The truth about Ebola in America: an epidemic, or even an outbreak, is extremely unlikely

By ACSH Staff — October 1, 2014

For months now, we’ve been reading the scary facts about the west African Ebola outbreak far and away the largest recorded since the virus was characterized in 1976 as a distinct entity. To summarize, as of this week there have been about 6,000 cases recorded, and about 3,100 deaths: but these are widely believed to be gross underestimates, given the meager epidemiological resources of the involved area (Liberia, Sierra Leone, Guinea, and, to a lesser extent, Nigeria). Americans, especially the media, wondered and worried: might it spread here?

Until this week, the answer seemed to be no. In retrospect, this dismissal seems like wishful thinking, given the travel proclivities and ease of international movement these days, plus the lack of early identifying signs and symptoms of the disease. Those infected are asymptomatic for anywhere between 3 days and 2 weeks before becoming ill, and the earliest signs are quite similar to any other viral illness, such as the flu.

This is just what happened a few days ago when a patient was definitively diagnosed with Ebola in a Dallas hospital. (A report issued only today [1] indicates there may be a second case, related to the initial one). The gentleman flew to Dallas on 9/20 from Liberia and, according to information supplied by the CDC, only became clinically ill on 9/24, while staying with family and friends. Unfortunately, despite seeking medical attention on 9/26, he was not diagnosed and was sent home with antibiotics [2] (which of course have no efficacy whatsoever against viral illnesses). When he became desperately ill, he was rushed by ambulance to the hospital on 9/28, having exposed an unknown number of contacts during the several days (9/26-9/28) when he was contagious. (Thankfully, the virus does not spread while the patient harboring it is not him/herself ill).

The disease is not easily spread, even when the patient is communicable [3], ie., sick. Casual contact will not do it, some contact with bodily fluids is needed: blood, urine, secretions, sputum,
nasal effluence, diarrhea are communicable items. Semen as well, although the likelihood of a man sick with Ebola transmitting the disease sexually seems remote. In Africa, consuming bushmeat meat from a dead animal is also a hazard, one unlikely to present a problem in our country (similarly, burial rituals often transmit the virus in Africa).

ACSH’s Dr. Gil Ross had this comment: Screening all those coming to our shores from the involved African nations for fever is a simple enough procedure, and worked quite well during the SARS epidemic in 2003 once the nature of the illness became clear. We at least already know quite a lot about the natural course of Ebola infection, but this episode does remind us that a few contagious individuals will slip through anyway. However, with heightened scrutiny and intensive contact tracing and isolation as appropriate, the chances of any widespread outbreak here are minimal to none, in my opinion.

ACSH’s Dr. Josh Bloom argues that it is too soon to know how this will play out. He says, We are now having the first real test of the actual risk of outbreaks in the US. It is premature for the CDC to say that there is nothing to worry about. This may be true, but the most problematic scenario is pretty much what happened. An infected, but asymptomatic person enters the country and becomes ill once he is here. Once he is ill he can now infect others during the interval between first symptoms and isolation. The problem is that early Ebola mimics norovirus quite well, the second most common infectious disease in the US (30 million people per year). Many people will get off planes and become ill within a few days. Almost none will be infected by Ebola. But, how can you tell?

We should also remind our readers that the CDC hasn’t exactly been inspiring much confidence this year. You can read Dr. Bloom’s unflattering Science 2.0 piece, Smallpox in a Big Box With no Locks [4]. While that was really a different issue than tracing and isolating people with Ebola, it speaks to the issue of competence something that seems to be in short supply at the CDC.

(An added "program" note: ACSH’s Dr. Gil Ross gave his perspective on an Indianapolis-based radio interview during "drive time" this morning: listen here [5]).