

# Notes

## 1: Welcome to Pandemia

Alex Berenson (@AlexBerenson), “Against hysteria, satire. Against...,” Twitter, April 16, 2020, 4:14 a.m., available at the Wayback Machine, <https://web.archive.org/web/20210324020334/https://twitter.com/AlexBerenson/status/1250744283012960258>. Twitter has now censored me by suspending my account, which does not just prevent me from tweeting but also makes my older tweets unavailable. Fortunately, I downloaded an essentially complete archive of my tweets and do intend to make them publicly available, unedited. But for the moment they cannot be found on Twitter. When I quote one of my tweets, I note whether I have a screenshot of it in my archive. And where it was captured and is still available elsewhere on the internet, usually at the Internet Archive’s Wayback Machine, I give that link.

1. Mirco Nacoti et al., “At the Epicenter of the COVID-19 Pandemic and Humanitarian Crises in Italy: Changing Perspectives on Preparation and Mitigation,” *NEJM Catalyst Innovations in Care Delivery*, March 21, 2020, <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0080>.

## 2: Happy New Year

1. “Li Wenliang: Coronavirus Kills Chinese Whistleblower Doctor,” BBC News, February 7, 2020, <https://www.bbc.com/news/world-asia-china-51403795>.
2. Sui-Lee Wee and Vivian Wang, “China Grapples with Mystery Pneumonia-Like Illness,” *New York Times*, January 6, 2020, <https://www.nytimes.com/2020/01/06/world/asia/china-SARS-pneumonialike.html>.
3. Sui-Lee Wee and Donald G. McNeil Jr., “From January 2020: China Identifies New Virus Causing Pneumonialike Illness,” *New York Times*, January 8, 2020, <https://www.nytimes.com/2020/01/08/health/china-pneumonia-outbreak-virus.html>.
4. Xixing Li et al., “Who Was the First Doctor to Report the COVID-19 Outbreak in Wuhan, China?” *Journal of Nuclear Medicine*, 61, no. 6 (June 2020): 782–83, <https://doi.org/10.2967/jnumed.120.247262>.
5. World Health Organization (WHO) (@WHO), “Preliminary investigations conducted by the Chinese authorities have found no clear evidence of human-to-human transmission of the novel #coronavirus (2019-nCoV) identified in #Wuhan, #China,” Twitter, January 14, 2020, 6:18 a.m., <https://twitter.com/WHO/status/1217043229427761152>.
6. Emily Baumgaertner, “As Coronavirus Outbreak Worsens, China Agrees to Accept Help from WHO,” *Los Angeles Times*, January 28, 2020, <https://www.latimes.com/science/story/2020-01-28/coronavirus-china-accepts-who-help>.
7. Zhuang Pinghui, “Chinese Laboratory That First Shared Coronavirus Genome with World Ordered to Close for ‘Rectification,’ Hindering Its Covid-19 Research,” *South China Morning Post*, February 28, 2020, <https://www.scmp.com/news/china/society/article/3052966/chinese-laboratory-first-shared-coronavirus-genome-world-ordered>.

8. “China Confirms Human-to-Human Transmission of 2019n-CoV, Infection of Medical Staff,” Xinhua Net, January 20, 2020, [http://www.xinhuanet.com/english/2020-01/20/c\\_138721762.htm](http://www.xinhuanet.com/english/2020-01/20/c_138721762.htm).
9. Sheridan Prasso, “China’s Epic Dash for PPE Left the World Short on Masks,” *Bloomberg Businessweek*, September 17, 2020, <https://www.bloomberg.com/news/articles/2020-09-17/behind-china-s-epic-dash-for-ppe-that-left-the-world-short-on-masks>.
10. Chris Buckley and Javier C. Hernández, “China Expands Virus Lockdown, Encircling 35 Million,” *New York Times*, January 23, 2020, <https://www.nytimes.com/2020/01/23/world/asia/china-coronavirus-outbreak.html>.
11. Gerry Shih, “In China’s Coronavirus Crisis, a Fleeting Flicker of Freer Speech,” *Washington Post*, February 6, 2020, [https://www.washingtonpost.com/world/asia\\_pacific/in-chinas-health-crisis-a-fleeting-flicker-of-free-speech/2020/02/06/21e16f8a-4888-11ea-8a1f-de1597be6cbc\\_story.html](https://www.washingtonpost.com/world/asia_pacific/in-chinas-health-crisis-a-fleeting-flicker-of-free-speech/2020/02/06/21e16f8a-4888-11ea-8a1f-de1597be6cbc_story.html).
12. Shawn Yuan, “Wuhan Turns to Social Media to Vent Anger at Coronavirus Response,” *Al Jazeera*, March 3, 2020, <https://www.aljazeera.com/news/2020/2/3/wuhan-turns-to-social-media-to-vent-anger-at-coronavirus-response>.
13. Justin Harper, “Wuhan Lockdown: How People Are Still Getting Food,” *BBC News*, January 31, 2020, <https://www.bbc.com/news/business-51305566>.
14. Stephanie Nebehay, “WHO Says Widespread Travel Bans Not Needed to Beat China Virus,” *Reuters*, February 3, 2020, <https://www.reuters.com/article/us-china-health/who/who-chief-says-widespread-travel-bans-not-needed-to-beat-china-virus-idUSKBN1ZX1H3>.
15. Iain Marlow, “China Lashes Out at Countries Restricting Travel over Virus,” *Bloomberg*, February 6, 2020, <https://www.bloomberg.com/news/articles/2020-02-06/china-lashes-out-at-countries-restricting-travel-over-virus>.
16. Megan Thielking and Lev Facher, “Health Experts Warn China Travel Ban Will Hinder Coronavirus Response,” *Stat News*, January 31, 2020, <https://www.statnews.com/2020/01/31/as-far-right-calls-for-china-travel-ban-health-experts-warn-coronavirus-response-would-suffer/>.
17. Alice Miranda Ollstein, “Coronavirus Quarantine, Travel Ban Could Backfire, Experts Fear,” *Politico*, February 4, 2020, <https://www.politico.com/news/2020/02/04/coronavirus-quarantine-travel-110750>.
18. “Naming the Coronavirus Disease (COVID-19) and the Virus That Causes It,” *World Health Organization*, [https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-\(covid-2019\)-and-the-virus-that-causes-it](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it).

### 3: In the Beginning

1. Richard Kent Zimmerman, “If Pneumonia Is the ‘Old Man’s Friend,’ Should It Be Prevented by Vaccination? An Ethical Analysis,” *Vaccine* 23, no. 29 (May 31, 2005): 3843–49, <https://pubmed.ncbi.nlm.nih.gov/15893623/>.
2. Joe Butash, “How the 1918 Flu Pandemic Stopped Scranton in Its Tracks,” *PA Homepage*, March 6, 2020, <https://www.pahomepage.com/news/how-the-1918-flu-pandemic-stopped-scranton-in-its-tracks/>.
3. Christopher Klein, “How America Struggled to Bury the Dead during the 1918 Flu Pandemic,” *History*, February 12, 2020, <https://www.history.com/news/spanish-flu-pandemic-dead>.

4. Quoted in Gina Kolata, *Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus That Caused It* (New York: Simon & Schuster, 1999), 13–14.
5. Douglas Jordan with contributions from Terrence Tumpey and Barbara Jester, “The Deadliest Flu: The Complete Story of the Discovery and Reconstruction of the 1918 Pandemic Virus,” Centers for Disease Control and Prevention, <https://www.cdc.gov/flu/pandemic-resources/reconstruction-1918-virus.html>.
6. Kolata, *Flu*, 55–56.
7. “Lesson 1: Introduction to Epidemiology, Section 2: Historical Evolution of Epidemiology,” in *Principles of Epidemiology in Public Health Practice: An Introduction to Applied Epidemiology and Biostatistics*, 3rd ed., Centers for Disease Control and Prevention, <https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section2.html>.
8. *Second Annual Report of the Registrar-General of Births, Deaths, and Marriages in England* (London: W. Clowes and Sons, 1840), 84, <https://babel.hathitrust.org/cgi/pt?id=njp.321101064041955&view=lup&seq=85>.
9. Lawrence Cosentino, “Maskers and ‘Slackers,’ a Century Ago,” *City Pulse*, July 23, 2020, <https://www.lansingcitypulse.com/stories/maskers-and-slackers-a-century-ago,14743>.
10. Wilfred H. Kellogg, *Influenza: A Study of Measures Adopted for the Control of the Epidemic* (Sacramento: California State Printing Office, 1919), 3, <https://babel.hathitrust.org/cgi/pt?id=uc1.31378008030317&view=lup&seq=7>.
11. Aria Nouri, “The Discovery of Bacteria,” American Association for the Advancement of Science, July 5, 2011, <https://www.aaas.org/discovery-bacteria>.
12. Frank L. Horsfall Jr., *Thomas Milton Rivers, 1888–1962* (Washington, D.C.: National Academy of Sciences, 1965), 270, <https://books.nap.edu/resource/biomems/trivers.pdf>.

#### 4: All the Wrong Lessons

1. Rebecca Kreston, “The Public Health Legacy of the 1976 Swine Flu Outbreak,” *Discover*, September 30, 2013, <https://www.discovermagazine.com/health/the-public-health-legacy-of-the-1976-swine-flu-outbreak>.
2. F. Barre-Sinoussi et al., “Isolation of a T-Lymphotropic Retrovirus from a Patient at Risk for Acquired Immune Deficiency Syndrome (AIDS),” *Science* 220, no. 4599 (May 1983): 868–71, <https://science.sciencemag.org/content/220/4599/868>.
3. “Table 1. Number and Percentage of Persons with AIDS, by Selected Characteristics and Period of Report—United States, 1981–2000,” Centers for Disease Control, June 8, 2001, <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5021a2.htm#tab1>.
4. Jack King, “The Drama That Raged against Reagan’s America,” BBC, October 19, 2020, <https://www.bbc.com/culture/article/20201019-the-drama-that-raged-against-reagans-america>.
5. Ben Cohen, “Dr. Fauci Was a Basketball Captain: Now He’s America’s Point Guard,” *Wall Street Journal*, March 29, 2020, <https://www.wsj.com/articles/dr-fauci-was-a-basketball-captain-now-hes-americas-point-guard-11585479601>.
6. Ushma S. Neill, “A Conversation with Tony Fauci,” *Journal of Clinical Investigation* 124, no. 7 (July 2014): 2814–15, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4071403/>.
7. Donald G. McNeil Jr., “‘We Loved Each Other’: Fauci Recalls Larry Kramer, Friend and Nemesis,” *New York Times*, May 27, 2020, <https://www.nytimes.com/2020/05/27/health/larry-kramer-anthony-fauci.html>.

8. Anne Barber, "NIH Docs Answer Call to Help the Needy of Washington," *NIH Record* 42, no. 11 (May 29, 1990): 1–4, <https://nihrecord.nih.gov/sites/recordNIH/files/pdf/1990/NIH-Record-1990-05-29.pdf>.
9. "Interview: Larry Kramer," PBS, January 22, 2005, <https://www.pbs.org/wgbh/pages/frontline/aids/interviews/kramer.html>.
10. Anthony S. Fauci, "The Global Challenge of Infectious Diseases: The Evolving Role of the National Institutes of Health in Basic and Clinical Research," *Nature Immunology* 6, no. 8 (August 2005): 743–47, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7097332/>.
11. Eric Lipton and Jennifer Steinhauer, "The Untold Story of the Birth of Social Distancing," *New York Times*, April 22, 2020, <https://www.nytimes.com/2020/04/22/us/politics/social-distancing-coronavirus.html>.
12. Richard J. Hatchett et al., "Public Health Interventions and Epidemic Intensity during the 1918 Influenza Pandemic," *Proceedings of the National Academy of Sciences of the United States of America* 104, no. 18 (May 1, 2007): 7582–87, <https://www.pnas.org/content/104/18/7582#ref-6>.
13. "Interim Pre-Pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States: Early, Targeted, Layered Use of Nonpharmaceutical Interventions," Centers for Disease Control, February 2007, <https://stacks.cdc.gov/view/cdc/11425>.
14. "Community Mitigation Guidelines to Prevent Pandemic Influenza—United States, 2017," Centers for Disease Control, April 21, 2017, <https://stacks.cdc.gov/view/cdc/145220>.
15. "Non-Pharmaceutical Public Health Measures for Mitigating the Risk and Impact of Epidemic and Pandemic Influenza," World Health Organization, 2019, <https://apps.who.int/iris/bitstream/handle/10665/329438/9789241516839-eng.pdf>.
16. Thomas V. Inglesby et al., "Disease Mitigation Measures in the Control of Pandemic Influenza," *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 4, no. 4 (December 2006): 366–375, [https://www.liebertpub.com/doi/10.1089/bsp.2006.4.366?url\\_ver=Z39.88-2003&rfr\\_id=ori%3Arid%3Acrossref.org&rfr\\_dat=cr\\_pu b++0pubmed&c](https://www.liebertpub.com/doi/10.1089/bsp.2006.4.366?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pu b++0pubmed&c).
17. The Institute of Medicine, "Modeling Community Containment for Pandemic Influenza," The National Academies of Sciences, Engineering, and Medicine, 2006, <https://www.nap.edu/catalog/11800/modeling-community-containment-for-pandemic-influenza-a-letter-report>.

## 5: Globetrotting

1. Ella Ide, "10 Italian Towns in Lockdown over Coronavirus Fears," Yahoo, February 21, 2020, <https://www.yahoo.com/now/10-italian-towns-lockdown-over-coronavirus-fears-220635548.html>.
2. Holly Ellyatt, "Italians on High Alert as Coronavirus Spreads beyond the North of the Country," CNBC, February 25, 2020, <https://www.cnn.com/2020/02/25/italians-under-lockdown-as-coronavirus-spreads.html>.
3. Daniel Wolfe and Daniel Dale, "'It's Going to Disappear': A Timeline of Trump's Claims That Covid-19 Will Vanish," CNN, October 31, 2020, <https://www.cnn.com/interactive/2020/10/politics/covid-disappearing-trump-comment-tracker/>.
4. Philip Bump, "Which Is Trump More Worried About: Coronavirus Numbers or Coronavirus Patients?" *Washington Post*, March 7, 2020, <https://www.washingtonpost.com>

- st.com/politics/2020/03/07/which-is-trump-more-worried-about-coronavirus-numbers-or-coronavirus-patients/.
5. Mike Baker et al., “Washington State Declares Emergency amid Coronavirus Death and Illnesses at Nursing Home,” *New York Times*, February 29, 2020, <https://www.nytimes.com/2020/02/29/us/coronavirus-washington-death.html>.
  6. Scottie Andrew and Jessie Yeung, “Masks Can’t Stop the Coronavirus in the US, but Hysteria Has Led to Bulk-Buying, Price-Gouging and Serious Fear for the Future,” CNN, February 29, 2020, <https://www.cnn.com/2020/02/29/health/coronavirus-mask-hysteria-us-trnd/index.html>.
  7. Jacqueline Howard, “Masks May Actually Increase Your Coronavirus Risk If Worn Improperly, Surgeon General Warns,” CNN, March 2, 2020, <https://www.cnn.com/2020/03/02/health/surgeon-general-coronavirus-masks-risk-trnd/index.html>.
  8. Daniele Macchini, “In una delle constanti . . .,” Facebook, March 6, 2020, <https://www.facebook.com/photo.php?fbid=3395151233834056&set=a.442367822445760&type=3>.
  9. Silvia Stringhini (@silviast9), “1/I may be repeating myself, but I want to fight this sense of security that I see outside of the epicenters, as if nothing was going to happen ‘here.’ The media in Europe are reassuring, while there’s little to be reassured of. #COVID19 #coronavirus,” Twitter, March 9, 2020, 4:36 a.m., <https://twitter.com/silviast9/status/1236933818654896129?s=20>.
  10. Jason Horowitz, “Italy Announces Restrictions over Entire Country in Attempt to Halt Coronavirus,” *New York Times*, March 9, 2020, <https://www.nytimes.com/2020/03/09/world/europe/italy-lockdown-coronavirus.html>.
  11. Rachel Sandler, “How the CDC Botched Its Initial Coronavirus Response with Faulty Tests,” *Forbes*, March 2, 2020, <https://www.forbes.com/sites/rachelsandler/2020/03/02/how-the-cdc-botched-its-initial-coronavirus-response-with-faulty-tests/?sh=5272818d670e>.
  12. Barbara J. Culliton, “Bush Goes 0 for 2 with Anthony Fauci,” *Science* 246, no. 4932 (November 1989), <https://science.sciencemag.org/content/246/4932/880>.
  13. Barbara J. Culliton, “Help Wanted: Director, NIH,” *Science* 245, no. 4923 (September 1989), <https://science.sciencemag.org/content/245/4923/1181>.
  14. Ushma S. Neill, “A Conversation with Tony Fauci,” *Journal of Clinical Investigation* 124, no. 7 (July 2014): 2814–15, <https://www.jci.org/articles/view/77277>.
  15. “President Bush Honors Presidential Medal of Freedom Recipients,” White House website archives, June 19, 2008, <https://georgewbush-whitehouse.archives.gov/news/releases/2008/06/20080619-9.html>.
  16. Molly Roberts, “Anthony Fauci Built a Truce. Trump Is Destroying It,” *Washington Post*, July 16, 2020, <https://www.washingtonpost.com/opinions/2020/07/16/anthony-fauci-built-truce-trump-is-destroying-it/>.
  17. Denise Grady, “Not His First Epidemic: Dr. Anthony Fauci Sticks to the Facts,” *New York Times*, March 8, 2020, <https://www.nytimes.com/2020/03/08/health/fauci-coronavirus.html>.

## 6: Fifteen Days

1. Sam Quinn, “Rudy Gobert Touched Every Microphone at Jazz Media Availability Monday, Now Reportedly Has Coronavirus,” CBS, March 12, 2020, <https://www.cbssports.com/nba/news/rudy-gobert-touched-every-microphone-at-jazz-media-availability-monday-now-reportedly-has-coronavirus/>.

2. Jake Russell, “Rudy Gobert Contracted the Coronavirus in March. He Still Can’t Smell Properly,” *Washington Post*, June 28, 2020, <https://www.washingtonpost.com/sports/2020/06/28/rudy-gobert-contracted-coronavirus-march-he-still-cant-smell-properly/>.
3. Jenni Carlson, “Carlson: Yes, Jazz Star Rudy Gobert Was a Goob about COVID, but He’s Also Become an Accidental Hero,” *The Oklahoman*, March 15, 2020, <https://www.oklahoman.com/article/5657635/coronavirus-in-oklahoma-yes-jazz-star-rudy-gobert-was-a-goob-but-hes-also-become-an-accidental-hero>.
4. ESPN, “Mark Cuban Reacts to NBA Suspending Season Due to Coronavirus: NBA on ESPN,” YouTube, March 11, 2020, <https://www.youtube.com/watch?v=b2-wU42KJ0c>.
5. Ken Davidoff, “The Night Baseball Returned after 9/11: These People Needed This,” *New York Post*, September 11, 2019, <https://nypost.com/2019/09/11/two-braves-greats-relive-night-baseball-returned-to-nyc-after-9-11/>.
6. Anthony D’Alessandro, “Tom Hanks & Rita Wilson Test Positive for Coronavirus as Outbreak Hits ‘Elvis Presley’ Film,” *Deadline*, March 11, 2020, <https://deadline.com/2020/03/tom-hanks-rita-wilson-20h-positive-coronavirus-elvis-presley-movie-1202880431/>.
7. “WHO Director-General’s Opening Remarks at the Media Briefing on COVID-19—11 March 2020,” World Health Organization, March 11, 2020, <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19—11-march-2020>.
8. Laurel Wamsley, “March 11, 2020: The Day Everything Changed,” NPR, March 11, 2021, <https://www.npr.org/2021/03/11/975663437/march-11-2020-the-day-everything-changed>.
9. Keith Collins and David Yaffe-Bellany, “About 2 Million Guns Were Sold in the U.S. As Virus Fears Spread,” *New York Times*, April 1, 2020, <https://www.nytimes.com/interactive/2020/04/01/business/coronavirus-gun-sales.html>.
10. Eliza Shapiro, “New York City Public Schools to Close to Slow Spread of Coronavirus,” *New York Times*, March 15, 2020, <https://www.nytimes.com/2020/03/15/nyregion/nyc-schools-closed.html>.
11. Chelsea Bruce Lockhart et al., “The Shocking Coronavirus Study That Rocked the UK and US,” *Financial Times*, March 19, 2020, <https://www.ft.com/content/16764a22-69ca-11ea-a3c9-1fe6fedcca75>.
12. Chloé Hecketsweiler and Cédric Pietralunga, “Coronavirus: Les Simulations Alarmantes des Épidémiologistes pour la France,” *Le Monde*, March 15, 2020, [https://www.lemonde.fr/planete/article/2020/03/15/coronavirus-les-simulations-alarmantes-des-epidemiologistes-pour-la-france\\_6033149\\_3244.html](https://www.lemonde.fr/planete/article/2020/03/15/coronavirus-les-simulations-alarmantes-des-epidemiologistes-pour-la-france_6033149_3244.html).
13. Joanna Wilson, “Theoretical Physics to Pandemic Modelling: Neil Ferguson on His Life in Science,” Imperial College London, September 24, 2020, <https://www.imperial.ac.uk/news/205053/theoretical-physics-pandemic-modelling-neil-ferguson/>.
14. Kate Wong, “‘Mad Cow’ Sheep in Britain Could Increase the Human Death Toll,” *Scientific American*, January 10, 2002, <https://www.scientificamerican.com/article/mad-cow-sheep-in-britain/>.
15. “Variant Creutzfeldt-Jakob Disease Current Data (February 2015),” University of Edinburgh, February 13, 2015, available at the Wayback Machine at <https://web.archive.org/web/20150226031911/http://www.cjd.ed.ac.uk/documents/worldfigs.pdf>.
16. James Sturcke, “Bird Flu Pandemic ‘Could Kill 150M,’” *The Guardian*, September 30, 2005, <https://www.theguardian.com/world/2005/sep/30/birdflu.jamessturcke>.
17. “Cumulative Number of Confirmed Human Cases for Avian Influenza A(H5N1) Reported to WHO, 2003–2011,” World Health Organization, August 19, 2011, <https://>

- [www.who.int/influenza/human\\_animal\\_interface/EN\\_GIP\\_20110819CumulativeNumberH5N1casesN.pdf?ua=1](http://www.who.int/influenza/human_animal_interface/EN_GIP_20110819CumulativeNumberH5N1casesN.pdf?ua=1).
18. “WHO Collaborating Centre for Infectious Disease Modeling,” World Health Organization, <https://apps.who.int/whocc/Detail.aspx?FjdjEEdrCMNfOU4d+dseSg==>.
  19. Mark Landler and Stephen Castle, “Behind the Virus Report That Jarred the U.S. and the U.K. to Action,” *New York Times*, March 17, 2020, <https://www.nytimes.com/2020/03/17/world/europe/coronavirus-imperial-college-johnson.html>.
  20. Deirdre Hine, “The 2009 Influenza Pandemic,” Pandemic Flu Response Review Team, July 2010, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/61252/the2009influenzapandemic-review.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/61252/the2009influenzapandemic-review.pdf).
  21. “Scientific Advice and Evidence in Emergencies—Science and Technology Committee,” Parliament of the United Kingdom, March 2, 2011, <https://publications.parliament.uk/pa/cm201011/cmselect/cmsctech/498/49803.htm>.
  22. Mark Landler and Stephen Castle, “The Secretive Group Guiding the U.K. on Coronavirus,” *New York Times*, April 23, 2020, <https://www.nytimes.com/2020/04/23/world/europe/uk-coronavirus-sage-secret.html>.
  23. Mark Landler and Stephen Castle, “For Boris Johnson’s Science Advisers, Pressure, Anxieties and ‘Pastoral Support,’” *New York Times*, June 26, 2020, <https://www.nytimes.com/2020/06/26/world/europe/sage-britain-coronavirus-ferguson.html>.
  24. Bill Bostock, “How ‘Professor Lockdown’ Helped Save Tens of Thousands of Lives Worldwide—and Carried COVID-19 into Downing Street,” *Business Insider*, April 25, 2020, <https://www.businessinsider.com/neil-ferguson-transformed-uk-covid-response-oxford-challenge-imperial-model-2020-4>.
  25. Ian Sample et al., “Sage Minutes Reveal How UK Advisers Reacted to Coronavirus Crisis,” *The Guardian*, May 29, 2020, <https://www.theguardian.com/world/2020/may/29/sage-minutes-reveal-how-uk-advisers-reacted-to-coronavirus-crisis>.
  26. David Adam, “Special Report: The Simulations Driving the World’s Response to COVID-19,” *Nature*, April 2, 2020, <https://www.nature.com/articles/d41586-020-01003-6>.
  27. Xihong Lin, “Learning from 26,000 Cases of COVID-19 in Wuhan,” Google Docs, March 20, 2020, [https://docs.google.com/presentation/d/1-rvZs0zsXF\\_0Tw8TNsBxKH4V1LQXq7Az9kDfCgZDfE/edit#slide=id.p1](https://docs.google.com/presentation/d/1-rvZs0zsXF_0Tw8TNsBxKH4V1LQXq7Az9kDfCgZDfE/edit#slide=id.p1).
  28. Landler and Castle, “Behind the Virus Report That Jarred the U.S. and the U.K. to Action.”
  29. Freddie Sayers, “Neil Ferguson Interview: China Changed What Was Possible,” *UnHerd*, December 26, 2020, <https://unherd.com/thepost/neil-ferguson-interview-china-changed-what-was-possible/>.
  30. William Booth, “A Chilling Scientific Paper Helped Upend U.S. and U.K. Coronavirus Strategies,” *Washington Post*, March 17, 2020, [https://www.washingtonpost.com/world/europe/a-chilling-scientific-paper-helped-upend-us-and-uk-coronavirus-strategies/2020/03/17/aaa84116-6851-11ea-b199-3a9799c54512\\_story.html](https://www.washingtonpost.com/world/europe/a-chilling-scientific-paper-helped-upend-us-and-uk-coronavirus-strategies/2020/03/17/aaa84116-6851-11ea-b199-3a9799c54512_story.html).
  31. James Gallagher, “Coronavirus: UK Changes Course amid Death Toll Fears,” *BBC*, March 17, 2020, <https://www.bbc.com/news/health-51915302>.
  32. Jeremy C. Young (@jeremycyoung), “We can now read the Imperial College report on COVID-19 that led to the extreme measures we’ve seen in the US this week. Read it; it’s terrifying. I’ll offer a summary in this thread; please correct me if I’ve gotten it wrong,” *Twitter*, March 17, 2020, 2:03 p.m., <https://twitter.com/jeremycyoung/status/1239975682643357696?lang=en>.

33. “Field Briefing: Diamond Princess COVID-19 Cases, 20 Feb Update,” National Institute of Infectious Diseases, February 21, 2020, <https://www.niid.go.jp/niid/en/2019-ncov-e/9417-covid-dp-fe-02.html>.
34. “Sorveglianza Integrata COVID-19 in Italia,” Epicentro, February 27, 2020, [https://www.epicentro.iss.it/coronavirus/bollettino/Infografica\\_16marzo%20ITA.pdf](https://www.epicentro.iss.it/coronavirus/bollettino/Infografica_16marzo%20ITA.pdf).
35. Tina Reed, “NIH’s Fauci on Coronavirus: ‘The Risk Group Is Very, Very Clear,’” *Fierce Healthcare*, March 9, 2020, <https://www.fiercehealthcare.com/practices/fauci-offers-update-coronavirus-to-jama-for-clinicians>.
36. Andrew Joseph, “U.S. Official Says Data Show Severe Coronavirus among Millennials, Not Just Older Americans,” *Stat News*, March 18, 2020, <https://www.statnews.com/2020/03/18/u-s-official-says-data-show-severe-coronavirus-infections-among-millennials-not-just-older-americans/>.
37. Rory Carroll, “Coronavirus Is a Threat to Young People Too, U.S. Official Fauci Tells NBA Star Curry,” *Reuters*, March 26, 2020, <https://www.reuters.com/article/us-health-coronavirus-curry-fauci/coronavirus-is-a-threat-to-young-people-too-u-s-official-fauci-tells-nba-star-curry-idUSKBN21D3GN>.
38. “Options for Increasing Adherence to Social Distancing Measures,” SAGE, March 22, 2020, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/882722/25-options-for-increasing-adherence-to-social-distancing-measures-22032020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882722/25-options-for-increasing-adherence-to-social-distancing-measures-22032020.pdf).
39. Barry S. Coller, “AIDS and Civil Liberties,” *New York Times*, June 26, 1983, <https://www.nytimes.com/1983/06/26/nyregion/aids-and-civil-liberties.html>.
40. Annika Olson, “An Open Letter to My Peers Partying on the Beach,” *CNN*, March 19, 2020, <https://www.cnn.com/2020/03/19/opinions/spring-breakers-coronavirus-warning-olson/index.html>.
41. Josh K. Elliott, “COVIDIOTS: New Name for Shaming Ignorant, Selfish Coronavirus Reactions,” *Global News*, March 23, 2020, <https://globalnews.ca/news/6717139/covid-iots-coronavirus/>.

## 7: Following the Science

1. “UCSC Genome Browser on SARS-Cov-2 Jan. 2020/NC\_045512.2 Assembly (wuhCor1),” University of California at Santa Cruz, [http://genome.ucsc.edu/cgi-bin/hgTracks?db=wuhCor1&lastVirtModeType=default&lastVirtModeExtraState=&virtModeType=default&virtMode=0&nonVirtPosition=&cposition=NC\\_045512v2%3A14916%2D14987&hgslid=1102816655\\_teyySluTHY4jScJU5DrUZNrvoBTu](http://genome.ucsc.edu/cgi-bin/hgTracks?db=wuhCor1&lastVirtModeType=default&lastVirtModeExtraState=&virtModeType=default&virtMode=0&nonVirtPosition=&cposition=NC_045512v2%3A14916%2D14987&hgslid=1102816655_teyySluTHY4jScJU5DrUZNrvoBTu).
2. Victor M. Corman et al., “Detection of 2019 Novel Coronavirus (2019-nCoV) by Real-Time RT-PCR,” *Eurosurveillance* 25, no. 3 (January 2020), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6988269/pdf/eurosurv-25-3-5.pdf>.
3. Kary B. Mullis and Michael Smith, “The Nobel Prize in Chemistry 1993,” Nobel Prize website, 1993, <https://www.nobelprize.org/prizes/chemistry/1993/summary/>.
4. James McGirk, “UCSC Genome Browser Posts the Coronavirus Genome,” Baskin School of Engineering, University of California at Santa Cruz, February 7, 2020, <https://www.soe.ucsc.edu/news/ucsc-genome-browser-posts-coronavirus-genome>.
5. I. Hamming et al., “Tissue Distribution of ACE2 Protein, the Functional Receptor for SARS Coronavirus. A First Step in Understanding SARS Pathogenesis,” *Journal of Pathology* 203, no. 2 (June 2004): 631–37, <https://pubmed.ncbi.nlm.nih.gov/15141377/>.
6. Daniel Wrapp et al., “Cryo-EM Structure of the 2019-nCoV Spike in the Prefusion Conformation,” *Science* 367, no. 6483 (March 2020): 1260–63, <https://pubmed.ncbi.nlm.nih.gov/32075877/>.



7. Shuai Xia et al., “The Role of Furin Cleavage Site in SARS-CoV-2 Spike Protein-Mediated Membrane Fusion in the Presence or Absence of Trypsin,” *Signal Transduction and Targeted Therapy* 5, no. 92 (2020), <https://www.nature.com/articles/s41392-020-0184-0>.
8. Charles Calisher et al., letter to the editor, *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).
9. Angela N. Baldwin, “Doctors Rush to Understand COVID-19’s Second Week Crash,” ABC News, May 6, 2020, <https://abcnews.go.com/Health/doctors-rush-understand-covid-19s-week-crash/story?id=70457111>.
10. Martin J. Vincent et al., “Chloroquine Is a Potent Inhibitor of SARS Coronavirus Infection and Spread,” *Virology Journal* 2, no. 69 (August 2005), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1232869/>.
11. Jianjun Gao et al., “Breakthrough: Chloroquine Phosphate Has Shown Apparent Efficacy in Treatment of COVID-19 Associated Pneumonia in Clinical Studies,” *Biosci Trends* 14, no. 1 (March 2020): 72–73, <https://pubmed.ncbi.nlm.nih.gov/32074550/>.
12. Lev Facher, “Trump Says His Belief in One Potential Coronavirus Drug Is ‘Just a Feeling,’” *Stat News*, March 20, 2020, <https://www.statnews.com/2020/03/20/trump-coronavirus-drug-just-a-feeling/>.
13. Ariana Eunjung Cha and Laurie McGinley, “Antimalarial Drug Touted by President Trump Is Linked to Increased Risk of Death in Coronavirus Patients, Study Says,” *Washington Post*, May 22, 2020, <https://www.washingtonpost.com/health/2020/05/22/hydroxychloroquine-coronavirus-study/>.
14. Mandeep R. Mehra et al., “Retracted: Hydroxychloroquine or Chloroquine with or without a Macrolide for Treatment of COVID-19: A Multinational Registry Analysis,” *The Lancet*, May 22, 2020, <https://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2820%2931180-6/fulltext>.
15. “NIH Trial of Remdesivir to Treat COVID-19 Begins,” National Institutes of Health, February 25, 2020, <https://www.nih.gov/news-events/news-releases/nih-clinical-trial-remdesivir-treat-covid-19-begins>.
16. “NIH Clinical Trial Shows Remdesivir Accelerates Recovery from Advanced COVID-19,” National Institutes of Health, April 29, 2020, <https://www.nih.gov/news-events/news-releases/nih-clinical-trial-shows-remdesivir-accelerates-recovery-advanced-covid-19>.
17. Berkeley Lovelace Jr., “Dr. Anthony Fauci Says Gilead’s Remdesivir Will Set a New ‘Standard of Care’ for Coronavirus Treatment,” CNBC, April 29, 2020, <https://www.cnbc.com/2020/04/29/dr-anthony-fauci-says-data-from-remdesivir-coronavirus-drug-trial-shows-quite-good-news.html>.
18. John H. Beigel et al., “Remdesivir for the Treatment of Covid-19—Final Report,” *New England Journal of Medicine* 383 (November 2020): 1813–26, <https://www.nejm.org/doi/full/10.1056/nejmoa2007764>.
19. Noah Higgins-Dunn, “Gilead’s \$1.5B in Remdesivir Sales Help Buoy Worse-than-Expected Declines for Mainstay HIV, Hepatitis C Drugs,” *Fierce Pharma*, April 30, 2021, <https://www.fiercepharma.com/pharma/gilead-s-1-5b-remdesivir-sales-help-buoy-greater-than-expected-declines-for-mainstay-hiv>.
20. Ivan O. Rosas et al., “Tocilizumab in Hospitalized Patients with Severe Covid-19 Pneumonia,” *New England Journal of Medicine* 384 (April 2021): 1503–1516, <https://www.nejm.org/doi/full/10.1056/NEJMoa2028700>.
21. Elisabeth Mahase, “Covid-19: Low-Dose Steroid Cuts Death in Ventilated Patients by One Third, Trial Finds,” *British Medical Journal* 369 (June 2020), <https://www.bmj>

- .com/content/369/bmj.m2422?ikey=1de0e606079f59110fa314b0a0cb0a159e4cc6ee&keytype2=tf\_ipsecsha.
22. Atul Matta et al., “Timing of Intubation and Its Implications on Outcomes in Critically Ill Patients with Coronavirus 2019 Infection,” *Critical Care Explorations* 2, no. 10 (October 2020), [https://journals.lww.com/ccejournal/fulltext/2020/10000/timing\\_of\\_intubation\\_and\\_its\\_implications\\_on.47.aspx#JCL-P-5](https://journals.lww.com/ccejournal/fulltext/2020/10000/timing_of_intubation_and_its_implications_on.47.aspx#JCL-P-5).
  23. Isaac Sher, “Italian Doctor Who Warned of Medical Supply Shortages to Fight Coronavirus Has Now Died from the Disease,” Business Insider, March 20, 2020, <https://www.businessinsider.com/italian-doctor-dies-from-coronavirus-covid-19-after-warning-low-supplies-2020-3?op=1>.
  24. Thomas Kirsch, “What Happens If Health-Care Workers Stop Showing Up?” *The Atlantic*, March 24, 2020, <https://www.theatlantic.com/ideas/archive/2020/03/were-failing-doctors/608662/>.
  25. “Coronavirus (COVID-19) Update: FDA Takes Action to Help Increase U.S. Supply of Ventilators and Respirators for Protection of Health Care Workers, Patients,” U.S. Food & Drug Administration, March 27, 2020, <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-takes-action-help-increase-us-supply-ventilators-and-respirators>.
  26. Alex Berenson (@AlexBerenson), “1/ Almost 90% of NYC patients put on ventilators...,” Twitter, April 23, 2020, 4:16 p.m., <https://twitter.com/alexberenson/status/1253417451754098689?lang=en>, including a screenshot of Meredith (@thisismeredith), “One problem is the sheer number...,” Twitter, March 25, 2020, 7:50 a.m. My tweet and part of the screenshot are available at the Wayback Machine, <https://web.archive.org/web/20210811210154/https://twitter.com/alexberenson/status/1253417451754098689>. The complete screenshot is in my possession.
  27. Sharon Begley, “With Ventilators Running Out, Doctors Say the Machines Are Overused for Covid-19,” Stat News, April 8, 2020, <https://www.statnews.com/2020/04/08/doctors-say-ventilators-overused-for-covid-19/>.
  28. Safiya Richardson et al., “Presenting Characteristics, Comorbidities, and Outcomes among 5700 Patients Hospitalized with COVID-19 in the New York City Area,” *Journal of the American Medical Association* 323, no. 20 (April 2020): 2052–59, <https://jamanetwork.com/journals/jama/fullarticle/2765184>.

## 8: The Star of New York

1. Jeffrey Toobin, “The Albany Chronicles,” *New Yorker*, February 9, 2015, <https://www.newyorker.com/magazine/2015/02/16/albany-chronicles>.
2. “Coronavirus Pandemic Pushes Cuomo to Record High Ratings; Voters Trust Cuomo over Trump on NY Reopening 78–16%,” April 27, 2020, Siena College Research Institute, <https://scri.siena.edu/2020/04/27/coronavirus-pandemic-pushes-cuomo-to-record-high-ratings-voters-trust-cuomo-over-trump-on-ny-reopening-78-16/>.
3. Jackie Willis, “Andrew Cuomo’s Celebrity Admirers: Jada Pinkett Smith, Chelsea Handler and More,” ET Online, April 30, 2020, <https://www.etonline.com/andrew-cuomos-celebrity-admirers-jada-pinkett-smith-chelsea-handler-and-more-145755>.
4. Will Feuer et al., “Gov. Cuomo Says New York City Will Not Be Quarantined: ‘It Cannot Happen,’” CNBC, March 17, 2020, <https://www.cnbc.com/2020/03/17/gov-cuomo-says-new-york-city-will-not-be-quarantined-it-cannot-happen.html>.
5. Reuters, “‘I’m Not Going to Do It,’ Cuomo Says of Shelter in Place,” *New York Times*, March 19, 2020, <https://www.nytimes.com/video/us/politics/100000007043194/cuomo-coronavirus.html>.

6. “43 Coronavirus Deaths and Over 5,600 Cases in N.Y.C.,” *New York Times*, March 20, 2020, <https://www.nytimes.com/2020/03/20/nyregion/coronavirus-new-york-up-date.html>.
7. Jeremy Berke, “New York City’s Mayor Warns April and May Are Going to Be ‘a Lot Worse’ than March as Coronavirus Cases Surge,” *Business Insider*, March 22, 2020, <https://www.businessinsider.com/coronavirus-nyc-mayor-deblasio-april-may-worse-than-march-2020-3>.
8. Associated Press, “U.S. Hospitals Brace for ‘Tremendous Strain’ from New Virus,” *WTOP News*, March 13, 2020, <https://wtop.com/coronavirus/2020/03/u-s-hospitals-brace-for-tremendous-strain-from-new-virus/>.
9. Amanda MacMillan, “Hospitals Overwhelmed by Flu Patients Are Treating Them in Tents,” *Time*, January 18, 2018, <https://time.com/5107984/hospitals-handling-burden-flu-patients/>.
10. Tom Kertscher, “No, Empty Hospital Beds Do Not Indicate COVID-19 Is ‘Fake Crisis,’” *PolitiFact*, April 3, 2020, <https://www.politifact.com/factchecks/2020/apr/03/facebook-posts/hospital-beds-being-kept-empty-prepare-covid-influ/>.
11. Sam Roberts, “Alan Finder, 72, Unflappable Newspaper Journalist, Dies,” *New York Times*, March 27, 2020, <https://www.nytimes.com/2020/03/27/obituaries/alan-finder-dead-coronavirus.html>.
12. Michael Schulman, “Rage for Terrence McNally,” *New Yorker*, March 27, 2020, <https://www.newyorker.com/culture/postscript/rage-for-terrence-mcnally>.
13. Gwen Aviles, “Terrence McNally, Award-Winning Playwright, Dies from Coronavirus Complications,” *NBC News*, March 24, 2020, <https://www.nbcnews.com/pop-culture-news/award-winning-playwright-terrence-mcnally-dies-coronavirus-complications-n1167856>.
14. Daniella Silva, “‘So Many Patients Dying’: Doctors Say NYC Public Hospitals Reeling from Coronavirus Cases,” *NBC News*, March 30, 2020, <https://www.nbcnews.com/news/us-news/so-many-patients-dying-doctors-say-nyc-public-hospitals-reeling-n1172451>.
15. Michael Rothfeld et al., “13 Deaths in a Day: An ‘Apocalyptic’ Coronavirus Surge at an N.Y.C. Hospital,” *New York Times*, March 25, 2020, <https://www.nytimes.com/2020/03/25/nyregion/nyc-coronavirus-hospitals.html>.
16. Michael Schwartz, “Nurses Die, Doctors Fall Sick and Panic Rises on Virus Front Lines,” *New York Times*, March 30, 2020, <https://www.nytimes.com/2020/03/30/nyregion/ny-coronavirus-doctors-sick.html>.
17. Andrew Jacobs et al., “Amid Desperate Need for Ventilators, Calls Grow for Federal Intervention,” *New York Times*, March 25, 2020, <https://www.nytimes.com/2020/03/25/health/ventilators-coronavirus.html>.
18. Brian M. Rosenthal et al., “‘The Other Option Is Death’: New York Starts Sharing of Ventilators,” *New York Times*, March 26, 2020, <https://www.nytimes.com/2020/03/26/health/coronavirus-ventilator-sharing.html>.
19. Jeremy R. Beitler et al., “Ventilator Sharing during an Acute Shortage Caused by the COVID-19 Pandemic,” *American Journal of Respiratory and Critical Care Medicine* 202, no. 4 (August 2020): 600–604, <https://www.atsjournals.org/doi/10.1164/rccm.202005-1586LE>.
20. Sarah Kliff et al., “There Aren’t Enough Ventilators to Cope with the Coronavirus,” *New York Times*, March 18, 2020, <https://www.nytimes.com/2020/03/18/business/coronavirus-ventilator-shortage.html>.
21. Geoff Herbert, “Cuomo Refutes Trump, Insists NY Needs up to 40,000 Ventilators: ‘I Operate on Facts,’” *Syracuse.com*, March 27, 2020, <https://www.syracuse.com/co>

- ronavirus/2020/03/cuomo-refutes-trump-insists-ny-needs-up-to-40000-ventilators-i-operate-on-facts.html.
22. Martin Kaste and Rebecca Hersher, “Ventilator Shortages Loom as States Ponder Rules for Rationing,” NPR, April 3, 2020, <https://www.npr.org/sections/health-shots/2020/04/03/826082727/ventilator-shortages-loom-as-states-ponder-rules-for-rationing>.
  23. Tom Woods (@ThomasEWoods), “As @AlexBerenson points out, 7% of the U.S. population is about 23 million people. I’d point this out to @MollyJongFast, but she’ll just tell me to wait two weeks,” Twitter, May 27, 2020, 9:17 p.m., <https://twitter.com/ThomasEWoods/status/1265814472926650368>.
  24. Dr. Tom Frieden (@DrTomFrieden), “I hear sirens in NYC all day. @nycHealthy released today’s data: on.nyc.gov/2wKiten. Yesterday 672 deaths, today 776. 104 more of my neighbors killed by #COVID19. In one day. 104. On average pre-covid 147 deaths/day. Increase of 60%. Words & tears cannot express the tragedy,” Twitter, March 29, 2020, 8:00 p.m., <https://mobile.twitter.com/drtomfrieden/status/1244414181048291329>.
  25. Devon Link, “Fact Check: NYC Is Not Planning to Use Trenches in Parks as Burial Grounds,” *USA Today*, April 11, 2020, <https://www.usatoday.com/story/news/factcheck/2020/04/11/fact-check-nyc-wont-use-local-parks-temporary-burial-grounds/5133460002/>.
  26. Greg Allen and Scott Neuman, “New York City Has Contingency Plan for Temporary Burials of COVID-19 Dead,” NPR, April 6, 2020, <https://www.npr.org/sections/coronavirus-live-updates/2020/04/06/828289698/new-york-city-plans-to-temporarily-bury-dead>.
  27. Matt Hickman, “New York’s Javits Center Completes Transformation into 1,200 Bed Emergency Hospital,” *Architect’s Newsletter*, March 30, 2020, <https://www.archpaper.com/2020/03/new-york-javits-center-coronavirus-emergency-hospital/>.
  28. “Samaritan’s Purse, in Collaboration with Mount Sinai Health System, Opens Emergency Field Hospital in New York’s Central Park in Response to the Coronavirus Pandemic,” Mount Sinai, April 1, 2020, <https://www.mountsinai.org/about/newsroom/2020/samaritans-purse-in-collaboration-with-mount-sinai-health-system-opens-emergency-field-hospital-in-new-yorks-central-park-in-response-to-the-coronavirus-pandemic-pr>.
  29. Steve Schmidt (@SteveSchmidtSES), “Trump is incompetent, dishonest, and profoundly indecent. His staggering incapacity for moral leadership in this unprecedented moment is hard to overstate. His empty boasting, dishonesty, blame gaming, lack of empathy and fragile ego are a deadly combination of traits right now,” Twitter, March 22, 2020, 6:58 p.m., <https://twitter.com/SteveSchmidtSES/status/1241861791233212416>.
  30. Michelle Goldberg (@michelleinbklyn), “Journalists are concentrated in cities that are being ravaged by a plague that could have been better contained with a competent president. They’re lonely and scared and reporting while homeschooling their kids. No one feels glee or delight. Some of us feel white hot rage,” Twitter, March 29, 2020, 11:25 a.m., <https://twitter.com/michelleinbklyn/status/1244284645849681922>.
  31. Dr. Steven W. Thrasher (@thrasherxy), “Just ‘attended’ my first Zoom funeral and let me just say Fuck all of this. Fuck COVID-19. Fuck Trump letting it rip thru our most vulnerable. Fuck the alienation of a crisis that forbids gathering & touch. & fuck the racism, transphobia & xenophobia that lead us here,” Twitter, March 30, 2020, 9:10 p.m., <https://twitter.com/thrasherxy/status/1244794233250349057?lang=en>.
  32. Andrew Solender, “All the Times Trump Has Promoted Hydroxychloroquine,” *Forbes*, May 22, 2020, <https://www.forbes.com/sites/andrewsolender/2020/05/22/all-the-times-trump-promoted-hydroxychloroquine/?sh=7e7f7aaf4643>.

33. Meridith McGraw and Sam Stein, “It’s Been Exactly One Year Since Trump Suggested Injecting Bleach. We’ve Never Been the Same,” *Politico*, April 23, 2021, <https://www.politico.com/news/2021/04/23/trump-bleach-one-year-484399>.
34. “Coronavirus: Outcry after Trump Suggests Injecting Disinfectant as Treatment,” *BBC*, April 24, 2020, <https://www.bbc.com/news/world-us-canada-52407177>.
35. Aaron Rupar, “‘This Is Just My Hunch’: Trump Goes on Fox News and Spreads Misinformation about the Coronavirus,” *Vox*, March 5, 2020, <https://www.vox.com/2020/3/5/21166031/trump-hannity-coronavirus-who-death-rate>.
36. Quint Forgey, “Trump Floats His Own Coronavirus Hunches on ‘Hannity,’” *Politico*, March 5, 2020, <https://www.politico.com/news/2020/03/05/trump-disputes-coronavirus-death-rate-121892>.
37. Philip Bump, “Trump’s Habit of Fudging Inconvenient Numbers Enters Dangerous Territory,” *Washington Post*, March 5, 2020, <https://www.washingtonpost.com/politics/2020/03/05/trumps-habit-fudging-inconvenient-numbers-enters-dangerous-territory/>.
38. “COVID-19 Integrated Surveillance Data in Italy,” EpiCentro, <https://www.epicentro.iss.it/en/coronavirus/sars-cov-2-dashboard>.
39. Zack Jones, “Trump’s 2020 Presidential Election Odds Fall as Coronavirus Stalls US Economy,” *Forbes*, March 26, 2020, <https://www.forbes.com/sites/zackjones/2020/03/26/trumps-2020-presidential-election-odds-fall-as-recession-fears-grow-amid-coronavirus-pandemic/?sh=4f5cec4b4a44>.
40. “Unemployment Rate,” Federal Reserve Economic Data, last updated July 2, 2020, <https://fred.stlouisfed.org/series/UNRATE#0>.
41. Ayesha Rascoe, “Trump Resists Using Wartime Law to Get, Distribute Coronavirus Supplies,” *NPR*, March 25, 2020, <https://www.npr.org/2020/03/25/821285204/trump-sends-mixed-messages-about-invoking-defense-production-act>.
42. Zolan Kanno-Youngs and Ana Swanson, “Wartime Production Law Has Been Used Routinely, but Not with Coronavirus,” *New York Times*, March 31, 2020, <https://www.nytimes.com/2020/03/31/us/politics/coronavirus-defense-production-act.html?smid=tw-nytimes&smtyp=cur>.
43. Neil A. Halpern and Kay See Tan, “United States Resource Availability for COVID-19,” *Society of Critical Care Medicine*, May 12, 2020, <https://sccm.org/getattachment/Blog/March-2020/United-States-Resource-Availability-for-COVID-19/United-States-Resource-Availability-for-COVID-19.pdf?lang=en-US>.
44. “We’re in This Together—Washington State to Send Ventilators,” *Washington Governor Jay Inslee*, April 5, 2020, <https://www.governor.wa.gov/news-media/we%E2%80%99re-together-%E2%80%93-washington-state-send-ventilators>.
45. Justin P. Hicks, “Michigan to Get 100 Ventilators from New York, Where Coronavirus Has Hit Hardest,” *Michigan Live*, April 15, 2020, <https://www.mlive.com/public-interest/2020/04/michigan-to-get-100-ventilators-from-new-york-where-coronavirus-has-hit-hardest.html>.
46. “Study Suggests Possible New COVID-19 Timeline in the U.S.,” *American Red Cross*, December 1, 2020, <https://www.redcross.org/about-us/news-and-events/press-release/2020/study-suggests-possible-new-covid-19-timeline-in-the-us.html>.

## 9: Twisting the Kaleidoscope

1. Alex Berenson (@AlexBerenson), “Coronavirus is coming...” *Twitter*, February 22, 2020, 11:18 a.m., <https://twitter.com/alexberenson/status/1231252028417957888?lang=en>. Screenshot in my possession.

2. *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research* (Washington, D.C.: National Academies Press, 2017), <https://www.ncbi.nlm.nih.gov/books/NBK425748/>.
3. Malcolm Gladwell, "Is Marijuana as Safe as We Think?" *New Yorker*, January 7, 2019, <https://www.newyorker.com/magazine/2019/01/14/is-marijuana-as-safe-as-we-think>.
4. "Oral Evidence: UK Science, Research and Technology Capability and Influence in Global Disease Outbreaks, HC 136," Science and Technology Committee, House of Commons, March 25, 2020, <https://committees.parliament.uk/oralevidence/237/html/>.
5. Neil M. Ferguson et al., "Report 9: Impact of Non-Pharmaceutical Interventions (NPIs) to Reduce COVID-19 Mortality and Healthcare Demand," Imperial College COVID-19 Response Team, March 16, 2020, <https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf>.
6. "Oral Evidence."
7. David Adam, "UK Has Enough Intensive Care Units for Coronavirus, Expert Predicts," *New Scientist*, March 25, 2020, <https://www.newscientist.com/article/2238578-uk-has-enough-intensive-care-units-for-coronavirus-expert-predicts/>.
8. Jemima Kelly, "Let's Flatten the Coronavirus Confusion Curve," *Financial Times*, March 27, 2020, <https://www.ft.com/content/64b06b64-1400-426d-a147-075f806b94e6>.
9. Alex Berenson, "Eli Lilly Said to Play Down Risk of Top Pill," *New York Times*, December 17, 2006, <https://www.nytimes.com/2006/12/17/business/17drug.html>.
10. Jim Romenesko, "Judge: Berenson's Actions 'Reprehensible' in Lilly Leak Case," Poynter, February 14, 2007, <https://www.poynter.org/reporting-editing/2007/judge-berensons-actions-reprehensible-in-lilly-leak-case/>.

## 10: My Father and Me

1. Maggie Haberman (@maggieNYT), "A view of @AlexBerenson threads, which are making their way around the White House among some senior officials >," Twitter, April 5, 2020, 10:21 a.m., <https://twitter.com/maggieNYT/status/1246805287627079681>.
2. "Health Metrics Institute Receives Groundbreaking Grant," University of Washington Medicine, January 25, 2017, <https://newsroom.uw.edu/story/health-metrics-institute-receives-groundbreaking-grant>.
3. Philip Bump, "The Grim Death Toll Projections the White House Offered Monday Have Already Been Revised Upward," *Washington Post*, April 2, 2020, <https://www.washingtonpost.com/politics/2020/04/02/grim-death-toll-projections-white-house-of-fered-monday-have-already-been-revised-upward/>.
4. Joseph Goldstein, "When Will N.Y.C. Reach the Peak of the Outbreak? Here's What We Know," *New York Times*, April 6, 2020, <https://www.nytimes.com/2020/04/06/nyregion/coronavirus-new-york-peak.html>.
5. G. Scott Thomas, "State Is Just 10 Days Away from Peak Strain on Health-Care System, Says Study," *Business Journals*, March 30, 2020, <https://www.bizjournals.com/buffalo/news/2020/03/30/state-is-just-10-days-away-from-peak-strain-on.html>.
6. Alex Berenson (@AlexBerenson), "Update on the @IMHE\_UW model versus reality...," Twitter, April 2, 12:22 p.m., <https://twitter.com/alexberenson/status/1245748387359711234?lang=en>. Screenshot in my possession, and available at <https://thedenforum.com/t/trusting-science-pandemic-and-global-warming/4445/5>.
7. Goldstein, "When Will N.Y.C. Reach the Peak?"

8. Carl T. Bergstrom (@CT\_Bergstrom), “4. Recall this is a model of successful suppression of the epidemic with no second wave. Still my personal impression is that it’s extremely optimistic. The total number of deaths is low and the epidemic passes very quickly,” Twitter, March 28, 2020, 4:57 a.m., [https://twitter.com/CT\\_Bergstrom/status/1243824533632454657](https://twitter.com/CT_Bergstrom/status/1243824533632454657).

## 11: Locked Down

1. Christopher Spata, “Coronavirus Has People Calling the Police and Shaming Neighbors on Social Media,” *Tampa Bay Times*, April 7, 2020, <https://www.tampabay.com/news/health/2020/04/07/coronavirus-has-people-calling-the-police-and-shaming-neighbors-on-social-media/>.
2. Daven Rae Kurutz, “Police: Don’t Call 911 Regarding Face Masks, Social Distancing in Beaver County,” *Beaver County Times*, April 21, 2020, <https://www.timesonline.com/news/20200421/police-donrsquot-call-911-regarding-face-masks-social-distancing-in-beaver-county>.
3. Erika Martin, “Officials: Paddleboarder Arrested at Malibu Pier for Flouting State Stay at Home Rule,” KTLA5, April 2, 2020, <https://ktla.com/news/local-news/officials-paddleboarder-arrested-at-malibu-pier-for-flouting-state-stay-at-home-order/>.
4. “‘Snitches Get Rewards’: Garcetti Issues New Rules for Construction Sites, Encourages Community to Report ‘Safer at Home’ Violators,” KCAL9 CBS Los Angeles, March 31, 2020, <https://losangeles.cbslocal.com/2020/03/31/coronavirus-los-angeles-eric-garcetti-snitches-get-rewards/>.
5. Lisa Rathke and David Goldman, “Rhode Island Door Knocks in Search of Fleeing New Yorkers,” Associated Press, March 28, 2020, <https://apnews.com/article/gina-raimondo-ct-state-wire-ri-state-wire-tx-state-wire-westerly-15f7327b48cc94781fb1f8a04948cc8c>.
6. Thomas Goetz, “A Lot of People Don’t Even *Know* They Should Stay Home,” *Wired*, April 9, 2020, <https://www.wired.com/story/a-lot-of-people-dont-even-know-they-should-stay-home/>.
7. “Mobility Trends: Change in Routing Requests since January 13, 2020,” Apple Maps, <https://covid19.apple.com/mobility>.
8. Chris Chmura and James Jackson, “Can Coronavirus Survive in Your Refrigerator? Here’s What a Renowned Scientist Told Us,” NBC Bay Area, April 3, 2020, <https://www.nbcbayarea.com/investigations/consumer/can-coronavirus-survive-in-your-refrigerator-heres-what-a-renowned-scientist-told-us/2265804/>.
9. Colleen Shalby et al., “L.A. County Tells Residents to Stay Inside This Week as Coronavirus Hits New Milestone,” *Los Angeles Times*, April 7, 2020, <https://www.latimes.com/california/story/2020-04-07/l-a-county-tell-residents-to-stay-inside-this-week-as-coronavirus-hits-new-milestone>.
10. Daniel J. Wakin, “Faces That Can’t Be Forgotten,” *New York Times*, April 16, 2020, <https://www.nytimes.com/2020/04/16/reader-center/coronavirus-obits.html>.
11. “Understanding Coronavirus in America,” University of Southern California Center for Economic and Social Research, 2020, <https://covid19pulse.usc.edu/>.
12. M. Gao et al., “Supplementary Appendix” (Supplement to: M. Gao et al., “Associations between Body-Mass Index and COVID-19 Severity in 6.9 Million People in England: A Prospective, Community-Based, Cohort Study”), *Lancet Diabetes & Endocrinology*, April 28, 2021, [https://www.thelancet.com/cms/10.1016/S2213-8587\(21\)00089-9/attachment/88cb76d8-d2d5-4b73-9a05-fffefad4de8d/mmc1.pdf](https://www.thelancet.com/cms/10.1016/S2213-8587(21)00089-9/attachment/88cb76d8-d2d5-4b73-9a05-fffefad4de8d/mmc1.pdf).

13. “COVID-19 Pandemic Planning Scenarios,” Centers for Disease Control, March 19, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html>.
14. Jennifer Rubin, “Opinion: We Must Hold Politicians Responsible for Deaths They Could Have Prevented,” *Washington Post*, April 1, 2020, <https://www.washingtonpost.com/opinions/2020/04/01/we-must-hold-politicians-responsible-deaths-they-could-have-prevented/>.
15. David Leonhardt, “Florida, Finally,” *New York Times*, April 2, 2020, <https://www.nytimes.com/2020/04/02/opinion/coronavirus-desantis-trump.html>.
16. Erik Augustin Palm, “I Just Came Home to Sweden. I’m Horrified by the Coronavirus Response Here,” *Slate*, April 29, 2020, <https://slate.com/news-and-politics/2020/04/sweden-coronavirus-response-death-social-distancing.html>.
17. Alex Berenson (@AlexBerenson), “My city in ruins . . .” Twitter, April 17, 2020. Screenshot in my possession, and available at [https://www.google.com/search?q=@alexberenson+%22my+city+in+ruins%22&tbm=isch&source=iu&ictx=1&fir=NW2jNT5C5UIMUM%252CJIxzTej7jy0xFM%252C\\_&vet=1&usg=AI4\\_-kT-AIUF23sUmbXT2Ngjqt\\_wCpLY5A&sa=X&ved=2ahUKEwizn4rMyIzzAhVhGVkFHSmSBIEQ9QF6BAgVEAE#imgrc=NW2jNT5C5UIMUM](https://www.google.com/search?q=@alexberenson+%22my+city+in+ruins%22&tbm=isch&source=iu&ictx=1&fir=NW2jNT5C5UIMUM%252CJIxzTej7jy0xFM%252C_&vet=1&usg=AI4_-kT-AIUF23sUmbXT2Ngjqt_wCpLY5A&sa=X&ved=2ahUKEwizn4rMyIzzAhVhGVkFHSmSBIEQ9QF6BAgVEAE#imgrc=NW2jNT5C5UIMUM).
18. Angus Johnston (@studentactivism), “My city in ruins. Fuck you, you weasel,” Twitter, April 17, 2020, 8:40 p.m., <https://twitter.com/studentactivism/status/1251309651695673345>.
19. Chase Mitchell (@ChaseMit), “best it’s ever looked,” Twitter, April 17, 2020, 9:23 p.m., <https://twitter.com/ChaseMit/status/1251320339562246145>.
20. Greg Gonsalves (@gregggonalves), “As a friend of mine said this weekend: ‘There are no natural or social laws preventing us from remaking the economy for the next 18 months, the next 18 years, or forever in a way that prioritizes providing people with food, shelter, health care, education, and information . . .’ 12/,” Twitter, March 23, 2020, 6:10 a.m., <https://twitter.com/gregggonalves/status/1242030950063759361>.
21. Michael Hiltzik, “Column: COVID-19 May Make Universal Basic Income More Palatable. That’s a Good Thing,” *Los Angeles Times*, May 22, 2020, <https://www.latimes.com/business/story/2020-05-22/covid-19-universal-basic-income>.
22. Brian Flood, “Jane Fonda Says Coronavirus Is ‘God’s Gift to the Left’ because It Could Help Biden Defeat Trump,” *Fox News*, October 7, 2020, <https://www.foxnews.com/entertainment/jane-fonda-says-coronavirus-gods-gift-left-help-biden-defeat-trump>.
23. Facebook App, “We’re Never Lost If We Can Find Each Other,” YouTube, March 31, 2020, <https://www.youtube.com/watch?v=nWwVFywBCeY>.
24. Ads of Brands, “Apple: Creativity Goes On,” YouTube, April 15, 2020, [youtube.com/watch?v=BbCe\\_5kSmxI&t=2s](https://www.youtube.com/watch?v=BbCe_5kSmxI&t=2s).
25. Google, “Thank You Healthcare Workers,” YouTube, March 29, 2020, <https://www.youtube.com/watch?v=rtuEgAHWw0>.
26. Thomas Beaumont and Hannah Fingerhut, “AP-NORC Poll: Few Americans Support Easing Virus Protections,” *Associated Press*, April 22, 2020, [https://apnews.com/article/public-health-health-us-news-ap-top-news-virus-outbreak-9ed271ca13012d3b77a2b631c1979ce1?utm\\_source=pushnotification](https://apnews.com/article/public-health-health-us-news-ap-top-news-virus-outbreak-9ed271ca13012d3b77a2b631c1979ce1?utm_source=pushnotification).
27. Jonathan Oosting, “What Michigan’s New Coronavirus Stay-at-Home Executive Order Means,” *Bridge Michigan*, April 10, 2020, <https://www.bridgemi.com/michigan-governments/what-michigans-new-coronavirus-stay-home-executive-order-means>.
28. Paul Egan and Kara Berg, “Thousands Converge on Lansing to Protest Whitmer’s Stay Home Order,” *Detroit Free Press*, April 15, 2020, <https://www.freep.com/story/news/local/michigan/2020/04/15/lansing-capitol-protest-michigan-stay-home-order/5136842002/>.



29. Allan Smith, “‘Lock Her Up!’: Anti-Whitmer Coronavirus Lockdown Protestors Swarm Michigan Capitol,” NBC News, April 15, 2020, <https://www.nbcnews.com/politics/politics-news/lock-her-anti-whitmer-coronavirus-lockdown-protestors-swarm-michigan-capitol-n1184426>.
30. Meagan Flynn, “Chanting ‘Lock Her Up,’ Michigan Protesters Waving Trump Flags Mass against Gov. Gretchen Whitmer’s Coronavirus Restrictions,” *Washington Post*, April 16, 2020, <https://www.washingtonpost.com/nation/2020/04/16/michigan-whitmer-conservatives-protest/>.
31. “Protests Not Allowed during Pandemic, Say NYC Mayor and Police Commissioner,” Fox5 New York, May 4, 2020, <https://www.fox5ny.com/news/protests-not-allowed-during-pandemic-say-nyc-mayor-and-police-commissioner>.

## 12: The Perfect Storm

1. Samples that gave a cycle threshold (Ct) value <40 for both N1 and N2 targets were considered positive. See Nicholas M. Moore et al., “Comparison of Two Commercial Molecular Tests and a Laboratory-Developed Modification of the CDC 2019-nCoV RT-PCR Assay for the Qualitative Detection of SARS-CoV-2 from Upper Respiratory Tract Specimens,” medRxiv, May 6, 2020, <https://www.medrxiv.org/content/10.1101/2020.05.02.20088740v1.full> and “CDC 2019-Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel,” Federal Drug Administration, July 21, 2021, <https://www.fda.gov/media/134922/download>, 35: “All clinical samples should exhibit fluorescence growth curves in the RNase P reaction that cross the threshold line within 40.00 cycles.... When all controls exhibit the expected performance, a specimen is considered negative if all 2019-nCoV marker (N1, N2) cycle threshold growth curves DO NOT cross the threshold line within 40.00 cycles (< 40.00 Ct) AND the RNase P growth curve DOES cross the threshold line within 40.00 cycles (< 40.00 Ct).”
2. Will Feuer and Noah Higgins-Dunn, “Cuomo Orders Most New Yorkers to Stay Inside—‘We’re All under Quarantine,’” CNBC, March 20, 2020, <https://www.cnbc.com/2020/03/20/new-york-gov-cuomo-orders-100percent-of-non-essential-businesses-to-work-from-home.html>.
3. Noah Higgins-Dunn and Will Feuer, “Gov. Cuomo Says NY Needs Ventilators Now, Help from GM and Ford ‘Does Us No Good,’” CNBC, March 24, 2020, <https://www.cnbc.com/2020/03/24/gov-cuomo-says-new-york-needs-ventilators-now-help-from-gm-ford-does-us-no-good.html>.
4. “Daily Deaths in New York,” Worldometers, <https://www.worldometers.info/coronavirus/usa/new-york/#graph-deaths-daily>.
5. Michael Buczyner, “AHCA: 65% of Adult ICU Beds Occupied in Palm Beach County,” WPTV, April 2, 2020, [https://www.wptv.com/news/region-c-palm-beach-county/ahca-65-of-adult-icu-beds-occupied-in-palm-beach-county?\\_amp=true](https://www.wptv.com/news/region-c-palm-beach-county/ahca-65-of-adult-icu-beds-occupied-in-palm-beach-county?_amp=true).
6. Zac Anderson, “Delayed Lockdown Decision Could Haunt Gov. DeSantis,” *Tallahassee Democrat*, April 3, 2020, <https://www.tallahassee.com/story/news/2020/04/03/delayed-lockdown-decision-could-haunt-gov-desantis/2938720001/>.
7. Scott Powers, “Key COVID-19 Model Now Forecasting Earlier Peak in Florida,” Florida Politics, April 6, 2020, <https://floridapolitics.com/archives/326936-key-covid-19-model-now-forecasting-earlier-peak-in-florida/>.
8. Screenshots from the website of the Florida Agency for Health Care Administration, at <https://ahca.myflorida.com/>, in the author’s possession.

9. Dylan Scott, "Why the Worst Fears about Florida's Covid-19 Outbreak Haven't Been Realized (So Far)," *Vox*, April 24, 2020, <https://www.vox.com/2020/4/24/21234641/florida-coronavirus-covid-19-stay-at-home>.
10. Arian Campo-Flores and Alex Leary, "Smart or Lucky? How Florida Dodged the Worst of Coronavirus," *Wall Street Journal*, May 3, 2020, <https://www.wsj.com/articles/smart-or-lucky-how-florida-dodged-the-worst-of-coronavirus-11588531865>.
11. James Glanz et al., "Where America Didn't Stay Home Even as the Virus Spread," *New York Times*, April 2, 2020, <https://www.nytimes.com/interactive/2020/04/02/us/coronavirus-social-distancing.html?action=click&module=Top%20Stories&pgtype=Homepage>.
12. Dan Margolies, "Private Hospital in Overland Park and Its Clinics Close, Citing Disruption Caused by COVID-19," High Plains Public Radio, April 14, 2020, <https://www.hppr.org/post/private-hospital-overland-park-and-its-clinics-close-citing-disruption-caused-covid-19>.
13. Alia Paavola, "266 Hospitals Furloughing Workers in Response to COVID-19," Becker's Hospital CFO Report, August 31, 2020, <https://www.beckershospitalreview.com/finance/49-hospitals-furloughing-workers-in-response-to-covid-19.html>.
14. Miriam Jordan and Annie Correal, "Foreign Doctors Could Help Fight Coronavirus. But U.S. Blocks Many," *New York Times*, April 13, 2020, <https://www.nytimes.com/2020/04/13/us/coronavirus-foreign-doctors-nurses-visas.html>.
15. "Potential Impact of Behavioural and Social Interventions on a Covid-19 Epidemic in the UK," SAGE, March 4, 2020, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/887449/21-potential-impact-behavioural-social-interventions-04032020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/887449/21-potential-impact-behavioural-social-interventions-04032020.pdf).
16. Alex Berenson (@AlexBerenson), "Craazy theory coming: what if...", Twitter, April 4, 2020, 7:08 p.m., <https://twitter.com/AlexBerenson/status/1246585434496524288>, embedding World Health Organization (WHO), "Live from WHO Headquarters—Coronavirus—COVID-19 Daily Press Briefing 30 March 2020," YouTube, March 30, 2020, <https://www.youtube.com/watch?v=2v3vlw14NbM&t=2998s>. Screenshot in my possession, and available at the Wayback Machine at <https://web.archive.org/web/20210425225158/https://twitter.com/AlexBerenson/status/1246585434496524288>.
17. Chris Riotta, "Ohio Governor Forced to Deny Rumors of 'Coronavirus Camps' as Unfounded Conspiracy Theories Go Viral," *The Independent*, September 8, 2020, <https://www.independent.co.uk/news/world/americas/us-politics/ohio-fema-camps-coronavirus-mandatory-quarantine-mike-dewine-b420727.html>.
18. Paul M. McKeigue et al., "Relation of Severe COVID-19 in Scotland to Transmission-Related Factors and Risk Conditions Eligible for Shielding Support: REACT-SCOT Case-Control Study," *MedRxiv*, March 3, 2020, <https://www.medrxiv.org/content/10.1101/2021.03.02.21252734v1.full>.
19. Michael Schuit et al., "Airborne SARS-CoV-2 Is Rapidly Inactivated by Simulated Sunlight," *Journal of Infectious Diseases* 222, no. 4 (August 2020): 564–71, <https://academic.oup.com/jid/article/222/4/564/5856149>.
20. David Leonhardt, "A Misleading C.D.C. Number," *New York Times*, May 11, 2021, <https://www.nytimes.com/2021/05/11/briefing/outdoor-covid-transmission-cdc-number.html>.
21. "Stay Home. Save Lives," GovStatus, <https://govstatus.egov.com/stayhomesavelives>.
22. Gregory Pratt, "Mayor Lori Lightfoot Launches Humorous 'Stay Home, Save Lives' Anti-Coronavirus Public Service Announcements," *Chicago Tribune*, March 30, 2020, <https://www.chicagotribune.com/coronavirus/ct-coronavirus-chicago-lightfoot-psa-20200331-nhtlpne7ifbh3ad12hlari7oq4-story.html>.

23. “#JimmyKimmelLiveFromHisHouse,” Twitter, [https://twitter.com/search?q=%23JimmyKimmelLiveFromHisHouse&src=typed\\_query](https://twitter.com/search?q=%23JimmyKimmelLiveFromHisHouse&src=typed_query).
24. “Coronavirus: Germany Hails Couch Potatoes in New Videos,” BBC, November 16, 2020, <https://www.bbc.com/news/world-europe-54959871>.
25. “New Hard-Hitting National TV Ad Urges the Nation to Stay at Home,” Department of Health and Social Care (UK), January 22, 2021, <https://www.gov.uk/government/news/new-hard-hitting-national-tv-ad-urges-the-nation-to-stay-at-home>.
26. Bess Kalb (@bessbell), “If you are lucky enough to make it off a ventilator (the equivalent exertion required for that is running a marathon without training), you will likely get put on dialysis and a feeding tube next. It’s a nightmare. It’s hell. It’s what you’re risking on your beach day,” Twitter, May 3, 2020, 5:28 p.m., <https://twitter.com/bessbell/status/1257059600777408513>.
27. Bess Kalb (@bessbell), “Send this thread to any idiot fucker who posts an Instagram at the beach or a crowded park. Tell them my dad says see you later,” Twitter, May 3, 2020, 6:25 p.m., <https://twitter.com/bessbell/status/1257073852330283008>.
28. Erin McCarthy, “New Jersey Closes All State and County Parks to Stop Spread of the Coronavirus,” *Philadelphia Inquirer*, April 7, 2020, <https://www.inquirer.com/health/coronavirus/coronavirus-new-jersey-state-parks-forests-closed-covid-19-murphy-20200407.html>.
29. Hannah Fry et al., “L.A. Mayor Orders Masks to Be Worn Outdoors; County Sets No End Date for Stay-at-Home Rules but Eases More Restrictions,” *Los Angeles Times*, May 13, 2020, <https://www.latimes.com/california/story/2020-05-13/beaches-reopen-in-la-but-dont-expect-to-go-to-restaurants-or-malls-soon>.
30. Peter Lane Taylor, “America’s Beaches Are Open for Summer. Here’s What You Need to Know State by State,” *Forbes*, May 15, 2020, <https://www.forbes.com/sites/petertaylor/2020/05/15/americas-beaches-have-re-opened-for-memorial-day-weekend-heres-what-you-need-to-know-state-by-state/?sh=4894600f7f28>.
31. Julia Paskin, “Why the Venice Beach Skate Park Now Looks like This,” LAist, April 19, 2020, <https://laist.com/news/venice-beach-skate-park-sand-filled>.
32. Greg B. Smith, “Lincoln Hospital under Investigation over Patient Who Went into Coma Hours after ER Staff Lost Track of Him,” *Daily News*, September 26, 2017, <https://www.nydailynews.com/new-york/bronx/lincoln-hospital-investigation-losing-er-patient-article-1.3523728>.
33. Howard W. French, “At Least 12 Deaths in Bronx Hospital Linked to Poor Care,” *New York Times*, October 28, 1988, <https://www.nytimes.com/1988/10/28/nyregion/at-least-12-deaths-in-hospital-in-bronx-linked-to-poor-care.html>.
34. Joan Gralla, “Nursing Homes Can’t Reject Patients Just over Coronavirus, State Says,” *Newsday*, March 29, 2020, <https://www.newsday.com/news/health/coronavirus/coronavirus-nursing-homes-1.43491608>.
35. Bill Hammond and Ian Kingsbury, “COVID-Positive Admissions Were Correlated with Higher Death Rates in New York Nursing Homes,” Empire Center, February 18, 2021, <https://www.empirecenter.org/publications/covid-positive-admissions-higher-death-rates/>.
36. Tracey Tully et al., “70 Died at a Nursing Home as Body Bags Piled Up. This is What Went Wrong,” *New York Times*, April 19, 2020, <https://www.nytimes.com/2020/04/19/nyregion/coronavirus-nj-andover-nursing-home-deaths.html>.
37. Riley Yates, “Nursing Home Deaths Devasted N.J. See Which Parts of the State Were Hit the Hardest,” NJ.com, March 12, 2021, <https://www.nj.com/coronavirus/2021/03/nursing-home-deaths-devastated-nj-see-which-parts-of-the-state-were-hit-the-hardest.html>.

38. Caroline Lewis, “21 Percent of NYC Residents Tested in State Study Have Antibodies from COVID-19,” *Gothamist*, April 23, 2020, <https://gothamist.com/news/new-york-antibody-test-results-coronavirus>.
39. J. David Goodman and William K. Rashbaum, “N.Y.C. Death Toll Soars Past 10,000 in Revised Virus Count,” *New York Times*, April 14, 2020, <https://www.nytimes.com/2020/04/14/nyregion/new-york-coronavirus-deaths.html>.

### 13: How Deadly?

1. Brooke Baldwin, “How Fighting Coronavirus Taught Me about the Gift of Connection,” CNN, April 19, 2020, <https://www.cnn.com/2020/04/19/health/coronavirus-diary-sickness-brooke-baldwin/index.html>.
2. Jessica Lustig, “What I Learned When My Husband Got Sick with Coronavirus,” *New York Times*, March 24, 2020, <https://www.nytimes.com/2020/03/24/magazine/coronavirus-family.html>.
3. “COVID-19 Alert No. 2: New ICD Code Introduced for COVID-19 Deaths,” National Vital Statistics System, Centers for Disease Control, March 24, 2020, <https://www.cdc.gov/nchs/data/nvss/coronavirus/Alert-2-New-ICD-code-introduced-for-COVID-19-deaths.pdf>.
4. “Quality Assurance Steps for COVID-19 Data,” Virginia Department of Health, June 17, 2021, <https://www.vdh.virginia.gov/coronavirus/category/methods/>.
5. Cole Lauterbach, “Maricopa County Clarifies How Officials Classify a ‘COVID-Attributed’ Death,” *The Center Square*, September 2, 2020, [https://www.thecentersquare.com/arizona/maricopa-county-clarifies-how-officials-classify-a-covid-attributed-death/article\\_8269def2-ed63-11ea-872c-d7fbb82999a4.html](https://www.thecentersquare.com/arizona/maricopa-county-clarifies-how-officials-classify-a-covid-attributed-death/article_8269def2-ed63-11ea-872c-d7fbb82999a4.html).
6. Amy Golden, “Coroner: State Included a Murder-Suicide in Grand’s COVID Deaths,” *Sky-Hi News*, December 15, 2020, <https://www.skyhinews.com/news/coroner-state-included-a-murder-suicide-in-grands-covid-deaths/>.
7. Brian Maass, “New COVID-19 Death Dispute: Colorado Coroner Says State Mischaracterized Death,” 4 CBS Denver, May 14, 2020, <https://denver.cbslocal.com/2020/05/14/coronavirus-montezuma-county-coroner-alcohol-poisoning-covid-death/>.
8. Adi V. Gundlapalli et al., “Death Certificate–Based ICD-10 Diagnosis Codes for COVID-19 Mortality Surveillance—United States, January–December 2020,” *Centers for Disease Control*, April 9, 2021, <https://www.cdc.gov/mmwr/volumes/70/wr/mm7014e2.htm>.
9. “Characteristics of Persons Who Died with COVID-19—United States, February 12–May 18, 2020,” *Centers for Disease Control*, July 17, 2020, <https://www.cdc.gov/mmwr/volumes/69/wr/mm6928e1.htm>.
10. “Provisional Death Counts and Excess Mortality, January to September 2020,” *Statistics Canada*, November 26, 2020, <https://www150.statcan.gc.ca/n1/daily-quotidien/201126/dq201126c-eng.htm>.
11. “COVID-19 Daily Epidemiology Update,” *Government of Canada*, <https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html>.
12. “Underlying Medical Conditions Associated with High Risk for Severe COVID-19: Information for Healthcare Providers,” *Centers for Disease Control*, May 13, 2021, [https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/underlyingconditions.html#ref\\_3](https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/underlyingconditions.html#ref_3).
13. Anne Kelly et al., “Length of Stay for Older Adults Residing in Nursing Homes at the End of Life,” *Journal of the American Geriatrics Society* 58, no. 9 (September 2010): 1701–1706, <http://dx.doi.org/10.1111/j.1532-5415.2010.03005.x>.

14. “Characteristics of SARS-CoV-2 Patients Dying in Italy Report Based on Available Data on April 28th, 2021,” Epicentro, April 28, 2021, [https://www.epicentro.iss.it/en/coronavirus/bollettino/Report-COVID-2019\\_28\\_april\\_2021.pdf](https://www.epicentro.iss.it/en/coronavirus/bollettino/Report-COVID-2019_28_april_2021.pdf).
15. “Public Data: Deaths in Milwaukee County under Medical Examiner’s Jurisdiction,” Milwaukee County, <https://county.milwaukee.gov/EN/Medical-Examiner/Public-Data>.
16. Kelly Crowe, “Flu Deaths Reality Check,” CBC News, November 25, 2012, <https://www.cbc.ca/news/health/flu-deaths-reality-check-1.1127442>.
17. Kenneth D. Kochanek et al., “Mortality in the United States, 2019: NCHS Data Brief No. 395,” Centers for Disease Control, December 2020, <https://www.cdc.gov/nchs/data/databriefs/db395-H.pdf>.
18. Farida B. Ahmad et al., “Provisional Mortality Data—United States, 2020,” *Morbidity and Mortality Weekly Report* 70, no. 14 (April 2021): 519–22, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8030985/>.
19. Allison Jones, “Delayed Cardiac Surgeries due to Coronavirus May Have Caused 35 Deaths in Ontario: Minister,” *Global News (Canada)*, April 28, 2020, <https://globalnews.ca/news/6879082/coronavirus-delayed-surgeries-ontario-deaths/>.
20. Nick Coltrain, “Fact Check: Does COVID-19 Have a Mortality Rate of 1%–2%?” *USA Today*, May 5, 2020, <https://www.usatoday.com/story/news/factcheck/2020/05/05/covid-19-fact-check-coronavirus-mortality-rate-misleading/3019503001/>.
21. Jude Joffe-Block, “COVID-19 Survival Rate Not Proof Vaccine Unnecessary,” *Associated Press*, August 31, 2020, <https://apnews.com/article/archive-fact-checking-9313631457>.
22. “Fact Check: Misleading Comparison between COVID-19 Mortality Rate and Vaccine Efficiency,” *Reuters*, November 20, 2020, <https://www.reuters.com/article/uk-factcheck-vaccine-comparison/fact-check-misleading-comparison-between-covid-19-mortality-rate-and-vaccine-efficiency-idUSKBN2802H4>.
23. “Second Round of COVID-19 Community Testing Completed; Miami-Dade County and the University of Miami Miller School of Medicine Announce Initial Findings,” Miami-Dade County, April 24, 2020, <https://www.miamidade.gov/releases/2020-04-24-sample-testing-results.asp>.
24. “USC-LA County Study: Early Results of Antibody Testing Suggest Number of COVID-19 Infections Far Exceeds Number of Confirmed Cases in Los Angeles County,” County of Los Angeles Public Health, April 20, 2020, <http://publichealth.la-county.gov/phcommon/public/media/mediapubhpdetail.cfm?prid=2328>.
25. Eran Bendavid et al., “COVID-19 Antibody Seroprevalence in Santa Clara County, California,” *MedRxiv*, April 17, 2020, <https://www.medrxiv.org/content/10.1101/2020.04.14.20062463v1>.
26. “Results Released for Antibody and COVID-19 Testing of Boston Residents,” City of Boston, May 18, 2020, <https://www.boston.gov/news/results-released-antibody-and-covid-19-testing-boston-residents>.
27. Mark Eichmann, “Researchers at MIT’s Biobot Use Fecal Matter to Track Coronavirus in Delaware,” *WHYY PBS*, April 23, 2020, <https://whyy.org/articles/researchers-at-mits-biobot-use-fecal-matter-to-track-coronavirus-in-delaware/>.
28. Frederick J. Angulo et al., “Estimation of US SARS-CoV-2 Infections, Symptomatic Infections, Hospitalizations, and Deaths Using Seroprevalence Surveys,” *Journal of the American Medical Association Network Open* 4, no. 1 (January 4, 2021), <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2774584>.
29. “COVID 19 Coronavirus Pandemic: United States,” *Worldometer*, <https://www.worldometers.info/coronavirus/country/us/>.

30. Sunil S. Bhopal et al., “Children and Young People Remain at Low Risk of COVID-19 Morality,” *The Lancet*, March 10, 2021, [https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642\(21\)00066-3/fulltext](https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(21)00066-3/fulltext).
31. Olivia V. Swann et al., “Clinical Characteristics of Children and Young People Admitted to Hospital with Covid-19 in United Kingdom: Prospective Multicentre Observational Cohort Study,” *British Medical Journal* 370 (August 17, 2020), <https://www.bmj.com/content/370/bmj.m3249>.
32. Olga Khazan, “A Failure of Empathy Led to 20,000 Deaths. It Has Deep Roots,” *The Atlantic*, September 22, 2020, <https://www.theatlantic.com/politics/archive/2020/09/covid-death-toll-us-empathy-elderly/616379/>.

## 14: Hitting Bottom

1. Stephanie Armour, “Biden Administration to Give Hospitals More Time to Spend Covid-19 Relief Money,” *Wall Street Journal*, June 11, 2021, <https://www.wsj.com/articles/biden-administration-to-give-hospitals-more-time-to-spend-covid-19-relief-money-11623427200>.
2. “State Employment and Unemployment—April 2020,” Bureau of Labor Statistics, May 22, 2020, [https://www.bls.gov/news.release/archives/laus\\_05222020.pdf](https://www.bls.gov/news.release/archives/laus_05222020.pdf).
3. Sheela Tobben, “Oil for Less than Nothing? Here’s How That Happened,” Bloomberg, April 21, 2020, <https://www.bloomberg.com/news/articles/2020-04-20/negative-prices-for-oil-here-s-what-that-means-quicktake>.
4. Sanya Mansoor, “‘The Food Supply Chain Is Breaking.’ Tyson Foods Warns of Meat Shortage as Plants Close Due to COVID19,” *Time*, April 26, 2020, <https://time.com/5827631/tyson-foods-meat-shortage/>.
5. Hollie Silverman, “More than 370 Workers at a Pork Plant in Missouri Tested Positive for Coronavirus. All Were Asymptomatic,” CNN, May 4, 2020, <https://www.cnn.com/2020/05/04/us/triumph-foods-outbreak-missouri/index.html>.
6. Jeanna Smialek, “The Fed Goes All In with Unlimited Bond-Buying Plan,” *New York Times*, March 23, 2020, <https://www.nytimes.com/2020/03/23/business/economy/coronavirus-fed-bond-buying.html>.
7. “Unemployment Insurance Relief during COVID-19 Outbreak,” Department of Labor, <https://www.dol.gov/coronavirus/unemployment-insurance>.
8. Alan Rappeport and Niraj Chokshi, “Crippled Airline Industry to Get \$25 Billion Bailout, Part of It as Loans,” *New York Times*, April 14, 2020, <https://www.nytimes.com/2020/04/14/business/coronavirus-airlines-bailout-treasury-department.html>.
9. “State Actions on Coronavirus Relief Bills,” National Conference of State Legislatures, <https://www.ncsl.org/research/fiscal-policy/state-actions-on-coronavirus-relief-funds.aspx>.
10. Michael Collins and Deirdre Shesgreen, “The \$2 Trillion Stimulus Is the Biggest in History. How Does It Compare to 9/11, Financial Crisis Bills?” *USA Today*, March 25, 2020, <https://www.usatoday.com/story/news/politics/2020/03/25/coronavirus-emergency-bill-how-does-it-compare-9-11-financial-crisis/5010452002/>.
11. “Coronavirus: Trump Orders Meatpacking Plants to Stay Open,” BBC, April 29, 2020, <https://www.bbc.com/news/world-us-canada-52466502>.
12. “The Florida Department of Economic Opportunity Announces the Pensacola Area December 2020 Employment Data,” Florida Department of Economic Opportunity, January 22, 2021, <https://www.floridajobs.org/news-center/DEO-Press/2021/01/22/the-florida-department-of-economic-opportunity-announces-the-pensacola-area-december-2020-employment-data>.

13. “Gross Domestic Product, 4th Quarter and Year 2020 (Advance Estimate),” Bureau of Economic Analysis, January 28, 2021, <https://www.bea.gov/news/2021/gross-domestic-product-4th-quarter-and-year-2020-advance-estimate>.

## 15: Apocalypse Not

1. Amanda Mull, “Georgia’s Experiment in Human Sacrifice,” *The Atlantic*, April 29, 2020, <https://www.theatlantic.com/health/archive/2020/04/why-georgia-reopening-coronavirus-pandemic/610882/>.
2. Dana Millbank, “Georgia Leads the Race to Become America’s No. 1 Death Destination,” *Panama City News Herald*, April 25, 2020, <https://www.newsherald.com/opinion/20200425/dana-milbank-georgia-leads-race-to-become-americas-no-1-death-destination>.
3. “Models Project Sharp Rise in Deaths as States Reopen,” *New York Times*, May 4, 2020, <https://www.nytimes.com/2020/05/04/us/coronavirus-live-updates.html>.
4. Allison Chiu and Kate Shephard, “Trump Wanted a Coronavirus Victory Event: It Ended When He Stalked Off after Clashing with Two Female Reporters,” *Washington Post*, May 12, 2020, <https://www.washingtonpost.com/nation/2020/05/12/trump-meetdown-coronavirus-testing/>.
5. Steve Holland and Jeff Mason, “White House to Wind Down Coronavirus Task Force as Focus Shifts to Aftermath: Trump,” Reuters, May 5, 2020, <https://www.reuters.com/article/us-health-coronavirus-usa-task-force-idUSKBN22H2KJ>.
6. Brian Naylor and Tamara Keith, “Trump Says Coronavirus Task Force to Stay ‘Indefinitely,’ after Signaling Wind-Down,” NPR, May 5, 2020, <https://www.npr.org/sections/coronavirus-live-updates/2020/05/05/850959187/white-house-cornonavirus-task-force-to-wind-down>.
7. Jorge L. Ortiz, “When Will US Reach 100,000 Deaths? After a Horrific April, Grim Milestone Could Hit in May,” *USA Today*, May 4, 2020, <https://www.usatoday.com/story/news/nation/2020/05/01/coronavirus-us-may-hit-10000-deaths-record-cases-may/3062216001/>.
8. Charlotte Klein, “Trump, Maskless, Goes Golfing as Coronavirus Death Toll Nears 100,000,” *Vanity Fair*, May 24, 2020, <https://www.vanityfair.com/news/2020/05/trump-maskless-goes-golfing-as-coronavirus-death-toll-nears-100000>.
9. Jay Greene, “Case of Man Found Dead in Car Off of I-380 in Cedar Rapids Ruled a Homicide, Police Say,” 9 ABC KCRG, March 20, 2020, [kcrg.com/content/news/Case-of-man-found-dead-in-car-off-of-I-380-in-Cedar-Rapids-ruled-a-homicide-police-say-568966831.html](http://kcrg.com/content/news/Case-of-man-found-dead-in-car-off-of-I-380-in-Cedar-Rapids-ruled-a-homicide-police-say-568966831.html).
10. Alex Berenson (@AlexBerenson), “Serious question: anyone wonder how far down the list...,” Twitter, May 23, 2020, 8:37 p.m., <https://twitter.com/AlexBerenson/status/1264354723374739459>. Screenshot in my possession.

## 16: Musk, Bezos, and Me

1. Brian Flood, “Free Speech Advocates Call YouTube’s Removal of Coronavirus-Related Video ‘Egregious Censorship Effort,’” Fox News, April 29, 2020, <https://www.foxnews.com/media/youtube-video-removed-coronavirus-free-speech>.
2. “YouTube’s Political Censorship,” *Wall Street Journal*, September 14, 2020, <https://www.wsj.com/articles/youtubes-political-censorship-11600126230>.

3. David Bondy, "Facebook Shuts Down Group Page Critical of Michigan Stay-at-Home Order," NBC 25 News, May 13, 2020, <https://nbc25news.com/news/coronavirus/organizer-of-anti-michigan-quarantine-says-facebook-shut-down-their-group-page>.
4. Ava Kofman, "The Hate Store: Amazon's Self-Publishing Arm Is a Haven for White Supremacists," ProPublica, April 7, 2020, <https://www.propublica.org/article/the-hate-store-amazons-self-publishing-arm-is-a-haven-for-white-supremacists>.
5. Charles Duhigg, "Is Amazon Unstoppable?" *New Yorker*, October 10, 2019, <https://www.newyorker.com/magazine/2019/10/21/is-amazon-unstoppable>.
6. Alex Berenson (@AlexBerenson), "THEY CENSORED IT! It is based...", Twitter, June 4, 2020, 9:09 a.m., <https://twitter.com/AlexBerenson/status/1268530222946758656>. Screenshot in my possession, and available at the Wayback Machine at <https://web.archive.org/web/20210804135453/https://twitter.com/AlexBerenson/status/1268530222946758656>.
7. Glenn Greenwald (@ggreenwald), "I've most definitely found Alex Berenson's Covid commentary inaccurate and reckless, but book banning by corporate tech giants is a far worse danger than whatever threats his book supposedly presents," Twitter, June 4, 2020, 3:09 p.m., <https://twitter.com/ggreenwald/status/1268620912791744512?lang=en>.
8. Andrew Sullivan (@sullydish), "I think this guy is nuts. But denying him access to Amazon because of the content of his book is appalling," Twitter, June 4, 2020, 10:25 a.m., <https://twitter.com/sullydish/status/1268549557975158786>.
9. Brit Hume (@brithume), ".Amazon.com is refusing to sell @AlexBerenson's booklet on Covid 19. He has been a leading—perhaps THE leading—dissenter on the paralyzing Covid 19 lockdowns. He draws his information from studies and official data.," Twitter, June 4, 2020, 10:33 a.m., <https://twitter.com/brithume/status/1268551341519110145?lang=en>.
10. Elon Musk (@elonmusk), "Time to break up Amazon. Monopolies are wrong!" Twitter, June 4, 2020, 2:01 p.m., <https://twitter.com/elonmusk/status/1268603809409888256>.
11. Jodi Kantor (@jodikantor), "One phone call and you're done," Twitter, May 24, 2018, 4:33 p.m., <https://twitter.com/jodikantor/status/999750330014285824>.
12. Reeves Wiedeman, "Times Change: In the Trump Years, the *New York Times* Became Less Dispassionate and More Crusading, Sparking a Raw Debate over the Paper's Future," *Intelligencer*, *New York*, November 9, 2020, <https://nymag.com/intelligencer/2020/11/inside-the-new-york-times-heated-reckoning-with-itself.html>.

## 17: Attention Citizens!

1. Alex Berenson (@AlexBerenson), "Attention citizens: Your Dept. of Pandemia requires 10,000 New York citizens to report to hospitals...", Twitter, April 6, 2020. Screenshot in my possession.
2. Michael Powell (@powellnyt), "Not sure you and @AlexBerenson Berenson fully grasp how appallingly obnoxious you are in a moment of maximum pain for so many people. There is a path to raise questions and there's another to be an asshole...", Twitter, April 7, 2020, 7:35 p.m., <https://twitter.com/powellnyt/status/1247669275420221442>.
3. Bruce Arthur (@bruce\_arthur), "Alex, hi, she cares about people's lives, you're a stupid insane ghoul who should be ashamed every second you're alive, hope this helps," Twitter, June 19, 2020, 9:40 p.m., [https://twitter.com/bruce\\_arthur/status/1274155015423361025](https://twitter.com/bruce_arthur/status/1274155015423361025).
4. Bess Kalb (@bessbell), "You fucking ghoul," Twitter, May 6, 2020, 12:32 p.m., <https://mobile.twitter.com/bessbell/status/1258072189909135360>.



5. Talia Lavin (@chick\_in\_kiev), “eat shit you death ghouL,” Twitter, July 19, 2020, 3:22 a.m., [https://twitter.com/chick\\_in\\_kiev/status/1284750332472500224](https://twitter.com/chick_in_kiev/status/1284750332472500224).
6. b-boy-bouiebaisse (@jbouie), “This pandemic killed my grandfather but yes, I am sorry you have not been able to get your haircut,” Twitter, May 2, 2020, 8:34 p.m., <https://twitter.com/jbouie/status/1256743817224392706>.
7. Alex Berenson (@AlexBerenson), “Very sorry to hear about your grandfather. My grandparents died of...,” Twitter, May 2, 2020, 6:05 p.m. Screenshot in my possession.
8. Alex Berenson (@AlexBerenson), “Went back to see all the blue-check hate I got over the weekend...,” Twitter, May 6, 2020, 10:26 p.m. Screenshot in my possession.
9. Alex Berenson, (@AlexBerenson), “Hey @Neil\_Ferguson, fuck you: You shut down the world but ignored the lockdown to have an affair with a married woman?” Twitter, May 5, 2020, 2:46 p.m. Screenshot in my possession.
10. Alex Berenson (@AlexBerenson), “Wondering what’s really happening in Texas? ...,” Twitter, June 29, 2020, 6:17 p.m. Screenshot in my possession, and available at the Wayback Machine at <https://web.archive.org/web/20200630012014/https://twitter.com/AlexBerenson/status/1277773344625119234>.
11. Frank Cerabino, “Wellington Equestrian Estate Prompts Pandemic Political Potshots at Illinois Governor,” *Palm Beach Post*, May 2, 2020, <https://www.palmbeachpost.com/news/20200502/cerabino-wellington-equestrian-estate-prompts-pandemic-political-potshots-at-illinois-governor>.
12. T. R. Allen et al., “An Outbreak of Common Colds at an Antarctic Base after Seventeen Weeks of Complete Isolation,” *Journal of Hygiene* 71, no. 4 (1973): 657–67, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2130424/?page=10>.
13. David Freedlander, “Does the King of the COVID-19 Contrarians Have a Case?” *Vanity Fair*, April 16, 2020, <https://www.vanityfair.com/news/2020/04/does-the-king-of-the-covid-19-contrarians-have-a-case>; Laura Wagner, “Here Are the Questions the Right’s Favorite Coronavirus Truther Isn’t Willing to Answer,” *Vice*, April 16, 2020, <https://www.vice.com/en/article/jge7g4/here-are-the-question-the-rights-favorite-coronavirus-truther-isnt-willing-to-answer>.

## 18: Masking, Unmasked

1. J. Edward Moreno, “Ocasio-Cortez Dismisses Proposed \$1B Cut: ‘Defunding Police Means Defunding Police,’” *The Hill*, June 30, 2020, <https://thehill.com/homenews/house/505307-ocasio-cortez-dismisses-proposed-1b-cut-defunding-police-means-defunding>.
2. Mariame Kaba, “Yes, We Mean Literally Abolish the Police,” *New York Times*, June 12, 2020, <https://www.nytimes.com/2020/06/12/opinion/sunday/floyd-abolish-defund-police.html>.
3. John Aguilar, “Many Health Officials Are OK with Police Protests despite COVID-19,” *Denver Post*, June 15, 2020, <https://www.denverpost.com/2020/06/15/coronavirus-protests-health-racism/>.
4. Jingyi Xiao et al., “Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures,” *Emerging Infectious Diseases* 26, no. 5 (May 2020): 967–975, [https://wwwnc.cdc.gov/eid/article/26/5/19-0994\\_article](https://wwwnc.cdc.gov/eid/article/26/5/19-0994_article).
5. C. Raina MacIntyre et al., “A Cluster Randomised Trial of Cloth Masks Compared with Medical Masks in Health Workers,” *BMJ Open* 5 (April 22, 2015), <https://bmjopen.bmj.com/content/bmjopen/5/4/e006577.full.pdf>.

6. Ontario Nurses' Association, "ONA Wins Landmark Influenza Vaccine-or-Mask Grievance," Cision, September 10, 2015, <https://www.newswire.ca/news-releases/ona-wins-landmark-influenza-vaccine-or-mask-grievance-526265811.html>.
7. "In the Matter of an Arbitration between Sault Area Hospital ('SAH' or 'Hospital') and Ontario Hospital Association ('OHA') and Ontario Nurses' Association ('Union' or 'ONA')," Canadian Legal Information Institute, September 2015, <https://www.canlii.org/en/on/onla/doc/2015/2015scanlii62106/2015scanlii62106.pdf>.
8. "In the Matter of an Arbitration between St. Michael's Hospital and The Ontario Hospital Association and The Ontario Nurses' Association," Ontario Nurses' Association, September 6, 2018, [https://www.ona.org/wp-content/uploads/ona\\_kapla\\_narbitrationdecision\\_vaccinateormask\\_stmichaelsoha\\_20180906.pdf](https://www.ona.org/wp-content/uploads/ona_kapla_narbitrationdecision_vaccinateormask_stmichaelsoha_20180906.pdf).
9. Samy Rengasamy et al., "Filtration Performance of FDA-Cleared Surgical Masks," *Journal of the International Society for Respiratory Protection* 26, no. 3 (2009): 54–70, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7357397/>.
10. "Understanding the Difference," Centers for Disease Control, <https://www.cdc.gov/niosh/nppt/pdfs/understanddifferenceinfographic-508.pdf>.
11. Joe Carlson and Christopher Snowbeck, "Walz Urged to Require Minnesotans to Wear Masks in COVID-19 Fight," *Star Tribune*, July 2, 2020, <https://www.startribune.com/gov-walz-is-urged-to-require-minnesotans-to-wear-masks-in-covid-19-fight/571593692/>.
12. "Advice on the Use of Masks in the Community, during Home Care and in Health Care Settings in the Context of the Novel Coronavirus (2019-nCoV) Outbreak," World Health Organization, January 29, 2020, [https://apps.who.int/iris/bitstream/handle/10665/330987/WHO-nCov-IPC\\_Masks-2020.1-eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/330987/WHO-nCov-IPC_Masks-2020.1-eng.pdf?sequence=1&isAllowed=y).
13. Brit McCandless Farmer, "March 2020: Dr. Anthony Fauci Talks with Dr. John Lapook about COVID-19," CBS News, March 8, 2020, <https://www.cbsnews.com/news/preventing-coronavirus-facemask-60-minutes-2020-03-08/>.
14. Michael Klompas et al., "Universal Masking in Hospitals in the Covid-19 Era," *New England Journal of Medicine* 382, no. 21 (May 21, 2020), <https://www.nejm.org/doi/full/10.1056/NEJMp2006372>.
15. Judy Woodruff et al., "What Dr. Fauci Wants You to Know about Face Masks and Staying Home as Virus Spreads," PBS, April 3, 2020, <https://www.pbs.org/newshour/show/what-dr-fauci-wants-you-to-know-about-face-masks-and-staying-home-as-virus-spreads>.
16. Daniel Lippman and Meredith McGraw, "Inside the National Security Council, a Rising Sense of Dread," *Politico*, April 2, 2020, <https://www.politico.com/news/2020/04/02/nsc-coronavirus-white-house-162530>.
17. "Remarks by President Trump, Vice President Pence, and Members of the Coronavirus Task Force in Press Briefing," Trump White House Archives, April 3, 2020, <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-vice-president-pence-members-coronavirus-task-force-press-briefing-18/>.
18. Henning Bundgaard et al., "Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2 Infection in Danish Mask Wearers," *Annals of Internal Medicine* 174, no. 3 (March 2021): 335–43, <https://www.acpjournals.org/doi/10.7326/m20-6817>.
19. Xiaowen Wang et al., "Association Between Universal Masking in a Health Care System and SARS-CoV-2 Positivity among Health Care Workers," *Journal of the American Medical Association* 324, no. 7 (July 2020): 703–4, <https://jamanetwork.com/journals/jama/fullarticle/2768533>.

20. M. Joshua Hendrix et al., “Absence of Apparent Transmission of SARS-CoV-2 from Two Stylists after Exposure at a Hair Salon with a Universal Face Covering Policy—Springfield, Missouri, May 2020,” *Morbidity and Mortality Weekly Report* 69, no. 28 (July 17, 2020): 930–32, <https://www.cdc.gov/mmwr/volumes/69/wr/mm6928e2.htm>.
21. Katherine Ross, “Why Weren’t We Wearing Masks from the Beginning? Dr. Fauci Explains,” *TheStreet*, June 12, 2020, <https://www.thestreet.com/video/dr-fauci-masks-changing-directive-coronavirus>.
22. Jack Nicas, “He Has 17,700 Bottles of Hand Sanitizer and Nowhere to Sell Them,” *New York Times*, March 14, 2020, <https://www.nytimes.com/2020/03/14/technology/coronavirus-purell-wipes-amazon-sellers.html>.
23. Joanne Kenen, “What the Best Public Health Minds Know—and Don’t Know—about the Wuhan Coronavirus,” *Politico*, January 28, 2020, <https://www.politico.com/news/2020/01/28/wuhan-coronavirus-health-108197>.
24. “Transmission of SARS-CoV-2: Implications for Infection Prevention Precautions,” World Health Organization, July 9, 2020, <https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions>.
25. Rahul Subramanian et al., “Quantifying Asymptomatic Infection and Transmission of COVID-19 in New York City Using Observed Cases, Serology, and Testing Capacity,” *Proceedings of the National Academy of Sciences of the United States of America* 118, no. 9 (March 2021), <https://www.pnas.org/content/118/9/e2019716118>.
26. Quint Forgey, “Fauci Says He Wears Mask as ‘Symbol’ of Good Behavior,” *Politico*, May 27, 2020, <https://www.politico.com/news/2020/05/27/fauci-wears-mask-as-symbol-of-good-behavior-283847>.
27. Jessica Castillo, “How to Talk to People Who Won’t Wear Face Masks,” *Teen Vogue*, July 8, 2020, <https://www.teenvogue.com/story/how-to-talk-to-people-who-wont-wear-face-masks>.
28. Allyson Chiru, “Some Covid-19 Rule Breakers Could Be Narcissists, Experts Say. Here’s How to Approach Them,” *Washington Post*, September 25, 2020, [https://www.washingtonpost.com/lifestyle/wellness/narcissism-mask-covid-psychology/2020/09/25/d3de1b32-fe9c-11ea-9ceb-061d646d9c67\\_story.html](https://www.washingtonpost.com/lifestyle/wellness/narcissism-mask-covid-psychology/2020/09/25/d3de1b32-fe9c-11ea-9ceb-061d646d9c67_story.html).
29. Angela Betsaida B. Laguipo, “Sociopaths Less Likely to Comply with COVID Mask, Hygiene and Social Distancing,” *Medical Life Sciences News*, August 24, 2020, <https://www.news-medical.net/news/20200824/Sociopaths-less-likely-to-comply-with-COVID-mask-hygiene-and-social-distancing.aspx>.
30. Stephanie Kramer, “More Americans Say They Are Regularly Wearing Masks in Stores and Other Businesses,” *Pew Research Center*, August 27, 2020, <https://www.pewresearch.org/fact-tank/2020/08/27/more-americans-say-they-are-regularly-wearing-masks-in-stores-and-other-businesses/>.
31. Matt Gertz, “Masks Work. Fox Keeps Hosting Alex Berenson to Claim They Don’t,” *Media Matters*, September 11, 2020, <https://www.mediamatters.org/coronavirus-covid-19/masks-work-fox-keeps-hosting-alex-berenson-claim-they-dont>.

## 19: Another Brick in the Wall

1. Eric Lipton et al., “He Could Have Seen What Was Coming: Behind Trump’s Failure on the Virus,” *New York Times*, April 11, 2020, <https://www.nytimes.com/2020/04/11/us/politics/coronavirus-trump-response.html>.

2. “National School Lunch Program,” U.S. Department of Agriculture Economic Research Service, <https://www.ers.usda.gov/topics/food-nutrition-assistance/child-nutrition-programs/national-school-lunch-program>.
3. Amanda Eisenberg and Madina Touré, “De Blasio: NYC Schools Will Close as of Monday, May Not Reopen This Year,” *Politico*, March 15, 2020, <https://www.politico.com/states/new-york/albany/story/2020/03/15/de-blasio-nyc-schools-will-close-as-of-monday-may-not-reopen-this-year-1267141>.
4. Lauren Camera, “Bill de Blasio: New York City Schools to Stay Open—for Now,” *U.S. News & World Report*, March 14, 2020, <https://www.usnews.com/news/education-news/articles/2020-03-14/bill-de-blasio-new-york-city-schools-to-stay-open-for-now>.
5. Eisenberg and Touré, “De Blasio: NYC Schools Will Close.”
6. “Education Systems’ Response to COVID19,” World Bank, April 3, 2020, <https://pubdocs.worldbank.org/en/857971586182572110/COVID19EducationSectorBriefApril3.pdf>.
7. Liz Bowie, “‘We Feel Like We Are Drowning’: Baltimore-Area Parents Struggle to Guide Kids’ Schooling from Home,” *Baltimore Sun*, May 8, 2020, <https://www.baltimoresun.com/coronavirus/bs-md-families-work-remote-learning-20200508-fwxqv-p4a6rawd4maowwikeoi-story.html>.
8. “Stress in America 2020,” American Psychological Association, May 2020, <https://www.apa.org/news/press/releases/stress/2020/report>.
9. Jamie Goldberg, “Oregon School Closures Strain Single-Parent Families during Coronavirus Outbreak,” *The Oregonian*, April 18, 2020, <https://www.oregonlive.com/coronavirus/2020/04/oregon-school-closures-strain-single-parent-families-during-coronavirus-outbreak.html>.
10. Usha Ranji et al., “Women, Work, and Family during COVID-19: Findings from the KFF’s Women’s Health Survey,” Kaiser Family Foundation, March 22, 2021, <https://www.kff.org/womens-health-policy/issue-brief/women-work-and-family-during-covid-19-findings-from-the-kff-womens-health-survey/>.
11. Alec MacGillis, “The Students Left Behind by Remote Learning,” *ProPublica*, September 28, 2020, <https://www.propublica.org/article/the-students-left-behind-by-remote-learning>.
12. Ariel Gilreath, “Thousands of Students in SC Aren’t Doing Their School Work. Some Have Completely Ghosted,” *Greenville News*, May 4, 2020, <https://www.greenvilleonline.com/story/news/2020/05/04/coronavirus-thousands-students-sc-not-doing-their-school-work/3040883001/>.
13. Veronique Mintz, “Why I’m Learning More with Distance Learning Than I Do in School,” *New York Times*, May 5, 2020, <https://www.nytimes.com/2020/05/05/opinion/coronavirus-pandemic-distance-learning.html>.
14. Jeb Bush, “Opinion: It’s Time to Embrace Distance Learning—and Not Just Because of the Coronavirus,” *Washington Post*, May 3, 2020, <https://www.washingtonpost.com/opinions/2020/05/03/jeb-bush-its-time-embrace-distance-learning-not-just-because-of-coronavirus/>.
15. “Coronavirus: German Easing of Lockdown to Start with Schools on May 4,” *Deutsche Welle*, April 15, 2020, <https://www.dw.com/en/coronavirus-german-easing-of-lockdown-to-start-with-schools-on-may-4/a-53127607>.
16. “Schools Reopen in Some Parts of Japan after Pandemic Shutdown,” *Japan Times*, May 7, 2020, <https://www.japantimes.co.jp/news/2020/05/07/national/schools-reopen-coronavirus/>.

17. Kostas Danis et al., “Cluster of Coronavirus Disease 2019 (COVID-19) in the French Alps, February 2020,” *Clinical Infectious Diseases* 71, no. 15 (August 1, 2020): 825–32, <https://academic.oup.com/cid/article/71/15/825/5819060>.
18. Qin Wu et al., “Coinfection and Other Clinical Characteristics of COVID-19 in Children,” *Pediatrics* 146, no. 1 (July 2020), <https://pediatrics.aappublications.org/content/146/1/e20200961.long>.
19. “Research Results Based on Data from Municipal Public Health Services (GGDs),” National Institute for Public Health and the Environment (Netherlands), <https://www.rivm.nl/en/coronavirus-covid-19/children-and-covid-19/data-from-municipal-public-health-services>.
20. Alex Berenson (@AlexBerenson), “From California: not one #coronavirusdeath among the...,” Twitter, July 14, 2020, 1:19 p.m. Screenshot in my possession.
21. Clare Smith et al., “Deaths in Children and Young People in England following SARS-CoV-2 Infection during the First Pandemic Year: A National Study Using Linked Mandatory Child Death Reporting Data,” Research Square, <https://assets.researchsquare.com/files/rs-689684/v1/3e4e93fb-4e98-4081-9315-16143c2bbd2b.pdf?c=1625678600>.
22. Nick Coatsworth, “Getting Our Kids Back to School—a Matter of Trust,” Australian Government Department of Health, May 3, 2020, <https://www.health.gov.au/news/getting-our-kids-back-to-school-a-matter-of-trust>.
23. Kyle Swenson, “New D.C. Hospital Numbers Suggest Kids Do Face Some Risk of Coronavirus Hospitalization,” *Washington Post*, April 25, 2020, [https://www.washingtonpost.com/local/new-dc-hospital-numbers-suggest-kids-do-face-some-risk-of-coronavirus-hospitalization/2020/04/25/5e78c268-86fe-11ea-878a-86477a724bdb\\_story.html](https://www.washingtonpost.com/local/new-dc-hospital-numbers-suggest-kids-do-face-some-risk-of-coronavirus-hospitalization/2020/04/25/5e78c268-86fe-11ea-878a-86477a724bdb_story.html).
24. Eli Saslow, “Voices from the Pandemic,” *Washington Post*, August 23, 2020, <https://www.washingtonpost.com/nation/2020/08/23/brothers-coronavirus-virginia/>.
25. Joseph Goldstein and Pam Belluck, “Children Are Falling Ill with a Baffling Ailment Related to Covid-19,” *New York Times*, May 5, 2020, <https://www.nytimes.com/2020/05/05/nyregion/kawasaki-disease-coronavirus.html?action=click&module=Top%20Stories&pgtype=Homepage>.
26. Sammy Turner and Brad Streicher, “Deadly Illness in Children Linked to COVID-19 Confirmed in Austin Hospital, More Cases Suspected,” KVUE, June 3, 2020, <https://www.kvue.com/article/news/health/coronavirus/multisystem-inflammatory-syndrome-dell-childrens-austin-coronavirus/269-ef12525f-213c-437a-ad9a-094f422c2f99>.
27. “PIMS-TS Inflammation in Children,” The UK Kawasaki Disease Foundation, May 15, 2020, <https://www.societi.org.uk/kawasaki-disease-covid-19/pims-ts/>.
28. Claire Cain Miller and Margot Sanger-Katz, “How 132 Epidemiologists Are Deciding When to Send Their Children to School,” *New York Times*, June 12, 2020, <https://www.nytimes.com/2020/06/12/upshot/epidemiologists-decisions-children-school-coronavirus.html>.
29. “Covid-19 in Schoolchildren: A Comparison between Finland and Sweden,” The Public Health Agency of Sweden, 2020, <https://www.folkhalsomyndigheten.se/contentassets/c1b78bffbfe4a7899eb0d8ffdb57b09/covid-19-school-aged-children.pdf>.
30. “Remarks by President Trump in Roundtable Discussion on Fighting for America’s Seniors,” Trump White House Archives, June 15, 2020, <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-roundtable-discussion-fighting-americas-seniors/>.

31. Mark Moore, "Randi Weingarten: 'No Way' Schools Can Return This Fall without More Funding," *New York Post*, July 12, 2020, <https://nypost.com/2020/07/12/weingarten-no-way-schools-open-this-fall-without-funding/>.
32. Edmund DeMarche, "LA Teachers Union Wants More Money by Defunding the Police, Calls for Medicare for All," Fox News, July 13, 2020, <https://www.foxnews.com/us/los-angeles-teachers-union-calls-on-defunding-police-before-reopening>.
33. Melissa Klein, "COVID-19 School Construction Delays Lead to Prolonged Overcrowding," *New York Post*, May 22, 2021, <https://nypost.com/2021/05/22/covid-19-school-construction-delays-lead-to-prolonged-overcrowding/>.
34. Oriol Güell, "Major Coronavirus Study in Spanish Summer Camps Shows Low Transmission among Children," *El País*, August 26, 2020, <https://english.elpais.com/society/2020-08-26/major-coronavirus-study-in-spanish-summer-camps-shows-low-transmission-among-children.html>.
35. Ibid.
36. Apoorva Mandavilli, "Older Children Spread the Coronavirus Just as Much as Adults, Large Study Finds," *New York Times*, July 18, 2020, <https://www.nytimes.com/2020/07/18/health/coronavirus-children-schools.html>.
37. Apoorva Mandavilli, "Older Children and the Coronavirus: A New Wrinkle in the Debate," *New York Times*, August 14, 2020, <https://www.nytimes.com/2020/08/14/health/older-children-and-the-coronavirus-a-new-wrinkle-in-the-debate.html>.
38. Mairead McArdle, "NYC Teachers' Union Threatens Strike Unless 'Every Single Person' Who Enters a School Receives COVID Test," *National Review*, August 19, 2020, <https://www.nationalreview.com/news/nyc-teachers-union-threatens-strike-unless-every-single-person-who-enters-a-school-receives-covid-test/>.
39. Emily Bloch, "Teachers Are Drafting Wills along with Lesson Plans; One Even Wrote Her Own Obituary," *USA Today*, August 13, 2020, <https://www.usatoday.com/story/news/education/2020/08/13/florida-teachers-writing-wills-obituaries-school-reopening-coronavirus/3362679001/>.
40. Rebecca Martinson, "I Won't Return to the Classroom, and You Shouldn't Ask Me To," *New York Times*, July 18, 2020, <https://www.nytimes.com/2020/07/18/opinion/sunday/covid-schools-reopen-teacher-safety.html>.
41. Lizzie Widdicombe, "Should You Send Your Child Back to School during the Pandemic?" *New Yorker*, August 26, 2020, <https://www.newyorker.com/news/news-desk/should-you-send-your-child-back-to-school-during-the-pandemic>.
42. Dana Goldstein, "She Fought to Reopen Schools, Becoming a Hero and a Villain," *New York Times*, June 22, 2021, <https://www.nytimes.com/2021/06/22/us/emily-oster-school-reopening.html>.
43. Talia Lavin (@chick\_in\_kiev), "this is NOT parenting-shaming good god. i don't have a kid and if i did i'd be going insane right now. on the other hand. the far right fucking loves chaos. a nazi tried to bomb a covid-laden hospital yesterday," Twitter, March 26, 2020, 9:25 p.m., [https://twitter.com/chick\\_in\\_kiev/status/1243348414450085889](https://twitter.com/chick_in_kiev/status/1243348414450085889).
44. "15 Schools, Rec Centers to Host City Students for In-Person Virtual Learning," WBAL-TV 11, September 10, 2020, <https://www.wbal.com/article/student-learning-centers-baltimore-schools-recreation-centers-in-person-virtual-learning/33897548#>.
45. Laurel Wamsley, "Florida Orders Schools to Reopen in the Fall for in-Person Instruction," NPR, July 7, 2020, <https://www.npr.org/sections/coronavirus-live-updates/2020/07/07/888320203/florida-orders-schools-to-reopen-in-the-fall-for-in-person-instruction>.
46. "Burbio's K-12 School Opening Tracker," Burbio, <https://cai.burbio.com/school-opening-tracker/>.

47. Reese Oxner, "Texas Students' Standardized Test Scores Dropped Dramatically during the Pandemic, Especially in Math," *Texas Tribune*, June 28, 2021, <https://www.texastribune.org/2021/06/28/texas-staar-test-results/>.
48. Evie Fordham, "Randi Weingarten Faces Backlash for Claiming AFT Tried to Reopen Schools Starting April 2020," Fox News, July 1, 2021, <https://www.foxnews.com/politics/weingarten-american-federation-teachers-reopening-2020-coronavirus>.

## 20: Another Brick in the Wall (College Remix)

1. Nikki Krize, "Travel Restrictions at Bucknell University," WNEP 16, September 18, 2020, <https://www.wnep.com/article/news/local/union-county/travel-restrictions-at-bucknell-university/523-467860ff-1ca4-4962-8109-063193e25f6a>.
2. Angela Ruggiero, "UC Berkeley Bans Campus Residents from Outdoor Exercise as Part of Clampdown after COVID Surge," *Mercury News*, February 11, 2021, <https://www.mercurynews.com/2021/02/11/uc-berkeley-bans-outdoor-exercise-in-tighter-covid-19-restrictions-on-campus/>.
3. Nicole Acevedo, "Coronavirus Rules Lead Northeastern University to Dismiss 11 Students over a Gathering," NBC News, September 5, 2020, <https://www.nbcnews.com/news/us-news/coronavirus-rules-lead-northeastern-university-dismiss-11-students-over-gathering-n1239419>.
4. Troy Closson, "'Nobody Likes Snitching': How Rules against Parties Are Dividing Campuses," *New York Times*, September 2, 2020, <https://www.nytimes.com/2020/09/02/nyregion/colleges-universities-covid-parties.html>.
5. Jan Wolfe and Daphne Psaledakis, "As Some U.S. College Students Party, Others Blow the Whistle," Reuters, September 16, 2020, <https://www.reuters.com/article/us-health-coronavirus-usa-colleges-idUSKBN2671TW>.
6. Anna Silman, "You Could Get Us All Sent Home," *The Cut*, *New York*, September 10, 2020, <https://www.thecut.com/article/college-students-parties-campus-covid.html>.
7. Penelope Gardner, "Save a Life: Be a Snitch," *University News* (St. Louis University), September 30, 2020, <https://unewsonline.com/2020/09/save-a-life-be-a-snitch/>.
8. "West Virginia Univ. President Apologizes for Maskless Photo," Associated Press, September 15, 2020, <https://apnews.com/article/media-social-media-gordon-gee-west-virginia-virus-outbreak-a4c6f7d7992314cb0d5388a650183649>.
9. Dennis Dodd, "Coronavirus in College Football: Hospitalizations, Deaths Predicted by Data Analysts if FBS Plays in 2020," CBS Sports, June 30, 2020, <https://www.cbssports.com/college-football/news/coronavirus-in-college-football-hospitalizations-deaths-projected-by-data-analysts-if-fbs-plays-in/>.
10. Elizabeth Cooney, "Covid-19 Infections Leave an Impact on the Heart, Raising Concerns about Lasting Damage," Stat News, July 27, 2020, <https://www.statnews.com/2020/07/27/covid19-concerns-about-lasting-heart-damage/>.
11. John Mandrola et al., "Setting the Record Straight: There Is No 'Covid Heart,'" Stat News, May 14, 2021, <https://www.statnews.com/2021/05/14/setting-the-record-straight-there-is-no-covid-heart/>.
12. Juan Perez Jr., "'Play College Football!' Trump Demands as Fall Season Collapses," *Politico*, August 10, 2020, <https://www.politico.com/news/2020/08/10/trump-gop-college-football-393135>.
13. Chris Solari and David Jesse, "Big Ten Football Reinstated; 9-Game Season to Begin October 24," *Detroit Free Press*, September 16, 2020, <https://www.freep.com/story/sports/college/2020/09/16/big-ten-football-update-vote-2020/5814647002/>.
14. Ibid.

15. Jonathan Haidt and Greg Lukianoff, *The Coddling of the American Mind: How Good Intentions and Bad Ideas Are Setting Up a Generation for Failure* (New York: Penguin, 2019), 30.
16. “Motor Vehicle Deaths in 2020 Estimated to Be Highest in 13 Years, Despite Dramatic Drops in Miles Driven,” National Safety Council, March 4, 2021, <https://www.nsc.org/newsroom/motor-vehicle-deaths-2020-estimated-to-be-highest>.
17. Kate Bayless, “What Is Helicopter Parenting?” December 5, 2019, *Parents*, <https://www.parents.com/parenting/better-parenting/what-is-helicopter-parenting/>.
18. Ellen Yard et al., “Emergency Department Visits for Suspected Suicide Attempts among Young Persons Aged 12–25 Years before and during the COVID Pandemic—United States, January 2019–May 2021,” *Morbidity and Mortality Weekly Report* 70, no. 24 (June 2021): 888–94, <https://www.cdc.gov/mmwr/volumes/70/wr/mm7024e1.htm>.
19. Abbey Machtig, “Nationally, Many Students Are Unwilling to Receive COVID-19 Testing, UMN Expert Says,” *Minnesota Daily*, September 18, 2020, <https://mndaily.com/262376/news/nationally-many-students-are-unwilling-to-receive-covid-19-testing-umn-expert-says/>.
20. Lauren Myers and Amanda Hara, “‘COVID-19 Pacts’ Happening among UT Students,” *WVLT* 8, September 15, 2020, <https://www.wvlt.tv/2020/09/15/covid-19-pacts-happening-among-ut-students/>.
21. Veneta Rizvic, “Mizzou Will Go Back to Virtual Learning after Thanksgiving Break,” *St. Louis Business Journal*, November 13, 2020, <https://www.bizjournals.com/stlouis/news/2020/11/13/mizzou-will-go-back-to-virtual-learning.html>.
22. Graham Rapier, “New College Enrollments Plunged 16% This Fall as Incoming Freshmen Opted for Gap Years over Virtual Learning,” *Business Insider*, October 15, 2020, <https://www.businessinsider.com/college-enrollment-numbers-decrease-during-covid-coronavirus-virtual-learning-data-2020-10>.

## 21: Deaths of Despair

1. Mackenzie Bean, “Suicides Fell in 2020, Early CDC Data Shows,” *Becker’s Hospital Review*, April 1, 2021, <https://www.beckershospitalreview.com/public-health/suicides-fell-in-2020-early-cdc-data-shows.html>.
2. “Provisional Drug Overdose Death Counts,” National Center for Health Statistics, July 4, 2021, <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>.
3. “Drug-Related Deaths and Mortality in Europe,” European Monitoring Centre for Drugs and Drug Addiction, May 2021, <https://www.emcdda.europa.eu/system/files/publications/13762/TD0221591ENN.pdf>.
4. “Opioid- and Stimulant-Related Harms in Canada,” Government of Canada, June 23, 2021, <https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants/>.
5. William Wan and Heather Long, “‘Cries for Help’: Drug Overdoses Are Soaring during the Coronavirus Pandemic,” *Washington Post*, July 1, 2020, <https://www.washingtonpost.com/health/2020/07/01/coronavirus-drug-overdose/>.
6. Emily Feng, “‘We Are Shipping to the U.S.’: Inside China’s Online Synthetic Drug Networks,” *NPR*, November 17, 2020, <https://www.npr.org/2020/11/17/916890880/we-are-shipping-to-the-u-s-china-s-fentanyl-sellers-find-new-routes-to-drug-user>.
7. “Opioid- and Stimulant-Related Harms in Canada.”
8. “Olivia Dalton Had Been Sober for over a Year. Then the Pandemic Hit, She Lost Her Job, Relapsed and Overdosed,” Canadian Broadcasting Corporation, November 4, 2020, <https://www.cbc.ca/news/canada/british-columbia/langley-parents-call-for-increased-supports-following-daughter-s-overdose-death-1.5788261>.



9. Julie Small and Mohar Chatterjee, “Fentanyl Is Killing More People during the Pandemic. In Santa Clara County, Victims Are Getting Younger,” KQED, May 24, 2021, <https://www.kqed.org/news/11874651/fentanyl-is-killing-more-people-in-the-pandemic-in-santa-clara-county-victims-are-getting-younger>.
10. Denise Coffey, “Significant Increase in Opioid-Related Overdoses on Cape Cod Blamed on COVID-19,” *Cape Cod Times*, January 10, 2021, <https://www.capecodtimes.com/story/news/2021/01/10/increase-opioid-related-overdoses-blamed-covid-19/6599127002/>.
11. Aubrey Whelan, “Philadelphia May Be on the Way to a Record for Fatal Drug Overdoses in 2020, Another COVID Consequence,” December 6, 2020, *Philadelphia Inquirer*, <https://www.inquirer.com/health/opioid-addiction/overdoses-philadelphia-covid-opioid-fentanyl-20210206.html>.
12. “Overdose Deaths in Philadelphia Reach 2nd-Highest Number Ever Recorded in 2020,” CBS 3 Philly, June 3, 2021, <https://philadelphia.cbslocal.com/2021/06/03/philadelphia-overdose-deaths-2020/>.
13. Maria Pulcinella, “Philly Museums Begin Reopening after City Eases COVID-19 Restrictions,” WHYY, January 4, 2021, <https://whyy.org/articles/philly-museums-begin-reopening-after-city-eases-covid-19-restrictions/>.
14. Josh Skluzacek, “Nearly 1K Minnesota Alcohol-Related Deaths in 2020, MDH Says,” KSTP 5, April 16, 2021, <https://kstp.com/minnesota-news/alcohol-related-deaths-increase-in-2020-minnesota-department-health-report/6077265/#:~:text=New%20data%20released%20by%20the,171%20deaths%20compared%20to%202019.>
15. “Alcohol Deaths Highest for 20 Years in England and Wales,” BBC, May 6, 2021, <https://www.bbc.com/news/health-57008067#:~:text=Alcohol%20killed%20more%20people%20in,Office%20for%20National%20Statistics%20says.>
16. “Drug Overdose Deaths in the United States, 1999–2019,” National Center for Health Statistics, Centers for Disease Control and Prevention, December 2020, <https://www.cdc.gov/nchs/products/databriefs/db394.htm>.
17. “Weekly Updates by Select Demographic and Geographic Characteristics,” National Center for Health Statistics, Centers for Disease Control and Prevention, [https://www.cdc.gov/nchs/nvss/vsrr/covid\\_weekly/index.htm](https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm).
18. “Video, Audio, Photos, & Rush Transcript: Governor Cuomo Signs the ‘New York State on Pause’ Executive Order,” New York State Governor website, <https://www.governor.ny.gov/news/video-audio-photos-rush-transcript-governor-cuomo-signs-new-york-state-pause-executive-order>.

## 22: Sunbelt Spike

1. Lidia Ryan, “CT Malls and Major Retailers That Have Reopened,” *Connecticut Post*, May 19, 2020, <https://www.ctpost.com/news/coronavirus/slideshow/CT-malls-and-major-retailers-opening-in-phase-1-202512.php>.
2. Alex Berenson (@alexberenson), “Flew today. Turns out that even when face diapers are required...they’re not really required. I had a mask, of course, and if the flight attendants had wanted me to wear it I would have...but they didn’t. Non-Karens are well aware they’re viral theater,” Twitter, July 1, 2020, 5:42 p.m. Screenshot in my possession, and available at the Wayback Machine at <https://web.archive.org/web/20210324021734/https://twitter.com/alexberenson/status/1278489115516964864>.
3. Norah O’Donnell, “Dr. Fauci Says, ‘With All Due Modesty, I Think I’m Pretty Effective,’” *InStyle*, July 15, 2020, <https://www.instyle.com/news/dr-fauci-says-with-all-due-modesty-i-think-im-pretty-effective>.

4. Alex Berenson (@AlexBerenson), “And there’s Dr. Anthony Fauci showing us all he knows exactly how well masks work! Thanks for the lesson, doc,” Twitter, July 23, 2020. Screenshot in my possession, and available at the Wayback Machine at <https://web.archive.org/web/20210721230239/https://twitter.com/alexberenson/status/1417983356365680640>.
5. Travis Pittman, “Fauci Calls Criticism over Photo of Him with Mask Down ‘Mischievous,’” WUSA 9, July 24, 2020, <https://www.wusa9.com/article/news/health/coronavirus/anthony-fauci-face-mask-down-photo-coronavirus/507-e33379cb-d79e-479b-9960-13293c96572f>.
6. Charles Ornstein and Mike Hixenbaugh, “‘All the Hospitals Are Full’: In Houston, Overwhelmed ICUs Leave COVID-19 Patients Waiting in ERs,” ProPublica, July 10, 2020, <https://www.propublica.org/article/all-the-hospitals-are-full-in-houston-overwhelmed-icus-leave-covid-19-patients-waiting-in-ers>.
7. Alex Berenson (@AlexBerenson), “Update from Houston...,” Twitter, July 20, 2020, <https://twitter.com/alexberenson/status/1285251820655308804?lang=en>. Screenshot in my possession.
8. Alex Berenson (@AlexBerenson), “CASE MIX: The age of the infected...,” Twitter, July 16, 2020, <https://twitter.com/alexberenson/status/1283754372569194498?lang=en>. Screenshot in my possession.
9. Alexis C. Madrigal, “A Second Coronavirus Death Surge Is Coming,” *The Atlantic*, July 15, 2020, <https://www.theatlantic.com/health/archive/2020/07/second-coronavirus-death-surge/614122/>.
10. Thomas Chatterton Williams, “Do Americans Understand How Badly They’re Doing? In France, Where I Live, the Virus Is under Control. I Can Hardly Believe the News Coming Out of the United States,” *The Atlantic*, July 2, 2020, <https://www.theatlantic.com/ideas/archive/2020/07/america-land-pathetic/613747/>.
11. Jonathan Chait, “American Death Cult: Why Has the Republican Response to the Pandemic Been So Mind-Bogglingly Disastrous?” *New York*, July 20, 2020, <https://nymag.com/intelligencer/2020/07/republican-response-coronavirus.html>.
12. Margherita Stancati and Bojan Pancevski, “How Europe Kept Coronavirus Cases Low Even after Reopening,” *Wall Street Journal*, July 20, 2020, <https://www.wsj.com/articles/how-europe-slowed-its-coronavirus-cases-from-a-torrent-to-a-trickle-11595240731>.
13. “Why Has Europe Better Contained the Virus Than the US? Here’s What Fauci Says,” CNN, July 31, 2020, [https://www.cnn.com/politics/live-news/fauci-coronavirus-testimony-07-31-20/h\\_7b051587c9b0584a6f83d07211a8792b](https://www.cnn.com/politics/live-news/fauci-coronavirus-testimony-07-31-20/h_7b051587c9b0584a6f83d07211a8792b).
14. Thomas V. Inglesby et al., “Disease Mitigation Measures in the Control of Pandemic Influenza,” *Biosecurity and Bioterrorism* 4, no. 4 (2006), <http://www.upmc-biosecurity.org/website/resources/publications/2006/2006-09-15-diseasemitigationcontrolpandemicflu.html>.
15. David Leonhardt, “America’s Death Gap,” *New York Times*, September 1, 2020, <https://www.nytimes.com/2020/09/01/briefing/coronavirus-kenosha-massachusetts-your-tuesday-briefing.html>.
16. See Kwok et al., “Obesity: A Critical Risk Factor in the COVID-19 Pandemic,” *Clinical Obesity* 10, no. 6 (December 2020), <https://pubmed.ncbi.nlm.nih.gov/32857454/>.
17. Ivan Pereira, “How New York Has Been Able to Keep Coronavirus at Bay While Other States See Surges,” ABC News, July 17, 2020, <https://abcnews.go.com/Health/york-coronavirus-bay-states-surges/story?id=71772507>.
18. “How Fauci Says the U.S. Can Get Control of the Pandemic,” *PBS NewsHour*, July 17, 2020, <https://www.pbs.org/newshour/show/how-fauci-says-the-u-s-can-get-control-of-the-pandemic>.

19. Tom Davis, “Gov. Murphy to Reopen NJ Libraries, Museums, Indoor Recreation,” Patch, June 24, 2020, <https://patch.com/new-jersey/holmdel-hazlet/watch-live-gov-murphy-nj-coronavirus-reopen-update-6-24-20>.
20. Chris Francescani et al., “100 Days in ‘Hell’: Gov. Andrew Cuomo on His Pandemic Performance,” ABC News, June 17, 2021, <https://abcnews.go.com/GMA/News/100-days-hell-gov-andrew-cuomo-pandemic-performance/story?id=71289534>.
21. “Video, Audio, Photos & Rush Transcript: Governor Cuomo on President Trump’s Failure to Take Responsibility for COVID-19 Crisis: ‘This Has Been Gross Negligence,’” New York State Governor website, July 13, 2020, <https://www.governor.ny.gov/news/video-audio-photos-rush-transcript-governor-cuomo-president-trumps-failure-take-responsibility>.

### 23: The Forever Lockdowners

1. Andy Slavitt (@ASlavitt), “COVID Update July 26: We can virtually eliminate the virus any time we decide to. 1/,” Twitter, July 26, 2020, 7:04 p.m., <https://twitter.com/ASlavitt/status/1287524301499965441>.
2. Andy Slavitt (@ASlavitt), “So let’s define the kitchen sink: 1. Start with universal mask wearing. We didn’t do this in Mar–April and let’s chalk it up to faulty instructions. But we know better now. 2. Keep the bars & restaurants & churches & transit closed. All hot spots. 3. Prohibit interstate travel10/,” Twitter, July 26, 2020, 7:04 p.m., <https://twitter.com/ASlavitt/status/1287524334429507585>.
3. Andy Slavitt (@ASlavitt), “6. Instead of 50% lockdown (which is what we did in March in April), let’s say it’s a 90% lockdown. Meaning most of the Americans who couldn’t stay home in April because they were picking crops or driving trucks or working in health care would stay home with us. 12/,” Twitter, July 26, 2020, 7:04 p.m., <https://twitter.com/ASlavitt/status/1287524336249835520>.
4. Michael T. Osterholm and Neel Kashkari, “Here’s How to Crush the Virus Until the Vaccines Arrive,” *New York Times*, August 7, 2020, <https://www.nytimes.com/2020/08/07/opinion/coronavirus-lockdown-unemployment-death.html>.
5. Michael T. Osterholm and Mark Olshaker, “Opinion: Facing Covid-19 Reality: A National Lockdown Is No Cure,” *Washington Post*, March 21, 2020, <https://www.washingtonpost.com/opinions/2020/03/21/facing-covid-19-reality-national-lockdown-is-no-cure/>.
6. Ritu Prasad, “Coronavirus: How Did Florida Get So Badly Hit by Covid-19?” BBC, July 14, 2020, <https://www.bbc.com/news/world-us-canada-53357742>.
7. Shawn Radcliffe, “How Contact Tracing Can Stop COVID-19,” Healthline, May 4, 2020, <https://www.healthline.com/health-news/everything-to-know-about-contact-tracing#What-is-contact-tracing?>
8. Andrew Joseph, “Contact Tracing Could Help Avoid Another Lockdown. Can It Work in the United States?” Stat News, May 29, 2020, <https://www.statnews.com/2020/05/29/contact-tracing-can-it-help-avoid-more-lockdowns/>.
9. Lisette Voytko, “NY Will Hire Contact Tracing ‘Army’ of 17,000 to Battle Coronavirus, Cuomo Says,” *Forbes*, April 30, 2020, <https://forbes.com/sites/lisettevoytko/2020/04/30/ny-will-hire-contact-tracing-army-of-17000-to-battle-coronavirus-cuomo-says/>.
10. Franco Ordoñez, “Ex-Officials Call for \$46 Billion for Tracing, Isolating in Next Coronavirus Package,” NPR, April 27, 2020, <https://www.npr.org/2020/04/27/845165404/ex-officials-call-for-46-billion-for-tracing-isolating-in-next-coronavirus-packa>.
11. Brian Chasnoff, “Really Exasperating’—S.A. Officials Struggle to Pinpoint Sources of COVID Infections,” *San-Antonio Express News*, June 23, 2020, <https://www.ex>

- pressnews.com/news/local/politics/article/Really-exasperating-S-A-officials-15361645.php.
12. Matt Arco, "N.J.'s Big Hangup in Coronavirus Fight Gets Worse. Contact Tracers Find 74% Unwilling to Cooperate," NJ.com, December 8, 2020, <https://www.nj.com/coronavirus/2020/12/njs-big-hangup-in-coronavirus-fight-gets-worse-contact-tracers-find-74-unwilling-to-cooperate.html>.
  13. "Kentucky Couple Who Refused Isolation Order on House Arrest after Positive COVID-19 Test," *Courier-Journal*, July 20, 2020, <https://www.courier-journal.com/story/news/2020/07/20/kentucky-couple-house-arrest-coronavirus-isolation-order/5470378002/>.
  14. Nicoletta Lanese, "Why Hasn't Contact Tracing Managed to Slow the Massive Surge of Coronavirus in the US?" Live Science, July 21, 2020, <https://www.livescience.com/covid19-contact-tracing-us-states.html>.
  15. Mirjam E. Kretzschmar et al., "Impact of Delays on Effectiveness of Contact Tracing Strategies for COVID-19: A Modelling Study," *The Lancet* 5, no. 8 (August 2020), [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(20\)30157-2/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30157-2/fulltext).
  16. Ari Shapiro and Maureen Pao, "California and Texas Health Officials: Mistrust a Major Hurdle for Contact Tracers," NPR, August 10, 2020, <https://www.npr.org/sections/coronavirus-live-updates/2020/08/10/901064505/california-and-texas-health-officials-on-challenges-they-face-in-contact-tracing>.
  17. "Crowds Seen at Motorcycle Rally Raise Fears of Super Spreader Event," CNN, August 11, 2020, <https://www.cnn.com/videos/us/2020/08/11/motorcycle-rally-sturgis-ryan-young-lklv-nr-ldn-vpx.cnn>.
  18. Ella Lee, "Fact Check: Post Online Misstates Sturgis Rally's Coronavirus Cases," USA Today, September 17, 2020, <https://www.usatoday.com/story/news/factcheck/2020/09/17/fact-check-sturgis-rallys-covid-19-cases-misstated-online-post/3458606001/>.
  19. Colton Hall, "SDHP: Fatal Motorcycle Crashes, Fatalities Doubled during 2020 Sturgis Motorcycle Rally," NewsCenter1, August 16, 2020, <https://www.newscenter1.tv/sdhp-fatal-motorcycle-crashes-fatalities-doubled-during-2020-sturgis-motorcycle-rally/>.
  20. Damien Gayle et al., "Coronavirus: Police Break Up Anti-Lockdown Protest in London," *The Guardian*, September 26, 2020, <https://www.theguardian.com/world/2020/sep/26/london-lockdown-protesters-urged-to-follow-covid-rules>.
  21. "Hundreds Protest, Clash with Police in Naples over New Coronavirus Curfew," France24, October 24, 2020, <https://www.france24.com/en/europe/20201024-hundreds-protest-clash-with-police-in-naples-over-new-coronavirus-curfew>.
  22. "Thousands Protest Anti-Coronavirus Restrictions in Germany over Weekend," Reuters, October 4, 2020, <https://www.reuters.com/article/us-health-coronavirus-germany-protest-idUKKBN26P0G1>.
  23. Christine Armario, "Colombia's Long Virus Lockdown Fuels Anxiety and Depression," Associated Press, August 5, 2020, <https://apnews.com/article/virus-outbreak-caribbean-anxiety-health-south-america-0e47524f0453c382c8c652de340b178c>.
  24. Luis Jaime Acosta, "Colombian Unions, Students Seek to Revive Mass Protests against Government, Police Violence," Reuters, September 22, 2020, <https://www.reuters.com/article/colombia-protests-idUSKCN26D0BQ>.
  25. "Colombia Riots: Several Dead in Protests over Police Violence," Deutsche Welle, September 11, 2020, <https://www.dw.com/en/colombia-protests/a-54888415>.
  26. Rajiv Kalkod, "Bengaluru Cops Say Majority of Rioters Lost Jobs and Had No Income," *Times of India*, August 14, 2020, <https://timesofindia.indiatimes.com/city>

/bengaluru/post-lockdown-frustrations-proved-fertile-ground-for-riots/articleshow/77533074.cms.

27. “Thousands of Anti-Government Protesters Rally in Thailand’s Capital,” *The Guardian*, July 18, 2020, <https://www.theguardian.com/world/2020/jul/18/thousands-of-anti-government-protesters-rally-in-thailands-capital>.
28. Tim Lister and Stefano Pozzebbon, “Protests across Latin America Reflect a Toxic Cocktail of Pandemic and Recession,” CNN, August 20, 2020, <https://www.cnn.com/2020/08/20/americas/latam-covid-19-protests-intl/index.html>.
29. “Germany Coronavirus: Anger after Attempt to Storm Parliament,” BBC, August 30, 2020, <https://www.bbc.com/news/world-europe-53964147>.

## 24: This Is Only a Test

1. Apoorva Mandavilli, “Your Coronavirus Test Is Positive. Maybe It Shouldn’t Be,” *New York Times*, August 29, 2020, <https://www.nytimes.com/2020/08/29/health/coronavirus-testing.html>.
2. “DNA Evidence: Basics of Analyzing,” National Institute of Justice, August 8, 2012, <https://nij.ojp.gov/topics/articles/dna-evidence-basics-analyzing>.
3. Leonardo Castañeda, “Coronavirus: Here’s What It’s Really Like to Get a Nasal Swab Test,” *Mercury News*, May 9, 2020, <https://www.mercurynews.com/2020/05/09/coronavirus-heres-what-its-really-like-to-get-a-nasal-swab-test/>.
4. “COVID-19 and PCR Testing,” Cleveland Clinic, <https://my.clevelandclinic.org/health/diagnostics/21462-covid-19-and-pcr-testing>.
5. Sarah Tiner, “The Science behind the Test for the COVID-19 Virus,” Discovery’s Edge, March 27, 2020, <https://discoverysedge.mayo.edu/2020/03/27/the-science-behind-the-test-for-the-covid-19-virus/>.
6. Reed Magleby et al., “Impact of Severe Acute Respiratory Syndrome Coronavirus 2 Viral Load on Risk of Intubation and Mortality among Hospitalized Patients with Coronavirus Disease 2019,” *Clinical Infectious Diseases*, June 30, 2020, <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaa851/5865363>.
7. Mandavilli, “Your Coronavirus Test Is Positive.”
8. “An Overview of Cycle Threshold Values and Their Role in SARS-CoV-2 Real-Time PCR Test Interpretation,” Public Health Ontario, September 17, 2020, <https://www.publichealthontario.ca/-/media/documents/ncov/main/2020/09/cycle-threshold-values-sars-cov2-pcr.pdf?la=en>.
9. Anika Singanayagam et al., “Duration of Infectiousness and Correlation with RT-PCR Cycle Threshold Values in Cases of COVID-19, England, January to May 2020,” *Eurosurveillance* 26, no. 7 (February 18, 2021), <https://pubmed.ncbi.nlm.nih.gov/32794447/>.
10. Rachel Schraer, “Coronavirus: Tests ‘Could Be Picking Up Dead Virus,’” BBC, September 5, 2020, <https://www.bbc.com/news/health-54000629>.
11. Jennifer Abbasi, “Anthony Fauci, MD, on COVID-19 Vaccines, Schools, and Larry Kramer,” *Journal of the American Medical Association* 324, no. 3 (June 8, 2020): 220–22, <https://jamanetwork.com/journals/jama/fullarticle/2767208>.
12. “COVID-19 with Dr. Anthony Fauci,” *This Week in Virology*, American Society for Microbiology, <https://asm.org/Podcasts/TWiV/Episodes/COVID-19-with-Dr-Anthony-Fauci-TWiV-641>.
13. “Novel Coronavirus (SARS-CoV-2),” European Centre for Disease Prevention and Control, <https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-Disease-criteria.pdf>, 2.

14. "Reporting of COVID-19 Ct Values Can Better Shape Public Policy," Rhode Island Center for Freedom and Prosperity, December 11, 2020, <https://rifreedom.org/2020/12/covid-19-ct-values-better-public-policy/>.
15. Mandavilli, "Your Coronavirus Test Is Positive."
16. Ibid.
17. "COVID-19 Integrated Surveillance Data in Italy," Epicentro, <https://www.epicentro.iss.it/en/coronavirus/sars-cov-2-dashboard>.
18. "Ellume's COVID-19 Home Test Shows 96% Accuracy in Multi-Site US Clinical Study," Ellume, <https://www.ellumehealth.com/2020/12/10/ellumes-covid-19-home-test-shows-96-accuracy-in-multi-site-us-clinical-study/>.
19. "Technical Advisory Cell," Welsh Government, July 15, 2020, <https://gov.wales/sites/default/files/publications/2020-07/core-principles-for-utilisation-of-rt-pcr-tests-for-detection-of-sars-cov-2.pdf>.
20. Allison Martell and Ned Parker, "The U.S. Has More Covid-19 Testing Than Most. So Why Is It Falling So Short?" Reuters, July 27, 2020, <https://www.reuters.com/article/us-health-coronavirus-usa-testing-insight/idUSKCN24519H>.
21. Kate Sheridan, "U.S. Needs 193 Million Covid-19 Tests per Month to Reopen Schools and Keep Up with Pandemic, New Report Says," Stat News, September 9, 2020, <https://www.statnews.com/2020/09/09/193-million-covid-19-tests-per-month-report/>.

## 25: Long, Long Covid

1. Dylan Byers, "The Atlantic Thrived through Trump and the Pandemic. The Future Is Harder," NBC News, July 13, 2021, <https://www.nbcnews.com/media/atlantic-thrived-trump-pandemic-future-harder-rcna1398>.
2. Ed Yong, "Long-Haulers Are Redefining Covid-19," *The Atlantic*, August 19, 2020, <https://www.theatlantic.com/health/archive/2020/08/long-haulers-covid-19-recognition-support-groups-symptoms/615382/>.
3. Ike Swetlitz, "Persistent Lyme Disease Symptoms Aren't Helped by Long-Term Antibiotics," Stat News, March 30, 2016, <https://www.statnews.com/2016/03/30/chronic-lyme-antibiotics/>.
4. "Post-Treatment Lyme Disease Syndrome," Centers for Disease Control, <https://www.cdc.gov/lyme/postlds/index.html>.
5. Ross McGuinness, "The 16 Symptoms of 'Long COVID' as Study Reveals 60,000 People Have Been Ill for Three Months," Yahoo, September 8, 2020, <https://www.yahoo.com/news/symptoms-long-covid-ill-months-coronavirus-115240083.html>.
6. Yong Huang et al., "COVID Symptoms, Symptom Clusters, and Predictors for Becoming a Long-Hauler: Looking for Clarity in the Haze of the Pandemic," medRxiv, March 5, 2021, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7941647/>.
7. Matt Reynolds, "They Never Officially Had Covid-19. Months Later They're Living in Hell," *Wired*, September 11, 2020, <https://www.wired.co.uk/article/coronavirus-long-haulers-negative-tests-covid-19>; Gina Assaf et al., "Report: What Does COVID-19 Recovery Actually Look Like?" Patient-Led Research Collaborative, May 11, 2020, <https://patientresearchcovid19.com/research/report-1/>.
8. Ed Hornick, "I Fear That I Will Never Be the Same Again: What It's Really Like to Be a COVID Long-Hauler," Yahoo, September 1, 2020, <https://uk.style.yahoo.com/i-fear-that-i-will-never-be-the-same-again-heres-what-its-really-like-to-be-a-covid-longhauler-185358665.html>.
9. Jayne O'Donnell and Khrysgiana Pineda, "Long-Lasting COVID Symptoms from Lungs to Limbs Linger in Coronavirus 'Long-Haulers,'" *USA Today*, July 25, 2020,

- <https://www.usatoday.com/in-depth/news/health/2020/07/25/covid-19-long-haulers-fight-months-lingering-symptoms/5420534002/>.
10. “National Safety Council: 97 Percent of Workers Report Fatigue Factors,” Compliance Signs, August 3, 2017, <https://www.compliancesigns.com/blog/national-safety-council-97-percent-of-workers-report-fatigue-factors/>.
  11. Adam Hampshire et al., “Cognitive Deficits in People Who Have Recovered from COVID-19 Relative to Controls: An N=84,285 Study,” medRxiv, October 21, 2020, <https://www.medrxiv.org/content/10.1101/2020.10.20.20215863v1.full-text>.
  12. Katie Gibbons, “Coronavirus Could Age the Brain by 10 Years or Cause IQ to Fall,” *The Times* (London), October 27, 2020, <https://www.thetimes.co.uk/article/coronavirus-could-age-the-brain-by-10-years-or-cause-iq-to-fall-v9s273rbs>.
  13. Nidhi Subbaraman, “US Health Agency Will Invest \$1 Billion to Investigate ‘Long COVID,’” *Nature*, March 4, 2021, <https://www.nature.com/articles/d41586-021-00586-y>.
  14. Sara Berg, “More Resources Needed to Help Millions Living with ‘Long COVID,’” American Medical Association, June 16, 2021, <https://www.ama-assn.org/delivering-care/public-health/more-resources-needed-help-millions-living-long-covid>.
  15. Survivor Corps, <https://www.survivorcorps.com/>.
  16. Haley Bull, “Long COVID Highlighted as It Relates to the Americans with Disabilities Act,” ABC Action News WFTS Tampa Bay, July 26, 2021, <https://www.abcactionnews.com/news/coronavirus/long-covid-highlighted-as-it-relates-to-the-americans-with-disabilities-act>.
  17. Katharine Q. Seelye, “Clinton Book Draws Cheers as Publisher Holds Breath,” *New York Times*, June 22, 2004, <https://www.nytimes.com/2004/06/22/us/clinton-book-draws-cheers-as-publisher-holds-breath.html>.
  18. “Multiplier Project Spotlight: National Science Policy Network,” <https://multiplier.org/>.
  19. David M. Morens and Anthony S. Fauci, “Emerging Pandemic Diseases: How We Got COVID-19,” *Cell* 182 (September 3, 2020), [https://www.cell.com/cell/pdf/S0092-8674\(20\)31012-6.pdf](https://www.cell.com/cell/pdf/S0092-8674(20)31012-6.pdf).
  20. Karina Piser, “The Trap Doors and Dead Ends of Trying to Get Treated for Long Covid,” *New Republic*, July 27, 2021, <https://newrepublic.com/article/163036/long-covid-treatment-dead-ends>.
  21. Melba Newsome, “New Long-Haul COVID Clinics Treat Mysterious and Ongoing Symptoms,” *Scientific American*, June 30, 2021, <https://www.scientificamerican.com/article/new-long-haul-covid-clinics-treat-mysterious-and-ongoing-symptoms/>.
  22. “Amphetamines,” Better Health Channel, <https://www.betterhealth.vic.gov.au/health/healthyliving/amphetamines#long-term-effects-of-amphetamines>.
  23. M. J. Nuñez et al., “Effects of Amphetamine on Influenza Virus Infection in Mice,” *Life Sciences* 52, no. 10 (1993): PL73–78, <https://www.sciencedirect.com/science/article/abs/pii/002432059390520D>.
  24. “Report: Aspirin Taken Daily with Bottle of Bourbon Reduces Awareness of Heart Attacks,” *The Onion*, June 10, 1998, <https://www.theonion.com/report-aspirin-taken-daily-with-bottle-of-bourbon-reduces-awareness-of-heart-attacks>.

## 26: Herd Immunity

1. Amanda Watts and Naomi Thomas, “New White House Coronavirus Adviser Says He’s a ‘Straight Shooter,’” CNN, September 4, 2020, <https://www.cnn.com/2020/09/04/health/coronavirus-atlas-straight-shooter/index.html>.

2. Yasmeen Abutaleb and Josh Dawsey, “New Trump Pandemic Adviser Pushes Controversial ‘Herd Immunity’ Strategy, Worrying Public Health Officials,” *Washington Post*, August 30, 2020, [https://www.washingtonpost.com/politics/trump-coronavirus-scott-atlas-herd-immunity/2020/08/30/925e68fe-e93b-11ea-970a-64c73a1c2392\\_story.html](https://www.washingtonpost.com/politics/trump-coronavirus-scott-atlas-herd-immunity/2020/08/30/925e68fe-e93b-11ea-970a-64c73a1c2392_story.html).
3. “Coronavirus Disease (COVID-19): Herd Immunity, Lockdowns and COVID-19,” World Health Organization, December 31, 2020, <https://www.who.int/news-room/q-a-detail/herd-immunity-lockdowns-and-covid-19>.
4. “Coronavirus ‘Herd Immunity’ Is Just Another Way to Say ‘Let People Die,’” *Los Angeles Times*, September 5, 2020, <https://www.latimes.com/opinion/story/2020-09-02/coronavirus-herd-immunity-trump>.
5. Brian Resnick, “The Worst Idea of 2020,” *Vox*, December 30, 2020, <https://www.vox.com/science-and-health/22202758/herd-immunity-natural-infection-worst-idea-of-2020>.
6. Geoff Brumfiel and Tamara Keith, “President Trump’s New COVID-19 Adviser Is Making Public Health Experts Nervous,” NPR, September 4, 2020, <https://www.npr.org/sections/health-shots/2020/09/04/909348915/president-trumps-new-covid-19-advisor-is-making-public-health-experts-nervous>.
7. Monica Alba, “Redfield Voices Alarm over Influence of Trump’s New Coronavirus Task Force Adviser,” NBC News, September 28, 2020, <https://www.nbcnews.com/politics/politics-news/redfield-voices-alarm-over-influence-trump-s-new-coronavirus-task-force-n1241221>.
8. Matt Wilstein, “Dr. Anthony Fauci Calls Out Fox News and Scott Atlas in CNN Interview,” *The Daily Beast*, September 29, 2020, <https://www.thedailybeast.com/dr-anthony-fauci-calls-out-fox-news-and-scott-atlas-in-cnn-interview-with-brian-stelter>.
9. “New Adviser Giving Trump Bad Information on Virus, Top Officials Say,” Reuters, September 28, 2020, <https://www.reuters.com/article/health-coronavirus-usa-cdc-idUSKBN26K07E>.
10. Greg Allen, “Florida’s Governor Lifts All COVID-19 Restrictions on Businesses Statewide,” NPR, September 25, 2020, <https://www.npr.org/sections/coronavirus-live-updates/2020/09/25/916969969/floridas-governor-lifts-all-covid-19-restrictions-on-businesses-statewide>.
11. Joe McLean and Ana Ceballos, “Florida Education Commissioner Mandates All Schools Must Reopen Campuses This Fall,” *News4Jax*, July 6, 2020, <https://www.news4jax.com/news/local/2020/07/06/florida-education-commissioner-mandates-all-schools-must-reopen-campuses-in-fall/>.
12. “Fauci Says Florida’s Decision to Fully Reopen Bars and Restaurants ‘Very Concerning,’” *Tampa Bay Times*, September 29, 2020, <https://www.tampabay.com/news/health/2020/09/29/fauci-says-floridas-decision-to-fully-reopen-bars-and-restaurants-very-concerning/>.
13. “Great Barrington Declaration,” <https://gbdeclaration.org/>.
14. Tunku Varadarajan, “Epidemiologists Stray from the Covid Herd,” *Wall Street Journal*, October 23, 2020, <https://www.wsj.com/articles/epidemiologists-stray-from-the-covid-herd-11603477330>.
15. Gregg Gonsalves (@gregggonsalves), “This fucking Great Barrington Declaration is like a bad rash that won’t go away,” Twitter, October 12, 2020, 5:34 p.m., <https://twitter.com/gregggonsalves/status/1315767761398890496?lang=en>.
16. Noah Higgins-Dunn, “Dr. Fauci Says Letting the Coronavirus Spread to Achieve Herd Immunity Is ‘Nonsense’ and ‘Dangerous,’” CNBC, October 15, 2020, <https://www.cnbc.com/2020/10/15/dr-fauci-says-letting-the-coronavirus-spread-to-achieve-herd-immunity-is-nonsense-and-dangerous.html>.



17. Carlie Porterfield, “Dr. Fauci on GOP Criticism: ‘Attacks on Me Quite Frankly, Are Attacks on Science,’” *Forbes*, June 9, 2021, <https://www.forbes.com/sites/carlieporterfield/2021/06/09/fauci-on-gop-criticism-attacks-on-me-quite-frankly-are-attacks-on-science/?sh=39aac9ee4542>.
18. Virginia Chamlee, “Dr. Fauci Tells Rand Paul, ‘You Do Not Know What You Are Talking About,’” *People*, July 21, 2021, <https://people.com/politics/anthony-fauci-rand-paul-heated-exchange-covid/>.
19. Rhett Jones, “Conservatives Pull Google into Their Plans to Let People Die,” *Gizmodo*, October 14, 2020, <https://gizmodo.com/conservatives-pull-google-into-their-plan-to-let-people-1845371054>.
20. Ethan Yang, “Reddit’s Censorship of the Great Barrington Declaration,” *American Institute for Economic Research*, October 8, 2020, <https://www.aier.org/article/reddits-censorship-of-the-great-barrington-declaration/>.

## 27: Trump

1. Tom Porter, “Trump Is Such a Germaphobe That Aides Aren’t Allowed to Cough in His Presence and Visitors Must Wash Their Hands before Entering the Oval Office, Report Says,” *Business Insider*, July 8, 2019, <https://www.businessinsider.com/germaphobe-trump-hates-people-coughing-and-sneezing-in-his-presence-2019-7>.
2. Lisa J. Adams Wagner, “Former GOP Presidential Hopeful Herman Cain Dies of COVID-19,” *Associated Press*, July 30, 2020, <https://apnews.com/article/virus-outbreak-election-2020-herman-cain-ap-top-news-ok-state-wire-8173fe14f7cf7095ced3b55fdc65581e>.
3. Jeremy W. Peters, “Will Herman Cain’s Death Change Republican Views on the Virus and Masks?” *New York Times*, July 30, 2020, <https://www.nytimes.com/2020/07/30/us/politics/herman-cain-gop-coronavirus.html>.
4. Patrick Stout, “Trump Killed Herman Cain,” *McDonough County Voice*, August 4, 2020, <https://www.mcdonoughvoice.com/story/opinion/columns/2020/08/04/trump-killed-herman-cain/42817567/>.
5. John Fritze and Maureen Groppe, “Trump Rallies 2.0: Behind the Curtain at the President’s Campaign Events in the Covid-19 Era,” *USA Today*, September 12, 2020, <https://www.usatoday.com/story/news/politics/elections/2020/09/12/election-2020-what-trumps-rallies-look-like-era-covid-19/5768172002/>.
6. Sam Gringlas, “At Least 8 People Test Positive for Coronavirus after Rose Garden Event for Barrett,” *NPR*, October 3, 2020, <https://www.npr.org/sections/latest-updates-trump-covid-19-results/2020/10/03/919851907/at-least-7-people-test-positive-for-coronavirus-after-rose-garden-event-for-barr>.
7. Maggie Haberman and Michael D. Shear, “Trump Says He’ll Begin ‘Quarantine Process’ after Hope Hicks Tests Positive for Coronavirus,” *New York Times*, October 1, 2020, <https://www.nytimes.com/2020/10/01/us/politics/hope-hicks-coronavirus.html>.
8. Aatif Sulleyman, “Donald Trump Tests Positive for COVID-19: What Is the Risk for Over-70s?” *Newsweek*, October 2, 2020, <https://www.newsweek.com/donald-trump-tests-positive-coronavirus-what-risk-over-70s-1535846>.
9. Kate Proctor and Nazia Parveen, “Boris Johnson: It Was 50–50 Whether to Put Me on a Ventilator,” *The Guardian*, May 3, 2020, <https://www.theguardian.com/world/2020/may/03/boris-johnson-it-was-50-50-whether-to-put-me-on-ventilator-coronavirus>.

10. Zachary B. Wolf, "Here's What Happens If Trump Gets Too Sick to Govern," CNN, October 9, 2020, <https://www.cnn.com/2020/10/02/politics/trump-covid-line-of-succession-governance/index.html>.
11. Sam Gringlas, "White House Official Calls Next 48 Hours 'Critical' for Trump's Care," NPR, October 3, 2020, <https://www.npr.org/sections/latest-updates-trump-covid-19-results/2020/10/03/919869461/watch-live-white-house-doctor-briefs-on-president-trumps-condition>.
12. Alexandra Alper, "After Mixed Messages from White House, Trump Says 'Real Test' Ahead in His COVID Fight," Reuters, October 3, 2020, <https://www.reuters.com/article/health-coronavirus-trump/after-mixed-messages-from-white-house-trump-says-real-test-ahead-in-his-covid-fight-idUSKBN26P02B>.
13. Brianna Abbott et al., "Trump Received Experimental Antibody and Remdesivir for Coronavirus," *Wall Street Journal*, October 3, 2020, <https://www.wsj.com/articles/trumps-weight-age-gender-make-severe-covid-19-more-likely-11601660627>.
14. Barbara Sprunt, "'Don't Be Afraid of It': Trump Dismisses Virus Threat as He Returns to White House," NPR, October 5, 2020, <https://www.npr.org/sections/latest-updates-trump-covid-19-results/2020/10/05/920412187/trump-says-he-will-leave-walter-reed-medical-center-monday-night>.
15. Julie Bosman et al., "Most Patients' Covid-19 Care Looks Nothing like Trump's," *New York Times*, October 6, 2020, <https://www.nytimes.com/2020/10/06/us/trump-coronavirus-care-treatment.html>.
16. Marilynn Marchione, "Ethicists Say Trump Special Treatment Raises Fairness Issue," Associated Press, October 7, 2020, <https://apnews.com/article/virus-outbreak-donald-trump-us-news-ap-top-news-international-news-a2f8d343085407a9209ed3c2c230a6f7>.
17. Dan Mangan and Kevin Breuninger, "Trump Tests Negative for the Coronavirus on Consecutive Days, White House Doctor Says," CNBC, October 12, 2020, <https://www.cnbc.com/2020/10/12/trump-tests-negative-for-the-coronavirus-on-consecutive-days-white-house-doctor-says.html>.
18. Kathryn Watson and Steven Portnoy, "Fauci Says Data on Masks 'Speaks for Itself' after 'Super-Spreader' White House Event," CBS News, October 9, 2020, <https://www.cbsnews.com/news/dr-fauci-on-masks-super-spreader-covid-event-interview/>.
19. Ronan McGreevy, "Covid-19: World in 'for a Hell of a Ride' in Coming Months, Dr Mike Ryan Says," *Irish Times*, October 2, 2020, <https://www.irishtimes.com/news/ireland/irish-news/covid-19-world-in-for-a-hell-of-a-ride-in-coming-months-dr-mike-ryan-says-1.4370626>.
20. Sophie Uyoga et al., "Seroprevalance of Anti-SARS-CoV-2 IgG Antibodies in Kenyan Blood Donors," medRxiv, July 29, 2020, <https://www.medrxiv.org/content/10.1101/2020.07.27.20162693v1.full.pdf>.
21. Gina Kolata and Roni Caryn Rabin, "'Don't Be Afraid of Covid,' Trump Says, Undermining Public Health Messages," *New York Times*, October 8, 2020, <https://www.nytimes.com/2020/10/05/health/trump-covid-public-health.html>.

## 28: A House Divided

1. Michael McFaul, "The Election of '96," Hoover Institution, *Hoover Digest*, October 1, 1997, <https://www.hoover.org/research/election-96>.
2. Becky Little, "When a Russian President Ended Up Drunk and Disrobed outside the White House," *History*, August 30, 2018, <https://www.history.com/news/bill-clinton-boris-yeltsin-drunk-1994-russian-state-visit>.

3. Emma Newburger, “Biden Leads Trump by 10 Points in Final Days before Election: NBC/WSJ Poll,” CNBC, November 1, 2020, <https://www.cnbc.com/2020/11/01/biden-leads-trump-by-10-points-in-final-days-before-election-nbc-wsj-poll.html>.
4. Stephen Collinson and Maeve Reston, “Biden Defeats Trump in an Election He Made about Character of the Nation and the President,” CNN, November 7, 2020, <https://www.cnn.com/2020/11/07/politics/joe-biden-wins-us-presidential-election/index.html>.
5. “Victory for Joe Biden, at Last,” *New York Times*, November 7, 2020, <https://www.nytimes.com/2020/11/07/opinion/joe-biden-president-winner.html>.
6. Sylvie Corbet, “Paris Mayor Reelected, Green Wave in France Local Elections,” Associated Press, June 28, 2020, <https://apnews.com/article/europe-virus-outbreak-rac-hida-dati-ap-top-news-elections-16e161a4349cd2712c5cb084259f1ece>; Glenn Kessler, “Trump’s Assertion That Only Two European Nations Allow Mail-in Voting,” *Washington Post*, December 4, 2020, <https://www.washingtonpost.com/politics/2020/12/04/trumps-assertion-that-only-two-european-nations-allow-mail-in-voting/>.
7. Emily Badger and Quoc Trung Bui, “How the Suburbs Moved Away from Trump,” *New York Times*, November 6, 2020, <https://www.nytimes.com/interactive/2020/11/06/upshot/suburbs-shifted-left-president.html>.
8. “Tucker: How ‘Defund the Police’ Movement Backfired on Democrats,” Fox News, November 10, 2020, <https://www.foxnews.com/transcript/tucker-how-defund-the-police-movement-backfired-on-democrats>.
9. Deborah Jordan Brooks and Lydia Saad, “The COVID-19 Responses of Men vs. Women,” Gallup, October 7, 2020, <https://news.gallup.com/opinion/gallup/321698/covid-responses-men-women.aspx>.
10. Audie Cornish and Maureen Pao, “To Tackle Racial Disparities in COVID-19, California Enacts New Metric for Reopening,” NPR, October 6, 2020, <https://www.npr.org/sections/coronavirus-live-updates/2020/10/06/920814386/to-tackle-racial-disparities-in-covid-19-california-enacts-new-metric-for-reopen>.
11. Queenie Wong, “Twitter Permanently Bans Trump’s Account,” CNET, January 9, 2021, <https://www.cnet.com/news/twitter-permanently-bans-trumps-account/>.
12. “Permanent Suspension of @realDonaldTrump,” Twitter, January 8, 2021, [https://blog.twitter.com/en\\_us/topics/company/2020/suspension](https://blog.twitter.com/en_us/topics/company/2020/suspension).
13. Sarah Frier, “Twitter’s Trump Ban Deemed Necessary, Derided as Long Overdue,” Bloomberg, January 9, 2021, <https://www.bloomberg.com/news/articles/2021-01-09/twitter-s-trump-ban-deemed-necessary-derided-as-long-overdue>.

## 29: Here We Go Again

1. “Newsom: State ‘Pulling Emergency Brake’ on Virus Reopenings,” NBC Bay Area, November 16, 2020, <https://www.nbcbayarea.com/news/california/new-restrictions-possible-as-gov-newsom-updates-states-virus-response/2400357/>.
2. Jill Cowan et al., “California Will Impose Its Strongest Virus Measures since the Spring,” *New York Times*, December 3, 2020, <https://www.nytimes.com/2020/12/03/us/california-stay-at-home-order.html>.
3. Whet Moser, “California Has Lost Control,” *The Atlantic*, December 21, 2020, <https://www.theatlantic.com/health/archive/2020/12/covid-hospitalizations-california-will-break-records/617455/>.
4. Elaine Godfrey, “Iowa Is What Happens When Government Does Nothing,” *The Atlantic*, December 3, 2020, <https://www.theatlantic.com/politics/archive/2020/12/how-iowa-mishandled-coronavirus-pandemic/617252/>.

5. Elaine Godfrey, “Iowans Were Scared into Taking the Virus Seriously,” *The Atlantic*, February 6, 2020, <https://www.theatlantic.com/politics/archive/2021/02/why-didnt-iowa-have-post-holiday-covid-19-surge/617920/>.
6. Brian Melley and Stefanie Dazio, “California Hospitals at ‘Brink of Catastrophe’ as Many Run Out of ICU Beds,” CTV News, December 31, 2020, <https://www.ctvnews.ca/world/california-hospitals-at-brink-of-catastrophe-as-many-run-out-of-icu-beds-1.5249919>.
7. Cheri Mossburg and Madeline Holcombe, “Oxygen Supply Issues Force Five Los Angeles–Area Hospitals to Declare an ‘Internal Disaster,’” CNN, December 29, 2020, <https://www.cnn.com/2020/12/29/us/california-hospital-oxygen-covid/index.html>.
8. “California’s Emergency Field Hospitals Provided Little Help during Height of COVID-19 Surge,” KTLA 5, July 31, 2021, <https://ktla.com/news/coronavirus/californias-emergency-field-hospitals-provided-little-help-during-height-of-covid-19-surge/>.
9. Corky Siemaszko, “Experts Warn of ‘Twindemic’ as Covid Cases Rise and Flu Seasons Loom,” NBC News, September 21, 2020, <https://www.nbcnews.com/news/us-news/experts-warn-twindemic-covid-cases-rise-flu-seasons-looms-n1240623>.
10. Sonja J. Olsen et al., “Decreased Influenza Activity during the COVID-19 Pandemic—United States, Australia, Chile, and South Africa, 2020,” *Morbidity and Mortality Report* 69, no. 37 (September 18, 2020): 1305–1309, <https://www.cdc.gov/mmwr/vo-lumes/69/wr/mm6937a6.htm>.
11. “Covid-19: France Moves to Night-Time Curfew from 15 December,” BBC, December 10, 2020, <https://www.bbc.com/news/world-europe-55266332>.
12. “Timeline of UK Coronavirus Lockdowns, March 2020 to March 2021,” Institute for Government (UK), <https://www.instituteforgovernment.org.uk/sites/default/files/time-line-lockdown-web.pdf>.
13. “Travel to New Zealand during Covid-19: What You Need to Know before You Go,” CNN, <https://www.cnn.com/travel/article/new-zealand-travel-covid-19/index.html>.
14. “New Zealand in Coronavirus Lockdown as U.K. Variant Cases Reported,” Reuters, February 14, 2021, <https://www.reuters.com/article/us-health-coronavirus-newzealand-idUSKBN2AE0R8>.
15. Daniel Wittenberg, “New Zealand Lockdown: Jacinda Ardern Announces Lifting of All Restrictions outside Auckland,” *The Independent*, September 21, 2020, <https://www.independent.co.uk/news/world/australasia/new-zealand-lockdown-coronavirus-restrictions-jacinda-ardern-auckland-b511204.html>.
16. Matthew S. Schwartz, “New Zealand PM Ardern Wins Re-Election in Best Showing for Labour Party in Decades,” NPR, October 17, 2020, <https://www.npr.org/2020/10/17/924934728/new-zealand-pm-ardern-wins-re-election-in-best-showing-for-labour-party-in-decad>.
17. Praveen Menon, “New Zealand’s Ardern Wins ‘Historic’ Re-Election for Crushing COVID-19,” Reuters, October 16, 2020, <https://www.reuters.com/article/uk-newzealand-election/new-zealands-ardern-wins-historic-re-election-for-crushing-covid-19-idUSKBN2712ZI>.
18. Todd Pollack et al., “Emerging COVID-19 Success Story: Vietnam’s Commitment to Containment,” Our World in Data, June 30, 2020, <https://ourworldindata.org/covid-exemplar-vietnam-2020>.
19. Emma Steen, “Tokyo Q&A: Why Is Japan Not in a Hard Lockdown over Coronavirus?” Time Out, May 12, 2020, <https://www.timeout.com/tokyo/news/why-is-japan-not-in-a-hard-lockdown-over-coronavirus-051220>.
20. “Japan Steps Up COVID Testing, but Some Say More Effort Needed,” Al Jazeera, March 3, 2021, <https://www.aljazeera.com/news/2021/3/3/japan-steps-up-covid-testing-but-some-say-more-effort-needed>.

21. “Lower Prevalence of Obesity in Japan Due to Environmental Factors,” *Pharmaceutical Technology*, January 28, 2020, <https://www.pharmaceutical-technology.com/comment/low-obesity-japan/>.
22. S. D. Stellman et al., “Smoking and Lung Cancer Risk in American and Japanese Men: An International Case-Control Study,” *Cancer Epidemiology, Biomarkers & Prevention* 10, no. 11 (November 2001), 1193–99, <https://pubmed.ncbi.nlm.nih.gov/11700268/>.
23. Sawako Hibino et al., “Dynamic Change of COVID-19 Seroprevalence among Asymptomatic Population in Tokyo during the Second Wave,” medRxiv, September 23, 2020, <https://www.medrxiv.org/content/10.1101/2020.09.21.20198796v1>.

### 30: Free at Last

1. “Pfizer and BioNTech Announce Vaccine Candidate against COVID-19 Achieved Success in First Interim Analysis from Phase 3 Study,” Pfizer, November 9, 2020, <https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-announce-vaccine-candidate-against>.
2. Nadia Kounang, “Pfizer Says Early Analysis Shows Its Covid-19 Vaccine Is More Than 90% Effective,” CNN, November 9, 2020, <https://www.cnn.com/2020/11/09/health/pfizer-covid-19-vaccine-effective/index.html>.
3. Tim Loh, “Fauci Says End to Pandemic Is in Sight, Thanks to Vaccines,” Bloomberg, November 12, 2020, <https://www.bloomberg.com/news/articles/2020-11-12/covid-won-t-be-pandemic-for-long-thanks-to-vaccines-fauci-says>.
4. Yuliya Talmazan and Erika Edwards, “‘Truly Striking’: Covid-19 Vaccine Candidate 94.5 Percent Effective, Moderna Says,” NBC News, November 16, 2020, <https://www.nbcnews.com/health/health-news/covid-19-vaccine-candidate-94-5-percent-effective-moderna-says-n1247888>.
5. “Pfizer and BioNTech Conclude Phase 3 Study of COVID-19 Vaccine Candidate, Meeting All Primary Efficacy Endpoints,” Pfizer, November 18, 2020, <https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-conclude-phase-3-study-covid-19-vaccine>.
6. Noah Higgins-Dunn, “CDC Director Says Face Masks May Provide More Protection Than Coronavirus Vaccine,” CNBC, September 16, 2020, <https://www.cnbc.com/2020/09/16/cdc-director-says-face-masks-may-provide-more-protection-than-coronavirus-vaccine.html>.
7. Philip Oltermann, “Uğur Şahin and Özlem Türeci: German ‘Dream Team’ behind Vaccine,” *The Guardian*, November 10, 2020, <https://www.theguardian.com/world/2020/nov/10/ugur-sahin-and-ozlem-tureci-german-dream-team-behind-vaccine>.
8. Laurie McGinley et al., “Trump Rails against ‘Medical Deep State’ after Pfizer Vaccine News Comes after Election Day,” *Washington Post*, November 11, 2020, <https://www.washingtonpost.com/politics/2020/11/11/trump-angry-about-pfizer-vaccine/>.
9. Zeke Miller, “Trump Hails Vaccine ‘Miracle,’ with Millions of Doses Soon,” Associated Press, December 8, 2020, <https://apnews.com/article/feds-pfizer-coronavirus-vaccine-doses-bb5cb23e49aa72ba9cf11b80f1c40b05>.
10. Rebecca Shabad, “Pence Receives Covid Vaccine in Televised Appearance, Hails ‘Medical Miracle,’” NBC News, December 18, 2020, <https://www.nbcnews.com/politics/white-house/pence-set-receive-covid-vaccine-televised-appearance-n1251655>.
11. Alex Berenson (@AlexBerenson), “Been thinking a lot...,” Twitter, November 10, 2020, <https://twitter.com/alexberenson/status/1326169723999051777?lang=en>. Screenshot in my possession.

### 31: The Excerpts

1. Lisa Müller et al., “Age-Dependent Immune Response to the Biontech/Pfizer BNT162b2 COVID-19 Vaccination,” medRxiv, March 5, 2021, <https://www.medrxiv.org/content/10.1101/2021.03.03.21251066v1.full>.
2. For example, Paul Naaber et al., “Dynamics of Antibody Response to BNT162b2 Vaccine after Six Months: A Longitudinal Prospective Study,” *The Lancet*, September 5, 2021, [https://www.thelancet.com/journals/lanepa/article/PIIS2666-7762\(21\)00185-X/fulltext](https://www.thelancet.com/journals/lanepa/article/PIIS2666-7762(21)00185-X/fulltext).
3. Michael L. Anderson et al., “The Effect of Influenza Vaccination for the Elderly on Hospitalization and Mortality: An Observational Study with a Regression Discontinuity Design,” *Annals of Internal Medicine* 172, no. 7 (April 7, 2020): 445–52, <https://pubmed.ncbi.nlm.nih.gov/32120383/>.
4. All figures in this section are taken from the Food and Drug Administration briefing books on the Pfizer and Moderna vaccines.
5. Ibid.
6. This was the figure at the original time of publication, in March 2021.
7. Ibid.
8. Serena Tinari, “The EMA Covid-19 Data Leak, and What It Tells Us about mRNA Instability,” *British Medical Journal* 372, no. 627 (March 10, 2021), <https://www.bmj.com/content/372/bmj.n627>.
9. Laurens Cerulus, “EU Medicines Agency Says Hackers Manipulated Leaked Coronavirus Vaccine Data,” *Politico*, January 25, 2021, <https://www.politico.eu/article/european-medicines-agency-ema-cyberattack-coronavirus-vaccine-data/>.
10. Tinari, “The EMA Covid-19 Data Link.” The British authorized the Pfizer vaccine for emergency use on December 2, 2020, becoming the first country to do so. Immunizations began almost immediately. Sarah Boseley and Josh Halliday, “UK Approves Pfizer/BioNTech Covid Vaccine for Rollout Next Week,” *The Guardian*, December 2, 2020, <https://www.theguardian.com/society/2020/dec/02/pfizer-biontech-covid-vaccine-wins-licence-for-use-in-the-uk>.
11. “Operation Warp Speed: Accelerated COVID-19 Vaccine Development Status and Efforts to Address Manufacturing Challenges,” Government Accountability Office, February 11, 2021, <https://www.gao.gov/products/gao-21-319>.
12. Berkeley Lovelace Jr., “First Human Trial for Coronavirus Vaccine Begins Monday in the US,” CNBC, March 16, 2020, <https://www.cnbc.com/2020/03/16/first-human-trial-for-coronavirus-vaccine-begins-monday-in-the-us.html>.
13. “German Company Begins Testing Possible Vaccine,” *Times of India*, April 29, 2020, <https://timesofindia.indiatimes.com/world/europe/german-company-begins-testing-possible-vaccine/articleshow/75450971.cms>.
14. “Assessment Report COVID-19 Vaccine Moderna,” European Medicines Agency, March 11, 2021, [https://www.ema.europa.eu/en/documents/assessment-report/covid-19-vaccine-moderna-epar-public-assessment-report\\_en.pdf](https://www.ema.europa.eu/en/documents/assessment-report/covid-19-vaccine-moderna-epar-public-assessment-report_en.pdf).
15. These figures all come from Pfizer’s trial data, as reported in the FDA briefing book.
16. “Assessment Report COVID-19 Vaccine Moderna.”
17. Uğur Şahin et al., “BNT162b2 Induces SARS-CoV-2-Neutralising Antibodies and T Cells in Humans,” medRxiv, December 11, 2020, <https://www.medrxiv.org/content/10.1101/2020.12.09.20245175v1>.
18. “Selected Adverse Events Reported after COVID-19 Vaccination,” Centers for Disease Control, <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/adverse-events.html>.

19. Matt Apuzzo et al., “Where Europe Went Wrong in Its Vaccine Rollout, and Why,” *New York Times*, March 20, 2021, <https://www.nytimes.com/2021/03/20/world/europe/europe-vaccine-rollout-astrazeneca.html>.

## 32: Bad News

1. Molly Jong-Fast, “Who Was I Before This Pandemic—And Who Am I Now?” *Vogue*, February 13, 2021, <https://www.vogue.com/article/how-the-pandemic-has-changed-me>. “I mostly hid in my apartment (an enormous luxury, I know). I was scared.”
2. Molly Jong-Fast, “Pandemic Fatigue Is Real—But Now Is Not the Time to Give In to It,” *Vogue*, December 5, 2020, <https://www.vogue.com/article/pandemic-fatigue-is-real-but-coronavirus-vaccine-is-almost-here>.
3. “Interim Considerations: Preparing for the Potential Management of Anaphylaxis after COVID-19 Vaccination,” Centers for Disease Control, March 3, 2021, <https://www.cdc.gov/vaccines/covid-19/clinical-considerations/managing-anaphylaxis.html#:~:text=CDC%20currently%20recommends%20the%20following,another%20vaccine%20or%20injectable%20therapy>.
4. Bill de Blasio (@NYCMayor), “The #COVID19 vaccine is the miracle so many have waited and worked for, and will end the pandemic. Get this shot of hope and help set our city free. Our new Vaccine For All Campaign will help spread the word that the vaccine is safe, effective and free,” Twitter, December 22, 2020, 11:33 a.m., <https://twitter.com/NYCMayor/status/1341421682016268290>.
5. Ezekiel Emmanuel et al., “Take Whatever COVID Vaccination You Can Get. All of Them Stop Death and Hospitalization,” *USA Today*, February 12, 2021, <https://www.usatoday.com/story/opinion/2021/02/12/all-covid-vaccines-stop-death-severe-illness-column/6709455002/>.
6. Martina Navratilova (@Martina), “Just got my first shot—Pfizer—and I am so excited and relieved and happy etc—if there are any antivaxxers out here—if you can—please get the vaccine...,” Twitter, February 28, 2021, 12:46 p.m., <https://twitter.com/Martina/status/1366082435008647169>.
7. Jane C. Timm, “Fact Check: Coronavirus Vaccine Could Come This Year, Trump Says. Experts Say He Needs a ‘Miracle’ to Be Right,” NBC News, May 15, 2020, <https://www.nbcnews.com/politics/donald-trump/fact-check-coronavirus-vaccine-could-come-year-trump-says-experts-n1207411>.
8. Caroline Kelly, “I Will Not Take His Word for It: Kamala Harris Says She Would Not Trust Trump Alone on a Coronavirus Vaccine,” CNN, September 5, 2020, <https://www.cnn.com/2020/09/05/politics/kamala-harris-not-trust-trump-vaccine-cnntv/index.html>.
9. Brian Mann, “Cuomo Says N.Y. Health Officials Will Review Any U.S.-Approved COVID-19 Vaccine,” NPR, September 24, 2020, <https://www.npr.org/sections/coronavirus-live-updates/2020/09/24/916565352/cuomo-says-n-y-health-officials-will-review-any-u-s-approved-covid-19-vaccine>.
10. Michael Specter, “Trump Is Right: Andrew Cuomo Should Accept F.D.A. Approval of a Coronavirus Vaccine,” *New Yorker*, November 16, 2020, <https://www.newyorker.com/news/daily-comment/trump-is-right-andrew-cuomo-should-accept-fda-approval-of-a-coronavirus-vaccine>.
11. Eric Lutz, “Trump’s Rush to Release a COVID Vaccine Has Americans Worried,” *Vanity Fair*, October 6, 2020, <https://www.vanityfair.com/news/2020/10/trump-rush-release-covid-vaccine-americans-worried>.

12. Eric Lutz, “The White House’s Incompetence Is Apparently Holding Up ‘Millions’ of COVID Vaccines,” *Vanity Fair*, December 18, 2020, <https://www.vanityfair.com/news/2020/12/white-house-delays-pfizer-vaccine-shipments>.
13. Barbara Sibbald, “Rofecoxib (Vioxx) Voluntarily Withdrawn from Market,” *Canadian Medical Association Journal* 171, no. 9 (October 24, 2006): 1027–28, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC526313/>.
14. Melody Petersen, “Increased Spending on Drugs Is Linked to More Advertising,” *New York Times*, November 21, 2001, <https://www.nytimes.com/2001/11/21/business/increased-spending-on-drugs-is-linked-to-more-advertising.html>.
15. “Study Linking Vioxx to Heart Problems Finally Published,” Canadian Broadcasting Corporation, January 25, 2005, <https://www.cbc.ca/news/science/study-linking-vioxx-to-heart-problems-finally-published-1.534735>.
16. Harlan M. Krumholz et al., “What Have We Learnt from Vioxx?” *British Medical Journal* 334, no. 7585 (January 20, 2007): 120–23, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1779871/#ref13>.
17. Lindsey Graham (@LindseyGrahamSC), “Thank God for nurses who help people in need and know how to use a needle. Thank God for those who produced these vaccines. If enough of us take it, we will get back to normal lives. Help is on the way,” Twitter, December 19, 2020, 2:24 p.m., <https://twitter.com/lindseygrahamsc/status/1340377410806689792>.
18. Robby Soave, “Reopen the Schools!” *Reason*, June 29, 2020, <https://reason.com/2020/06/29/reopen-schools-coronavirus-covid-19/>.
19. Robby Soave (@robbysoave), “People who say ‘well, the vaccine doesn’t actually prevent infection’ are wrong. The vaccine almost certainly prevents infection. It is akin to a cure. If you got it, you don’t have to wear a mask. You will neither contract nor spread the disease,” Twitter, January 18, 2020, 4:48 p.m., <https://twitter.com/robbysoave/status/1351285350237433856>.
20. “Operation Warp Speed’s Triumph,” *Wall Street Journal*, March 2, 2021, <https://www.wsj.com/articles/operation-warp-speeds-triumph-11614728552>.
21. Ben Shapiro (@benshapiro), “Alternatively, once you are fully vaccinated, take off the mask and go live your life because the vaccines are a scientific miracle and there is no data to back a single element of the lower right side of this chart,” Twitter, April 27, 2021, 5:59 p.m., <https://twitter.com/benshapiro/status/1387164630234116103?lang=en>.
22. In the winter of 2021, a full year into the epidemic—and with vaccinations taking off—the public health mandarins and their media waterboys experimented with a push to encourage “double masking.” Two masks would fit more tightly to the face and help block more viral particles, or so the theory went. Laurel Wamsley, “CDC Says Double-Masking Offers More Protection against the Coronavirus,” NPR, February 10, 2021, <https://www.npr.org/sections/coronavirus-live-updates/2021/02/10/966313710/cdc-now-recommends-double-masking-for-more-protection-against-the-coronavirus>. Other outlets helpfully offered tips on the best ways to double-mask. Fortunately, this effort petered out quickly. Even the most committed Team Apocalypse reporters realized that asking people to wear two masks raised questions about how useful one might be. And two masks just seemed *silly*, a bridge too far.
23. Monica Gandhi (@MonicaGhandi9), “No time in history do we have this extraordinary detection of asymptomatic infection since latter can transmit to others. So, please be assured that YOU ARE SAFE after vaccine from what matters—disease and spreading. Two vaccinated people can be as close as 2 spoons in a drawer!” Twitter, January 9,



- 2021, 2:33 p.m., <https://twitter.com/monicagandhi9/status/1347989801090224129?lang=en>.
24. Martin Varsavsky (@martinvars), “The relevant data is not the very few who got mild Covid after full vaccination. We should explain that after millions of vaccinations there is NOT ONE fully vaccinated person, who got severe Covid, and died of Covid,” Twitter, February 17, 2021, 7:01 p.m., <https://twitter.com/martinvars/status/1362190510350340096>.
  25. Adir Yanko, “Just 4 of 660 COVID Victims Received Both Vaccine Doses—Health Ministry Data,” Ynet News, February 11, 2021, [https://www.ynetnews.com/health\\_science/article/Hkm6mJmW00](https://www.ynetnews.com/health_science/article/Hkm6mJmW00).
  26. Ashish K. Jha (@ashishkja), “Am often asked about different vaccines and their efficacy. Each trial tracks, reports efficacy differently. Currently, we have preliminary results for Novavax and J&J. But what numbers matter? What should you look for? Here’s one set of data to track. In a simple table,” Twitter, January 31, 2021, 10:16 p.m., <https://twitter.com/ashishkja/status/1356079020878786561>.
  27. David Leonhardt, “Vaccine Alarmism,” *New York Times*, February 19, 2021, <https://www.nytimes.com/2021/02/19/briefing/ted-cruz-texas-water-iran-nuclear.html>.
  28. Costas Pitas, “UK Passes 100,000 COVID Deaths, with Many More to Come,” Reuters, January 26, 2021, <https://www.reuters.com/article/uk-health-coronavirus-britain-casualties-idUSKBN29V20D>.
  29. “30% of Israeli COVID-19 Deaths Were in January Alone—Health Ministry Data,” *Times of Israel*, February 1, 2021, <https://www.timesofisrael.com/30-of-israeli-covid-19-deaths-were-in-january-alone/>.
  30. Martin Vernon (@runnermandoc), “One month into the care home vaccination programme, I am deeply concerned to be seeing covid-19 infection outbreaks among first dose vaccinated resident within, and beyond 21 days of vaccination. Are any other clinicians seeing this happening?” Twitter, February 1, 2021, 3:22 p.m., <https://twitter.com/runnermandoc/status/1356337026757492738>.
  31. Ida Rask Moustsen-Helms et al., “Vaccine Effectiveness after 1st and 2nd Dose of the BNT162b2 mRNA Covid-19 Vaccine in Long-Term Care Facility Residents and Healthcare Workers—a Danish Cohort Study,” medRxiv, March 9, 2021, <https://www.medrxiv.org/content/10.1101/2021.03.08.21252200v1>.
  32. Ciara Linnane, “U.S. Suffers Another 4,000 COVID Deaths in a Single Day as Fauci Warns about New Strains,” Market Watch, January 28, 2021, <https://www.marketwatch.com/story/u-s-suffers-another-4-000-covid-deaths-in-a-single-day-as-fauci-warns-about-new-strains-11611849723>.
  33. Tom Randall, “When Will Life Return to Normal? In 7 Years at Today’s Vaccine Rates,” Bloomberg, February 4, 2021, <https://www.bloomberg.com/news/articles/2021-02-04/when-will-covid-pandemic-end-near-me-vaccine-coverage-calculator>.
  34. “About VAERS,” Vaccine Adverse Event Reporting System, <https://vaers.hhs.gov/about.html>.
  35. “I’ve Heard That People Have Experienced Serious Allergic Reactions to the Vaccine and Am Worried That Might Happen to Me or a Loved One. Can I Have an Allergic Reaction or Die from the Vaccine?” See Friends Again, <https://www.seefriendsagain.org/allergic-reactions>.
  36. Beatrice Dupuy, “Data from Vaccine Reporting Site Being Misrepresented Online,” Associated Press, February 4, 2021, <https://apnews.com/article/fact-checking-afs-Content:9957832237>.

37. “COVID-19 VaST Work Group Report—May 24, 2021,” Centers for Disease Control, May 24, 2021, <https://www.cdc.gov/vaccines/acip/work-groups-vast/report-2021-05-24.html>.
38. Jatara McGee, “Get the Facts on the Vax: Debunking Claims about the COVID-19 Vaccines,” WLWT5, September 7, 2021, <https://www.wlwt.com/article/get-the-facts-on-the-vax-debunking-claims-about-the-covid-19-vaccines/37505869#>.
39. Twitter removed the tweet after I complained, but I have the screenshot.
40. Michael Eisen (@mbeisen), “What utterly disgusting, murderous POSs all the prominent people in the media spreading anti-vaccine propaganda are. Alex Berenson is a murderer. Naomi Wolf is a murderer. I can’t believe Twitter lets them get away with this BS,” Twitter, May 20, 2021, 12:20 a.m., <https://twitter.com/mbeisen/status/1395233042453524483>.
41. Tom Taylor (@TomTaylorMade), “Did...did Naomi Wolf get one of her unhinged anti-vaxx theories from listening to a stranger talk about Pym particles in Avengers: Endgame?” Twitter, June 5, 2021, 8:32 a.m., <https://twitter.com/TomTaylorMade/status/1401154866257403904?s=20>.
42. Lev Facher, “The White House Is Set to Unveil a Wide-Reaching, Billion-Dollar Campaign Aimed at Convincing Every American to Get Vaccinated,” Stat News, March 15, 2021, <https://www.statnews.com/2021/03/15/white-house-unveil-a-wide-reaching-billion-dollar-campaign-convincing-every-american-to-get-vaccinated/>.
43. Katie Adams, “10 Recently Launched COVID-19 Vaccine Ad Campaigns,” *Becker’s Hospital Review*, April 22, 2021, <https://www.beckershospitalreview.com/digital-marketing/10-recently-launched-covid-19-ad-campaigns.html>.
44. Morgan Hines, “‘Get Back to What You Love’: Google COVID-19 Vaccine Ad Garner 6.3 Million Views, Emotional Response,” *USA Today*, April 5, 2021, <https://www.usatoday.com/story/tech/2021/04/05/google-covid-vaccine-ad-goes-viral-get-back-what-you-love/7088232002/>.
45. Walgreens, “This is Our Shot | John Legend | COVID-19 Vaccines at Walgreens,” YouTube, April 16, 2021, <https://www.youtube.com/watch?v=295r46gmVl0>.
46. World Health Organization, “COVID-19 vaccines could save your life. Get vaccinated, as soon as it’s your turn,” Facebook, August 24, 2021, <https://www.facebook.com/WHO/videos/1016395655764297/>.
47. Mark Murphy, “Debunking Common COVID-19 Vaccines Myths and Falsehoods,” *Savannah Now*, January 17, 2021, <https://www.savannahnow.com/story/opinion/2021/01/17/physician-addresses-many-myths-and-falsehoods-covid-vaccines/6636091002>

### 33: Truth Leaks Out

1. Han Xia et al., “Biosafety Level 4 Laboratory User Training Program, China,” *Emerging Infectious Diseases* 25, no. 5 (May 2019), [https://wwwnc.cdc.gov/eid/article/25/5/18-0220\\_article](https://wwwnc.cdc.gov/eid/article/25/5/18-0220_article).
2. Josh Rogin, “Opinion: State Department Cables Warned of Safety Issues at Wuhan Lab Studying Bat Coronaviruses,” *Washington Post*, April 14, 2020, <https://www.washingtonpost.com/opinions/2020/04/14/state-department-cables-warned-safety-issues-wuhan-lab-studying-bat-coronaviruses/>.
3. Jackson Ryan, “How the Coronavirus Origin Story Is Being Rewritten by a Guerrilla Twitter Group,” CNET, April 15, 2021, <https://www.cnet.com/features/how-the-coronavirus-origin-story-is-being-rewritten-by-a-guerrilla-twitter-group/>; Peng Zhou et al., “Addendum: A Pneumonia Outbreak Associated with a New Coronavirus of

- Probable Bat Origin,” *Nature* 566, no. E6 (November 17, 2020), <https://www.nature.com/articles/s41586-020-2951-z>.
4. Jason Beaubien, “Why They’re Called ‘Wet Markets’—And What Health Risks They Might Pose,” NPR, January 31, 2020, <https://www.npr.org/sections/goatsandsoda/2020/01/31/800975655/why-theyre-called-wet-markets-and-what-health-risks-they-might-pose>.
  5. Rafi Letzter, “The Coronavirus Didn’t Really Start at That Wuhan ‘Wet Market,’” *Live Science*, May 28, 2020, <https://www.livescience.com/covid-19-did-not-start-at-wuhan-wet-market.html>.
  6. Stephanie Hegarty, “The Chinese Doctor Who Tried to Warn Others about Coronavirus,” *BBC News*, February 6, 2020, <https://www.bbc.com/news/world-asia-china-51364382>.
  7. “China Delayed Releasing Coronavirus Info, Frustrating WHO,” *Associated Press*, June 2, 2020, <https://apnews.com/article/united-nations-health-ap-top-news-virus-outbreak-public-health-3c061794970661042b18d5aeaed9fae>.
  8. Zhuang Pinghui, “Chinese Laboratory That First Shared Coronavirus Genome with World Ordered to Close for ‘Rectification,’ Hindering Its Covid-19 Research,” *South China Morning Post*, February 28, 2020, <https://www.scmp.com/news/china/society/article/3052966/chinese-laboratory-first-shared-coronavirus-genome-world-ordered>.
  9. Yanan Wang and Ken Moritsugu, “Human-to-Human Transmission Confirmed in China Coronavirus,” *Associated Press*, January 19, 2020, <https://apnews.com/article/pneumonia-ap-top-news-international-news-china-health-14d7dcffa205d9022fa9ea593bb2a8c5>.
  10. Donald G. McNeil Jr. and Zolan Kanno-Youngs, “C.D.C. and W.H.O. Offers to Help China Have Been Ignored for Weeks,” *New York Times*, February 7, 2020, <https://www.nytimes.com/2020/02/07/health/cdc-coronavirus-china.html>.
  11. Melinda Wenner Moyer, “Vaccines Are Pushing Pathogens to Evolve,” *Quanta Magazine*, May 10, 2018, <https://www.quantamagazine.org/how-vaccines-can-drive-pathogens-to-evolve-20180510/>.
  12. Claire Jarvis, “Which Species Transmit COVID-19 to Humans? We’re Still Not Sure,” *The Scientist*, March 16, 2020, <https://www.the-scientist.com/news-opinion/which-species-transmit-covid-19-to-humans-were-still-not-sure-67272>.
  13. Bryan A. Johnson et al., “Furin Cleavage Site Is Key to SARS-CoV-2 Pathogenesis,” *bioRxiv*, August 26, 2020, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7457603/>.
  14. David Cyranoski, “Profile of a Killer: The Complex Biology Powering the Coronavirus Pandemic,” *Nature*, May 4, 2020, <https://www.nature.com/articles/d41586-020-01315-7>.
  15. Carl Zimmer and James Gorman, “Fight over Covid’s Origins Renews Debate on Risks of Lab Work,” *New York Times*, June 20, 2021, <https://www.nytimes.com/2021/06/20/science/covid-lab-leak-wuhan.html>.
  16. Mark Lipsitch, “Why Do Exceptionally Dangerous Gain-of-Function Experiments in Influenza?” *Methods in Molecular Biology*, 1836 (2018): 589–608, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7119956/>.
  17. Mark Lipsitch and Thomas V. Inglesby, “Moratorium on Research Intended to Create Novel Potential Pandemic Pathogens,” *mBio* 5, no. 6 (November–December 2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4271556/>.
  18. “Experiments with the full-length and chimeric SHC014 recombinant viruses were initiated and performed before the GOF research funding pause.” Vineet D. Menachery et al., “A SARS-Like Cluster of Circulating Bat Coronaviruses Shows Potential for

- Human Emergence,” *Natural Medicine Journal* 21, no. 12 (November 9, 2015): 1508–13, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4797993/>.
19. “Gain-of-Function Deliberative Process Written Public Comments,” National Institutes of Health, October 19, 2014–June 8, 2016, [https://osp.od.nih.gov/wp-content/uploads/2013/06/Gain\\_of\\_Function\\_Deliberative\\_Process\\_Written\\_Public\\_Comments.pdf](https://osp.od.nih.gov/wp-content/uploads/2013/06/Gain_of_Function_Deliberative_Process_Written_Public_Comments.pdf).
  20. Anthony S. Fauci, Gary S. Nabel, and Francis S. Collins, “A Flu Virus Risk Worth Taking,” *Washington Post*, December 30, 2011, [https://www.washingtonpost.com/opinions/a-flu-virus-risk-worth-taking/2011/12/30/gIQAM9sNRP\\_story.html](https://www.washingtonpost.com/opinions/a-flu-virus-risk-worth-taking/2011/12/30/gIQAM9sNRP_story.html).
  21. Anthony S. Fauci, “Research on Highly Pathogenic H5N1 Influenza Virus: The Way Forward,” *mBio* 3, no. 5 (September–October 2012), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3484390/>.
  22. Francis S. Collins, “NIH Lifts Funding Pause on Gain-of-Function Research,” National Institutes of Health, December 19, 2017, <https://www.nih.gov/about-nih/who-we-are/nih-director/statements/nih-lifts-funding-pause-gain-function-research>.
  23. Sharon Lerner et al., “NIH Documents Provide New Evidence U.S. Funded Gain-of-Function Research in Wuhan,” *The Intercept*, September 9, 2021, <https://theintercept.com/2021/09/09/covid-origins-gain-of-function-research/>.
  24. Y. Guan et al., “Isolation and Characterization of Viruses Related to the SARS Coronavirus from Animals in Southern China,” *Science* 302, no. 5643 (October 10, 2003): 276–78, <https://www.science.org/doi/abs/10.1126/science.1087139>.
  25. Robert Roos, “WHO Sees More Evidence of Civet Role in SARS,” Center for Infectious Disease Research and Policy, January 16, 2004, <https://www.cidrap.umn.edu/news-perspective/2004/01/who-sees-more-evidence-civet-role-sars>.
  26. Rogin, “Opinion: State Department Cables Warned of Safety Issues at Wuhan Lab.”
  27. Kristian G. Andersen et al., “The Proximal Origin of SARS-CoV-2,” *Nature Medicine* 26 (March 17, 2020): 450–52, <https://www.nature.com/articles/s41591-020-0820-9>.
  28. Maanvi Singh et al., “Trump Claims to Have Evidence Coronavirus Started in Chinese Lab but Offers No Details,” *The Guardian*, April 30, 2020, <https://www.theguardian.com/us-news/2020/apr/30/donald-trump-coronavirus-chinese-lab-claim>.
  29. Kathy Gilman, “How China Is Planning to Win Back the World,” *The Atlantic*, May 2020, <https://www.theatlantic.com/politics/archive/2020/05/china-disinformation-pr-opaganda-united-states-xi-jinping/612085/>.
  30. Meg Kelly and Sarah Cahlan, “Was the New Coronavirus Accidentally Released from a Wuhan Lab? It’s Doubtful,” *Washington Post*, May 1, 2020, <https://www.washingtonpost.com/politics/2020/05/01/was-new-coronavirus-accidentally-released-wuhan-lab-its-doubtful/>.
  31. Olafimihan Oshin, “Washington Post Issues Correction on 2020 Report on Tom Cotton, Lab-Leak Theory,” *The Hill*, June 1, 2021, <https://thehill.com/homenews/media/556418-washington-post-issues-correction-on-2020-report-on-tom-cotton-lab-leak-theory>.
  32. Nsikan Akpan and Victoria Jaggard, “Fauci: No Scientific Evidence the Coronavirus Was Made in a Chinese Lab,” *National Geographic*, May 4, 2020, <https://www.nationalgeographic.com/science/article/anthony-fauci-no-scientific-evidence-the-coronavirus-was-made-in-a-chinese-lab-cvd>.
  33. Nicholas G. Evans, “Where the Coronavirus Bioweapon Conspiracy Theories Really Come From,” *Slate*, February 27, 2020, <https://slate.com/technology/2020/02/coronavirus-bioweapon-conspiracy-theories.html>.
  34. Lindsey Ellefson, “NY Times COVID Reporter Deletes Tweet Claiming ‘Racist Roots’ of ‘Lab Leak Theory’ after Backlash,” *The Wrap*, May 27, 2021, <https://www.thewrap.com/new-york-times-covid-lab-leak-apoorva-mandavilli/>.

35. Guy Rosen, “An Update on Our Work to Keep People Informed and Limit Misinformation about COVID-19,” Facebook, April 16, 2020, <https://about.fb.com/news/2020/04/covid-19-misinfo-update/> (Update, February 8, 2021: “We are expanding the list of false claims we will remove to include additional debunked claims about the coronavirus and vaccines. This includes claims such as: COVID-19 is man-made or manufactured.”)
36. Rowan Jacobsen, “Could COVID-19 Have Escaped from a Lab?” *Boston*, September 9, 2020, <https://www.bostonmagazine.com/news/2020/09/09/alina-chan-broad-institute-coronavirus/>.
37. Michaeleen Doucleff, “World Health Organization Finishes Investigation into Origins of COVID-19,” NPR, February 9, 2021, <https://www.npr.org/2021/02/09/965966786/world-health-organization-finishes-investigation-into-origins-of-covid-19>.
38. Scott Gottlieb, “WHO Said What about Wuhan?” *Wall Street Journal*, February 21, 2021, <https://www.wsj.com/articles/who-said-what-about-wuhan-11613933182>.
39. Ibid.
40. “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>.
41. Nicholas Wade, “Origin of Covid—Following the Clues,” Medium, May 2, 2021, <https://nicholaswade.medium.com/origin-of-covid-following-the-clues-6f03564c038>.
42. Christina Wilkie and Rich Mendez, “Biden Orders Closer Review of Covid Origins as U.S. Intel Weighs Wuhan Lab Leak Theory,” CNBC, May 26, 2021, <https://www.cnbc.com/2021/05/26/biden-orders-us-intelligence-to-intensify-investigation-into-covid-19-origins.html>.
43. Ellen Nakashima et al., “Biden Receives Inconclusive Intelligence Report on Covid Origins,” *Washington Post*, August 4, 2021, <https://www.washingtonpost.com/politics/2021/08/24/covid-origins-biden-intelligence-review/>.
44. Cristiano Lima, “Facebook No Longer Treating ‘Man-Made’ Covid as a Crackpot Idea,” Politico, May 26, 2021, <https://www.politico.com/news/2021/05/26/facebook-ban-covid-man-made-491053>.
45. Julie Mazziotta, “Fauci’s Emails from the Pandemic Show His Stress-Filled Days: ‘Some Crazy People in This World,’” *People*, June 2, 2021, <https://people.com/health/faucis-emails-from-the-pandemic-show-stress-filled-days/>.
46. CNN (@CNN), “Thousands of emails from and to Dr. Fauci reveal the weight that came with his role as a rare source of frank honesty within the Trump administration’s Covid-19 task force,” Twitter, June 2, 2021, 7:45 a.m., <https://twitter.com/cnn/status/1400055865181356052?lang=en>.
47. Email correspondence between Fauci, Anthony (NIH/NIAID)[E] and Kristian G. Anderson, January 31, 2020–February 1, 2020, <https://cdn.factcheck.org/UploadedFiles/Andersen-Jan-31-email-to-Fauci.png>, <https://cdn.factcheck.org/UploadedFiles/Andersen-Jan-31-email-to-Fauci.png>.
48. Email correspondence of Fauci, Anthony (NIH/NIAID)[E], January–March 2020, Document Cloud, <https://s3.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf>, at page 3221 (of 3234).
49. Sharon Lerner and Mara Hvistendahl, “New Details Emerge about Coronavirus Research at Wuhan Lab,” *The Intercept*, September 6, 2021, <https://theintercept.com/2021/09/06/new-details-emerge-about-coronavirus-research-at-chinese-lab/>.
50. James Gorman and Carl Zimmer, “Scientist Opens Up about His Early Email to Fauci on Virus Origins,” *New York Times*, June 14, 2021, <https://www.nytimes.com/2021>

/06/14/science/covid-lab-leak-fauci-kristian-andersen.html?action=click&module=RelatedLinks&pgtype=Article.

### 34: Dodging Bullets

1. “Twitter by the Numbers: Stats, Demographics & Fun Facts,” Omnicore, January 3, 2021, <https://www.omnicoreagency.com/twitter-statistics/>.
2. Kate Tempest, “People’s Faces,” *The Book of Traps and Lessons* (Republic Records, 2019).
3. Brian Fung, “Parler Has Now Been Booted by Amazon, Apple and Google,” CNN, January 11, 2021, <https://www.cnn.com/2021/01/09/tech/parler-suspended-apple-app-store/index.html>.
4. Probably the best one they could find was an October 2020 tweet in which I wrote that the Institute for Health Metrics and Evaluation “has been wrong over and over—why would anyone credit or repeat its projection of 500,000 US Covid deaths by spring?” Sure enough, the IHME finally got one right, probably with a little help from the vaccine post-first-dose spike. In February 2021, the United States recorded its 500,000th Covid death. So be it. To make predictions is to be wrong from time to time, and on the whole my published record compares favorably to Fauci’s or anyone else’s.
5. “COVID-19 Advice for the Public: Getting Vaccinated,” World Health Organization, June 18, 2021, archived at the WayBack Machine, <http://web.archive.org/web/20210618212957/https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines/advice>.
6. Nickie Louise, “WHO Says ‘Children Should Not Be Vaccinated for the Moment [because] There Is Not Yet Enough Evidence on the Use of Vaccines against COVID-19,’” Tech Startups, June 21, 2021, <https://techstartups.com/2021/06/21/who-says-children-should-not-be-vaccinated-for-the-moment-because-there-is-not-yet-enough-evidence-on-the-use-of-vaccines-against-covid-19/>.
7. “COVID-19 Advice for the Public: Getting Vaccinated,” World Health Organization, July 14, 2021, <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines/advice>.
8. McKenzie Sadeghi, “Fact Check: Claims about WHO Guidance for Vaccinating Children Are Missing Context,” *USA Today*, June 25, 2021, <https://www.usatoday.com/story/news/factcheck/2021/06/25/fact-check-posts-whos-stance-vaccinating-children-lack-context/7778033002/>.
9. “Israel,” Worldometer, <https://www.worldometers.info/coronavirus/country/israel/>.
10. Rossella Tercatin, “Coronavirus in Israel: Over 6,000 Dead since Beginning of Pandemic,” *Jerusalem Post*, March 14, 2021, <https://www.jpost.com/israel-news/coronavirus-govt-debates-expanding-number-of-returnees-destinations-661943>.
11. Patrick Kingsley, “‘Like a Miracle’: Israel’s Vaccine Success Allows Easter Crowds in Jerusalem,” *New York Times*, April 3, 2021, <https://www.nytimes.com/2021/04/03/world/middleeast/easter-jerusalem-coronavirus.html>.
12. Mark G. Thompson et al., “Interim Estimates of Vaccine Effectiveness of BNT162b2 and mRNA-1273 COVID-19 Vaccines in Preventing SARS-CoV-2 Infection among Health Care Personnel, First Responders, and Other Essential and Frontline Workers—Eight U.S. Locations, December 2020–March 2021,” *Morbidity and Mortality Weekly Report* 70, no. 13 (April 2, 2021): 495–500, <https://www.cdc.gov/mmwr/volumes/70/wr/mm7013e3.htm>.

13. Derek Thompson, “The Pandemic’s Wrongest Man,” *The Atlantic*, April 1, 2021, <https://www.theatlantic.com/ideas/archive/2021/04/pandemics-wrongest-man/618475/>.
14. “United States,” Worldometer, <https://www.worldometers.info/coronavirus/country/us/>.
15. Noah Weiland et al., “Johnson & Johnson Vaccinations Paused after Rare Clotting Cases Emerge,” *New York Times*, April 13, 2021, <https://www.nytimes.com/2021/04/13/us/politics/johnson-johnson-vaccine-blood-clots-fda-cdc.html>.
16. “See How Vaccinations Are Going in Your County and State,” *New York Times*, <https://www.nytimes.com/interactive/2020/us/covid-19-vaccine-doses.html>.
17. Frank Jordans, “BioNTech Boss Strikes Upbeat Note on Europe’s Vaccine Drive,” Associated Press, April 28, 2021, <https://apnews.com/article/europe-north-america-immunizations-coronavirus-pandemic-coronavirus-vaccine-f1eca91561f3a1be9550b79534b17741>.
18. Monica Ghandi (@MonicaGhandi9), “No time in history do we have this extraordinary detection of asymptomatic infection since latter can transmit to others. So, please be assured that YOU ARE SAFE after vaccine from what matters—disease and spreading. Two vaccinated people can be as close as 2 spoons in a drawer!” Twitter, January 9, 2021, 2:33 p.m., <https://twitter.com/MonicaGhandi9/status/1347989801090224129>.
19. Monica Ghandi (@MonicaGhandi9), “Good to see this January 9 tweet has so much evidence behind it now in real world that vaccines block transmission since biological plausibility was ample. Here are some of the studies cited in CDC guidance that vaccines block transmission,” Twitter, May 17, 2021, 10:38 a.m., <https://twitter.com/MonicaGhandi9/status/1394301284556017664>.
20. Alan Murray and Katherine Dunn, “The CEOs on Our World’s Greatest Leaders List,” *Fortune*, May 12, 2021, <https://fortune.com/2021/05/12/ceo-daily-worlds-greatest-leaders/>.
21. “Transcript: Coronavirus: Leadership during Crisis with Anthony S. Fauci, MD,” *Washington Post*, May 20, 2021, <https://www.washingtonpost.com/washington-post-live/2021/05/20/transcript-coronavirus-leadership-during-crisis-with-anthony-s-fauci-md/>.
22. Jessica Bursztynsky, “Yes, It’s Going to Be a Hot Vax Summer,” CNBC, May 22, 2021, <https://www.cnbc.com/2021/05/22/yes-its-going-to-be-a-hot-vax-summer.html>.
23. Stephen Collinson, “A Vaccine Marvel Is Bringing America Back,” CNN, May 25, 2021, <https://www.cnn.com/2021/05/25/politics/vaccine-marvel-america-back/index.html>.
24. Ian Mount et al., “Operation Overtake: How Europe Surpassed the U.S. in Its COVID Vaccination Push,” *Fortune*, July 1, 2021, <https://fortune.com/2021/07/01/europe-over-takes-us-covid-vaccination-push/>.
25. “WHO Warns of ‘Two-Track Pandemic’ as Cases Decline but Vaccine Inequity Persists,” UN News, June 7, 2021, <https://news.un.org/en/story/2021/06/1093472>.
26. Elaine K. Howley, “How to Talk to Someone Who’s Hesitant to Get the COVID-19 Vaccine,” *U.S. News & World Report*, May 12, 2021, <https://www.usnews.com/conditions/coronavirus-and-your-health/articles/how-to-talk-to-someone-whos-hesitant-to-get-the-covid-19-vaccine>.
27. “The Tuskegee Timeline,” Centers for Disease Control, <https://www.cdc.gov/tuskegee/timeline.htm>.
28. Blake Farmer, “‘It’s Not a Never Thing’—White, Rural Southerners Hesitant to Get COVID Vaccine,” NPR, April 15, 2021, <https://www.npr.org/sections/health-shots/20>

- 21/04/15/987412681/its-not-a-never-thing-white-rural-southerners-are-waiting-to-get-the-vaccine.
29. Adrian Horton, “John Oliver on Vaccine Hesitancy: ‘We Badly Need to Convince Anyone Who Can Be Convinced,’” *The Guardian*, May 3, 2021, <https://www.theguardian.com/tv-and-radio/2021/may/03/john-oliver-vaccine-hesitancy-covid>.
  30. Daniel Kalla, “The ‘Vaccine Hesitant’ Are a Threat to Society. But We Must Show Them Compassion,” *Globe and Mail*, May 7, 2021, <https://www.theglobeandmail.com/opinion/article-the-vaccine-hesitant-are-a-threat-to-society-but-we-must-show-them/>.
  31. Theresa Waldrop et al., “Fauci: Vaccinations Will Help Coronavirus Variants from Emerging,” CNN, January 22, 2021, <https://www.cnn.com/2021/01/21/health/us-coronavirus-thursday/index.html>.
  32. John P. Moore and Paul A. Offit, “SARS-CoV-2 Vaccines and the Growing Threat of Viral Variants,” *Journal of the American Medical Association* 325, no. 9 (January 28, 2021): 821–22, <https://jamanetwork.com/journals/jama/fullarticle/2776039>.
  33. Nandita Bose and Jeff Mason, “‘Get a Shot, Have a Beer’: Biden, Anheuser-Busch Push July Vaccination Goal,” Reuters, June 2, 2021, <https://www.reuters.com/business/healthcare-pharmaceuticals/biden-outline-steps-help-reach-july-4-vaccination-goal-2021-06-02/>.
  34. “COVID-19 Vaccine Incentives,” National Governors Association, July 30, 2020, <https://www.nga.org/center/publications/covid-19-vaccine-incentives/>.
  35. Dara Khosrowshahi, “The Road to 70 Percent: Free Vaccination Rides Begin Today,” Uber, May 24, 2021, <https://www.uber.com/newsroom/freevaccinerides/>.
  36. Allan J. Wallkey et al., “Lottery-Based Incentive in Ohio and COVID-19 Vaccination Rates,” *Journal of the American Medical Association* 326, no. 8 (July 2, 2021): 766–67, <https://jamanetwork.com/journals/jama/fullarticle/2781792>.
  37. Julia Manchester, “Biden: Coronavirus Vaccine Should Not Be Mandatory,” *The Hill*, December 4, 2020, <https://thehill.com/homenews/campaign/528834-biden-coronavirus-vaccine-should-not-be-mandatory>.
  38. “Transcript of Pelosi Weekly Press Conference Today,” Nancy Pelosi Speaker of the House website, April 29, 2021, <https://www.speaker.gov/newsroom/42921-2>.
  39. Audie Cornish et al., “You Asked, We Got Answers: The U.S. Surgeon General Takes On Your COVID-19 Questions,” NPR, June 9, 2021, <https://www.npr.org/2021/06/09/1004862388/you-asked-we-got-answers-the-u-s-surgeon-general-takes-on-your-covid-19-question>.
  40. “Table 31. Vaccination Coverage for Selected Diseases by Age 24 Months, by Race and Hispanic Origin, Poverty Level, and Location of Residence: United States, Birth Years 2010–2015,” Centers for Disease Control, 2019, <https://www.cdc.gov/nchs/data/hus/2019/031-508.pdf>.
  41. “Israel,” Worldometer.
  42. “Transcript: Coronavirus: Leadership during Crisis.”
  43. Lisa A. Jackson et al., “Evidence of Bias in Estimates of Influenza Vaccine Effectiveness in Seniors,” *International Journal of Epidemiology* 35, no. 2 (April 2006): 337–44, <https://pubmed.ncbi.nlm.nih.gov/16368725/>.
  44. “COVID-19 Vaccine Surveillance Report Week 36,” Public Health England, September 9, 2021, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1016465/Vaccine\\_surveillance\\_report\\_-\\_week\\_36.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1016465/Vaccine_surveillance_report_-_week_36.pdf).
  45. Ariel Israel et al., “Large-Scale Study of Antibody Titer Decay Following BNT162b2 mRNA Vaccine or SARS-CoV-2 Infection,” medRxiv, August 22, 2021, <https://www.medrxiv.org/content/10.1101/2021.08.19.21262111v1>.



46. Michel C. Nussenzweig, “Natural Infection versus Vaccination: Differences in COVID Antibody Responses Emerge,” The Rockefeller University, August 24, 2021, <https://www.rockefeller.edu/news/30919-natural-infection-versus-vaccination-differences-in-covid-antibody-responses-emerge/>.
47. Sivan Gazit et al., “Comparing SARS-CoV-2 Natural Immunity to Vaccine-Induced Immunity: Reinfections versus Breakthrough Infections,” medRxiv, August 25, 2021, <https://www.medrxiv.org/content/10.1101/2021.08.24.21262415v1>.
48. Meredith Wadman, “Having SARS-CoV-2 Once Confers Much Greater Immunity Than a Vaccine—but Vaccination Remains Vital,” *Science*, August 26, 2021, <https://www.science.org/content/article/having-sars-cov-2-once-confers-much-greater-immunity-vaccine-vaccination-remains-vital>.
49. Amy Spiro, “Pfizer Exec Calls Israel ‘a Sort of Laboratory’ for COVID Vaccines,” *Times of Israel*, September 12, 2021, <https://www.timesofisrael.com/pfizer-exec-calls-israel-a-sort-of-laboratory-for-covid-vaccines/>.
50. “United States,” Worldometer.
51. “Meet the Press—July 4, 2021,” NBC News, July 4, 2021, <https://www.nbcnews.com/meet-the-press/meet-press-july-4-2021-n1273065>; “Surgeon General: 99.5% of Virus Deaths Are Unvaccinated People,” CNN, July 18, 2021, <https://www.cnn.com/videos/politics/2021/07/18/murthy-full-interview.cnn>.
52. “Read: Internal CDC Document on Breakthrough Infections,” *Washington Post*, July 29, 2021, [https://www.washingtonpost.com/context/cdc-breakthrough-infections/94390e3a-5e45-44a5-ac40-2744e4e25f2e/?\\_=1](https://www.washingtonpost.com/context/cdc-breakthrough-infections/94390e3a-5e45-44a5-ac40-2744e4e25f2e/?_=1), slide 4.
53. Alex Berenson, “Here We Go Again,” *Unreported Truths* (Substack), July 25, 2021, <https://alexberenson.substack.com/p/here-we-go-again>.
54. Alex Silverman, “Many Vaccinated Americans Are Still Uncomfortable Returning to Public Activities. The U.S. Economy Needs Them,” *Morning Consult*, May 12, 2021, <https://morningconsult.com/2021/05/12/vaccinated-unvaccinated-americans-comfort-with-activities/>.
55. *Ibid.*
56. Zeke Miller, “Biden Grappling with ‘Pandemic of the Unvaccinated,’” Associated Press, July 17, 2021, <https://apnews.com/article/joe-biden-health-government-and-politics-pandemics-coronavirus-pandemic-8318e3f406278f3ebf09871128cc91de>.
57. Fenit Nirappil, “They’re Called Mild Cases. But People with Breakthrough Covid Can Still Feel Pretty Sick,” *Washington Post*, August 31, 2021, <https://www.washingtonpost.com/health/2021/08/31/mild-coronavirus-breakthrough-infections/>.
58. Jackie Fortier, “The Anger toward Unvaccinated People Is Personal for Some Who Got Breakthrough COVID,” NPR, August 13, 2021, <https://www.npr.org/2021/08/13/1027537422/the-anger-toward-unvaccinated-people-is-personal-for-some-who-got-breakthrough-c>.
59. “Widow: Unvaccinated to Blame for Vaccinated Iowa Man’s Death,” Associated Press, September 14, 2021, <https://apnews.com/article/health-coronavirus-pandemic-iowa-5afd2572d5a282c499a9a2de7ac0fe3d>.
60. Berkeley Lovelace Jr., “Biden Outlines Plan to Mandate Covid Vaccines for Millions: ‘Our Patience Is Wearing Thin,’” CNBC, September 9, 2021, <https://www.cnbc.com/2021/09/09/biden-to-detail-new-six-pronged-plan-to-increase-us-covid-vaccination-rates-fight-virus.html>.
61. Frank Bruni, “The Pizza-Paved Path to the Far Side of the Covid Pandemic,” *New York Times*, September 16, 2021, <https://www.nytimes.com/2021/09/16/opinion/vaccine-mandates-businesses.html?action=click&module=Well&pgtype=Homepage&section=OpEd%20Columnists>.

62. Jonathan Meer, “Opinion: Don’t Want the COVID-19 Vaccine? Then Pay the Full Cost If You Land in the Hospital,” *Market Watch*, August 6, 2021, <https://www.marketwatch.com/story/dont-want-the-covid-19-vaccine-then-pay-the-full-cost-if-you-land-in-the-hospital-11628206594>.
63. Arthur L. Caplan and Dorit R. Reiss, “Vaccine Mandates Aren’t Enough. Make Unvaccinated People Pay If They Harm Others,” *Barron’s*, August 3, 2021, <https://www.barrons.com/articles/coronavirus-vaccine-mask-mandate-unvaccinated-51627939803>.
64. Nancy Gibbs, “Opinion: Do the Unvaccinated Deserve Scarce ICU Beds?” *Washington Post*, September 1, 2021, <https://www.washingtonpost.com/opinions/2021/09/01/do-unvaccinated-deserve-scarce-icu-beds/>.
65. Lovelace Jr., “Biden Outlines Plan.”
66. Melissa Quinn, “Arizona Becomes First State to Sue Biden Administration over COVID-19 Vaccine Mandates,” *CBS News*, September 15, 2021, <https://www.cbsnews.com/news/arizona-sues-biden-administration-covid-19-vaccine-mandates/>.
67. Kasen K. Riemersma et al., “Shedding of Infectious SARS-CoV-2 Despite Vaccination,” *medRxiv*, August 24, 2021, <https://www.medrxiv.org/content/10.1101/2021.07.31.21261387v4.full>.
68. Sharon LaFraniere, “U.S. to Advise Boosters for Most Americans 8 Months after Vaccination,” *New York Times*, August 16, 2021, <https://www.nytimes.com/2021/08/16/us/politics/booster-shots.html>.
69. Steven Nelson, “Biden, Fauci Discuss Requiring COVID Booster Shots Every 5 Months,” *New York Post*, August 27, 2021, <https://nypost.com/2021/08/27/biden-and-fauci-discuss-covid-19-booster-shots-every-5-months/>.
70. Joanna Taylor, “Israel’s Covid Chief Calls for Fourth Vaccine Dose,” *The Independent*, September 6, 2021, <https://www.independent.co.uk/news/world/middle-east/covid-vaccine-israel-fourth-dose-b1915076.html>.
71. Sarah Oweremohle, “Biden’s Top-Down Booster Plan Sparks Anger at FDA,” *Politico*, August 31, 2021, <https://www.politico.com/news/2021/08/31/biden-booster-plan-fda-508149>.
72. Philip R. Krause et al., “Considerations in Boosting COVID-19 Vaccine Immune Responses,” *The Lancet*, September 13, 2021, [https://www.thelancet.com/journals/lan/article/PIIS0140-6736\(21\)02046-8/fulltext](https://www.thelancet.com/journals/lan/article/PIIS0140-6736(21)02046-8/fulltext).
73. Julie Steenhuisen, “Analysis: U.S. Hopes COVID Vaccine Boosters Will Decrease Not Just Deaths, but Virus Spread,” *Reuters*, September 15, 2021, <https://www.reuters.com/world/us/us-looks-covid-19-boosters-curb-virus-spread-2021-09-15/>.
74. Yafei Liu et al., “The SARS-CoV-2 Delta Variant Is Poised to Acquire Complete Resistance to Wild-Type Spike Vaccines,” *bioRxiv*, August 23, 2021, <https://www.biorxiv.org/content/10.1101/2021.08.22.457114v1>; Kasen K. Riemersma et al., “Shedding of Infectious SARS-CoV-2 despite Vaccination,” *medRxiv*, August 24, 2021, <https://www.medrxiv.org/content/10.1101/2021.07.31.21261387v4>.
75. “Press Briefing by Press Secretary Jen Psaki and Surgeon General Dr. Vivek H. Murthy, July 15, 2021,” White House, July 15, 2021, <https://www.whitehouse.gov/briefing-room/press-briefings/2021/07/15/press-briefing-by-press-secretary-jen-psaki-and-surgeon-general-dr-vivek-h-murthy-july-15-2021/>. The censors generally define “misinformation” as facts that are accurate but in their eyes misleading—such as posts based on VAERS data. “Disinformation” describes statements that are factually inaccurate or actually untruthful. Because they could not refute the facts that I and others presented, they were forced to label them “misinformation.”

76. John Hendel, "Congress Faces Broadband Crunch," *Politico*, July 16, 2021, <https://www.politico.com/newsletters/morning-tech/2021/07/16/congress-faces-broadband-crunch-796549>.
77. Ian Schwartz, "WH's Psaki: If You're Banned on One Social Media Platform, You Should Be Banned on All Others," *RealClearPolitics*, July 17, 2021, [https://www.realclearpolitics.com/video/2021/07/17/whs\\_psaki\\_if\\_youre\\_banned\\_on\\_one\\_social\\_media\\_platform\\_you\\_should\\_be\\_banned\\_on\\_all\\_others.html](https://www.realclearpolitics.com/video/2021/07/17/whs_psaki_if_youre_banned_on_one_social_media_platform_you_should_be_banned_on_all_others.html).
78. C-SPAN, "President Biden: 'They're Killing People,'" YouTube, July 16, 2021, <https://www.youtube.com/watch?v=gJoOtLn4goY>.
79. Corona Realism (@homenkollin), "Something really odd is going on: In Europe we are seeing surges at many places where most of the population has already been vaccinated. At the same time, the 15 least vaccinated countries don't seem to face any problem. At some point, denying this problem will get painful," Twitter, July 16, 2021, 6:59 a.m., <https://twitter.com/holmenkollin/status/1415989536933490688>.
80. Stephen J. Thomas et al., "Six Month Safety and Efficacy of the BNT162b2 mRNA COVID-19 Vaccine," *medRxiv*, July 28, 2021, <https://www.medrxiv.org/content/10.1101/2021.07.28.21261159v1.full.pdf>.
81. Michael Ruiz, "Twitter Permanently Suspends Alex Berenson over Coronavirus Tweets," *Fox Business*, August 28, 2021, <https://www.foxbusiness.com/media/twitter-permanently-suspends-alex-berenson-over-coronavirus-tweets>.
82. Senator Elizabeth Warren, letter to Andy Jassy, Elizabeth Warren Senate website, September 7, 2021, <https://www.warren.senate.gov/imo/media/doc/2021.9.7%20Letter%20to%20Amazon%20on%20COVID%20Misinformation.pdf>.

### 35: In Conclusion: Our Own Shadows

1. Brie Stimson, "San Francisco Mayor Defiant after Caught Maskless in Nightclub despite Mandate: Don't Need 'Fun Police,'" *Fox News*, September 17, 2021, <https://www.foxnews.com/politics/san-francisco-mayor-london-breed-maskless-nightclub-mandate-fun-police>.
2. Danielle Kurtzleben, "What Is Infrastructure? It's a Gender Issue, for Starters," *NPR*, April 15, 2021, <https://www.npr.org/2021/04/15/987229254/biden-infrastructure-pu-sh-highlights-economic-gender-gaps>.
3. Francis Collins, "COVID-19 Infected Many More Americans in 2020 Than Official Tallies Show," *NIH Director's Blog*, September 7, 2021, <https://directorsblog.nih.gov/tag/covid-19-testing/>.
4. "NHE Fact Sheet: Historical NHE, 2019," *Centers for Medicare and Medicaid Services*, December 16, 2020, [https://www.cms.gov/Research-Statistics-Data-and-Sytems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet#:~:text=Hospital%20expenditures%20grew%206.2%25%20to,than%20the%204.0%25%20in%202018.\(We%20spent%20\\$1.2%20trillion%20in%202019,so%20\\$1.3%20trillion%20in%202021%20is%20actually%20a%20conservative%20estimate.\)](https://www.cms.gov/Research-Statistics-Data-and-Sytems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet#:~:text=Hospital%20expenditures%20grew%206.2%25%20to,than%20the%204.0%25%20in%202018.(We%20spent%20$1.2%20trillion%20in%202019,so%20$1.3%20trillion%20in%202021%20is%20actually%20a%20conservative%20estimate.))
5. Leticia Miranda, "Rural Hospitals Losing Hundreds of Staff to High-Paid Traveling Nurse Jobs," *NBC News*, September 15, 2021, <https://www.nbcnews.com/business/business-news/rural-hospitals-losing-hundreds-staff-high-paid-traveling-nurse-jobs-n1279199>.
6. Jaclyn Diaz, "A N.Y. Hospital Will Stop Delivering Babies as Workers Quit over a Vaccine Mandate," *NPR*, September 13, 2021, <https://www.npr.org/2021/09/13/1036521499/covid-workers-resign-new-york-hospital-stops-baby-delivery>.
7. The stocks of Moderna and BioNTech sit near all-time highs as I write these words in lateish September. I think of myself as a cynic, but I'm a naif in the woods compared

to the folks on Wall Street. They have decided that a “vaccine” that stops working after a few months and needs to be dosed again is the best vaccine of all, since it means endless profits for its makers—who have no legal liability for any injuries that their vaccines might cause. See MacKenzie Sigalos, “You Can’t Sue Pfizer or Moderna If You Have Severe Covid Vaccine Side Effects. The Government Likely Won’t Compensate You for Damages Either,” CNBC, December 17, 2020, <https://www.cnbc.com/2020/12/16/covid-vaccine-side-effects-compensation-lawsuit.html>.

8. “Denmark,” COVID-19 Ined, <https://dc-covid.site.ined.fr/en/data/denmark/>.
9. Min Gao et al., “Associations between Body-Mass Index and COVID-19 Severity in 6.9 Million People in England: A Prospective, Community-Based, Cohort Study,” *The Lancet* 9, no. 6 (June 1, 2021): P350–359, [https://www.thelancet.com/journals/landia/article/PIIS2213-8587\(21\)00089-9/fulltext](https://www.thelancet.com/journals/landia/article/PIIS2213-8587(21)00089-9/fulltext).
10. Philip Ewing, “Hospital Ship USNS Comfort Scheduled to Sail from New York City,” NPR, April 28, 2020, <https://www.npr.org/sections/coronavirus-live-updates/2020/04/28/847457974/hospital-ship-usns-comfort-scheduled-to-sail-from-new-york-city>.
11. Donald G. McNeil Jr., “D.A. Henderson, Doctor Who Helped End Smallpox Scourge, Dies at 87,” *New York Times*, August 21, 2016, <https://www.nytimes.com/2016/08/22/us/dr-donald-a-henderson-who-helped-end-smallpox-dies-at-87.html>.
12. Thomas V. Inglesby et al., “Disease Mitigation Measures in the Control of Pandemic Influenza,” *Biosecurity and Bioterrorism* 4, no. 4 (2006): 366–75, <https://pubmed.ncbi.nlm.nih.gov/17238820/>.
13. Mark Landler and Stephen Castle, “Britons, Unfazed by High Covid Rates, Weigh Their ‘Price of Freedom,’” *New York Times*, August 28, 2021, <https://www.nytimes.com/2021/08/28/world/europe/coronavirus-britain-uk.html>.
14. Damien Cave, “Australia Is Betting on Remote Quarantine. Here’s What I Learned on the Inside,” *New York Times*, August 20, 2021, <https://www.nytimes.com/2021/08/20/world/australia/howard-springs-quarantine.html>.
15. Abram Van Engen, “How America Became ‘a City upon a Hill,’” *Humanities* 41, no. 1 (winter 2020), <https://www.neh.gov/article/how-america-became-city-upon-hill>.