

Preparing for the next pandemic

At a time when, hopefully, we are on the downward slope of the Covid-19 pandemic with 30 percent of the US population fully vaccinated, it is perhaps a good time to take a step back and look at the bigger picture.

Covid-19 is caused by a virus called SARS-CoV-2 which originated in some bats that live in the area around Wuhan, China. Currently it is thought that SARS-CoV-2 infected an intermediary animal that then transmitted it to humans. Once the virus was transmitted to humans, it turned out that it was easily spread from person to person through airborne expelled moisture.

The result was the pandemic that we are now living with.

Much has been made of the idea that it is a zoonotic disease—an animal disease that infects humans—and may have originated in a wet market in Wuhan. While the label “zoonotic disease” sounds exotic and may be unfamiliar to many, it turns out that they are exceedingly common.

When we were children we were told to stay away from dogs and skunks that were foaming at the mouth because they might have rabies. The fact that we could get rabies from the bite of a rabid animal makes rabies a zoonotic disease.

According to the Centers for Disease Control and Prevention, “Six out of every 10 infectious diseases in people are zoonotic” (<https://tinyurl.com/3cw66jrv>).

One of these 6 is Lyme Disease, a disease that was first identified in 1975 in Lyme, Connecticut (thus the name) and is transmitted by ticks.

We all remember the 2015 avian influenza (bird flu) outbreak in the US that resulted in the death or preventative destruction of over 40 million birds. While, the bird flu of 2015 did not threaten the human population, an earlier avian influenza strain was responsible for the Influenza Pandemic of 1918.

Human-animal interactions—whether with pets, animals raised for food, animals smaller than mosquitos, or animals in the wild—all have the potential for the transmission of serious diseases to humans. The risk may be unknown, but it is there. There is always the possibility of the appearance of a novel disease that has a devastating effect on humans.

In the last decade it may have seemed unnecessary to provide significant government funding to research and planning for the next pandemic, after all it had been nearly a century since the Influenza Pandemic of 1918. Besides that, the zoonotic diseases that appeared in the last two decades (MERS, SARS, Ebola, Zika) failed to have a worldwide impact on the human population.

But looking in the rearview mirror, we have to ask how different the last 14 months would have looked if we had maintained a high level of research and preparedness for the next zoonotic disease to threaten the world’s human population.

With a deeper research and public health strategy base, would we have been able to respond more quickly to protect the public? How much would the cost of that early research and planning be compared to the economic impact of Covid-19?

As agricultural policy analysts, we doubt there is a sharp line between public research on the diseases of wild animals, the animals we raise for pets or food, and our own health.

We leave it to our readers to decide where they stand on the issue of public funding of zoonotic disease and public health research as well as preparedness planning for the next zoonotic disease outbreak, but we know where we stand.

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