When Anthony Fauci speaks, it is time to listen. He now speaks about Ebola.

By ACSH Staff — August 14, 2014

For anyone who has followed the AIDS epidemic from the beginning, Anthony Fauci is a very familiar name. Dr. Fauci, an accomplished immunologist, became the director of National Institute of Allergy and Infectious Diseases (NIAID) one of the institutes that comprise the NIH in 1984, where his contributions to the understanding of HIV played a huge part in the eventual control of the infection years later. He still holds this position, and has been one of the world’s most cited scientists over the past two decades.

Dr. Fauci wrote a Perspective piece in the most recent issue of The New England Journal of Medicine where he discusses the risks of Ebola both in the US and less developed countries. He highlights the enormous difference in outcome of being infected between parts of the world that do and do not have adequate medical support for infected people.

Perhaps the most important take home message from his piece is the following: Although the regional threat of Ebola in West Africa looms large, the chance that the virus will establish a foothold in the United States or another high-resource country remains extremely small. Although global air transit could, and most likely will, allow an infected, asymptomatic person to board a plane and unknowingly carry Ebola virus to a higher-income country, containment should be readily achievable.

This is mostly reassuring, but also somewhat troubling. Dr. Fauci realizes that given the incubation period of the infection, and the window of time when the victim is infectious all but guarantees that infected people will arrive in many parts of the world, but that when this happens it will not be a cataclysmic event, rather, one that should be controllable.

ACSH’s Dr. Josh Bloom, a former researcher in virology, has one problem with the piece. He explains, I think Dr. Fauci is painting too rosy a picture of anti-Ebola candidates that are in various stages of development. From his discussion near the end of the piece, an average reader would probably conclude that effective therapies are right around the corner. This is a common philosophy among scientists who have not been in the ditches wrestling with an endless stream of problems that pop up during drug discovery, anyone of which can relegate a promising candidate to the huge scrapheap of failed drugs.

Fauci says, Other candidate therapeutics include RNA-polymerase inhibitors and small interfering
RNA nanoparticles that inhibit protein production.

But, as Dr. Bloom points out, Sovaldi the drug that revolutionized the treatment of hepatitis C also happens to be a RNA-polymerase inhibitor that was granted a patent in 2008. It is a fairly safe assumption that the actual invention originated years before this. This adds up to 8-10 years of work, before the drug hit the market, and this is very fast compared to other drugs. And keep in mind that dozens of similar compounds failed in the 20 years before this succeeded. One should not assume that any effective therapy will show up anytime soon.