Advice on Airborne Virus Transmission Vanishes From C.D.C. Website

The new guidance, published only on Friday, had acknowledged that fine particles floating in air may spread the virus.

By Apoorva Mandavilli
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Just days after publishing significant new guidance on airborne transmission of the coronavirus, the Centers for Disease Control and Prevention on Monday withdrew the advice, saying only that it had been “posted in error” on the agency’s website.

The rapid reversal prompted consternation among scientists and again called into question the credibility of the world’s premier health agency, even as President Trump and his senior health officials have sought to undermine C.D.C. scientists.

The president faces an election whose outcome may turn on public perception of his handling of the coronavirus pandemic.

The turnabout arrived as the number of virus-related deaths in the United States approached the 200,000 mark. Tens of thousands of new infections are reported every day, and experts fear a resurgence as cooler weather approaches and people spend more time indoors.

The new document for the first time had acknowledged that the virus spreads mainly by air, a declaration with urgent implications for how people protect themselves indoors and how ventilation should be engineered in schools, offices, hospitals and other public buildings.

Experts with knowledge of the incident said on Monday that the latest reversal appeared to be a genuine mistake in the agency’s scientific review process, rather than the result of political meddling. Officials said the agency would soon publish revised guidance.

“We are reviewing our process and tightening criteria for review of all guidance and updates before they are posted to the C.D.C. website,” said Jason McDonald, a spokesman for the agency.

Still, the reversal prompted rebukes from even the C.D.C.’s staunchest supporters. “It’s not something that instills a lot of confidence, right?” said Dr. Carlos del Rio, an infectious disease expert at Emory University. “It doesn’t help at all.”

Other scientists said it was hard to understand how a document of such public health importance could have been posted without careful vetting, given how closely the agency’s actions are now scrutinized.

“At this time, everybody knows that the stakes are extremely high, in terms of science communication,” said Dr. Abraar Karan, an internal medicine physician at Harvard Medical School.

The C.D.C. has suffered a series of blows to its reputation as the pandemic has spread in the United States. Only in April, for example, did officials recommend face coverings for the public, after initially saying masks were not necessary.

The C.D.C. said in August that people who have close contact with an infected person but no symptoms don’t need to get tested for the infection. But last week, after The New York Times reported that the guidance had been dictated by officials in the administration rather than by scientists, the agency reversed its position and said all close contacts of infected people should be tested regardless of symptoms.

That reversal came after Michael R. Caputo, the top spokesman at H.H.S., took a leave of absence “to focus on his health and the well-being of his family” after accusing federal scientists of “sedition” in a bizarre Facebook rant. Dr. Paul Alexander, an adviser to Mr. Caputo who was highly critical of C.D.C. research, also is leaving the department.

Mr. Trump last week lashed out at the agency’s director, Dr. Robert Redfield, after Dr. Redfield told a congressional hearing that a vaccine would not be widely available until the middle of next year. “It’s just incorrect information,” the president said.

The constant controversies make it “that much more difficult for the general public who are now looking at this guidance and wondering, ‘What the hell does this all mean?’” said Dr. Karan.

The latest incident concerns the spread of the virus by air through droplets and aerosols, which are tiny particles containing the virus that can stay aloft for long periods and travel farther than six feet.

Scientists were aware from the beginning of the pandemic that the coronavirus could be spread by respiratory droplets sneezed or coughed by infected people. Only lately have health agencies like the World Health Organization acknowledged the role of floating aerosols, expelled by talking, breathing or even singing.

The C.D.C.’s new document described both as airborne transmission, but officials had not previously detailed an expansive role for aerosols.

The virus is spread through “respiratory droplets or small particles, such as those in aerosols, produced when an infected person coughs, sneezes, sings, talks, or breathes,” the C.D.C. said in the document published on Friday and subsequently withdrawn.

These particles may be inhaled and may seed an infection, the agency added: “This is thought to be the main way the virus spreads.”

“Airborne viruses, including Covid-19, are among the most contagious and easily spread,” the C.D.C. also said — a statement with immense implications for how hospitals should care for coronavirus patients, said Saskia Popescu, a hospital epidemiologist at George Mason University.

Airborne viruses may require that patients be isolated in so-called negative-pressure rooms, which prevent the virus from escaping, and that health care workers wear N95 masks at all times.
“The challenge would be then that we are not able to put every single patient in negative-pressure rooms,” Dr. Popescu said.

If the ventilation and infection-control systems in hospitals offered inadequate protection against the virus, hospitals would have seeded many more infections, she added.

“My gut tells me that’s why they pulled it, truly,” Dr. Popescu said. “I think they understand that you can’t just throw out ‘airborne’ haphazardly. It has very serious implications for hospitals.”

Scientific research so far indicates that aerosols are important primarily in certain settings — mostly in crowded indoor spaces with poor ventilation, like many bars, clubs, gyms and restaurants.

In these spaces, the virus may remain suspended in the air for long periods and travel distances beyond six feet, the agency warned in the document posted Friday.

Earlier this summer, scientists isolated live virus from aerosols collected at a distance of seven and 16 feet from an infected patient in a hospital. Airborne spread may explain many so-called “superspreader” events, scientists have said, such as a cluster of cases following a choir practice in Washington State, and why Southern states saw a spike in infections this summer as people stayed indoors in air-conditioned environments.

Researchers noticed on Sunday that the agency had updated its description of how the virus is transmitted to say that the pathogen is spread primarily by air. Many had welcomed the C.D.C.’s acknowledgment of these risks, and its endorsement of air filters in indoor spaces.

“Many people are spending hours cleaning places, and I think it’s pretty much an overkill, quite frankly,” Dr. del Rio said.

But the new language disappeared on Monday morning, and the official advice reverted to a previous description of spread by respiratory droplets.

“A draft version of proposed changes to these recommendations was posted in error to the agency’s official website,” the agency said.

The document was posted to the C.D.C.’s website “prematurely,” and will be published after it is revised, according to a federal official familiar with the matter.

More than 200 experts who study aerosols appealed to the World Health Organization in July to review the evidence on aerosol transmission of the coronavirus.

The W.H.O. acknowledged that this route appeared to contribute significantly to the spread of the pandemic, but experts disagree as to its importance relative to the heavier respiratory droplets that are sneezed or coughed by infected patients.

“We really don’t have the epidemiological evidence right now to say that it is one more than the other,” Dr. Popescu said.

Some experts said that regardless of which are more important — droplets or aerosols — what matters is how people should protect themselves.

“I think that aerosols are very important, important enough that public health guidance should place them front and center,” said Linsey Marr, an expert in airborne viruses at Virginia Tech. “I hope that it comes back in some form that acknowledges the importance of aerosols.”