Congressional Research Service
Informing the legislative debate since 1914

Preventing the Introduction and Spread of Ebola in the United States: Frequently Asked Questions

Sarah A. Lister, Coordinator
Specialist in Public Health and Epidemiology

December 5, 2014

Congressional Research Service
7-5700
www.crs.gov
R43809

CRS REPORT
Prepared for Members and
Committees of Congress

Contents

Contacts

Throughout 2014, an outbreak of Ebola virus disease (EVD) has outpaced the efforts of health workers trying to contain it in three West African countries: Guinea, Liberia, and Sierra Leone. (These are often referred to as "affected countries" or "countries with widespread transmission." In mid-November, 2014, Ebola transmission also occurred for the second time in neighboring Mali. The extent of spread in Mali remains to be seen.) EVD cases have been imported to other countries, including the United States, where two nurses were infected while caring for a patient who had traveled from Liberia.

Members of Congress and the public have considered ways to prevent the entry and spread of EVD in the United States. Official recommendations have seemed to conflict at times. In part this reflects the evolution of officials' understanding of this new threat and the scientific and technical aspects of its control. In addition, under the nation's federalist governance structure, the federal and state governments are empowered to take measures to control communicable diseases, and have addressed some aspects of the Ebola threat in varied ways. In the United States and abroad, public concern about the spread of Ebola also may have shaped policymakers' decisions as well.

This CRS report answers common legal and policy questions about the potential introduction and spread of EVD in the United States. Questions and answers are presented in the following topical order:

- *Barring travelers from Ebola-stricken countries from coming to the United States:* Immigration law and policy provide options to prevent the entry into the United States of foreign nationals who could spread communicable diseases. U.S. citizens are generally afforded the right to repatriate.
- *Exit procedures upon departure from affected countries in Africa:* The U.S. Centers for Disease Control and Prevention (CDC) and U.S. Agency for International Development (USAID) have aided affected countries in West Africa in screening departing travelers to minimize the exportation of EVD to other countries.
- *U.S. laws and procedures involving airlines and other conveyances:* Several laws address the role of commercial carriers in preventing or detecting the spread of communicable diseases on their planes or vessels. Implementation of these laws involves a balance of public health and commercial considerations.
- *Identification and screening of passengers arriving from Ebola-affected Countries:* The United States has routed most travelers originating from affected areas of West Africa to one of five U.S. airports, at which the travelers can be interviewed and examined to determine their risk of exposure to EVD, and referred for further monitoring.
- *Domestic quarantine and isolation: legal authority and policies*: Both the federal and state governments have authority to restrict the movement of persons who may pose a threat to others by transmitting disease. Public health officials at each level of government are involved in identifying and monitoring persons at risk of developing EVD, and developing protocols to assure that persons who develop symptoms are promptly isolated.

Barring Travelers from Ebola-Stricken Countries from Coming to the United States[1]

May the United States bar the entry of foreign nationals suspected of carrying EVD?

Federal law confers executive agencies with significant authority to restrict or regulate the entry of foreign nationals seeking to travel to the United States who are suspected of carrying the Ebola virus or other communicable diseases.

Under current law, with certain exceptions,[2] foreign nationals not already legally residing in the United States who wish to come to the country must obtain a visa. Foreign nationals do not have a constitutional right to be admitted into the United States.[3] The Immigration and Nationality Act (INA) provides various grounds under which a foreign national (generally referred to as an "alien" under the INA) may be denied a visa to come to the United States or otherwise be admitted into the country.[4] These grounds include when the foreign national is determined to have a "communicable disease of public health significance."[5] Accordingly, aliens seeking admission into the United States who have been determined to carry the Ebola virus may be denied entry.[6]

The health-related grounds for exclusion might not guarantee that a foreign national who is exposed to EVD will be prevented from travelling to the United States. Assessing whether a foreign national is inadmissible on health-related grounds is an individualized determination of the person's condition, rather than a more general bar applicable to persons who might have had contact with a person carrying a communicable disease. It is also not assured that a foreign national carrying the Ebola virus will be identified as such either when applying for a visa to come to the United States (e.g., if the foreign national only became infected after obtaining a visa) or when processed upon arrival at a U.S. port of entry (e.g., if the infected person did not show symptoms of the Ebola virus at the time of arrival into the United States). For further discussion of the health-related screening of foreign nationals seeking to enter the United States, see the later section, "How does entry screening in the United States work?" Importantly as well,

---

[1] Contributed by Michael John Garcia, Legislative Attorney, 7-3873, mgarcia@crs.loc.gov, and Alison Siskin, Specialist in Immigration Policy, 7-0260, asiskin@crs.loc.gov.

[2] Authorities to except or to waive visa requirements are specified in law, such as the broad parole authority of the Secretary of Homeland Security under §212(d)(5) of the Immigration and Nationality Act (INA) and the specific authority of the Visa Waiver Program in INA §217. See CRS Report R41104, *Immigration Visa Issuances and Grounds for Exclusion: Policy and Trends*, by Ruth Ellen Wasem.

[3] *See, e.g.*, Landon v. Plasencia, 459 U.S. 21, 32 (1982) ("an alien seeking admission to the United States requests a privilege and has no constitutional rights regarding his application, for the power to admit or exclude aliens is a sovereign prerogative.... ").

[4] Having a valid visa does not guarantee admittance to the United States. At ports of entry, foreign nationals are screened by Customs and Border Protection (CBP) to make sure that they are not inadmissible according to the specified grounds in the INA, including health-related grounds.

[5] Immigration and Nationality Act (INA) §212(a)(1), 8 U.S.C. §1182(a)(1).

[6] The Secretary of Health and Human Services is responsible for defining illnesses constituting a "communicable disease of public health significance." Current regulations define the term to include, among other things, those diseases listed in a Presidential Executive Order or subject to specified requirements under the rules of the World Health Organization. 42 C.F.R. §34.2. Due to practical concerns, a foreign national arriving at a U.S. port of entry who is believed to have the Ebola virus would be placed in isolation and given medical treatment, rather than immediately being placed in removal proceedings or given the option of promptly leaving the United States.

the health-related grounds for exclusion do not apply to most lawful permanent resident aliens (LPRs, sometimes described as immigrants)[7] who have already been admitted into the United States, but thereafter travel abroad.[8]

In addition to the health-related grounds for exclusion, Section 212(f) of the INA provides that the President, pursuant to a proclamation, may direct the denial of entry to any alien or class of aliens whose entry into the country "would be detrimental to the interests of the United States."[9] Although this provision seems to have never been employed so broadly,[10] it could potentially be used to restrict the entry of foreign nationals traveling from a particular country or region from which there has been an Ebola outbreak. If the President deemed the entry of such persons into the country to be contrary to U.S. interests, such a restriction would obviate the need to determine if an individual had actually been infected with the Ebola virus. Importantly as well, Section 212(f) of the INA would appear to authorize the President to issue a proclamation barring the entry of any category of aliens whose entry would be considered detrimental to U.S. interests, including aliens with valid visas, as well as immigrants (i.e., LPRs) who were already admitted into the United States and have traveled abroad. Moreover, the authority conferred by Section 212(f) could be employed to selectively restrict the entry or issuance of visas to certain types of foreign travelers (e.g., those seeking to come to the United States as tourists).

In the absence of the invocation of INA Section 212(f) authority, the Executive's ability to bar foreign travelers from Ebola-stricken countries from being issued visas to come to the United States would seem to be very limited. It should be noted that it is not unprecedented for the U.S. government to temporarily limit visa services at certain embassies or consulates within a country.[11] Such suspensions have occurred for political reasons[12] or because there are security concerns for the staff of the embassy,[13] along with more mundane reasons such as the renovation of the building where the consular office is located.[14]

---

[7] Foreign nationals with lawful permanent resident (LPR) status are authorized to permanently live in the United States. They are also eligible to work in the United States.

[8] *See* INA §101(a)(13)(C), 8 U.S.C. §1101(a)(13)(C) (exempting most lawful permanent residents who are returning to the United States after brief trips abroad from being viewed as seeking admission into the country).

[9] INA §212(f), 8 U.S.C. §1182(f) (broadly permitting the President to "suspend the entry of all aliens or any class of aliens as immigrants or nonimmigrants, or impose on the entry of aliens any restrictions he may deem to be appropriate").

[10] A list of presidential proclamations pursuant to INA §212(f) which are currently in effect can be viewed at http://travel.state.gov/content/visas/english/fees/presidential-proclamations.html. For further discussion regarding the potential use of INA §212(f) to restrict the travel of foreign nationals from Ebola-stricken countries, see CRS Legal Sidebar WSLG1094, Can the President Bar Foreign Travelers from Ebola-Stricken Countries from Entering the United States? by Michael John Garcia.

[11] For a list of the current closed consulates and embassies, see U.S. Department of State, *Countries with Limited or No U.S. Visa Services*, http://travel.state.gov/content/visas/english/general/countries-with-limited-or-no-u-s—visa-services.html.

[12] In August 2009, the U.S. Embassy in Honduras temporarily suspended issuing nonimmigrant, non-emergency visas to put pressure on the government there to reinstate the deposed president, Manuel Zelaya. Department of State, "Temporary Suspension of Non-Immigrant Visa Services in Honduras," press release, August 25, 2009, http://www.state.gov/r/pa/prs/ps/2009/aug/128349.htm.

[13] In the summer of 2014, for example, the U.S. Embassy in Tel Aviv, Israel, reduced its staff due to security concerns, and as a result canceled the processing of nonimmigrant visas except in emergency situations. The embassy also suspended routine services to U.S. citizens.

[14] For example, visa services at the U.S. Consulate in Calgary were limited for the month of November 2014 due to building renovations. See United States Consulate General in Calgary, Announcement, Oct. 16, 2014, available at (continued...)

If U.S. consular officers were to limit visa services in certain countries as a result of the Ebola outbreak, it is possible that such limitations would impede persons from such countries from obtaining visas to travel to the United States. However, when visa services at an embassy or consular office are limited for an extended period, foreign nationals are typically instructed that they may apply for visas at another location, including perhaps a third country, where a U.S. consulate offers visa services.[15] This could have consequences for the spread of a communicable disease. Moreover, since some visas are valid for several years, those who hold previously issued visas that are still valid could be able to travel to the United States.[16] If executive officials sought to bar foreign travelers from Ebola-stricken countries from being permitted to travel to the United States (including those already issued visas to do so), the President would likely need to issue a proclamation pursuant to the authority conferred under INA Section 212(f).

Some have expressed policy concerns regarding the effects of a travel ban. Concerns about such actions center on humanitarian and disease control considerations in the affected countries, and on visa reciprocity. The World Health Organization (WHO) has consistently criticized travel bans as a means of disease control in general, and specifically in the context of the current Ebola outbreak.[17] According to a WHO official, "Travel bans are detrimental and ineffective. Cutting off beleaguered West African nations would be catastrophic to families and economies."[18] In addition, visa issuance is generally based on the principle of reciprocity. If the United States were to suspend issuance of some or all types of visas for nationals of a particular country, the other country could suspend issuance of visas to U.S. citizens.[19] The Department of State is not considering suspending visa issuance from Ebola-affected countries, but is "carefully considering" the available options.[20]

May the United States bar the entry of U.S. citizens suspected of carrying EVD?

Immigration rules that may restrict the entry of foreign nationals are not applicable to U.S. citizens returning from abroad. U.S. citizens abroad may enjoy a constitutional right to reenter the country, in which case the government would be required, at minimum, to overcome a heavier burden in order to justify a reentry restriction than would be required in situations where a

(...continued)

http://calgary.usconsulate.gov/news-events/consulate-news-and-events/2014/limited-consular-services-in-november-2014.html.

[15] See footnote 11 (listing closed embassies and consular offices and providing instructions for where affected foreign nationals may apply for a visa).

[16] B-visas (short-term visas for business or tourism), for instance, are valid for a period of 36 months for nationals of Sierra Leone and Guinea and for a year for nationals of Liberia.

[17] See for example WHO, "Ebola Travel Advice: WHO Does Not Recommend General Bans on Travel or Trade," http://www.who.int/csr/disease/ebola/travel-advice/en/.

[18] Dr. Isabelle Nuttall, Director, Global Capacities, Alert and Response, WHO, "Ebola Travel: Vigilance, Not Bans," Commentary, November 5, 2014, http://www.who.int/mediacentre/commentaries/ebola-travel/en/.

[19] Different types of visas are issued for different purposes. Immigrant visas are issued to those intending to live permanently in the United States, and nonimmigrant visas to those coming to the United States for a specific purpose and specified period of time. The 72 categories of nonimmigrant visas include B-visas for short-term visitors for business or tourism, H-visas for temporary workers, F-visas for students, and L-visas for intercompany transfers. CRS Report R41104, *Immigration Visa Issuances and Grounds for Exclusion: Policy and Trends*, by Ruth Ellen Wasem.

[20] Weekly federal interagency Ebola update call for Congressional staff, October 16, 2014.

person's constitutional rights were not implicated.[21] However, various travel restrictions discussed elsewhere in this report may impede the ability of any person—regardless of citizenship—from traveling to the United States in a manner that potentially exposes others to a communicable disease. For further discussion of these restrictions, see the later section, "U.S. Laws and Procedures Involving Airlines and Other Conveyances."

Exit Procedures upon Departure from Affected Countries in Africa[22]

How are Ebola-affected countries preventing Ebola-infected persons from departing their territories?

The World Health Organization (WHO) recommends that governments in countries with Ebola transmission conduct "exit screening of all persons at international airports, seaports and major land crossings, for unexplained febrile illness consistent with potential EVD 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."[23] It recommends prohibiting persons who have "an illness consistent with EVD" from departing countries with Ebola transmission unless they are undergoing medical evacuation on specially equipped air ambulances.[24]

Most land borders between Guinea, Liberia, and Sierra Leone have been formally closed by authorities, but unregulated, ad hoc cross-border traffic remains common. The main international airports in the affected countries—one in each country—remain open. The governments of the affected countries are screening departing travelers for possible Ebola infection or exposure at airports that remain open, as recommended by WHO.[25] The Centers for Disease Control and Prevention (CDC) has trained these airport personnel to undertake such screening using CDC-developed guidelines.[26] The screening being carried out is similar to the entry screening of travelers from EVD-affected countries now being undertaken by U.S. officials, and involves

[21] Some federal courts have found that the right of an American citizen to return to the United States from abroad is a substantive due process right. *See* Fikre v. F.B.I., 3:13-CV-00899-BR, 2014 WL 2335343 (D. Or. May 29, 2014); Tarhuni v. Holder, 3:13-CV-00001-BR, 2014 WL 1269655 (D. Or. Mar. 26, 2014); *see also* Nguyen v. Immigration and Naturalization Serv., 533 U.S. 53, 67 (2001) (discussing privileges of U.S. citizenship, including "the absolute right to enter [the] borders" of the United States).

[22] Contributed by Tiaji Salaam-Blyther, Specialist in Global Health, 7-7677, tsalaam@crs.loc.gov, and Nicolas Cook, Specialist in African Affairs, 7-0429, ncook@crs.loc.gov.

[23] WHO, "Ebola Virus Disease Exit Screening at Airports, Ports and Land Crossings: Interim Guidance," November 6, 2014, p. 4, referencing WHO guidance of August 2014, http://www.who.int/csr/resources/publications/ebola/exit-screening-guidance/en/. WHO provides EVD case definition guidelines for the purpose of making EVD detection assessments. See WHO, "Case Definition Recommendations for Ebola or Marburg Virus Diseases," August 9, 2014, http://www.who.int/csr/resources/publications/ebola/ebola-case-definition-contact-en.pdf.

[24] WHO, "Travel and Transport Risk Assessment: Interim Guidance for Public Health Authorities and the Transport Sector," September 2014, http://www.who.int/csr/resources/publications/ebola/travel-guidance/en/.

[25] Ibid.

[26] CDC, "Ebola Virus Disease (Ebola) Pre-Departure/Exit Screening at Points of Departure in Affected Countries," Version 9, August 30, 2014, http://wwwnc.cdc.gov/travel/page/ebola-outbreak-communication-resources. Appendix 4 of the guide provides a sample exit screening questionnaire.

taking the traveler's temperature and administering a questionnaire. According to CDC, travelers may continue traveling if

- all answers to questions about EVD symptoms or exposure are "no";
- they do not show any signs or report any symptoms of EVD; and
- they do not have a fever of (or higher than) 38.6˚ C or 101.5˚ F.[27]

Travelers who exhibit signs or report symptoms consistent with EVD undergo a more thorough health screening. The United States Agency for International Development (USAID) has provided hands-free temperature scanners to the affected countries.[28] The French government and the International Committee of the Red Cross are also helping the Guinean government to improve exit screening procedures.[29]

Do exit screenings effectively detect EVD cases?

For several reasons, exit screening may not detect all current or incubating cases of Ebola virus infection. There are, by definition, no symptoms of EVD during the incubation period of the disease, which can last up to 21 days.[30] Diagnostic tests for EVD do not detect the disease during the incubation period, and may also fail to detect the infection for the first few days of symptoms.[31] Consequently, testing is not a reliable means of ruling out infection. Potential exposure, without symptoms, can only be assessed by querying the traveler. Some travelers may not disclose possible exposure due to lack of knowledge of it, or mendacity.

A group of researchers developed a mathematical model to study the effects of exit and entry screening (see "How does entry screening in the United States work?") on detection of EVD among travelers.[32] Acknowledging that neither approach (alone or together) would identify all incubating cases of illness, the authors report that the model showed exit screening to be the more effective and efficient of the two interventions, and note that many developing countries lack the capacity to conduct entry screening. However, they also comment that exit screening occurs in countries already struggling with widespread EVD transmission, so that international assistance with exit screening can assure its optimal effectiveness.

Does WHO recommend restricting travel from Ebola-affected countries?

WHO "does not recommend travel restrictions to or from the countries affected [by Ebola], except for EVD patients, contacts of EVD patients and corpses of EVD patients."[33] Its rationale is stated most recently by its Ebola Travel and Transport Task Force, which says

[27] Ibid, p. 5.

[28] USAID, "West Africa Ebola Outbreak," Fact Sheet #3, October 14, 2014, http://www.usaid.gov/ebola/fy15/fs03.

[29] UN Mission for Ebola Emergency Response (UNMEER) External Situation Report, October 17, 2014, http://www.un.org/ebolaresponse/resources.shtml.

[30] CRS Report R43750, *Ebola: Basics About the Disease*, by Sarah A. Lister.

[31] Ibid.

[32] Isaac I. Bogoch, et al., "Assessment of the Potential for International Dissemination of Ebola Virus via Commercial Air Travel During the 2014 West African Outbreak," *The Lancet*, October 21, 2014, http://ebola.thelancet.com/.

[33] WHO, "Travel and Transport Risk Assessment: Interim Guidance for Public Health Authorities and the Transport (continued...)

> Such measures can create a false impression of control and may have a detrimental impact on the number of health care workers volunteering to assist Ebola control or prevention efforts in the affected countries. Such measures may also adversely reduce essential trade, including supplies of food, fuel and medical equipment to the affected countries, contributing to their humanitarian and economic hardship.[34]

U.S. Laws and Procedures Involving Airlines and Other Conveyances

How might people travel from affected countries to the United States?[35]

There are currently no scheduled non-stop flights on commercial airlines between Guinea, Liberia, or Sierra Leone and the United States.[36] It appears that the majority of air travelers from West Africa to the United States fly via Europe.[37] As of October 2014, most flights out of the affected countries are intra-African; the only non-stop flights out of these three nations to Europe are operated by Air France and Brussels Airlines, heading for Paris, France and Brussels, Belgium, respectively.[38] Both airlines are members of an airline alliance that includes a U.S. carrier; members of an alliance often coordinate their services and have codeshare agreements.[39] For example, Thomas Eric Duncan, the first EVD patient diagnosed in the United States, reportedly flew on one ticket on a Brussels Airlines flight from Monrovia, Liberia to Belgium; a United Airlines flight from Belgium to Washington Dulles International Airport; and a United Airlines flight from Dulles to Dallas/Fort Worth.[40]

Travelers may not necessarily travel from the affected region to the United States on a single airline ticket. A passenger originating in one of the affected countries might travel to Europe on one ticket and book an entirely separate ticket, not necessarily on a code-sharing partner, to cross the Atlantic. In this case, the carrier flying the trans-Atlantic leg might not be aware that the travel originated in West Africa. It is also possible that a traveler could attempt to connect to the United States through airports in other African countries; however, many air and ground transportation links between the Ebola-affected countries and nearby countries have been suspended.[41]

(...continued)

Sector," September 2014, p. 6, http://who.int/csr/resources/publications/ebola/travel-guidance/en/. This WHO guide provides for purposes of public education a "Template message for travelers" that provides basic information about the disease, modes of EVD infection and its prevention, and related information.

[34] WHO, "Statement from the Travel and Transport Task Force on Ebola Virus Disease Outbreak in West Africa," November 7, 2014, http://who.int/mediacentre/news/statements/2014/ebola-travel/en/.

[35] Contributed by Rachel Tang, Analyst in Transportation and Industry, 7-7875, rtang@crs.loc.gov.

[36] Data provided by and discussion with Airlines for America, an industry association representing major U.S. air carriers. This has been confirmed by the Department of Transportation and the Department of Homeland Security.

[37] Ibid.

[38] Ibid.

[39] Brussels Airlines is a member of the Star Alliance network, along with U.S. carrier United Airlines. Star Alliance, "Travel the World with the Star Alliance Network," http://www.staralliance.com/en/about/member_airlines/. Air France is a member of the SkyTeam network, along with U.S. carrier Delta Airlines. SkyTeam, "SkyTeam Members," https://www.skyteam.com/en/About-us/Our-members/.

[40] Larry Buchanan et al., "Retracing the Steps of the Dallas Ebola Patient," *N.Y. Times*, October 8, 2014.

[41] Voice of America News, "Airlines Cut West Africa Flights, Delay Ebola Aid," September 12, 2014,
(continued...)

On average, about 150 passengers travel from the three affected countries to the United States daily.[42] Among those, prior to October 21, 2014, 94% arrived at five major hub airports: John F. Kennedy International Airport (JFK); Newark Liberty International Airport (EWR); Washington Dulles International Airport (IAD); Hartsfield-Jackson Atlanta International Airport (ATL); and Chicago O'Hare International Airport (ORD).[43] On October 21, 2014, the Department of Homeland Security (DHS) announced that, effective October 22, 2014, all passengers arriving in the United States whose travel originates in Guinea, Liberia, or Sierra Leone are required to fly into one of the aforementioned five airports, which have enhanced screening procedures in place.[44] In addition, CDC and DHS announced that, effective November 17, 2014, entry screening would begin for travelers arriving from Mali, due to the evolving nature of outbreaks there. DHS states it will work with airlines to ensure that all passengers whose travel originates in Mali will enter the United States at one of the five airports discussed above.[45] DHS provides information about the number of arriving passengers screened, and the subset of them needing further assessment, on a public website.[46] For more information on screening procedures, see the subsequent section of this report, "How does entry screening in the United States work?"

Can the federal government restrict the use of U.S. airspace?[47]

The notion that each nation has complete and exclusive sovereignty over the airspace above its territory has been incorporated into international agreements dating back to the initial rise of international aviation.[48] Congress enshrined this principle in federal law in 1958, by declaring that "The United States Government has exclusive sovereignty of airspace of the United States."[49] Congress delegated the authority to regulate U.S. airspace to the Administrator of the Federal Aviation Administration (FAA).[50] The FAA has the authority to restrict the use of U.S. airspace and prevent the entry of aircraft into U.S. airspace.[51] Additionally, the FAA has the authority to

(...continued)

http://www.voanews.com/content/airlines-cuts-in-flights-to-west-africa-delay-ebola-aid/2448006.html; Achilleas Galatsidas and Mark Anderson, "West Africa in Quarantine: Ebola, Closed Borders and Travel Bans," *The Guardian,* August 22, 2014, http://www.theguardian.com/global-development/ng-interactive/2014/aug/22/ebola-west-africa-closed-borders-travel-bans; *see also* International SOS, "Travel restrictions, flight operations, and screening," November 3, 2014, https://www.internationalsos.com/ebola/index.cfm?content_id=435&.

[42] Andrew Grossman, Carol E. Lee, and Jack Nicas, "U.S. to Check Temperatures of West Africa Passengers at Five Airports," *Wall Street Journal*, October 8, 2014.

[43] The White House Blog, "Five U.S. Airports Are Enacting New Screening Measures to Protect Against Ebola," October 8, 2014, http://www.whitehouse.gov/blog/2014/10/08/five-us-airports-are-enacting-new-screening-measures-protect-against-ebola.

[44] DHS, "Statement by Secretary Johnson on Travel Restrictions and Protective Measures to Prevent the Spread of Ebola to the United States," press release, October 21, 2014, http://www.dhs.gov/news-releases/press-releases.

[45] CDC and DHS, "Enhanced Airport Entry Screening to Begin for Travelers to the United States from Mali," press release, November 16, 2014, http://www.cdc.gov/media/archives.htm.

[46] DHS, "DHS's Coordinated Response to Ebola," http://www.dhs.gov/ebola-response.

[47] Contributed by Alissa M. Dolan, Legislative Attorney, 7-8433, adolan@crs.loc.gov.

[48] *See, e.g.*, Convention for the Regulation of Aerial Navigation (Paris Convention), Oct. 13, 1919, Art. 1; Convention on International Civil Aviation (Chicago Convention), Dec. 7, 1944, Art. 1.

[49] 49 U.S.C. §40103(a).

[50] 49 U.S.C. §40103(b).

[51] *See* 49 U.S.C. §§40103(b), 44701. FAA issues Notice to Airmen (NOTAM) to announce temporary flight restrictions in U.S. airspace according to FAA regulation. *See* 14 C.F.R. §§91.137-138, 91.141, 91.143-145.

prevent U.S. carriers and operators from flying to or within the airspace of other countries.[52] In regulating the use of airspace for the benefit of the public interest, the FAA must consider several factors as being in the public interest, including "assigning, maintaining, and enhancing safety and security as the highest priorities in air commerce" and "regulating air commerce in a way that best promotes safety and fulfills national defense requirements."[53]

During the current Ebola outbreak, the FAA has acknowledged its authority to restrict the use of U.S. airspace, but has cautioned that decisions made on a public health basis would involve other federal agencies.[54] The FAA has stated:

> While the FAA has the authority to direct flight operations in United States airspace, any decision to restrict flights between the United States and other countries due to public health and disease concerns would be an interagency decision that would engage the Departments of Health and Human Services/CDC, State, Homeland Security, and Transportation.[55]

CRS has been unable to identify any instances in which the FAA has restricted the use of U.S. airspace by incoming or outgoing flights purely on the basis of a public health concern.

Can the federal government prevent a specific person with a communicable disease from boarding a U.S.-bound airplane?[56]

DHS and CDC maintain a public health "Do Not Board" (DNB) list, which contains the names of people who are likely to be contagious with a communicable disease, may not adhere to public health recommendations, and are likely to board an aircraft.[57] Airlines are not permitted to issue a boarding pass to people on the DNB list for flights departing from or arriving into the United States. People placed on the DNB list are also "assigned a public health lookout record," which will alert CBP officers in the event the person attempts to enter the country through a port of entry.[58]

What if the flight crew sees someone sick on board an aircraft?[59]

Federal law requires a ship master or aircraft commander to immediately report a death on board or any ill person among the passengers and crew to a quarantine station nearest the port or airport of arrival.[60] For aircraft, such required reports are to be made to air traffic control and "[o]nce the

---

[52] *See* 49 U.S.C. §§40101(d)(1), 44701(a)(5). For an example of such a restriction, *see* "Prohibition Against Certain Flights Within the Territory and Airspace of Somalia," 72 Fed. Reg. 16710 (April 5, 2007).

[53] 49 U.S.C. §40101(d)(1).

[54] Federal Aviation Administration (FAA), "FAA Statement on Ebola," press release, Oct. 3, 2014, http://www.faa.gov/news/press_releases/.

[55] *Id*.

[56] Contributed by Jared P. Cole, Legislative Attorney, 7-6350, jpcole@crs.loc.gov.

[57] *See* CDC, "Federal Air Travel Restrictions for Public Health Purposes—United States, June 2007-May 2008," *MMWR*, September 19, 2008, http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5737a1.htm.

[58] *Id*.

[59] Contributed by Alissa M. Dolan, Legislative Attorney, 7-8433, adolan@crs.loc.gov.

[60] 42 C.F.R. §71.21. For ships, the reporting requirement covers a death or illness that occurs within 15 days prior to the date of expected arrival or since departure from a U.S. port, whichever time period is shorter.

FAA receives [the] report, it promptly communicates it to the CDC Emergency Operations Center."[61] Therefore, if the flight crew of a commercial aircraft arriving in the U.S. becomes aware of an ill person on board, which could include a person with Ebola symptoms, federal law requires the flight's commander to notify the nearest quarantine station. The CDC now also requests that airline crews ask sick travelers if they were in Guinea, Liberia, or Sierra Leone in the prior 21 days, and to report this information to CDC immediately.[62] The CDC maintains quarantine stations at 20 ports of entry and land-border crossings, including at international airports in the following areas: Atlanta, Chicago, Detroit, Honolulu, Houston, Los Angeles, Miami, Minneapolis-St. Paul, New York City (JFK), Philadelphia, San Francisco, San Juan, Seattle, and Washington, DC (IAD).[63]

What other steps are airlines and airports taking to prevent the spread of Ebola?[64]

An airline operating any U.S.-bound flight may deny boarding to a customer that has a communicable disease or infection and poses a "direct threat," in accordance with Department of Transportation regulations.[65]

There are no enforceable federal regulations or standards regarding the cleaning or disinfecting of aircraft cabins or airport facilities. However, CDC issues non-binding guidance,[66] as does the Occupational Safety and Health Administration (OHSA).[67] In general, airlines follow certain CDC and OSHA guidelines, in addition to having internal protocols for aircraft cleaning. Additionally, WHO provides voluntary guidelines for hygiene and sanitation of airliners and airports.[68] Reportedly, U.S. carriers have tightened their aircraft cleaning regimens for aircraft arriving into the United States from West Africa to conform to WHO guidelines.[69] At some airports, infectious disease training has been offered to cleaning personnel, but concerns remain over training standards and the availability of appropriate cleaning supplies and suitable personal protective equipment for airport and aircraft cleaning crews.[70]

---

[61] Federal Aviation Administration (FAA), "FAA Statement on Ebola," press release, October 3, 2014, http://www.faa.gov/news/press_releases/.

[62] CDC, "Guidance for Airlines on Reporting Onboard Deaths or Illnesses to CDC," October 15, 2014, http://www.cdc.gov/quarantine/air/reporting-deaths-illness/guidance-reporting-onboard-deaths-illnesses.html.

[63] CDC, "Quarantine Station Contact List, Map, and Fact Sheets," http://www.cdc.gov/quarantine/quarantinestationcontactlistfull.html.

[64] Contributed by Bart Elias, Specialist in Aviation Policy, 7-7771, belias@crs.loc.gov.

[65] See 14 C.F.R. §382.21. A "direct threat" means a "significant risk to the health or safety of others that cannot be eliminated by a modification of policies, practices, or procedures, or by the provision of auxiliary aids or services." 14 C.F.R. §382.3.

[66] CDC, "Ebola Guidance for Airlines: Interim Guidance about Ebola Infection for Airline Crews, Cleaning Personnel, and Cargo Personnel," http://wwwnc.cdc.gov/travel/page/travel-industry-information-center.

[67] OSHA, "Ebola: Control and Prevention," https://www.osha.gov/SLTC/ebola/control_prevention.html.

[68] WHO, "Guide to Hygiene and Sanitation in Aviation," Third ed. 2009, http://www.who.int/water_sanitation_health/hygiene/ships/guide_hygiene_sanitation_aviation_3_edition.pdf.

[69] Scott McCartney, "The Trouble with Keeping Commercial Flights Clean," *Wall Street Journal*, September 17, 2014.

[70] Bart Jansen, "Airport Workers Ill-Equipped to Cope with Sick Fliers," *USA Today*, October 8, 2014, http://www.usatoday.com/story/news/nation/2014/10/08/airport-cleaners-seiu-jfk-laguardia/16909177/.

Major airports maintain biologic and pandemic incident response plans. The National Incident Management System[71] and the National Strategy for Pandemic Influenza[72] served as models for most of these airport plans. However, some research has indicated that these protocols and guidelines are not always effectively followed and often have not been independently validated or tested.[73]

Identification and Screening of Passengers Arriving from Ebola-Affected Countries

How does entry screening in the United States work?[74]

Customs and Border Protection (CBP) conducts pre-travel electronic screening of all persons (including U.S. citizens) seeking to travel to the United States by air.[75] Starting 72 hours before the flight and prior to securing aircraft doors before departure, CBP receives data from commercial airlines (e.g., the Passenger Name Record [PNR] systems data[76] and the passenger and crew manifests[77]) and uses it to identify passengers who may be a risk to the United States (e.g., terrorists, criminals, and currently, those who have traveled from Guinea, Liberia, Sierra Leone, or Mali).[78]

As noted in the earlier section "How might people travel from affected countries to the United States?", persons whose travel originates in Guinea, Liberia, Sierra Leone, or Mali must enter the United States through one of five airports that have established new screening procedures for these passengers: John F. Kennedy International; Newark Liberty International; Washington Dulles; Atlanta Hartsfield-Jackson International, and Chicago O'Hare. When a passenger (including a U.S. citizen) whose travel originated in one of the four countries arrives, the passenger is escorted to a separate area for additional screening, fills out an extensive questionnaire, and has his or her temperature taken. If there are any concerns, CBP refers the person to CDC personnel at the airport who decide whether the person should be quarantined or allowed to continue to the final destination.[79] Travelers without fever or symptoms consistent with EVD are required to be monitored daily by the state and local health authorities for 21 days from the date of their departure from West Africa.[80] This is discussed more in the section "Who enforces monitoring and movement restrictions for those exposed to EVD?" Although entry

[71] See CRS Report R42845, *Federal Emergency Management: A Brief Introduction*, coordinated by Bruce R. Lindsay.

[72] See Flu.gov, "Planning and Preparedness," http://www.flu.gov/planning-preparedness/federal/index.html.

[73] Duane Habeck, "Communications and Information Management Issues for Air Travel Disease Mitigation," *Federal Roles in Air Travel Disease Mitigation,* Transportation Research Board 2014 Annual Meeting.

[74] Contributed by Alison Siskin, Specialist in Immigration Policy, 7-0260, asiskin@crs.loc.gov.

[75] For a fuller discussion of CBP's air passenger screening procedures, see CRS Report R43356, *Border Security: Immigration Inspections at Ports of Entry*, by Lisa Seghetti.

[76] 19 C.F.R. §122.49d. The data include passport and travel itinerary information.

[77] 19 C.F.R. §§122.49a, 122.49b.

[78] CBP, "Frequently Asked Questions, U.S. Customs and Border Protection, Receipt of Passenger Name Record (PNR) Data," June 21, 2013, http://www.cbp.gov/sites/default/files/documents/pnr_faq_3.pdf.

[79] This referral is referred to as "tertiary" (i.e., the third) inspection.

[80] Post-arrival monitoring began in the six states (Georgia, Maryland, New Jersey, New York, Pennsylvania, and Virginia) where approximately 70% of travelers are headed. CDC, "CDC Announces Active Post-Arrival Monitoring for Travelers from Impacted Countries," press release, October 22, 2014, http://www.cdc.gov/media/archives.htm.

screening has identified a number of persons who are ill upon arrival, no cases of EVD have been identified.[81]

What are other countries doing to prevent the introduction of Ebola via air travel?[82]

Numerous countries around the world, including in Africa, have prohibited or restricted the issuance of visas to, or otherwise barred the entry of travelers from, the affected countries, or are screening travelers upon entry. A private medical travel and security company, International SOS, maintains a website that provides information on countries imposing travel restrictions on travelers originating from the affected countries.[83]

No European Union (EU) member states have barred travel from Ebola-affected countries, but some EU countries are screening travelers arriving from these countries.[84] There is no EU-wide policy regarding the entry of nationals from EVD-affected countries into the EU. Travel to EU countries is controlled by the authorities of each member state based on its own laws and regulations, which in most cases comply with common EU agreements and regulations. Most EU countries rely on the advice of EU health authorities, principally the European Centre for Disease Prevention and Control (ECDC). The ECDC maintains that "the added value of entry screening, if exit screening is being conducted effectively, is likely to be very small, and the resource implications considerable."[85] It also states, however, that "complementing exit screening with entry screening may, however, be considered: When there are doubts about the efficiency of exit screening [; and] to detect the few who may develop fever between the time of departure and the time of arrival."[86]

Domestic Quarantine and Isolation: Legal Authority and Policies

What is quarantine? What is isolation?[87]

Quarantine and isolation are different but related procedures to prevent the spread of infection. *Quarantine* is used to separate and restrict the movement of well persons who may have been

[81] DHS, "DHS's Coordinated Response to Ebola," http://www.dhs.gov/ebola-response.

[82] Contributed by Tiaji Salaam-Blyther, Specialist in Global Health, 7-7677, tsalaam@crs.loc.gov, and Nicolas Cook, Specialist in African Affairs, 7-0429, ncook@crs.loc.gov.

[83] International SOS, "Travel Restrictions, Flight Operations and Screening," among other Ebola-related resources at https://www.internationalsos.com/ebola/. Information is updated regularly but does not consistently reflect all current travel restrictions.

[84] Adrian Croft and Francesco Guarascio, "EU Disagrees on Need for Ebola Screening at Europe's Airports," *Reuters*, October 16, 2014; and AFP, "Brussels Becomes Latest EU Airport to Screen for Ebola," October 20, 2014.

[85] European Centre for Disease Prevention and Control (ECDC), "Infection Prevention and Control Measures for Ebola Virus Disease Entry and Exit Screening Measures, Technical Report," October 12, 2014, http://www.ecdc.europa.eu/en/publications/technical_reports/Pages/index.aspx.

[86] Ibid. The ECDC also reported that, as of mid-October 2014, no information was "available regarding the quality and performance of the exit screening implemented in the affected countries," and has identified several aspects of both exit and entry screening that indicate that screening may result in a failure to detect EVD. See ECDC, *Outbreak of Ebola Virus Disease in West Africa*, Rapid Risk Assessment, Seventh update, October 17, 2014.

[87] Contributed by Sarah A. Lister, Specialist in Public Health and Epidemiology, 7-7320, slister@crs.loc.gov.

exposed to a communicable disease, in case they become contagious. *Isolation* is used to separate ill persons who have a communicable disease from others, including their caregivers, to some extent. Isolation is often carried out in a healthcare setting.

What legal authority allows the federal government to quarantine or isolate a person?[88]

The primary authority for communicable disease quarantine and isolation rests with states as an exercise of their traditional police powers.[89] However, the federal government has authority to order isolation and/or quarantine measures in certain situations. The Secretary of Health and Human Services is authorized to take measures "to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession."[90] The Secretary has delegated part of this responsibility to CDC, which is authorized to detain, isolate, or quarantine individuals suspected of carrying certain communicable diseases arriving from a foreign country, traveling from state-to-state, or believed to be a likely source of infection for individuals traveling to another state. However, such measures are limited to addressing communicable diseases published in an executive order issued by the President.[91] Executive Order 13295[92] lists the communicable diseases for which this quarantine authority may be exercised.[93] (The list includes Ebola.) Both interstate and foreign quarantine measures are now carried out by CDC's Division of Global Migration and Quarantine.[94]

There are currently 20 CDC Quarantine Stations located at ports of entry into the United States.[95] Because there are not CDC officials at every port of entry, various agencies in the Department of Homeland Security (DHS) are authorized to assist the CDC in "the enforcement of quarantine rules and regulations."[96] If an individual is suspected of carrying a communicable disease specified by the President, CDC may issue an isolation or quarantine order, a violation of which is a criminal misdemeanor.[97]

---

[88] Contributed by Jared P. Cole, Legislative Attorney, 7-6350, jpcole@crs.loc.gov.

[89] *See* Compagnie Francaise de Navigation a Vapeur v. Louisiana State Board of Health, 186 U.S. 380 (1902). "Police power" refers to the power of a state to establish and enforce laws protecting the welfare, safety, and health of the public. *See* Patterson v. State of Kentucky, 97 U.S. 501, 504 (1878); Mugler v. Kansas, 123 U.S. 623 (1887).

[90] 42 U.S.C. §264.

[91] 42 U.S.C. §264(b).

[92] *See* Exec. Order No. 13674, 79 Fed. Reg. 45671 (August 6, 2014); Exec. Order No. 13375, 70 Fed. Reg. 17299 (April 1, 2005).

[93] Exec. Order No. 13295, 68 Fed. Reg. 17255 (April 4, 2003). The diseases currently listed are cholera, diphtheria, infectious tuberculosis, plague, smallpox, yellow fever, viral hemorrhagic fevers (including Ebola), severe acute respiratory syndrome (SARS), and influenza viruses which have the potential to cause a pandemic.

[94] Whether an isolation or quarantine order originates with the federal or state government, such orders will presumably be subject to habeas corpus challenges, and must also comport with the Due Process Clause of the Constitution. *See* CRS Report RL33201, *Federal and State Quarantine and Isolation Authority*, by Jared P. Cole.

[95] *See* Centers for Disease Control and Prevention (CDC), U.S. Quarantine Stations, http://www.cdc.gov/quarantine/quarantine-stations-us.html.

[96] 42 U.S.C. §268.

[97] 42 U.S.C. §271.

What does the federal government recommend for persons exposed to EVD?[98]

CDC has revised its guidance for the management of persons who may have been exposed to EVD in order to prevent spread of the disease, should an exposed person become ill and contagious.[99] These guidelines address travelers from Ebola-affected countries in Africa as well as contacts potentially exposed to EVD within the United States.

The guidance distinguishes between *persons with symptoms* of illness and those without (i.e., *persons who are asymptomatic*). Persons with possible EVD exposure who are ill may be contagious to others and should be isolated and evaluated by medical and public health personnel immediately, according to protocols that prevent transmission of the disease to others.

Persons who have potentially been *exposed to Ebola virus* but have no symptoms of illness are not contagious to others. The incubation period for EVD, the time between exposure and the development of symptoms (i.e., the onset of illness), ranges from 2 to 21 days; in most cases it falls between 9 to 11 days.[100] After 21 days a person who was potentially exposed to Ebola virus but has not become ill is very unlikely to do so.

The CDC guidance defines several *levels of risk of exposure* among asymptomatic persons. These levels, and some examples of persons at each level, are

- *High risk*: direct contact with body fluids, or the dead body, of an infected person (including a needlestick injury or other known breach of personal protective equipment, PPE); living with and caring for an infected person.
- *Some risk*: care of an infected person in a country with widespread transmission (i.e., Guinea, Liberia, or Sierra Leone) or in Mali while using PPE properly.
- *Low risk:* care of an infected person in a country without widespread transmission while using PPE properly; being in a country with widespread transmission or in Mali within the prior 21 days.
- *No risk:* contact with another asymptomatic person who cares for someone with EVD infection, or who later develops EVD; persons traveling from a country (other than Mali) that has had Ebola cases but not widespread transmission.[101]

For those at risk of exposure, the CDC guidance stresses frequent (at least once daily) *monitoring for symptoms* such as fever, headache, vomiting, or diarrhea, among others. The premise is that if an exposed person is isolated promptly upon the onset of symptoms, there will have been no transmission of the virus to others. The exposure level determines whether monitoring is carried out directly by a public health worker, verified by phone or other electronic communication with a health worker, or is simply documented by the potentially exposed person. In any case, persons

[98] Contributed by Sarah A. Lister, Specialist in Public Health and Epidemiology, 7-7320, slister@crs.loc.gov.

[99] CDC, "Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure," October 28, 2014 (updated November 16, 2014), http://www.cdc.gov/vhf/ebola/exposure/monitoring-and-movement-of-persons-with-exposure.html.

[100] CDC, "Ebola Virus Disease Information for Clinicians in U.S. Healthcare Settings," November 9, 2014, http://www.cdc.gov/vhf/ebola/hcp/clinician-information-us-healthcare-settings.html.

[101] CDC, "Questions and Answers about CDC's Ebola Monitoring and Movement Guidance," November 8, 2014, http://www.cdc.gov/vhf/ebola/exposure/qas-monitoring-and-movement-guidance.html.

who develop symptoms while under monitoring are to report to public health officials immediately and facilitate prompt isolation measures.

Along with careful monitoring, *movement restrictions* such as home quarantine may be recommended as secondary control measures. The guidance does not advise strict quarantine in a specified location for most exposure risk levels, although at higher exposure levels it recommends "controlled movement," such as avoiding mass transit and mass gatherings.[102] The guidance suggests that movement restrictions can be crafted by public health officials on a case by case basis for many potentially exposed persons.

How does the current guidance differ from the prior version?[103]

The current (November 16) guidance supersedes guidance published on August 22,[104] and recommends that all healthcare workers who care for EVD patients should be considered at low or some risk of EVD exposure, even if they have used PPE with no known breach. In addition, persons having traveled from severely affected countries (i.e., Guinea, Liberia, or Sierra Leone) or to Mali should be considered at low risk even if they have no known close contact with an Ebola patient. Finally, U.S. state and local public health officials are urged to conduct active monitoring of at-risk persons during their 21-day monitoring period.[105]

Who enforces monitoring and movement restrictions for those exposed to EVD?[106]

In general, state and local public health officials are responsible for setting the terms of monitoring and movement restrictions for exposed persons, as an exercise of their police powers. (See the earlier section, "What legal authority allows the federal government to quarantine or isolate a person?".)

State and local health officials are directly involved in tracing, identifying, and managing contacts when Ebola transmission may have occurred in the United States. Entrants (travelers) identified by CDC or CBP officials as having possible exposure are required to provide information about their final U.S. destination, and contact information. CDC or CBP officials then provide this information to public health officials at the final destination, who commence the daily monitoring and any additional protocols recommended for these persons.[107]

[102] CDC, "Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure," October 28, 2014 (updated November 16, 2014), http://www.cdc.gov/vhf/ebola/exposure/monitoring-and-movement-of-persons-with-exposure.html.

[103] Contributed by Sarah A. Lister, Specialist in Public Health and Epidemiology, 7-7320, slister@crs.loc.gov.

[104] CDC, "Interim Guidance for Monitoring and Movement of Persons with Ebola Virus Disease Exposure," updated August 22, 2014.

[105] CDC, "Questions and Answers about CDC's Ebola Monitoring and Movement Guidance," November 8, 2014, http://www.cdc.gov/vhf/ebola/exposure/qas-monitoring-and-movement-guidance.html.

[106] Contributed by Sarah A. Lister, Specialist in Public Health and Epidemiology, 7-7320, slister@crs.loc.gov.

[107] Department of Homeland Security, "DHS's Coordinated Response to Ebola," http://www.dhs.gov/ebola-response.

If a traveler with the potential for EVD exposure is found to be ill upon arrival in the United States, CDC or CBP officials may, pursuant to CDC's quarantine authority, require the person to be immediately isolated and transported to a nearby hospital for further evaluation.

In addition, if federal or state/local officials determine that an asymptomatic but potentially exposed individual should not travel by air once at the final U.S. destination, CDC and CBP may place the individual on the Do Not Board list for the duration of the person's quarantine period, as discussed in the previous section of this report, "Can the federal government prevent a specific person with a communicable disease from boarding a U.S.-bound airplane?".

How do states enforce monitoring requirements and movement restrictions?[108]

All states have the authority and the legal means to require monitoring and movement restriction of individuals in order to ensure public health and safety. State laws and procedures vary considerably in their particulars, however.[109]

Following the 2001 terrorist attacks, CDC funding was provided to aid states in their public health preparedness efforts,[110] which included updating their quarantine laws and otherwise improving their legal preparedness for infectious disease threats. Specifically, CDC funded development of a model state emergency health powers act for states to adopt, in whole or part.[111] In 2011, CDC published *Public Health Preparedness Capabilities: National Standards for State and Local Planning* (PHEP Capabilities) to help state and local planners identify and address gaps in their readiness for public health threats.[112] The document presents "priority elements" that should be addressed in a state's or locality's written public health emergency plan, including the following regarding isolation and quarantine capability:

> ...documentation of the applicable jurisdictional, legal, and regulatory authorities and policies for recommending and implementing non-pharmaceutical interventions in both routine and incident-specific situations. This includes but is not limited to authorities for restricting the following elements: [Individuals; Groups; Facilities; Animals (e.g., animals with infectious diseases and animals with exposure to environmental, chemical, radiological hazards); Consumer food products; Public works/utilities (e.g., water supply); and Travel through ports of entry].[113]

[108] Contributed by Sarah A. Lister, Specialist in Public Health and Epidemiology, 7-7320, slister@crs.loc.gov.

[109] *See* National Council of State Legislatures, "State Quarantine and Isolation Statutes," a database, updated October 29, 2014, http://www.ncsl.org/research/health/state-quarantine-and-isolation-statutes.aspx.

[110] CDC, "Funding and Guidance for State and Local Health Departments," http://www.cdc.gov/phpr/coopagreement.htm.

[111] *See* "Model State Emergency Health Powers Act" in CRS Report RS21414, *Mandatory Vaccinations: Precedent and Current Laws*, by Jared P. Cole and Kathleen S. Swendiman.

[112] CDC, Public Health Preparedness Capabilities: National Standards for State and Local Planning, July 22, 2011, http://www.cdc.gov/phpr/capabilities/.

[113] Ibid, pp. 102-103. In contrast to drugs and vaccines, "non-pharmaceutical interventions" for communicable disease control refer to restrictions such isolation and quarantine, and other interventions such as cancellation of large events.

How has the public reacted to U.S. quarantine policies?[114]

A CBS News poll conducted in late October, 2014, found that 80% of Americans think that asymptomatic U.S. citizens and legal residents returning from West Africa should be quarantined upon their arrival in the United States until it is certain they don't have Ebola infection.[115]

Aid groups and others have cautioned that forced quarantine could dissuade healthcare workers from volunteering for Ebola response missions in West Africa.[116] CDC guidance does not generally recommend quarantine for potentially Ebola-exposed persons who do not have symptoms. (See the earlier section "What does the federal government recommend for persons exposed to EVD?".) However, the Department of Defense has imposed a 21-day quarantine on military members deployed to Ebola-affected countries in West Africa, upon their return.[117]

Quarantine can be cumbersome, intrusive, and fraught with unintended consequences, but, when applied skillfully, it is a time-tested approach to stopping the spread of communicable diseases.[118] Decisions to use or forgo quarantine are likely to continue to stir debate in American communities, regardless of the science behind them or the passage of time, because these decisions reveal the nation's diverse views about the balance of individual and collective well-being.[119]

[114] Contributed by Sarah A. Lister, Specialist in Public Health and Epidemiology, 7-7320, slister@crs.loc.gov.

[115] Sarah Dutton, et al., "Do Americans Believe there Should Be a Quarantine to Deal with Ebola?" *CBS News*, October 29, 2014, http://www.cbsnews.com/feature/cbs-news-polls/.

[116] See for example Doctors Without Borders/Médecins Sans Frontières (MSF), "Ebola: Quarantine Can Undermine Efforts to Curb Epidemic," press release, October 27, 2014, http://www.doctorswithoutborders.org/news-stories/press/press-releases.

[117] See for example Dion Nissenbaum, "Hagel Approves 21-Day Ebola Isolation Period for Military; Applies to All Servicemembers Returning from West Africa," *The Wall Street Journal*, October 30, 2014.

[118] See for example Jon Schuppe, "Dallas Ebola Family Joins Long History of Quarantines," *NBC News*, October 4, 2014.

[119] Kate Murphy, "The Ethics of Infection," *The New York Times*, November 8, 2014.

Author Contact Information

Sarah A. Lister, Coordinator
Specialist in Public Health and Epidemiology
slister@crs.loc.gov, 7-7320

Jared P. Cole
Legislative Attorney
jpcole@crs.loc.gov, 7-6350

Nicolas Cook
Specialist in African Affairs
ncook@crs.loc.gov, 7-0429

Alissa M. Dolan
Legislative Attorney
adolan@crs.loc.gov, 7-8433

Bart Elias
Specialist in Aviation Policy
belias@crs.loc.gov, 7-7771

Michael John Garcia
Legislative Attorney
mgarcia@crs.loc.gov, 7-3873

Tiaji Salaam-Blyther
Specialist in Global Health
tsalaam@crs.loc.gov, 7-7677

Alison Siskin
Specialist in Immigration Policy
asiskin@crs.loc.gov, 7-0260

Rachel Y. Tang
Analyst in Transportation and Industry
rtang@crs.loc.gov, 7-7875