

THE TRUMP FILES

Gratis Sample: Part V: COVID-19

Jack Hassard

This is a free sample from The Trump Files.

If you use, copy, or share (which you are free to do) this section my book,
please use this citation:

From The Trump Files: An Account of the Trump Administration's Effect on American Democracy, Human Rights, Science, and Public Health, Jack Hassard. Northington-Hearn Publishing, Marietta, GA Copyright ©
2022 by Jack Hassard

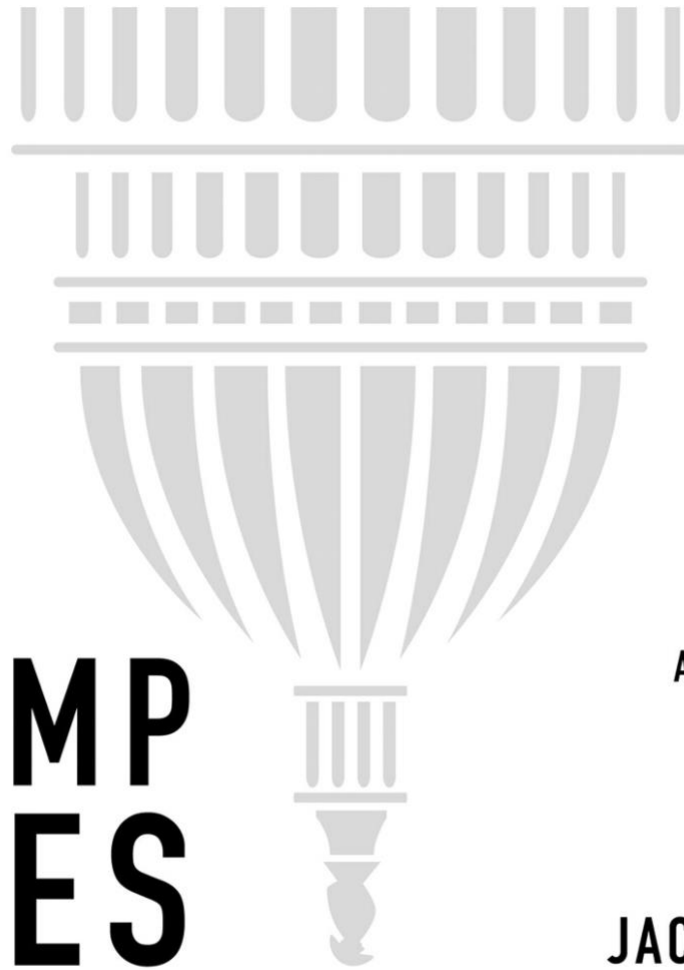
THE TRUMP FILES

AN ACCOUNT OF
THE TRUMP
ADMINISTRATION'S
EFFECT ON AMERICAN
DEMOCRACY,
HUMAN RIGHTS,
SCIENCE,
AND PUBLIC HEALTH

JACK HASSARD



THE TRUMP FILES



AN ACCOUNT
OF THE TRUMP
ADMINISTRATION'S
EFFECT ON
AMERICAN
DEMOCRACY,
HUMAN RIGHTS,
SCIENCE,
AND PUBLIC HEALTH

JACK HASSARD

Contents

Citizen Jack
Prologue

Part I: Trumpism

Chapter 1: Authoritarianism
Chapter 2: Dangerousness
Chapter 3: Moral Worldviews

Part II: Rights

Chapter 4: Racial Justice Chapter
5: Free and Fair Elections

Part III: Scrutiny

Chapter 6: Investigations

Part IV: Science

Chapter 7: Degrading the Environmental Protection Agency
Chapter 8: Fires, Hurricanes, and Floods
Chapter 9: Existential Threats

Part V: COVID-19

Chapter 10: SARS-CoV-2
Chapter 11: Trump's COVID-19 Response
Chapter 12: School in the Age of COVID-19

Part VI: Departure

Chapter 13: Political Violence

Epilogue

Further Reading
Index
About the Author

PART V: COVID-19

And then I see the disinfectant, where it
knocks it out in a minute. One minute. And is
there a way we can do something like that,
by injection inside or almost a cleaning?

—Donald J. Trump, April 23, 2020

INTRODUCTION

ON JANUARY 28, 2020, A MEETING WAS HELD IN THE OVAL Office. Donald Trump met with some of his national security team. He was told by National Security Advisor Robert O'Brien that the virus outbreak in China "will be the biggest national security threat you face in your presidency."³⁴⁵ Another person in the room at the time said that this virus would not be anything like the 2003 SARS outbreak. SARS, or severe acute respiratory syndrome, is a viral respiratory illness caused by a coronavirus. According to Bob Woodward, O'Brien disagreed and defended his position of the virus being serious.

Indeed, Assistant National Security Advisor Matt Pottinger, who was also in the room, agreed with O'Brien. Pottinger had been in the Trump administration as a national security advisor since September 2019. He previously was a journalist and US Marine Corps officer. As a reporter, he wrote more than three dozen stories on the SARS epidemic. He spoke Mandarin Chinese and did reporting from China for seven years. He understood infectious diseases. During this meeting in the

³⁴⁵ Woodward, *Rage*, xiii.

Oval Office, Pottinger explained to Trump that the virus in China would be as bad as the 1918 flu pandemic. He knew this outcome because he had been in touch with Chinese contacts whom he trusted and with whom he worked while he was in China.

So on January 28, Donald Trump found out that he would be facing the most serious health emergency in more than a century. Pottinger spoke out in the meeting and said to the president, "My contacts in China told me that there three factors that were accelerating the transmission of the disease. They said that contrary to some reports from the Chinese government, people were getting the disease easily from other people and it was being spread by people who didn't show any symptoms. This means a once-in-a-lifetime health emergency, a virus that's out of control."³⁴⁶

From this point on, Americans were put at risk by the failure of President Trump to heed the advice from his national security team. Instead of calling in the CDC and the National Institute of Allergy and Infectious Diseases (NIAID) for the latest research on the outbreak in China, he downplayed the disease and sidelined hundreds of scientists.

THE GREAT 1918 INFLUENZA PANDEMIC

A century ago, the world experienced the most lethal respiratory virus in human history. Early estimates were that 20 million people globally (about the population of New York) died from the disease. But recent research estimates that between 50 and 100 million people died out of a world population of 1.8 billion. Evidence shows that the influenza pandemic originated in Haskell County, Kansas, a small and remote area in the southwest corner of the state.³⁴⁷ The first case was reported there. Camp Funston, a US Army training camp located on Fort Riley, southwest of Manhattan, Kansas, was visited by friends and family of the soldiers in the camp; some brought the influenza there, and it spread among the troops. Because Camp Funston was a training center, soldiers moved to other bases in the US and then to France, where WWI was

³⁴⁶ Conversation based on Woodward, *Rage*.

³⁴⁷ John M. Barry, "The Site of Origin of the 1918 Influenza Pandemic and Its Public Health Implications," *Journal of Translational Medicine*, January 20, 2004, retrieved April 5, 2022, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC340389/>.

raging. American soldiers traveling to France brought with them the virus that had already spread throughout the US. More than 650,000 Americans died in a matter of months.

The lessons from the 1918 flu pandemic are clear. Nonpharmaceutical methods, including keeping students out of school, banning public gatherings, and using isolation and quarantine are effective. They can mitigate the spread of a virus.

John Barry, author of *The Great Influenza: The Story of the Deadliest Plague in History*, says that truth is the most important lesson we can learn from the Great Influenza.³⁴⁸ People need to tell the truth about the outbreak. Information from all levels of government needs to be based on facts and truthfulness. Anything short will result in alienation and suspicion.

The CDC has web pages about how to communicate during an outbreak or public health crisis. An important consideration for health officials is to realize that individuals will perceive the risk posed by the disease and then decide how they will deal with mitigation recommendations or orders by the government. During the coronavirus pandemic, the United States' messaging was incomplete and inconsistent, resulting in mixed messages by local and state governments. Some states were on lockdown, while other states were open for business. Florida, Georgia, and Texas lead the way in ignoring CDC guidelines. Some of my friends thought it was ironic that Georgia is on this list, given that the CDC is in Atlanta. Gatherings of hundreds of people at beaches and bars were common and resulted in what are known as super-spreader events.

School closures, limits on public gatherings, isolation, and quarantine were used during the Great Influenza in the United States. As I show Chapter 10, isolation and quarantine seem to be the most effective at preventing the disease, but mask wearing and social distancing are also important. The evidence today is that facial coverings may provide the most protection for yourself and others who might be in close contact with infected persons.

³⁴⁸ John M. Barry, *The Great Influenza: The Story of the Deadliest Pandemic in History* (New York: Penguin Books, 2004).

However, in 1918, wearing masks was not an effective mitigation method, according to Barry.³⁴⁹ Many western states enacted mask-wearing ordinances, yet people resisted wearing them. Most masks were homemade and lacked the quality that was needed to prevent exposure to the flu.

The face mask was pioneered by Dr. Wu Lien-teh, an epidemiologist who designed and used face masks after investigating a deadly disease outbreak in northeastern China in 1910.³⁵⁰ Dr. Wu learned from this experience that the disease could be spread by respiratory droplets. A bacterium was responsible for the disease, which he identified as *Yersinia pestis*, known from earlier bubonic plagues. He produced a mask made from cotton and gauze with extra layers of cloth, a much-improved design over the one-layered “mouth bandage” developed by Johannes von Mikulicz in Breslau, Germany, around 1900.³⁵¹ Dr. Wu recommended that medical staff wear masks to protect themselves from disease carried by their patients. Mask wearing introduced by Dr. Wu was met with some resistance. But, as is so often the case, a colleague who refused to wear a mask died from a respiratory disease.

One of the most important things in the COVID-19 pandemic is that people need to be told the truth about the virus. The president of the United States avoided telling Americans how serious the disease was, and he obstructed the advice of science advisors on the White House Coronavirus Task Force.

THE GREAT 2019 CORONAVIRUS PANDEMIC

The first case of coronavirus is thought to be an individual in the Hubei Province in China. The case dates to November 17, 2019, which, of course, is earlier than the cases that were later found in December 2019 in Wuhan, China. The Chinese considered the viral disease so serious they quarantined 11 million people (about twice the population of Arizona) in Wuhan.

³⁴⁹ Barry, *The Great Influenza*.

³⁵⁰ Sam Wong, “Dr Wu Lien-teh: Face Mask Pioneer Who Helped Defeat a Plague Epidemic,” *New Scientist*, March 10, 2021, retrieved March 13, 2021, <https://www.newscientist.com/article/2270735-dr-wu-lien-teh-face-mask-pioneer-who-helped-defeat-a-plague-epidemic/>.

³⁵¹ Christiane Matuschek et al., “The History and Value of Face Masks,” *European Journal of Medical Research*, June 23, 2020, retrieved November 27, 2021, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7309199/>.

During this time the CDC and the NSC were in contact with each other about the coronavirus outbreak in Wuhan. The CDC tried to send some of its infectious disease scientists to Wuhan, but they were blocked by the Chinese government.

On January 9, the World Health Organization (WHO) announced that pneumonia-like cases in Wuhan could be a new coronavirus. Chinese scientists confirmed that a novel coronavirus had killed four and infected more than two hundred. On January 23 the WHO declared a global health emergency.

The United States had its first reported case January 20, 2020. *The New England Journal of Medicine* published a detailed study of the first case on January 31, 2020. According to the study, a thirty-five-year-old man with a four-day history of cough and fever checked into an urgent care clinic in Snohomish County, Washington, which is located north of Seattle. The man put on a mask and waited for about twenty minutes before being examined. He said he returned to Washington state on January 15 after visiting family in Wuhan, China. He indicated that he did not visit the Huanan seafood market and didn't meet persons who were ill. He came to the clinic because he had seen a health alert from the CDC about the novel coronavirus outbreak in China.³⁵²

They sent nasal swabs to the CDC to test for SARS-CoV-2 using overnight polymerase chain reaction testing (PCR). The PCR test is used to detect genetic material from a specific organism, such as a coronavirus. The CDC confirmed that he tested positive for the novel coronavirus. Although the patient had been discharged, he was later admitted to an airborne-isolation unit at a regional medical center for clinical observation.

ORIGIN OF SARS-COV-2

On January 23, 2020, twenty-five people had died from SARS-CoV-2. By October 15, 2021, more than 4.8 million worldwide had died from the virus.

³⁵² Michelle L. Holshue et al., "First Case of 2019 Novel Coronavirus in the United States," *New England Journal of Medicine*, May 7, 2020, retrieved February 24, 2021, <https://www.nejm.org/doi/full/10.1056/NEJMoa2001191>.

SARS-CoV-2 raises many questions. For example, what is its origin? Was a human infected by the virus from an animal, or was it the result of a laboratory accident?

The origin of the virus has not been determined and has sparked a controversy highlighting the “lab leak” thesis. Could a shattered container in a lab in Wuhan, China, result in a worldwide pandemic? As you will read ahead, the WHO and US Intelligence Community doesn’t think it started in a lab. Most scientists, including Dr. Anthony Fauci, director of the NIAID, believe the virus began naturally jumping from animals to humans. Yet the research on the origins of SARS-CoV-2 that I uncovered does not dismiss the lab accident cause of the pandemic. In the end, what is important is how and where the virus infected humans and spread throughout the world.

A paper published in *Nature Medicine* says that despite what has been said about the lab leak theory, there is no credible evidence that SARS-CoV-2 was ever known to virologists before it emerged in 2019. The paper’s author, A. L. Rasmussen, researcher at the Center for Global Health Science and Security, Georgetown University, went on to say that it appears as if SARS-CoV-2 evolved in a bat host until a spillover event into humans occurred.³⁵³

Rasmussen also points out that there is considerable research on the history of pathogens (viruses, bacteria, fungi, protozoa, and worms) emerging by natural means. She writes that the laboratory origin of SARS-CoV-2 has become political propaganda. Some, including Senator Tom Cotton, have suggested that the virus is a biological weapon,³⁵⁴ while others have claimed that it was engineered followed by a government coverup. The US Intelligence Committee investigation in the spring of 2021 of COVID-19 dismissed each of these ideas. Misinformation published in anti-science print media blames scientists for covering up the origins of the virus. In some cases, scientists that dispute such claims are subject to harassment, violence, and sexual assault.³⁵⁵ Pseudoscience

³⁵³ Angela L. Rasmussen, “On the Origins of SARS-CoV-2,” *Nature News*, January 13, 2021, <https://www.nature.com/articles/s41591-020-01205-5>.

³⁵⁴ Amy Maxmen, “US COVID Origins Report: Researchers Pleased with Scientific Approach,” *Nature News*, August 27, 2021, <https://www.nature.com/articles/d41586-021-02366-0>. The Unclassified Intelligence Community report, although inconclusive, finds that SARS-CoV-2 wasn’t weaponized and was unlikely to have been engineered.

³⁵⁵ Rasmussen, “On the Origins of SARS-CoV-2.”

and conspiracy theories are attractive to media outlets, but they are dangerous because we need to know how and where the virus originated to help deal with future pandemics.

Another report indicated that there is near-consensus view that SARS-CoV-2 has a natural zoonotic origin.³⁵⁶ However, the authors of this paper don't think we should discount a laboratory origin of COVID-19. They identify several characteristics of SARS-CoV-2 that are not easily explained by natural zoonotic origin hypothesis. And no unmistakable evidence of zoonotic transfer from a bat or intermediate species yet exists. Very few papers counter the lab theory with data analysis.³⁵⁷

In February 2020, a group of twenty-four physicians, veterinarians, epidemiologists, virologists, biologists, ecologists, and public health experts from around the world joined together to support the work being done by Chinese colleagues to find the origin of SARS-CoV-2. They also spoke out to support the idea that the virus originated in nature and not in a lab.³⁵⁸

In July 2021, the same group of scientists published another article in *The Lancet* reaffirming their original idea of a natural origin of COVID-19 based on genetic analysis of the virus and previous research on SARS-CoV and MERS-CoV.³⁵⁹ Several peer-reviewed studies are cited by the scientists supporting the virus emerging from an animal to a human.^{360,361,362} They also cite research that shows the lab theory of origin doesn't hold up.³⁶³

³⁵⁶ Rossana Segreto et al., "Should We Discount the Laboratory Origin of COVID-19?" *Environmental Chemistry Letters* 19 (March 25, 2021): 2743–4757, <https://link.springer.com/article/10.1007/s10311-021-01211-0>.

³⁵⁷ Segreto et al., "Laboratory Origin of COVID-19?"

³⁵⁸ Charles Calisher et al., "Statement in Support of the Scientists, Public Health Professionals, and Medical Professionals of China Combatting COVID-19," *The Lancet*, February 19, 2020, [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30418-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30418-9/fulltext).

³⁵⁹ Charles Calisher, Dennis Carroll, and Rita Colwell, "Science, Not Speculation, Is Essential to Determine How SARS-CoV-2 Reached Humans," *The Lancet*, July 5, 2021, accessed July 6, 2021, [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)01419-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01419-7/fulltext).

³⁶⁰ Diego Forni et al., "Molecular Evolution of Human Coronavirus Genomes," *Trends in Microbiology* 25, no. 1 (January 1, 2017): 35–48, <https://doi.org/10.1016/j.tim.2016.09.001>.

³⁶¹ H. Zhou et al., "Identification of Novel Bat Coronaviruses Sheds Light on the Evolutionary Origins of SARS-CoV-2 and Related Viruses," *Cell* 184, no. 17 (2021): 4380–4391, <https://pubmed.ncbi.nlm.nih.gov/34147139/>.

³⁶² Robert F. Garry, "Early Appearance of Two Distinct Genomic Lineages of SARS-CoV-2 in Different Wuhan Wildlife Markets Suggests SARS-CoV-2 Has a Natural Origin," *Virological*, May 3, 2021, <https://virological.org/t/early-appearance-of-two-distinct-genomic-lineages-of-sars-cov-2-in-different-wuhan-wildlife-markets-suggests-sars-cov-2-has-a-natural-origin/691>.

³⁶³ Justin Ling, "The Lab Leak Theory Doesn't Hold Up," *Foreign Policy*, June 15, 2021, <https://foreignpolicy.com/2021/06/15/lab-leak-theory-doesnt-hold-up-covid-china/>.

Laboratory Incidents. Laboratory accidents or incidents have a long history stretching back to the early twentieth century. It is possible that dangerous or lethal pathogens can be accidentally released from a lab or during transport from field sites. One case involved a laboratory worker getting exposed and infected simply by a pin prick. In 2007–2008, foot-and-mouth disease was spread from a drainage pipe leak at a UK lab, even with the highest biosafety rating of BSL-4. At that time, I was traveling often to the UK to purchase antiques with my wife, and whenever I entered a farm or a large commercial field, it was necessary to walk through disinfectant pools as a safety precaution. Biosafety levels range from BSL-1 to BSL-4 based on the risk of microbes from low to high.³⁶⁴ Biosafety means that safety precautions are applied that reduce the laboratory’s risk of exposure to a potentially infectious microbes and to limit the contamination of the work environment.

Compromising biosafety protocols can result in infection and community spread. In 2015 a female lab worker in South Korea who was at a BSL-2 lab (a biosafety level similar to your dentist’s office) was infected with dengue by a needlestick injury. In 2016, thirty staff members were exposed to a toxic bacterium in a lab in Canberra, Australia.

Initial Research Papers. One of the first papers on the origin of SARS-CoV-2 was reported by Dr. Francis Collins, director of the NIH, on the director’s blog. The research Dr. Collins cites, “The Proximal Origin of SARS-CoV-2,”³⁶⁵ shows that the virus arose naturally, not in a lab. It was published in *Nature Medicine*, a journal in the *Nature* portfolio of publishing. The paper was also cited in Rasmussen’s “On the Origins of SARS-CoV-2” research, and it too counters the laboratory origin theory of SARS-CoV-2.

In the study published in *Nature Medicine*, two scenarios are postulated. The first is natural selection in an animal host before zoonotic transfer. Given the similarity of SARS-CoV-2 to SARS-CoV-like

³⁶⁴ “CDC LC Quick Learn: Recognize the Four Biosafety Levels,” Centers for Disease Control and Prevention, <https://www.cdc.gov/training/quicklearns/biosafety/>.

³⁶⁵ Kristian G. Andersen et al., “The Proximal Origin of SARS-CoV-2,” *Nature Medicine* 26 (2020): 450–452, <https://doi.org/10.1038/s41591-020-0820-9>.

coronaviruses in bats, the researchers suggest it is likely that bats serve as reservoir hosts for its progenitor.

The second scenario is natural selection in humans following zoonotic transfer. In this scenario, the virus crossed from animals to humans long before it could cause human disease. Anderson's team thinks that through gradual evolutionary changes over years or decades, the coronavirus developed the ability to spread from human to human, which could cause a serious disease.

The researchers' analysis show that SARS-CoV-2 is probably not a laboratory construct or a purposefully manipulated virus.

Finding the origin of the SARS-CoV-2 will only happen with more scientific data determined by using evidence-based approaches. Knowing the origin of the virus, whether it's a lab or not, will only advance our knowledge and surveillance of viruses that infect humans.

The 2021 WHO Study. In January 2021, a WHO international scientific and collaborative mission traveled to China and worked with scientists there for four weeks to investigate the origins of the SARS-CoV-2. The report, *WHO-Convened Global Study of Origins of SARS-CoV-2: China Part*, was published in March 2021.³⁶⁶

According to the report, it's highly unlikely that the coronavirus escaped from a lab at the Wuhan Institute of Virology. To scientists involved in the study, most say the evidence favors SARS-CoV-2 having spilled over from animals into humans. However, a few still back the idea that the virus was intentionally or accidentally leaked from a lab. When the team visited the virology lab, they found no workers at the lab with antibodies against SAR-CoV-2, which rules out the idea that someone there had been infected and then spread the virus. However, it's been reported that three workers at the lab fell sick in November 2019 and had to be hospitalized. They had COVID-19-like or seasonal symptoms.

Because of the scrutiny by the Chinese government during their time in Wuhan, some scientists went on record saying they wouldn't

³⁶⁶ WHO-Convened Global Study of Origins of SARS-CoV-2: China Part, World Health Organization, March 30, 2021, <https://www.who.int/publications/i/item/who-convened-global-study-of-origins-of-sars-cov-2-china-part>.

trust the outcome of the investigation. The WHO-led team had little power to conduct a thorough and impartial study of the virus's origins. The Trump administration withdrew from the WHO, a decision that made it difficult to have American scientists as part of the WHO-led team to China. Although some American names were put forward, none were ever extended an invitation to join the WHO team.³⁶⁷

These journalists reported that the WHO-led team was only mandated to design and recommend scientific studies. It was not prepared to do scientific investigations and did not have laboratory forensic capabilities. This omission was unfortunate because it sheds doubt on the WHO report.

Challenges remaining include finding the animal that carried the virus from bats to humans and determining how that spillover into people occurred. To what degree can the report's findings meet the test of scientific viability?

The WHO investigation zeroed in to identify the zoonotic source of the virus and the route of introduction to the human population, including the role of intermediate hosts. The early cases of COVID-19 were associated with the Huanan market, and some other markets as well. Some cases were not associated with markets at all. The WHO research team also suggested cases might have existed before the first case in Wuhan. Investigating possible earlier events might be important.

Environmental sampling in Huanan market showed out of 923 samples in the market, 73 samples were positive. WHO researchers said this result revealed widespread contamination of surfaces with SARS-CoV-2, meaning the virus was spread by infected people, infected animals, or contaminated products. In addition, supply chains to the Huanan market included cold-chain products and animal products from twenty countries, including some samples that were reported as positive for SARS-CoV-2. The researchers also suggested evidence existed that some domesticated wildlife products sold in the market are susceptible to SARS-CoV-2.

³⁶⁷ Jeremy Page, Betsy McKay, and Drew Hinshaw, "How the WHO's Hunt for Covid's Origins Stumbled in China," *Wall Street Journal*, March 17, 2021, retrieved May 24, 2021, <https://www.wsj.com/articles/who-china-hunt-covid-origins-11616004512>.

The joint international team proposed four scenarios for introduction of the virus into humans:³⁶⁸

1. Direct zoonotic transmission to humans (spillover)
2. Introduction through an intermediate host followed by spillover
3. Introduction through the (cold) food chain
4. Introduction through a laboratory incident

Using qualitative risk assessment, each pathway was investigated considering available evidence. This kind of assessment is an estimate based on qualitative data rather than quantitative data. Although quantitative data are preferred to make risk assessments, the WHO team did not have sufficient quantitative data to incorporate into their assessments.

The WHO joint team postulated the following as the likelihood of each pathway:

1. Direct zoonotic spillover is a possible to likely pathway.
2. Introduction through an intermediate host is a likely to very likely pathway.
3. Introduction through (cold) food chain products is considered a possible pathway.
4. Introduction through a laboratory incident is an extremely unlikely pathway.

It's important to note that the joint team visited nine locations, including hospitals, infectious disease centers, wholesale markets, Wuhan CDC, Wuhan Institute of Virology, and a community center in Jianxinyuan. The major finding of the joint team is that direct zoonotic spillover is a possible to likely pathway of the SARS-CoV-2.

However, scientists still do not know which animal might have carried the virus from bats to humans. The WHO report suggests that

³⁶⁸ Page, McKay, and Hinshaw, "How the WHO's Hunt for Covid's Origins Stumbled in China."

the start of the virus outbreak might have been a month or two before mid-December 2019. Much research is needed to track down how the virus spilled over into humans.

US Intelligence Community Report. On May 26, 2021, President Biden ordered a ninety-day US Intelligence Community investigation into where the SARS-CoV-2 came from. The Intelligence Community report, which consisted of several teams of investigators, concluded that two hypotheses are plausible: natural exposure to an infected animal and a laboratory-associated incident.

The groups assessed with low confidence that the initial SARS-CoV-2 infection was most likely caused by natural exposure to an animal infected with it or a close progenitor virus—a virus that probably would be more than 99 percent like SARS-CoV-2. The low confidence emerged because of the lack of foreknowledge from the Chinese government. One group assessed with moderate confidence that the first human infection with SARS-CoV-2 most likely was the result of a laboratory-associated incident, probably involving experimentation, animal handling, or sampling by the Wuhan Institute of Virology. These analysts give weight to the inherently risky nature of work on coronaviruses. This US government report keeps the door open to a lab accident but does not have research to support its idea.

Wuhan Institute of Virology. Ever since the virus was identified in Wuhan, initial claims were that the virus leaked from the Wuhan Institute of Virology. The institute was founded in 1951 as the Wuhan Microbiology Laboratory, and over time its name changed, but the nature of its work progressed so that in 2003, it became the first BSL-4 lab in China. A BSL-4 lab is one that can contain the most dangerous biological agents using training, technology, and secure systems to prevent accidental laboratory events.

By 2018, the lab was accredited by the China National Accreditation Service for Conformity Assessment. The institute's BSL-4 allows it to investigate dangerous viruses such as SARS, influenza H5N1, Japanese encephalitis, and dengue, as well as anthrax.

The initial claims of a lab leak waned throughout 2020, but as new information surfaced in 2021, such as three employees of the institute being hospitalized with COVID-19-like symptoms in December, the lab leak gained more attention.

When Trump promoted an anti-China and anti-Asia campaign, most officials and scientists did not believe that the lab leak was a viable hypothesis. However, after the WHO's investigation of the virus was published in 2021, the hypothesis was revived. The WHO scientists were not given wide access to documents and details of the Wuhan Institute of Virology. Some of the scientists were not impressed and thought that the institute should be pressed to be more transparent with what they know about the disease. Although most of the scientific community believes the virus originated in nature, they support further work to examine the lab leak hypothesis.

The Lab Leak Idea. The Trump administration pushed the lab leak theory in the press to take the heat of their own bungling in dealing with the spread of the virus in the United States. No evidence existed then for a lab leak, and it is more unlikely now based on recent research reported in peer-reviewed journals and newsletters.

The major perpetrator of the lab leak theory is the media; it makes for good television. It also enables the media to present two sides of the origin of COVID-19, which is very similar to the media's enchantment of presenting two sides of other issues, such as evolution versus intelligent design. In a *Los Angeles Times* article, Michael Hitzik describes how CNN propped up the lab leak idea by bringing together a group of four panelists, only one of whom was a medical expert—Sanjay Gupta.³⁶⁹ The lab leak side had no one with any experience in virology. The two ideas, a natural spillover and the lab leak, as equals is the unfortunate approach the media takes. There are many research studies in scientific journals about the origin of COVID-19

³⁶⁹ M. Hitzik, "Column: New Evidence Undermines the COVID Lab-Leak Theory—but the Press Keeps Pushing It," *Los Angeles Times*, September 28, 2021, retrieved October 11, 2021, <https://www.latimes.com/business/story/2021-09-28/evidence-against-a-lab-leak-as-covid-source>.

that support a natural spill from animal to human.^{370,371} There are no studies that support a lab leak.

Spillover Infection Events. Pathogens such as SARS-CoV-2 are the result of spillover infection events.³⁷² Spillover occurs when a reservoir population (rats, bats, mosquitos) encounters a novel host population, such as humans. This is an example of zoonosis, an infectious disease caused by an agent such as a bacterium, parasite, or virus that has spilled over or jumped from an animal (normally a vertebrate) to a human.

According to many scientists around the world, a spillover occurred somewhere in China from a bat to an intermediate animal and then to a human. A SARS-CoV-2 infection can spread from human to human. The infection can spread asymptotically. Dr. Anthony Fauci, director of the NIAID, says 40 percent of Americans with SARS-CoV-2 are asymptomatic, meaning they show no symptoms of the disease. According to the CDC, people can be infectious for ten to fourteen days. South Korean researchers estimate those infectious with symptoms were contagious for up to twenty days.

The most likely place that the spillover happened was the Huanan market. It's been reported that a third of the 168 COVID-19 cases reported in December 2019 were linked to the market. It was also discovered that many of the early cases were not only linked to the market, but the western part of the market where live animals, such as raccoon dogs, were housed. Raccoon dogs are a potential intermediate host to transmit SARS-CoV-2 to humans.³⁷³

The SARS-CoV-2 pandemic was not a surprise to most infectious disease scientists and journalists who specialize in studying or reporting human diseases, as well as ecological and environmental issues caused by human invasion. David Quammen's 2012 book, *Spillover: Animal*

³⁷⁰ Smriti Mallapaty, "Closest Known Relatives of Virus behind COVID-19 Found in Laos," *Nature News*, September 27, 2021, retrieved October 11, 2021, <https://www.nature.com/articles/d41586-021-02596-2>.

³⁷¹ Garry, "Early Appearance of Two Distinct Genomic Lineages."

³⁷² Corrie Brown, "Spillover: Animal Infection and the Next Human Pandemic," review of the book by David Quammen, *Emerging Infectious Diseases* 19 no. 2 (2013): 349, <https://doi.org/10.3201/eid1902.121694>.

³⁷³ Michael Le Page, "Analysis of Earliest COVID-19 Cases Points to Wuhan Market as Source," *New Scientist*, November 25, 2021, retrieved November 28, 2021, <https://www.newscientist.com/article/2298195-analysis-of-earliest-covid-19-cases-points-to-wuhan-market-as-source/>.

Infections and the Next Human Pandemic, reads like a fictional tale of someone's idea of how to kill off one another, either humans or other animals, on Earth.³⁷⁴

One of the important points that Quammen makes is that humanity is responsible for the large pattern of outbreaks of new zoonotic diseases. I was talking with Mike Dias, professor of biology at Kennesaw State University, on a Zoom call recently. He said as we live in closer proximity to wild animals, we should expect more zoonotic outbreaks. Think about how the Earth's population has changed over the past century. The human population was 2 billion a century ago. Now it is 7 billion. Many of us live in large and dense cities.

As Quammen says, we have penetrated and we continue to penetrate the last great forests and other wild ecosystems. This invasion has disrupted the physical structures and the ecological communities of these places.

One of the most significant spillover species is bats. Quammen described how a handful of scientists who knew little about bats but a lot about infectious diseases decided to do a review of published and unpublished research on bats. They published their paper with the title "Bats: Important Reservoir Hosts of Emerging Viruses."³⁷⁵ They described the characteristics of bats and information regarding sixty-six viruses that have been isolated from bats. In 2006, they made it clear that not enough is known about bat conservation, and many questions need to be explored regarding the role of bats in disease emergence. Their paper resulted in requests for hundreds of reprints and cited thousands of times in the literature.

Bats are the major hosts for the evolution of the two previous coronaviruses, severe acute respiratory syndrome (SARS, 2002 in China) and Middle East respiratory syndrome (MERS, 2012, Saudi Arabia). The new coronavirus, SARS-CoV-2, originated in bats. Much of the early research focused on Wuhan's open-air wet markets, where customers bought

³⁷⁴ David Quammen, *Spillover: Animal Infections and the Next Human Pandemic* (New York: W. W. Norton & Company, 2021).

³⁷⁵ Charles Calisher et al., "Bats: Important Reservoir Hosts of Emerging Viruses," *Clinical Microbiology Reviews* 19, no. 3 (2006): 531-545, retrieved March 12, 2021, <https://doi.org/10.1128/CMR.00017-06>.

fresh meat and fish, including animals killed on the spot. Some wet markets sell wild and banned species. Crowded conditions allow viruses to spill over, spreading to and infecting other animals and humans. However, some of the people who got sick never went near the open-air market. And the first case reported in the United States was a man who had returned to the US after spending time in Wuhan and who said that he did not visit any of the markets in Wuhan.

TRUMP'S RESPONSE

Trump's history of denial and untruths about COVID-19 was disgraceful. Trump's first public denial occurred on January 21, 2020, in Davos, Switzerland, when he answered a reporter's question about the virus. Trump said, "We have it totally under control. It's one person coming in from China. We have it under control. It's going to be just fine." Trump also said he trusted the information coming out of China. He said that he has a great relationship with President Xi. "The relationship is very good."

Later in the year, Trump changed his tune about China. Trump stigmatized COVID-19 by blaming it on the Chinese and calling the virus the China virus or Chinese virus. Trump started using this racist terminology as early as March 2020. He's persisted with this racist connotation. The damage done to the Asian American community was appalling. According to various reports, Asian Americans have faced racist violence at a much higher rate since the pandemic began. Violence and hate crimes against Asian Americans took place nationwide. On March 16, 2021, a series of mass shootings occurred at three spas in the metropolitan area of Atlanta, only a few miles from where I live. Six Asian women were killed.

Donald Trump knew in early January 2020 that the coronavirus outbreak in China was serious. Parts of his government, especially the intelligence agencies, were telling him that the virus was a threat to national security. Trump ignored and denied the information that he was receiving, even when he received the President's Daily Brief.

On March 13, 2020, Trump announced a national emergency for COVID-19. His announcement came more than two months after

coronavirus was identified as a serious disease by China and the WHO and was spreading across the world. By this time, more than 80,000 cases had been recorded in China and at least 600,000 cases around the world. US coronavirus cases had reached 1,678, with a death tally of 41. By the end of Trump's term in office, coronavirus cases in the United States reached 24.24 million. More than 406,000 deaths had been reported.³⁷⁶

The United States government failed its citizens not only in protecting them, but also in educating them and explaining what mitigation methods should be implemented. Trump deserves the most blame, but the NIH and at least two of its agencies should bear some responsibility as well. However, after I completed more research to investigate the relationship between the White House and the CDC, I found the relationship is not pretty.

THE CDC VERSUS THE WHITE HOUSE

The purpose of the Centers for Disease Control and Prevention is to protect the safety, health, and security of America from threats here and around the world. The CDC is in my backyard, as it's located on Clifton Road in Atlanta. Years ago when I lived in that part of Atlanta, I would drive by the agency's campus. Up until the COVID-19 pandemic, the CDC had a reputation as the world leader in disease control and prevention. However, a ProPublica investigation exposed an ugly chapter in the history of CDC. In fact, the authors of the report said this:

When the next history of the CDC is written, 2020 will emerge as perhaps the darkest chapter in its 74 years, rivaled only by its involvement in the infamous Tuskegee experiment, in which federal doctors withheld medicine from poor Black men with syphilis, then tracked their descent into blindness, insanity, and death.³⁷⁷

³⁷⁶ Will Stone, "On Trump's Last Full Day, Nation Records 400,000 Covid Deaths," *Kaiser Health News*, January 20, 2021, retrieved April 5, 2022, <https://khn.org/news/nation-records-400000-covid-deaths-on-last-day-of-donald-trump-presidency/>.

³⁷⁷ James Bandler et al., "Inside the Fall of the CDC," ProPublica, October 15, 2020, retrieved March 14, 2021, <https://www.propublica.org/article/inside-the-fall-of-the-cdc>.

How could the authors of the ProPublica article make such an assessment? Part of the answer lies in mistakes that were made in one of the laboratories on the campus of the CDC in Atlanta. But the laboratory mistakes, which I'll explain in a bit, pale in comparison with how the Trump administration took over the CDC's COVID-19 decision-making and public communication. Here are a few examples that shed light on the CDC's fall from grace:³⁷⁸

- Senior CDC staff describe waging battles protecting science from the White House as protecting the public from COVID-19.
- White House officials with no public health experience meddled in important CDC meetings on COVID-19, including Trump's daughter Ivanka, Stephen Miller, and "protégés of Jared Kushner, wearing blue suits with red ties and beards."
- There was a loss of faith in CDC director Dr. Robert Redfield.
- Veteran CDC specialists with global reputations were marginalized, silenced, or reassigned. If these top scientists spoke out, they disappeared.
- Trump appropriated the CDC, a public enterprise, and turned it into a propaganda regime.

Several points that should be made at this point in the story. The first has to do with the agency's initial intelligence about news reports of coronavirus cases in Wuhan, China. What did the agency find out, and what did its leading scientists and directors do? The second has to do with the agency's initial messaging to the public and the media about the coronavirus. And the third is Trump's reaction to the CDC announcement and what he did because of the CDC's public statements.

It is during this time that Trump brought the CDC to its knees and removed the agency from the public sphere. The public lost confidence in the CDC. But as important as that loss of confidence is, Trump's

³⁷⁸ Bandler et al., "Fall of the CDC."

decision to take over the messaging of COVID-19 resulted in the most chaotic and disastrous health crisis in United States history.

What follows will probably make you as angry as it did me. The United States could have avoided much of the harm that came about because of the negligence of the president of the United States. Let me explain.

On December 31, 2019, Dr. Anne Schuchat, the CDC's top career scientist, emailed Dr. Jay Butler, later to become the CDC's coronavirus response head. Schuchat asked Butler if any of his colleagues knew anything about the "unknown pneumonia" in Wuhan. According to the ProPublica study, Dr. Dan Jernigan, the flu chief, and his boss, Dr. Nancy Messonnier, met at CDC headquarters in Atlanta. That same day, they learned about twenty-seven cases in China, some of them severe. These patients had difficulty breathing and suffered a buildup of abnormal substances in the lungs. Messonnier immediately realized this could be a SARS virus. She contacted Dr. Martin Cetron, director of the Division of Global Migration and Quarantine at the CDC. While he was with on vacation in New Hampshire, he told those around him about the new virus in China and that he was concerned it could affect the entire world.³⁷⁹

Normally Schuchat's team of infectious experts would have been in touch with the CDC's office located within the Chinese CDC in Beijing. But that office no longer existed because of budget cuts going back to the Great Recession of 2008 and, later, Trump's decision to close it down. Remember the CDC had stopped the Ebola epidemic in 2014 when Obama was president, but it now found its global influence waning because of losing as many as three hundred overseas posts.

Robert Redfield, the new director of the CDC, reached out to his close ally in China, according to the ProPublica investigators. The close ally was George Gao, director of China's CDC. Gao was a microbiologist educated at Oxford and Harvard. Redfield hoped he would obtain detailed information about the infections in Wuhan. He didn't. In fact, communications with Gao lessened and eventually ended. Gao was muted by Chinese government officials.

³⁷⁹ Bandler et al., "Fall of the CDC."

The CDC felt an obligation to communicate with the American public. At first they indicated that the public had no reason to panic about the virus detected in China. In the meantime, Trump was told by his intelligence agencies and his national security advisors that the virus in China was serious and would be the most significant national security threat he'd face as president. "What should I do?" Trump asked. Matthew Pottinger told him to stop all flights from China. Trump ordered all flights from China stopped on January 31, 2020. Scientists at the CDC did not see closing borders as helpful because it restricts the flow of medical experts and goods.

Then on February 25, Messonnier, the CDC's director of the National Center for Immunization and Respiratory Diseases, held a press conference in Atlanta about the coronavirus and what steps should Americans take to prevent it. The virus, she said, moves quite rapidly through community spread. As the virus spreads, containment becomes more difficult. The CDC urged American businesses and families to start preparing for a bigger outbreak.

I happened to be watching TV and saw her press conference. At the end, reporters asked her if she was taking any precautions considering the novel virus. "Disruption to everyday life might be severe," Messonnier said, adding that she talked to her children about the issue Tuesday morning. "While I didn't think they are at risk right now, we as a family ought to be preparing for significant disruption to our lives." She had even called her children's school to ask about their plans for online learning.

The stock market and the White House were shocked. One fell and the other screamed. Messonnier was removed from public appearances after her warning about the coronavirus. Unfortunately, instead of listening to Messonnier, the Trump administration silenced her and covered up the actual nature of the virus as early as February 2020.

Trump put Mike Pence in charge of his Coronavirus Task Force, replacing Alex Azar, secretary of health and human services. Trump became the communicator-in-chief. For the next month or so, Trump decided to have daily press conferences and used this forum to play down COVID-19 and sideline the CDC and its scientists. The scientists

that he did involve during these TV news conferences were Dr. Anthony Fauci, director of the NIAID, and Dr. Deborah Birx, United States Global AIDS Coordinator. Although Redfield, the director of the CDC, was on the task force, he rarely spoke at these press meetings.

Trump never fully embraced—at least publicly—the pandemic and its effects on the United States. The task force stopped meeting in April and didn't hold a meeting again until June 30. All the while Trump downplayed the disease and spoke only about how well his administration was doing with the virus. He spent most of his time insisting that states open their economies while he played golf.



President Trump, with hands in pockets, visits the CDC on March 6, 2020, in Atlanta. He is joined by Health and Human Services Secretary Alex Azar, left; Dr. Robert Redfield, director of the CDC, speaking; and Dr. Stephen Monroe, associate director of the CDC. And lurking in the background is former Georgia Senator David Perdue. The CDC by this time was being undermined by the Trump administration, and soon the White House took over all communications coming out of the CDC. Source: Public Domain Mark 1.0; no copyright.

BOTCHED TEST KITS

The CDC had the responsibility for developing a COVID-19 test. It developed a coronavirus kit in the Respiratory Viruses Diagnostic Team lab on its Atlanta campus in January 2020, and it was ready for shipment on February 6. The lab that developed the kits learned that the final quality control test suggested the kits were failing 33 percent of

the time. However, Stephen Lindstrom, the head of the lab, decided to sign off on the quality control report and ship the kits. A later investigation found that the lab had many quality standard and organizational problems. Laboratory officials were not allowed to make any public comments by the CDC management. By February 6, one hundred or more clinics and public labs across the United States began receiving the kits. Within days labs were reporting that they were getting inconclusive results. The CDC was notified, and their first idea was possible contamination due to quality preparations in the Atlanta lab.

The CDC claimed that one of the chemicals needed for the test got contaminated. None of the test kits that were sent out could be used. It took five weeks for the CDC to correct and produce new test kits. At this point in the pandemic, testing was one of the most important tools for tracking, tracing, and controlling the virus. The United States was unable to take these steps, which were taken in South Korea and Germany. Early in the pandemic, these countries were able to keep the virus under control.

Recall that the first coronavirus case in the United States was identified on January 20, 2020. At that time, the only place in the United States to have a sample tested for COVID-19 was in Atlanta at the CDC headquarters. And for a local clinic to be able to send the samples, they needed to get approval from the CDC. In the first cases detected, the sample was flown to Atlanta, where it was tested. Meanwhile, South Korea had already initiated a testing and tracking program, which led it to control the virus at an early stage.³⁸⁰

As described in Chapter 11, Donald Trump failed as a leader to respond to the COVID-19 pandemic. He was unable to face reality and tell the American people the truth. His administration interfered with the scientific community. Scientists were dismissed and their ideas, which would have helped Americans deal with the virus, were ignored or compromised.

³⁸⁰ Katherine Faulders, Matthew Mosk, and John Santucci, "Coronavirus Testing: What Top Officials Say Went Wrong," ABC News, July 29, 2020, retrieved March 14, 2021, <https://abcnews.go.com/Health/coronavirus-testing-top-officials-wrong/story?id=71973919>.

THE DEVELOPMENT OF SARS-COV-2 VACCINES

Viruses are tiny bits of genetic material inside a protein shell. They are able to make their way into a cell of an organism and take over the cell's machinery in order to replicate themselves. SARS-CoV-2 is an RNA molecule that Chinese scientists had analyzed and publicly reported the genetic sequence of on January 9, 2020. With this information available, scientists worked to find treatments and vaccines that would block the ability of the virus to hook on to human cells.³⁸¹

SARS-CoV-2 vaccines were developed so rapidly in 2020 because of decades of research, developmental, and clinical work by federally funded research scientists at NIH and at research labs at universities around the country, as well as with collaboration with scientists in other countries, especially China. The groundwork for the Moderna, Pfizer-BioNTech, and Johnson & Johnson/Janssen vaccines was laid out previously and was ready to implement.³⁸²

Most of the development of vaccines for SARS-CoV-2 has been in North America, with 36 (46%) developers as compared to 14 (18%) in China, 14 (18%) in Asia and Australia, and 14 (18%) in Europe.³⁸³

According to an article in *Nature Reviews*, the response to global vaccine development has been unprecedented. Normally vaccines take between two and ten years to be developed and approved for use on humans. However, the timeline for COVID-19 vaccines has been reduced to months.

In a *Scientific American* article, Arthur Allen describes how pioneering work by several scientists and their lab associates led to what are called mRNA vaccines. According to the CDC, mRNA vaccines are a new type of vaccine to protect against infectious diseases.³⁸⁴ These

³⁸¹ Walter Isaacson, *Code Breaker: Jennifer Doudna, Gene Editing, and the Future of the Human Race* (New York: Simon & Schuster, 2021), 403–404.

³⁸² Arthur Allen, "For Billion-Dollar COVID Vaccines, Basic Government-Funded Science Laid the Groundwork," *Scientific American*, November 18, 2020, retrieved May 2, 2021, <https://www.scientificamerican.com/article/for-billion-dollar-covid-vaccines-basic-government-funded-science-laid-the-groundwork/>.

³⁸³ Tung Thanh Le et al., "The COVID-19 Vaccine Development Landscape," *Nature Reviews Drug Discovery*, April 2020, retrieved May 2, 2021, https://www.researchgate.net/profile/Tung-Le-10/publication/340535627_The_COVID-19_vaccine_development_landscape/links/5ead65c5a6fdcc7050a1c089/The-COVID-19-vaccine-development-landscape.pdf.

³⁸⁴ Allen, "For Billion-Dollar COVID Vaccines."

mRNA vaccines teach our cells how to make a protein that triggers an immune response inside our bodies.

Scientists at the NIH pioneered the groundbreaking research that led to the development of multiple SARS-CoV-2 vaccines. One of the earliest pioneering researchers is Dr. Kati Karikó, a Hungarian biochemist and senior vice president with BioNTech who specializes in RNA mechanisms. She and American immunologist Drew Weissman, Pearlman School of Medicine at the University of Pennsylvania, hold the patents for the technology enabling the modification of RNA. This discovery has been licensed by BioNTech and Moderna to develop their COVID-19 vaccines.³⁸⁵ Karikó and Weissman were awarded the Rosenstiel Award for Distinguished Work in Basic Medical Research by Brandeis University in January 2021.³⁸⁶

Another of the early pioneers was Dr. Barney Graham, deputy director of the Vaccine Research Center and the chief of the Viral Pathogenesis Laboratory at the NIH. Graham and his colleague Jason McLellan, along with Chinese scientists, developed in 2013 the “bioengineered protein” that led the way to designing vaccines against emerging pandemic viruses. Graham’s NIH lab began working with Moderna in 2017 to design rapid manufacturing systems. During the COVID-19 outbreak in China, the Moderna/Graham group switched goals to work on the novel virus. They produced a vaccine in six weeks and started a 30,000-volunteer late-stage trial. It showed 95 percent effectiveness.³⁸⁷ My wife and I received the first of two Moderna vaccine shots in early January 2021 and the second in early February, plus a Moderna booster in August 2021.

After Joe Biden was inaugurated, vaccine distribution of SARS-CoV-2 exceeded 3 million people (about the population of Arkansas) per day, and within one hundred days, more than 200 million people were vaccinated in the United States. However, many developing countries still need help, and some developed countries are still experiencing

³⁸⁵ Gina Kolata, “Kati Kariko Helped Shield the World from the Coronavirus,” *New York Times*, April 8, 2021, retrieved November 28, 2021, <https://www.nytimes.com/2021/04/08/health/coronavirus-mrna-kariko.html>.

³⁸⁶ Lawrence Goodman, “Rosenstiel Award Given to Pioneering Scientists behind COVID-19 Vaccines,” *BrandeisNOW*, January 21, 2021, retrieved November 28, 2021, <https://www.brandeis.edu/now/2021/january/rosenstiel-covid-vaccine.html>.

³⁸⁷ Allen, “For Billion-Dollar COVID Vaccines.”

coronavirus outbreaks. Now is the time for a lend-lease or patent-free distribution of the vaccine to any country that needs assistance. The virus needs to be mitigated globally, not just locally. Biden announced at the 2021 G7 summit in the UK that the United States would begin donating vaccines to poorer countries, starting with 500 million doses. Other countries have promised a total of 500 million doses.

Another fundamental problem is the growing anti-vaccination movement. This movement is especially troublesome when the world is trying to manage, control, and rid the Earth of the virus, although that is very unlikely. Fauci thinks that herd immunity will not be reached primarily because of anti-vaxxers. Vaccine hesitancy has been around for decades. Many people refuse to let their children be vaccinated against any contagious disease. Others believe that vaccines cause autism in children. In the United States, some groups are filing lawsuits against companies and organizations that require COVID-19 vaccinations and making themselves available to individuals who wish to refuse the vaccination. They will be happy to file a lawsuit for you.

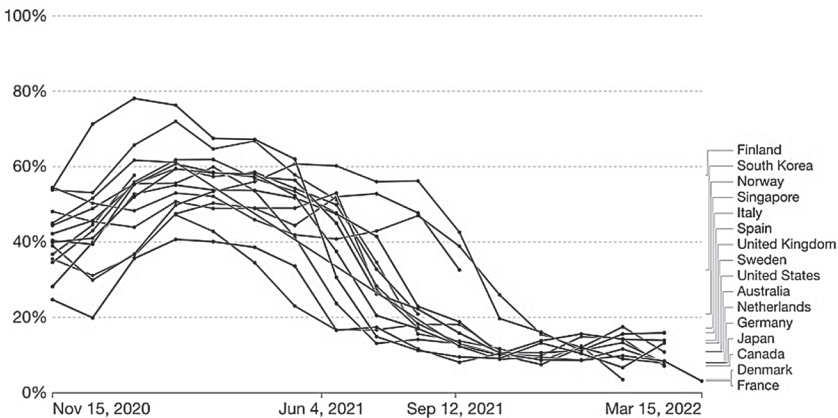


Figure 13. Share of survey respondents who have not received a COVID-19 vaccine and who agree with the statement: "If a COVID-19 vaccine were made available to me this week, I would definitely get it." Source: Our World in Data, CC BY 4.0.

The WHO views vaccine hesitancy as one of the top ten global health threats. In the United States, a recent poll indicated that one in four Americans will refuse the COVID-19 vaccine. Leading the list of

anti-vaxxers are Republican men, 49 percent of whom say they will refuse the vaccine. As of fall 2020, Georgia had the lowest percentage of adults and children over twelve vaccinated against COVID-19. Figure 13 shows that even after two years of the pandemic, only 20% of those who are unvaccinated would be willing to be vaccinated. And anti-vaccination is not just a problem in the United States, as shown in the graph.³⁸⁸

A connection exists between anti-maskers and anti-lockdown protestors and the anti-vax movement. The anti-masker and anti-lockdown groups include QAnon conspirators as well as ordinary people who don't like being told what to do. QAnon is a far-right conspiracy theory based on false claims made by an internet individual known as "Q." Followers believe that a cannibalistic cabal has conspired against former President Donald Trump. Followers of this cult claim their freedom is being curbed. And there are some anti-maskers who don't believe their children should have to wear masks while at school. However, in some states, governors have lifted mask mandates. You guessed it: Florida, Georgia, and Texas led the way.

The history of anti-vaccinations reveals a thriving movement. Edna Bonhomme, a historian of science and writer who lives in Berlin, writes that in Germany, for instance, anti-science sentiment, right-wing politics, and racism have been entwined since before Jews were accused of spreading the bubonic plague in the fourteenth century.³⁸⁹ She concludes that anti-science sentiments are tangled with racial prejudice.

Blaming ethnic minorities for viruses and other diseases has also been part of America's racist and anti-science movement. It's been a part of American history, including blaming Irish Catholic immigrants for the 1882 cholera outbreak in New York, quarantining San Francisco's Chinatown in 1876 for smallpox and disease, and screening at Ellis Island in the nineteenth and early twentieth centuries to prohibit "physically inferior" immigrants. In our time, Donald Trump has cast Central American immigrants as disease carriers. And calling COVID-19 the

³⁸⁸ View this chart at <https://ourworldindata.org/grapher/covid-vaccine-willingness>.

³⁸⁹ Edna Bonhomme, "Germany's Anti-Vaccination History Is Riddled with Anti-Semitism," *The Atlantic*, May 2, 2021, retrieved May 3, 2021, <https://www.theatlantic.com/health/archive/2021/05/anti-vaccination-germany-anti-semitism/618777/>.

“China virus” has stigmatized the virus and led to some people blaming Chinese Americans for the pandemic.³⁹⁰

Underlying refusals to be vaccinated are conspiracy theories. As mentioned, some claim that vaccines cause autism. No scientific evidence supports this concern. For others, anti-scientific conspiracy theory fosters a disregard for the work of scientists in preventing disease. A distrust of science is also a factor. In the age of Trump, truthfulness is in short supply. Fake news, alternative facts, and distortions of reality impact people’s beliefs in facts, reasoning, and science. Millions of people refuse vaccinations because of their denial and refusal to know the science. Naomi Oreskes, in her book *Why Trust Science?*, suggests science confront a public crisis of trust. Suspicion and motivation of scientific theories are abundant but not new.

To remove the threat of the coronavirus, we must prevent the virus from spreading. If people think they won’t get the virus or they simply don’t believe in putting anything into their bodies, then the virus will be able to spread. There have been at least ten variants of SARS-CoV-2. If the virus is left to spread, new variants are sure to evolve, as we’ve seen with the Delta and Omicron variants. But if more people get vaccinated, we have a strong possibility of containing SARS-CoV-2.

SCHOOL IN THE AGE OF A GLOBAL PANDEMIC

As soon as the coronavirus was considered a global health emergency, schools across the world closed their doors to face-to-face learning. At the time schools closed their doors, the virus was spreading rapidly. The nature of the virus was understood, but governments hesitated. Even the CDC hesitated in explaining how people could protect themselves from catching the virus. It was a wise decision to close schools, yet mixed messaging created problems for local school districts, often pitting parents against school officials.

The decision to close schools to face-to-face learning led to the question of when should schools open? How can we open them

³⁹⁰ Catherine E. Shoichet, “What Historians Hear When Trump Calls Coronavirus ‘Chinese’ and ‘Foreign,’” CNN, March 17, 2020, retrieved May 3, 2021, <https://www.cnn.com/2020/03/12/us/disease-outbreaks-xenophobia-history/index.html>.

safely? When schools closed, all teaching and learning was moved to online frameworks. Virtual learning led to a host of problems, including the lack of availability of computers in families in low socio-economic communities, lack of access to reliable networks, and lack of instruction for teachers to learn how to use online resources, plus the effects of learning at home on students and parents. Online learning pushed teachers and students to use multiple technologies, including email, websites, Zoom, and other video services. Many were not prepared.

With respect to school, I was concerned about safety as well the effects of online learning. How could schools manage a safe environment, considering the community spread of the coronavirus? Who would benefit from online learning? Who wouldn't?

For example, in Georgia where I live, more than 360,000 college and university students are enrolled across the state. I used coronavirus data that Ed Johnson compiled using the Georgia Department of Public Health statistics to answer questions about the opening of universities. Johnson is a fellow resident of Georgia and an advocate for public education who published a daily newsletter focusing on public education in Atlanta. He also has been tracking COVID-19 since early March 2020 and publishing his findings on his newsletter. I used his research findings on my blog, and you'll find some of his data in Chapters 10 and 12.

Early in the pandemic, not much was known about the effect of bringing students back to their respective schools. Even now, the safety of students in school is an open question. The question can be answered if the primary consideration is safety, health, and welfare of students and teachers, as well the families of each group.

In the summer of 2021, Fauci supported sending kids back to school, but only if the COVID-19 rate positivity rate is 5 percent or less than 5 per 100,000 population. This is referred to as the green zone. Yellow zones have positivity rates between 5% and 10%. Red zones have positivity rates above 10%. In December 2020, there were only four states in the green zone, meaning that the positivity rate

was less than 5%. More than half the states have a positivity rate of more than 10%. Fauci says that to open schools in the yellow and red zones, we've got to lower the positivity rates in the community of these schools. As more people get vaccinated, COVID-19 positivity rates will go down.³⁹¹

In the initial stages of the pandemic, not much research was made available to help school and university officials make decisions on whether to open schools and under what conditions. That omission is beginning to change in late 2021.

However, some medical experts have raised questions about the methodology used in some studies that might become influential in directing schools to open or not. In Chapter 12, several posts raise questions about the relationship between community spread of the virus and the spread in schools. Little data exist on the spread of the virus in schools. Most states provide data on coronavirus cases for each county. I used this type of data to raise questions about returning students to school.

Based on data from MCH Strategic Data, 13,597 of 14,944 US school districts provided school reopening plans for fall 2020. Of those districts, 24% were completely online, 51% were using a hybrid model, and 17% were fully open for in-person instruction. Slightly more than half had students participating in school sports programs. Most school districts required students to wear masks, but on further inspection of the data, only 7% required middle and high school students to wear masks, and only 2% of high schools required masks.³⁹²

A review of some research on school opening and SARS-CoV-2 infection rates was reported by CDC researchers. The findings reported in the study are of the authors and not the CDC. Crowded conditions in adult living environments or meatpacking facilities are ripe for spreading COVID-19. Schools also risk the possibility of spreading SARS-CoV-2, though one study in North Carolina that involved 90,000 students

³⁹¹ Kristina Fiore, "Fauci: Here's How Schools Can Safely Reopen," *Medical News*, August 13, 2020, retrieved April 5, 2022, <https://www.medpagetoday.com/infectiousdisease/covid19/88065>.

³⁹² MCH Strategic Data, retrieved March 16, 2021, <https://www.mchdata.com/>.

and staff for a nine-week period found that within-school transmissions were rare (32 infections in schools, whereas 773 community-acquired infections).

However, Stephen Friedman, MD, MPH, and adjunct professor, Department of Medicine, Rutgers University, commented that the infection rates reported for students were limited to the local school data dashboard rather than systematic testing of students. He also noted that comparing students to community spread data was comparing students to adults.³⁹³ School-related activities have increased the risk of SARS-CoV-2 infection, especially in after-school sports programs. One example of how contact sports can lead to infection was a study of a high school wrestling tournament. Among 130 tournament participants, 38 (30 percent) had a lab-confirmed SARS-CoV-2 infection.³⁹⁴ Only 50 percent of the participants were tested. Secondary transmission was identified through contact tracing in households and in school (classrooms and athletics). Some states banned after-school sports. However, in Georgia, where I live, there is little evidence of schools reducing after-school activities.

The researchers concluded that schools need to take into account community spread and ensure safe environments for students during and after school. Masks, social distancing, and handwashing are essential and should be required. However, in some school districts, parent groups are filing lawsuits opposing mask wearing for students.

Stephanie Jones, distinguished teaching professor in the Department of Educational Theory and Practice at the University of Georgia, expressed a concern I share that too few schools were mandating masks and social distancing to provide safe learning environments, especially for students in grades K–6. Children this age could not be vaccinated until fall 2021 and were very susceptible to being infected with the Delta variant of COVID-19 before that point.³⁹⁵

³⁹³ Margaret A. Honein, Lisa C. Barrios, and John T. Brooks, "In-Person Education and the Spread of SARS-COV-2 Infection," *JAMA*, March 2, 2021, retrieved February 12, 2022, <https://jamanetwork.com/journals/jama/fullarticle/2775875>.

³⁹⁴ Honein et al., "In-Person Education."

³⁹⁵ Stephani Jones, "We Must Protect Students from Storms and Pandemics," *Atlanta Journal-Constitution*, August 28, 2021, retrieved September 10, 2021, <https://www.ajc.com/education/get-schooled-blog/uga-professor-we-must-protect-students-from-storms-and-pandemics/KFF7LLXA5F2JISDTEPKZTPFNU/>.

She wondered what students would think about the fact that we knew about the seriousness of the pandemic. Would they wonder why didn't we go out of our way to provide the protection they needed? As she suggested, we've put teachers and students in the "center of a political and ideological battlefield where children's and youth's best interests are not being prioritized." She continues, "Maybe now, in the quiet after the storm, we can reflect on the dangerous position we forced our young people and teachers into as they waited out our tornado warnings."³⁹⁶

In 2022 we find schools in a difficult situation because of the rapid spread of the Omicron variant of COVID-19. Positivity rates are beyond 20 percent in the United States, suggesting that sending kids into schools should only be done with extreme caution. In some school districts, teachers have gone on strike. But in most districts around the country, teachers have little say about whether schools should open for face-to-face instruction or go online.

The CDC's recommendations in early fall 2021 were stated as essential elements of safe K-12 school in-person instruction. They are universal and call for the use of masks, physical separation (six feet), handwashing and respiratory etiquette, cleaning facilities, and contact tracing in combination with isolation and quarantine. These were used successfully during the 1918 flu pandemic, by the way.

Throughout the pandemic, a disconnect existed between CDC guidance for operational strategies for K-12 schools and local and state government COVID-19 guidelines. For instance, the CDC recommended mask wearing and physical separation in schools, while some governors, as noted above, lifted mask mandates. This disconnect is a problem. Some parents continue to say they do not want their children vaccinated. Some parents are not sure what the long-term effect of mRNA vaccines will have on children's brain development, for instance. Other parents are committed anti-vaxxers and won't allow their children to be jabbed.

If the virus is in circulation, then unvaccinated children, teens, and adults can be infected and can pass the infection on to others.

³⁹⁶ Jones, "Protect Students."

PREVIEW

Ahead are seventeen blog posts that I wrote about the SARS-CoV-2 pandemic. In Chapter 10, the nature of the pandemic is explored. What are the facts about SARS-CoV-2? What can we learn about the pandemic we are living through from previous pandemics, especially the 1918 flu pandemic? The United States has registered the greatest number of cases and deaths in the world caused by SARS-CoV-2. How can this knowledge be used to prepare for future pandemics, which are sure to happen?

Chapter 11 includes several posts that show how Donald Trump failed to lead the nation at a time when leadership would have been the difference between failure and success, life and death. Throughout his presidency, Trump ignored the science and scientists that were all around him and instead played down the virus to the detriment of all Americans. More than 800,000 people (about two-thirds the population of Maine) have died, most of whom would not be dead if Trump had done his job.

Chapter 12 explores schooling in the age of SARS-CoV-2. COVID-19 has presented unique problems for educators, parents, and students. Schools operated for months entirely online, with many schools continuing to teach online to this day. Many questions are still unanswered about how safe it is to return all students to school for face-to-face learning.