

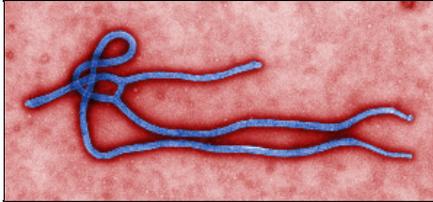
Safe at Home? Letting Ebola-Stricken Americans Return

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August 5, 2014 (IN10126)

In early August 2014 two American healthcare workers who contracted Ebola virus infections while working to stem an [outbreak in West Africa](#) returned to the United States to continue receiving medical care here. Ebola infection is highly deadly and there is no approved specific treatment. Although the patients were to be transported and cared for under strict isolation protocols, some have voiced [concern about Ebola infection](#) being brought to the United States for the first time intentionally.

Figure 1. Ebola Virus Particle



Ebola

Source: Colorized transmission electron micrograph from Centers for Disease Control and Prevention, Public Health Image Library, image #10816, <http://phil.cdc.gov>.

infection is one of several communicable diseases for which [aliens are generally barred from entry](#) into the United States. Although U.S. citizens are entitled to certain constitutional protections related to the right to travel and reenter the United States, these rights may be balanced against the government's interest in preventing the spread of a dangerous communicable disease. In any event, [U.S. practice has been to isolate and/or quarantine](#) arriving U.S. citizens who have been infected with or exposed to a dangerous communicable disease, rather than barring their entry into the country outright (though circumstances could conceivably arise where this practice would be altered).

Isolation or Quarantine?

Isolation is used to separate ill persons who have a communicable disease from others. It is often carried out in a healthcare setting.

Quarantine is used to separate and restrict the movement of well persons who may have been exposed to a communicable disease to see if they become ill. It is often carried out at home.

Ebola infection has a [high mortality rate](#), often killing more than half of those who are infected. [Supportive treatment](#) such as intravenous hydration lowers the death rate somewhat. The two infected American healthcare workers who returned to the United States are reported to have received an [experimental antibody treatment](#) for the disease. The U.S. National Institutes of Health (NIH) plans to begin [clinical trials on a candidate vaccine](#) in the fall of 2014.

Figure 2. Healthcare Workers in Personal Protective Equipment



Source: Centers for Disease Control and Prevention, <http://www.cdc.gov/vhf/ebola/exposure/index.html>.

[Transmission of Ebola infection](#) requires direct contact with body fluids; it cannot generally be spread through airborne or casual contact. Spread of infection in affected West African nations was facilitated by certain [dietary and cultural practices](#) that are not generally observed in the United States. Community spread in the United States would be unlikely. However, [healthcare workers are at considerable risk](#) when caring for ill patients.

The [course of Ebola infections](#) is generally well understood. The incubation period is up to 15 days after a potential exposure. If an exposed person, such as a healthcare worker who sustains a needlestick injury while caring for an Ebola patient, does not develop symptoms within that time, he or she is not likely to do so. The disease is not communicable until symptoms appear. Those surviving infection may remain contagious for several months after infection, when symptoms are no longer present, but they can be tested for persistent infection in order to quarantine themselves from others.

Using this information, public health officials can craft appropriate isolation and quarantine protocols for patients and those exposed to them. [Enforcing isolation and quarantine](#) protocols, if necessary, is

generally a matter of state law. U.S. [hospital isolation capacity](#) has expanded since the anthrax attacks of 2001, partly as a result of federal [Hospital Preparedness Program](#) grants to all 50 states, the District of Columbia, and the U.S. territories.

Diseases like Ebola could enter the United States through an infected traveler at any time. In response to the outbreak in West Africa, CDC has taken two actions that it has used before in similar situations. First, it has [advised healthcare providers](#) in the United States to be vigilant for possible symptoms of Ebola infection in recent travelers to affected countries. Second, it has issued a [Level 3 Travel Warning](#) to travelers from the United States, urging against nonessential travel to Liberia, Guinea, and Sierra Leone. The warning provides information about protective practices for those (such as aid workers) who must travel to these countries while the Ebola outbreak is ongoing. United States health authorities continue to work with World Health Organization (WHO) and other nations to monitor the outbreak and share information, as is expected now of all parties to WHO's [International Health Regulations \(IHR\)](#). The IHR provide a means for coordinated international tracking of and response to infectious diseases in an ever more mobile world.