Summer weather may bring some slight relief from the COVID-19 pandemic, predicts a prominent Yale physician researcher famed for his use of quantitative methods. But unlike earlier pandemics, sunshine will not bake away the disease. And look out for a powerful second wave by fall.

Nicholas A. Christakis MD, PhD, MPH, is the Sterling Professor of Social and Natural Science, Internal Medicine and Biomedical Engineering and directs the Human Nature Lab at Yale University. He discussed the historical patterns of pandemics and the social issues related to the COVID-19 pandemic with JAMA editor Howard Bauchner, MD, on Dr. Bauchner’s podcast, “Conversations with Dr. Bauchner.”

Stay up to speed on the fast-moving pandemic with the AMA’s COVID-19 resource center, which offers a library of the most up-to-date resources from JAMA Network™, the Centers for Disease Control and Prevention, and the World Health Organization. Also check out the JAMA Network COVID-19 resource center.

Summer break?

Dr. Christakis said that while early studies from China predicted that weather may not play much of a role in the progression of the pandemic, more recent studies suggest a reduction of cases and deaths during the summer, but not a huge reduction and not has much as some previous pandemics which were stopped in their paths by summer heat.

“In the fall, I think there is at least a 75% chance it will come back with a second wave as it did in 1918 and 1957 pandemics,” he said. “I don’t know that it will be deadlier, but there will be a second wave and we will have to prepare ourselves for it.”

However, even the brief respite is still months away, he said. “We are just at the beginning of this first
wave” and there is still much damage to come.

Dr. Christakis said the current pandemic compares most closely with the 1957 influenza pandemic which killed about 150,000 from a U.S. population of about 170 million. At that rate, the current pandemic could kill 250,000 or more of the current U.S population.

Eventually, COVID-19 will become endemic like the cold or influenza and eventually there will be a vaccine or better medicine to treat it, “but until then, people are going to die.”

“Florida is going to have a serious problem. Louisiana is already having a problem. Right now, it is in our major coastal cities and Detroit, but the rest of the nation is not far behind,” Dr. Christakis added. “It is going to be a rocky few weeks.”

Subscribe to the “Conversations with Dr. Bauchner” podcast. Each week, he interviews leading researchers and thinkers in health care about their recent JAMA articles. Go beyond an article recap, and delve into the background, context and implications of the study or editorial.

Learn more about Dr. Bauchner in this AMA Moving Medicine Magazine profile, “Digital designs for the age of evidence.”

Unheeded warning signs

It’s clear by now, Dr. Christakis said, that the U.S. should have been better prepared with both strategy and equipment. The current pandemic should not have been a surprise on our shores, based on generally known research from already affected areas of the world.

“I knew in early February this was going to be a pandemic,” he said, “because I had been watching the Chinese response to their pandemic.”

Dr. Christakis learned from Chinese research collaborators that on Jan. 25, the Chinese ordered nearly a billion residents into strict home confinement, a measure that indicated, he says, how serious the country took the progression of the virus. He said that key indicator on social media and in news media interviews.

Also, the United States should have learned more from the actions of other earlier victims, such as South Korea and Taiwan. Medical researchers and government officials in South Korea and Taiwan, which had been devastated by the severe acute respiratory syndrome pandemic of 2003, “had really prepared themselves,” Dr. Christakis said. “And of course, they were closer to the
front—to China—and had more rapid intelligence.”

JN Learning also is continually updating a collection of COVID-19 resources, with information on obtaining CME credit.

“Absurd” shortage of PPE

The U.S. also should also have been better prepared with supplies, particularly personal protective equipment (PPE) which has been in short supply, exposing health professionals to greater than ordinary medical risks.

“This makes me very upset. It is reasonable and right to expect our health care workers to take a risk. It’s like being a police officer or a fireman. But not without equipment,” he said. “It’s absurd—and why we weren’t producing billions of masks over the last six or eight weeks defies understanding.”

Learn more about the plea to the nation from doctors fighting COVID-19: #GetMePPE.

Dr. Christakis said he is also concerned about the pandemics’ effect on upcoming national elections and called for more polling places and disease-resistant equipment to protect voters.

If the pandemic is still raging in October and November, it may interfere with people going to the polls and “conversely, if the pandemic is mild, we may be giving it to each other,” he said.

Silence not the answer

Dr. Christakis also reacted to reports that some hospitals and health systems have “clamped down on doctors and health care workers speaking to the media about the pandemic and its progression.

“It’s un-American and furthermore, if we are going to beat this thing, we are not going to beat it with silence. That’s completely wrong,” he said.

AMA President Patrice A. Harris, MD, MA, also has weighed in on that troubling trend.

“The American Medical Association calls for reinforcing the principle that places patients’ welfare as the first priority in any situation where the interests of physicians and hospitals are in conflict,” she said. “No employer should restrict physicians’ freedom to advocate for the best interest of their patients.”