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What We're Afraid to Say About Ebola

By MICHAEL T. OSTERHOLM SEPT. 11, 2014

MINNEAPOLIS — THE Ebola epidemic in West Africa has the potential to alter history as much as any plague has ever done.

There have been more than 4,300 cases and 2,300 deaths over the past six months. Last week, the World Health Organization warned that, by early October, there may be thousands of new cases per week in Liberia, Sierra Leone, Guinea and Nigeria. What is not getting said publicly, despite briefings and discussions in the inner circles of the world's public health agencies, is that we are in totally uncharted waters and that Mother Nature is the only force in charge of the crisis at this time.

There are two possible future chapters to this story that should keep us up at night.

The first possibility is that the Ebola virus spreads from West Africa to megacities in other regions of the developing world. This outbreak is very different from the 19 that have occurred in Africa over the past 40 years. It is much easier to control Ebola infections in isolated villages. But there has been a 300 percent increase in Africa's population over the last four decades, much of it in large city slums. What happens when an infected person yet to become ill travels by plane to Lagos, Nairobi, Kinshasa or Mogadishu — or even Karachi, Jakarta, Mexico City or Dhaka?

The second possibility is one that virologists are loath to discuss openly but are definitely considering in private: that an Ebola virus could mutate to become transmissible through the air. You can now get Ebola only through direct contact with bodily fluids. But viruses like Ebola are notoriously sloppy in replicating, meaning the virus entering one person may be genetically different from the virus entering the next. The current Ebola virus's hyper-evolution is unprecedented;

there has been more human-to-human transmission in the past four months than most likely occurred in the last 500 to 1,000 years. Each new infection represents trillions of throws of the genetic dice.

If certain mutations occurred, it would mean that just breathing would put one at risk of contracting Ebola. Infections could spread quickly to every part of the globe, as the H1N1 influenza virus did in 2009, after its birth in Mexico.

Why are public officials afraid to discuss this? They don't want to be accused of screaming "Fire!" in a crowded theater — as I'm sure some will accuse me of doing. But the risk is real, and until we consider it, the world will not be prepared to do what is necessary to end the epidemic.

In 2012, a team of Canadian researchers proved that Ebola Zaire, the same virus that is causing the West Africa outbreak, could be transmitted by the respiratory route from pigs to monkeys, both of whose lungs are very similar to those of humans. Richard Preston's 1994 best seller "The Hot Zone" chronicled a 1989 outbreak of a different strain, Ebola Reston virus, among monkeys at a quarantine station near Washington. The virus was transmitted through breathing, and the outbreak ended only when all the monkeys were euthanized. We must consider that such transmissions could happen between humans, if the virus mutates.

So what must we do that we are not doing?

First, we need someone to take over the position of "command and control." The United Nations is the only international organization that can direct the immense amount of medical, public health and humanitarian aid that must come from many different countries and nongovernmental groups to smother this epidemic. Thus far it has played at best a collaborating role, and with everyone in charge, no one is in charge.

A Security Council resolution could give the United Nations total responsibility for controlling the outbreak, while respecting West African nations' sovereignty as much as possible. The United Nations could, for instance, secure aircraft and landing rights. Many private airlines are refusing to fly into the affected countries, making it very difficult to deploy critical supplies and personnel. The Group of 7 countries' military air and ground support must be brought in to ensure supply chains for medical and infection-control products, as well as food and water for quarantined areas.

The United Nations should provide whatever number of beds are needed; the World Health Organization has recommended 1,500, but we may need thousands more. It should also coordinate the recruitment and training around the world of medical and nursing staff, in particular by bringing in local residents who have survived Ebola, and are no longer at risk of infection. Many countries are pledging medical resources, but donations will not result in an effective treatment system if no single group is responsible for coordinating them.

Finally, we have to remember that Ebola isn't West Africa's only problem. Tens of thousands die there each year from diseases like AIDS, malaria and tuberculosis. Liberia, Sierra Leone and Guinea have among the highest maternal mortality rates in the world. Because people are now too afraid of contracting Ebola to go to the hospital, very few are getting basic medical care. In addition, many health care workers have been infected with Ebola, and more than 120 have died. Liberia has only 250 doctors left, for a population of four million.

This is about humanitarianism and self-interest. If we wait for vaccines and new drugs to arrive to end the Ebola epidemic, instead of taking major action now, we risk the disease's reaching from West Africa to our own backyards.

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