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Religious Freedom vs. Compelled Vaccination: A Case-Study of the 2018-2019 Measles Pandemic or the Law as a Public Health Response

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Cover Page Footnote

Dr. Billauer holds academic appointments at the University of Porto, Portugal, where she is a Professor in the International Program on Bioethics, and the Institute of World Politics in Washington, D.C., where she is a research Professor of Scientific Statecraft. She is currently Visiting Sr. Faculty at the Academic Center for Law and Science in Hod Hasharon. Dr. Billauer has advanced degrees in law and public health and sits on the UNESCO committee currently compiling a casebook on bioethics. Her most recent book, *HEALTH INEQUITY AND THE ELDERLY: THE IMPACT OF PANDEMIC-POLICY, BIOETHICS AND THE LAW* has just been published. The author gratefully acknowledges the advice and comments of Professor Norman A. Bailey, and the feedback from Dean Thomas Galligan, Professors Charlotte Tschider and Chris Ogalla at the SEALs conference (2020), but bears full responsibility for the content of this Article.

RELIGIOUS FREEDOM VS. COMPELLED VACCINATION: A CASE-STUDY OF THE 2018–2019 MEASLES PANDEMIC OR THE LAW AS A PUBLIC HEALTH RESPONSE

Barbara Pfeffer Billauer, JD, MA, PhD⁺

Following the recent decision in Roman Catholic Diocese v. Cuomo,ⁱ clear guidance regarding the state's powers to act during a pandemic is wanting. I look here to the 2018–2019 global measles epidemic, with a focus on the New York and Israeli experiences, for that guidance. Measles rates increased dramatically during the 2018–2019 season, both in the United States and globally. This phenomenon reflects a general decline in worldwide vaccination and an increase in vaccine resistance stoked by anti-vax groups. In the United States, the epidemic targeted ultra-Orthodox Jewish communities, as it did in Israel. This Article evaluates the legal response to vaccination in the two countries, and between two neighboring ultra-Orthodox localities in New York. The research demonstrates the efficacy of differing legal responses, a novel approach to empirically assessing the impact of legal intervention. In so doing, the Article demonstrates the power of the law to help quash epidemics, demonstrating its use as a public health tool. The Article also reaffirms the constitutionality of protecting public health via governmental measures that might trespass on individual rights, such as mandating vaccination. I also discuss legal challenges mounted by the anti-vax community. Finally, and critically, this Article demonstrates the importance of lawyers being knowledgeable with epidemiological terms and principles when mounting defenses to governmental initiatives.

⁺ Dr. Billauer holds academic appointments at the University of Porto, Portugal, where she is a Professor in the International Program on Bioethics, and the Institute of World Politics in Washington, D.C., where she is a research Professor of Scientific Statecraft. She is currently Visiting Sr. Faculty at the Academic Center for Law and Science in Hod Hasharon. Dr. Billauer has advanced degrees in law and public health and sits on the UNESCO committee currently compiling a casebook on bioethics. Her most recent book, HEALTH INEQUITY AND THE ELDERLY: THE IMPACT OF PANDEMIC-POLICY, BIOETHICS AND THE LAW has just been published. The author gratefully acknowledges the advice and comments of Professor Norman A. Bailey, and the feedback from Dean Thomas Galligan, Professors Charlotte Tschider and Chris Ogalla at the SEALs conference (2020), but bears full responsibility for the content of this Article.

i. See Roman Cath. Diocese v. Cuomo, 141 S. Ct. 63, 68 (2020).

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I. INTRODUCTION

On Thanksgiving eve, 2020, the U.S. Supreme Court rendered a decision that effectively corroded the states’ right to address public health matters, including managing epidemics. In *Roman Catholic Diocese v. Cuomo*, the Court ruled that the constitutional right of freedom of religion can trump the state’s police powers.¹ The *per curiam* decision trampled upon the hitherto guiding light and law in public health emergency matters, *Jacobson v. Massachusetts*.² Some experts believe that “[w]ith *Jacobson* apparently sidelined, the future of many public health laws, including and especially vaccine mandates, appears perilous,”³ and that the previously unfettered role of public health officials, governors, and legislatures in combatting epidemics is now in serious jeopardy.

1. *Id.*

2. *Jacobson v. Massachusetts*, 197 U.S. 11, 37–38 (1905).

3. Wendy E. Parmet, *Roman Catholic Diocese of Brooklyn v. Cuomo—The Supreme Court and Pandemic Controls*, 384 NEW ENG. J. MED. 199, 201 (2021).

Paradoxically, the decision came just as the world is facing what might be called the greatest microbial invasion in a half-century, portending to threaten society as we know it. As this article is being finalized, COVID-19 has overtaken health services and hospitals, and sickened and killed millions. For now, vaccination seems to be the only effective weapon. Nevertheless, initial studies indicated that only half the population would accept vaccination,⁴ manifesting an overall trend in vaccine resistance.⁵ The anti-vaccination (“anti-vax”) community is out in full force seeking to bludgeon vaccine acceptance.⁶ Whether circumstances will warrant compulsory vaccination to achieve herd immunity remains to be seen. Whether states will have the power to compel such vaccination—especially in light of *Roman Catholic Diocese v. Cuomo*—is also questionable. And anti-vaxxers are sure to raise the *Diocese* case to sustain religious objection to vaccination. Guidance is surely needed.

To be sure, the *Diocese* case did not concern vaccination—it addresses lockdown and quarantine—and *Jacobson*, which it certainly trampled on, does not address the First Amendment’s Free Exercise Clause. However, case law addressing this balancing conundrum does exist—even at the Supreme Court level—although it is not referenced by the *Diocese* court. Moreover, recent practical and legal experience addressing the weighing of personal liberties against the police power of the state to protect the public health exists, establishing that sometimes religious rights must temporarily be suppressed to achieve the societal benefit.⁷

This Article discusses how religious objections to mandatory vaccination were dealt with during the 2018–2019 New York measles epidemic, as a case-study, to provide guidance to public health officials and the legal community in the event mandatory vaccination becomes necessary, either regarding COVID-19 or some other infectious menace.⁸

4. Lauran Neergaard & Hannah Fingerhut, *AP-NORC Poll: Half of Americans Would Get a COVID-19 Vaccine*, AP NEWS (May 27, 2020), <https://apnews.com/article/donald-trump-us-news-ap-top-news-politics-virus-outbreak-dacdc8bc428dd4df6511bfa259cfec44>.

5. Melissa Jenco, *AAP Urges Vaccination as Rates Drop Due to COVID-19*, AM. ACAD. PEDIATRICS, (May 8, 2020), <https://www.aappublications.org/news/2020/05/08/covid19vaccinations050820>.

6. Persistent emails sent to the over 50,000 Facebook subscribers of Children’s Defense of Israel, a known anti-vax organization, on file with author. See Vaccines Association, *Vaccines—An Informed Choice*, FACEBOOK, <https://www.facebook.com/groups/VaccineChoiceIL/> (last visited Nov. 20, 2021). See, e.g., Imran Ahmed, *Dismantling the Anti-Vaxx Industry*, 27 NATURE MED. 366 (2021); Barbara Pfeffer Billauer, *Muzzling Anti-Vaxxer FEAR Speech- Overcoming Free Speech Obstacles with Compelled Speech*, 76 U. MIAMI L. REV 1 (2022) [hereinafter *Muzzling Anti-Vaxxer*].

7. *Doe v. Mills*, 142 S. Ct. 17 (2021) (denying petition to Supreme Court for injunctive relief from a COVID-19 vaccine mandate).

8. Legislation has already been introduced in New York to compel mandatory Covid vaccination. See LEGIS. ASSEMB., A11179 (N.Y. 2020).

One overarching factor governing the propriety of a state's legislation or a health department order is the severity of the epidemic.⁹ The severity and the response, however, cannot be judged in purely objective terms. Justice Gorsuch, in his concurring opinion in *Diocese*, trivialized the penalty imposed on Pastor Hennings Jacobson who foreswore vaccination to smallpox in the early 1900s.¹⁰ Robert Kennedy, Jr. called the fine imposed no different than a "traffic ticket."¹¹ In actuality, it was almost half the weekly wages of an average factory worker.¹² Translated to the wages of a Supreme Court justice that equals more than \$1,000.¹³ The motivating factor for the *Jacobson* Court's rather draconian punishment was a Jungian-like panic associated with the then-raging epidemic, a similar fear the anti-vax community snubs or disputes in their crusades against measles or COVID-19 or other vaccine-preventable diseases.¹⁴ It is this panic, in many cases well-founded, that dictates legal, public health, and community response, and it is the possibility of such danger-induced terror and loss of life that the *Diocese* court simply ignores.

The New York 2018–2019 measles experience provides us with guidance on several fronts. Firstly, contemporaneous epidemics in two neighboring counties garnering similar health department orders regarding mandatory vaccination resulted in opposite court decisions when opposed by anti-vaxxers. The difference in the ensuing trajectory of the outbreaks in the two counties alerts us to the impact of such decisions and the efficacy of health department orders. Secondly, eventually New York State enacted legislation eviscerating non-medical vaccine exemptions for pre-school vaccination. That legislation was contested. The ensuing decision on its legality, while rendered at a lower court level, reviewed at length the compelling legal issue we face here: freedom of religion versus the police power to compel vaccination. Justice Hartman's decision provides far more pointed, practical, and relevant guidance regarding mandatory COVID-19 vaccination than the more ephemeral and idealistic *Diocese* case. And while COVID-19 is a less contagious disease than measles,¹⁵

9. See *Corman v. Acting Sec'y Pa. Dep't of Health*, 266 A.3d 452 (Pa. 2021) (holding that a school mask mandate was improper absent a state of emergency declaration by the governor).

10. *Diocese*, 141 S. Ct. at 71 (2020) (Gorsuch, J., concurring).

11. See *Robert F. Kennedy, Jr. vs Alan Dershowitz: The Great Vaccine Debate!*, CHILD'S HEALTH DEF., <https://childrenshealthdefense.org/transcripts/robert-f-kennedy-jr-vs-alan-dershowitz-the-great-vaccine-debate/> (last visited Nov. 20, 2021).

12. MICHAEL WILLRICH, *POX: AN AMERICAN HISTORY* (2011).

13. Reity O'Brien, *Supreme Court Justices Earn Quarter-Million in Cash on the Side*, THE CTR. FOR PUB. INTEGRITY (June 20, 2014), <https://publicintegrity.org/politics/supreme-court-justices-earn-quarter-million-in-cash-on-the-side> (noting, according to the Federal Judicial Center, Supreme Court Justices today make \$244,400).

14. CTR. FOR COUNTERING DIGIT. HATE, *THE ANTI-VAX PLAYBOOK* 11–13 (2020), www.counterhate.com/playbook.

15. Patricia A. Stinchfield, *Measles & COVID-19: A Dangerous Combination*, NAT'L FOUND. FOR INFECTIOUS DISEASES (July 16, 2020), <https://www.nfid.org/2020/07/16/measles-covid-19-a-dangerous-combination/>; see also Imke Schröder, *COVID-19: A Risk Assessment Perspective*, 27 ACS CHEM. HEALTH & SAFETY 160, 163 (2020).

with perhaps only a 67% vaccination rate required to achieve herd immunity needed to stem spread,¹⁶ lawmakers and public health officials will still need to confront a population that is highly resistant to vaccine acceptance.¹⁷

In addition to empirically comparing the epidemic and legal situation in two neighboring counties to evaluate the impact of vaccination and judicial sentiment, the first such study to do so, this Article compares these results and experiences against a contemporaneous outbreak in Israel, in a society with an advanced health system but an entirely different legal system. This evaluation provides yet another rubric to confirm the impact of public health law on epidemic response.

The comparison between the Israeli and American situation becomes even more compelling when considering the population similarities in all three locales: both countries generally have high vaccination rates,¹⁸ all three outbreaks besieged similar ultra-Orthodox communities—called the Hassidic community in the United States and referred to as the Haredi community in Israel¹⁹—and in all localities, hospitalizations surged.²⁰ Further, in both countries the disease was imported: in the United States, the index case was exposed in Israel,²¹ and in Israel, the index case was exposed in Ukraine.²² That the Israeli incidence was nearly three times higher and lasted twice as long as

16. *What Is Herd Immunity?*, WEBMD (May 13, 2021), <https://www.webmd.com/lung/what-is-herd-immunity#1>; Ludwig Burger & Kate Kelland, *Analysis: Can First COVID-19 Vaccines Bring Herd Immunity? Experts Have Doubts*, REUTERS (Nov. 18, 2020, 4:25 AM), <https://www.reuters.com/article/us-health-coronavirus-immunity-analysis/analysis-can-first-covid-19-vaccines-bring-herd-immunity-experts-have-doubts-iduskbn27y124>.

17. See Nat Malkus, Opinion, *D.C. Schools Took a Wise Step to Help Prevent Something Worse Than Coronavirus*, WASH. POST (Aug. 4, 2020), <https://www.washingtonpost.com/opinions/2020/08/04/dc-schools-took-wise-step-help-prevent-something-worse-than-coronavirus/>.

18. Daniel Avery, *Israel Is Still Recovering From a Historic Measles Epidemic. Is a Resurgence Right Around the Corner?*, NEWSWEEK (Sept. 5, 2019, 5:15 PM), <https://www.newsweek.com/israel-measles-outbreak-1454494>; *Kindergarten Immunization Coverage Rates 2018–19: Mumps, Measles and Rubella Vaccine*, NAT'L CONF. STATE LEG. (Jan. 30, 2020), <https://www.ncsl.org/research/health/kindergarten-immunizations-coverage-rates-2018-19-mumps-measles-and-rubella-vaccine-postcard.aspx>; Eva Avramovich et al., *Measles Outbreak in a Highly Vaccinated Population: Israel, July–August 2017*, 67 MORBIDITY & MORTALITY WKLY. REP. 1186, 1187 (2018) (citing Anis E. Grotto et al., *Measles in a Highly Vaccinated Society: The 2007–08 Outbreak in Israel*, 59 J. INFECTION 252 (2009)).

19. See generally Yehoshua Pfeffer, *Coronavirus: The Charedi Response*, TZARICH IYUM (Apr. 2020), <https://iyun.org.il/en/article/coronavirus-the-charedi-response/>.

20. *New Measles Surveillance Data for 2019*, WORLD HEALTH ORG. (May 15, 2019), <https://www.who.int/news/item/15-05-2019-new-measles-surveillance-data-for-2019>.

21. See Scott Enman, *One Williamsburg School 'Ignited' NYC's Measles Crisis*, BROOKLYN DAILY EAGLE (June 25, 2019), <https://brooklyneagle.com/articles/2019/06/25/williamsburg-school-ignited-nyc-measles-crisis/>.

22. See Nick Paumgarten, *The Message of Measles*, THE NEW YORKER (Aug. 26, 2019), <https://www.newyorker.com/magazine/2019/09/02/the-message-of-measles>.

that in the United States and included three deaths,²³ supports my hypothesis that the differing legal and cultural—although not religious—responses regarding vaccination contributed to the different outcome.

This research is novel in two respects. First, it evaluates if the difference between epidemic experiences in two developed countries with virtually identical populations—i.e., Israel and the United States—can be attributed to different legal or bioethical frameworks. Second, it determines, via a case-study approach, the power of the law as a public health response in quelling local epidemics. Finally, I address legal objections raised by the anti-vax community regarding the claim of freedom of religion. Understanding the wealth of legal precedent in this area may empower states seeking to impose public health initiatives via legislation or order and avoid constitutional trespass.

Part I introduces the problem. Section A discusses the history of the once-upon-a-time eradication of measles, and section B examines the dangers of the disease. Part II details the 2018–2019 measles epidemic on a chronological basis in two neighboring New York counties, Rockland and Kings (Brooklyn), illustrating in real time the critical nature of the interface among anti-vaxxers, public health personnel, and disease incidence, and the importance of evaluating the severity of the epidemic and the response of local public health experts on the scene. Part III discusses and compares the differing responses to municipal emergency orders in each county from an epidemiological perspective. Part IV examines the variant judicial views. Finally, Part V explores state legislation, noting the tensions between First Amendment freedoms of religion, personal freedoms of choice and autonomy, and the Government’s constitutionally sanctioned role of protecting public health. This Part also provides reassurance for legislatures seeking to eliminate religious exemptions to vaccination and the constitutionality.

A. Background

In 2000, the United States achieved World Health Organization (WHO) status for eradicated measles.²⁴ Not twenty years later, we were on the verge of losing that designation.²⁵ The 2018–2019 outbreak saw the United States suffering the worst measles epidemic in decades, sickening more people than any year since

23. See generally Tani Goldstein, *Ill-Prepared Israeli Health System Struggles to Keep Measles at Bay*, TIMES ISR. (Nov. 11, 2019, 6:39 AM), <https://www.timesofisrael.com/ill-prepared-israeli-health-system-struggles-to-keep-measles-at-bay/>.

24. See *Measles Elimination*, CTRS. FOR DISEASE CONTROL & PREVENTION (Nov. 5, 2020), <https://www.cdc.gov/measles/elimination.html> (“The World Health Organization (WHO) defines measles elimination as ‘the absence of endemic measles virus transmission in a defined geographical area (e.g. region or country) for at least 12 months’ In 2000, measles was declared eliminated from the United States.”).

25. Gabriella Borter, *How One County Scrambled to Keep America Measles-Free*, REUTERS (Nov. 4, 2019, 8:47 AM), <https://www.reuters.com/article/us-health-measles-usa-insight/how-one-county-scrambled-to-keep-america-measles-free-idUSKBN1XE15F>.

1992.²⁶ As of December 5, 2019, “1,276 illnesses [were] reported in [thirty-one] states.”²⁷ Two outbreaks arising in neighboring New York counties, Rockland and Kings, accounted for the lion’s share²⁸—about 75% of the cases.²⁹ By contrast, in 2017, 120 cases were reported for the entire country.³⁰

Globally, the same trend appeared. In the first ten months of 2019, 440,263 confirmed cases of measles were reported,³¹ a three-fold increase over the prior year.³² This increase was not limited to undeveloped countries. According to WHO records, Israel, an economically developed (“OECD”) country, was the

26. Rachael Rettner, *The 5 Most Notable Disease Outbreaks of 2019*, LIVE SCI. (Dec. 27, 2019), <https://www.livescience.com/biggest-outbreaks-2019.html>.

27. Aimee Cunningham, *Measles Got a Foothold in the United States This Year and Almost Didn’t Let Go*, SCI. NEWS (Dec. 16, 2019, 9:00 AM) [hereinafter *Measles Foothold*], <https://www.sciencenews.org/article/measles-cases-low-vaccination-rates-top-science-stories-2019-yir>; see also Aimee Cunningham, *The U.S. Narrowly Eked Out a Measles Win, Keeping Elimination Status*, SCI. NEWS (Oct. 4, 2019, 1:02 PM), <https://www.sciencenews.org/article/united-states-measles-outbreak-elimination-status>; Meredith Gingold, *The Path is Cleared: A Growing Body of Case Law Upholds States’ Removal of Non-Medical Vaccination Exemptions; Minnesota Should be Next*, MINN. L. REV.: DE NOVO (Dec. 4, 2019), <https://minnesota.lawreview.org/2019/12/04/the-path-is-cleared-a-growing-body-of-case-law-upholds-states-removal-of-non-medical-vaccination-exemptions-minnesota-should-be-next/>.

28. Debra Goldschmidt & Susan Scutti, *Michigan Measles Outbreak Linked to Outbreak in New York; Rockland County Takes new Steps to Contain Virus*, CNN (Apr. 16, 2019), <https://www.cnn.com/2019/04/16/health/measles-outbreak-new-york-michigan-bn/index.html>. See also Lena H. Sun, *Washington Post Unaware He had Measles a NY Man to Michigan, Infecting 39 People*, WASH. POST (Apr. 15, 2019), <https://www.washingtonpost.com/health/2019/04/16/how-patient-zero-spread-measles-across-state-lines-infected-people/>. While most reports attribute 75% of the American epidemic to these venues, when adding the 39 cases in Michigan that were seeded by a visitor from Rockland, and the cases in the religious communities of Lakewood and Sullivan-Ulster, which are satellites of the Rockland and Kings counties reported on here, the percentage of American cases tethered to these locales exceeds 85%.

29. *Measles Foothold*, *supra* note 27; see also Debra Goldschmidt & Susan Scutti, *Michigan Measles Outbreak Linked to Outbreak in New York; Rockland County Takes New Steps to Contain Virus*, CNN (Apr. 16, 2019, 1:20 PM), <https://www.cnn.com/2019/04/16/health/measles-outbreak-new-york-michigan-bn/index.html> (noting that two Rockland cases were imported from the United Kingdom and one from Ukraine). See also Lena H. Sun, *Unaware He Had Measles, a Man Traveled from N.Y. to Michigan, Infecting 39 People*, WASH. POST (Apr. 16, 2019), <https://www.washingtonpost.com/health/2019/04/16/how-patient-zero-spread-measles-across-state-lines-infected-people/> (noting its import from Brooklyn, with 75% of the U.S. cases over the previous five years occurring in “various insular communities . . . [including] the ultra-Orthodox community in New York”).

30. *Measles Cases and Outbreaks*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/measles/cases-outbreaks.html> (last visited Nov. 20, 2021).

31. *Measles—Global Situation*, WORLD HEALTH ORG. (Nov. 27, 2019), <https://reliefweb.int/report/world/measles-global-situation-disease-outbreak-news-27-november-2019>.

32. Press Release, *More Than 140,000 Die From Measles as Cases Surge Worldwide*, UNICEF (Dec. 5, 2019), <https://www.unicef.org/press-releases/more-140000-die-measles-cases-surge-worldwide>.

sixth-most measles-stricken country in the WHO's European Region.³³ The 2018–2019 epidemic was the worst that country had seen.³⁴ Over 4,300 people became ill, compared to thirty the year before.³⁵

Another 200 cases were reported in Jerusalem in November and December.³⁶ Over the course of the epidemic, three died.³⁷ One was a forty-three year old stewardess exposed on a flight from the United States to Israel.³⁸ A ten year old boy currently lies in a coma with permanent brain damage.³⁹

It took five years after the measles vaccine was developed in 1963 for the vaccine to gain traction in the United States.⁴⁰ Widespread vaccination at the effective level of two doses was not achieved until some three decades later.⁴¹

33. WHO EpiData, WORLD HEALTH ORG., (July 4, 2019), https://www.euro.who.int/__data/assets/pdf_file/0009/406980/2019-06-Epi_Data_EN_June2018-May2019_revised.pdf; see also Goldstein, *supra* note 23.

34. C. Stein-Zamir et al., *Measles Outbreaks Affecting Children in Jewish Ultra-Orthodox Communities in Jerusalem*, 136 J. EPIDEMIOLOGY & INFECTION 207, 208 (2008) [hereinafter *Measles Outbreak*]; see also Barbara Pfeffer Billauer, *Anti-Vax "FEAR" Speech: A Public Health-Driven Policy Initiative When Counter-Speech Won't Work*, 32 HEALTH MATRIX: J.L. & MED. (forthcoming 2022) [hereinafter *Policy Initiative*]; *Muzzling Anti-Vaxxer*, *supra* note 6; Barbara Pfeffer Billauer, *When Public Health Is Eroded by Junk Science: Muzzling Anti-Vaxxer FEAR Speech—and the First Amendment* (Mar. 9, 2020) [hereinafter *FEAR Speech*] (unpublished manuscript), <https://ssrn.com/abstract=3550670>.

35. Noga Tarnopolsky, *Israel Saw 4,000 Measles Cases in 2018—and Only 30 the Year Before*, THE DAILY BEAST (Apr. 2, 2019, 4:51 AM), <https://www.thedailybeast.com/israel-saw-4000-measles-cases-in-2018-and-only-30-the-year-before>.

36. Chen Stein-Zamir et al., *Community-Oriented Epidemic Preparedness and Response to the Jerusalem 2018–2019 Measles Epidemic*, 109 AM. J. PUB. HEALTH PRAC. 1714, 1715 (2019).

37. Exposure to Measles on Flight to Georgia, ARUTZ SHEVA, ISR. NAT'L NEWS (Dec. 17, 2019) [hereinafter *Exposure to Measles*].

38. Daniel Sugarman, *El Al Stewardess Dies After Contracting Measles on Board New York to Tel Aviv Flight*, THE JC (Aug. 13, 2019), <https://www.thejc.com/news/israel/el-al-stewardess-roteam-amitai-dies-after-contracting-measles-on-board-flight-1.487403> (noting that a forty-three year old flight attendant who flew from New York City to Tel Aviv became ill with the disease, and later died); see also Avery, *supra* note 18; E. Ben-Chetrit et al., *Measles-Related Hospitalizations and Associated Complications in Jerusalem, 2018–2019*, 26 CLINICAL MICROBIOLOGY & INFECTION 637 (2020).

39. *Exposure to Measles*, *supra* note 37.

40. See *Measles History*, CDC (Feb. 5, 2018), <https://www.cdc.gov/measles/about/history.html>; see also Steven P. Calandrillo, *Vanishing Vaccinations: Why Are So Many Americans Opting Out of Vaccinating Their Children?*, 37 U. MICH. J.L. REFORM 353, 372–74 & n. 121 (2004).

41. Cristina V. Cardemil et al., *Effectiveness of a Third Dose of MMR Vaccine for Mumps Outbreak Control*, 377 NEW ENG. J. OF MED. 947, (2017) (“In the United States, immunization with two doses of the measles–mumps–rubella (MMR) vaccine as part of a childhood vaccination program led to a 99% reduction in reported cases of mumps by 2005.”); Maureen S. Kolasa, *Progress Towards Implementation of a Second-Dose Measles Immunization Requirement for All Schoolchildren in the United States*, 189 THE J. OF INFECTIOUS DISEASES S98-S103 (2004).

By 2000, the United States had achieved WHO status of eradicating a disease,⁴² which throughout the middle of the 20th century claimed some 400–500 lives a year,⁴³ hospitalized another 48,000,⁴⁴ and sickened a reported 500,000,⁴⁵ including 4,000 cases of encephalitis.⁴⁶ These figures represent a gross improvement in case-fatality compared to the turn of the 20th century, when an average of 5,300–6,000 succumbed to measles-related deaths yearly.⁴⁷

In the last decade, however, vaccination resistance rooted and spread,⁴⁸ and cases of measles have been creeping up before exploding of late.⁴⁹ The descent in public health metrics surrounding vaccination has been attributed to the rising potency of the anti-vax movement, populated by actors,⁵⁰ politicians,⁵¹ and even physicians.⁵² Their motives—and their funding sources—⁵³ remain obscure and—at least facially—above reproach. Upon examination, however, it appears

42. *Morbidity and Mortality Wkly. Rep., Measles—United States, January 1–August 24, 2013*, CTRS. FOR DISEASE CONTROL & PREVENTION (Sept. 13, 2013); see *Measles Elimination*, *supra* note 24.

43. See *Reported Cases and Deaths from Vaccine Preventable Diseases, United States*, CTRS. FOR DISEASE CONTROL & PREVENTION (May 2019) (on file with author).

44. Walter A. Orenstein et al., *Measles Elimination in the United States*, 189 J. INFECTIOUS DISEASES S1 (2004).

45. See Calandrillo, *supra* note 40, at 372, n.122; see also *Never Too Old—Measles is Often Spread by Adults—Vaccinating Children Only is No Longer Enough*, ECONOMIST, May 25, 2019.

46. Orenstein et al., *supra* note 44; see also *Information Sheet—Observed Rate of Vaccine Reactions—Measles, Mumps, and Rubella Vaccines*, WORLD HEALTH ORG. (May 2014), https://www.who.int/vaccine_safety/initiative/tools/MMR_vaccine_rates_information_sheet.pdf.

47. See *Measles History*, *supra* note 40.

48. Jacqueline K. Olive et al., *The State of the Antivaccine Movement in the United States: A Focused Examination of Nonmedical Exemptions in States and Counties*, 15 PLOS MED. (2018); see also Ben Sales, *Here's What We Know About Orthodox Vaccination Rates*, JEWISH TELEGRAPHIC AGENCY (June 7, 2019).

49. See *Measles Cases and Outbreaks*, *supra* note 30.

50. EJ Dickson, *A Guide to 17 Anti-Vaccination Celebrities*, ROLLING STONE (June 14, 2019, 1:52 PM), <https://www.rollingstone.com/culture/culture-features/celebrities-anti-vaxxers-jessica-biel-847779/> (discussing a list of anti-vaxxers including Robert de Niro and Jenny McCarthy); see also Paumgarten, *supra* note 22.

51. Paul A. Offit, *Thimerosal and Vaccines—A Cautionary Tale*, 357 NEW ENG. J. MED. 1278, 1279 (2007) (noting that “[o]n August 26, 2004, Arnold Schwarzenegger, governor of California, banned thimerosal-containing influenza vaccines from his state; others soon followed his lead”); see also *Lawsuit Filed to Stop Repeal of Religious Exemptions to Vaccine*, WGRZ NEWS (July 10, 2019, 5:19 PM), <https://www.wgrz.com/article/news/lawsuit-seeks-to-stop-repeal-of-religious-exemptions-to-vaccines/71-7a6a0c9f-3bfd-4b86-884d-cd28bea5fac7>.

52. See, e.g., Paumgarten, *supra* note 22 (noting that pediatrician Lawrence Palevsky is an anti-vaxxer).

53. See, e.g., Lena H. Sun & Amy Brittain, *Meet the New York Couple Donating Millions to the Anti-vax Movement*, WASH. POST (June 19, 2019), https://www.washingtonpost.com/national/health-science/meet-the-new-york-couple-donating-millions-to-the-anti-vax-movement/2019/06/18/9d791bcc-8e28-11e9-b08e-cfd89bd36d4e_story.html; see also *FEAR Speech*, *supra* note 34, at 45–46.

that at least some of them are making lots of money from these socially harmful activities.⁵⁴

Vaccine resistance is not limited to the United States.⁵⁵ Globally we see the same reasons for lowered vaccination rates and high disease incidence: anti-vaxxers spreading false information claiming the measles vaccine is dangerous and the disease is not.⁵⁶ Various countries have taken aggressive initiatives to deal with the problem, and in some cases are compelling vaccinations by imposing fines to deal with the rising outbreaks.⁵⁷

In the United States, all states have mandatory vaccination requirements.⁵⁸ However, in some circumstances parents who oppose vaccination can opt out,⁵⁹ by relying on religious exemptions, which require attestation that the religion

54. See *FEAR Speech*, *supra* note 34, at 45–46. See, e.g., *Cedillo v. Sec’y of Health & Hum. Servs.*, 617 F.3d 1328, 1335–36 (Fed. Cir. 2010) (some doctors and “researchers” have become expert witnesses in vaccine litigation and earn significant sums from testifying); Stephen Barrett, *Dr. Mark Geier Severely Criticized*, QUACKWATCH (July 11, 2012), <https://quackwatch.org/cases/civil/geier/>. See also *Weiss v. Sec’y of Dept. of Health & Hum. Servs.*, No. 03-190V, 2003 U.S. Claims LEXIS 359, at *2 (Fed. Cl. Oct. 9, 2003) (quoting *Haim v. Sec’y of Health & Hum. Servs.*, No. 90-1031V, 1993 U.S. Claims LEXIS 145, at *46 (Fed. Cl. Aug. 27, 1993)) (holding by a magistrate that “Geier’s testimony is not reliable, or grounded in scientific methodology and procedure. His testimony is merely subjective belief and unsupported speculation.”); *Weiss*, No. 03-190V, 2003 U.S. Claims LEXIS 359, at *2 (quoting *Ormechea v. Sec’y of Health & Hum. Servs.*, No. 90-1683V, 1992 U.S. Cl. Ct. LEXIS 264, at *20 (Fed. Cl. June 10, 1992)) (“Because Dr. Geier has made a profession of testifying in matters to which his professional background (obstetrics, genetics) is unrelated, his testimony is of limited value to the court.”)

55. See Denis Campbell, *Sharp Rise in Measles in England Amid Fears Over ‘Anti-Vaxxers’*, THE GUARDIAN (Aug. 30, 2019, 11:12 AM); see also Goldstein, *supra* note 23.

56. Calandrillo, *supra* note 40.

57. Allison M. Maiuri, *German Lawmakers Approve Compulsory Measles Vaccine Plan*, MED. XPRESS (Nov. 14, 2019), <https://medicalxpress.com/news/2019-11-german-lawmakers-compulsory-measles-vaccine.html>.

58. Calandrillo, *supra* note 40, at 356; see *States With Religious and Philosophical Exemptions from School Immunization Requirements*, NAT’L CONF. OF STATE LEGS. (Apr. 30, 2021), <https://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx>; cf. James G. Hodge, Jr. & Lawrence O. Gostin, *School Vaccination Requirements: Historical, Social, and Legal Perspectives*, 90 KY. L.J. 831, 833 & n.9 (2002) (noting that in the early part of the 20th century, prominent parents preferred jail and fines to vaccinating their children); *State Vaccination Requirements*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/vaccines/imz-managers/laws/state-reqs.html> (Nov. 15, 2016).

59. See Sharon Otterman, *Get Vaccinated or Leave School: 26,000 N.Y. Children Face a Choice*, N.Y. TIMES (Sept. 6, 2019), <https://www.nytimes.com/2019/09/03/nyregion/measles-vaccine-exemptions-ny.html> (noting only a few states which do not allow non-medical exemptions); Mariam Siddiqui et al., *Epidemiology of Vaccine Hesitancy in the United States*, 9 HUM. VACCINES & IMMUNOTHERAPEUTICS 2643 (2013).

prohibits vaccines⁶⁰ or philosophical exemptions,⁶¹ which are easier to obtain.⁶² Alternatively, they institute their own delayed vaccine schedule,⁶³ or simply home school them, a response that may have its own negative ramifications.⁶⁴ Legal efforts to compel vaccination or prevent nonvaccinated children from attending school receive mixed reception—from both the medical community and the courts.⁶⁵ The virulent anti-vax movement stokes these sentiments,⁶⁶ contributing to the raging global epidemic.⁶⁷

With the vaccine resistance trend escalating, some means must be found to increase vaccine coverage—as a preventive measure, as well as a response to a

60. There are very few established religions that oppose vaccination, most notably Christian Scientists. Some parents claim religious objections when it is their own personal belief. See *NM v. Hebrew Acad. Long Beach*, 155 F. Supp. 3d 247 (E.D.N.Y. 2016) (ruling against a parent's religious objection when the objection is based on the parent's own belief). Hence, philosophical objections that only require a personal statement of belief are easier to obtain. See *Davis v. State*, 451 A.2d 107 (Md. 1982).

61. Gordana Pelčić et al., *Religious Exception for Vaccination or Religious Excuses for Avoiding Vaccination*, 57 CROAT. MED. J. 516 (2016); *New York State to Students: Get vaccinated—or Leave School*, ARUTZ SHEVA, ISR. NAT'L NEWS (Sept. 4, 2019), <https://www.israelnationalnews.com/News/News.aspx/268390> (noting that in NY “[s]ome 26,000 public school students” had claimed religious exemptions prior to their being eliminated); see also Paumgarten, *supra* note 22 (noting that “[i]n California, after the removal of the religious exemption, the rate of vaccination rose, from ninety per cent to ninety-six per cent”); Calandrillo, *supra* note 40, at 360.

62. Kyle Reding, *Do We Need Religious and Philosophical Exemptions to Vaccination?*, 10 J. OF BIO SECURITY, BIOSAFETY, AND BIODEFENSE L. 20190006 (2019); *Davis v. State*, 451 A.2d 107 (Md. 1982); see also Douglas S. Diekema, *Personal Belief Exemptions From School Vaccination Requirements*, 35 ANN. R. OF PUB. HEALTH 275 (2014) (“Whether these exemptions were restrictive (allowing only exemption for recognized or established religions) or liberal (allowing exemption for personal beliefs) varied by state.”); Kay Lazar, *A Murky Battle Over Religious Beliefs and COVID-19 Vaccinations Continues*, THE BOS. GLOBE (Sep. 18, 2021), <https://www.bostonglobe.com/2021/09/18/metro/murky-battle-over-sincerely-held-religious-beliefs-covid-19-vaccination/>.

63. Tara Haele, *Vaccine Schedule Not Followed for One Third of Children in US*, MEDSCAPE (Feb. 21, 2020), https://www.medscape.com/viewarticle/925568#vp_1.

64. See Jon Campbell et al., *Will New York Parents Opposed to Vaccinations Send Kids to School? They Rallied in Albany Amid Uncertainty*, LOHUD (Sept. 10, 2019, 9:43 AM), <https://www.lohud.com/story/news/2019/09/09/new-york-parents-opposed-vaccinations-send-kids-school/2263308001/>.

65. See Liam Drew, *The Case for Mandatory Vaccination*, NATURE (Nov. 27, 2019), <https://www.nature.com/articles/d41586-019-03642-w>; but see *Garcia v. New York City Dep't of Health & Mental Hygiene*, 106 N.E.3d 1187 (N.Y. 2018); Kevin M. Malone & Alan R. Hinman, *Vaccination Mandates: The Public Health Imperative and Individual Rights*, in LAW IN PUB. HEALTH PRAC. 262, 271–75 (Richard A. Goodman et al. eds., 2003); *W.D. v. Cnty. of Rockland*, 139 N.Y.S.3d 273, 275–77 (N.Y. Sup. Ct. Apr. 5, 2019).

66. Jan Hoffman, *How Anti-Vaccine Sentiment Took Hold in the United States*, N.Y. TIMES (Mar. 26, 2021), <https://www.nytimes.com/2019/09/23/health/anti-vaccination-movement-us.html>.

67. *Global Reported Measles Infections Triple in 2019, Health Body Says*, TIMES ISR. (Aug. 13, 2019, 4:04 PM), <https://www.timesofisrael.com/global-reported-measles-infections-triple-in-2019-health-body-says/>.

raging epidemic.⁶⁸ But, forcibly compelling vaccination carries notions of violations of autonomy,⁶⁹ which are considered heinous to a large segment of society, whether they agree with the importance of vaccination or not.⁷⁰ Nevertheless, during a raging epidemic, there may be no other choice available other than some form of mandated vaccination or restricting access to public spaces for those choosing not to vaccinate.

Restricting religious exemptions is another vehicle to increase vaccination, but this, too, invites pushback.⁷¹ A state-backed information program might be another method of countering anti-vax misinformation.⁷² But this initiative has problems as well. In Minnesota, for example, the program appears counterproductive, as the state's government is populated by those espousing anti-vax sentiment.⁷³ Furthermore, at the end of the day, parents will gravitate to educational programs more aligned with their cognitive preferences.⁷⁴

Ultimately, the best solution might be to empower state or local health department authorities to intervene—at least during the midst of an epidemic.⁷⁵ This was the mechanism attempted by the two neighboring counties in the midst of the 2018–2019 measles epidemic, the subject of this work.

68. See Sarah Pitt, *Measles Epidemic: Parents Reluctant to Vaccinate Their Children Need to Hear of the Horrors of Forgotten Diseases*, THE CONVERSATION (Aug. 30, 2019, 7:36 AM), <https://theconversation.com/measles-epidemic-parents-reluctant-to-vaccinate-their-children-need-to-hear-of-the-horrors-of-forgotten-diseases-122688>; see also Campbell, *supra* note 55; *Measles in Samoa—Red Alert*, THE ECONOMIST, Dec. 7, 2019, at 47 (noting regarding the Samoan measles epidemic that, “[t]he crisis offers clear proof of the dangers of anti-vax propaganda”).

69. Geoffrey R. Simon et al., *Medical Versus Nonmedical Immunization Exemptions for Child Care and School Attendance*, 138 PEDIATRICS, at 3 (2016) (noting that “[s]everal pediatric bioethicists have argued against the elimination of nonmedical exemptions by citing the ethical Principle of Least Restrictive Means for public health policy”); see generally Douglas J. Opel et al., *Childhood Vaccine Exemption Policy: The Case for a Less Restrictive Alternative*, 137 PEDIATRICS (2016).

70. Julie D. Cantor, *Mandatory Measles Vaccination in New York City – Reflections on a Bold Experiment*, 381 NEW ENG. J. MED. 101, 101–03 (2019) (opining that New York City's decision to fine residents who do not vaccinate may have backfired).

71. *Id.* at 101–02.

72. See Editorial, *Minnesota Bill Would Counter Dangerous Vaccine Disinformation*, STAR TRIBUNE (Feb. 19, 2019, 5:39 PM), <https://www.startribune.com/minnesota-bill-would-counter-dangerous-vaccine-disinformation/506067652/>; see generally Dorit Rubinstein Reiss & John Diamond, *Measles and Misrepresentation in Minnesota: Can There Be Liability For Anti-Vaccine Misinformation That Causes Bodily Harm?*, 56 SAN DIEGO L. REV. 531 (2019).

73. Molly C. Enking, *Minnesota's Autism Board Installs Anti-Vaxxers*, DAILY BEAST (Jan. 19, 2021, 4:07 PM), <https://www.thedailybeast.com/minnesotas-autism-board-installs-anti-vaxxers>.

74. See David Warmflash, *Brain Chemicals Fight for the Status Quo*, GENETIC LITERACY PROJECT (Feb. 7, 2020), <https://geneticliteracyproject.org/2020/02/07/brain-chemicals-fight-for-the-status-quo-thats-why-its-so-hard-to-change-peoples-minds-even-when-the-science-consensus-is-overwhelming/>.

75. See, e.g., *Ass'n of Jewish Camp Operators v. Cuomo*, 470 F. Supp. 3d. 197, 229 (N.D.N.Y. 2020).

B. *The Targeted Epidemics for Investigation:*

The two major American outbreaks in New York’s Rockland County and Brooklyn—and to a lesser extent Lakewood, New Jersey—⁷⁶ and the Israeli outbreaks, disproportionately affected ultra-Orthodox Jewish areas.⁷⁷ Because New York and Israel ordinarily have high vaccination rates,⁷⁸ these localized outbreaks signify pockets of vaccination resistance. The issue of *why* these communities resist vaccines, while significant, is outside the scope of this paper and addressed elsewhere.⁷⁹ Here, I focus only on the *impact* of anti-vax groups targeting them, comparing government response, community pushback, and the consequential trajectory of the epidemics.

C. *How Dangerous is Measles Anyway?*

“[M]easles is the most contagious disease on earth.”⁸⁰ It “is so contagious that if one person has it, 90% of . . . [those in] close [proximity] . . . who are not immune will also become infected.”⁸¹ During the 1989–1992 United States measles epidemic, 57,859 cases and 127 deaths—two per every thousand

76. See Anastasia Tsioulcas, *At Least 5 Rabbis From Ultra-Orthodox N.J. Community Have Died From Coronavirus*, NPR (Mar. 31, 2020, 4:26 PM), <https://www.npr.org/sections/coronavirus-live-updates/2020/03/31/824701633/at-least-5-rabbis-from-ultra-orthodox-n-j-community-have-died-from-coronavirus>; see generally *Measles Cases and Outbreaks*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/measles/cases-outbreaks.html> (last visited Sept. 30, 2021).

77. See Robert McDonald et al., *Measles Outbreaks from Imported Cases in Orthodox Jewish Communities—New York and New Jersey, 2018–2019*, 69 MORBIDITY MORTALITY WKLY. REP. 444, 444 (2019) (“The cases of measles were primarily in members of orthodox Jewish communities . . . [m]ost patients resided in orthodox Jewish neighborhoods with low school immunization rates.”); see also *A Life Apart: Hasidism in America—A Brief Introduction to Hasidism*, PUB. BROAD. STATION, <https://www.pbs.org/alifeapart/intro.html>; Hilary Danailova, *Brooklyn, the Most Jewish Spot on Earth*, HADASSAH MAG. (Jan. 2018), <https://www.hadassahmagazine.org/2018/01/11/brooklyn-jewish-spot-earth/>; STATE OF ISR. MINISTRY OF HEALTH, <https://www.health.gov.il/English/Pages/HomePage.aspx>; Chen Stein-Zamir et al., *Large Measles Outbreak in Orthodox Jewish Communities—Jerusalem District, Israel, 2018–2019*, 69 MORBIDITY MORTALITY WKLY. REP. 562 (2020).

78. Chen Stein-Zamir et al., *The National Childhood Immunization Registry in Israel*, 4 *PROCEDIA IN VACCINOLOGY* 9, 11 (2011) (recounting that overall, Israel boasted a 97% vaccination rate for MMR—measles, mumps and rubella vaccine—in 2007); see Stein-Zamir et al., *supra* note 77 (noting Israel’s vaccination rate decreased to 90% by 2020, and to 78% in the Haredi neighborhoods).

79. See *Policy Initiative*, *supra* note 34.

80. Annie Sparrow, *The Truth About the Measles – The Return of the World’s Most Contagious Disease*, PORTSIDE (Mar. 12, 2015), <https://portside.org/2015-03-12/truth-about-measles-return-worlds-most-contagious-disease>.

81. Donald Kaye & Marjorie P. Pollack, *Measles: No Longer Gone and Forgotten*, HEALIO (Oct. 22, 2018), <https://www.healio.com/news/infectious-disease/20181008/measles-no-longer-gone-and-forgotten>.

cases—were reported.⁸² In some developing countries, the case-fatality is closer to one in a hundred,⁸³ although before widespread use of antibiotics to address the sequelae, it was as high as one to five in one hundred, even in the United States.⁸⁴ Additionally, risks to immunocompromised children or very young infants—for whom vaccination is contraindicated—must be considered.⁸⁵

“Globally, measles *remains* a leading cause of childhood deaths and an estimated 160,000 children die each year from complications of the disease.”⁸⁶ Death, however, is not the only serious risk. Other risks include encephalitis—a life-threatening swelling of the brain—and hospitalization—with a rate ranging from one in five to one in ten for those unvaccinated,⁸⁷ mostly owing to pneumonia.⁸⁸ In 2011, in the United States 40% of patients were hospitalized.⁸⁹ The Center for Disease Control (“CDC”) reports that currently, 20% of the unvaccinated end up in the hospital.⁹⁰

About one in one thousand children who contract measles develops encephalitis, which “can lead to convulsions and leave the child deaf or with

82. Nathan Boonstra, *Seriously, How Deadly is Measles?*, UNITYPOINT HEALTH (Nov. 29, 2017), <https://www.unitypoint.org/blankchildrens/pedsgeekmd-article.aspx?id=babec96f-cf1e-4af1-b421-adfcb36ca561&Seriously%252c+How+Deadly+Is+Measles%253f+>.

83. *See Measles Outbreak in the Pacific – Situation Report No. 9*, WORLD HEALTH ORG. (Dec. 31, 2019), https://www.who.int/docs/default-source/wpro---documents/dps/outbreaks-and-emergencies/measles-2019/measles-pacific-who-unicef-sitrep-20200103.pdf?sfvrsn=82f90381_2 (noting 1,844 hospitalized with 5,675 ill—a hospitalization rate of 32%).

84. WALLACE MASON YATER, *THE FUNDAMENTALS OF INTERNAL MEDICINE* 658 (1941). Babies born of mothers who contracted the disease have a short-lived immunity of three to five months, essentially the same as vaccinated mothers. *Id.* at 656. As recently as 1941, identification of the cause of measles had not been definitively determined. *Id.*

85. *See Immunization and Public Health—Measles Vaccines*, VACCINE WKLY. (Sept. 25, 2019).

86. *Factsheet About Measles*, EUR. CTR. FOR DISEASE PREVENTION CONTROL, (emphasis added), <https://www.ecdc.europa.eu/en/measles/facts/factsheet> (last visited Nov. 21, 2020).

87. Tim Newman, *What is Encephalitis?*, MED. NEWS TODAY (Dec. 7, 2017), <https://www.medicalnewstoday.com/articles/168997>; *NYC Measles Outbreak Over: Officials*, WEBMD (Sept. 4, 2019), <https://www.webmd.com/children/vaccines/news/20190904/nyc-measles-outbreak-over-officials>.; *Complications of Measles*, CNTRS. FOR DISEASE CONTROL (last visited Feb. 27, 2022), <https://www.cdc.gov/measles/symptoms/complications.html> (noting “[a]bout 1 in 5 unvaccinated people in the U.S. who get measles end up hospitalized. Pneumonia. As many as 1 out of every 20 children with measles gets pneumonia, the most common cause of death from measles in young children. Encephalitis. About 1 child out of every 1,000 who get measles will develop encephalitis (swelling of the brain) that can lead to convulsions and can leave the child deaf or with intellectual disability.”).

88. *See Measles Cases and Outbreaks*, *supra* note 30.

89. *Measles—United States, January–May 20, 2011*, 60 MORBIDITY MORTALITY WKLY. REP. 666, 666 (2011).

90. *Complications of Measles*, CNTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/measles/symptoms/complications.html> (last visited Nov. 21, 2019); *see* Lanning Taliaferro, *Rockland County Only Ongoing Measles Outbreak in U.S.: CDC*, PATCH (Sept. 23, 2019, 12:27 PM), <https://patch.com/new-york/newcity/rockland-county-only-ongoing-measles-outbreak-u-s-cdc>.

intellectual disability.”⁹¹ In rare cases, a delayed, but fatal, form of encephalitis, called subacute sclerosing panencephalitis (“SSPE”), may develop seven to ten years after a child contracts measles.⁹² Further, measles may have a suppressive effect on the immune system for up to two years.⁹³ Recent studies determined that roughly 16% of children suffering from measles acquire a severe case of “immune amnesia,” where measles “strip[s] away the immune protections” these children had built to diseases and germs over years of exposure; “those children had lost at least some immunity to more than 40% of the microbes that cause common childhood diseases.”⁹⁴

Not only does measles result in serious consequences or sequelae, but treatment modalities are limited.⁹⁵ Because measles is a viral disease, antibiotics are only effective against measles-related bacterial pneumonia, not the disease itself.⁹⁶ Hence, the best “treatment” is prevention. Two mechanisms are available: vaccination,⁹⁷ and, where vaccination is unavailable due to medical contraindications, reliance on non-exposure by others, called “herd immunity.”⁹⁸ Herd immunity can only be achieved by reaching a disease-specific level of immunity—for measles, this level is 93–95%⁹⁹—either from vaccination or prior infection, such that the likelihood of coming into contact with an infected individual reaches close to zero. In essence, the concept of herd immunity relies on vaccination, not so much to protect the vaccinated individual, but rather to

91. *Complications of Measles*, *supra* note 87.

92. *Complications of Measles*, *supra* note 87; Maggie Fox, *Fatal Measles Complication Killed Patients Years Later*, NBC NEWS (Oct. 28, 2016), <https://www.nbcnews.com/health/health-news/fatal-measles-complication-killed-patients-years-later-n674706>. This complication killed at least 16 people following an outbreak in California. *Id.* The complication occurs when the measles virus remains in the brain, undetected, activating years later as subacute sclerosing panencephalitis (“SSPE”) once the child has recovered. *Id.* In the California cases, “1 in 1,400 [children] under 5 who [contracted] measles developed SSPE.” *Id.* See also *Complications of Measles*, *supra* note 87.

93. Stephanie Soucheray, *Measles Does Long-Term Damage to Immune System*, *STUDIES SHOW*, CIDRAP NEWS (Nov. 1, 2019), <https://www.cidrap.umn.edu/news-perspective/2019/11/measles-does-long-term-damage-immune-system-studies-show>; Ryan O’Hare, *Measles Causes “Immune Amnesia” Leaving us Vulnerable to Other Diseases*, IMPERIAL COLL. LONDON (Oct. 31, 2019) (citing Velislava N. Petrova et al., *Incomplete Genetic Reconstitution of B Cell Pools Contributes to Prolonged Immunosuppression After Measles*, 4 SCIENCE IMMUNOLOGY No. 41 (Nov. 1, 2019)).

94. Melissa Healy, *Measles Infection Causes ‘Immune Amnesia,’ Leaving Kids Vulnerable to Other Illnesses*, L.A. TIMES (Oct. 31, 2019, 11:02 AM).

95. See *Measles (Rubeola): For Healthcare Professionals*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/measles/hcp/index.html> (last visited Nov. 21, 2021).

96. Adam Felman, *What to Know About Measles*, MED. NEWS TODAY (June 29, 2020).

97. *Measles (Rubeola): For Healthcare Professionals*, *supra* note 95.

98. *Herd Immunity*, ASS’N PROS. INFECTION CONTROL EPIDEMIOLOGY, https://apic.org/monthly_alerts/herd-immunity/ (last visited Nov. 21, 2021).

99. Sebastian Funk, *Critical Immunity Thresholds for Measles Elimination*, CTR. MATHEMATICAL MODELLING INFECTIOUS DISEASES (Oct. 19, 2017), https://www.who.int/immunization/sage/meetings/2017/october/2._target_immunity_levels_FUNK.pdf.

assure that that individual does not become a carrier and infect otherwise susceptible individuals.¹⁰⁰ In other words, one gets vaccinated because one is a good citizen who wants to protect others, not merely because one wants to protect oneself.

II. THE 2018–2019 AMERICAN MEASLES PANDEMIC

A. *The Rockland County Outbreak*

The Rockland County outbreak began in an ultra-Orthodox synagogue on October 1, 2018.¹⁰¹ During the Succot holiday service, a fourteen-year-old teenager visiting from Israel fell sick, exposing seven thousand congregants.¹⁰² The house of worship served as the perfect epicenter of spread, and the county—with its unvaccinated population—provided a perfect breeding ground, especially for the youngsters.¹⁰³

100. *See id.*

101. McDonald et al., *supra* note 77 at 444; Stein-Zamir et al., *supra* note 77. The official date is recorded as October 1, but Patient Zero, in observance of Simchat Torah, attended services at the synagogue for the fifth time in four days on October 1. *See* Paumgarten, *supra* note 22.

102. Paumgarten, *supra* note 22; McDonald et al., *supra* note 77, at 444. The incubation period of measles, from exposure to prodrome, averages 10–12 days. Selina SP Chen et al., *What is the Incubation Period for Measles?*, MEDSCAPE (June 6, 2019), <https://www.medscape.com/answers/966220-87114/what-is-the-incubation-period-for-measles>. The teenager was diagnosed on or about October 1, meaning he likely contracted the disease around September 20. “The New York State Department of Health last week said the measles cases in Rockland were linked to travelers who returned from Israel” *Measles Cases in New York Linked to Travel to Israel*, THE TIMES OF ISR. (Oct. 23, 2018), <https://www.timesofisrael.com/measles-cases-in-new-york-linked-to-travel-to-israel>. *See also* Robert Carlson, *Israel Visitors Brought Measles to New York in 2018*, PRECISION VACCINATIONS (Mar. 27, 2019), <https://www.precisionvaccinations.com/ny-reported-336-cases-nyc-and-rockland-counties-during-measles-outbreak>; *See also* Robert MacDonald, et. al, *Notes From the Field: Measles Outbreaks From Imported Cases in Orthodox Jewish Communities—New York and New Jersey, 2018-2019*, CTRS. FOR DISEASE CONTROL (May 17, 2019), <https://www.cdc.gov/mmwr/volumes/68/wr/mm6819a4.htm>; Rene F. Najera, *Measles Update-November 2018*, THE HIST. OF VACCINES (Nov. 19, 2018), <https://www.historyofvaccines.org/content/blog/measles-update-november-2018> (“Most of the cases in Rockland County are in an Orthodox Jewish community. In turn, it is believed that the index case (the first confirmed case) brought measles to the New York area via Israel. In Israel, the legislature is voting on a bill that would prevent unvaccinated/non-immune children from attending public school when an outbreak was declared”).

Nevertheless, it is unlikely that the child arrived after September 23, the beginning of Succot—when travel is prohibited by Jewish law—and further he likely was in the synagogue every day from September 23 to October 1, the Succot holdiday, probably three times a day as is customary holiday worship. *Driving on Sukkot*, DINONLINE (Sep. 15, 2013), <https://dinonline.org/2013/09/15/can-you-drive-on-sukkot/> (“It is not permitted to drive on Sucoot”). *See also* Menachem Posner, *What is Sukkot? A Guide to the Jewish Holiday of Sukkot, The Feast of Tabernacles, and the Meanings Behind it*, Chabad.org, https://www.chabad.org/library/article_cdo/aid/4784/jewish/What-Is-Sukkot.htm.

103. *See* Paumgarten, *supra* note 22. “The shul is more than twenty-two thousand square feet and holds seven thousand people.” *Id.*

Indeed, at the time in question, “Rockland County . . . ha[d] the second lowest measles vaccination rate in [New York State.]”¹⁰⁴ 2018 data shows “children ages one to three have only a 59.4% vaccination rate, and children ages [four] to [eighteen] have only a 53.8% vaccination rate.”¹⁰⁵ “According to county data on . . . school-age children, some Jewish schools in the county had measles vaccination rates below 70% in 2018, compared to 99% statewide.”¹⁰⁶ The county was a sitting duck.¹⁰⁷

“On October 9th, a second case [was reported] in New Square,” an all-Hassidic enclave in Rockland County, from “a fifty-six-year-old man returning from a trip to Israel.”¹⁰⁸ With these cases, New Square becomes the focus of where the two New York outbreaks intersect.

New Square in Rockland is home of the Squarer (Skverer) Hassidim, a sect that originated in the Ukraine.¹⁰⁹ Its founders eventually migrated from Williamsburg, in Brooklyn¹¹⁰ where some New Square residents still send their

104. F.F. *ex rel.* Y.F. v. New York, 108 N.Y.S.3d 761, 769 (N.Y. Sup. Ct. 2019).

105. *Id.*; see also Sales, *supra* note 48.

State statistics show, however, that Rockland County’s immunization rates are significantly below the 96 percent goal set by the state Health Department. And more than 20 Orthodox schools in Rockland and Brooklyn had more than 10 percent of kids claiming a religious exemption from vaccination. . . . At the time of [Rockland’s March] order, less than 73 percent of Rockland County was vaccinated. . . . According to data from the State Department of Education, more than 30 Orthodox schools in Rockland had immunization rates lower than 90 percent last year. In Brooklyn, the number was more than 20.

Sales, *supra* note 48.

106. Borter, *supra* note 25; see McDonald et al., *supra* note 77, at 444 (noting vaccination rate among schools in the outbreak area was 77%, compared to an overall state rate of 98% for students in pre-kindergarten through grade 12); see also Frank Esposito, *What is the Measles Vaccination Rate at My School?*, LOHUD (June 13, 2019, 8:05 PM) (noting New York State Department of Health statistics reporting a school in Rockland County with “zero students vaccinated for the 2016–2017 and 2017–2018 school years”).

107. See *Measles Information*, ROCKLAND COUNTY, <http://rocklandgov.com/departments/health/measles-information/> (last visited Nov. 22, 2021).

108. *Paumgarten*, *supra* note 22.

109. *Paumgarten*, *supra* note 22; Adrienne Sanders, *New Square FAQs*, LOHUD (Nov. 5, 2015, 9:36 AM); Goldschmidt & Scutti, *supra* note 28; REUTERS, *Coronavirus Keeps Israeli Jews from New Year Pilgrimage to Ukraine*, JERUSALEM POST (July 14, 2020, 3:42 PM) (“Israeli Hasidic Jews will have to forego an annual pilgrimage to the central Ukrainian town of Uman this year because of the coronavirus pandemic.”); Maayan Jaffe-Hoffman, *Lieberman Slams Decision to Let Foreign Yeshiva Students into Israel*, JERUSALEM POST (Aug. 1, 2020, 10:44 PM) (“The Ukrainian government has agreed to let in only around 5,000 people for the annual Rosh Hashanah pilgrimage to Uman, Ukrainian Chief Rabbi . . . told JTA.”). See Barbara Pfeffer Billauer, *Is Gamzu – LeTova (for Good)? The Multiple Dangers of Israeli CoVid Policy*, THE TIMES OF ISR. (Aug. 27, 2020) (and links therein).

110. Sanders, *supra* note 109; *Paumgarten*, *supra* note 22 (noting the Hasidim “Square” Rockland community moved from Williamsburg, Brooklyn, and has origins in Skvire, Ukraine).

children to school,¹¹¹ and where presumably relatives in both locales intermixed during the Succot holiday. In total, three cases imported from Israel to New Square seeded the Rockland epidemic.¹¹² From there, one person travelled to Michigan, and infected thirty-nine others.¹¹³ These index cases birthed an epidemic, which would sicken 312 people in Rockland County alone before the outbreak was declared over.¹¹⁴ In the first seven months, October 2018 to April 2019, more than one hundred fifty became ill.¹¹⁵ Fifty-six patients, mostly children, were hospitalized representing an 18% hospitalization rate; “[f]ifteen . . . were so sick that they ended up in . . . intensive care.”¹¹⁶

In the first month of the epidemic, more than forty cases were reported.¹¹⁷ By November 18, 2018, seventy-five cases had been diagnosed.¹¹⁸ The Rockland

111. See SHULEM DEEN, ALL WHO GO DO NOT RETURN 25 (2015); Yosef Feffer, *Williamsburg: Thousands Attended the Seudot Shabbos of Maran HaAdmor of Skver Shlita*, TOG (Nov. 18, 2009, 5:30 PM), <http://www.tog.org.il/en/TorahNew.aspx?id=2386> (noting a “Skverer Beis Midrash in Williamsburg [was] founded by Maran Harav Hakadosh of Skver zy’a,” and that a small Skver outpost remaining in Williamsburg congregates at the Skverer Shul located on Bedford Avenue). Skver Shull, GOOGLEMAPS (last visited Feb. 27, 2022) <https://www.google.com/maps/place/Skver+Shull+-+לביביל+שטייטל+אראסקוויירא%E2%80%AD/@40.7040964,-73.9606984,15z/data=!4m5!3m4!1s0x0:0x750deb93430eaba!8m2!3d40.7040426!4d-73.960783> (noting a synagogue at Basement, 571 Bedford Ave, Brooklyn, NY 11211, United States).

112. See Paumgarten, *supra* note 22, at 5; Patricia Schnabel Ruppert, *The Measles Outbreak in Rockland County 2018–2019*, N.Y. STATE ASS’N OF CNTY. HEALTH OFFS. (Nov. 15, 2019), <https://www.nysacho.org/wp-content/uploads/2019/11/The-Measles-Outbreak-in-Rockland-County-Dr.-Rupert.pdf>.

113. See Paumgarten, *supra* note 22; see generally Ruppert, *supra* note 112; C.F. v. New York City Dep’t of Health & Mental Hygiene, No. 508356/19, 2019 NY Misc. LEXIS 1914, at *3 n.1 (N.Y. Sup. Ct. Apr. 18, 2019).

114. Kristen Rogers, *Measles Outbreak that Sickened 312 in Rockland County, New York, Declared Over*, CNN (Sept. 25, 2019, 4:55 PM), <https://www.cnn.com/2019/09/25/health/measles-outbreak-over-rockland-county-ny/index.html>.

115. Susan Scutti, *New York City Declares a Public Health Emergency Amid Brooklyn Measles Outbreak*, CNN (Apr. 9, 2019, 3:24 PM), <https://www.cnn.com/2019/04/09/health/measles-new-york-emergency-bn/index.html>; see Jacqueline Howard, *New York City Measles Outbreak Has Ended, Health Officials Say*, CNN (Sept. 3, 2019, 1:59 PM), <https://www.cnn.com/2019/09/03/health/new-york-city-measles-outbreak-over-bn/index.html>.

116. Elizabeth Cohen et al., *As New York Struggles to Undo the Lies of Anti-Vaxers, Moms Step in to Help*, CNN (June 10, 2019, 12:13 PM), <https://www.cnn.com/2019/06/10/health/ny-measles-response/index.html>.

117. See *40 Measles Cases Confirmed in New York*, RT MAG. (Oct. 30, 2018), <https://rtmagazine.com/disorders-diseases/infectious-diseases/40-measles-cases-confirmed-new-york/>.

118. Peter D. Kramer, *2019 Measles Outbreak: Epidemic Blazes Across New York, New Jersey*, LOHUD (Mar. 27, 2019, 5:18 PM), <https://www.lohud.com/story/news/local/rockland/2019/03/27/2019-measles-outbreak-how-epidemic-spread-across-ny-nj/3289404002>. See generally David Robinson, *Rockland Measles: Answers to Frequently Asked Questions About Historic Outbreak*, LOHUD (Dec. 1, 2018, 9:46 AM), <https://www.lohud.com/story/news/health/2018/11/06/rockland-measles-outbreak-answers-faq-keeping-safe/1904555002/> (noting that Dr. Matthew Zahn, chair of the Infectious Diseases Society

County Health Department then created a measles information section on its website, and in December health officials barred unvaccinated students from attending school.¹¹⁹ Similarly, the New York Health Commissioner, Dr. Oxiris Barbot, also issued an emergency order in December, barring unvaccinated students from attending school in certain neighborhoods.¹²⁰ Like the New York City Health Commissioner's emergency order, the Rockland County directive did not seem to have much of an effect. By January 23, 2019, Rockland County

of America's Public Health Committee, called this "one of the largest [outbreaks] in modern history").

119. *Measles Information*, *supra* note 107; Michael Gold, *Parents Wanted Their Unvaccinated Children in School, but a Judge Said No*, N.Y. TIMES (Mar. 13, 2019), <https://www.nytimes.com/2019/03/13/nyregion/measles-rockland-county.html>; Ashley Welch, *Measles Outbreak: Rockland County, New York Declares State of Emergency*, CBS NEWS (Mar. 26, 2019, 7:27 PM), <https://www.cbsnews.com/news/measles-outbreak-rockland-county-new-york-state-of-emergency/>; Amy Gunia, *New York Judge Rules Unvaccinated Students Can't Go Back to Class*, TIME (Mar. 14, 2019, 5:11 AM), <https://time.com/5551243/new-york-denies-unvaccinated-students-injunction-measles/> ("District Court Judge Vincent Briccetti said the parents had failed to demonstrate 'that public interest weighs in favor of granting an injunction.'").

120. Tyler Pager & Jeffery C. Mays, *New York Declares Measles Emergency, Requiring Vaccinations in Parts of Brooklyn*, N.Y. TIMES (Apr. 9, 2019), <https://www.nytimes.com/2019/04/09/nyregion/measles-vaccination-williamsburg.html>; *see also* Tyler Pager, *Measles Outbreak: Yeshiva's Preschool Program Is Closed by New York City Health Officials*, N.Y. TIMES (Apr. 15, 2019), <https://www.nytimes.com/2019/04/15/nyregion/measles-nyc-yeshiva-closing.html>.

Additionally:

[i]n December, the city issued exclusion orders, barring unvaccinated students from attending school in certain neighborhoods. The city issued violations to 23 yeshivas and day care centers for breaking that order. But, last month, the city said it would no longer issue violations; rather, it would immediately close yeshivas. . . . 'Our attempts at education and persuasion have failed to stop the spread of measles,' [said] Nick Paolucci, a spokesman for the city's Law Department.

Id. *See also* Elisha Fieldstadt, *One New York City Student with Measles Sickened 21 People Amid Outbreak*, NBC NEWS (Mar. 8, 2019, 1:59 PM), <https://www.nbcnews.com/storyline/measles-outbreak/one-new-york-city-student-measles-sickened-21-people-amid-n981006> ("In December, the health department issued a mandatory directive that schools in selected zip codes in Borough Park and Williamsburg exclude students who had not received the measles, mumps and rubella (MMR) vaccines."). The enforcement of this directive, however, seems lax. *Id.*; Lanning Taliaferro, *Parents Fight Measles Outbreak Rules In Rockland, Brooklyn*, PATCH (Mar. 16, 2019, 12:39 PM), <https://patch.com/new-york/newcity/parents-fight-measles-outbreak-rules-rockland-brooklyn> ("The penalty is \$2,000-per-day for every unvaccinated child allowed to attend school during the outbreak, a city Health Department spokesperson said."); Oxiris Barbot, *ALERT # 38: Measles Outbreak in New York City in the Orthodox Jewish Community*, N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, <https://www1.nyc.gov/assets/doh/downloads/pdf/han/alert/2018/alert38-measles-outbreak.pdf>.

registered 118 cases; by February, the total had increased to 135.¹²¹ All the while, Rockland health department officials scrambled to vaccinate.¹²²

Midway through the epidemic came the first anti-vax pushback. In March 2019, parents of some forty students at the non-Jewish Green Meadow Waldorf school,¹²³ a school with a 56% vaccination rate,¹²⁴ challenged the health department's order barring school attendance without vaccination.¹²⁵ Their claim? That their perfectly healthy children were prevented from pursuing daily activities.¹²⁶ Judge Vincent Briccetti of the United States District Court for the Southern District of New York was not convinced.¹²⁷ On March 12, 2019, with 145 cases reported, Judge Briccetti allowed the health department order to stand, holding that, "[t]he plaintiffs have not demonstrated that public interest weighs in favor of granting an injunction."¹²⁸ It should have been a victory for the county.

But the cases continued to mount. By March 26, 2019, the county reported 153 cases.¹²⁹ The county executive declared a state of emergency: no unvaccinated person under eighteen years of age would be allowed in public places, including venues of public transport.¹³⁰

121. Kramer, *supra* note 118. Further:

Rockland County Attorney Thomas Humbach said: . . . 'While no one enjoys the fact that these kids are out of school these orders have worked; they have helped prevent the measles outbreak from spreading to this school population. We will continue to press forward to protect the public health as that is the primary objective of the government.'

Id.

122. See Steve Lieberman, *Rockland Declares End to Measles Outbreak that Involved Vaccination Fights, Court Battles*, LOHUD (Sept. 25, 2019, 8:33 AM), <https://www.lohud.com/story/news/local/rockland/2019/09/24/rockland-measles-outbreak-2019-over/2432154001/>; see also Paumgarten, *supra* note 22.

123. See Gold, *supra* note 119.

124. Gold, *supra* note 119.; Gabriel Rom, *Judge Denies Request to let Unvaccinated Students Return to Class*, LOHUD (Mar. 12, 2019, 5:15 PM), <https://www.lohud.com/story/news/local/rockland/2019/03/12/judge-denies-request-let-unvaccinated-students-return-class/3140386002/> ("[T]he county's Law Department said the school's vaccination rate was about 33 percent when the Dec. 5 order was imposed.").

125. Rom, *supra* note 124.

126. See *Rockland County Measles Outbreak: Judge Lifts Ban on Unvaccinated Children, but Not Because Outbreak Ended*, CBS NEWS (Apr. 5, 2019, 7:32 PM), <https://www.cbsnews.com/news/rockland-county-measles-outbreak-judge-lifts-ban-on-unvaccinated-children-today-2019-04-05/>.

127. Reis Thebault, *The Parents of More Than Three Dozen Unvaccinated Kids Want Them Back in School. A Judge Said No*, WASH. POST (Mar. 14, 2019), <https://www.washingtonpost.com/health/2019/03/14/parentsunvaccinated-kids-wanted-them-back-school-now-judge-said-no/>.

128. Rom, *supra* note 124.

129. Kramer, *supra* note 118.

130. Kramer, *supra* note 118. Further:

Health officials in Rockland County, New York have declared a state of emergency amid an ongoing measles outbreak. The county is prohibiting unvaccinated children under the

The anti-vaxxers began a major offensive—this time with a rally on March 28, 2019,¹³¹ organized by a group called Pro-Informed Consent which asked their followers to post anti-vax comments at The Jewish Federation of Rockland County social media pages.¹³² The exchange made for an ugly interchange.¹³³ With the epidemic still raging and restrictions on their children’s liberty chafing, the anti-vaxxers stepped up their attack. The Green Meadow Waldorf School parents went to state court to challenge the Health Department order.¹³⁴

On April 5, 2019, with 166 cases now reported, acting New York State Supreme Court Judge Rolf Thorsen quashed the Rockland County Health Department order.¹³⁵ His opinion relied on a faulty understanding of

age of 18 from going out in public spaces for 30 days. . . . The ban begins at midnight tonight and is in effect for 30 days. Public places . . . include [] shopping centers, businesses, restaurants, schools, and places of worship. Anyone under 18 who hasn’t been vaccinated will be banned from such places for 30 days or until the individual gets vaccinated. People who are medically unable to get vaccinated are exempt. . . . [P]arents of unvaccinated children ‘will be held accountable’ if they are found to be in violation . . . and could face a class B misdemeanor charge.

Welch, *supra* note 119.

131. Ari Feldman, *Anti-Vaxxer Wore Yellow Star To Protest of Measles Emergency in Rockland County*, FORWARD (Mar. 29, 2019), <https://forward.com/fast-forward/421767/anti-vaxxer-yellow-star-rockland-county-measles/>; *see also* Steve Lieberman & Rochel Goldblatt, *Rockland Measles: Anti-Vaccination Rally Draws Small Crowd of Protesters at Palisades Mall this Morning*, LOHUD (Mar. 28, 2019, 5:33 PM), <https://www.lohud.com/story/news/local/rockland/2019/03/28/measles-anti-vaccination-rally-palisades-center-mall/3296793002/> (noting the rally took place at the Palisades Center mall in West Nyack, N.Y., and the county executive stated the protesters are welcome to voice their opinions. Why the county did not stop the rally remains unclear.)

132. Taliaferro, *supra* note 120 (noting “the group called it ‘unvaccinated civil disobedience’”).

133. *See* Jewish Federation & Foundation of Rockland County, FACEBOOK (Mar. 27, 2019), <https://www.facebook.com/JewishFederationRC/>; *see also* Rachel Leah Goldblatt (@ReporterRox), TWITTER (Mar. 28, 2019, 10:31 AM), https://twitter.com/ReporterRox/status/1111274678843293696?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1111274678843293696%7Ctwgr%5E&ref_url=https%3A%2F%2Fpatch.com%2Fnew-york%2Fnewcity%2Fanti-vaxxers-staging-protest-mall-rockland-county.

134. Frances Stead Sellers, *Judge Rules New York County Can’t Ban Unvaccinated Children from Schools, Parks*, WASH. POST (Apr. 6, 2019), https://www.washingtonpost.com/national/judge-rules-new-york-county-cant-ban-unvaccinated-children-from-schools-parks/2019/04/06/589ae326-587e-11e9-8ef3-fbd41a2ce4d5_story.html.

135. *Judge Lifts Ban on Unvaccinated Children, but Not Because Outbreak Ended*, *supra* note 126; *W.D. v. Cnty. of Rockland*, 110 N.Y.S.3d 820, 822–23 (N.Y. Sup. Ct. 2019) (noting plaintiffs filed a petition for a preliminary injunction under CPLR Article 78, opposing this emergency order, and stating that this action was “arbitrary and capricious and contrary to law.”) Judge Thorsen granted the plaintiffs’ petition for a preliminary injunction on April 5, 2019, Rockland County appealed and lost. *Id.*; *see* Robert Brum, *Measles: Rockland Issues New ‘Exclusion Order’ for Public Spaces*, LOHUD (Apr. 16, 2019) (“‘Communicable Disease and Exposure Exclusion Order’ that mandates anyone with measles to stay home, and those exposed stay out of public spaces throughout the county. Those who do not comply face a \$2,000-a-day fine.”). In the New York Judicial System trial court judges are called “Justices.”

“epidemic,”¹³⁶—admittedly undefined in the statute—and an abject ignorance of the purpose of vaccination.¹³⁷ Justice Thorsen based his opinion on the absolute number of cases—166, which he did not think particularly troubling—as opposed to the epidemiologic definition—the number of cases compared to baseline.¹³⁸ Given that there were 120 cases in the entire United States in 2017 and eighty-six cases in 2016, epidemiologically, Rockland County presented a classic, textbook epidemic.¹³⁹ But with Justice Thorsen’s decision, legal efforts in Rockland County to stem the six-month-old epidemic ceased,¹⁴⁰ leaving the way clear and unfettered for anti-vax activists.¹⁴¹

In the six-month time period before the order was issued, the Rockland health department had vaccinated 16,958 people in total,¹⁴² averaging 2,880 a month or ninety-six people a day. In the weeks following the Pro-Informed Consent’s rally and the court decision, the number dropped to an average of seventy-three per day.¹⁴³ In total, less than 4,700 more would be vaccinated in the next nine weeks.¹⁴⁴ Following the striking down of the emergency order, other less stringent health department directives were implemented and aggressive

136. See *W.D.*, 110 N.Y.S.3d at 824; but see *Epidemic*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/epidemic>, (defining epidemic “as an outbreak of disease that spreads quickly and affects many individuals at the same time”). According to the dictionary of epidemiology, “epidemic” refers to “the occurrence in a community or region of cases of an illness . . . in excess of normal expectancy.” Sanjay Kaira et. al, *Endemic or Epidemic? Measuring the Endemicity Index of Diabetes*, 19 INDIAN J. OF ENDOCRINOLOGY & METABOLISM 5 (2015). See also DICTIONARY OF EPIDEMIOLOGY 78-79 (Miquel Porta, ed., New York:Oxford University Press 5th ed., 2008).

137. Cf. *People v. Aleynikov*, 104 N.E. 687, 695 (N.Y. 2018) (noting when a word is not defined by the relevant statute, the court must look to its ordinary meaning and “dictionary definitions serve as useful guideposts” in determining the word’s “‘ordinary’ and ‘commonly understood’” meaning); see *Epidemic*, *supra* note 136 (“[E]pidemic” is dictionary-defined as “an outbreak of disease that spreads quickly and affects many individuals at the same time.”); but see Manfred S. Green et al., *When is an Epidemic an Epidemic?*, 4 ISR. MED. ASS’N. J. 3, 3 (2002) (“An epidemic is the occurrence in a community or region of cases of an illness, specified health behavior, or other health-related events clearly in excess of normal expectancy; the community or region, and the time period in which cases occur, are specified precisely.”).

138. See LEON GORDIS, *EPIDEMIOLOGY* 23 (5th ed. 2014) (defining epidemic “the occurrence in a community or region of a group of illnesses of similar nature, clearly in excess of normal expectancy, and derived from a common or from a propagated source.”) or [baseline or background level] . . .”).

139. The 166 cases at the time were far above the usual background level for the entire United States. See *Measles Cases and Outbreaks*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/measles/cases-outbreaks.html> (last visited Aug. 30, 2020).

140. *New York City Declares Public Health Emergency over Measles Outbreak*, CBS NEWS (Apr. 9, 2019, 12:24 PM), <https://www.cbsnews.com/news/measles-outbreak-new-york-city-orders-measles-vaccination-exclude-unvaccinated-students-in-brooklyn/>.

141. See generally Rom, *supra* note 124.

142. Cantor, *supra* note 70, at 102.

143. Cantor, *supra* note 70, at 102.

144. Cantor, *supra* note 70, at 102.

counter-anti-vax initiatives were initiated.¹⁴⁵ But the epidemic soldiered on. By the time the Rockland County epidemic was declared over six months later by the Department of Health, another 146 people would sicken.¹⁴⁶

During the ensuing months following Justice Thorsen's decision, the Rockland County Health Department continued aggressive vaccination efforts¹⁴⁷ and the County Executive renewed the State of Emergency.¹⁴⁸ But their efforts were hampered by the virulent anti-vax movement¹⁴⁹ "sway[ing] parents in New York to refuse immunizations for their kids."¹⁵⁰ On May 13, 2019, the anti-vaxxers hosted a second rally; this one attracted close to a thousand people.¹⁵¹ Advance notice for the event was less than twenty-four hours,¹⁵² the anti-vaxxers were out in full-force rounding up attendees, some of whom were bussed in from Brooklyn and Lakewood,¹⁵³ and the delayed

145. *County Executive Ed Day and Commissioner of Health Dr. Patricia Ruppert Announced Next Steps in Combatting Measles Outbreak*, ROCKLAND COUNTY (Apr. 9, 2019) [hereinafter *County Executive Announcement*], <http://rocklandgov.com/departments/county-executive/press-releases/2019-press-releases/rockland-announces-next-steps/>.

146. See Rogers, *supra* note 114 (noting a total of 312 confirmed cases); Brum, *supra* note 135 (noting the county had 166 cases reported between the beginning of the epidemic and the issuing of Justice Thorsen's order).

147. See *County Executive Announcement*, *supra* note 145; Paumgarten, *supra* note 22; *Measles Information*, *supra* note 107; Rochel Leah Goldblatt, *Measles Outbreak: Q&A With Rockland County Health Commissioner*, LOHUD (Oct. 26, 2018).

148. Allison Dunne, *Rockland County Exec Renews Measles State Of Emergency, Again*, WAMC NE. PUB. RADIO (May 28, 2019, 7:44 PM), <https://www.wamc.org/hudson-valley-news/2019-05-28/rockland-county-exec-renews-measles-state-of-emergency-again>.

149. Comment to *Why Del Bigtree Wore A Yellow Star of David*, THE HIGH WIRE WITH DEL BIGTREE (Apr. 1, 2019), <https://www.youtube.com/watch?v=sI8jq3JAB-g>. ("Incredible speech full of priceless information! We are eternally grateful for all you are doing to speak up for those whose voices have fallen on deaf ears!").

150. Julia Belluz, *New York's Orthodox Jewish Community Is Battling Measles Outbreaks. Vaccine Deniers Are to Blame*, VOX (Apr. 10, 2019, 1:22 PM), <https://www.vox.com/science-and-health/2018/11/9/18068036/measles-new-york-orthodox-jewish-community-vaccines>.

151. *Hundreds Attend Ultra-Orthodox Anti-Vaccine Event in New York*, TIMES ISRAEL (May 15, 2019, 5:56 PM), <https://www.timesofisrael.com/hundreds-attend-ultra-orthodox-anti-vaccine-event-in-new-york/>.

152. Sandy Eller, *Anti-Vaccination Event Fills Auditorium In Monsey*, JEWISH PRESS (May 17, 2019), <https://www.jewishpress.com/news/us-news/ny/anti-vaccination-event-fills-auditorium-in-monsey/2019/05/17>. Reporting that:

[a]pproximately 1,000 men and women turned out on Tuesday night at the Atrium Plaza in Monsey for what had been billed as a 'highly informative night of science and discussion addressing your concerns, fears and doubts.' The flyer for the event was released just 24 hours in advance and appeared to be deliberately vague, listing no date for the symposium and listing the sponsor as the United Jewish Community Council, a seemingly unknown entity.

Id.

153. David Israel, *Monsey Jewish Families Rally Against Measles Vaccinations 'Conspiracy'*, JEWISH PRESS (May 15, 2019). The concerted effort to troll for attendees is clear. Lakewood is home to a few prominent Rabbis who support the anti-vax movement. See *Gedolim Letters*; see

notification suggested that the organizers feared being shut down by City authorities.

“As measles cases topped 250 . . . a [hitherto unknown] group called the United Jewish Community Council [(UJCC)] hosted a symposium five miles from the health department”¹⁵⁴ “[U]ltra-Orthodox Jews packed a ballroom for a ‘vaccine symposium’ with leaders of the anti-vaccination movement.”¹⁵⁵ Speakers at the event included Rabbi Hillel Handler; the anti-vax “prophet,” Andrew Wakefield,¹⁵⁶ via a video conference; and anti-vax “celebrity” Del Bigtree,¹⁵⁷ all of whom make repeated appearances in other recent epidemics.¹⁵⁸

also Dov Zakheim, *Da’as Torah and Anti-Vaxxers*, JEWISH J. (May 1, 2019), <https://jewishjournal.com/commentary/columnist/297876/daas-torah-and-anti-vaxxers/>.

154. Borter, *supra* note 25.

155. Kimiko de Freytas-Tamura, *Despite Measles Warnings, Anti-Vaccine Rally Draws Hundreds of Ultra-Orthodox Jews*, N.Y. TIMES (May 14, 2019) <https://www.nytimes.com/2019/05/14/nyregion/measles-vaccine-orthodox-jews.html>; see also Eller, *supra* note 152. The United Jewish Community Council appears to be a vehicle for Handler.

156. Andrew Wakefield is a discredited British researcher who initiated the claim that the measles vaccine is responsible for autism. His medical license has been revoked. Brian Deer, *Revealed: MMR Research Scandal*, SUNDAY TIMES (Feb. 22, 2004) <https://www.thetimes.co.uk/article/revealed-mmr-research-scandal-7ncfntn8mjg>; Alex Berezow, *Fraud Doctor Andrew Wakefield Now Lying About COVID RNA Vaccine*, AM. COUNCIL ON SCI. & HEALTH (Dec. 27, 2020), <https://www.acsh.org/news/2020/12/27/fraud-doctor-andrew-wakefield-now-lying-about-covid-rna-vaccine-15240>. For a discussion on Andrew Wakefield’s misrepresentations about MMR, see Brian Deer, *How the Case Against the MMR Vaccine Was Fixed*, THE BMJ (Jan. 6, 2011), <https://doi.org/10.1136/bmj.c5347>; Brian Deer, *MMR Scare Doctor Faces List of Charges*, SUNDAY TIMES, Sept. 11, 2005, at 13; Catherine Kim, *Anti-Vaccination Rallies Are Drawing Crowds — Even During the Measles Epidemic*, VOX (May 15, 2019, 2:10 PM), <https://www.vox.com/science-and-health/2019/5/15/18624715/antivax-vaccines-measles-new-york-orthodox-jews-rallies>.

157. Gabriel Rom & Rochel Leah Goldblatt, *Measles: Anti-Vaccination Forum in Monsey Draws Crowd, Condemnation*, LOHUD (May 14, 2019, 1:00 PM), <https://www.lohud.com/story/news/local/rockland/2019/05/14/measles-rockland-speaks-out-against-anti-vaccine-forum-monsey/3664266002/> (noting that Rockland County released a statement condemning the symposium, issued by the County Executive, the Ramapo Supervisor and Rabbi Chaim Schabes); see also Oona St-Amant et al., *Case Study: Del Bigtree*, in VACCINE PRAC. FOR HEALTH PROS.: 1ST CANADIAN EDITION 193, <https://openlibrary-repo.ecampusontario.ca/jspui/bitstream/123456789/650/2/Vaccine-Practice-for-Health-Professionals-1st-Canadian-Edition-1583175228.pdf>.

158. See St-Amant et al., *supra* note 157, at 193; Isabelle Gerretsen, *‘Abhorrent’ Anti-Vaccination Movement Blamed for Worst Minnesota Measles Outbreak in Decades*, INT’L BUS. TIMES (June 3, 2017, 4:25 PM), <https://www.ibtimes.co.uk/abhorrent-anti-vaccination-movement-blamed-worst-minnesota-measles-outbreak-decades-1624620>. See *Williamsburg Satmar Kehilla Condemns Handler’s Remarks at Anti-Vax Event; Rebbe Says Everyone MUST Vaccinate*, THE YESHIVA WORLD (May 23, 2019), <https://www.theyeshivaworld.com/news/general/1732534/williamsburg-satmar-kehilla-condems-handler-for-remarks-made-at-anti-vax-event-rebbe-says-everyone-must-vaccinate.html>.

The sponsoring group, the UJCC, might have been unknown, but it attracted the heavy hitters in the anti-vax movement, notably Wakefield and Bigtree,¹⁵⁹ the latter who runs the well-funded American Informed Consent Action Network (ICAN)—a nonprofit founded in 2016 (a scant two years before the 2018–2019 outbreaks).¹⁶⁰ One of Bigtree and ICAN’s recurring arguments is the debunked autism–thimerosal connection, now expanded to include an alleged autism–aluminum connection.¹⁶¹ The fact that the measles vaccine contains neither thimerosal, nor aluminum,¹⁶² does not seem to be of concern either to Bigtree, or his supporters.

The Rockland County Health Department fired back against the UJCC-Bigtree production with literature of its own,¹⁶³ as did the Jewish community.¹⁶⁴ These initiatives did not seem to have much of an effect.¹⁶⁵ As a result, the

159. Anna Merlan, *Everything I Learned While Getting Kicked Out of America’s Biggest Anti-Vaccine Conference*, JEZEBEL (June 20, 2019, 2:30 PM), <https://jezebel.com/everything-i-learned-while-getting-kicked-out-of-america-1834992879>.

160. Sun & Brittain, *supra* note 53. In June of 2019, Mr. Bigtree “headlined [numerous] forums in the ultra-Orthodox Jewish communities in Brooklyn and Rockland County.” *Id.* He was quoted as saying “[t]hey should be allowed to have the measles if they want the measles. . . . It’s crazy there’s this level of intensity around a trivial childhood illness.” *Id.* See also Amy Britain, *The Multi-Millionaire Anti-Vax Couple Bankrolling Groups Scaremongering About Immunisation*, INDEPENDENT (June 23, 2019, 4:52 PM), <https://www.independent.co.uk/news/world/americas/anti-vax-donation-new-york-couple-vaccine-a8970921.html> (describing how Bigtree has no expertise in health or science but artfully stokes fear and hysteria at anti-vax conferences). David Gorski, *Deception by Omission: Del Bigtree’s ICAN Calls the Studies Licensing MMR into Question*, SCI. BASED MED. (May 6, 2019), <https://sciencebasedmedicine.org/deception-by-omission-del-bigtrees-ican-calls-the-studies-licensing-mmr-into-question/>.

161. *FEAR Speech*, *supra* note 34, at 18.; *How Aluminum Adjuvants In Vaccines Can Cause Autism*, INFORMED CONSENT ACTION NETWORK (Aug. 18, 2017), <https://www.icandecide.org/wp-content/uploads/2019/09/ICAN-AluminumAdjuvant-Autism-2.pdf>; see also Michael S. Kinch, *Five Myths About Vaccines*, WASH. POST (May 1, 2020), https://www.washingtonpost.com/outlook/five-myths/five-myths-about-vaccines/2020/05/01/e21befac-8b07-11ea-8ac1-bfb250876b7a_story.html.

162. *Thimerosal and Vaccines*, CDC (Aug. 25, 2020), <https://www.cdc.gov/vaccinesafety/concerns/thimerosal/index.html>; see also *Vaccine Ingredients—Aluminum*, CHILD’S HOSP. OF PHILA., <https://www.chop.edu/centers-programs/vaccine-education-center/vaccine-ingredients/aluminum>.

163. Cohen et al., *supra* note 116 (noting “New York state countered these booklets with posters in Yiddish—but botched the translation so badly that parts of it are incomprehensible”); see also McDonald et al., *supra* note 77 (noting that “culturally appropriate and detailed vaccine education book was distributed to 15,000 Rockland County and 10,000 Orange County homes and medical providers”).

164. Rom & Goldblatt, *supra* note 157.

165. This is perhaps because the Yiddish versions were improperly translated. See Rogers, *supra* note 114 (noting “the Yiddish was mangled”); see also *Lost in Translation: Rockland Measles Doorhangers Include Botched Yiddish Text*, NEWS 12 WESTCHESTER (May 28, 2019, 5:10 PM), <https://westchester.news12.com/lost-in-translation-rockland-measles-doorhangers-include-botched-yiddish-text-40545979>. Yossi Gestetner of the Orthodox Jewish Public Affairs Council described the translation effort as, “‘a butcher job,’” and noted that the Yiddish words just don’t make sense. *Id.* He explained, “[i]t seems to be speak with your health worry food person.” *Id.*

health department became increasingly concerned that the anti-vaxxers were disseminating literature specially targeted to the ultra-orthodox community.¹⁶⁶

According to Rockland County spokesperson John Lyon, “[f]rankly,” false information regarding vaccines that is circulated in ultra-orthodox Jewish communities “is dangerous and of great concern to our Department of Health.” The sentiment was echoed by others: “[W]hen the anti-vaxxers targeted the ultra-Orthodox Jewish community, they knew exactly what they were doing. To help plant fear directly into mothers’ hearts, their publications contained religious references and include illustrations of mothers and children wearing clothes typical of religious Jews.”¹⁶⁷

By June 2019, though, local counter-anti-vax activists had organized and were out in full force.¹⁶⁸ Led by well-regarded health organizations catering to the ultra-Orthodox community, including *Chai Lifeline*,¹⁶⁹ and facilitated by local counter-anti-vax activist Shoshana Bernstein, an informational seminar for women was held in Monsey on June 3, 2019.¹⁷⁰ This time the efforts seem to have had some effect.¹⁷¹ Three months later, on September 25, 2019, the

The article goes on to note that “[h]e says the mangled doorhangers were the talk of the town when they first appeared, and that while the intention was good, the errors deepened mistrust in the state,” and quoted him further, “‘You can’t even translate a simple English line and you’re telling me you know exactly what is or isn’t good for my health?’” *Id.*

166. Tyler Pager, ‘*Monkey, Rat and Pig DNA*’: *How Misinformation is Driving the Measles Outbreak Among Ultra-Orthodox Jews*, N.Y. TIMES (Apr. 9, 2019), <https://www.nytimes.com/2019/04/09/nyregion/jews-measles-vaccination.html>; *see also* Rogers, *supra* note 114 (noting that “anti-vaxxers ... specifically targeted the Orthodox Jewish community, spreading claims that vaccines caused conditions such as autism and sudden infant death syndrome”).

167. Claudia Koerner & Julia Reinstein, *How A Group For Jewish Moms Spread Anti-Vax Propaganda Before New York’s Measles Outbreak*, BUZZFEED NEWS (Apr. 15, 2019, 3:52 PM), <https://www.buzzfeednews.com/article/claudiakoerner/anti-vaccine-peach-measles-new-york-propaganda-outbreak>; *see also* Cohen et al., *supra* note 116.

168. Cohen et al., *supra* note 116; Rochel Lead Goldblatt, *Less Than 150 Women Attend Monsey Vaccine Forum That Sought to Counter Misinformation*, LOHUD (June 3, 2019), <https://www.lohud.com/story/news/local/rockland/monsey/2019/06/03/vaccine-forum-monsey-ny-tonight-counter-misinformation/1330747001/>.

169. Rom & Goldblatt, *supra* note 157.

170. *See* Marcy Oster, *Fewer Than 150 Attend Vaccine Education Program in NY Ultra-Orthodox Community*, TIMES ISRAEL (June 4, 2019, 11:42 PM), <https://www.timesofisrael.com/fewer-than-150-attend-vaccine-education-program-in-ny-ultra-orthodox-community/> (noting that though smaller than the earlier event in Monsey, this was a women-only event, and it may have attracted an audience most likely to be impacted by the message, in contrast with the huge rally-type event that might have been designed as a media event, just to make a splash).

171. Rochel Leah Goldblatt, *Measles: Vaccine Advocates Counter Perception that Jewish Community Caused Outbreak*, LOHUD (June 5, 2019, 10:40 AM), <https://www.lohud.com/story/news/local/rockland/2019/06/05/measles-vaccine-orthodox-jewish-community-facts-misinformation/1340503001/>.

epidemic was declared over,¹⁷² missing just by a hair's breadth losing the WHO designation of "epidemic-free."¹⁷³



Figure 1. Two photographs showing attendance at the meeting to oppose measles vaccinations in Monsey, Rockland County, New York (Photo Credit: Gwynne Hogan/New York Public Radio).¹⁷⁴

172. Jane Zucker et al., *Consequences of Undervaccination—Measles Outbreak, New York City, 2018–2019*, 382 *NEW ENG. J. MED.* 1009, 1011 (2020) (noting that on “September 3, 2019, when the outbreak was declared to be over [it was] two incubation periods [42 days] after the infectious period of the last case ended”).

Compare Rogers, *supra* note 114, with *Measles Information*, *supra* note 107 (noting that on October 7, another case was reported, which technically means the United States should have lost eradication status).

173. *With End of New York Outbreak, United States Keeps Measles Elimination Status*, U.S. DEP’T OF HEALTH AND HUM. SERVS. (Oct. 4, 2019), <https://public3.pagefreezer.com/browse/HHS.gov/31-12-2020T08:51/https://www.hhs.gov/about/news/2019/10/04/end-new-york-outbreak-united-states-keeps-measles-elimination-status.html>.

174. de Freytas-Tamura, *supra* note 155.



Figure 2. Male attendees at an anti-vaccine event in Monsey at the Atrium, on Monday, May 13, 2019.¹⁷⁵

Controlling the epidemic did not come cheap. According to preliminary reports, the direct cost of the Rockland County response was between 2.4 and 6.5 million dollars.¹⁷⁶ And while no one died, by the time the epidemic was over, 312 would sicken,¹⁷⁷ “[8%] were diagnosed with pneumonia and [7%] were hospitalized.”¹⁷⁸ (This is to be compared with the U.S. total of 119 individuals requiring hospitalization and sixty developing pneumonia).¹⁷⁹ One patient suffered encephalitis, a life-threatening swelling of the brain¹⁸⁰

B. The Brooklyn Outbreak

Two and a half million people live in Brooklyn—one of the five boroughs of New York City—more than eight times the number living in Rockland, about forty miles away.¹⁸¹ Compared to the 8,500 who live in New Square

175. Robert Brum, Coronavirus: Rockland Now Has 4 Cases Connected with New Rochelle Exposure, LOHUD (Mar. 18, 2020, 12:51 PM), <https://www.lohud.com/story/news/local/rockland/2020/03/09/coronavirus-rockland-has-4-cases-connected-new-rochelle-exposure/5000565002/>; Rom & Goldblatt, *supra* note 157 (noting that the hall holds 1500 people). Note that the woman’s section was far more populated, not surprising for this community, where women assume the brunt of responsibility for child-raising.

176. Borter, *supra* note 25.

177. See Rogers, *supra* note 114. Most were in Eastern Ramapo with a population of just over 9000. See *Measles Information*, *supra* note 107.

178. See also Michaela Fleming, *Examining the 2018–19 New York State Measles Outbreaks*, CONTAGION LIVE (Oct. 4, 2019), <https://www.contagionlive.com/view/examining-the-201819-new-york-state-measles-outbreaks>.

179. Manisha Patel et al., *National Update on Measles Cases and Outbreaks—United States, January 1–October 1, 2019*, 68 MORBIDITY & MORTALITY WKLY. REP. 893, 893–896 (2019).

180. *Id.*

181. *Driving Directions from Brooklyn to Rockland, N.Y.*, GOOGLE MAPS, <http://maps.google.com> (follow “Directions” hyperlink; then search starting point field for “Brooklyn, New York” and search destination field for “Rockland County, New York”).

neighborhood,¹⁸² along with the 23,000 in Monsey and 32,300 in Spring Valley,¹⁸³ the Rockland areas primarily affected, approximately 150,000 Brooklynites live in the Williamsburg section and 100,000 live in nearby Borough Park.¹⁸⁴ These two locales, populated predominantly by ultra-Orthodox groups, contributed most of the over 600 confirmed measles cases to the New York tally.¹⁸⁵ The larger of the two outbreaks occurred in Williamsburg, where 473 people became ill.¹⁸⁶ In Borough Park, 121 cases were reported,¹⁸⁷ fifty-five cases were reported in outlying neighborhoods.¹⁸⁸ This is not the first outbreak to befall the ultra-Orthodox in these New York City areas.¹⁸⁹ A similar outbreak happened in 2013, although it was far less severe.¹⁹⁰

The measles epidemic in Brooklyn began a day earlier than Rockland, on September 30, 2018,¹⁹¹ although it ended some three months earlier, with no new cases reported beginning early July 2019.¹⁹² Similar to Rockland County, the New York City epidemic was also traced to Israel; the index case, also a child, was a native New Yorker who contracted the disease while visiting Israel.¹⁹³ At least five cases seeding the Brooklyn outbreak were also exposed

182. Kathy Reakes, *Number of Confirmed Measles Cases Rises Again in Rockland*, DAILY VOICE (Jan. 23, 2019), <https://dailyvoice.com/new-york/clarkstown/news/number-of-confirmed-measles-cases-rises-again-in-rockland/747277/> (“The majority of the cases has mainly affected the Orthodox Jewish community in New Square, Spring Valley, and Monsey, health officials said.”).

183. See *Spring Valley/Population*, GOOGLE (last visited Feb. 14, 2022), https://www.google.com/search?q=population+spring+valley+&rlz=1C1GGRV_enIL757IL762&sxsrf=AOaemvKiKyeJlIkqBFIVPZitZdehlOr2pw%3A1643302060996&ei=rMzyYbabPJH6kwXRh7_gBg&ved=0ahUKEwi2oeqcsdL1AhUR_aQKHdHDD2wQ4dUDCA4&uact=5&oq=population+spring+valley+&gs_lcp=Cgdnd3Mtd2l6EAMyBAgAEB4yBggAEAgQHjIGCAAQCBAeMgYIABAIEB4yBggAEAgQHjIGCAAQCBAeMgYIABAIEB4yBggAEAgQHjIGCAAQCBAeMgYIABAIEB46BwgjELADECc6BwgAEEcQsAM6BAgJECc6BQgAEJECOGUIABCABDoFCC4QgAQ6BggAEAcQHjoICAAQCBAHEB46CggAEAgQBxAKEB5KBAhBGABKBAhGGABQr2BYiY4BYMiUAWgFcAJ4AIAB4gKIAoakgEIMC4xNy4xLjGyAQcGAQHIAQnAAQE&scient=gws-wiz.

184. See *American Community Survey*, U.S. CENSUS BUREAU, <https://www.census.gov/programs-surveys/acs>.

185. Howard, *supra* note 115.

186. *Measles*, N.Y.C. HEALTH DEP’T, <https://www1.nyc.gov/site/doh/health/health-topics/measles.page>.

187. *Id.*

188. *Id.* Scott Enman, *These Are All The Brooklyn Neighborhoods With Measles*, BROOKLYN DAILY EAGLE (July 16, 2019), <https://brooklyneagle.com/articles/2019/07/16/these-are-all-the-brooklyn-neighborhoods-with-measles/>.

189. See, e.g., Jennifer B. Rosen et al., *Public Health Consequences of a 2013 Measles Outbreak in New York City*, 172 JAMA PEDIATRICS 811, 812–13; see also *Fear Speech*, *supra* note 34, at 9–10.

190. See Rosen, *supra* note 189.

191. Patel et al., *supra* note 179.

192. Howard, *supra* note 115.

193. Fieldstadt, *supra* note 120; see also *51% Of Early Cases In NY Measles Outbreak Attributed To Unvaccinated Adults*, HEALIO NEWS (Oct. 7, 2019), <https://www.healio.com/news/infectious-disease/20191007/51-of-early-cases-in-ny-measles-outbreak-attributed-to-unvaccinated-adults> (noting eleven cases were internationally imported); *ALERT # 38: Measles*

in Israel.¹⁹⁴ Six people diagnosed were children; one eventually was hospitalized with pneumonia.¹⁹⁵

According to the New York City Department of Health, the epidemic started slowly.¹⁹⁶ The first thirteen cases were reported in October 2018, twenty-eight more were reported in November 2018, and fourteen more in December 2018.¹⁹⁷ That was when “the health department issued a mandatory directive that schools in selected zip codes in Borough Park and Williamsburg exclude students who had not received the measles, mumps and rubella (MMR) vaccine.”¹⁹⁸ One school did not comply, admitting a single student who was not vaccinated.¹⁹⁹ The student proceeded to infect twenty-one others.²⁰⁰ In January 2019, thirty-seven more people were infected.²⁰¹ By February 2019, the number of new cases in New York City had almost doubled—at seventy-one cases.²⁰² By March 2019, that number had more than doubled again to 169.²⁰³

Ratcheting up vaccine resistance was an anti-vax pamphlet called, “*The Vaccine Safety Handbook: An Informed Parent’s Guide*,”²⁰⁴ produced by an anti-vax group called Parents Educating and Advocating for Children’s Health (“PEACH”).²⁰⁵ The pamphlet became ubiquitous in Hasidic enclaves, including

Outbreak in New York City in the Orthodox Jewish Community, N.Y.C. DEP’T OF HEALTH & MENTAL HYGIENE (Oct. 18, 2018) [hereinafter ALERT #38], <https://www1.nyc.gov/assets/doh/downloads/pdf/han/alert/2018/alert38-measles-outbreak.pdf> (noting that “six individuals with measles were confirmed in October in the Orthodox Jewish community of Williamsburg, Brooklyn” and that initial individuals were unvaccinated traveling in Israel).

194. Mary Frost, *NYC: Measles Outbreak in Orthodox Williamsburg Stems from Unvaccinated Children*, BROOKLYN DAILY EAGLE, (Oct. 18, 2018), <https://brooklyneagle.com/articles/2018/10/18/nyc-measles-outbreak-in-orthodox-williamsburg-stems-from-unvaccinated-children/>; ALERT # 38, *supra* note 193.

195. ALERT # 38, *supra* note 193.

196. *Measles*, N.Y.C. HEALTH DEP’T, <https://www1.nyc.gov/site/doh/health/health-topics/measles.page>.

197. *Id.*

198. Fieldstadt, *supra* note 120.

199. Fieldstadt, *supra* note 120.

200. Fieldstadt, *supra* note 120. In Williamsburg, Yeshiva Kehilath Yakov “‘went out of compliance’ and allowed an unvaccinated student with measles to attend school.” 21 of the resultant 87 cases were traced to that one student—and the high rates of non-vaccination in the school.

201. *Measles*, *supra* note 186.

202. *Measles*, *supra* note 186.

203. *Measles*, *supra* note 186.

204. See PEACH, THE VACCINE SAFETY HANDBOOK: AN INFORMED PARENT’S GUIDE, https://issuu.com/peachmoms/docs/the_vaccine_safety_handbook_a4.

205. Paumgarten, *supra* note 22. A counter-speech pamphlet called “A Slice of PIE” composed by the Orthodox Nurses Association (at their expense) is available on the NYC Dept. of Health website. EMES INITIATIVE, A SLICE OF PIE: PARENTS INFORMED & EDUCATED (2019), <https://www1.nyc.gov/assets/doh/downloads/pdf/a-slice-of-pie>.

Brooklyn and Rockland County.²⁰⁶ “[D]irectly aimed at the Orthodox community,” the pamphlet is “partly written in Hebrew and filled with snippets from the Torah, or Old Testament,”²⁰⁷ although the assertions misrepresent Jewish law.²⁰⁸ The pamphlet also plays on unique fears within the ultra-Orthodox communities, such as that vaccines might contain traces of monkey, kidneys, rabbit brains, pork products, and aborted fetuses.²⁰⁹

According to Shevi Rosner, president of the Orthodox Jewish Nurses association:

[f]rom front cover to back cover, the booklet is full of misinformation It’s so well-produced and written that it looks professional and factual, [b]ut it’s filled with cherry-picked snippets of articles that appear to prove that vaccines are dangerous, yet when you look at the article, it’s saying the exact opposite.²¹⁰

206. Aaron Short, *Why Rabbis Can’t Contain The Measles Outbreak*, CITY & STATE N. Y. (May 3, 2019), <https://www.cityandstateny.com/policy/2019/05/why-rabbis-cant-contain-the-measles-outbreak/177395/> (noting that, “Anti-vaxxer propaganda has permeated ultra-Orthodox communities for years,” demonstrated by “robocalls from a hotline and a glossy 40-page magazine called the ‘Vaccine Safety Handbook’”); see also Belluz, *supra* note 150 (describing the types of historic anti-vaccine information that has permeated ultra-Orthodox communities).

207. Sandee LaMotte, *Why New York Hasn’t Contained The Largest And Longest Measles Outbreak In Decades*, CNN (Mar. 29, 2019, 5:10 AM), <https://www.cnn.com/2019/03/29/health/measles-ny-outbreak-fear-misinformation/index.html>.

208. Koerner & Reinstein, *supra* note 167; see Gwynne Hogan, *How Orthodox Jewish Nurses Are Fighting ‘Anti-Vaccination Propaganda’ Targeting Their Community*, GOTHAMIST (Mar. 26, 2019, 9:00 AM) (discussing the counter-anti-vax efforts of the Orthodox Jewish Nurses Association and Blima Marcus at vaccinetaaskforce@gmail.com and their counter-speech book, PIE); EMES INITIATIVE, *A SLICE OF PIE: PARENTS INFORMED & EDUCATED* (2019), <https://www1.nyc.gov/assets/doh/downloads/pdf/a-slice-of-pie>; Scott Enman, *Measles Outbreak: Brooklyn Judge Dismisses Anti-Vaxxer Lawsuit Against the City*, BROOKLYN DAILY EAGLE (Apr. 19, 2019), <https://brooklyneagle.com/articles/2019/04/19/measles-outbreak-brooklyn-judge-dismisses-anti-vaxxer-lawsuit-against-the-city/>; see also LaMotte, *supra* note 207 (“Yet local Orthodox Jewish leadership has made it clear that there is nothing in Jewish law that prohibits vaccinations. In fact, it’s the opposite.”)

209. PEACH, ALL YOUR VACCINE QUESTIONS ANSWERED 2, <https://www.dropbox.com/s/uu9b5dg11rcenms/PEACH%20anti-vaxxing.pdf?dl=0>; see Koerner & Reinstein, *supra* note 167; see also Jessica Bursztynsky, *Jewish Nurses Debunk Anti-Vaxxer Misinformation as Measles Spreads in NYC Ultra-Orthodox Community*, CNBC (Apr. 21, 2019, 10:30 AM), <https://www.cnbc.com/2019/04/18/jewish-nurses-debunk-anti-vaxxer-misinformation-as-measles-spreads.html>. The PEACH booklet:

takes original, anti-vaccination beliefs and applies them to passages of the Bible. . . . [M]embers of the Orthodox Jewish Nurses’ Vaccine Task Force [] are frantically working on their own handbook called Pie [sic], short for Parents Informed and Educated. They’re going page-by-page against Peach, seeking to refute . . . false claims in the Peach handbook, notably one that says the MMR vaccine violates kosher dietary law.

Id.

210. LaMotte, *supra* note 207.

But it is effective.²¹¹ The PEACH group also sponsors “a vaccine conference hotline that frequently invites guests who have written about the dangers of vaccines to speak to the assembled listeners.”²¹² With anti-vax groups stoking vaccine-fears targeted to the ultra-Orthodox community,²¹³ cases mounted up and New York City Deputy Health Commissioner, Demetre Daskalakis blamed the local yeshiva where the outbreak began.²¹⁴ He said:

One school failed to exclude people in Williamsburg. . . . We had one measles case in that school, and subsequently every unvaccinated child who was not excluded came down with the measles, creating really the spark that ignited Williamsburg and created a true fire of measles in that neighborhood.²¹⁵

Other than blaming the school and requiring vaccination prior to school admittance—and apparently not monitoring compliance,²¹⁶ nothing seems to have been done until April, six months after the epidemic began. On April 8, 2019, with 193 cases reported,²¹⁷ the city “ordered yeshivas in Brooklyn to exclude . . . all students who are not vaccinated against measles” or face closure.²¹⁸ On April 9, 2019, the City declared a state of emergency when the total cases reached 285.²¹⁹ It promulgated an order requiring all individuals to be vaccinated—or provide evidence of immunity or a medical exemption—or

211. The group publishes two pamphlets: THE VACCINE SAFETY HANDBOOK, *supra* note 204 and ALL YOUR VACCINE QUESTIONS ANSWERED, *supra* note 209, prominently featuring the Hebrew acronym for “With the help of the Blessed Almighty.”

212. LaMotte, *supra* note 207; *see also* Belluz, *supra* note 150.

213. Koerner & Reinstein, *supra* note 167 (“[C]alls are led by Chany Silber, a Jewish mother in Brooklyn.”); *see also* Gwynne Hogan, *Misinformation Hotline Stokes Fear Of Vaccines in Ultra-Orthodox Community*, GOTHAMIST (Mar. 12, 2019, 11:37 PM), <https://gothamist.com/news/misinformation-hotline-stokes-fear-of-vaccines-in-ultra-orthodox-community> (“the Akers Habayis Hotline . . . in Yiddish mean[ing] ‘mainstay of the home’” “has taken on a different meaning and a different purpose, serving as a telephonic hub for ultra-Orthodox mothers who are resistant to vaccinating their children.”)

214. Enman, *supra* note 21.

215. Enman, *supra* note 21. *See also* Demetre Daskalakis, *Proposed Resolution: Measles Vaccination*, COURTHOUSE NEWS SERV. (Apr. 17, 2019), <https://www.courthousenews.com/wp-content/uploads/2019/04/Vax.pdf>.

216. *See* Fieldstadt, *supra* note 120.

217. *Measles*, NYC HEALTH, <https://www1.nyc.gov/site/doh/health/health-topics/measles.page> [<http://web.archive.org/web/20191205012053/https://www1.nyc.gov/site/doh/health/health-topics/measles.page>].

218. Janelle Griffith, *New York City Declares Health Emergency Over Measles Outbreak in Brooklyn*, NBC NEWS (Apr. 9, 2019, 3:08 PM), <https://www.nbcnews.com/news/us-news/new-york-city-declares-health-emergency-over-measles-brooklyn-n992466> (stating the mayor suddenly noticed the urgency of the situation claiming: “This . . . outbreak that is very, very troubling and must be dealt with immediately.”)

219. Susan Scutti, *New York City Declares a Public Health Emergency Amid Brooklyn Measles Outbreak*, CNN (Apr. 9, 2019), <https://edition.cnn.com/2019/04/09/health/measles-new-york-emergency-bn/index.html>.

face a \$1,000 fine.²²⁰ Those who could not furnish proof of immunity or medical exemption would be prohibited from attending school or daycare.²²¹ It appears that compliance monitoring then began in earnest.²²² In April, the City announced school closures for non-compliance with the April 9 order, shuttering two schools for failing to release immunization and attendance records.²²³ By June, ten schools had been closed, nine of the ten were in Williamsburg,²²⁴ the tenth was in Queens.²²⁵ An additional five yeshivas were closed temporarily, and three individuals were fined within the first two weeks of the April 9 order for failing to vaccinate.²²⁶

As the number of cases grew, five families sued the city for restricting their liberty.²²⁷ As in Rockland County, parents of unvaccinated children went to court to have the health department order stricken, accompanied by a heavy-hitter team of lawyers, including Robert F. Kennedy Jr., chairman of Children's Health Defense, the anti-vaccination group.²²⁸ Claiming the health department order violated their children's autonomy, religious practices,²²⁹ and the law of informed consent, they demanded a temporary restraining order.²³⁰ The arguments in both counties were similar. Lawyer Kennedy argued that "[r]eligious rights are fundamental. It is unconstitutional for the state to deprive people of such important rights when religious animus has played a key role."²³¹

220. Cantor, *supra* note 70, at 101.

221. Joseph Aron & Shlomo Greenwald, *New York Declares Public Health Emergency as Cases Approach 300*, JEWISH PRESS, Apr. 10, 2019, at 12.

222. Pager & Mays, *supra* note 120.

223. Short, *supra* note 206.

224. Ben Sales, *New York City Closes 10th Jewish School for Violating Vaccine Order*, JEWISH TELEGRAPHIC AGENCY (June 11, 2019, 1:47 PM), <https://www.jta.org/2019/06/11/united-states/nyc-closes-tenth-jewish-school-for-violating-vaccine-order>. Subsequently two more schools were added. Michelle Andrews, *As Measles Outbreak Fades, N.Y. Sets in Motion New Rules on School Vaccinations*, KAISER HEALTH NEWS (Sept. 5, 2019), <https://khn.org/news/as-measles-outbreak-fades-n-y-sets-in-motion-new-rules-on-school-vaccinations/>.

225. Sales, *supra* note 224.

226. Short, *supra* note 206; Enman, *supra* note 208; see Amanda Ottaway, *Measles-Vaccination Order Extended Across New York City*, COURTHOUSE NEWS SERV. (Apr. 17, 2019), <https://www.courthousenews.com/measles-vaccination-order-extended-across-new-york-city/>.

227. Short, *supra* note 206; see also *C.F. v. New York City Dep't of Health & Mental Hygiene*, 2019 N.Y. Misc. LEXIS 1914, at *2 (N.Y. Sup. Ct. Apr. 18, 2019).

228. *Families Sue New York State to Stop the Repeal of Religious Exemption to Vaccines*, CHILD.'S HEALTH DEF. (July 10, 2019), <https://childrenshealthdefense.org/child-health-topics/mandates/families-sue-new-york-state-to-stop-the-repeal-of-the-religious-exemption-to-vaccines/>.

229. See Plaintiff's Brief in Support of Entry of TRO at 20–21, *F.F. v. New York*, 108 N.Y.S.3d 761 (Sup. Ct. 2019).

230. *Id.*

231. *Lawsuit Filed to Stop Repeal of Religious Exemptions to Vaccines*, WGRZ (July 10, 2019, 5:19 PM), <https://www.wgrz.com/article/news/lawsuit-seeks-to-stop-repeal-of-religious-exemptions-to-vaccines/71-7a6a0c9f-3bfd-4b86-884d-cd28bea5fac7> (a sentiment he re-echoed when

On April 18, 2019, Judge Lawrence Knipel of Kings County Supreme Court denied their request and upheld the April 9 order,²³² ruling that “[t]he unvarnished truth is that these diagnoses represent the most significant spike in incidences of measles in the United States in many years and that the Williamsburg section of Brooklyn is at its epicenter.”²³³ With 285 cases in Brooklyn, compared to eighty-five diagnoses nationwide during the entirety of 2016, “this court can only conclude that there presently exists an emergent measles epidemic . . . in or bordering the Williamsburg neighborhood of Brooklyn, sufficient to warrant the declaration of a public health emergency.”²³⁴ Judge Knipel clearly “got it,” understanding what constitutes an epidemic in the public health context.

The court’s ruling could not have come soon enough.²³⁵ By the end of April 2019, the number of new cases spiked to 193.²³⁶ The impact of the ruling was dramatic; by the end of May, the city had issued 123 citations for noncompliance with its order,²³⁷ and new case reports dropped dramatically—ninety-seven cases for May, and twenty for June.²³⁸

The anti-vaxxers seemed desperate. On June 4, 2019, Rabbi Handler surfaced again, this time holding a rally at a wedding hall on the boundary of the Borough Park and Flatbush neighborhoods, where a meeting was orchestrated by the UJCC.²³⁹ Again, Del Bigtree was prominently featured,²⁴⁰ again brandishing his yellow Star of David,²⁴¹ and again declaiming the thoroughly debunked theory

opposing state legislation seeking to eliminate religious exemptions to mandatory vaccination); see Debra Cassens Weiss, *Robert F. Kennedy Jr. Among Lawyers Filing Suit to Block Vaccination Order*, ABA J. (Apr. 16, 2019, 12:51 PM), <https://www.abajournal.com/news/article/robert-f-kennedy-jr-is-among-the-lawyers-filing-suit-to-block-vaccination-order>.

232. *C.F. v. New York City Dep’t of Health & Mental Hygiene*, No. 508356, 2019 N.Y. Misc. LEXIS 1914, at *6–7 (N.Y. Sup. Ct. Apr. 18, 2019).

233. *Id.* at 2–3.

234. *Id.* at 3–4.

235. See generally Article 78 Verified Petition at 2–3, *C.F. v. New York City Dep’t of Health & Mental Hygiene*, No. 508356, 2019 N.Y. Misc. LEXIS 1914 (N.Y. Sup. Ct. Apr. 18, 2019).

236. NYC HEALTH, *supra* note 218.

237. Melanie Grayce West, *New York City Has Issued 123 Summonses to People Defying Measles Vaccine Order*, WALL ST. J. (May 30, 2019, 3:45 PM), <https://www.wsj.com/articles/new-york-city-has-issued-123-summonses-to-people-defying-measles-vaccine-order-11559245514>.

238. NYC HEALTH, *supra* note 218.

239. Gwynne Hogan, *Ultra-Orthodox Brooklyn Residents Protest Anti-Vax Symposium*, GOTHAMIST (June 5, 2019, 5:11 PM), <https://gothamist.com/news/ultra-orthodox-brooklyn-residents-protest-anti-vax-symposium>.

240. Ben Sales, *I Attended an Orthodox Anti-Vaccine Rally. Here’s What I Saw*, JEWISH TEL. AGENCY (June 5, 2019, 4:43 PM), <https://www.jta.org/2019/06/05/united-states/an-orthodox-rally-in-brooklyn-sees-vaccines-as-a-conspiracy>.

241. Sally Goldenberg & Amanda Eisenberg, *Amid Measles Outbreak, Debate Over Vaccines Rages in Orthodox Brooklyn Neighborhood*, POLITICO (June 5, 2019), <https://www.politico.com/states/new-york/albany/story/2019/06/05/amid-measles-outbreak-debate-over-vaccines-rages-in-orthodox-brooklyn-neighborhood-1042065>; Beth Mole, *Measles Cases Hit 1,001 as Anti-vaxxers Hold Another Rally of Disinformation*, ARSTECHNICA (June 6,

that vaccines cause a rise in autoimmune diseases and neurological disorders.²⁴² Bigtree went further, linking vaccines to the Holocaust and to child sacrifice.²⁴³ In the words of one witness: “[h]e compared them to Nazi experimentation on unwilling Jewish medical subjects, then to the intentional ritual murder of children, in an effort to debunk the scientific consensus that a critical mass of vaccinated people, or herd immunity” will protect those who cannot be vaccinated for genuine medical reasons.²⁴⁴

And again, attendees were bussed in from other neighborhoods.²⁴⁵ But this time, the local communities of Borough Park and neighboring Flatbush were in an uproar.²⁴⁶ As in Rockland County, the meeting was well-publicized, although

2019) (citing VIN reporter), <https://arstechnica.com/science/2019/06/anti-vaxxers-continue-spreading-wild-conspiracy-theories-amid-measles-outbreak/> (reporting on Del Bigtree at a Rockland County rally billed under an informed consent education seminar) (“Over the course of about 12 minutes, Bigtree linked vaccines to the Holocaust and then to child sacrifice. He compared them to Nazi experimentation on unwilling Jewish medical subjects, then to the intentional ritual murder of children, in an effort to debunk the scientific consensus that a critical mass of vaccinated people, or herd immunity, means that even those who cannot be vaccinated for genuine medical reasons will have some protection from getting sick. ‘It’s hard to imagine what it would be that would let you accept killing an innocent child,’ he said. ‘What if I presented to you that this would make it worth it? This is the argument, right? Herd immunity. Herd immunity is the reason we’re allowed to kill some children.’”); see also Merlan, *supra* note 159. Josefin Dolsten, *US Anti-Vaxxers Use Holocaust-Era Yellow Stars to Promote Their Agenda*, TIMES OF ISRAEL (Apr. 6, 2019, 7:04 AM), <https://www.timesofisrael.com/anti-vaxxers-using-yellow-star-used-in-holocaust-to-promote-hemselves.html>; *Sickening New Low: Anti-Vaxxers Using Yellow Star Used in Holocaust to Promote Themselves*, YESHIVA WORLD (Apr. 8, 2019, 11:30 PM), <https://www.theyeshivaworld.com/news/general/1711363/sickening-new-low-anti-vaxxers-using-yellow-star-used-in-holocaust-to-promote-themselves.html> (referencing a post on Instagram, <https://www.instagram.com/theyeshivaworld/p/BvxxJ0LAF3X/?>).

242. Hogan, *supra* note 239.

243. Ben Sales, *Gospels and Child Sacrifice: Inside a NYC Ultra-Orthodox Anti-Vaccination Rally*, TIMES ISRAEL (June 6, 2019, 1:03 AM), <https://www.timesofisrael.com/gospels-and-child-sacrifice-inside-a-nyc-ultra-orthodox-anti-vaccination-rally/>; see Gwynne Hogan, *Controversial Anti-Vax YouTube Host Accused of Preying on Ultra-Orthodox Community*, GOTHAMIST (Apr. 16, 2019, 3:25 PM), <https://gothamist.com/news/controversial-anti-vax-youtube-host-accused-of-preying-on-ultra-orthodox-community> (discussing Bigtree’s March, 2019 comments about the New York outbreak); see also *Why Del Bigtree Wore A Yellow Star of David*, VAX ANSWERS (Apr. 1, 2019), <https://vaxanswers.com/why-del-bigtree-wore-a-yellow-star-of-david-highwiretalk/> (discussing his speech previously posted to YouTube and since removed by YouTube).

244. Sales, *supra* note 240.

245. *Total Blowout: 50 Anti-Vaxxers Show up to Flatbush Event, 1,300 Empty Chairs*, YESHIVA WORLD (June 4, 2019, 9:35 PM), <https://www.theyeshivaworld.com/news/general/1738022/stay-out-of-flatbush-leading-flatbush-rabbonim-and-fjcc-denounce-planned-anti-vaxxer-event-being-held-in-flatbush.html>.

246. *Anti-Vaccination Event in Midwood Draws Ire From Residents, Officials*, NEWS 12 BROOKLYN (June 5, 2019, 7:45 PM), <https://brooklyn.news12.com/antivaccination-event-in-midwood-draws-ire-from-residents-officials-40593621>; see also Hogan, *supra* note 239. “Word about Tuesday’s event had spread through WhatsApp groups, word of mouth, flyers stuck to telephone poles and through recorded messages blasted from car speakers around Borough Park.” *Id.*

notice of the exact date and place were not revealed until twenty-four hours prior to the event.²⁴⁷ Again, it appears the conference organizers might have been afraid of being shut down.

This time the audience was far smaller; some reports said only fifty people attended, and the message seemed to have fallen on deaf ears.²⁴⁸ In July, only six cases were reported in Brooklyn.²⁴⁹ By August,²⁵⁰ the epidemic died out for Brooklynites.²⁵¹

To be sure, the city also reached out to the ultra-Orthodox community and distributed a thirty-page pamphlet prepared by a rabbinical organization explaining the benefits of vaccination, how vaccines are made and tested, and other details.²⁵² “Satmar Hasidic leaders, including United Jewish Organizations executive director Rabbi David Niederman, supported the mayor’s measles order, proclaiming ‘take the shot.’”²⁵³ “The *Der Yid* Newspaper (affiliated with the Satmar community of Williamsburg) printed a strong editorial against anti-vaxxers [and] . . . also took the rare step of printing it in English.”²⁵⁴ It is difficult to assess the contribution of the Williamsburg

247. See Eller, *supra* note 152; see also Ben Guarino & Lena H. Sun, *New York Anti-Vaccine Event Attracts Pro-Vaccine Protests Amid Measles Outbreak*, WASH. POST (June 5, 2019), <https://www.washingtonpost.com/health/2019/06/05/brooklyn-anti-vaccine-event-attracts-pro-vaccine-protests-amid-measles-outbreak/> (describing how the conferences organizers misled the wedding hall owners into believing they were renting their site for an anti-pornography conference); *Muzzling Anti-Vaxxer*, *supra* note 6; *Total Blowout*, *supra* note 245.

248. *Total Blowout*, *supra* note 245. At the Flatbush anti-vaccination event, “[a]s of 9:30PM ET, a whopping 50 anti-vaxxers have shown up at the anti-vaccination symposium at Ateres Chynka Hall in Flatbush. The event was called for 8:00PM, with ‘buses leaving Williamsburg every 10 minutes.’” A statement from the Flatbush Jewish Community Coalition said the organization, “expresses [its] grave disappointment and dismay with the organizers and hosts of tonight’s anti-vaccination event. The Flatbush community does vaccinate. The religious and lay leaders of our community are unanimous in encouraging vaccination. We resent that participants are being bussed in from other neighborhoods. Our community will not participate.” *Id.*; Catherine Kim, *Anti-Vaccination Rallies Are Drawing Crowds—Even During the Measles Epidemic*, VOX (May 15, 2019, 2:10 PM), <https://www.vox.com/science-and-health/2019/5/15/18624715/antivax-vaccines-measles-new-york-orthodox-jews-rallies> (“Hundreds of people attended an anti-vaccination event in New York, where the outbreak has hit hardest . . . [Hillel Handler] also criticized New York Mayor Bill de Blasio, calling him a ‘German’ and ‘very sneaky fellow,’ for actions he said singled out Jews during the epidemic.”).

249. *Measles*, *supra* note 218.

250. *Measles*, *supra* note 218.

251. Lena H. Sun, *New York City Declares End to Largest Measles Outbreak in Nearly 30 Years*, WASH. POST (Sept. 3, 2019), <https://www.washingtonpost.com/health/2019/09/03/new-york-city-declares-end-largest-measles-outbreak-nearly-years/>; see also Stephanie Soucheray, *US Measles Cases Hit 1,234 as Brooklyn Outbreak Called Over*, CIDRAP NEWS (Sept. 3, 2019), <https://www.cidrap.umn.edu/news-perspective/2019/09/us-measles-cases-hit-1234-brooklyn-outbreak-called-over>.

252. Frost, *supra* note 194; see also *Total Blowout*, *supra* note 245.

253. Short, *supra* note 206.

254. *Historic: Satmar Paper “Der Yid” Publishes Editorial in English Blasting Anti-Vaxxers*, YESHIVA WORLD (Apr. 11, 2019, 8:15 PM), <https://www.theyeshivaworld.com/news/headlines->

community although these efforts clearly had no effect on anti-vax proselyzer, Handler, a member of the sect.²⁵⁵

As of September 3, New York City saw fifty-two patients hospitalized—8% of the 654—sixteen in intensive care,²⁵⁶ and “[sixty-five] reported complications, including pneumonia and encephalitis.”²⁵⁷ “Of the 17 hospitalized children, five (29%) were admitted to the intensive care unit.”²⁵⁸ By the time the epidemic was over, the city had spent over \$6 million and deployed more than 500 staff to effectuate the mandatory vaccination order.²⁵⁹ Almost 15,550 doses of the MMR vaccine were administered after the April 9 emergency order, a nearly 41% increase compared to the same time period the previous year.²⁶⁰ This is to be compared to approximately 4,600 doses administered in Rockland after its emergency order was vacated.²⁶¹

While not as dramatic from a public health standpoint, the Lakewood, New Jersey and Fallsburg, New York, measles experiences are noteworthy.²⁶² Together, the two locales contributed another forty cases: thirty-three for Lakewood and seven for Fallsburg,²⁶³ which reacted by imposing vaccine requirements for campers.²⁶⁴ Including the thirty-nine cases imported to

breaking-stories/1713691/historic-satmar-paper-der-yid-publishes-editorial-in-english-blasting-anti-vaxxers.html.

255. Dave Goldiner, *Brooklyn's Kooky Anti-Vaxxer Rabbi is Extremist on Sex Abuse, Circumcision—Even Opposes Israel*, N.Y. DAILY NEWS (May 16, 2019), <https://www.nydailynews.com/news/politics/ny-antivaxxer-hillel-handler-rabbi-hasidic-orthodox-abuse-circumcision-20190516-li6utlmne5czhoz34bafvozsoa-story.html>.

256. *Mayor de Blasio, Health Officials Declare End of Measles Outbreak in New York City*, (Sept. 3, 2019), <https://www1.nyc.gov/office-of-the-mayor/news/409-19/mayor-de-blasio-health-officials-declare-end-measles-outbreak-new-york-city>.

257. Frost, *supra* note 194 (noting seventy-eight percent of Brooklyn cases were unvaccinated because of parental refusal or intentional delay, and twenty-one percent were too young for routine measles vaccination); Stephanie Soucheray, *US Measles Cases hit 1,234 as Brooklyn Outbreak Called Over*, CIDRAP (Sep. 3, 2019), <https://www.cidrap.umn.edu/news-perspective/2019/09/us-measles-cases-hit-1234-brooklyn-outbreak-called-over>.

258. Fleming, *supra* note 178.

259. Guarino & Sun, *supra* note 247.

260. *Mayor de Blasio, Health Officials Declare End of Measles Outbreak in New York City*, NYC (Sept. 3, 2019), <https://www1.nyc.gov/office-of-the-mayor/news/409-19/mayor-de-blasio-health-officials-declare-end-measles-outbreak-new-york-city>.

261. Cantor, *supra* note 70; *Measles Information*, *supra* note 107.

262. See Sergio Bichao, *It's Official: Measles Outbreak Returns to Lakewood*, NEW JERSEY 101.5 (Mar. 15, 2019), <https://nj1015.com/its-official-measles-outbreak-returns-to-lakewood/>.

263. *Public Health Advisory #2*, SULLIVAN CNTY CATSKILLS. (June 10, 2019), <https://sullivanny.us/news/public-health-advisory-2>; Stacey Barchenger, *Measles Outbreak in Ocean, Passaic Counties is Over, Officials Say*, APP.COM (Jan. 16, 2019), <https://www.app.com/story/news/health/2019/01/16/measles-outbreak-new-jersey-lakewood-over-ends/2597447002/>.

264. Allison Dunne, *Sullivan County Requires Measles Vaccinations For Campers*, WAMC NE. PUB. RADIO (May 29, 2019, 8:01 AM), <https://www.wamc.org/hudson-valley-news/2019-05-29/sullivan-county-requires-measles-vaccinations-for-campers>.

Michigan from Williamsburg,²⁶⁵ these numbers raise the contribution of the ultra-Orthodox community to 86% of the 2018–2019 American measles-epidemic load.²⁶⁶ The Lakewood experience is especially interesting because it brokered intense intra-community strife.²⁶⁷ Here, too, the organized anti-vax movement helped foster vaccine resistance, in large measure via the *Gedolim Letters* manifesto written by a local anti-vaxxers apparently with the help of anti-vax activists—but targeted to the local Orthodox community.²⁶⁸

C. The Israeli Experience

While New York quelled its epidemic in less than a year with less than 1,000 cases, Israel, with its own large ultra-Orthodox population, did not fare as well.²⁶⁹ Between July 2018 and July 2019, the Israeli Health Ministry pegged the number of cases at more than 4,300.²⁷⁰ Thereafter, another two hundred cases were reported, bumping the number to over 4,500 cases as the epidemic dragged on for almost two years.²⁷¹ Most believe that the Israeli-Ukraine pilgrimages imported the epidemic to Israel,²⁷² also around the time of High Holidays²⁷³ when thousands flock to visit the grave of Rabbi Nachman of Breslov.²⁷⁴ In October, following the pilgrimage, “measles cases exploded in Israel, to 949.”²⁷⁵ Since Ukraine hosted the most serious of the European outbreaks—with 72,000 cases—²⁷⁶ and had a poor vaccination record—57% of

265. C.F. v. New York City Dep’t of Health & Mental Hygiene, No. 508356/19, 2019 N.Y. Misc. LEXIS 1914, at *3 n.1 (N.Y. Sup. Ct. Apr. 18, 2019); Enman, *supra* note 208.

266. While the official tallies indicate that 75% of US cases came from Rockland and Brooklyn, adding the thirty-nine Michigan cases seeded from Rockland and the forty cases from New Jersey and Sullivan Counties, raises the tally to 86%. See also *Public Health Advisory #2*, *supra* note 263; Barchenger, *supra* note 263.

267. E-mail from Anonymous GEDOLIM LETTERS Author(s), to author, (Jan. 26, 2020, Feb. 3–6, Feb. 8–11, Feb. 13, Feb. 23, and Feb. 27, 2020) (on file with author).

268. See generally GEDOLIM LETTERS: ON VACCINATION, PARENTAL RIGHTS AND RELIGIOUS FREEDOM, <https://k6s3v6r4.ssl.hwcdn.net/?file=20200114181029.pdf>.

269. Stein-Zamir et al., *supra* note 77.

270. Avery, *supra* note 18 (note discrepancies both in dates and numbers with Stein-Zamir et al., *supra* note 77).

271. *Exposure to Measles on Flight to Georgia*, ISR. NAT’L NEWS (Dec. 17, 2019, 2:59 PM), <https://www.israelnationalnews.com/News/News.aspx/273285>.

272. Stein-Zamir et al., *supra* note 77 (noting outbreak followed international importations credited, “mainly to the Ukraine”).

273. REUTERS, *supra* note 109.

274. *In Pictures: Ultra-Orthodox Flock to Celebrate Rosh Hashana in Ukraine*, JERUSALEM POST (Sept. 22, 2017, 12:10 AM), <https://www.jpost.com/diaspora/in-pictures-ultra-orthodox-flock-to-celebrate-rosh-hashanah-in-ukraine-505683>.

275. Marcy Oster, *Israel’s Measles Outbreak Began in Uman, Ukraine*, JERUSALEM POST (Apr. 4, 2019, 11:16 AM), <https://www.jpost.com/health-science/israels-measles-outbreak-began-in-uman-ukraine-585704>.

276. Julia Belluz, *2019 is a Very Bad Year for Measles*, VOX (May 31, 2019, 10:38 AM), <https://www.vox.com/2019/4/15/18311377/measles-outbreak-2019>; but see Goldstein, *supra* note 24 (noting 54,000 cases for Ukraine); see also *Measles – European Region: Disease Outbreak*

children in 2013 compared to 99% in 2000—²⁷⁷the assumption seems plausible.²⁷⁸

III. EVALUATING THE RESPONSE

A. Israel

Vaccination law in Israel differs from the United States and other countries. “There is no law compelling vaccination, no law barring unvaccinated children from attending schools, no disciplinary action against anti-vaxxers, and no educational effort targeting the parents.”²⁷⁹

As an overall policy in Israel, coercive vaccination measures²⁸⁰ are not countenanced, even to the point of not requiring vaccination as a precondition to schooling.²⁸¹ In fact, until 2018–2019, laws imposing mandatory vaccination

News, WORLD HEALTH ORG. (May 6, 2019), <https://reliefweb.int/report/ukraine/measles-european-region-disease-outbreak-news-update-6-may-2019>; Borter, *supra* note 22 (noting about 58,000 cases in 2019).

277. Goldstein, *supra* note 23; Jaffe-Hoffman, *supra* note 109 (“In the past, approximately 30,000 [Israelis] would travel to the Ukrainian city every Rosh Hashanah.”).

278. Goldstein, *supra* note 23 (“In Ukraine, it seems the disdain and mistrust of scientific knowledge have spread not only among the general public but within the health care system itself, as doctors increasingly recommend that parents opt not to vaccinate children, and about 30% of medical publications penned by physicians do the same.”). The steep increase in Ukrainian cases is attributed to both a vaccine shortage and massive anti-vaccine propaganda

279. Goldstein, *supra* note 23; Stuart Winer, *Ministers Advance Bill to Ban the Unvaccinated From Schools*, TIMES ISRAEL (Nov. 18, 2018, 7:17 PM), <https://www.timesofisrael.com/ministers-advance-bill-to-ban-the-unvaccinated-from-schools/>; Shelly Kamin-Friedman, *Would It be Legally Justified to Impose Vaccination in Israel? Examining the Issue in Light of the 2013 Detection of Polio in Israeli Sewage*, 6 ISRAELI J. HEALTH POL’Y RSCH. 2, 5 (2017). Frustration with the escalating numbers—between March 2018 and February 2019 there were 3,590 cases of measles—did eventually manifest in Israeli officials eventually and belatedly taking some action. See Ido Efrati, *Israel to Keep Unvaccinated Kids Out of School as Measles Outbreak Looms*, HAARETZ (May 2, 2019), <https://www.haaretz.com/israel-news/israel-to-keep-unvaccinated-kids-out-of-school-as-measles-outbreak-looms-1.7189866>. After proposed legislation failed to pass making vaccination mandatory:

Health Ministry Director General Moshe Bar Siman Tov . . . contacted all the chief district physicians and asked them not to hesitate to use their authority to keep unvaccinated children out of schools and preschools if there are signs of a potential outbreak of the type that reached its peak last September and October.

Id. Since the outbreak had peaked by that time, no such authority vested in the district physicians, and the directive was not implemented except in isolated areas. See Ido Efrati, *Israel Bars 11 Children Not Vaccinated for Measles from Preschools*, HAARETZ (Jan. 15, 2019), <https://www.haaretz.com/israel-news/.premium-israel-bars-11-children-not-vaccinated-for-measles-from-preschools-1.6846463>.

280. Kamin-Friedman, *supra* note 279, at 3 (“Israel’s Advisory Committee on Infectious Diseases and Immunization . . . discussed the possibility of requiring children’s vaccination prior to their admission to the education system in 2008. The committee . . . stated that a mandatory vaccination requirement would not be effective due to enforcement difficulties . . .”).

281. Kamin-Friedman, *supra* note 279, at 3–4. However, recent international work on the coronavirus epidemic seems to indicate Israeli support for mandatory vaccination to coronavirus.

have only passed in Israeli history on two occasions, “once in 1949, when Israel faced a smallpox outbreak, and once in 1994 when a [localized] measles outbreak occurred”²⁸² Nevertheless, Israeli law does allow closing schools in case of a measles outbreak,²⁸³ but, the government only applied this law to two schools in the last four months of 2018—in Jerusalem and a town near Haifa—when 900 new cases were reported in these areas.²⁸⁴ And judicial intervention has, thus far, been limited to individual cases.²⁸⁵ Proposed legislation to charge parents with responsibility for vaccination and ban unvaccinated children from schools has stalled.²⁸⁶

Indeed, the lack of mandatory pre-school requirements, a reflection of the Israeli veneration for autonomy,²⁸⁷ may well explain the three-fold higher incidence and longer duration of the 2018–2019 Israeli measles outbreak, considering the affected populations were virtually identical in lifestyle and demographics.

See Jonathan Davies, *Legal and Ethical Ramifications of COVID-19 in Israel*, 39 MED. & L. 225, 235–37 (2020) (discussing autonomy and noting “[i]t is assumed that public health interests will prevail over the right to autonomy in Israel and worldwide,” predicting that vaccination will become mandatory even in Israel).

282. Kamin-Friedman, *supra* note 279, at 4. Kamin-Friedman further recognizes:

[t]he Public Health Ordinance enacted in 1940, is currently the only reference in Israeli law to public health interventions. According to §19 of the Ordinance . . . ‘In any town, village or area where an infectious disease assumes or is likely to assume an epidemic character or where there exists in the neighborhood infectious disease such as in the opinion of the Director constitutes a danger to the public health of . . . [the] area, the Director or Medical Officer may proceed to take such measures to protect the inhabitants thereof from infection’

Kamin-Friedman, *supra* note 279, at 4.

283. Goldstein, *supra* note 23.

284. Goldstein, *supra* note 23; see also *Court Blocks Teachers’ Strike Over Canceled Quarantine for Kids, Classes to go Ahead*, THE TIMES OF ISR. (Jan. 27, 2022), <https://www.timesofisrael.com/court-blocks-teachers-strike-over-cancelled-kids-quarantine-classes-to-go-ahead/> (Israeli policy during the COVID outbreak differs a bit with schools being required to hold classes by Zoom during the earlier waves. The most recent policy—addressed to Omicron—is to open schools and relax quarantine rules—to the point of engendering a teacher’s strike—the legality of which was rejected).

285. See, e.g., *Tel Aviv Court Orders Mother to Vaccinate Her Children*, TIMES ISRAEL (Nov. 4, 2019, 7:09PM), <https://www.timesofisrael.com/tel-aviv-court-orders-mother-to-vaccinate-her-children/> (“Father sue[d] after unmarried couple agreed to have kids, but [the] woman refused to have them immunized, claiming—but not proving—they are sensitive to the vaccines.” The court directed vaccination.)

286. Goldstein, *supra* note 23.

287. Davies, *supra* note 281, at 235; see Roy Gilbar & José Miola, *One Size Fits All? On Patient Autonomy, Medical Decision-Making, and the Impact of Culture*, 23 MED. L. REV. 375, 383–86 (2015); H CJ 5304/15 Israel Med. Ass’n. v. Knesset, (2016) (Isr.), <https://versa.cardozo.yu.edu/opinions/israel-medical-association-v-knesset>.

B. *The American Response*

Both Rockland County and Kings, NYC, were criticized for poor public health response. Rockland's Health Department came under fire for initially allowing children to attend school if not vaccinated and for botched pro-vaccination messaging.²⁸⁸ New York City came under attack for not calling in the CDC during the 2018–2019 epidemic,²⁸⁹ although with 400 people assigned from its own health department,²⁹⁰ it is not clear what the CDC could have contributed.

In terms of legal responses and the subsequent trajectory of the epidemic, however, comparison between the Rockland and Brooklyn episodes vastly differ. These differing legal resolutions and consequent public health measures and outcomes provide us with some objective evidence of the efficacy of public health law and emergency orders in combatting epidemics. The fortuitous similarities in population characteristics in both American epidemics and the Israeli outbreak also preclude typical objections of the ecologic fallacy.

To recount, both American epidemics began about the same time; both were imported from Israel.²⁹¹ Both began with teenagers.²⁹² Both communities were composed of ultra-Orthodox Jews with identical lifestyles.²⁹³ Both epidemics were festered by the same groups of anti-vaxxers, PEACH, and ICAN,²⁹⁴ promulgated by written literature and oral symposia in both counties.²⁹⁵ Both communities cooperated in counter-anti-vax efforts,²⁹⁶ but these initiatives primarily took place after the epidemic was well underway. In April 2019, both counties sought court orders imposing vaccination.²⁹⁷ And there the similarity ends.

Initially, it appears the Rockland County Health Department did a better job of responding, declaring a state of emergency as early as March 2019.²⁹⁸ By contrast, initially New York City seemed to allow the epidemic to get the best of them. Aggressive efforts by the city did not begin until April 2019.²⁹⁹

288. Nancy Cutler, *Rockland Measles Emergency Draws Questions, Criticism on Social Media*, LOHUD (Mar. 27, 2019, 6:18 PM), <https://www.lohud.com/story/news/local/rockland/2019/03/27/rockland-county-measles-emergency-social-media-criticism/3286537002/>; Cohen et al., *supra* note 116.

289. Cohen et al., *supra* note 116.

290. Cohen et al., *supra* note 116.

291. McDonald et al., *supra* note 77, at 444; *see also* Patel et al., *supra* note 179.

292. McDonald et al., *supra* note 77; *see also* Patel et al., *supra* note 179.

293. McDonald et al., *supra* note 77; *see also* Patel et al., *supra* note 179.

294. *Policy Initiative*, *supra* note 34, at 23–24.

295. *Policy Initiative*, *supra* note 34, at 23–24.

296. *Policy Initiative*, *supra* note 34, at 23–24.

297. Pager & Mays, *supra* note 120.

298. *See generally* Cantor, *supra* note 70, at 102.

299. *See generally* Cantor, *supra* note 70, at 101. Although rules were implemented requiring schools to ascertain student vaccination prior to admittance back in December, these were flagrantly disregarded with lackluster enforcement by the City as is apparent from the increased number of cases.

In April, Rockland County had reported thirteen new cases, compared to 193 in New York City, with totals for the six months—October to the date of the court orders—of 166 for Rockland and 256 for Kings County.³⁰⁰

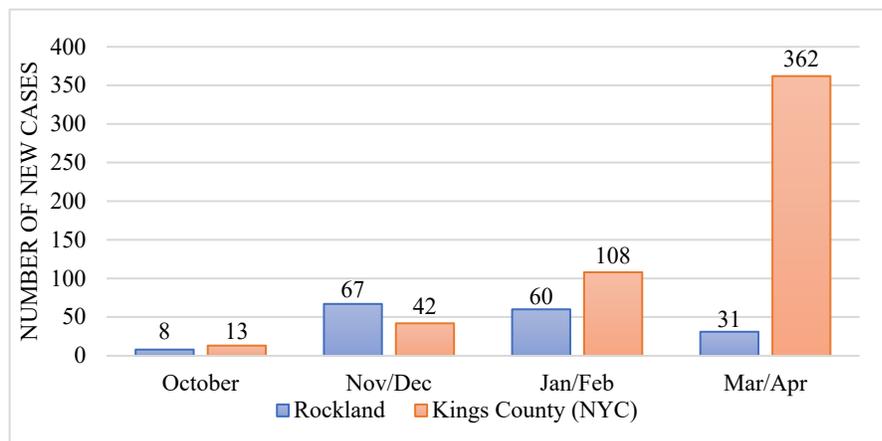


Figure 3. Bi-monthly Epidemic Curve (new cases) during October through April, the first half of the 2018-2019 measles epidemic, for Rockland County and Kings County (NYC).³⁰¹ Rockland in orange, Kings in blue.

Prior to the respective court decisions, Rockland registered thirty-one cases for March and April, down by 50% from January and February, while NYC registered 362 cases for the two months—up more than three times compared to the prior two months.³⁰² At that time, Rockland was vaccinating almost 100 persons a day.³⁰³ But following the April 5, 2019 court decision repealing the Rockland state of emergency and denying compulsory vaccination, measles cases dramatically increased in the county, and vaccinations dramatically decreased.³⁰⁴

After the Rockland court quashed the local order, Rockland County reported eighty-four new measles cases, a six and a half-fold increase.³⁰⁵ The uptick in

300. See court decisions, *infra*.

301. Graph created by author based on the follow sources. Jane R. Zucker, et. al, *Consequences of Undervaccination—Measles Outbreak, New York City, 2018-2019*, 382 NEW ENG. J. OF MED. 1009 (2020); Jennifer Rosen, *Measles Outbreak New York City, 2018-19*, NYC HEALTH (Oct. 2019), https://cheac.org/wp-content/uploads/2019/10/Measles_CHEAC_Oct2019.pdf (slides 18 & 27).

302. See *Measles*, *supra* note 218; Debra Goldschmidt, *More Than 800 Cases of Measles in US, With NY Outbreak Continuing to Lead*, CNN (May 13, 2019), <https://www.cnn.com/2019/05/13/health/measles-update-cdc-800-cases/index.html>.

303. Cantor, *supra* note 70, at 102.

304. See Cantor, *supra* note 70.

305. Rochel Leah Goldblatt, *Rockland Measles: Emergency Order Renewed for 4th Time, Cases Rise to 275*, LOHUD (June 24, 2019, 3:06 PM),

Rockland cases continued throughout May 2019, rising from thirteen in April to eighty-four in May, culminating with the impressive anti-vax symposium held on May 13.³⁰⁶ Not until June, contemporaneous with a vigorous community counter-anti-vax effort—and imposition of the state law—do we begin to see a decrease in Rockland cases.

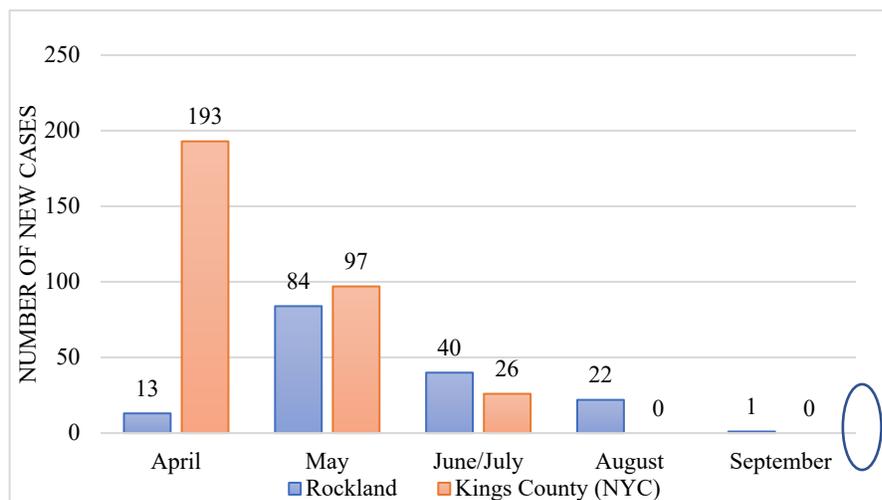


Figure 4. Monthly Epidemic Curve (new cases) for Rockland County and Kings County (NYC) – 6 months (April 2019 through September 2019).³⁰⁷ Rockland in orange, Kings in blue.

The increase—and in fact, acceleration—of cases following the court’s revocation of the Rockland health department order resulted in an epidemic that outlasted the New York City epidemic by approximately three months, and risked the United States losing its WHO measles-free status.³⁰⁸ In comparison after its court intervention, and now armed with an order requiring vaccination, New York City would soon boast a decline of new cases by 50%—from 193 to 97—in one month. Six cases were reported in July and none were reported in August.³⁰⁹

<https://www.lohud.com/story/news/local/rockland/2019/06/24/rockland-measles-emergency-order-renewed-fourth-time/1548608001/>.

306. See de Freytas-Tamura, *supra* note 155.

307. Graph created by author.

308. Elizabeth Cohen, *The US Eliminated Measles in 2000. The Current Outbreak Could Change That*, CNN (Sept. 3, 2019, 2:29 PM), <https://www.cnn.com/2019/08/28/health/us-measles-elimination-status-in-jeopardy/index.html>.

309. *Measles*, *supra* note 218; Paul Frangipane, *Measles Outbreak Continues to Slow, With No New Cases in August*, BROOKLYN DAILY EAGLE (Aug. 23, 2019) (noting 654 cases were reported in New York City as of August).

One physician, however, derided this tactic. In an article published in the *New England Journal of Medicine*, Dr. Julie Cantor first questioned the Rockland County's reported statistics, then suggested that laws coercing vaccination are so unpalatable as to be counterproductive.³¹⁰ She also claimed, without evidence, that New York City's decision to fine residents who do not vaccinate may have backfired.³¹¹ "Furthermore," she asserts, "emergency edicts may not increase vaccination rates If New York City excludes confounding variables, perhaps its data, which are not publicly available, will be more compelling."³¹² Regardless, the precedent's dangers remain."³¹³

Yet, on its face, the efficacy of allowing New York City's order to stand seems quite compelling, strongly suggesting that the legal intervention escalated vaccination and hence decreased spread and truncated the epidemic's progression.³¹⁴ The question to be examined, given the similarity of facts at the time of the respective orders, is what caused the legal outcome to differ?

IV. THE LEGAL RESPONSE: EMERGENCY ORDERS AND THE POWERS OF THE MUNICIPALITY

A. *Arbitrary and Capricious in Rockland*

The Rockland County order, which barred children who had not been vaccinated from public spaces, was stricken in *W.D. v. County of Rockland*.³¹⁵ The New York City order, which fined anyone who had not been vaccinated and accessed public spaces, was upheld in *C.F. v. Department of Health and Mental Hygiene*.³¹⁶ Both actions were brought as Article 78 proceedings, challenging the local laws as "arbitrary and capricious."³¹⁷ The main differences between the orders was that Rockland's targeted those under the age of eighteen and saddled responsibility on the parents for vaccinating their children. By comparison, New York City imposed a \$1,000 fine for non-compliance and applied to everyone, adult and child alike, if the person appeared in public and could not show proof of vaccination or immunity or medical exemption. Yet,

310. See Cantor, *supra* note 70, at 102.

311. Cantor, *supra* note 70, at 101.

312. *Measles*, NYC HEALTH (May 10, 2020), <http://www1.nyc.gov/site/doh/health/health-topics/measles.page>.

313. Cantor, *supra* note 70, at 102 (emphasis added); see also Drew, *supra* note 65.

314. Jennifer Rosen, *Measles Outbreak New York City, 2018-19*, NYC HEALTH (Oct. 2019), https://cheac.org/wp-content/uploads/2019/10/Measles_CHEAC_Oct2019.pdf (slide 42).

315. *W.D. ex rel. A v. Cnty. of Rockland*, 101 N.Y.S. 3d 820, 822 (N.Y. Sup. Ct. 2019).

316. *C.F. v. N.Y.C. Dep't of Health & Mental Hygiene*, 139 N.Y.S.3d 273 (App. Div. 2020); see also Brief of Petitioner at 1–2, 8–9, *C.F. v. N.Y.C. Dep't of Health & Mental Hygiene*, 139 N.Y.S.3d 273, 273 (App. Div. 2020) (No. 19-4455) (stating that with the exception of exemption for medical contraindications "all persons . . . shall be vaccinated against measles" and anyone not able to show proof of vaccination or immunity would be considered a "nuisance").

317. *W.D.*, 101 N.Y.S. 3d at 822; *C.F.*, 139 N.Y.S.3d at 273.

notwithstanding the similarity of underlying facts, within the span of two weeks two entirely different decisions were rendered.

While the Rockland County order did not actually include a vaccination requirement, it effectively did so by barring unvaccinated children from public places from March 27 through April 25 of 2019.³¹⁸ Although not expressly using the terms liberty or autonomy, the petitioners claimed that their children could not attend the school of their choice. They sought to have the order voided on the grounds that it was arbitrary and capricious.³¹⁹ They also claimed that the religious exemption they enjoyed—to be stricken some three months later by New York State—afforded them protection from the local order.³²⁰ This claim was essentially ignored by the Court, which focused on the facts and the definition of “epidemic” found in the enabling legislation.³²¹ Although noting that the County Executive had emergency power, the court found this was limited to disasters.³²² While “epidemic” is covered under the disaster provision, its meaning was undefined in the enabling statute.³²³ This omission allowed the court to forage around the general vernacular, consult the dictionary,³²⁴ select the definition of its choice, and accept the petitioners’ characterization of the outbreak as one not severe enough to justify emergency orders by the executive.³²⁵

To do so, the Court turned to a Merriam-Webster dictionary to provide the desired definition.³²⁶ That dictionary provides two definitions: the first defines epidemic as “an outbreak of disease that spreads quickly and affects many individuals at the same time,” and was implicitly rejected by the court.³²⁷ Instead, the court chose a second definition, one that defines the word as “affecting . . . disproportionately . . . large number[s] of individuals within a population.”³²⁸ Holding that “[i]n a population of roughly 330,000 people, 166 cases [of measles] . . . does not appear . . . to rise to the level of an ‘epidemic’ as included in the definition of ‘disaster’ under Executive Law § 24[.]” the court

318. *W.D.*, 101 N.Y.S. 3d at 822.

319. *Id.*

320. Brief for Petitioner at 12, 16–17, *W.D. v. Cnty. of Rockland*, 101 N.Y.S. 3d 820 (Sup. Ct. 2019).

321. *W.D.*, 101 N.Y.S. 3d at 824.

322. *Id.* at 823–24.

323. *Id.* at 824.

324. *Id.* (“When a word used in a statute is not defined in the statute, dictionary definitions serve as ‘useful guideposts’ in determining the word’s ‘ordinary’ and ‘commonly understood’ meaning.”).

325. *Id.*

326. *Id.* (citing *Epidemic*, *Merriam-Webster Online Dictionary*, <https://www.merriam-webster.com/dictionary/epidemic> (last visited Jan. 14, 2022)).

327. *W.D.*, 101 N.Y.S. 3d at 824.

328. *Id.*

ruled that the order was indeed arbitrary and capricious and constituted an abuse of executive discretion.³²⁹

Several problems surface with the courts' outcome determinative methodology.³³⁰ First is that "epidemic" is a term of art in public health practice, meaning an excess of cases over a background level or normal expectancy.³³¹ Given that the prevalence of disease in Rockland was 40% higher than experienced by the entire U.S. over the preceding year, and double that of 2016, the situation certainly constituted an epidemic in public health terms.³³² Moreover, given that the disease increased from one case to 166 cases over a six-month period, was spreading rapidly, and had the potential to spread astronomically, it could be said to constitute an epidemic even under the first Merriam-Webster definition. Thirdly, the epidemic definition relied on by the court, which appears to be a secondary definition, was not even a proper definition of the term when used as a noun—as opposed to an adjective—at least according to one dictionary published in 1981 by Merriam-Webster.³³³

The decision is plainly wrong from a public health point of view,³³⁴ and perhaps from a legal view as well,³³⁵ although it was upheld on appeal.³³⁶ As illustrated above, the impact of this decision delayed resolution of the

329. *Id.*

330. The County's Memorandum of Law did not clarify that epidemic is a term of art in public health practice. Memorandum of Law at 7–8, *W.D. v. Cnty. of Rockland*, 101 N.Y.S. 3d 820 (N.Y. Sup. Ct. 2019), https://libraryguides.law.pace.edu/ld.php?content_id=47777387. Instead they rely on arguments of police power citing *Jacobsen* and note that the state has "wide discretion to pass legislation in areas where there is medical and scientific uncertainty[.]" *Id.* at 9 (quoting *Gonzales v. Carhard*, 550 U.S. Ct. 124, 164 (2007)).

331. GORDIS, *supra* note 138, at 23.

332. *Measles Cases and Outbreaks*, *supra* note 30.

333. *Epidemic*, WEBSTER'S NEW COLLEGIATE DICTIONARY (1981).

334. See Michael P. McKinney, *Measles Outbreak: Judge Upholds Halt on Rockland County Emergency Order*, LOHUD (Apr. 15, 2019, 5:56 AM), <https://www.lohud.com/story/news/local/rockland/2019/04/13/measles-judge-upholds-halt-emergency-order/3456667002/> (summarizing that the ruling was at least temporarily upheld by Appellate Judge Jeffrey Cohen).

335. See *Garcia v. N.Y.C. Dep't of Health & Mental Hygiene*, 106 N.E.3d 1187, 1202 (N.Y. 2018) (holding that "the Board [of Health] permissibly adopted . . . vaccine rules pursuant to its legislatively-delegated and long-exercised authority to regulate vaccinations").

336. See McKinney, *supra* note 334; see also Robert Brum, *Measles: Judges Deny Rockland's Appeal on Emergency Declaration*, LOHUD (Apr. 19, 2019, 6:43 PM), <https://www.lohud.com/story/news/local/rockland/2019/04/19/measles-rockland-emergency-declaration-judge-denies-appeal/3521003002/> (commenting on the non-publicized two-page order). Thereafter, "Rockland County officials . . . announced a 'Communicable Disease and Exposure Exclusion Order' that mandates anyone with measles to stay home, and those exposed stay out of public spaces throughout the county. Those who do not comply face a \$2,000-a-day fine." See Robert Brum, *Measles: Rockland Issues New 'Exclusion Order' for Public Spaces*, LOHUD (Apr. 17, 2019, 11:09 AM), <https://www.lohud.com/story/news/local/rockland/2019/04/16/rockland-bans-measles-exposed-public/3482383002/> (noting the order was struck on April 16).

epidemic.³³⁷ The arguments made by the Rockland County Attorney, which focused on the police power of the state and relied on *Jacobson*, were clearly not effective nor persuasive regarding the issues raised in the local order.³³⁸

B. Not Arbitrary and Capricious in Brooklyn

One day before the Appellate Division ruled on the Rockland case, the Brooklyn case was filed.³³⁹ Here the petitioners, also a group of parents, brought claims far more sophisticated than their Rockland neighbors. In addition to the same arbitrary and capricious claim that prevailed in Rockland, the petitioners also alleged violations of autonomy, informed consent, religious freedoms, and claimed that the order was “disproportionate to the provable factual circumstances” and “fail[ed] to use the least restrictive means that would likely control measles yet balance the rights to individual autonomy.”³⁴⁰

The petitioner’s papers also contained additional claims, which were given little receptivity by the court, including the “specter of unjustifiable forced vaccination.”³⁴¹ Rather than focusing on strict constitutional—religious freedom—issues, the plaintiffs raised human rights and bioethical mandates, such as “the Nuremberg Code, the Helsinki Declaration, and the UN Declaration on Human Rights and Bioethics,”³⁴² which support the right of “the fundamental principle of informed consent.”³⁴³ Petitioners also raised issues of safety and efficacy of the vaccine, but without persuasive evidence—save an unsupported doctor’s affidavit, which was quickly rejected by the court.³⁴⁴ Finally, they claimed that the city had “no legal authority or precedent for finding an unvaccinated person in any context to be a nuisance.”³⁴⁵

337. Kenneth B. Robbins et al., *Low Measles Incidence: Association with Enforcement of School Immunization Laws*, 71 AM. J. PUB. HEALTH 273 (1981); see also Alan R. Hinman et al., *Childhood Immunization: Laws That Work*, 30 J. L. MED. & ETHICS 122 (2002).

338. Memorandum of L. in Opposition to Petitioner’s Order to Show Cause at 9, *W.D. v. Cnty. of Rockland*, 101 N.Y.S. 3d 820 (N.Y. Sup. Ct. 2019) (No. 10-31783).

339. *C.F. v. N.Y.C. Dep’t of Health & Mental Hygiene*, 139 N.Y.S.3d 273 (App. Div. 2020).

340. Verified Petition at 3, *C.F. v. N.Y.C. Dep’t of Health & Mental Hygiene*, No. 508356/2019 (N.Y. Sup. Ct. Apr. 15, 2019).

341. *Id.*

342. *Id.* at 4. Interestingly, the Israeli position also relies heavily on the Helsinki Declaration, although its prime focus is on ethical human research. See Davies, *supra* note 281, at 227–28 (adopting “the Geneva Declaration of the World Medical Association, which governed the relationships between doctor and patient.”)

343. Verified Petition, *supra* note 340, at 13.

344. Verified Petition, *supra* note 340, at 17–21; *C.F. v. N.Y.C. Dep’t of Health & Mental Hygiene*, 2019 N.Y. Misc. LEXIS 1914, at *69–78 (N.Y. Sup. Ct. Apr. 18, 2019).

345. Verified Petition, *supra* note 340, at 14, 16; see generally *Garcia v. N.Y.C. Dep’t of Health & Mental Hygiene*, 106 N.E.3d 1187, 1196 (N.Y. 2018). The *Garcia* court ruled that: [t]o be sure, the . . . vaccine rules necessarily impinge upon personal choice to some degree. This will almost always be true with health-related regulations . . . [But because] the rules challenged here . . . seek to ensure increased public safety and health for the

Similar to the Rockland court, the Brooklyn decision first addressed the city's power to act:

The pivotal questions posed for this court's determination is whether Respondent Commissioner has a rational, non-pretextual basis for declaring a public health emergency and issuing the attendant orders challenged herein. The evidence in this regard is largely uncontroverted. The unvarnished truth is that these diagnoses represent the most significant spike in incidences of measles in the United States in many years and that the Williamsburg section of Brooklyn is at its epicenter.³⁴⁶

At the time of the decision, 285 cases had been reported in the Brooklyn epicenters of Williamsburg and Borough Park, which together claimed a population of about 150,000, which seemingly would make the Rockland epidemic—which focused mainly on New Square, Monsey and Spring Valley (the ultra-Orthodox areas) far worse. Regardless, Brooklyn's Judge Knipel recognized the severity of the epidemic and took serious issue with Judge Thorsen.³⁴⁷ Pointedly, he noted “[t]he appropriate measure is rather the sudden percentage rise in infection experienced by the subject population. If one were to wait till a significant percentage of overall population were infected, disaster would inevitably ensue.”³⁴⁸

Finding the city Health Department order well-founded, Judge Knipel proceeded to address the city's response and determine if there was a less restrictive, “demonstrably better, safer, or more efficient,” alternative available. He concluded not, noting that petitioners had not even supplied or suggested one.³⁴⁹ Interestingly, *dehors* the record, one commentator suggested quarantine of affected or exposed persons as an acceptable alternative.³⁵⁰ But that was before the days of the coronavirus, when we are finding that quarantine poses its own hazards, such as serious deficits to mental health, including risk of post-traumatic stress disorder and suicide.³⁵¹ Further, quarantine is only an adjuvant in terms of controlling a current epidemic. Should another epidemic roll out in short order, as was seen in the smallpox epidemics, ravaging disaster follows.³⁵²

citizenry by reducing the prevalence and spread of a contagious infectious disease within a particularly vulnerable population.

Id.

346. *C.F. v. N.Y.C. Dep't of Health & Mental Hygiene*, No. 508356-19, 2019 N.Y. Misc. LEXIS 1914 at *2–3 (Sup. Ct. Apr. 18, 2019).

347. *C.F.*, 2019 N.Y. Mis. LEXIS 1914, at *4 n.3.

348. *Id.* (emphasis added).

349. *Id.* at *4.

350. Cantor, *supra* note 70, at 102.

351. Barbara Pfeffer Billauer, *Mental Health and the Aged in the Era of COVID-19*, 2 ARIZ. ST. L.J. ONLINE 108, 116 (2020).

352. *See generally* WILLRICH, *supra* note 12.

Judge Knipel also rejected objections of informed consent, noting a fireman does not ask consent to put out a fire in a burning building, and that “religious objections,” would apply only to pre-school certifications of vaccination.³⁵³ Finding that the personal opinions of the affiants are of no value, he noted they are “unsupported by an affidavit of a religious official . . . or other doctrinal documentation.”³⁵⁴ The judge further addressed “scientific objections” raised by the petitioners, which included three typical anti-vax tropes: vaccine danger, ineffectiveness, and that it causes the disease,³⁵⁵ and swiftly rejected these as speculation.³⁵⁶

While the dicta clearly and adamantly rejected these “scientific” claims, the anti-vax community continues to spout them—attempting to secure more converts to their cause.³⁵⁷ These efforts go unobstructed.³⁵⁸ Sadly, next time an epidemic happens upon us, the anti-vax message likely will have infected a host of new susceptibles, and we can expect to find ourselves back in court again as local—and state—emergency orders are again contested.³⁵⁹

C. *Balancing Rights and Interests*

Another argument brushed off by the Brooklyn court pertains to petitioner’s claim to “balance the rights to individual autonomy, informed consent and free exercise of religion.”³⁶⁰ Certainly, all legislative measures are subject to balancing the rights and needs of the parties,³⁶¹ but the important variable to be calibrated is balanced against what?

The *Gedolim Letters* brochure, referenced above, sheds light on common misconceptions of parental rights.³⁶² Indeed, it goes beyond claims of parental rights to make medical or health-related decisions for their children,³⁶³ which can be abrogated under certain circumstances.³⁶⁴ Rather, the brochure asserts

353. Shortly after the decision, New York amended its vaccine rules, eliminating the religious exemption even before entering school. See *W.D. v. Cnty*, 139 N.Y.S.3d 273 (N.Y. Sup. Ct. Apr. 5, 2019).

354. *C.F.*, 2019 N.Y. Misc. LEXIS 1914, at *5.

355. *Id.* at *4–5.

356. *Id.* at *5.

357. Taylor Telford, *Anti-Vaxxers are Spreading Conspiracy Theories on Facebook, and the Company is Struggling to Stop Them*, WASH. POST (Feb. 13, 2019), <https://www.washingtonpost.com/business/2019/02/13/anti-vaxxers-are-spreading-conspiracy-theories-facebook-company-is-struggling-stop-them/>.

358. *Id.*

359. See *Doe v. Mills*, 142 S. Ct. 17 (2021).

360. *C.F.*, 2019 N.Y. Misc. LEXIS 1914, at *1.

361. *La Rocca v. Lane*, 338 N.E.2d 606, 613 (N.Y. 1975) (citing *People v. Woodruff*, 272 N.Y.S.2d 786, 789 (App. Div. 1966), *aff’d*, 263 N.E.2d 159 (N.Y. 1968)).

362. GEDOLIM LETTERS, *supra* note 268, at 2–3, 14, 19, 23.

363. See *Ass’n of Jewish Camp Operators v. Cuomo*, 470 F. Supp. 3d 197, 206 (N.D.N.Y. 2020) (raising the claim of parental rights in the context of a pandemic).

364. *Id.* at 213–14.

that “[r]eligious freedom is an *absolute* constitutional right—and to remove it we would need absolute scientific proof that there is indeed a compelling health threat that we must avert. That proof has never been given.”³⁶⁵ Such misstatements of both legal and scientific fact fan the flames of resistance.³⁶⁶ This false information of an absolute right of parents to determine health care choices for their children energizes anti-vax parents to oppose legislation removing nonmedical exemptions or otherwise require vaccination.³⁶⁷

The balancing of parental rights may turn on the characterization of the threat as perceived under the cultural mores of the country involved.³⁶⁸ In Israel, other countervailing rights are considered³⁶⁹ including autonomy, dignity, and education.³⁷⁰ In the United States, such individual rights, when exercise thereof threatens the public health, had been relegated as inferior, at least under *Jacobson*.³⁷¹ These cultural differences may be of little interest when an

365. GEDOLIM LETTERS, *supra* note 268, at 10; *see Jacobson*, 197 U.S. at 26 (ruling that “the liberty secured by the Constitution of the United States to every person within its jurisdiction does not import an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint”); *see also* Barbara Pfeffer Billauer, *More on Measles: De-Mystifying the Myths: #1 Autism, Thimerosal and the Vaccine*, TIMES ISRAEL (Dec. 19, 2019, 4:45 PM), <https://blogs.timesofisrael.com/more-on-measles-de-mystifying-the-myths-1-autism-thimerosal-and-the-vaccine/>.

366. Billauer, *supra* note 351; *see also* ALL YOUR VACCINE QUESTIONS ANSWERED, *supra* note 201.

367. Susan Haigh, *Connecticut Panel Advances Bill to Eliminate Religious Exemption for Vaccines*, NBC 10 WJAR (Feb. 25, 2020), <https://turnto10.com/politics/connecticut-panel-advances-bill-to-eliminate-religious-exemption-for-vaccines>.

368. Kamin-Friedman, *supra* note 279, at 10 (noting that “[s]anctions applied against those who refuse vaccination (depriving the right to education) in the US resulted in increased immunization rates”).

369. Kamin-Friedman, *supra* note 279, at 5. Kamin-Friedman further notes that:

[t]he constitutional right to dignity includes . . . , the right to autonomy. One aspect of the right to autonomy is parental autonomy, which refers to parents’ right and obligation to take care of their minor children. . . . The right to autonomy in the medical context is implemented through the requirement of ‘informed consent’ prior to medical interventions.

Kamin-Friedman, *supra* note 279.

370. Kamin-Friedman, *supra* note 279, at 3–4 (noting that, “[t]he government . . . possesses the sole authority to empower, regulate, or carry out activities designed for the protection or promotion of the general health, safety, and welfare of the population”); *see also* HCJ 7245/10 Adalla Legal Ctr. v. The Israeli Ministry of Social Affairs & Social Servs., 49–50 (2013) (Isr.); *see also* Limor Malul, *The Role of the Israeli Courts in Formulating the Physician–Patient Relationship*, 33 INT’L J. OF MED. & L., 61 (2014).

371. *See* *Prince v. Massachusetts*, 321 U.S. 158, 166–67 (1944); *In re Abbott*, 954 F.3d 772, 778, 785–86 (5th Cir. 2020) (“The right to practice religion freely does not include liberty to expose the community . . . to communicable disease.”) (quoting *Prince*, 321 U.S. 166–67); *see also* *Crowley v. Christensen*, 137 U.S. 86, 89–90 (1890) (“Even liberty itself, the greatest of all rights, is not unrestricted license to act according to one’s own will. It is only freedom from restraint under conditions essential to the equal enjoyment of the same right by others.”); *Jacobson v. Massachusetts*, 197 U.S. 11, 26 (1905) (“The possession and enjoyment of all rights are subject to

epidemic is self-contained. However, when infective agents result in pandemic, international cultural clashes must be addressed.

V. A LEGAL RESPONSE: CLASH OF IDEALS AND THE ROLE OF THE FIRST AMENDMENT

A. *Mandatory Vaccination Laws in the United States*

Mandatory vaccination is not a novel concept in the United States. Every state requires that all pre-school children must be vaccinated against a prescribed list of childhood diseases prior to attendance.³⁷² There are, however, certain exemptions, which vary in extent and proof of qualification on a state-by-state basis. But these exemptions are generally easy to obtain and the enforcement of documentation is lax.³⁷³

All states allow exemptions for medical reasons. Fifteen states allow philosophical exemptions.³⁷⁴ Until very recently forty-eight states legislatively provided for religious exemptions from mandated vaccinations.³⁷⁵ Now, the number is down to 44.³⁷⁶

In 2015, following the measles outbreak in Disneyland, the California Legislature enacted Senate Bill 277.³⁷⁷ This “law gave California parents a choice: they could vaccinate a child against ten diseases, obtain a medical exemption stating that the child had a medical condition that prevents vaccinating, or keep the child at home and provide education through

such reasonable conditions as may be deemed by the governing authority of the country essential to the safety, health, peace, good order, and morals of the community.”).

372. Calandrillo, *supra* note 40, at 356.

373. Calandrillo, *supra* note 40, at 356–57.

374. *States with Religious and Philosophical Exemptions from School Immunization Requirements*, NAT’L CONF. OF STATE LEGIS. (Apr. 30, 2021), <https://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx> (philosophical exemptions include objections because of “personal, moral or other beliefs . . . [t]he existing statute in Minnesota and Louisiana does not explicitly recognize religion as a reason for claiming an exemption, however, as a practical matter, the non-medical exemption may encompass religious beliefs.”)

375. Calandrillo, *supra* note 40, at 360; *see also* Aleksandra Sandstrom, *Amid Measles Outbreak, New York Closes Religious Exemption for Vaccinations – but Most States Retain It*, PEW RSCH. CTR. (June 28, 2019), <https://www.pewresearch.org/fact-tank/2019/06/28/nearly-all-states-allow-religious-exemptions-for-vaccinations/>; *see also* Hodge & Gostin, *supra* note 58, at 874 n.233 (noting that two states, West Virginia and Mississippi, lacked religious exemptions in their compulsory vaccination statutes as of the 1999–2000 school year).

376. *See* Sandstrom, *supra* note 375 (California, New York, Maine, Mississippi, and West Virginia bring the total to five).

377. Emily Oster & Geoffrey Kocks, *After a Debacle, How California Became a Role Model on Measles*, N.Y. TIMES (Jan. 15, 2018), <https://www.nytimes.com/2018/01/16/upshot/measles-vaccination-california-students.html>; *see also* Alex Berezow, *California’s New Vaccine Laws Should Be A Model For All States*, AM. COUNCIL ON SCI. & HEALTH (Sept. 16, 2019), <https://www.acsh.org/news/2019/09/16/californias-new-vaccine-laws-should-be-model-all-states-14286>.

homeschooling or an independent study.”³⁷⁸ At the time, three other states had eliminated non-medical exemptions—Maine, West Virginia,³⁷⁹ and Mississippi.³⁸⁰ The California legislation, like those of the three other states that had already enacted similar laws, withstood judicial scrutiny on constitutional issues.³⁸¹

In June of 2019, shortly before the epidemics in both Rockland County and New York City subsided (and after the Health Department orders were decided), New York State became the fifth state to eliminate all non-medical exemptions to pre-school vaccination.³⁸² On June 13th, Governor Andrew Cuomo signed legislation (S.2994A/A.2371).³⁸³ Unvaccinated students now have fourteen days from the start of school to prove they received the first dose of each immunization.³⁸⁴ Recently, New Jersey attempted to enact similar legislation,³⁸⁵

378. Dorit Reiss, *California Court of Appeal Rejects Challenge to Vaccine Law*, PETRIE-FLOM CTR. (July 30, 2018), <https://blog.petrieflom.law.harvard.edu/2018/07/30/california-court-of-appeal-rejects-challenge-to-vaccine-law/>.

379. W. VA. CODE § 16-3-4 (2015); *F.F. v. New York*, 108 N.Y.S.3d 761, 771 (Sup. Ct. 2019); *see Workman v. Mingo Cnty. Bd. of Educ.*, 419 Fed. Appx. 348, 354 (4th Cir. 2011) (concluding “that the West Virginia statute requiring vaccinations as a condition of admission to school does not unconstitutionally infringe [the plaintiff’s] right to free exercise.”).

380. *Gingold*, *supra* note 27 (noting “[o]ther states are also considering bills to eliminate non-medical exemptions to school vaccination requirements, including Arizona (HB 2162), Iowa (HF 206), [and] Minnesota (SF 1520).”); *see also Susan Haigh*, *supra* note 367 (noting Connecticut is also considering such legislation).

381. Reiss & Diamond, *infra* note 394.

382. To be sure, New York’s legislative efforts have been criticized as too slow. In comparison to California’s swift legislative response, which similarly eliminated non-medical exemptions, New York’s bill languished for months—legislators introduced it in January 2019, but it did not pass until June. After California’s legislature eliminated religious and “personal belief” exemptions the vaccination rate rose from ninety percent to ninety-six percent. “But so did the incidence of doctors selling bogus medical exemptions.” *See Paumgarten*, *supra* note 22.

383. Alexa Lardieri, *Gov. Cuomo Signs Bill Removing Religious Vaccination Exemptions*, US NEWS (June 14, 2019), <https://www.usnews.com/news/politics/articles/2019-06-14/new-york-gov-andrew-cuomo-signs-bill-removing-religious-vaccination-exemptions>.

384. S.2994-A, 2019-2020 Reg. Sess. (N.Y. 2019); N.Y. PUB. HEALTH LAW § 2164 (McKinney 2019).

385. *New Jersey Assembly Passes Bill to Bar Religious Exemption for Vaccinations*, TIMES ISRAEL (Dec. 17, 2019, 3:21 AM), <https://www.timesofisrael.com/nj-assembly-passes-bill-to-bar-religious-exemption-for-vaccinations/> (noting the legislation stalled in the Senate amid vocal opposition from the public, chanting, “We do not consent”).

but failed,³⁸⁶ at least in part due to organized anti-vax efforts,³⁸⁷ generating the cheers of throngs on its failure, many of whom were anti-vax interlopers bussed in from Brooklyn.³⁸⁸ Colorado³⁸⁹ and Oregon³⁹⁰ suffered similar experiences,

386. Tracey Tully et al., *How Anti-Vaccine Activists Doomed a Bill in New Jersey*, N.Y. TIMES (Jan. 16, 2020), <https://www.nytimes.com/2020/01/16/nyregion/nj-vaccinations-religious-exemption.html>; see also, *Vote on NJ Bill to Bar Certain Vaccine Exemptions Stalled*, HAMODIA (Jan. 13, 2020, 8:04 PM), <https://hamodia.com/2020/01/13/vote-nj-bill-bar-certain-vaccine-exemptions-stalled/>; Meg Oliver, *New Jersey Vaccine Bill to End Religious Exemptions Fails, but Debate Rages On*, CBS NEWS (Jan. 14, 2020, 6:43 PM), <https://www.cbsnews.com/news/new-jersey-vaccine-bill-to-end-religious-exemptions-fails-but-debate-rages-on/>; Ashley Balcerzak & Lindy Washburn, *Bill to End Religious Exemptions to Vaccines Passes Assembly, Stalls in Senate*, NORTHJERSEY.COM (Jan. 10, 2020, 1:30 PM), <https://www.northjersey.com/story/news/new-jersey/2019/12/16/assembly-passes-bill-limit-vaccine-religious-exemptions/2663862001>.

387. New Jersey 101.5, *New Jersey Vaccines Law Defeated (for now) – Parents Cheer*, YOUTUBE (Jan. 13, 2020), <https://www.youtube.com/watch?v=yVIPoTTjnyw&t=49s> (“Opponents to a bill that would have ended religious exemptions to mandatory vaccinations for New Jersey public school students cheer after state Senate President Steve Sweeney announces [the exemption will remain in place]”); Mordechai Sones, *New Jersey Vaccines Law Defeated (for now) as Parents Cheer*, ISR. NAT’L NEWS (Jan. 14, 2020, 8:01 PM), <https://www.israelnationalnews.com/News/News.aspx/274550> (“Months of organizing a national movement culminated in protesters flooding the chamber and cheering when the Senate session ended without a vote . . . Orthodox Jewish voices were prominent at New Jersey’s protest, with bill opponents arriving by bus from Brooklyn, Monsey, Lakewood, Pennsylvania, and Maryland.”); see also GEDOLIM LETTERS, *supra* note 268, at 3 (“[Gedolim] rule that vaccination is a parental choice, and that parents may not be coerced into vaccination.”). The authors included a letter sent to the legislator making their views on vaccination known. Email from Gedolim Letters Staff to Barbara Pfeffer-Billauer, Research Professor, Inst. of World Politics (Feb. 5, 2020) (on file with author). There is no indication who prepared the Gedolim Letters, who produced it, or who funded it. The author’s attempts by email to ascertain this information were rebuffed, with the signatory to her emails listed only as “Gedolim Letters Staff” and who expressly declined to identify himself/themselves fearing retaliation.

388. Sones, *supra* note 387 (noting that on site was the ubiquitous anti-vaxer Del Bigtree of ICAN, who travelled to Trenton, New Jersey, to cheer the failure to pass the legislation); Vaccine Wars, *Del Bigtree up close in Trenton Jan. 13 2020*, YOUTUBE (Jan. 13, 2020), https://www.youtube.com/watch?time_continue=1017&v=QFST07QG14E&feature=emb_logo.

389. Jennifer Brown, *Colorado Lawmakers Failed to Pass a Bill to Improve Immunization Rates in 2019. Here’s What’s New this Year*, COLORADO SUN (Feb 20, 2020, 3:00 AM), <https://coloradosun.com/2020/02/20/immunization-rates-legislation/>.

390. See Dirk VanderHart, *Amid Measles Outbreaks, States Consider Revoking Religious Vaccine Exemptions*, NPR (May 6, 2019, 3:42 PM), <https://www.npr.org/2019/05/06/720673193/amid-measles-outbreaks-states-consider-revoking-religious-vaccine-exemptions> (“2015 [was] the last time Oregon considered stricter vaccine laws. That year, outspoken opposition killed the bill.”); Hillary Borrud & Molly Harbarger, *Oregon Governor Nixes Vaccine Bill as US Measles Count Soars*, OREGONIAN (May 15, 2019, 7:16 AM), <https://www.oregonlive.com/politics/2019/05/oregon-governor-nixes-vaccine-bill-as-us-measles-count-soars.html> (“Oregon has the highest rate of unvaccinated kindergartners in the country, with at least 7.5% of their families claiming an exemption.”); H.B. 3063, 80th Leg. Assemb., Reg. Sess. (Or. 2019); Molly Harbarger, *Hundreds Pack Oregon Hearing to Oppose Bill to End Vaccine Exemptions*, OREGON LIVE (Mar. 5, 2019, 9:44 AM), <https://www.oregonlive.com/education/2019/03/hundreds-pack-oregon-hearing-to-oppose-vaccination-bill.html>.

with Colorado generating the personal appearance of noted anti-vaxxers, including Robert Kennedy Jr.³⁹¹

In the absence of the ability to pass such a statute due to widespread community opposition fueled by false claims that of autism would result, Oregon mandated that parents either watch an educational video or discuss vaccination with their doctor.³⁹² Minnesota, too, provides for education,³⁹³ but its vehicles are championed by a decidedly anti-vax government.³⁹⁴ Maine “pared back a bill that would have eliminated all nonmedical exemptions[,]” revoking philosophical exemptions but retaining religious exemptions.³⁹⁵ But Connecticut has enacted legislation that eviscerates new religious exemptions although grandfathers in ones obtained prior to April 28, 2021.³⁹⁶ On the other hand, “[twenty] states have introduced legislation to expand non-medical

391. Rae Ellen Bichell, *Anti-Vaccine Movement, Racism and COVID-19 Collide in Colorado*, KUNC (June 11, 2020, 9:45 AM), <https://www.kunc.org/politics/2020-06-11/anti-vaccine-movement-racism-and-covid-19-collide-in-colorado>.

392. Rachel Monahan, *Pediatrician Paul Thomas Has 15,000 Patients—and He Tells Them the Measles Vaccine Might Cause Autism*, WILLAMETTE WEEK (Mar. 20, 2019, 5:37 AM), <https://www.wweek.com/news/2019/03/20/pediatrician-paul-thomas-has-15000-patients-and-he-tells-them-the-measles-vaccine-might-cause-autism/>.

393. See *Minnesota Bill Would Counter Dangerous Vaccine Disinformation*, STARTRIBUNE (Feb. 19, 2019, 5:39 PM) [hereinafter *Minnesota Bill*], <https://www.startribune.com/minnesota-bill-would-counter-dangerous-vaccine-disinformation/506067652/> (discussing a proposed Minnesota bill that provides funds for a targeted counter anti-vax campaign); Molly C. Enking, *Minnesota’s Autism Board Installs Anti-Vaxxers*, DAILY BEAST (Jan. 24, 2019, 4:07 PM), <https://www.thedailybeast.com/minnesotas-autism-board-installs-anti-vaxxers>.

394. *Minnesota Bill*, *supra* note 393; see also Dorit Rubinstein Reiss & John Diamond, *Measles and Misrepresentation in Minnesota: Can There Be Liability for Anti-Vaccine Misinformation that Causes Bodily Harm?*, 56 SAN DIEGO L. REV. 531 (2019), <https://digital.sandiego.edu/sdlr/vol56/iss3/3/>; Frances Stevenson, *Minn. Senate Looks at a Bill that Removes Vaccination Exemptions*, FERGUS FALLS J. (Mar. 8, 2019), https://www.fergusfallsjournal.com/news/minn-senate-looks-at-bill-that-removes-vaccinationexemptions/article_02df1b82-2c26-5afd-a42f-04d3f1c9efbe.html.

395. VanderHart, *supra* note 390; see also Jeffrey Schools, *Religious Exemptions Restored in Vaccine Bill Passed by Maine Senate*, NEWS CENTER MAINE (May 2, 2019, 6:54 PM), <https://www.newscentermaine.com/article/news/health/religious-exemptions-restored-in-vaccine-bill-passed-by-maine-senate/97-a93e8d0f-52e8-44b8-a5f0-00946c575dcb>; Stevenson, *supra* note 394. Whether in light of the recent case of *Does v Mills*, eschewing religious exemptions for COVID-19 in Maine, that the state will continue to allow religious exemptions for childhood vaccines remains to be seen.

396. Jenna Carlesso, *Proponents of Bill Ending Connecticut’s Religious Exemption to Vaccines Eye Special Session for Vote*, CT MIRROR (May 28, 2020), <https://ctmirror.org/2020/05/28/proponents-of-bill-ending-connecticuts-religious-exemption-to-vaccines-eye-special-session-for-vote/>. This was enacted on April 28, 2021. See *CDSE Guidance Regarding Public Act 21-6, “An Act Concerning Immunizations”*, STATE OF CONN DEP’T OF EDUC. (May 25, 2021) (“The new law removes this exemption, effective April 28, 2021 the new law removes this exemption, effective April 28, 2021, with limited exceptions as provided below. No new religious exemptions submitted after this date will be considered valid”).

exemptions for vaccines[,] or to require doctors to provide patients with more information on the risks of vaccines.”³⁹⁷

B. *Attacking State Legislation on Constitutional Grounds*

In July 2019, a lawsuit challenged the newly enacted New York legislation.³⁹⁸ This lawsuit, filed by fifty-five families, claimed the law is unconstitutional and violates religious freedom.³⁹⁹ Related actions were brought by Robert Kennedy Jr.’s anti-vax Children’s Health Defense organization.⁴⁰⁰ Similar to the California law, the New York State legislation does not compel vaccination, nor does it ban the non-vaccinated from visiting public spaces, nor does it impose a fine on those choosing not to vaccinate.⁴⁰¹ The law does allow parents to homeschool or move to another state, should their religious beliefs so motivate them.⁴⁰²

While the lawsuits attacking the local orders focused primarily on the reasonableness of the court-ordered behavior, cases attacking the state’s desire to remove non-medical exemptions focus on the constitutional right of freedom of religion,⁴⁰³ with the main issue revolving around balancing freedom of religion with the state’s police power to protect the public’s right to health and safety.⁴⁰⁴ As of now, five jurisdictions have grappled with that issue, all ruling that no constitutional trespass had occurred.⁴⁰⁵

397. Gingold, *supra* note 27. Arizona is working on a bill to make it easier to obtain exemptions. See Ryan Prior, *Arizona Lawmakers Are Pushing Vaccine Exemption Bills*, CNN (Feb. 26, 2019, 7:57 PM), <https://www.cnn.com/2019/02/26/health/arizona-vaccine-exemption-trnd/index.html>.

398. See *F.F. v. New York*, 114 N.Y.S.3d 852 (Sup. Ct. 2019).

399. *Id.* at 858.

400. *Families Sue New York State to Stop to Stop the Repeal of the Religious Exemption to Vaccines*, CHILD’S HEALTH DEFENSE (July 10, 2019), <https://childrenshealthdefense.org/child-health-topics/mandates/families-sue-new-york-state-to-stop-the-repeal-of-the-religious-exemption-to-vaccines>.

401. N.Y. PUB. HEALTH L. § 2164 (McKinney 2019).

402. See Dorit Reiss, *New York’s Strict Vaccine Mandate Goes to Court*, PETRIE-FLOM CTR. (Sept. 6, 2019), <https://blog.petrieflom.law.harvard.edu/2019/09/06/new-yorks-strict-vaccine-mandate-goes-to-court/>.

403. The matter first rose over 125 years ago. “In 1890, the California Supreme Court rejected a constitutional challenge to a ‘vaccination act’ that required schools to exclude any child who had not been vaccinated against small-pox.” *Brown v. Smith*, 235 Cal. Rptr. 3d 218, 220, 224–25 (Ct. App. 2018). “‘Where the issue pertains to medical or surgical treatment, the nature, effect, and result of which are the subjects of common knowledge, such matters are within the rule of judicial knowledge. As for instance, the court will take judicial notice of the nature, purpose, and effects of vaccination.’” *Id.* at 223 (quoting *S. Cal. Edison Co. v. Indus. Accident Co.*, 243 P. 455 (1925)).

404. *Brown*, 235 Cal. Rptr. 3d at 225 (citing *Prince v. Massachusetts*, 321 U.S. 158, 166–67 (1944)).

405. *States with Religious and Philosophical Exemptions from School Immunization*, NAT’L CONF. OF STATE LEGIS. (Apr. 30, 2021), <https://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx>.

In California, general anti-vax tropes about the dangers and efficacy of the vaccine were also raised (and rejected) with the court taking judicial notice of vaccine safety.⁴⁰⁶ These same issues were raised in the case attacking the Brooklyn order, denied on April 18, 2019.⁴⁰⁷ Perhaps for that reason they were not raised in the action challenging the New York state statute.⁴⁰⁸ Other claims were raised in the New York case but given short shrift by the court, which devoted most of its attention to the constitutional questions. These additional issues include the right of parents to make educational decisions pertaining to their children,⁴⁰⁹ a so-called “hybrid” claim,⁴¹⁰ and an inchoate claim of compelled speech.⁴¹¹ The compelled speech claim ostensibly related to an alleged effect of the law forcing home-schooling on parents refusing to vaccinate their children.⁴¹²

1. *The State’s Police Power vs. the Individual’s Freedom of Religion*

The conflict between the free exercise of religion and the state’s police power to protect public health is fully explored in *F.F. v. New York*,⁴¹³ which addressed the constitutionality of New York’s statute.⁴¹⁴ The action charged Justice Denise Hartman with balancing the freedom of religion of individuals against health risks to the community.⁴¹⁵ The court noted that four other states, California,⁴¹⁶

406. *Brown*, 235 Cal. Rptr. 3d at 224–25 (quoting the complaint “dispute[s] the central hypothesis that drives vaccine theory,” which allegedly “has never been proven . . . it”; that “[v]accines kill and maim children”; and that Senate Bill No. 277 “is a totalitarian mandate that expects parents to merrily sacrifice their children for the greater good.”).

407. *C.F. v. New York City Dep’t of Health & Mental Hygiene*, No. 508356/19, 2019 N.Y. Misc. LEXIS 1914, at *4–5 (N.Y. Sup. Ct. 2019) (where the court seemed to summarily reject these claims on the basis of a singular affidavit).

408. N.Y. PUB. HEALTH L. § 2164 (McKinney 2019).

409. *See Catholic Charities of Diocese of Albany v Serio*, 859 N.E.2d 459 (N.Y. 2006); *Wisconsin v. Yoder*, 406 US 205, 232–33 (1972).

410. *F.F. v. New York*, 108 N.Y.S.3d 761, 773 (N.Y. Sup. Ct. 2019).

411. *Id.* at 777.

412. The New York court held the claims were not well-developed. The California court rejected an analogous claim of a right to attend school. *See Brown v. Smith*, 235 Cal. Rptr. 3d 218, 226 (Ct. App. 2018).

413. *F.F.*, 108 N.Y.S.3d at 765. *I see, Suit Challenges Repeal of New York’s Religious Exemption from Vaccination*, RELIGION CLAUSE (July 11, 2019), <http://religionclause.blogspot.com/2019/07/suit-challenges-repeal-of-new-yorks.html>.

414. Rob Boston, *New York Health Department Law Challenged in New York*, CHURCH & STATE MAG., AU BULL., Sept. 2019.

415. *F.F.*, 108 N.Y.S.3d at 771, 776.

416. *See, e.g., Whitlow v. California*, 203 F. Supp. 3d 1079, 1085–89, 1092 (S.D. Cal. 2016); *Love v. State Dep’t of Educ.*, 240 Cal. Rptr. 3d 861, 873 (Ct. App. 2018) (dismissing constitutional challenges); *Brown*, 235 Cal. Rptr. at 224–27 (rejecting claims of violation of four provisions of the California Constitution: the free exercise of religion, the right to a public education, equal protection, and substantive due process).

Maine, West Virginia,⁴¹⁷ and Mississippi—which similarly removed non-medical exemptions—also faced similar constitutional challenges, and all withstood scrutiny,⁴¹⁸ as the reviewing courts rejected a Free Exercise Clause challenge.⁴¹⁹

In rendering her seventeen-page decision, Justice Hartman considered both the applicability of the strict scrutiny doctrine—finding it inapplicable⁴²⁰—as well as the legitimacy of the plaintiff’s religious claims.⁴²¹ Ultimately, she ruled that protecting the public health trumps individual religious freedoms, and that health risks to individuals outweighed the plaintiffs’ First Amendment claims:⁴²²

[T]he court is hard-pressed to conclude that plaintiffs have shown that the balance of equities tips decidedly in their favor. Just as the court cannot overstate the potential harm to plaintiffs . . . the court cannot overstate the potential harm to unvaccinated individuals if the injunction is granted.⁴²³

In disallowing the parents’ claim, the New York court first considered the importance of freedom of religion in light of the state’s police function to protect the public safety.⁴²⁴ The court acknowledged that “freedom of religious expression is a founding tenet of this nation,” supported by longstanding precedent.⁴²⁵ However, the court also ruled that this liberty “does not include the right to endanger the health of the community, one’s children, or the children of others,”⁴²⁶ relying on several cases, including *Jacobson v. Massachusetts*.⁴²⁷

417. See *Workman v. Mingo Cnty. Bd. of Edu.*, 419 Fed. App’x 348, 354 (4th Cir. 2011); *F.F.*, 108 N.Y.S.3d at 771.

418. *Id.*

419. *McCarthy v. Boozman*, 212 F. Supp. 2d 945, 948 (W.D. Ark. 2002) (“The constitutional right to freely practice one’s religion does not provide an exemption for parents seeking to avoid compulsory immunization for their school-aged children”).

420. As the ultimate purpose of the legislation is the protection of public health, courts have routinely concluded that compulsory vaccination laws without religious exemptions are constitutional, regardless of whether rational basis or strict scrutiny applies. *F.F.*, 108 N.Y.S.3d at 774–75.

421. *Id.* at 775.

422. *Id.* at 777.

423. *Id.* at 770; see also Dan M. Clark, *Albany Judge Rejects Injunction Against NY Vaccines Law Curbing Religious Exemptions*, N.Y.L.J. (Aug. 26, 2019, 2:43 PM), <https://www.law.com/newyorklawjournal/2019/08/26/albany-judge-rejects-injunction-against-ny-vaccines-law-curbing-religious-exemptions/>.

424. *F.F.*, 114 N.Y.S.3d 852, 864 (Sup. Ct. 2019) (quoting the legislative record).

425. *Id.* at 863–64.

426. *Id.* at 864. The court noted that “the Supreme Court upheld Massachusetts’ compulsory vaccination laws as a valid exercise of the states’ police power, rejecting the plaintiff’s claim that a law requiring children to be vaccinated as a condition to attending public or private schools violated the guarantee of individual liberty under the United States Constitution.” *Id.* at 861.

427. *Id.* at 860–61; *Jacobson v. Massachusetts*, 197 U.S. 11, 28–29, 38 (1905) (identifying the ongoing smallpox epidemic as a danger to the general public, allowing the court to hold that individual rights and liberty were subordinate to the state’s obligation to eradicate the disease).

Therein, the U.S. Supreme Court held that mandatory vaccination laws are within the state's police power and do not violate guarantees of individual liberty, and that individual freedom is truncated when the common welfare is at stake.⁴²⁸ In other words, an individual's liberty is subordinated to the police power of the state, as "the state may be justified in restricting individual liberty 'under the pressure of great dangers' to 'the safety of the general public.'"⁴²⁹

Citing *Zucht v. King*, where the Supreme Court addressed the mandatory vaccination requirement prior to school admittance in upholding a Texas law,⁴³⁰ the New York court further noted that government officials are endowed with broad discretion in matters affecting public health.⁴³¹ A similar holding emerged in *Viemeister v. White*.⁴³² These decisions articulated the standard that the common welfare must subordinate the religious freedom of the individual, and is subject to the police power of the state.⁴³³ That court's decision was clear—the state's police power trumps First Amendment freedom of religion rights. The maxim was well-stated by an Arkansas court:

It has long been settled that individual rights must be subordinated to the compelling state interest of protecting society against the spread of disease The constitutional right to freely practice one's religion does not provide an exemption for parents seeking to avoid compulsory immunization for their school-aged children.⁴³⁴

In explaining her ruling, New York's Judge Hartman cited to *Brown v. Smith*, a California case, which noted that "compulsory immunization has long been recognized as the gold standard for preventing the spread of contagious diseases."⁴³⁵ She then noted the legislative history, which references studies that found that "when belief exemptions to vaccination guidelines are permitted, vaccination rates decrease' and community immunity wanes if large numbers of children do not receive required vaccinations."⁴³⁶ Finally, Judge Hartman ruled that "protecting public health, and children's health in particular, through attainment of threshold inoculation levels for community immunity from

428. *Jacobson*, 197 U.S. at 37–38; see also Zechariah Chafee, *Freedom of Speech in War Time*, 32 HARV. L. REV. 932, 957 (1919) (noting memorably that the freedom to swing one's arms "ends just where the other man's nose begins").

429. Wendy K. Mariner et al., *Jacobson v Massachusetts: It's Not Your Great-Great-Grandfather's Public Health Law*, 95 AM. J. PUB. HEALTH 581, 583, (2005).

430. *Zucht v. King*, 260 U.S. 174, 175–76 (1922).

431. *F.F.*, 108 N.Y.S.3d at 776; see also *New York v. Van de Carr*, 199 U.S. 552, 562–63 (1905) (stating the municipality may vest in its official's broad discretion in matters affecting the application and enforcement of a health law).

432. *Viemeister v. White*, 72 N.E. 97, 97 (N.Y. 1904).

433. *F.F.*, 108 N.Y.S.3d at 774.

434. *McCarthy v. Boozman*, 212 F. Supp. 2d 945, 948 (W.D. Ark. 2002).

435. *Brown v. Smith*, 235 Cal. Rptr. 3d 218, 226 (Ct. App. Cal 2018); see *F.F.*, 108 N.Y.S.3d at 772 (citing *Brown*, 235 Cal. Rptr. 3d at 226).

436. *Brown*, 235 Cal. Rptr. 3d at 221; see *F.F.*, 108 N.Y.S.3d at 772 (citing *Brown*, 235 Cal. Rptr. 3d at 221); see also Reiss & Diamond, *supra* note 394.

communicable diseases is unquestionably a compelling state interest,⁴³⁷ and can be regulated under the police power vested in the state under the state's power to control, regulate, or prohibit non-criminal behavior which furthers the public health.⁴³⁸

The uncontrollable nature of epidemic diseases moved the Supreme Court to uphold such extreme measures on the basis of the defense of the common good. The communitarian philosophy . . . was carried into later judicial holdings, further consolidating states' exercise of public health police power. . . .⁴³⁹

The legal principles underlying the state public health police power are basic: *sic utere tuo, ut alienum non laedas*—"use that which is yours so as not to injure others"—and *salus populi supreme lex*—"public well-being is the supreme law".⁴⁴⁰ The former doctrine describes "the power of the state to prevent or prohibit 'the use of private property or the commission of private acts in a manner harmful to others.'"⁴⁴¹ "The principle of *salus publica*, on the other hand, recognizes a more extensive police power to 'prevent or avoid public harm even if the action has not harmed others.'"⁴⁴² A state action "allowable under this aegis was, generally speaking, under the discretion of the state legislature."⁴⁴³

Judge Hartman relied on a litany of cases upholding the superiority of protecting public health, even at the expense of trespassing on First Amendment rights and even while recognizing the inherent dangers of vaccination. Thus, relying on a California case, the New York court ruled that, "[w]hile vaccination may not be the best and safest preventive possible, experience and observation . . . dating from the year 1796 . . . have proved it to be the best method known to medical science to lessen the liability to infection with the disease."⁴⁴⁴ Similarly, in *Love v. State Department of Education*,⁴⁴⁵ the California Court of Appeals echoed the *Abeel*⁴⁴⁶ court's views, noting that vaccination was the best method

437. *F.F.*, 108 N.Y.S.3d at 776.

438. *Id.*; *Brown*, 235 Cal. Rptr. 3d at 224; see also Jorge E. Galva et al., *Public Health Strategy and the Police Powers of the State*, 120 PUB. HEALTH REPS. (2005 SUPP. 1) 20, 20–21 (2005) (citing *Smith v. Turner*, 48 U.S. 283, 340–41 (1849)) ("State police power was validated for the first time a few years after the end of the Revolutionary War, when Philadelphia was isolated to control the threat of yellow fever.").

439. Galva et al., *supra* note 438, at 21.

440. Lawrence O. Gostin et al., *The Law and the Public's Health: A Study of Infectious Disease Law in the United States*, 99 COLUM. L. REV. 59, 103 (1999).

441. Galva et al., *supra* note 438, at 21; see also Glenn H. Reynolds & David B. Kopel, *The Evolving Police Power: Some Observations for a New Century*, 27 HASTINGS CONST. L.Q. 511, 511 (2000).

442. Galva et al., *supra* note 438, at 21.

443. *Id.* (citing *Berman v. Parker*, 348 U.S. 26, 32 (1954)).

444. *Abeel*, 24 P. at 384.

445. *Love v. State Dep't of Educ.*, 240 Cal. Rptr. 3d 861 (Ct. App. 2018).

446. *Abeel*, 24 P. at 384.

“to lessen the liability to infection with the disease.”⁴⁴⁷ Going further, the New York *F.F.* court cited *Brown v. Smith*,⁴⁴⁸ which rejected the parents’ claim that because vaccines are unavoidably unsafe, they could not be regulated.⁴⁴⁹

2. *The Limits of the Police Power*

To be sure, in recent years curbs have been placed on the exercise of this power, even in the face of an epidemic.⁴⁵⁰ However, as far as relevant here, those limits require only the least restrictive use of power.⁴⁵¹ Nevertheless, other questions surface regarding its implementation, the most pressing being under what conditions may courts protect this police power: *i.e.*, must an emergency be present? The answer is a resounding no.⁴⁵² Courts have routinely held that states need not wait for vaccination rates to fall below the community immunity threshold or for outbreaks to occur before mandatory inoculations are required for children to attend school.⁴⁵³ In order to maintain community immunity and prevent future outbreaks, courts have upheld proactive, compulsory vaccination requirements for school-aged children, even where there was no recent outbreak.⁴⁵⁴ Numerous courts have ruled that even where an emergency or imminent situation is not present, individuals cannot use the religious exemption to trump the state’s interest in protecting public health by requiring vaccination.⁴⁵⁵

447. *Love*, 240 Cal. Rptr. 3d at 864.

448. *Brown v. Smith*, 235 Cal. Rptr. 3d 218, 224 (Ct. App. 2018).

449. Reiss, & Diamond *supra* note 394.

450. See Larry Gostin, *The Future of Communicable Disease Control: Toward a New Concept in Public Health Law*, 64 MILBANK Q. (SUPP. 1) 79, 86–87, 89–90, 95–96 (1986); see also Lawrence O. Gostin, *The Future of Public Health Law*, 12 AM. J. L. & MED. 461, 462–63, 465–66 (1986); Lawrence O. Gostin, *Public Health Law in a New Century: Part II: Public Health Powers and Limits*, 283 J. AM. MED. ASS’N 2979, 2981–82 (2000).

451. Galva et al., *supra* note 438, at 22. The authors note that:

[t]he [Warren] Court curtailed police power by establishing that: (1) the exercise of police power could be limited by express or implied rights; (2) the rule of reason supporting public health actions would be replaced by strict analysis; and (3) the states should show a compelling interest to allow exercise of police power limiting an individual right,

id., none of these considerations being applicable here.

452. *But see Jacobson v. Massachusetts*, 197 U.S. 11, 27–28 (1905) (finding police powers apply only to epidemics “in process” as opposed to those vaccination measures mandated as a prophylactic measure to prevent an future epidemic from occurring).

453. See, e.g., *Zucht v. King*, 260 U.S. 174, 176 (1922).

454. See *id.*

455. See, e.g., *Workman v. Mingo Cnty. Bd. of Educ.*, 419 Fed. App’x 348, 353–54, 356 (4th Cir. 2011) (noting the Supreme Court has consistently recognized that a state may constitutionally require school children to be immunized, even when no recognized outbreak was in progress); *Brown v. Smith*, 235 Cal. Rptr. 3d 218, 224–25 (Ct. App. 2018) (dismissing plaintiffs’ challenge to California law that eliminated the previously existing “personal beliefs” exemption from mandatory immunization); *Whitlow v. California Dep’t of Educ.*, 203 F. Supp. 3d 1079, 1083 (S.D. Cal. 2016) (citing *Jacobson*, 197 U.S. at 27) (upholding the constitutionality of SB 277 noting that,

The case of *Davis v. State* is noteworthy.⁴⁵⁶ The opinion begins by reminding us that the vaccination program need not be triggered by the existence of an epidemic,⁴⁵⁷ although the presence of an epidemic will, indeed, eviscerate exemptions.⁴⁵⁸ Furthermore, courts have upheld decisions to implement vaccination requirements based on historical experience and without the need for legislative fact-finding hearings.⁴⁵⁹

3. *Establishing a Freedom of Religion Claim*

While Justice Hartman acknowledged that the cases validating the superiority of the police power did not expressly address claims that compulsory vaccination violated the Free Exercise Clause,⁴⁶⁰ she cited to *Phillips v. City of New York*⁴⁶¹ and *Prince v. Massachusetts*,⁴⁶² and noted that “persuasive” dicta of the Second Circuit stated that “mandatory vaccination as a condition for admission to school does not violate the Free Exercise Clause.”⁴⁶³ Again, these courts also ruled that “[t]he right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death.”⁴⁶⁴ The New York court also held that strict scrutiny is not the right approach to evaluate constitutionally-based claims for religious exemptions where the language is content-neutral.⁴⁶⁵

“[f]or more than 100 years, the United States Supreme Court has upheld the right of the States to enact and enforce laws requiring citizens to be vaccinated”).

456. *Davis v. State*, 451 A.2d 107 (Md. 1982).

457. *Id.* at 111 (“[T]he program need not be triggered by the existence of an epidemic . . . Nor need the state provide a religious exemption from its immunization program.”) (citing *Mountain Lakes Bd. of Educ. v. Maas*, 152 A.2d 394, 405 (N.J. Sup. Ct. App. Div. 1959), *aff’d*, 158 A.2d 330 (N.J. 1960); *Prince v. Massachusetts*, 321 U.S. 158, 166–67 (1944)).

458. *Davis*, 451 A.2d at 112 (citing *United States v. Ballard* 322 U.S. 78, 87 (1944)); *see Doe v. Mills*, 142 S. Ct. 17 (2021).

459. *F.F. v. New York*, 108 N.Y.S.3d 761, 776 (N.Y. Sup. Ct. 2019) (citing *in re Viemeister v. White*, 72 N.E. 97, 99 (N.Y. 1904); *Noyes v. Erie & Wyoming Farmers Co-op. Corp.*, 22 N.E.2d 334, 335–36 (N.Y. 1939)) (permitting lawmakers to rely on CDC reports and publications from medical associations to assess risks posed by vaccine-preventable diseases and the effectiveness and safety of vaccines).

460. *F.F.*, 108 N.Y.S.3d at 771; *see also* Claire Mullally, *Free Exercise Clause Overview*, FREEDOM F. INST. (Sept. 16, 2011), <https://www.freedomforuminstitute.org/first-amendment-center/topics/freedom-of-religion/free-exercise-clause-overview/> (“Congress shall make no law . . . prohibiting the free exercise (of religion)’ is called the free-exercise clause of the First Amendment.”).

461. *Phillips v. City of New York*, 775 F.3d 538, 543 (2d Cir. 2015) (noting preventing communicable diseases is a compelling interest).

462. *Prince v. Massachusetts*, 321 U.S. 158, 166–67 (1944) (“The right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death.”).

463. *F.F.*, 108 N.Y.S.3d at 771 (quoting *Phillips*, 775 F.3d at 543).

464. *Id.* (citing *Prince*, 321 U.S. at 166–67).

465. *Id.* at 772 (quoting *Catholic Charities of Diocese of Albany v. Serio*, 859 N.E.2d 459, 464, 466–67, (N.Y. 2006)) (“A ‘neutral’ law, the Supreme Court has explained, is one that does not

4. *Sincerity or Subterfuge*

Exemptions sought on religious grounds highlight their improper use, when employed not to actualize a religious objection, but as antipathy to prevailing science. This can be seen by comparing the surge in religious exemptions and decline in those professing religion.⁴⁶⁶ Thus, in 2010–2011, the number of children with religious exemptions from school vaccine requirements was 14,059.⁴⁶⁷ In the 2017–18 school year, more than 26,000 students had religious exemptions—compared to only 4,571 who had medical exemptions.⁴⁶⁸ Interestingly, religious adherence declined during those intervening years,⁴⁶⁹ as atheism and agnosticism became more popular. The number of “Americans who are religiously unaffiliated—describing themselves as atheist, agnostic or ‘nothing in particular’—jumped more than six points, from 16.1% to 22.8%” between 2007 and 2014.⁴⁷⁰ Thus, the increase in religious exemptions for vaccination is not due to a vast constituency who “suddenly found religion.”⁴⁷¹ Rather, this roughly fifty-fold increase in “religiosity” manifested by the surge in religious exemptions—although not tracked by sect affiliation—indicates the practice of hijacking the exemption for personal use, and provided the perfect breeding ground for the 2018–2019 national epidemic.⁴⁷²

In this regard, the *F.F.* court did not seem impressed by the integrity or sincerity⁴⁷³ of many of the claims⁴⁷⁴ or claimants.⁴⁷⁵ This requirement—of

‘target [] religious beliefs as such’ or have as its ‘object . . . to infringe upon or restrict practices because of their religious motivation.’”).

466. Compare Gingold, *supra* note 27, at n.44, and Andrews, *supra* note 224, with *America’s Changing Religious Landscape*, PEW RSCH. CTR. (May 12, 2015) [hereinafter *Changing Religious Landscape*], <https://www.pewforum.org/2015/05/12/americas-changing-religious-landscape/>.

467. Gingold, *supra* note 27, at n.44.

468. Gingold, *supra* note 27, at n.44; Andrews, *supra* note 224.

469. *Changing Religious Landscape*, *supra* note 466.

470. *Changing Religious Landscape*, *supra* note 466.

471. See *Changing Religious Landscape*, *supra* note 466.

472. Compare Gingold, *supra* note 27, at n. 44, and Andrews, *supra* note 224, with *Changing Religious Landscape*, *supra* note 466; see Devin W. Quackenbush, *Religion’s Hepatitis B Shot: The Arkansas General Assembly Established an Overly Broad Religious Exemption to Mandatory Immunizations—McCarty v. Ozark School District*, 42 CREIGHTON L. REV. 777, 811–12 (2009).

473. *F.F. v. New York*, 108 N.Y.S.3d 761, 766 (N.Y. Sup. Ct. 2019) (finding the standard for establishing a religious exemption in New York are “[g]enuine and sincere religious beliefs”); see also *Garcia v. N.Y.C. Dep’t of Health & Mental Hygiene*, 106 N.E.3d 1187, 1191, 1197 (N.Y. 2018) (holding that the N.Y.C. Department of Health has been vested with the authority to enact vaccine regulation to protect the public health since 1866).

474. *F.F.*, 108 N.Y.S.3d at 767; see also *McCarthy v. Boozman*, 212 F. Supp. 2d 945, 947 (W.D. Ark. 2002) (finding “the statute requiring immunization of school age children is constitutional, but that the religious exemption provision of the statute is unconstitutional”). The paradoxical situation was later addressed by the legislature enacting new, but narrower laws allowing exemptions on philosophical grounds. See ARK. CODE ANN. § 6-18-702(d)(4)(A) (2019).

475. See also *Sherr v. Northport-East Northport Union Free Sch. Dist.*, 672 F. Supp. 81, 94–97 (E.D.N.Y. 1987).

sincere beliefs—was discussed at length under *Davis v. State*.⁴⁷⁶ a fulsome decision which bears note here. That court noted that:

while many do hold genuine and sincere religious beliefs, it cannot be denied that there are individuals who have attempted to assert religious exemptions when they, in actuality, disagree with the prevailing scientific and medical consensus that vaccines are safe for their children and are a highly effective way to protect public health[.]⁴⁷⁷

To this end, the New York court cited *Caviezel v. Great Neck Public Schools*,⁴⁷⁸ holding that personal affidavits were insufficient to constitute a religious exemption.⁴⁷⁹ Of particular note is the courts' disentangling legitimate religious views from a general notion that they call "religious" supposedly supporting some amorphous freedom to choose,⁴⁸⁰ violation of liberty, or right of informed consent.⁴⁸¹ The case of *N.M. v. Hebrew Academy Long Beach*,⁴⁸² is a noteworthy example. Therein, the court pointedly rejected the plaintiffs' claim that Jewish (Halachic) law created a basis for opposing vaccination and ruled that it was a subterfuge for health concerns.⁴⁸³ The *N.M.* court hence denied the parents' request for an injunction, which, had it been granted, would have allowed their child to remain in school,⁴⁸⁴ even pointing out hypocrisy in the plaintiffs' behaviors.

476. *Davis v. State*, 451 A.2d 107, 111 (Md. 1982) (citing *Maier v. Besser*, 341 N.Y.S.2d 411, 414 (N.Y. Sup. Ct. 1972)) (as manifested by "membership in or adherence to a recognized church"). *But c.f. N.M.*, 155 F. Supp. 3d at 258–59 (ruling N.Y. requires the proponent of the exemption request to establish that their religion supports their claim.)

477. *F.F. v. State*, 108 N.Y.S. 616, 632 (N.Y. Sup. Ct. 2019); *see, e.g., Phillips v City of New York*, 775 F.3d 538, 541 (2d Cir. 2015); *Mason v. General Brown Cent. Sch. Dist.*, 851 F.2d 47, 51 (2d Cir. 1988); *Caviezel v. Great Neck Pub. Schs.*, 701 F. Supp. 2d 414 (E.D.N.Y. 2010), *aff'd* 500 Fed. App'x 16 (2d Cir. 2012); *Farina v. Board of Educ.*, 116 F. Supp. 2d 503, 508 (E.D.N.Y. 2000).

478. *Caviezel*, 701 F. Supp. 2d 414.

479. *F.F.*, 108 N.Y.S.3d at 775

480. *Id.* at 775.

481. *See id.* at 771.

482. *N.M. v. Hebrew Acad. Long Beach*, 155 F. Supp. 3d 247, 258–59 (E.D.N.Y. 2016) (rejecting the parents' sincere, but disingenuous, effort to couch their objections as religious; it is unknown whether the parents had the child vaccinated or removed the child from the school).

483. *Id.* at 258–59.

484. *Id.* at 249–59. A more insidious argument was raised in a pamphlet entitled GEDOLIM LETTERS, *supra* note 268, produced by an anonymous individual or group who claim to be students of three Lakewood Rabbis. The pamphlet spends much of its fifty-four pages distinguishing and differentiating the Halachic opinions of hundreds of major Rabbinic authorities mandating vaccination. *Id.* Claiming the issue is one of debate, the author(s) notes the Lakewood Rabbis opine the issue is a religious one. *Id.* at 23. Disentangling the issue, the dispute is not whether under Jewish Law vaccination is permissible; the dispute is whether it is mandatory. *Id.* at 1.

Judicial antipathy towards amorphous religious exemptions is amply demonstrated. For example, in the aforementioned case of *Davis v. State*⁴⁸⁵ “[t]he record [revealed] that the Department of Health and Mental Hygiene . . . recognized only two religious groups . . . qualifying for the [applicable] exemption: the Worldwide Church of God and the Church of Christ Scientist.”⁴⁸⁶ The plaintiff, who adhered to neither, claimed the exemption provision was unconstitutional.⁴⁸⁷ The court agreed.⁴⁸⁸ But in a pyrrhic victory the court eliminated all exemptions, holding the portion of the statute unconstitutional regarding religious exemptions but upholding the remainder including the plaintiff’s criminal conviction for failing to vaccinate his son.⁴⁸⁹

The subterfuge for using religion to mask scientific disagreement is patently demonstrated by the brochures designed to foster vaccine-independence. Thus, for example, the *Gedolim Letters* brochure, discussed above, illustrates the corrupted attempt to misuse Jewish law to sustain a claim for religious objections to vaccination.⁴⁹⁰ Attempting to sustain a position that there is a *bone fide* controversy in Jewish law regarding vaccination, the (anonymous) author gathers a list of prevailing major rabbinic positions, admitting that with the exception of a handful of rabbinic authorities,⁴⁹¹ hundreds of others opine that vaccination is not only permitted, but mandatory.⁴⁹² The opposers claim only that vaccination is permissible, rather than mandatory.⁴⁹³ No Rabbinic authority has gone on record opposing vaccination on the basis of Jewish Law, thus removing the issue from a religious tenet eligible for an exemption.⁴⁹⁴

485. *Davis v. State*, 451 A.2d 107, 108–09, 113 (Md. 1982) (addressing the meaning of “conflicts with the tenets and practice of a recognized church or religious denomination of which he is an adherent or member” and holding it unconstitutional as not being universal in application).

486. *Id.* at 109.

487. *Id.* at 110.

488. *Id.* at 113–14.

489. *Id.* at 115.

490. See generally GEDOLIM LETTERS, supra note 268 (compiled ostensibly to defuse the polarization of the community on the issues, with the clear but underlying message of attempting to validate the author’s fear of vaccination and refusal to vaccinate his children).

491. *Id.* at 1. It is not clear whether the author is relying on three or five rabbis who support his position against the scores he notes that do not. It appears that three of the rabbis are venued in the U.S. The other two are in Israel, including one Chaim Kanievsky, who initially admonished his flock to remain in synagogue and Yeshiva in violation of Israeli directives at the inception of the coronavirus, before he subsequently backtracked. See David M. Halbfinger, *Virus Soars Among Ultra-Orthodox Jews as Many Flout Israel’s Rules*, N.Y. TIMES (May 7, 2020). See also Aaron Rabinowitz & Josh Breiner, *Tens of Thousands of Haredi Students Went to School Sunday, Violating Coronavirus Closure*, HAARETZ (Mar. 16, 2020), (noting “[t]ens of thousands of ultra-Orthodox (Haredi) students went to school Sunday as usual, following the directive of Rabbi Chaim Kanievsky, leader of the non-Hasidic Haredi community, who ordered Talmud Torah schools to remain open despite the Health Ministry order to close”).

492. See generally GEDOLIM LETTERS, supra note 268.

493. See GEDOLIM LETTERS, supra note 268, at 1.

494. Indeed, even the most impressive of those Rabbis, whom the *Gedolim Letters* author cites in support of his position, Rabbi Chaim Kanievsky, has gone on record re the COVID vaccine as

Nevertheless, the brochure's (anonymous) author cobbles together an unsubstantiated claim that Jewish Law requires *free choice*, as a religious imperative, and then goes further by bootstrapping his argument on the unsubstantiated claim "that one opposes vaccination on religious grounds has a firm basis in the Torah."⁴⁹⁵ Given that hundreds of religious experts—which he, himself, cites—opine that vaccination is not a choice, but a requirement, he clearly is crossing himself.⁴⁹⁶ In summary, the brochure artificially turns the rare Rabbinic political demurrer on the Jewish requirement to vaccinate into a religious issue.⁴⁹⁷ First, it claims that vaccination is a religious decision, "because the Rabbis say it is,"⁴⁹⁸ although what these very few Rabbis really say is that it is a matter of personal choice, and then because, these few Rabbis say it is a personal choice, it suddenly becomes a religious issue.⁴⁹⁹

VI. CONCLUSION

Although measles is, theoretically, far more contagious than COVID-19, the present pandemic makes measles look tame. This has not stopped five Supreme Court justices from misunderstanding the severity of the situation—erroneously

saying it is necessary to be vaccinated. Sam Sokol, *Defying Death Threats, Top Haredi Rabbi Doubles Down on Support for Child Vaccines*, HAARETZ (Dec. 21, 2021), <https://www.haaretz.com/israel-news/.premium-defying-death-threats-top-haredi-rabbi-doubles-down-support-for-child-vaccines-1.10483142> ("After receiving death threats, Rabbi Chaim Kanievsky reiterates his belief that vaccination campaigns in ultra-Orthodox educational institutions are necessary").

495. GEDOLIM LETTERS, *supra* note 268, at 1, 23.

496. Pun intended.

497. GEDOLIM LETTERS, *supra* note 268, at 23. It is not clear if the author claims three rabbis support him or five, although it appears that at least a hundred oppose his position.

498. GEDOLIM LETTERS, *supra* note 268, at 1.

This publication has been prepared on behalf of the *talmidim* of *Moreinu* Harav Shmuel Kamenetzky, *shlit"á*, *Moreinu* Harav Elya Ber Wachtfogel, *shlit"á*, and *Moreinu* Harav Malkiel Kotler, *shlit"á* . . . parents who choose not to vaccinate should be viewed as parents exercising a right and making a justifiable decision, not as agitators recklessly endangering the public welfare.

GEDOLIM LETTERS, *supra* note 268, at 2 ("In 2008, a Lakewood *beis din* [community court] was convened . . . [This can] be identified as the beginning of the Orthodox Jewish community's vaccination controversy."); GEDOLIM LETTERS, *supra* note 268, at 10 ("[P]recious little has been devoted to scientific discussion of the nature of the threat that the unvaccinated pose. No study demonstrating clearly that unvaccinated children pose a health threat to those around them has been presented in any of our legislatures ruling on the issue."). Notwithstanding the parallel claim that they don't oppose vaccination, the pamphlet is replete with false information insinuating grave dangers of vaccination.

499. GEDOLIM LETTERS, *supra* note 268, at 23.

[T]he Lakewood Rabbis argue over the Torah's view on vaccination. Whether they rule that 'according to the Torah one must immunize,' or whether they rule that Jewish law views vaccination as a matter of parental choice, they see vaccination as a question that Rabbis need to rule on; in other words, they see it as a religious issue.

GEDOLIM LETTERS, *supra* note 268, at 23. Dov S. Zakheim, *Da'as Torah and Anti-Vaxxers*, JEWISH J. (May 1, 2019) <https://jewishjournal.com/commentary/columnist/297876/daas-torah-and-anti-vaxxers/>.

comparing sources of contagion and venerating religious worship *uber alles*—under the rubric that Constitutional Rights reigns supreme.⁵⁰⁰ Indeed, consideration of constitutional guarantees in the face of danger to health has been undertaken by numerous courts, as this Article demonstrates. Sadly, the Supreme Court did not take cognizance of those cases when deciding the *Diocese* case.⁵⁰¹

We can only anticipate a further challenge as states begin to invoke legislation compelling COVID-19 vaccination.⁵⁰² The impact of escalating vaccine resistance, fostered by a virulent anti-vax movement and now targeted to the Black population, will further complicate matters.

Attempts to counter the dangerous actions of this movement have taken various forms, including legislation removing non-medical vaccine exemptions and emergency municipal orders compelling vaccination during the pendency of an epidemic.⁵⁰³ Studies also illustrate the impact of mandatory vaccination on pre-school admittance.⁵⁰⁴ Nevertheless, orders advocating vaccination prior to school attendance—with the onus on the parents, and the targets on children—did not seem as effective as imposing fines for anyone failing to submit to immediate vaccination,⁵⁰⁵ such as provided in the stunningly effective laws enacted by New York City via its April 9, 2019 order.⁵⁰⁶

500. Barbara Pfeffer Billauer, *Health Inequality, Pandemic Policy, Law, Bioethics, and the Elderly*, Eliva Press, 2021, reprinted from *How To Stage A Lockdown Without Triggering Constitutional Objections*, ACSH.org (Jan. 19, 2021), <https://www.acsh.org/news/2021/01/19/how-stage-lockdown-without-triggering-constitutional-objections-15286>.

501. Of course, the requirement of using the least restrictive alternative is always paramount, rendering Cuomo's lockdown response arguably ill-advised. Nevertheless, the customary deference once given to legislatures and health officials seems to have been decimated by the *Diocese* case.

502. See, e.g., Legis. Assemb. 11179 (N.Y. 2020).

503. Donald G. McNeil Jr., *New York City Is Requiring Vaccinations Against Measles. Can Officials Do That?*, N.Y. TIMES (Apr. 9, 2019); see also *Statement on Legislation Removing Non-Medical Exemption from School Vaccination Requirements*, N.Y. DEP'T OF HEALTH (Jun. 14, 2019).

504. Robbins et al., *supra* note 337, at 273 (noting “school immunization laws were more comprehensive [and better enforced] in low incidence areas,” with high levels of schools excluding noncompliant students.) “In contrast, school immunization laws [were not widely applied nor enforced] in the high incidence group . . . The evidence indicates a strong association between comprehensive, vigorously enforced school immunization laws and a low incidence of measles.” *Id.*

505. Mallory K. Ellingson et al., *Vaccine Mandates Boost Coverage in Europe*, HEALIO (Jan. 13, 2020), <https://www.healio.com/news/pediatrics/20200113/vaccine-mandates-boost-coverage-in-europe> (noting “European countries that mandated vaccination and imposed stiffer financial penalties for noncompliance had higher vaccination coverage against measles and pertussis, according to a study covering 29 European countries published in *Pediatrics*”); Nicholas Gerbis, *The Path to Boosting COVID-19 Vaccination Rates is Riddled with Pitfalls. Here's Why*, KJZZ 91.5 (Mar. 10, 2021), <https://kjzz.org/content/1664766/path-boosting-covid-19-vaccination-rates-riddled-pitfalls-heres-why>.

506. Ord. of the Comm'r, N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE (Apr. 9, 2019), <https://www1.nyc.gov/assets/doh/downloads/pdf/press/2019/emergency-orders-measles>; see

Although effective, these methods have been criticized as violating constitutional rights—including personal liberty, religious freedom, or, as couched on some anti-vax websites, as violating a right of informed consent.⁵⁰⁷ These arguments have been deftly rejected by the courts.⁵⁰⁸ To requote one juridical opinion addressing the informed consent issue, “a fireman does not ask for permission to enter a burning building.”⁵⁰⁹

Voiding religiously-based vaccine exemptions has also survived constitutional challenge. However, at the time of writing this Article, only six states have such laws.⁵¹⁰ While other states are trying or considering this option, the organized anti-vax movement is strengthening their opposition to such laws,⁵¹¹ and thus far, they have been successful.

As new epidemics overtake us and vaccine resistance grows, we should not overlook municipal ordinances as an effective public health measure. Great care must be afforded to defending these orders. Not only must lawyers be schooled in epidemiology, but dicta empowering judges to take judicial notice of the efficacy of vaccination must be recalled and weaponized. Finally, in terms of assessing how much weight will be afforded to the legislature’s judgment, the New York Court of Appeals had once made this clear: “[w]e now hold that substantial deference is due the Legislature.”⁵¹² Courts once resoundingly held that First Amendment protections of religious freedom (and the Free Exercise Clause) are not absolute.⁵¹³ There is, however, under the *Diocese* case, an assault on these judicial sentiments, of which we must be wary.

The sad result suggests that both judges and lawyers need basic epidemiology training to properly understand and deploy available legal interventions, as unpopular as they may be, since in the midst of an epidemic, this may be the only resort.

Angelica LaVito, *New York Declares Public Health Emergency Over Measles “Crisis.” Mayor Orders Mandatory Vaccinations*, CNBC NEWS (Apr. 9, 2019, 1:30 PM), <https://www.cnbc.com/2019/04/09/new-york-declares-public-health-emergency-over-measles-crisis.html>.

507. Barbara Cáceres, *Vaccine Mandates: Ignoring Human Rights and Informed Consent*, VACCINE REACTION (Mar. 7, 2019), <https://thevaccinereaction.org/2019/03/vaccine-mandates-ignoring-human-rights-and-informed-consent/>.

508. *C.F. v. New York City Dep’t of Health & Mental Hygiene*, No. 508356/19, 2019 N.Y. Misc. LEXIS 1914, *1, *2–3 (Sup. Ct. Apr. 18, 2019).

509. *Id.* at 5. The analogy is not quite apt; entering a burning building is not as invasive as, nor should it carry the same degree of protections, as an invasion of the body. Nevertheless, a more apt analogy can be constructed by conjuring the doctor who does not ask for consent before performing an emergency procedure if the patient is not competent to provide it.

510. *States with Religious and Philosophical Exemptions from School Immunization Requirements*, NAT’L CONF. OF STATE LEGIS. (Apr. 30, 2021), <https://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx>.

511. E-mail from hisunim=educated-choice.com@responder.co.il, to omniscience@starpower.net (Aug. 25, 2020) (on file with author).

512. *Catholic Charities of Diocese of Albany v. Serio*, 859 N.E.2d 459, 466 (N.Y. 2006).

513. *Sherbert v. Verner*, 374 U.S. 398, 402–03 (1963).

VII. APPENDIX

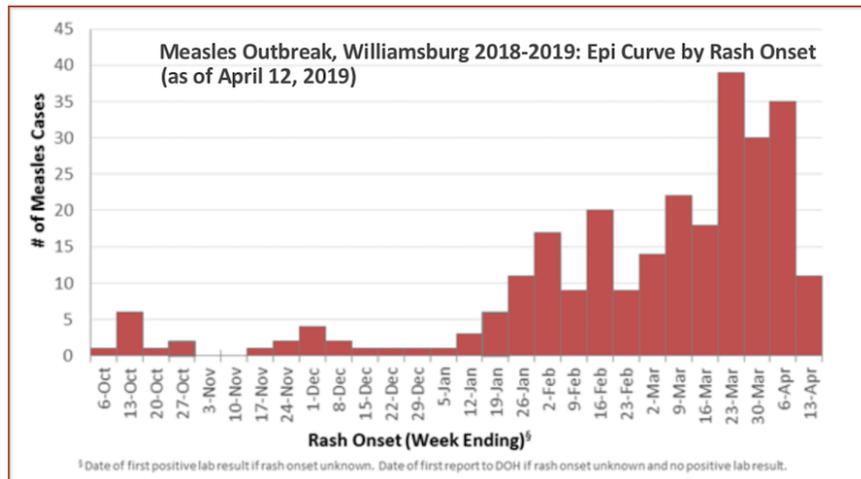


Figure 5. Epidemic Curve Depicting New Cases Per Day.⁵¹⁴

514. Daskalakis, *supra* note 215.