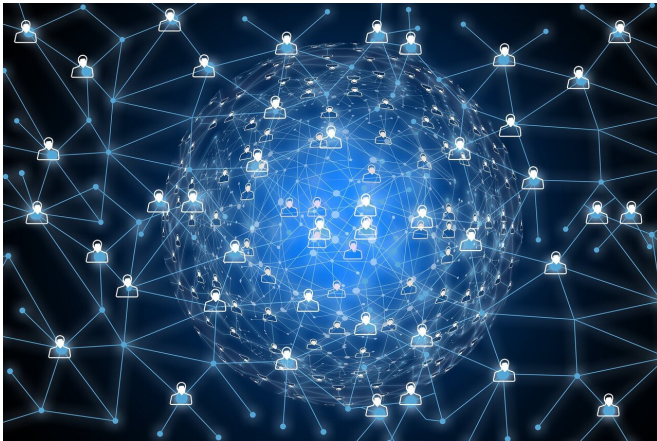


# The coronavirus and our interconnected economy and biosphere

2 March 2020, by Steve Cohen



Credit: CC0 Public Domain

When I think about the climate problem and the challenges it creates, I am reassured by the fact that we know what causes climate change, we understand its impact and we know how to mitigate it. The forces that are slowing the transition to renewable energy are economic, technological, political and cultural. These are intense forces, but they can and will be addressed. In contrast, threats to our interconnected ecosystems and to the human lives that depend on our living planet are less well understood. The coronavirus is the latest example of such a threat, but there are many others underway and more will come in the future. These are serious threats and they require study, analysis and both collective and individual action.

These dangers are complicated and not always well understood. The worst thing you can do about them is what President Trump managed to do in recent days. He has declared the virus a hoax exaggerated by his enemies for political purposes. He is claiming that the government is doing a great job in addressing the disease and simultaneously playing down the threat it poses. The U.S. government is in the beginning stages of response,

and if the professionals are given the resources and left alone by the politicians, we will do better than we are now doing. While we do not know how bad this will get, we know that additional medical resources must be put in place to deal with this crisis. Requiring medical professionals to clear their statements through the [vice president](#) will slow down and distort communications that should come directly from [medical experts](#).

Not only is the virus not a hoax, but it is a symptom of a global economy that we all depend on and benefit from. In other words, we will see more of these in the future. While we do not fully understand this particular virus, we have methods for analyzing its causes and effects and for reducing its transmission. Conducting the research needed and protecting [public health](#) requires resources, expertise and institutional capacity. America has the resources, expertise and the ability to develop the capacity to contain this disease, but to do so we need calm, determined leadership.

Some of the threats to ecosystems that we face are from [invasive species](#) that travel in our planes and ships to ecosystems that did not evolve with defenses against those threats. In addition to invasive species, some of the risks are posed by diseases transmitted directly by humans and animals. We live on a more crowded planet with far more animals bred for food than at any time in human history. This increases the probability that we will see diseases spread from a species with protection against a disease to a species that lacks protection. In addition to disease, some threats are human-made such as those caused by pesticides and other chemicals that we use on our farms and gardens. We introduce new chemicals into our economy at a ferocious rate and we do little to regulate them even when we know they harm animals, ecosystems and people.

While I believe we need to get used to the risks

posed by our global lifestyle, I do not mean that we should simply permit risk and danger without seeking to understand them and manage them. When we see a risk like the coronavirus, where the impact is obvious and intense, we urgently seek to reduce that risk. That is an appropriate and sensible response. Politicizing the response is not. Minimizing the risk for the sake of political spin is a mistake. Maximizing the perception of risk for political gain is also a mistake. The president and his crew should stop spinning the crisis and their management of its impact. The government's response to the crisis is a work in progress. Congress should ignore the spin and focus on generating the resources that our experts and state and local governments need to respond to this emerging crisis. This is a time to work together rather than reinforce division.

I recognize that this won't be easy because the Trump Administration has worked over the past several years to reduce our capacity to deal with pandemics. As Sharon Lerner observed over this past weekend in *The Intercept*:

"President Trump has fired many of the people who actually know how to coordinate government responses to epidemics. As Laurie Garrett reported in January, the president shut down the National Security Council's global health security unit and cut \$15 billion in national health spending, including funding for the management of infectious global diseases at the CDC, DHS, and HHS."

But we need to see those cuts as "history" and focus all of our attention on the current situation. We do not have the luxury of pointing fingers and assigning blame. Hopefully, this experience will make it clear that we need to invest substantial public funds into the capacity needed to protect the public from contagious diseases.

We are in an era where scientific expertise is increasingly at the center of our economic life, but scientific experts are challenged by populist politicians whose power is based on the propagation of ignorance and fear. Climate and disease denial are examples of this phenomenon and they pose a real and present danger to all of us. Our only real weapon to address the threats

posed by the impact of science and technology is the human ingenuity required to develop additional science and technology. The global economy was created by scores of new technologies such as containerized shipping, air travel, motor vehicles, air conditioning, refrigeration, the internet, bar codes, cheap global communication and low-priced computing. That stuff is not going away. We will continue to see diseases and ecosystem threats carried from one part of the world to another. We are in a brain-based economy built on expertise and innovation. We benefit from that economy and the degree of interconnectedness of modern life will continue to grow despite xenophobia, disease and political posturing.

Many people have been concerned about President Trump's ability to deal with a real crisis, rather than one generated by his own policies. His tendency to personalize every issue and see his own welfare and reelection prospects as paramount is familiar to everyone. Still, we can't afford to make the administration's response to the coronavirus a test of their competence and ability to manage crises, because we can't afford for them to fail. It is essential that we work together as an American community and do everything we can to assure success.

It is really a moment for the experts and grownups to assume command. There were signs this past weekend that we are moving in that direction. The Food and Drug Administration authorized non-federal testing for the virus. As Thomas M. Burton reported in the *Wall Street Journal*:

"The Food and Drug Administration said Saturday that it will allow hundreds of U.S. academic hospital labs to immediately begin testing for the novel coronavirus. The move by the federal agency means that the nation will become able virtually overnight to test thousands of patients rather than the few hundred tested so far for the virus, known as Covid-19... The FDA said the new policy is for certain laboratories that develop and begin to use validated Covid-19 diagnostics before the FDA has completed review of their Emergency Use Authorization requests. The FDA estimated that between 300 and 400 academic medical centers and a few large community hospitals can

immediately begin testing. Until Saturday's announcement, the U.S. had been limited to a relatively few diagnostic tests done so far by the Centers for Disease Control and Prevention... The FDA's fast response to a rapidly evolving disease outbreak takes place even before it has been able to plow through the details of the hospitals' emergency applications. In doing so, the FDA is tapping into a vast reservoir of diagnostic capability at American hospitals."

This is an indication that the federal government is beginning to understand and act on the crisis. My hope is that in the days and weeks ahead, our healthcare resources will be fully deployed, and our medical experts will be permitted to take charge of the response to the [disease](#). The risks we face are serious and it is important to understand that this type of crisis will become increasingly common. The volume of communication and the amount of information we all consume may result in increased awareness and understanding of the risks of the modern world. Or it could result in increased levels of panic and instability. It is up to all of us to resist panic and polarization and strive for understanding and community. This crisis is not simply a challenge for Donald Trump, but for our American community, indeed for all humanity.

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