

Ep 299 Mar 8 2020 Coronavirus

- <https://www.cdc.gov/coronavirus/2019-ncov/summary.html>

Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats. Rarely, animal coronaviruses can infect people and then spread between people such as with [MERS-CoV](#), [SARS-CoV](#), and now with this new virus (named SARS-CoV-2).

The SARS-CoV-2 virus is a betacoronavirus, like MERS-CoV and SARS-CoV. All three of these viruses have their origins in bats. The sequences from U.S. patients are similar to the one that China initially posted, suggesting a likely single, recent emergence of this virus from an animal reservoir.

Early on, many of the patients at the epicenter of the outbreak in Wuhan, Hubei Province, China had some link to a large seafood and live animal market, suggesting animal-to-person spread. Later, a growing number of patients reportedly did not have exposure to animal markets, indicating person-to-person spread. Person-to-person spread was subsequently reported outside Hubei and in countries outside China, including in the [United States](#). Some international [destinations now have apparent community spread](#) with the virus that causes COVID-19, as do some parts of the United States. Community spread means some people have been infected and it is not known how or where they became exposed. Learn what is known about the [spread of this newly emerged coronaviruses](#).

The complete clinical picture with regard to COVID-19 is not fully known. Reported illnesses have ranged from very mild (including some with no reported symptoms) to severe, including illness resulting in death. While information so far suggests that most COVID-19 illness is mild, out of China suggests serious illness occurs in 16% of cases. Older people and people of all ages with severe underlying health conditions — like heart disease, lung disease and diabetes, for example — seem to be at [higher risk of developing serious COVID-19 illness](#). Common symptoms are fever, cough and shortness of breath.

- <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html>

As of Sunday evening, at least 536 people have been treated for coronavirus in 34 states and Washington, D.C., according to a New York Times database, and at least 21 patients with the virus have died.

- <https://www.nytimes.com/2020/03/07/us/politics/trump-coronavirus.html>

Stock markets >>> measured and rational outbreak response and emergency preparedness

- https://www.washingtonpost.com/politics/trump-coronavirus-response-squandered-time/2020/03/07/5c47d3d0-5fcb-11ea-9055-5fa12981bbbf_story.html

“As of today, I can announce that the CDC has begun working with health departments in five cities to use its flu surveillance network to begin testing individuals with flu-like symptoms for the Chinese coronavirus,” Azar said. “This effort will help see whether there is broader spread than we have been able to detect so far.”

But there were two major problems: The cities weren’t ready, and the tests didn’t work.

Azar’s bungled announcement before the Senate Finance Committee on Feb. 13 was just one of many preventable missteps and blunders in the [federal government’s handling of the coronavirus crisis](#) — the embodiment of an administration that, for weeks, repeatedly squandered opportunities to manage and prepare for a global epidemic that has killed thousands worldwide and at least 19 so far in the United States.

First there were the problems with the initial coronavirus test kits, which contained [an unspecified problem with a compound](#) that prompted inconclusive results; it took experts nearly three weeks of troubleshooting to find a workaround. Initial U.S. guidelines for testing also were overly narrow, only screening individuals who presented with respiratory symptoms and had either recently traveled to China or come in close contact with an infected person.

Infighting quickly materialized among agencies that have long had poor relationships — feuding was especially intense between the CDC and the Office of the Assistant Secretary for Preparedness and Response — and when the situation went awry, recriminations were swift. Public health officials and experts also struggled to find an uneasy equilibrium between doing their jobs honestly and transparently while trying to manage a mercurial president, who griped about what he viewed as overheated rhetoric by officials and the media.

At the White House, Trump and many of his aides were initially skeptical of just how serious the coronavirus threat was, while the president often seemed uninterested as long as the virus was abroad. At first, when he began to engage, he downplayed the threat — “The Coronavirus is very much under control in the USA,” he tweeted in late February — and became a font of misinformation and confusion, further muddling his administration’s response.

On Friday, visiting the CDC in Atlanta, [the president spewed more falsehoods](#) when he claimed, incorrectly: “Anybody that needs a test, gets a test. They’re there. They have the tests. And the tests are beautiful.”

Public health and infectious-disease experts have lamented that the faulty CDC test and limited testing criteria delayed officials’ abilities to detect the virus’s spread throughout the United States. They also said the government expended too much time and too many resources on trying to contain a virus — at 70 times smaller than a single blood cell — that scientists and doctors quickly realized spread easily and stealthily.

Until the end of February, [only about a dozen labs](#) outside of the CDC had the ability to do their own testing for the virus.

The repeated false claims by the president that the virus was being contained exacerbated the problem. They made it difficult for public health officials to lay out the need to prepare for what happens next, even after most experts had begun to fear the virus was already here and spreading. There was also a ripple effect, with health officials and others not taking the threat as seriously as they should have because Trump kept on making faulty assurances, such as his claim at a Feb. 26 news conference that within the United States, the number of cases was “going to be down to close to zero.”

- <https://www.nytimes.com/2020/03/02/health/coronavirus-testing-cdc.html>

Soon after the virus surfaced in China, the C.D.C. got to work on its own test. “Generally, C.D.C. provides these tests for the world,” said Dr. Frieden.

But German researchers were devising their own test, which was quickly adopted by the World Health Organization for distribution around the world.

After the C.D.C.’s version turned out to be flawed, the agency continued to pursue it, despite the fact that another diagnostic test was already in wide use.

With F.D.A. approval, the agency could simply have embraced the test used by the W.H.O., Dr. Mina, epidemiologist at Harvard University, said. The government could do so even now.

“It’s just a very American approach to say, ‘We’re the U.S., the major U.S. public health lab, and we’re going to not follow the leader,’” Dr. Mina said.