## Airborne form of Ebola a realistic possibility?

Back in September, when the West African Ebola outbreak was getting worse with every passing week, a lot of people began to worry that the virus could spread by air or that it might be on the verge of mutating into an airborne form.

When I talked to virus experts, they saw little ground for either concern. The anxiety over airborne Ebola has faded. But a new "Opinion/Hypothesis" piece published in the journal *mBio*, called <u>"Transmission of Ebola Viruses: What We Know and Do Not Know,"</u> has breathed some new life into the old worry.

After surveying what we do and don't know about Ebola transmission, the authors offer what they call a hypothesis: Ebola might indeed be able to become airborne. Infected people might cough up virus-laden droplets, which other people might then breathe into their lungs, setting off an infection. Mutations could make this route easier for the virus to take. "We agree this is an improbable (although not impossible) scenario," [study author] Michael Osterholm of the University of Minnesota and his colleagues acknowledge, but they point out that Ebola has sprung many surprises on us in the past.

In fact, viruses in general don't show the massive evolutionary potential that Osterholm and his colleagues see in Ebola. Smallpox and influenza have infected billions of people by airborne transmission for thousands of years, and there's no evidence that they have evolved a new route. Poliovirus and norovirus take the oral route, as they always have.

Read full, original article: Is it worth imagining airborne Ebola?