Things You Must Know About Ebola

Ebola Facts, Risks, and Air Travel
by James Hubbard, MD, MPH

Ebola is highly contagious and kills nine out of 10 people infected. So, why do I think headlines like USA Today's "Ebola only a plane ride away from USA." paint the wrong picture? Now that I think of it, why does my first sentence do the same? It's all about perspective.

First, a little background.

The current Ebola outbreak in Africa has been going on for several months. It hit the American news cycle big time on Monday because an American doctor contracted it while in Africa. And someone on a plane there was found to have the disease. The media is asking, "Could it come here?" This is not the first outbreak in Africa, but past ones have been localized to small villages. The usual outbreak runs its course and eventually just goes away. But this one has been spreading—to multiple regions, including large cities.

This is serious business. For those in Africa, it's a nightmare. Horrible. Devastating. But here are some more facts to put it in perspective for the rest of us:

$ Ebola has never been shown to spread from person to person by air droplets. The reason colds and the flu are so contagious is they do spread that way. Someone posted on my Facebook page that their local news said Ebola does too. Well, it doesn't. It could mutate, but that's pure speculation. And that's where you might get the wrong idea from my first sentence. Ebola is highly contagious, but not from respiratory air droplets.

$ Ebola is spread by contact with bodily fluids: blood, semen, vomit, feces, saliva. The World Health Organization says it can spread through sweat.

$ An American doctor recently infected was in Africa caring for multiple infected people at their sickest, under less than ideal conditions and in close contact. How he got it exactly has yet to be reported, but no doubt, despite the best precautions, the longer you're potentially exposed and the more fluids you're exposed to, the more likely you're going to become infected. For example, there could have been a break in the protective gear, an area not cleaned, a contaminated-needle stick.

$ Ebola does not penetrate intact skin. Certainly, you don't want to get any fluids on you, but technically, the only way they're going to infect you is if they come in contact with mucous membranes (like in your mouth, nose, vagina, rectum) or enter through a crack in your skin.

$ Yes, the USA Today headline seems, to me, a little misleading, but it is true. Plane travelers can carry Ebola. They could carry any virus, for that matter. As with most infections, once someone gets infected, symptoms can take several days to show up. Before they get sick, they could travel. They would be contagious. But, you don't get Ebola from casual contact, so even if you were to sit next to an infected person for hours, you'd have to come in contact with bodily fluids to be at risk. That's unlikely, especially if you use good hygiene like frequent hand washing, which brings me to the next fact.

$ If an infected person comes to the United States or another developed country, when they get sick (and these people get very sick) they will be transferred to a hospital and put in isolation. Even the health care workers who first come in contact—before the disease is diagnosed—will be protected by the common practice of wearing protective clothing and masks. As we know from the doctors infected in Africa, this is not foolproof, but in the tragic instance that someone—health care worker or not—comes into direct contact with the infected person's bodily fluids, they will be isolated, probably immediately or certainly at the first sign of symptoms.

$ One of the big problems in Africa is the very sick are often treated at home. And even if they're not, many clinics have conditions that would be considered appalling here in the United States. They just don't have many good, clean, up-to-date health care facilities. Preparing for burial is also often done by family members at home—another way people are exposed.

$ The probable reason this outbreak is spreading over various regions in Africa is this: Family comes in for funerals, etc. They get infected but don't get sick right away, so they go home. They're treated in their home and spread the infection. Here in the U.S. and other places, public health is on high alert for someone getting sick who has traveled recently in Africa.

$ The Ebola virus has only been known about since 1976. Past outbreaks have come and gone rather quickly, so it has been harder to study. New facts will emerge.

On the other hand, much misinformation will be spread, as is often the case with scary diseases. See number 1 about the newscast. Some will spread that as fact. I mean, it was on the news. Headlines are there to get your attention. Read beyond them. These days, headlines are not known for accuracy. They're written to get you to click and read the article. How many Internet headlines have you clicked on only to find the real story is something totally different? And, actually, if you read the entire *USA Today* article, you'll find some very good content.

I'm probably just being picky, but when I read, blank disease (say the flu) is coming to the U.S., I see it as meaning an outbreak, not just a few isolated cases. But, with Ebola, we're only talking isolated cases, at least in the foreseeable future. Only time will tell how this will end. But you'll always be better prepared by knowing the facts and discerning them from the misinformation.