

CDC Support for Exit Screening and Lessons Learned for Preparedness

Andrew Demma, MS
International Assistance Lead
Global Migration Task Force
Centers for Disease Control and Prevention

National Center for Emerging and Zoonotic Infectious Diseases
Division of Global Migration and Quarantine



Objectives

- ❑ Understand the mandate reasons for exit screening
- ❑ Understand the components of exit screening
- ❑ Understand CDC support and resources to conduct exit screening
- ❑ Understand key issues for exit screening preparedness
- ❑ Share basic lessons learned from exit screening in West Africa

Statement on the 1st meeting of the IHR Emergency Committee on the 2014 Ebola outbreak in West Africa

□ States with Ebola transmission

- States should conduct exit screening of all persons at international airports, seaports and major land crossings, for unexplained febrile illness consistent with potential Ebola infection. The exit screening should consist of, at a minimum, a questionnaire, a temperature measurement and, if there is a fever, an assessment of the risk that the fever is caused by EVD. Any person with an illness consistent with EVD should not be allowed to travel unless the travel is part of an appropriate medical evacuation.

Statement on the 1st meeting of the IHR Emergency Committee on the 2014 Ebola outbreak in West Africa

□ States with Ebola transmission (continued...)

- There should be no international travel of Ebola contacts or cases, unless the travel is part of an appropriate medical evacuation. To minimize the risk of international spread of EVD:
 - Confirmed cases should immediately be isolated and treated in an Ebola Treatment Centre with no national or international travel until 2 Ebola-specific diagnostic tests conducted at least 48 hours apart are negative;
 - Contacts (which do not include properly protected health workers and laboratory staff who have had no unprotected exposure) should be monitored daily, with restricted national travel and no international travel until 21 days after exposure;
 - Probable and suspect cases should immediately be isolated and their travel should be restricted in accordance with their classification as either a confirmed case or contact.

Statement on the 1st meeting of the IHR Emergency Committee on the 2014 Ebola outbreak in West Africa

- ❑ **States with a potential or confirmed Ebola Case, and unaffected States with land borders with affected States**
 - If Ebola transmission is confirmed to be occurring in the State, the full recommendations for States with Ebola Transmission should be implemented, on either a national or subnational level, depending on the epidemiologic and risk context.
- ❑ **Exit screening and reporting of data reinforced in statements from the 3rd and 4th meetings of the Emergency Committee**

<http://www.who.int/mediacentre/news/statements/2014/ebola-20140808/en/>

<http://www.who.int/mediacentre/news/statements/2014/ebola-3rd-ihc-meeting/en/>

<http://www.who.int/mediacentre/news/statements/2015/ebola-4th-ihc-meeting/en/>

Why Do Exit Screening?

- ❑ **Prevents international spread of Ebola**
- ❑ **Concentrates screening resources at location of highest risk**
 - Caveat is that location may have least resources to begin with
- ❑ **Maximizes the positive predictive value of screening**
 - Caveat is that positive predictive value is still low

- ❑ **Exit Screening at International Airports**
 - Concentrates screening resources at migration bottleneck
 - Concentrates resources at point of highest risk
 - Targets largest global risk for a symptomatic traveler to spread Ebola

- ❑ **Exit Screening at Land Crossings**
 - Screening resources limited often due to distances from population centers
 - Limited effectiveness due to unofficial crossings
 - Other approaches required to compensate for lack of effectiveness

- ❑ **Exit Screening at Seaports**
 - Similar to land crossings, other approaches must compensate for low official passenger volume

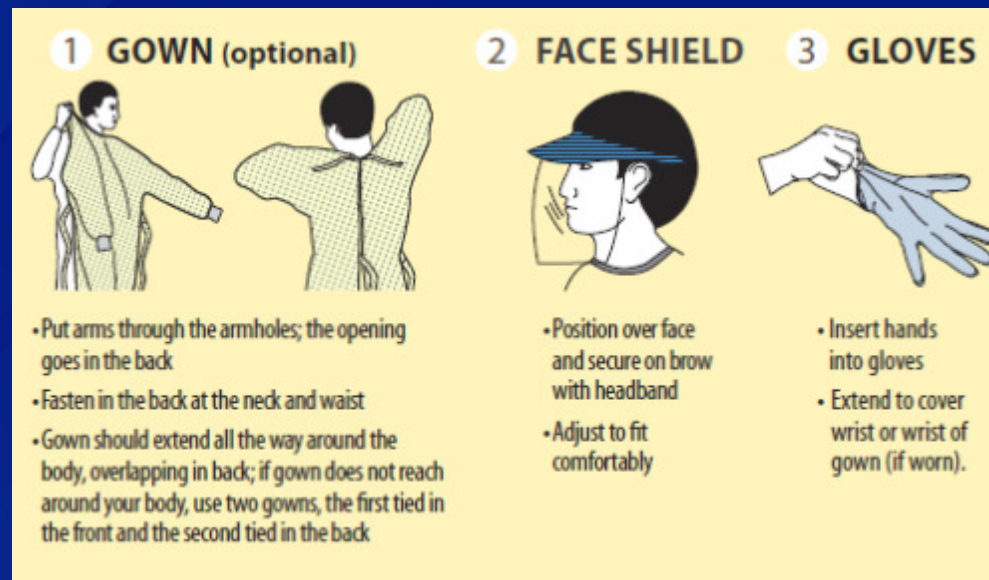
CDC Support for Exit Screening - Staff

- ❑ Liberia
 - ❑ Guinea
 - ❑ Sierra Leone
 - ❑ Nigeria
 - ❑ Senegal
 - ❑ Mali
- August 2014 to present
- August 2014 to September 2014
- September 2014 to October 2014
- November 2014 to January 2015
- ❑ Teams generally composed of migration health specialists and border public health officers
 - ❑ Varies due to personnel availability and other mission requirements
 - ❑ Integrated into overall CDC response in host nation
 - ❑ Teams provided orientation and training to exit screening and border health
 - ❑ Supported by Emergency Operations Center in Atlanta



CDC Support for Exit Screening - Materiel

- ❑ Limited ability to procure required materiel
- ❑ CDC's appropriations generally do not allow direct transfer of goods
- ❑ Supplies and equipment provided through the response are facilitated by CDC teams from donors or other US government agencies



CDC Support for Exit Screening - Documents

- ❑ Materials for use in US Airports
- ❑ Materials for use in Countries with Ebola Outbreaks
 - Screening Travelers
 - Fact sheets
 - Protocols
 - Posters
 - Thermometer information

Materials for Use in U.S. Airports

These materials have been developed to assist U.S. and other countries' port of entry partners with preventing the spread of Ebola in countries that do not have widespread Ebola outbreaks.

- > Screening Travelers
- > Communicating with Travelers
- > Information for Airport Workers (NIOSH)

Materials for Use in Countries with Ebola Outbreaks

These materials were developed for use in airports in countries with widespread Ebola transmission.

Screening Travelers

Exit screening in countries with Ebola outbreaks: CDC is helping countries with widespread transmission of Ebola screen departing travelers. Exit screening is conducted at airports to find sick travelers or travelers exposed to Ebola and to delay them from boarding an airplane until it is safe for them to travel.

- [Fact Sheet: Screening of Travelers at Airports](#)
- [Exit Screening Protocol](#) [PDF - 23 pages]
 - For use by public health officials and airport authorities to assist in exit screening program planning.
- [Poster: Personal Protective Equipment for Primary Airport Exit Screeners](#) [PDF - 1 page]
- [Poster: Personal Protective Equipment for Secondary Airport Exit Screeners](#) [PDF - 1 page]
- [Poster: Personal Protective Equipment for Security Supporting Airport Exit Screening](#) [PDF - 1 page]
- [Non-Contact Temperature Measurement Devices Guidance](#) [PDF - 4 pages]
 - For use by public health officials and airport authorities to learn about different non-contact temperature measurement devices used in port of entry screening.

CDC Support for Exit Screening - Documents

Materials for use in Countries with Ebola Outbreaks (continued)

- Communicating with Travelers
 - Travel advisory
- Information for Airport Workers and RING Cards
 - RING cards and posters
 - RING training
 - Personal protective equipment poster



HEALTH ADVISORY: EBOLA

Ebola spreads through direct contact with an infected person's blood or body fluids (such as saliva or urine).

Leaving 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 you were in a country with Ebola.

CC200513

Preparation for Exit Screening

- ❑ **Develop standard operating procedures**
- ❑ **Identify locations, nationally and physically within national identified locations**
- ❑ **Identify and train staff**
- ❑ **Identify and procure supplies**
- ❑ **Develop questionnaires or health declaration forms**
 - Must be available in the language of traveling population
- ❑ **Develop communications tools**
- ❑ **Develop data management plan and procedures**

Lessons Learned

- ❑ **Preparation for exit screening makes implementation easier**
 - Refer to Appendix 1 of CDC or WHO exit screening guidance
- ❑ **Exit screening is resource intensive, especially in staffing**
- ❑ **Exit screening requires tremendous attention to detail**
- ❑ **Exit screening, like all port health activities, requires extensive partner coordination**
 - Policy and procedural decision should include all impacted partners
- ❑ **Exit screening needs to be integrated and coordinated with and supported by the national Ebola response**
 - Policy and procedures at the airport need to be consistent with national policy
- ❑ **A multi-layered approach to exit screening is essential**
 - Multiple passenger checks and review of forms improves thoroughness of screening
- ❑ **Data analysis and sharing provide feedback**
 - Quality assurance steps for improvement and inspires confidence in the screening process

References

- ❑ **CDC Ebola Virus Disease (Ebola) Pre-Departure/Exit Screening at Points of Departure in Affected Countries, August 2014**
 - <http://www.cdc.gov/vhf/ebola/airports/index.html>

- ❑ **WHO Interim Guidance for Ebola Virus Disease: Exit Screening at Airports, Ports and Land Crossings, November 2014**
 - <http://www.who.int/csr/resources/publications/ebola/travel-advice/en/>

Merci & thank you

Comments to ADemma@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

E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

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

