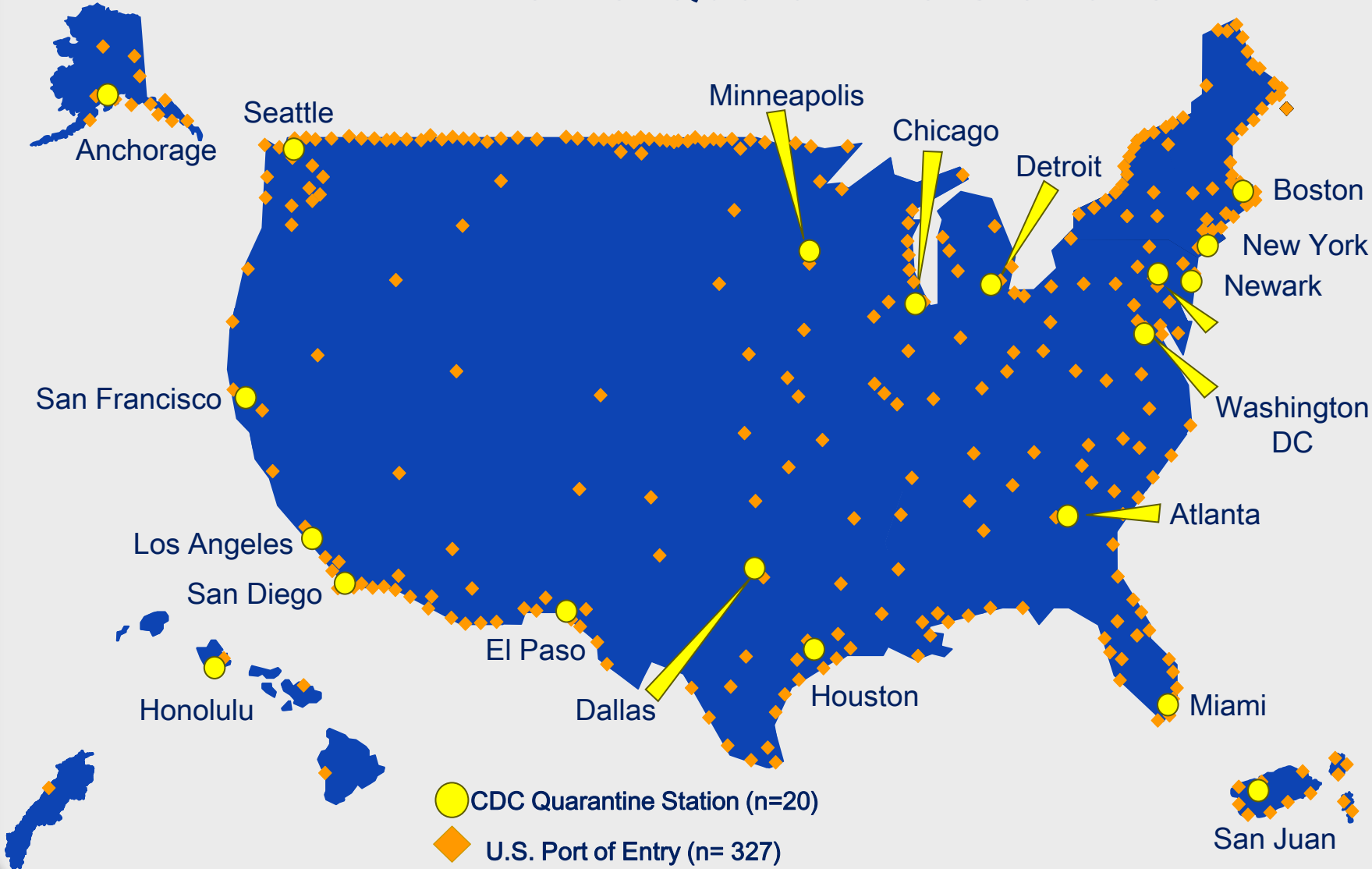
Foreign and
Interstate
Quarantine
Regulations

- Includes list of communicable diseases of public health significance
- Includes requirements for the medical screenings of aliens

- Authorizes DGMQ to medically examine, and release persons arriving into the United States and traveling between states who are suspected of carrying one of the nine communicable diseases identified in the Presidential Executive Order

- Includes restrictions on the importation of animals (e.g., cats, dogs, ferrets, turtles, non-human primates, rats) and animal products

U.S. POE and CDC Quarantine Stations



Staffing by Customs and Public Health Officers at Ports of Entry

Ports of Entry	> 300
Quarantine Stations	20
CBP Staff*	20,000
TSA Staff**	50,000
CDC Staff	~ 100

*Source: Securing America's Borders at Ports of Entry; Office of Field Operations Strategic Plan FY 2007-2011; Customs and Border Protection. Accessed at: www.cbp.gov; **Transportation Security Administration, www.tsa.gov

Border Tools & Activities to Prevent Introduction of Communicable Diseases

- Isolation (and quarantine) orders
- Travel restrictions
- Contact investigations
- Health promotion activities including
Travel Health Alert Notices
- Passive or enhanced screening
- Training, Planning, Exercising

Broad Objectives for Entry Screening

- **Identify on arrival those travelers who may be ill with Ebola or who might have been exposed to Ebola**
- **Ensure symptomatic travelers are directed to medical care, if needed**
- **Provide travelers with information on reporting fever and other symptoms to public health authorities**
- **Rapidly provide travelers' contact information to public health authorities**

Entry Screening in the U.S.

- Five airports that average 125 travelers per day



Entry Screening

- Layered approach
- On October, 2014, after the first case of Ebola was identified in the U.S., enhanced entry screening began at 5 ports in the U.S.
 - All travelers on itineraries originating in affected country diverted to one of these airports
 - Airports selected based on travel volume: received an estimated 94% of travelers arriving from Guinea, Liberia and Sierra Leone
 - No direct flights from affected region to the U.S.
- With 2-21 day incubation, not all people with Ebola will be detected before they leave a country with an Ebola outbreak
- Allowed for traveler education and linkages to state and local partners to facilitate health monitoring and referrals.

Entry Screening in the U.S.

Public Health Messaging



HEALTH ADVISORY: EBOLA

Recently in West Africa?

Watch for fever, headaches, and body aches in the next 3 weeks.



3 WEEKS						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

If you get sick, call a doctor.

Tell the doctor where you traveled.



For more information:
visit www.cdc.gov/travel
or call 800-CDC-INFO.



Ring Cards at Point of Entry



RECOGNIZE

- Ill traveler (see back of card).

ISOLATE

- Separate the ill traveler from others to the extent possible.
- Use appropriate personal protective equipment such as face mask, gloves, and face shield or goggles if you have direct contact (within one meter) with the ill traveler.

NOTIFY

- Your supervisor or follow your port's procedures to request a medical evaluation and assistance.

GIVE SUPPORT

- Follow instructions from the port or public health authority.

RECOGNIZE ILL TRAVELER
Look for or ask about Ebola symptoms.*
An ill traveler may be denied boarding.
Alert your supervisor about any traveler who has:

- FEVER** of greater than 38.6°C (including history of feeling feverish)

AND

- ONE or more** of the following conditions:

• Severe headache	• Diarrhea
• Muscle pain	• Stomach pain
• Vomiting	• Unexplained bruising or bleeding

*WHO/CDC definition of Ebola
Rev. 09-2014

CS2014-0

CARE Kit Introduction and Health Advisory

EBOLA CARE KIT

INTRODUCTION

Welcome to the United States

Whether you are returning home or just visiting, we hope you enjoy your time in the United States. We know that you just came from a country with an Ebola outbreak and that this can cause worry and fear. We want to make sure that you know what to do now. We also want to make sure you know what to do to protect your health and the health of those who are close to you.

This is the **Check and Report Ebola** (or, CARE) Kit. The kit has information about Ebola. It also contains tools to help you do daily health checks for the next 21 days. Your daily health check will include a temperature check and a symptom check.

You will find these 6 items in your CARE Kit:

1	<p>Digital thermometer A thermometer is in your kit so that you can take your temperature every morning and every night for 21 days.</p>
2	<p>Directions for your digital thermometer (Title: Take your Temperature Two Times a day, Morning and Night) Explains how to:</p> <ul style="list-style-type: none"> take your temperature using the thermometer in your kit, and record your thermometer reading
3	<p>Ebola CARE Kit Health Advisory The health advisory is a quick tool to remind you to check your temperature and do health checks 2 times each day for 21 days. This tool also reminds you who to call if you have symptoms.</p>
4	<p>Symptom Card and Symptom Log The Symptom Card shows the signs and symptoms of Ebola. The Symptom Log asks you to do a health check each day. Then, write down the date, your temperature, and any symptoms you may have. You should do this health check 2 times a day, for 21 days after your arrival into the United States.</p>
5	<p>A Check and Report Ebola (CARE) Card The CARE Card is a simple reminder to do a health check each day and who to call if you have symptoms. If you call the state health department or a doctor, tell them you have a CARE card. Keep this card with you for 21 days after your arrival in the United States</p>
6	<p>List of State Health Department Telephone Numbers This is a list of telephone numbers for state health departments across the United States. The list is given so you may contact the state health department in the state you are in to report any symptoms.</p>

Once 21 days have passed, if you have no symptoms or fever, you are no longer at risk of Ebola.

We hope you find this kit useful. Please use it to keep yourself safe and help others around you to stay safe too. Together, we can protect everyone from Ebola.



HEALTH ADVISORY: EBOLA

Ebola spreads through direct contact with the blood or body fluids (such as spit or pee) of a person who is sick with Ebola symptoms.

Watch for fever, headaches, and body aches for the next 3 weeks.

3 WEEKS						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
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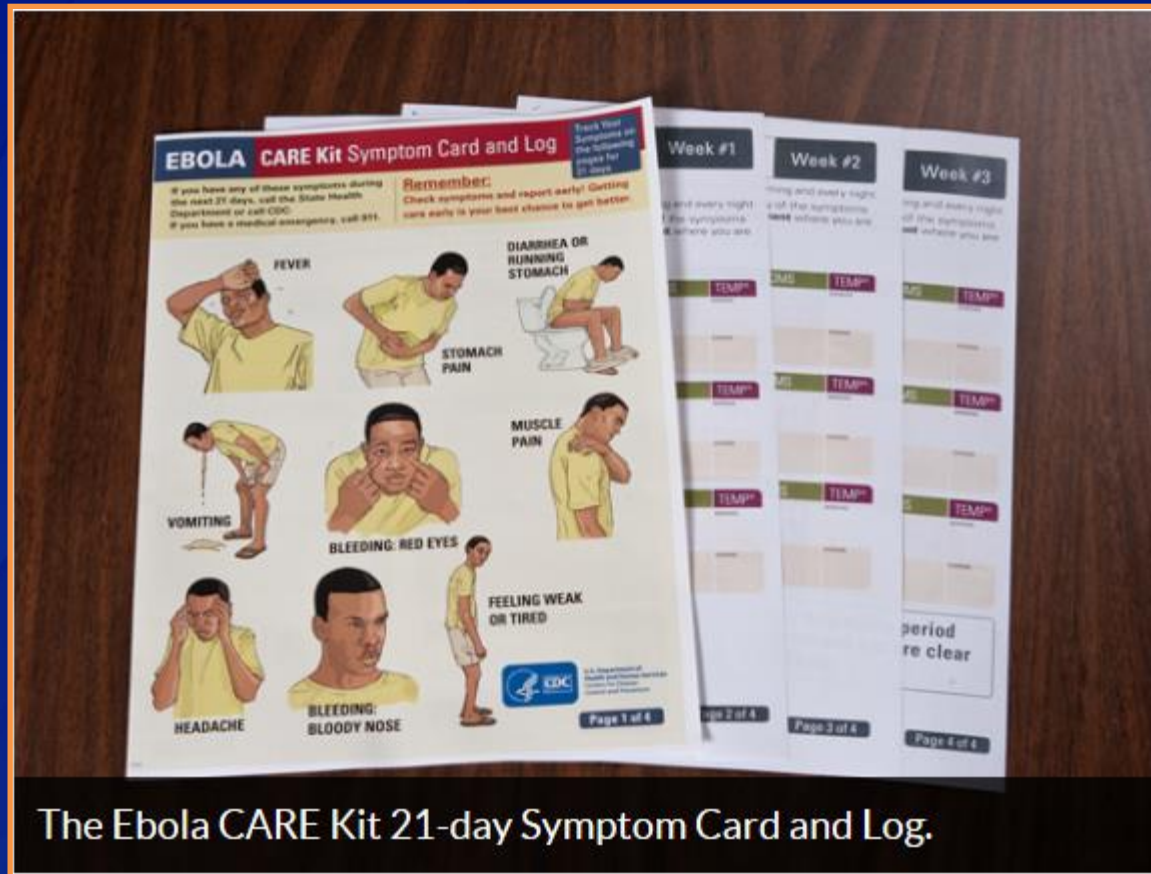


If you get sick, stay at home, then call the **State Health Department** or call **CDC: 1-800-232-4636.**

If you have a medical emergency, call **911.**



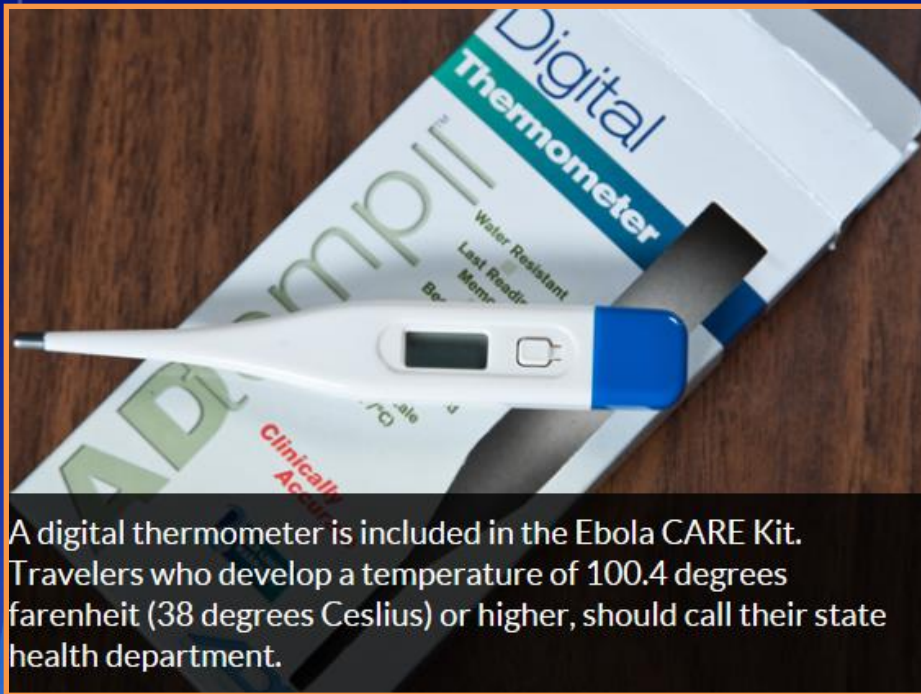
CARE Kit 21-Day Symptom Card and Log



The Ebola CARE Kit 21-day Symptom Card and Log.

CARE Kit

Thermometer and Instructions for Use



A digital thermometer is included in the Ebola CARE Kit. Travelers who develop a temperature of 100.4 degrees fahrenheit (38 degrees Celsius) or higher, should call their state health department.

Take your temperature two times a day, morning and night.



• This thermometer is for **YOU ONLY**.

• Please **DO NOT SHARE** it.

• **KEEP IT** for yourself for the next 21 days.



DO NOT take your temperature right after eating or drinking.



1. Turn the thermometer on. It will show an "L" in the screen when it is ready.



2. Hold the tip under your tongue for 60 seconds until it beeps.



3. Read the temperature.



4. Write your temperature on the Symptom Log you got in your CARE Kit.



If your temperature is **100.4° F / 38° C** or above OR if you have any of the symptoms on your Symptom Card, stay at home. Follow what you were told by the public health worker who contacted you.

If you are not able to reach someone immediately, call:

- the state health department or
- CDC: 1-800-232-4636.

If you have a medical emergency, call 911.

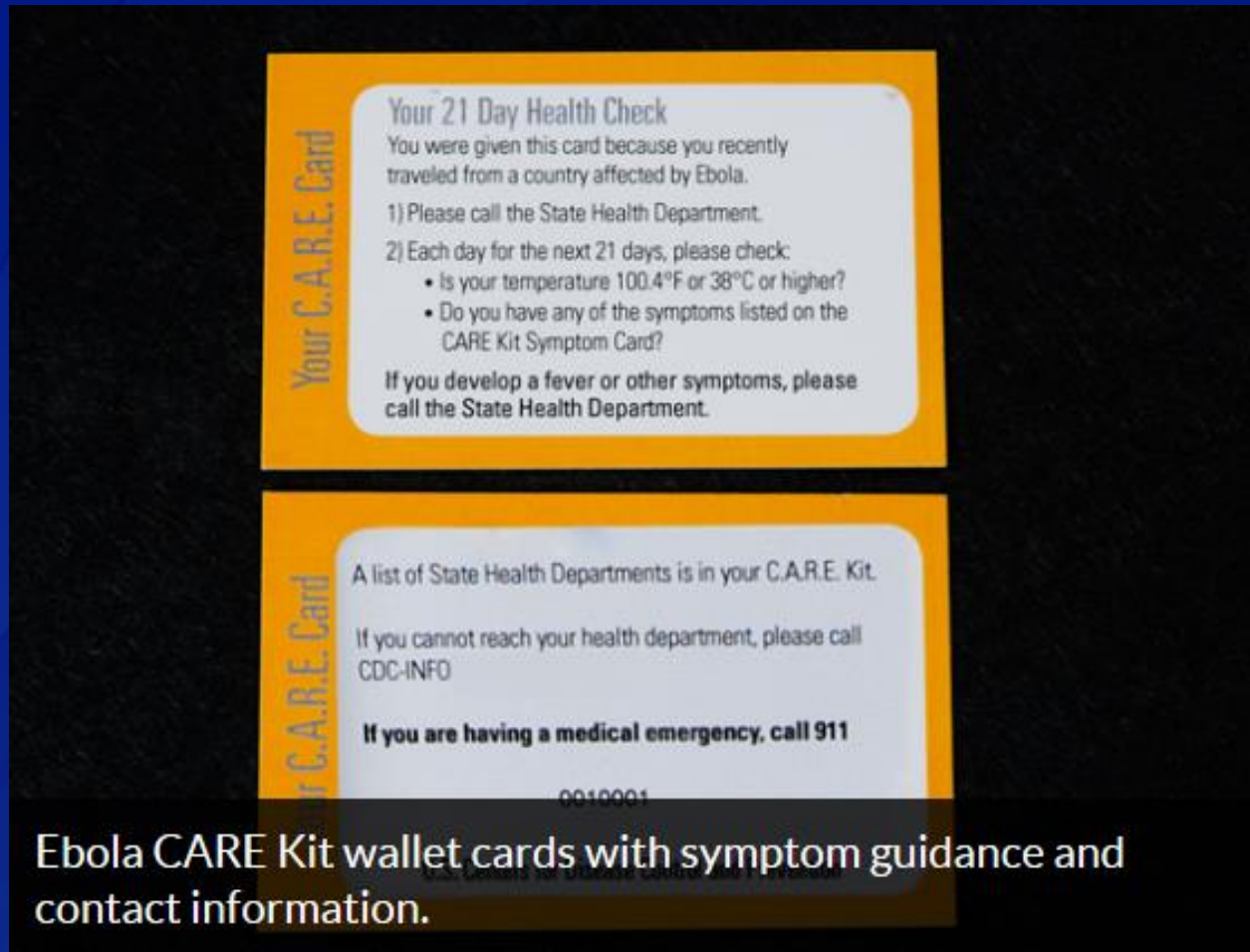


5. You can clean your thermometer with soap and water.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CARE Kit Wallet Card



Ebola CARE Kit wallet cards with symptom guidance and contact information.

Monitoring and Movement of Persons with Potential Exposure to Ebola



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People™

SEARCH



CDC A-Z INDEX ▾

Ebola (Ebola Virus Disease)

Ebola (Ebola Virus Disease)

About Ebola +

2014 West Africa Outbreak +

Outbreaks +

Signs and Symptoms

Transmission +

Risk of Exposure -

Epidemiologic Risk Factors to Consider when Evaluating a Person for Exposure to Ebola Virus

Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure -

Q&As about Monitoring and Movement Guidance

Monitoring Symptoms and Controlling Movement

[CDC](#) > [Ebola \(Ebola Virus Disease\)](#) > [Risk of Exposure](#)

Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure

Updated: December 24, 2014

Recommend Tweet Share

Summary of Recent Changes

1. Minor revisions were made December 24, 2014, to clarify the recommendations regarding people who enter patient care areas of Ebola treatment units but do not provide direct patient care (such as observers) and healthcare workers in any (including non-Ebola) healthcare settings. Language was also added to clarify that the low (but not zero) classification for brief proximity to a person with Ebola does not apply to Ebola patient care areas.
2. The guidance was updated November 28, 2014, to incorporate language about countries with cases in urban settings with uncertain control measures.
3. This guidance was updated November 16, 2014, to reflect the following:
 - a. All healthcare workers who engaged in direct patient care in any healthcare setting in

Language: English ▾

On this Page

- Definitions used in this document
- Early Recognition and Reporting of Suspected Ebola Virus Exposures
- Important Evaluation Factors
- Recommendations for Evaluating Ebola Exposure Risk to Determine Appropriate Public Health Actions
- Recommendations for specific groups and settings
- Table: Summary of CDC Interim



Chapter I – General provisions

Article 23 Health measures on arrival and departure

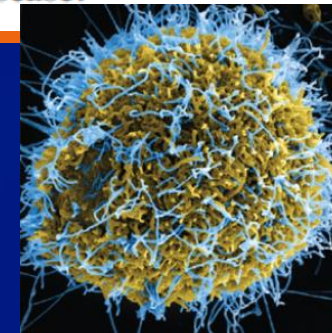
2. On the basis of evidence of a public health risk obtained through the measures provided in paragraph 1 of this Article, or through other means, States Parties may apply additional health measures, in accordance with these Regulations, in particular, with regard to a suspect or affected traveller, on a case-by-case basis, the least intrusive and invasive medical examination that would achieve the public health objective of preventing the international spread of disease.

Statement on the 4th meeting of the IHR Emergency Committee regarding the 2014 Ebola outbreak in West Africa

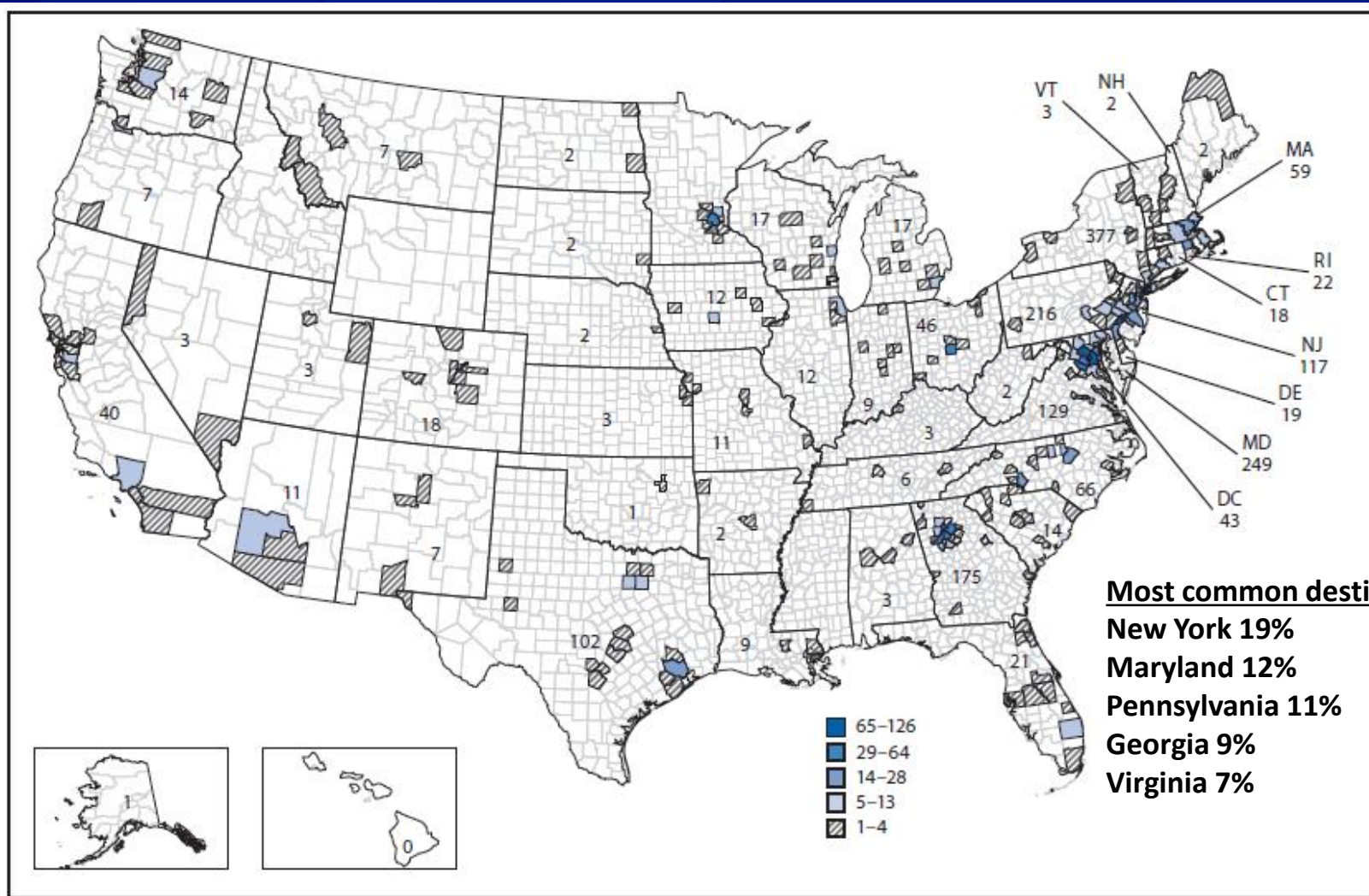
WHO statement
21 January 2015

Recommendations for all countries

The Committee reaffirmed the need to avoid unnecessary interference with international travel and trade, as specified in Article 2 of the IHR 2005. The Committee noted that more than 40 countries have implemented additional measures, such as quarantine of returning travellers and refusal of entry. Such



**Number of travelers (N = 1,986*) arriving from Guinea, Liberia, and Sierra Leone who were screened for Ebola at U.S. airports, by state and county of destination
October 11 – November 10, 2014**



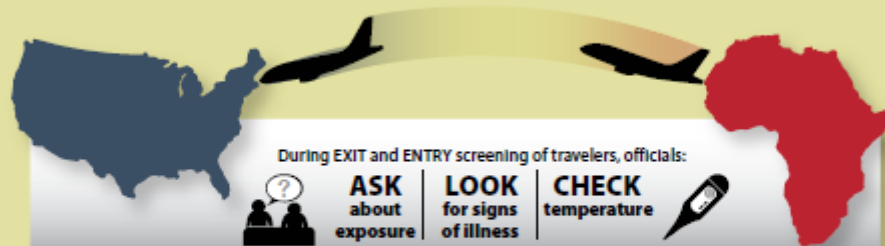
Source: CDC. MMWR / December 9, 2014 / Vol. 63

* Seven travelers were in transit and did not stay in the United States.

U.S. Experience with Entry Screening from Affected Countries

- **Approximately 85% were adults ≥ 18 years and 3% had worked in a health care facility or laboratory**
- **Since entry screening has started, no traveler has been identified as high risk at port of entry.**

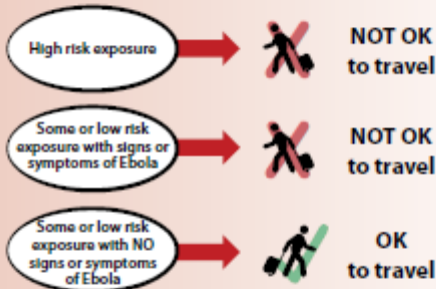
Preventing Ebola by Screening Travelers



West Africa

EXIT screening

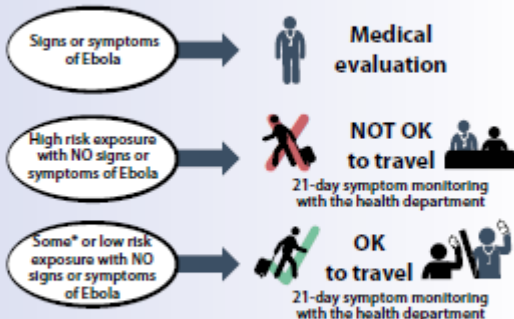
All travelers leaving Guinea, Liberia, and Sierra Leone will be screened before getting on their flight.



United States

ENTRY screening

Travelers coming to the US from countries with Ebola outbreaks (such as Guinea, Liberia, and Sierra Leone) fly into one of the following airports for entry screening: New York's JFK, Newark, Washington-Dulles, Chicago O'Hare, and Atlanta.



* Denotes: Some travelers falling under the "some risk" category may be allowed to continue to their final destination; once travelers are in their final destination, states may choose to apply travel/movement restrictions.

More information about screening and monitoring travelers can be found at: www.cdc.gov/vhf/ebola/travelers/ebola-screening-factsheet.html.

Definitions of high, some, and low risk exposure can be found at: www.cdc.gov/vhf/ebola/pdf/ebola-guidance-travelers.pdf.



March 24, 2015

Classroom

For the most current information, visit

**[http://www.cdc.gov/vhf/ebola/airports/
index.html](http://www.cdc.gov/vhf/ebola/airports/index.html)**

<http://www.cdc.gov/vhf/ebola/index.html>

Acknowledgements

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- **Faith Washburn**

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Email: stl5@cdc.gov

or

Email: airadmin@cdc.gov

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333

Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

Visit: www.cdc.gov | Contact CDC at: 1-800-CDC-INFO or www.cdc.gov/info

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

National Center for Emerging and Zoonotic Infectious Diseases

Division of Global Migration and Quarantine

