Mandatory Vaccinations: The Long-Term Implications of Mandating a COVID-19 Vaccine

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INTRODUCTION

Over the past two years, the coronavirus disease 2019 (Covid-19) pandemic changed the dynamics of society, impacting the way governments interpret laws and formulate policy decisions. On December 31, 2019, the Wuhan Municipal Health Commission reported a cluster of pneumonia cases with an unknown origin to the World Health Organization (WHO) China Country Office. Three days later, the number of cases in Wuhan City, Hubei Province of China increased to forty-four. When the WHO released its first press release, there were no known deaths. Within two weeks, long before any state implemented lock-down procedures, the first known case in the United States was identified in Seattle, Washington. At the time, it was still unknown if it would turn into an epidemic, let alone a pandemic.

Within a few short months, the world changed drastically.⁶ Covid-19 "brought countries to a standstill, pushed hospital systems to the brink, and dragged the global economy into what may be the worst recession since World War II." On February 3, 2020, the United States declared Covid-19 a public health

[https://perma.cc/83LK-B7YV] (timeline outlining the early events in the pandemic).

- ² See Pneumonia of Unknown Cause China, supra note 1.
- ³ See id.

⁴ See First Travel-Related Case of 2019 Novel Coronavirus Detected in United States, CTRS. FOR DISEASE CONTROL & PREVENTION (Jan. 21, 2020), https://www.cdc.gov/media/releases/2020/p0121-novel-coronavirus-travel-case.html [https://perma.cc/ZE78-5S6F].

⁵ An epidemic is an outbreak that infects a large group of individuals in a particular community, while a pandemic is an outbreak spread across a large area. John Kelly, "Epidemic" vs. "Pandemic" vs. "Endemic": What Do These Terms Mean?, DICTIONARY.COM, https://www.dictionary.com/e/epidemic-vs-pandemic/ [https://perma.cc/38HP-8S73] (last visited Nov. 12, 2020).

⁶ See Michael Futch, 'It's Changed all Our Lives:' People around Fayetteville Talk About How COVID-19 Affects Daily Life, The FAYETTEVILLE OBSERVER (Sept. 26, 2020, 3:52 PM).

https://www.fayobserver.com/story/news/2020/09/26/its-changed-all-our-lives-threat-covid-19-still-impacts-people/3536567001/ [https://perma.cc/4B4Q-2WQN].

¹ Pneumonia of Unknown Cause – China, WORLD HEALTH ORG. (Jan. 5, 2020), https://www.who.int/csr/don/05-january-2020-pneumonia-of-unkown-cause-china/en/ [https://perma.cc/L3CL-39NS]. See also Archived: WHO Timeline - COVID-19, WORLD HEALTH ORG. (Apr. 27, 2020), https://www.who.int/news/item/27-04-2020-who-timeline---covid-19 [https://perma.cc/83LK-B7YV] (timeline outlining the early events in the

⁷ *Id*.

emergency.⁸ The national unemployment rate peaked at an unprecedented level of 14.8 percent, and "the unemployment rate for every state and the District of Columbia surpassed levels seen during the Great Recession." In March 2020, the United States was on its way to lead the world for the most confirmed Covid-19 cases, prompting state governors to issue stay at home orders and temporarily shut businesses. Some estimate that about 60 percent "of businesses that have closed during the coronavirus pandemic will never reopen." By December 22, 2020, there had been over 18.1 million confirmed cases of Covid-19 in the United States and 77.7 million worldwide. Less than a year later, the number of cases exponentially increased to over 41.95 million confirmed cases of Covid-19 in the United States and 227.62 million worldwide. Million worldwide.

The drastic increase in Covid-19 cases led to a global push for Covid-19 vaccine mandates in hopes that they would eradicate the virus and life would go back to the way it was before the pandemic.¹⁴ "[S]cientists [raced] to produce a safe and effective

⁸ See A Timeline of COVID-19 Developments in 2020, AJMC (Jan. 1, 2021), https://www.ajmc.com/view/a-timeline-of-covid19-developments-in-2020 [https://perma.cc/49AR-36YJ].

⁹ GENE FALK, ET AL., CONG. RSCH. SERV., R46554, UNEMPLOYMENT RATES DURING THE COVID-19 PANDEMIC: IN BRIEF (2021), https://www.everycrspreport.com/files/20210820_R46554_211d85453a9b241f4a4 80fce32659ca5532ed598.pdf [https://perma.cc/M3A7-7JW9].

¹⁰ See Coronavirus Disease 2019 (COVID-19) Situation Report – 67, WORLD HEALTH ORG. (Mar. 27, 2021), https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200327-sitrep-67-covid-19.pdf?sfvrsn=b65f68eb_4 [https://perma.cc/8C6E-2QZE]; Casey Leins, 10 States With the Most Aggressive Response to COVID-19, US NEWS (Mar. 17, 2020), https://www.usnews.com/news/best-states/articles/2020-03-17/10-states-with-the-most-aggressive-response-to-coronavirus [https://perma.cc/ALJ2-ABRL].

¹¹ Danielle Wiener-Bronner, *More than Half of Businesses that Closed During the Pandemic Won't Reopen*, CNN BUSINESS (Sept. 17, 2020), https://www.cnn.com/2020/09/16/business/yelp-coronavirus-closures/index.html [https://perma.cc/Q564-Z42W].

¹² United States of America Situation, WORLD HEALTH ORG. (Oct. 15, 2021), https://covid19.who.int/region/amro/country/us [https://perma.cc/9U8E-6CRJ]; Global Situation, WORLD HEALTH ORG. (Oct. 15, 2021), https://covid19.who.int/[https://perma.cc/3SQS-SWN8].

 $^{^{13}\,}$ United States of America Situation, supra note 12; Global Situation, supra note 12.

¹⁴ See Michelle Roberts, Covid-19: Normal Life Back Next Winter, Says Vaccine Creator, BBC News (Nov. 15, 2020), https://www.bbc.com/news/health-54949799 [https://perma.cc/K76G-22CR]; Joanna Walters, US Vaccine Expert Predicts Life Could Be Back To Normal Around May, The Guardian (Nov. 22, 2020, 10:19 AM), https://www.theguardian.com/world/2020/nov/22/us-vaccine-expert-life-could-be-back-to-normal-may [https://perma.cc/8E9M-WA49].

coronavirus vaccine."15 Several pharmaceutical companies received permission to simultaneously conduct animal testing and clinical trials on humans. 16 By November 2020, biotechnology and pharmaceutical companies Pfizer and Moderna had each announced they had developed a vaccine which was at least ninety percent effective.¹⁷ However, the expedited development timeline fueled a fierce vaccine debate, with some resisting, and others advocating for, mandatory vaccine mandates. 18 Many believe that a widely available, safe, and effective vaccine is key to reopening schools and businesses, as well as reviving the economy. 19 In 2021, Covid-19 vaccine mandates began sweeping across the United States.²⁰ Mandates first began in the private sector, with large employers, such as Google and Facebook, requiring employees to get vaccinated.²¹ Soon after, Covid-19 vaccines became required for travel, indoor dining, museums, and gyms, in certain states and countries.²² The increase in the number of mandates, however, has

¹⁵ See Carl Zimmer et al. Coronavirus Vaccine Tracker, N.Y. TIMES (Oct. 13, 2021), https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html [https://perma.cc/HCN7-QPVA] (describing global efforts over the course of the pandemic to develop effective vaccines).

¹⁶ See Nicoletta Lanese, Researchers Fast-Track Coronavirus Vaccine By Skipping Key Animal Testing First, LIVE SCIENCE (Mar. 13, 2020), https://www.livescience.com/coronavirus-vaccine-trial-no-animal-testing.html [https://perma.cc/2RB8-3JG6]; but see Beatrice Depuy, Pfizer and Moderna Did Not Skip Animal Trials, AP NEWS (Nov. 25, 2020), https://apnews.com/article/fact-checking-afs:Content:9792931264 [https://perma.cc/FP8U-WQA5].

¹⁷ See Lanese, supra note 16.

¹⁸ See Jason Grant, Lawyers, Professors Push Back Against State Bar Group Call for 'Mandatory' COVID-19 Vaccinations, LAW.COM (June 4, 2020), https://www.law.com/newyorklawjournal/2020/06/04/lawyers-professors-push-back-against-state-bar-group-call-for-mandatory-covid-19-vaccinations/ [https://perma.cc/QV9A-KRH6]; Jason Grant, State Bar Group Calls for 'Mandatory' COVID-19 Vaccinations, Regardless of Objections, LAW.COM (May 28, 2020), https://www.law.com/newyorklawjournal/2020/05/28/state-bar-calls-for-mandatory-covid-19-vaccinations-regardless-of-objections/?slreturn=20201025195607 [https://perma.cc/3K2U-CPDF].

¹⁹ See COVID-19: An Update on the Federal Response, CTRS. FOR DISEASE CONTROL & PREVENTION (Sept. 23, 2020),

https://www.cdc.gov/washington/testimony/2020/t20200923.htm [https://perma.cc/4Z6T-UC66].

²⁰ See Robert Towey & Leslie Josephs, Covid Vaccine Mandates Sweep Across Corporate America as Delta Variant Spurs Action, CNBC (Aug. 9, 2021, 12:43 PM), https://www.cnbc.com/2021/08/09/covid-vaccine-mandates-sweep-across-corporate-america-as-delta-surges.html [https://perma.cc/LH4F-JF3N].

 $^{^{\}overline{21}}$ See id.

²² See Monica Buchanan Pitrelli, Vaccine Mandates for Travel Are Legal in the U.S. — And More Are Probably Coming, CNBC TRAVEL (Sept. 23, 2021, 8:31 PM), https://www.cnbc.com/2021/09/23/is-it-legal-to-require-vaccinations-to-travel-yes-say-experts-.html [https://perma.cc/9APV-NMG9]. See also Sylvia

led to a sharp increase in resistance to obtaining the vaccine and litigation surrounding the legality of such mandates.²³

The Covid-19 vaccine debate raises several legal and policy questions: (1) whether the federal or state government has the authority to mandate a vaccine; (2) who has enforcement authority if someone refuses to take a vaccine; (3) whether there should be exemptions to a mandatory vaccine; (4) the policy implications of rushing a vaccine before it is deemed effective; and (5) at what point in time should the vaccine no longer be mandated. At the time this paper was written, both Pfizer and Moderna vaccines were beginning to be distributed across the United States, and some New York state lawmakers began introducing legislation to mandate all New York residents receive a version of the vaccine.²⁴

The purpose of this paper is to reflect on the history of mandatory vaccinations in the United States, explore the legal and policy implications of mandating a rushed Covid-19 vaccine, and determine at which point mandates, if implemented, should be lifted. Part I discusses the Supreme Court's decision in *Jacobson v. Massachusetts*, which established the constitutional power of state governments to mandate vaccines. Part II examines the constitutional considerations in mandating a vaccine, including the varying standards of review for a vaccine mandate and possible exemptions. Part III explores potential exemptions from mandatory vaccinations. Part IV discusses the statutory authority granted to the federal government to implement public health directives. Part V examines the policy considerations behind mandating a Covid-19 vaccine. Part VI proposes a new test to

Poggioli, Italy's New COVID Vaccine Mandate Is One of The Strictest in The World, NPR (Sept. 24, 2021, 4:19 PM),

https://www.npr.org/2021/09/24/1040550745/italys-new-covid-vaccine-mandate-is-one-of-the-strictest-in-the-world [https://perma.cc/2LQD-8AHF].

²³ See Tom Hals, Factbox: COVID-19 and the U.S. Courts: Challenges to Vaccine Requirements, REUTERS (Sept. 22, 2021, 11:52 AM), https://www.reuters.com/legal/government/covid-19-us-courts-challenges-vaccine-requirements-2021-09-22/ [https://perma.cc/68AV-SA6E].

²⁴ See A. Pawlowski, Will the COVID-19 Vaccine Be Mandatory? What the Law Says, Today (Aug. 6, 2021, 2:05 PM), https://www.today.com/health/will-covid-19-vaccine-be-mandatory-t190838 [https://perma.cc/U92A-K7AA]; New York Legislation Could Make COVID-19 Vaccination Mandatory, Fox5 NY (Dec. 9, 2020), https://www.fox5ny.com/news/new-york-legislation-would-make-covid-19-vaccination-mandatory [https://perma.cc/352W-UEU6]. The Janssen COVID-19 Vaccine was not issued an emergency use authorization until February 27, 2021. See Janssen COVID-19 Vaccine, Food & DRUG ADMIN., https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/janssen-covid-19-vaccine (last visited Dec. 2, 2021).

²⁵ See generally Jacobson v. Massachusetts, 197 U.S. 11 (1905).

evaluate vaccination mandates under *Jacobson* in light of Covid-19. Lastly, Part VII suggests next steps to avoid long-term negative consequences if a rushed Covid-19 vaccine becomes mandated for all residents through regulation or statute.

I. Constitutional Basis For Mandatory Vaccinations

At the end of the eighteenth century, Edward Jenner developed the first successful vaccination for smallpox.²⁶ To date, smallpox remains the only disease to be completely eradicated by a vaccine. 27 The vaccine became widely accepted and used in the United States from 1802 to 1840.28 As more members of society voluntarily took the vaccine, smallpox no longer seemed a threat to society through herd immunity.²⁹ By the 1870s, smallpox reappeared and became an epidemic once again.³⁰ As part of eradication efforts, lawmakers began to track "all known and possible contacts to seal off the outbreak from the rest of the population" and gave these individuals the vaccine, sometimes using force.³¹ "smallpox vaccination raid[s]" occurred across the country, with police officers holding down individuals to administer the vaccine, as well as removing infected individuals from their homes to isolate them in city buildings. 32 Concurrently, lawmakers passed mandatory vaccination laws, and public health officials "ordered mandatory vaccinations in schools, factories and on railroads."33

²⁶ Smallpox Vaccines, WORLD HEALTH ORG. (May 31, 2016), https://www.who.int/news-room/feature-stories/detail/smallpox-vaccines [https://perma.cc/CC33-3LCV].

²⁷ Id.; German Lopez, What Diseases Have Vaccines Eradicated?, Vox (Aug. 25, 2016, 1:41 PM), https://www.vox.com/2018/8/21/17588074/vaccines-diseases-wiped-out [https://perma.cc/F2KM-M56C].

²⁸ Martin Kaufman, *The American Anti-Vaccinationists and Their Arguments*, 41 Bull. Hist. Med. 463, 463 (1967).

²⁹ *Id.* at 464. Herd immunity "occurs when a high percentage of the community is immune to a disease (through vaccination and/or prior illness), making the spread of this disease from person to person unlikely." *Herd Immunity*, ASS'N FOR PROS. IN INFECTION CONTROL AND EPIDEMIOLOGY (Apr. 6, 2021), https://apic.org/monthly_alerts/herd-immunity/ [https://perma.cc/9TR5-2UKF]. This allows individuals who are not vaccinated or high risk, such as infants, to be protected "because the disease has little opportunity to spread within the community." *Id.*

 $^{^{\}rm 30}\,$ Kaufman, supra note 28, at 464.

³¹ Smallpox Vaccines, supra note 26. See How The 'Pox' Epidemic Changed Vaccination Rules, NPR (Apr. 5, 2011, 11:23 AM), https://www.npr.org/2011/04/05/135121451/how-the-pox-epidemic-changed-vaccination-rules [https://perma.cc/5MKR-PN36].

³² See How The 'Pox' Epidemic Changed Vaccination Rules, supra note 31.

³³ Id.

Despite the vaccine's success, many resisted taking the vaccine, leading to the development of anti-vaccination societies.³⁴ Members began to mail out pamphlets and attack legislation through the courts.³⁵

Despite the influx of vaccination cases, the Supreme Court did not grant certiorari to a mandatory vaccine case until after 1903, when it decided to hear Jacobson v. Massachusetts. Today, Jacobson remains the seminal case upholding state and local lawmakers' authority to mandate vaccinations, both for the general public and for school children. It also sets the framework for scrutinizing public health restrictions, including those eliminating religious and philosophical vaccination exemptions.

A. Constitutional Power Of State Governments To Mandate Vaccines

In 1902, the Board of Health of the city of Cambridge, Massachusetts enacted a regulation mandating all persons not vaccinated against smallpox to be vaccinated, and anyone not vaccinated since 1897, revaccinated.³⁶ Pursuant to state law, the Board provided free vaccinations to enforce its regulation.³⁷ Henning Jacobson refused to comply with the regulation, believing it was a violation of authority and that the vaccine would harm his health.³⁸ With the support of local anti-vaccinationists, Jacobson filed a suit against the state of Massachusetts, arguing that the regulation violated his constitutional rights.³⁹ The Supreme Court granted certiorari, making it the first case where the Court considered the power of states to implement and enforce public health laws pertaining to vaccines.⁴⁰

 $^{^{34}}$ See id.

³⁵ See Kaufman, supra note 28, at 464.

³⁶ Jacobson v. Commonwealth of Massachusetts, 197 U.S. 11, 12–13 (1905).

 $^{^{37}}$ Id. at 12 (citing Mass. Gen. Laws Ann. Ch 75, §§ 137, 139 (1902)).

³⁸ Wendy E. Parmet, *Rediscovering Jacobson in the Era of COVID-19*, 100 B.U. L. Rev. 117, 121 (2020).

³⁹ Id.

⁴⁰ See 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, 581 (Apr. 2005).

1. Constitutional Authority For States To Enact Laws For Public Health And Safety

In *Jacobson*, the Court considered whether the Massachusetts statute was "inconsistent with the liberty which the Constitution of the United States secures to every person against deprivation by the State." Under the Constitution, states have the authority to enact reasonable laws using their police power "to safeguard the public health and the public safety." Furthermore, states can delegate their authority to local municipalities to implement state laws. These laws may not conflict with any right under the Constitution. However, "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." In applying these principles, the Court held that the Massachusetts statute and local ordinance were not at odds with the Constitution, and therefore valid.

2. Framework For Scrutinizing Public Health And Safety Laws

The Court in *Jacobson* also set the framework for scrutinizing public health restrictions, including those eliminating religious and philosophical vaccination exemptions. In the case, Jacobson argued that since the vaccine allowed select individuals to be exempt, and was not scientifically proven effective, the law mandating the smallpox vaccine was unconstitutional.

As part of its reasoning, the Court stated that "a community has the right to protect itself against an epidemic of disease which threatens the safety of its members." ⁴⁶ Since the number of smallpox cases in Cambridge and neighboring communities was increasing, the city needed to take necessary measures to protect its residents. ⁴⁷ Although the statute created an exemption for children who were unfit to take the vaccination—not adults—this carve out was not enough to undermine the entire law. ⁴⁸ This was because the mandatory vaccination law applied to all adults

⁴¹ Jacobson, 197 U.S. at 24.

 $^{^{42}}$ Id. at 24–25.

⁴³ See id. at 25.

⁴⁴ Id.

⁴⁵ Id. at 26.

⁴⁶ Jacobson, 197 U.S. at 27.

⁴⁷ See id. at 27-28.

⁴⁸ *Id*. at 30.

equally, thus not denying any one person equal protection under the law.⁴⁹ Likewise, competing theories arguing the effectiveness of a vaccine did not deem the statute unconstitutional.⁵⁰ The Court believed that the state legislature considered all opposition before passing the mandate, finding that in light of all information made available at the time, it was necessary to protect public health and safety.⁵¹ "The state legislature proceeded upon the theory which recognized vaccination as at least an effective, if not the best-known, way in which to meet and suppress the evils of a smallpox epidemic that imperiled an entire population."⁵²

Through this decision, the Court established that courts only have the duty to strike down a statute if it has no relation to public health and safety, or "is, beyond all question, a plain, palpable invasion of rights secured by the fundamental law." The Court based this holding largely on the New York Court of Appeals decision in *Viemeister v. White*, which considered a challenge to a school mandate requiring all children to be vaccinated. Copying the lower court's opinion, the Supreme Court affirmed that a smallpox vaccination, "[w]hile not accepted by all, it is accepted by the mass of the people, as well as by most members of the medical profession." As a result, it set a precedent for allowing states and municipalities to mandate vaccinations known to be effective through common belief, regardless of whether everyone in society accepted the vaccine.

II. Constitutional Considerations

A. Standards Of Review Before Jacobson

Before *Jacobson*, state legislatures passed mandatory vaccination laws requiring the general public to receive the smallpox vaccine; those who refused to be vaccinated were often required to quarantine until they received the vaccine.⁵⁶ The first cases surrounding the smallpox vaccine involved the authority of

⁴⁹ *Id*.

⁵⁰ See id.

 $^{^{51}}$ See id.

⁵² Jacobson, 197 U.S. at 30-31.

⁵³ *Id*. at 31.

⁵⁴ Id. at 34-35 (citing Viemeister v. White, 72 N.E. 97, 97 (N.Y. 1904)).

⁵⁵ Id. at 34.

⁵⁶ See Charlotte LoBuono, History of Vaccine Mandates In the US, STACKER (May 6, 2022), https://stacker.com/stories/21994/history-vaccine-mandates-us [https://perma.cc/7GEH-A46J].

public health commissioners to quarantine sick members of the public to enforce vaccination mandates.⁵⁷ Each following case discusses a different standard of review, leading up to the decision in *Jacobson*.

1. Strict Interpretation: Laws Must Be Necessary To Protect The Public During An Extraordinary And Dangerous Emergency

In 1898, the New York State Legislature granted the health commissioner of Brooklyn the power to create public health mandates to protect the public from "impending pestilence." As smallpox became more widespread, the New York State legislature amended the Public Health Law to require "[e]very such local board of health [to] guard against the introduction of contagious and infectious diseases" by requiring "the isolation of all persons and things infected with or exposed to such disease. . . ." ⁵⁹ The statute did not explicitly grant the public health commissioner authority to mandate a vaccine. Rather than pass a vaccine mandate, the public health commissioner mandated a group of realtors who traveled to a highly infectious portion of the city to quarantine until they consented to take the smallpox vaccine. ⁶⁰ The realtors refused to take the vaccine and filed a writ of habeas corpus to lift the mandatory quarantine. ⁶¹

In the case *In re Smith*, the New York Court of Appeals explored the right of the public health commissioner to require the realtors to quarantine as means of forcing them to be vaccinated.⁶² The court held that the statutory powers granted to the commissioner

 $^{^{57}}$ See e.g., State v. Hay, 35 S.E. 459 (N.C. 1900); Viemeister v. White, 72 N.E. 97, 97 (N.Y. 1904).

⁵⁸ See In re Smith, 40 N.E. 497, 498 (N.Y. 1895) (citing Act of June 9, 1888, ch. 583, tit. 12, §5, 1888 N.Y. Laws 949, 1013). A pestilence is an infectious epidemic disease that is considered fatal. Pestilence, MERRIAM-WEBSTER DICTIONARY, https://www.merriam-webster.com/dictionary/pestilence [https://perma.cc/VR8Y-2XEJ] (last visited Oct. 24, 2020). Covid-19 is not considered a plague or a pestilence because it does not currently have a high mortality. See John Kelly, Is The Coronavirus A Plague?, DICTIONARY.COM (Mar. 20, 2020), https://www.dictionary.com/e/is-the-coronavirus-a-plague/[https://perma.cc/2UPP-R9HM].

⁵⁹ In re Smith, 40 N.E. at 498 (quoting Public Health Law, ch. 661, §24 [sic], 1893 N.Y. Laws 1495, 1504-05) (internal quotations omitted).

⁶⁰ See id

 $^{^{61}}$ In re Smith, 32 N.Y.S. 317 (N.Y. Gen. Term 1895), rev'd, 40 N.E. 497 (N.Y).

⁶² See In re Smith 40 N.E. at 498.

did not give him the right to quarantine individuals to "compel the vaccination of every citizen in the city of Brooklyn." Although the statute gave the commissioner broad powers, he could only enforce necessary health mandates. A mandatory quarantine was not necessary unless individuals were infected or known to have been exposed to infectious diseases. Increasing the implicit scope of the regulations to mandate the quarantine of individuals possibly infected or exposed would unjustly deny individuals of their liberty.

Despite holding that the relators should be discharged from their quarantine without the mandatory vaccination, the Court clarified that the legislature had the right to enact laws surrounding public health, including mandating vaccines:

The question here is not whether the legislature had the power to enact the provisions of section 24 of the Health Law; but whether the respondent has shown that a state of facts existed, warranting the exercise of the extraordinary authority conferred upon him. Like all enactments which may affect the liberty of the person, this one must be construed strictly; with the saving consideration, however, that, as the legislature contemplated an extraordinary and dangerous emergency for the exercise of the power conferred, some latitude of a reasonable discretion is to be allowed to the local authorities upon the facts of a case.⁶⁷

The New York Court of Appeals declined to consider the legislature's authority to grant police powers to the commissioner. Instead, it left the burden to the enacting authority to prove that the power exercised was granted by the legislature. However, where extraordinary or dangerous emergencies are involved, courts need to allow local governments to utilize reasonable discretion.

⁶³ Id. (emphasis added).

 $^{^{64}}$ See id.

⁶⁵ *Id.* ("Passing to the question of what power is vested in the commissioner by virtue of his office, under the Public Health Law, it is very clear that an 'isolation of all persons and things' is only permitted when they are 'infected with or exposed to' contagious and infectious diseases.").

⁶⁶ See id. (emphasis added).

⁶⁷ Id. at 499.

2. Laws Must Be In The Best Interest Of The Public

The Supreme Court of Georgia chose a relaxed standard compared to the one outlined in In re Smith, by only requiring legislative bodies to pass laws in the best interest of their constituents. In Wyatt v. Rome, the court declined to consider whether a municipality could pass a law requiring residents to receive a vaccination. ⁶⁸ Before the suit, the city of Rome passed an ordinance requiring citizens and residents over the age of fifteen to be vaccinated. 69 Failure to be vaccinated resulted in either a fine or imprisonment. 70 The plaintiff was approached by a doctor and forced to receive a second vaccination or face punishment under the ordinance.⁷¹ The Court held that the city was not liable for any damage caused as a result of the mandated vaccine. 72 Rather than review the statute, the rationale focused on the interest of the general public at large. If the court were to allow the plaintiff to proceed with its action against the city, it would "render such action so dangerous that the possible evil consequences to it, resulting from the multiplicity of suits, might be as great as the smallpox itself."73 This is because the city may no longer be able to act in the best interest of the public at large, "paralyz[ing] the arm of the municipal government" from protecting its citizens from infectious or contagious diseases.⁷⁴ Although the court did not look at the ordinance itself, it established that the state of Georgia could delegate power to a municipality to enact laws to ensure the public health of its citizens. As a result, Georgia courts should decline to review an ordinance properly passed by a legislature in the best interest of the public's health and safety.

3. The Role Of Scientific Evidence In Upholding Mandatory Vaccination Laws

Years after the decision in *Wyatt*, the court in *Hay* established that laws passed in the best interest of public health and safety

⁶⁸ See Wyatt v. City of Rome, 105 Ga. 312, 315 (1898) ("[T]he suit was not based on any alleged want of authority in the city to legislate on the subject.").

⁶⁹ See id. at 312-313.

⁷⁰ See id. at 313.

⁷¹ See id.

⁷² See id. at 315.

 $^{^{73}}$ *Id*.

 $^{^{74}}$ Id.

should be supported by well-ascertained facts.⁷⁵ The city of Burlington, North Carolina, passed an ordinance requiring all citizens not vaccinated "within the last three years" to be vaccinated by the end of the week or be "fined \$10 for every day they refuse, after being called upon by the doctors appointed, or imprisoned thirty days."⁷⁶ In *Hay*, the defendant refused to be vaccinated, fearing the vaccination would be dangerous to his health.⁷⁷ He was prosecuted for violating the local ordinance. The case was decided pro forma by special verdict to allow the North Carolina Supreme Court to evaluate the legality of the ordinance; it became one of the first cases to look at the authority of the legislature to pass mandatory vaccination laws.⁷⁸ On appeal, the state supreme court considered a North Carolina law that allowed:

[t]he authorities of any city or town, or the board of county commissioners of any county, may make such regulations and provisions for the vaccination of its inhabitants under the direction of the local or county board of health or a committee chosen for the purpose, and impose such penalties as they deem necessary to protect the public health.⁷⁹

It held that, since the Constitution did not forbid the enactment of the law and the government had the power to create laws for the general public welfare, the legislature could not be limited in its power to pass vaccination laws unless by an "express constitutional provision." 80 It viewed public welfare as the "highest law . . . the foundation principle of all civil government." 81

However, unlike other courts in the United States, the justices looked at the statistics in conjunction with the challenged legislation.⁸² Statistics provided by the government attorney showed that in a group of 1,000 unvaccinated individuals, 400

⁷⁵ State v. Hav. 35 S.E. 459, 460 (N.C. 1900).

⁷⁶ Id.; Walter Boyd, Burlington's Smallpox Epidemic Created Havoc in February 1899, Times-News (Feb. 18, 2014, 4:55 PM), https://www.thetimesnews.com/article/20140218/News/302189870 [https://perma.cc/SLF8-7ASS].

⁷⁷ See Hay, 35 S.E. at 461.

⁷⁸ Pro forma is a formality without a binding outcome to facilitate the legal process. See Pro forma, MERRIAM-WEBSTER DICTIONARY, https://www.merriam-webster.com/dictionary/pro%20forma [https://perma.cc/9M2J-FX9T] (last visited Oct. 24, 2020); Pro forma, BLACK'S LAW DICTIONARY (5th pocket ed. 2011). See also Hay, 35 S.E. at 460.

⁷⁹ Hay, 35 S.E. at 461 (citing § 23, 1893 N.C. Laws ch. 214).

⁸⁰ Id. at 461–62.

⁸¹ *Id*. at 461.

⁸² See id.

became infected with smallpox.⁸³ In contrast, less than two in a group of 1,000 vaccinated individuals became infected.⁸⁴ The court considered these numbers "well-ascertained facts" to show the efficiency of the vaccination and establish a proper basis for the legislature to act in "their best judgment for the public welfare upon the information before them," to mandate vaccines as "necessary for public protection."⁸⁵ Likewise, the Court considered the laws passed by other states and found no court decision striking down mandatory vaccination laws, highlighting the "power of the legislature to authorize county and municipal authorities to require compulsory vaccination" even when that power "may in some cases infringe upon individual rights."⁸⁶ The analysis suggests courts may have limited authority in invalidating state and local ordinances that are for the general public good.

While scientific evidence helps determine whether a public health law is in the best interest of the public, it is not required. In Viemeister, a parent challenged a policy by the Board of Education of the Borough of Queens which mandated all school children and teachers to be vaccinated.⁸⁷ Per the policy, the principal of a school refused to allow the plaintiff's son to attend class until the ten-year-old child received the smallpox vaccine.88 The New York Court of Appeals reviewed the policy using the New York State Constitution to determine whether "the legislature is prohibited by the Constitution from enacting that such children as have not been vaccinated shall be excluded from the public schools."89 In its decision, the Court held that a public health law with a connection to the common good does not violate the constitution and that "these principles are so well established as to require no [further] discussion."90 While every child has the right to attend school, restrictions may be allowed in the interest of the school and the general public. 91 "Smallpox is known of all to be a dangerous and contagious disease. If vaccination strongly tends to prevent the transmission or spread of this disease, it logically follows that children may be refused admission to the

⁸³ *Id*.

⁸⁴ *Id*.

⁸⁵ *Id*.

⁸⁶ *Id*.

⁸⁷ See Viemeister v. White, 72 N.E. 97, 97 (N.Y. 1904).

⁸⁸ See id.

⁸⁹ Id.

⁹⁰ *Id*.

⁹¹ *Id*.

public schools until they have been vaccinated."92

The plaintiff in Viemeister argued that vaccination did not prevent smallpox and caused more harm to public health than good.⁹³ In response, the Court stated that "[n]early every state of the Union has statutes to encourage or, directly or indirectly, to require vaccination, and this is true of most nations of Europe."94 Although only a few states had laws mandating vaccinations, courts across the country had upheld regulations mandating children be vaccinated to attend public school.⁹⁵ After analyzing similar decisions in other jurisdictions, the Court turned its attention to the underlying science, emphasizing the power of legislatures to pass laws even where common belief may not be supported by evidence. 96 Courts and legislatures have the power to act on common belief without proof or consensus, if the information comes from a trustworthy source, and can be strengthened by science. 97 In a bold assertion, the Court expressly stated:

The possibility that the belief may be wrong and that science may yet show it to be wrong is not conclusive, for the legislature has the right to pass laws which, according to the common belief of the people, are adapted to prevent the spread of contagious diseases. In a free country where the government is by the people through their chosen representatives, practical legislation admits of no other standard of action, for what the people believe is for the common welfare must be accepted as tending to promote the common welfare, whether it does in fact or not. 98

Courts should not be able to decide if a vaccine is preventative or effective, only whether the legislation is properly classified as public health law and "enacted in a reasonable and proper exercise of the police power." Like New York, legislatures should have the authority to pass public health laws mandating vaccinations, regardless of whether there is a consensus among scientists, as long as the law is passed based on common belief and knowledge.

⁹² *Id*.

⁹³ See Viemeister v. White, 72 N.E. 97, 97 (N.Y. 1904).

⁹⁴ *Id*.

⁹⁵ *Id*.

⁹⁶ See id. at 240–41.

⁹⁷ See id.

⁹⁸ *Id*.

⁹⁹ *Id*.

B. Standard Of Review After Jacobson

The court in Jacobson established that there should be broad limits to uphold mandatory vaccination laws where public health and safety are concerned. Since Jacobson, both the United States Supreme Court and lower courts have consistently upheld compulsory vaccinations.¹⁰¹ Seventeen years after Jacobson, the Court in Zucht held that public officials had broad discretion to require vaccinations and exclude those who refused to comply from attending school. 102 In doing so, it upheld that vaccination requirements are constitutional regardless of whether there is an outbreak of any specific disease or an emergency health situation. 103 Twenty years after Zucht, the Court again affirmed Jacobson, declining to recognize an individual exempt from a vaccine mandate on religious grounds. 104 The Court stated that "[t]he right to practice religion freely does not include liberty to expose the community or [a] child to a communicable disease or the latter to ill health or death."105 Although the holding has been questioned by lower courts, it has never been overruled or questioned by the United States Supreme Court. Jacobson and Zucht, despite occurring over 100 years ago, remain good law. As a result, vaccine mandates, despite no disease outbreak, remain constitutional. 106

1. Revisiting Jacobson's Standard Of Review During Covid-19

Recently, courts have rediscovered *Jacobson*, relying heavily on its opinion to evaluate the constitutionality of mandates passed during Covid-19.¹⁰⁷ In *South Bay United Pentecostal Church*, the Supreme Court refused to grant emergency injunctive relief where a California executive order limited the number of individuals who

 $^{^{100}\,}$ See Jacobson v. Massachusetts, 197 U.S. 11, 20–21 (1905).

¹⁰¹ See Parmet, supra note 38, at 127.

¹⁰² See Zucht v. King, 260 U.S. 174, 175 (1922).

¹⁰³ See Parmet, supra note 38, at 127.

¹⁰⁴ See id.; Prince v. Massachusetts, 321 U.S. 158, 178 (1944) (court rejecting Jehovah's Witness' claim that their children should be exempt from child labor laws on religious grounds).

¹⁰⁵ Prince, 321 U.S. at 166–67 (citations omitted).

 $^{^{106}}$ See Parmet, supra note 38, at 127.

¹⁰⁷ See id. at 128.

could attend religious services in places of worship. 108 Although there was no majority opinion written, Chief Justice Roberts addresses the precedent set by *Jacobson* in his concurring opinion: restrictions on places of worship "appear consistent with the Free Exercise Clause of the First Amendment" since similar or stricter "restrictions apply to comparable secular gatherings." 109 Therefore, the question is not whether the mandates in place violate the Constitution, but whether they are proper or should be lifted during a pandemic. 110 Relying on *Jacobson*, Roberts affirmed the need to establish broad limits where public health and safety are concerned. However, the concurrence left open the possibility of reexamining *Jacobson* at a later date, if the opportunity presented itself. 111

In contrast, the circuit courts remain conflicted on whether "the traditional tiers of constitutional scrutiny" apply in a public health emergency, or if a more lenient standard should be applied under Jacobson. 112 Some circuits have largely accepted Jacobson, establishing a two-part test to determine the constitutionality of a restriction based on public health. 113 The Eighth, Fifth, and First Circuits have established that when evaluating a "public health emergency law" courts must "first ask if the government order 'has . . . [a] substantial relation" to the public health crisis." 114 If not, the analysis ends and the regulation should be stricken. However, if there is a substantial relation, "the inquiry must be limited to whether the measure is beyond all question, a plain, palpable invasion of rights secured by the fundamental law."115 In contrast, the Sixth Circuit refused to broadly apply Jacobson in Roberts. 116 There, the governor of Kentucky issued an order prohibiting individuals from attending "faith-based" gatherings, such as religious services. 117 The court agreed that the governor had a duty under Jacobson to protect the health of the citizens of Kentucky and that *Prince* limited a person's right to spread communal diseases regardless of faith, but the court still

 $^{^{108}}$ See South Bay United Pentecostal Church v. Newsom, 140 S. Ct. 1613, 1613 (2020).

¹⁰⁹ *Id*.

¹¹⁰ *Id*.

 $^{^{111}}$ See id. at 1613–14; Parmet, supra note 38, at 128–29.

¹¹² Parmet, supra note 38, at 130.

¹¹³ See id. at 131.

¹¹⁴ Id.

¹¹⁵ *Id*.

 $^{^{116}}$ See id. at 132; Roberts v. Neace, 958 F.3d 409, 414–15 (6th Cir. 2020).

¹¹⁷ Roberts, 958 F.3d at 411.

granted an interlocutory appeal prohibiting the enforcement of the order. ¹¹⁸ In its reasoning, the Court stated that the "constitutional benchmark is 'government neutrality," and that the order was subject to strict scrutiny. ¹¹⁹ Since there were no similar limitations or orders addressing secular operations, the order could not be enforced under the First Amendment.

2. Reconciling Conflicting Standards Of Review

While there have been conflicting holdings regarding the application of Jacobson this past year in light of Covid-19, they can be reconciled. In almost every vaccination case since 1905, Courts have repeatedly held that when there is a public health crisis, states have the police power to enforce emergency public health laws for the health and safety of their residents. 120 Mandatory vaccines, in those instances, were generally applied to everyone, with some states allowed exemptions for non-medical and medical purposes. Due to the general applicability and need to protect the general public, the Due Process Clause and the First Amendment were not violated in almost every case. If certain Circuits wish to apply strict scrutiny, in light of the 2020 Supreme Court Decisions, the same outcome will likely occur. It has long been established that the Government has a compelling state interest in the wellbeing of all its residents, which justifies limiting the rights of a few when contagious diseases arise. Since vaccination laws apply to everyone, the constitutional benchmark of government neutrality is met. Thus, no matter the standard applied, compulsory vaccination mandates remain constitutional during a public health emergency.

III. Exemptions To Mandatory Vaccination Laws

By 1904, compulsory vaccination laws only existed in eleven states, with thirty-four states opting to have no law that impacted the general public. 121 States with no compulsory vaccination laws

¹¹⁸ See id. at 414.

 $^{^{119}}$ Id. at 415.

¹²⁰ See Jacobson v. Massachusetts, 197 U.S. 11, 22 (1905); Kevin M. Malone & Alan R. Hinman, Vaccination Mandates: The Public Health Imperative and Individual Rights, in L. IN Pub. Health Prac. 262, 271–72 (2003).

¹²¹ Jacobson, 197 U.S. at 11. Compulsory vaccination laws existed on the state level in "Connecticut, Georgia, Kentucky, Maryland (for children), Massachusetts, Mississippi, North [sic], North Carolina, Pennsylvania (in second class cities), South Carolina, Virginia and Wyoming." *Id.*

were Alabama, Arkansas, California, Colorado, Delaware, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, West Virginia, and Wisconsin. 122 It is possible that vaccination laws were established and then repealed in these states, or that such laws were never enacted by state legislatures. Some of the states, however, did have mandatory vaccination laws passed via municipal ordinance, such as Brooklyn, New York. 123 Likewise, thirteen of the thirty-four states opting to have no statewide law still mandated public school children to be vaccinated across the state. 124 As more mandatory vaccination laws were passed, either for the general public or school children, many individuals tried to opt-out of mandatory vaccines through religious or philosophical exemptions. 125

A. Authority To Establish Exemptions To Mandatory Vaccination Laws

The court in *Hay* acknowledged that individuals have some rights where a vaccine may be contrary to their health. ¹²⁶ That court found that "there may be some conditions of a person's health when it would be unsafe to submit to vaccination, and which, therefore, would be a sufficient excuse for noncompliance." ¹²⁷ These circumstances do not invalidate the law as a whole, but rather show that a municipality can create exceptions on a caseby-case basis. However, the exception remains at the sole discretion of the enforcing entity.

Years later, the Court in *Jacobson* stated that "those who had no faith in [the] vaccination" were not exempt from the mandate. ¹²⁸ The defendant was not exempted due to his fear or "because 'quite often' or 'occasionally' injury had resulted from vaccination." ¹²⁹ To

 $^{122 \,} Id.$

¹²³ See In re Smith, 40 N.E. 497, 498 (N.Y. 1895).

 $^{^{124}}$ $Jacobson,\,197$ U.S. at 11. These states included California, Georgia, Iowa, Maine, Massachusetts, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, South Dakota and Virginia. Id.

¹²⁵ See Alicia Novak, The Religious and Philosophical Exemptions to State-Compelled Vaccination: Constitutional and Other Challenges, 7 U. PA. J. CONST. L. 1101, 1104–10 (2005).

¹²⁶ See State v. Hay, 35 S.E. 459, 461 (N.C. 1990).

¹²⁷ Id.

¹²⁸ Jacobson, 197 U.S. at 36.

¹²⁹ *Id*. at 37.

allow such exemption would hinder the legislature's ability to protect the public from infectious diseases:

Such an answer would mean that compulsory vaccination could not, in any conceivable case, be legally enforced in a community, even at the command of the legislature, however widespread the epidemic of smallpox, and however deep and universal was the belief of the community and of its medical advisers, that a system of general vaccination was vital to the safety of all. ¹³⁰

However, the Court emphasized that its holding was not meant to force adults in ill health to receive a vaccine when doing so may be detrimental to their health.¹³¹ Regardless of the application, "[i]t will always... be presumed that the legislature intended exceptions to its language" in extraordinary circumstances.¹³² As a result, these exceptions do not undermine any laws pertaining to vaccine mandates, allowing states to freely legislate if they believe such laws are necessary for the safety and health of their constituents.

B. Current Religious And Philosophical Exemptions

Today, all fifty states and the District of Columbia have laws requiring school children to get vaccinated. State and local governments have the authority to mandate vaccinations for school children, so the types of vaccinations required vary based on jurisdiction. National Likewise, the types of exceptions to the vaccination requirement vary. National in 2019 alone, lawmakers introduced more than 300 childhood vaccine-related bills, a steep increase from the 175 overall vaccine-related bills proposed from 2001 to 2017. A majority of those bills introduced in state legislatures focused on non-medical vaccination exemption laws,

¹³⁰ *Id*.

¹³¹ See id. at 38-39.

¹³² *Id.* at 39.

 $^{^{133}}$ Wen W. Shen, Cong. Rsch. Serv., LSB10300, An Overview of State and Federal Authority to Impose Vaccination Requirements (2019), https://crsreports.congress.gov/product/pdf/LSB/LSB10300

[[]https://perma.cc/Y9Z4-XD5K]. See Malone & Hinman, supra note 120 at 270.

134 See Vaccination Laws, CTRS. FOR DISEASE CONTROL & PREVENTION (Feb. 28, 2018), https://www.cdc.gov/phlp/publications/topic/vaccinationlaws.html [https://perma.cc/F8NF-FB65]; SHEN, supra note 133, at 2.

¹³⁵ See Shen, supra note 133, at 1.

¹³⁶ See Scottie Andrew, The Battle Between Science and Skepticism, CNN (Jan. 18, 2020, 4:05 AM), https://www.cnn.com/2020/01/18/health/vaccine-laws-exemption-2020-trnd/index.html [https://perma.cc/P8XH-JLQY].

such as religious and philosophical exemptions.¹³⁷ As of June 2020, forty-four states and the District of Columbia allow religious exemptions for mandatory vaccinations.¹³⁸ Only fifteen states "allow philosophical exemptions for children whose parents object to immunizations because of personal, moral or other beliefs."¹³⁹

Where exemptions are allowed, there has been an increasing trend to enact exceptions to exemptions in special circumstances. In 2015 the Delaware legislature passed House Bill 91, which amended Title 14 of the Delaware Code pertaining to school immunization programs and required unvaccinated children exposed to a vaccine-preventable disease to be temporarily prohibited from attending school, regardless of vaccine exemptions. The new provision would go into effect if the Division of Public Health declared an "outbreak," rather than the Division having to wait to declare an "epidemic" that is throughout the State or in a "particular definable region." 141

In 2019, the New York State Legislature passed Assembly Bill 2371, which repealed all non-medical exemptions, including religious exemptions. from vaccination requirements. 142 Lawmakers believed the legislation was necessary because the immunization rate in at least 285 New York schools was below eighty-five percent. 143 In contrast, the Center for Disease Control recommended the vaccination rate be around ninety-five percent to ensure herd immunity to protect those who are medically unable to get vaccinated. 144 Governor Cuomo justified signing the bill into law due to spikes of vaccine-preventable diseases in certain communities across New York as a direct result of religious exemptions. 145 When this provision was challenged in court, the New York Supreme Court heavily relied on Jacobson and Viemeister, holding that the "repeal of the religious exemption to

¹³⁷ See *id*.

¹³⁸ See States with Religious and Philosophical Exemptions from School Immunization Requirements, NAT'L CONF. OF STATE LEGISLATURES (Jan. 10, 202)), https://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx [https://perma.cc/VAJ8-C2EL].

¹³⁹ *Id*.

¹⁴⁰ See 90 Del. Laws ch. 91 (2015).

⁴¹ Id.

¹⁴² See 2019 N.Y. Laws 144, ch. 31.

¹⁴³ See N.Y. Assemb. B. 2371, 242d Ann. Reg. Sess. (Sponsor Memo. 2019).

¹⁴⁴ *Id*.

¹⁴⁵ See Bobby Allyn, New York Ends Religious Exemptions for Required Vaccines, NPR (June 13, 2019, 5:26 PM),

https://www.npr.org/2019/06/13/732501865/new-york-advances-bill-ending-religious-exemptions-for-vaccines-amid-health-cris [https://perma.cc/67PB-5BJR].

compulsory vaccination . . . [is] not unconstitutional in violation of plaintiffs' rights under the Free Exercise Clause of the First Amendment of the United States Constitution, or the New York State Constitution" and that preventing highly contagious diseases was "unquestionably a compelling state interest." ¹⁴⁶

"Studies have shown that vaccine exemptions tend to cluster geographically, making some communities at greater risk for outbreaks." ¹⁴⁷ Before the enactment of Assembly Bill 2371, the New York City Department of Health and Hygiene declared a public health emergency in areas of Brooklyn due to a measles outbreak. ¹⁴⁸ In response, the Department also issued a mandatory vaccination order for children and adults, as well as a ban preventing unvaccinated children from attending school. ¹⁴⁹ When this order was challenged in court, the judge upheld the mandatory vaccination order, calling the increase in measles infections "a dramatic spike" when compared to the number of cases nationally. ¹⁵⁰ Although the holding does not cite *Jacobson*, it relies on the same rationale to uphold the order by restricting the court's authority to only determining whether there is an epidemic to justify the declaration of a public health emergency. ¹⁵¹

C. Constitutionality Of Eliminating Non-Medical Exemptions

Vaccination mandates remain constitutional even when nonmedical exemptions, such as religious and philosophical exemptions, are removed. The California Court of Appeals case

 $^{^{146}}$ See F.F. v. New York, 114, N.Y.S.3d 852, 860–61, 867, 870–71 (N.Y. Sup. Ct. 2019), $af\!f'd$, F.F. v. State, 143 N.Y.S.3d 734 (N.Y. App. Div. 2021).

¹⁴⁷ State Vaccination Requirements, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/vaccines/imz-managers/laws/state-reqs.html [https://perma.cc/C5UQ-HGT5] (last visited Nov. 15, 2019) (citations omitted).

¹⁴⁸ See 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 [https://perma.cc/5RY8-ZN7M].

¹⁴⁹ Helen Branswell, Can Officials Require Vaccinations Against Measles? A Century-Old Case May Give Them a Foothold, Stat News (Apr. 10, 2019), https://www.statnews.com/2019/04/10/can-officials-require-vaccinations-against-measles-a-century-old-case-may-give-them-a-foothold/ [https://perma.cc/Q87F-DX4K]

¹⁵⁰ See Francesca Paris, Judge Upholds Mandatory Measles Vaccinations as New York Closes More Schools, NPR (Apr. 19, 2019, 1:38 AM), https://www.npr.org/2019/04/19/715016284/Brooklyn-judge-upholds-mandatory-vaccinations-as-new-york-city-closes-more-schoo [https://perma.cc/Q4AR-Z99Z]; C.F. v. N.Y.C. Dep't of Health & Mental Hygiene, No. 508356/19, slip op. at 3 (N.Y. Sup. Ct. Apr. 18, 2019).

¹⁵¹ See C.F., slip op. at 4.

Brown v. Smith, the California legislature eliminated personal belief exemptions from mandatory vaccinations for any child in "public or private elementary or secondary school, [or] daycare center." The court held that the bill did not violate the free exercise of religion, the right to attend school, due process, or equal protection under the law; likewise, a federal trial court in Brooklyn held in V.D. that "[m]andatory vaccination laws are a permissible use of state police power, and states are free to pass laws that mandate compliance with immunization requirements." Both decisions relied on Jacobson and Prince; in Prince, the Supreme Court held "[n]either rights of religion nor rights of parenthood are beyond limitation." 154

IV. Statutory Authority For Vaccination Laws

Although not widely discussed, opinion in *Jacobson* heavily weighs the powers separating the state and federal government when it comes to the wellbeing of state residents. In its opinion, the Court expressly states that the "safety and health of the people of Massachusetts are . . . for that Commonwealth to guard and protect." Furthermore, the opinion asserts that states should enact regulation for "matters that do not ordinarily concern the National Government" because those matters "depend" on the state's "wisdom" to ensure its constituents are properly protected. This language paved the way for future regulations and statutes mandating individuals to receive vaccinations on the state level.

At the time *Jacobson* was decided, there was almost no federal government involvement concerning the smallpox pandemic. It was up to state legislatures to determine the best course of action to protect the safety and health of its residents. Public health policy was an area traditionally left to the states to decide. ¹⁵⁷ It was not until 1944, thirty-nine years after *Jacobson*, that the federal government became involved in shaping public health

¹⁵² Brown v. Smith, 235 Cal. Rptr. 3d 218, 220 (Cal. Ct. App. 2018).

¹⁵³ V.D. v. New York, 403 F. Supp. 3d 76, 86 (E.D.N.Y. 2019).

¹⁵⁴ See Malone & Hinman, supra note 119, at 271, 273 (quoting Prince v. Massachusetts, 321 U.S. 158, 166–67 (1944)).

¹⁵⁵ Jacobson v. Massachusetts, 197 U.S. 11, 38 (1905).

 $^{^{156}}$ Id.

¹⁵⁷ See Richard Hughes IV, Vaccine Exemptions and the Federal Government's Role, HEALTH AFFS. (Mar. 21, 2019),

https://www.healthaffairs.org/do/10.1377/hblog20190318.382995/full/[https://perma.cc/6CA6-24XQ].

policy with the enactment of the Public Health Service Act of 1944. 158 The Act established the federal government's authority to implement and enforce a federal quarantine for those traveling state to state by granting the Surgeon General power to control communicable diseases. 159 Under the Act, the federal government, "as may be specified from time to time in Executive orders of the President upon the recommendation of the Secretary, in consultation with the Surgeon General," may detain individuals for "the purpose of preventing the introduction, transmission, or spread of such communicable diseases."160

If no executive order is issued, the Surgeon General may, with "the recommendation of the Secretary," detain any individual "reasonably believed to be infected with a communicable disease" and "moving or about to move from a State to another State" or believed "to be a probable source of infection to individuals who, while infected with such disease in a qualifying stage, will be moving from a State to another State."161 Through this provision, the infected individual "may be detained for such time and in such manner as may be reasonably necessary."162 Large-scale federal quarantines are rarely implemented, and states largely manage public health via their police powers. 163 The last "[l]arge-scale [federal] isolation and quarantine" was "during the influenza ('Spanish Flu') pandemic in 1918–1919."164

Under Section 311 of the Public Health Service Act of 1944, States and municipalities may assist with the federal quarantine mandates issued by the Surgeon General. 165 Likewise, the "Surgeon General shall also assist States and their political subdivisions in the prevention and suppression of communicable diseases" by "cooperat[ing] with and aid[ing] State and local authorities in the enforcement of their [intra-state] quarantine and other health regulations." This provision explicitly provided for federal and state government cooperation in the enforcement of

¹⁵⁸ See id.; Public Health Service Act of 1944, 42 U.S.C. §§ 201–300aaa-13.

¹⁵⁹ See 42 U.S.C. § 264(a).

^{160 42} U.S.C. § 264(b).

¹⁶¹ 42 U.S.C. §§ 264(b), (d)(1). ¹⁶² 42 U.S.C. § 264(d)(1).

¹⁶³ See Legal Authorities for Isolation and Quarantine, CTRS. FOR DISEASE CONTROL & PREVENTION,

https://www.cdc.gov/quarantine/aboutlawsregulationsquarantineisolation.html [https://perma.cc/C5PW-T6QG].

¹⁶⁴ Id. Cf. Ala. Ass'n of Realtors v. HHS, 141 S. Ct. 2485 (striking down a moratorium implemented under 42 U.S.C. §264(a)).

¹⁶⁵ Public Health Service Act of 1944, 42 U.S.C. §§ 243, 246(a).

^{166 42} U.S.C. § 243.

local mandatory vaccination laws, and allowed the federal government to enforce a national mandate requiring individuals to receive a vaccine for smallpox; the federal government issued such a mandate, which remained in effect until 1972. 167

Since 1944, the Public Health Service Act has been expanded to encourage federal and state cooperation when implementing public health laws. Section 247d authorizes the Secretary of the Department of Health and Human Services to declare a public health emergency, allowing the Department to provide funds from the Public Health Emergency Fund to States. However, Congress realized that the failure to vaccinate the total United States population constituted a public health threat. Act was amended to provide ongoing financial support to state or local health departments to "effectively implement vaccination programs at the state level. It as a result, states have maintained exclusive power over the ability to legislate vaccination mandates, while both states and the federal government have the authority to enact quarantines.

Although states can legislate and enact public health laws, that power is not limitless. In 2000, the Code of Federal Regulations was amended to increase the federal government's authority involving communicable diseases. Under Section 70.2 of Title

¹⁶⁷ See How The 'Pox' Epidemic Changed Vaccination Rules, supra note 31.

¹⁶⁸ See 42 U.S.C. § 243(a).

reassignment of federally funded personnel" to aid states with outbreaks of infectious diseases. 42 U.S.C. § 247d(e)(1). Additionally, Congress passed the Vaccination Assistance Act of 1962, establishing a nationwide immunization program to assist with the distribution of vaccines. See Barbara J. Connolly, The Necessary Complement to Mandatory Immunizations: A National Vaccination Compensation Program, 8 CARDOZO L. REV. 137, 142 (1986) (citing Vaccine Assistance Act of 1962, Pub. L. No. 87-868, § 2, 76 Stat. 1155 (codified as amended at 42 U.S.C. § 247b)); Alan R. Hinman et al., Vaccine-Preventable Diseases, Immunizations, and MMWR 1961-2011, CTRS. FOR DISEASE CONTROL & PREVENTION (Oct. 7, 2011),

https://www.cdc.gov/mmwr/preview/mmwrhtml/su6004a9.htm [https://perma.cc/PQU5-T323] ("In 1962, the Vaccination Assistance Act (Section 317 of the Public Health Service Act) was passed to 'achieve as quickly as possible the protection of the population, especially of all preschool children . . . through intensive immunization activity over a limited period of time. . . .").

 $^{^{170}\,}$ Connolly, supra note 169, at 142.

¹⁷¹ Id.; see also Hinman et al., supra note 169.

¹⁷² "States have police power functions to protect the health, safety, and welfare of persons within their borders. To control the spread of disease within their borders, states have laws to enforce the use of isolation and quarantine." *Legal Authorities for Isolation and Quarantine, supra* note 163.

¹⁷³ See 42 C.F.R § 70.2 (2021).

42, if "the Director of the Centers for Disease Control and Prevention determines that the measures taken by health authorities of any State or [municipality] are insufficient to prevent the spread of any of the communicable diseases from such State or [city] to any other State or [city]," the Director may take measures to prevent the spread of a disease that are "reasonably necessary."174 Although this authority has not been used to date to enforce vaccinations, it may allow the federal government to mandate vaccines in hot spots that arise across the United States. This is because the provision increases the federal government's power by allowing the CDC to take necessary action where state and local municipalities are ineffective during a public health emergency. During the smallpox epidemic, courts upheld state laws that were necessary to ensure the health and safety of the public, including vaccine mandates. While those cases pertain to state authority, courts may extend that authority where the federal government steps in the shoes of state officials to enact public health directives. 175

V. Policy Considerations

Although it is likely the United States Supreme Court and lower courts will uphold a federal COVID-19 vaccination mandate, lawmakers need to consider the policy implications. To date, there is no judicial requirement for the role science should play in policymaking. When the first vaccine was compelled by a state over 110 years ago, there was "no effort taken by the government to ensure that vaccines on the market were safe and effective" and almost no regulation of the pharmaceutical industry. 176 Yet courts, such as the one in Jacobson and its predecessors, upheld mandates based on the common belief or knowledge standard applied by policymakers to decide whether a mandate is rational. That belief did not require any proof but *could* be based on scientific evidence if a legislator personally finds that information reliable when weighing the pros and cons of a mandate. Although the industry is regulated today, no modern court case has determined the role science should play or the safety benchmark required to uphold compulsory vaccinations. The common knowledge standard still applies.

¹⁷⁴ 42 C.F.R § 70.2 (2021).

¹⁷⁵ *Cf.* Wyatt v. City of Rome, 31 S.E. 188, 188 (Ga. 1898) (holding that municipalities issuing a state mandated vaccine had the same governmental immunity as state officials because they were acting on behalf of the state).

¹⁷⁶ How The 'Pox' Epidemic Changed Vaccination Rules, supra note 31.

On average, it historically has taken about ten to fifteen years to develop a successful vaccine. Although the human papilommavirus (HPV) was first discovered in 1981, a vaccine was not approved by the Federal Drug Administration until 2006. Real Once approved, the vaccine was made available to the public on October 16, 2009. The entire process, from discovery to approval and distribution, took twenty-eight years. Even upon the vaccination's release, two subsequent versions were introduced to the market. Real Currently, there are three versions of the vaccine available, and it is a school vaccination requirement in Rhode Island, Virginia, Washington, D.C., Hawaii, and Puerto Rico. Reforts to require the HPV vaccine in other states have been unsuccessful due to safety concerns.

Prior to the HPV vaccine, the federal government pushed to expedite the National Swine Flu Immunization Program. In 1976, the U.S. Secretary of Health, Education, and Welfare feared an epidemic caused by a new strain of influenza, similar to the 1918 Spanish Flu. 182 To prevent a potential pandemic, the Center for Disease Control announced that "at least 80 percent of the United States population would need to be vaccinated." Immediately, lawmakers in Congress began working on the National Swine Flu Immunization Program to aid in the development and distribution

¹⁷⁷ See Vaccine Development, Testing, and Regulation, HIST. OF VACCINES, https://www.historyofvaccines.org/content/articles/vaccine-development-testing-and-regulation [https://perma.cc/UZ2X-PDPE].

¹⁷⁸ See Natalie Colarossi, How Long It Took to Develop 12 Other Vaccines in History, Bus. Insider (July 18, 2020, 9:20 AM),

https://www.businessinsider.com/how-long-it-took-to-develop-other-vaccines-in-history-2020-7 [https://perma.cc/22J2-PY7F].

 $^{^{179}\,}$ See U.S. Food & Drug Admin., October 16, 2009 Approval Letter – Cervarix (2009),

https://web.archive.org/web/20091019061945/www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm186959.htm [https://perma.cc/G3J5-PCH9].

¹⁸⁰ See Human Papillomavirus (HPV) Vaccination: What Everyone Should Know, CTRS. FOR DISEASE CONTROL & PREVENTION (Mar. 17, 2020), https://www.cdc.gov/vaccines/vpd/hpv/public/index.html [https://perma.cc/8VC7-ZYDM] ("Three HPV vaccines . . . have been licensed by the U.S. Food and Drug Administration (FDA).").

¹⁸¹ Id.; HPV Vaccine: State Legislation and Regulation, NAT'L CONF. OF STATE LEGISLATURES (May 26, 2020), https://www.ncsl.org/research/health/hpv-vaccine-state-legislation-and-statutes.aspx [https://perma.cc/J98B-7TNA].

 $^{^{182}}$ Kat Eschner, The Long Shadow of the 1976 Swine Flu Vaccine 'Fiasco', SMITHSONIAN MAG. (Feb. 6, 2017), https://www.smithsonianmag.com/smartnews/long-shadow-1976-swine-flu-vaccine-fiasco-180961994/ [https://perma.cc/CD2G-HAHD].

 $^{^{183}}$ Id.

of a vaccine. 184 Within eight months of discovering the new strain of swine flu, eleven million doses of the vaccine were produced and distributed to the public. 185 "The nationwide vaccination program, however, ended after vaccination was associated with an increased risk of a [neurological] condition called Guillain-Barré syndrome (GBS)." 186 In response, the New York Times criticized the program, highlighting that the vaccine "may have resulted in the death of some persons and sickened many more." 187 The article continued to state that "[t]he blame for such a result will have to fall on the politicians and bureaucrats who formed policy so hastily early this year, scorning the few voices that expressed skepticism and sought to raise questions about the program." 188

Fast forward to 2020 and many have the same concerns regarding hastily produced vaccinations in response to a pandemic. "The chief concern among those surveyed was that the [COVID-19] vaccine approval process would move too quickly without taking time to properly establish safety and effectiveness." When developing a vaccine, lawmakers need to take into consideration the levels of risks associated with speed and distribution. The Center for Disease Control and Prevention evaluates vaccines both for their efficiency and effectiveness. "Vaccine efficacy is used when a study is carried out under ideal conditions, for example, during a clinical trial." Meanwhile, "[v]accine effectiveness is used when a study is carried out under typical field (that is, less than perfectly controlled) conditions." The decision to use a vaccine depends on a balance of risk and benefit, since no vaccine is 100% effective.

¹⁸⁴ See id.

¹⁸⁵ See Swine Flu Influenza Vaccine, HIST. OF VACCINES, https://www.historyofvaccines.org/content/swine-flu-vaccine [https://perma.cc/2MN6-6GFR].

¹⁸⁶ All Timelines Overview, HIST. OF VACCINES, https://www.historyofvaccines.org/timeline#EVT_100826 [https://perma.cc/6WJ3-Q4LW].

¹⁸⁷ Harry Schwartz, *Swine Flu Fiasco*, N.Y. TIMES (Dec. 21, 1976), https://www.nytimes.com/1976/12/21/archives/swine-flu-fiasco.html [https://perma.cc/9F2Y-6MDR].

¹⁸⁸ *Id*

¹⁸⁹ Michael Gold & Jesse McKinley, *New York Will Review Virus Vaccines*, *Citing Politicization of Process*, N.Y. TIMES (Dec. 3, 2020), https://www.nytimes.com/2020/09/24/nyregion/new-york-coronavirus-vaccine.html [https://perma.cc/ZJT6-PVVR].

¹⁹⁰ Lesson 3: Measures of Risk, CTRS. FOR DISEASE CONTROL & PREVENTION, (May 18, 2012) https://www.cdc.gov/csels/dsepd/ss1978/lesson3/section6.html [https://perma.cc/F76Q-JV3H].

 $^{^{191}}$ Id.

¹⁹² See Malone & Hinman, supra note 120, at 264.

rate to make a vaccine mandatory for the public, "[m]ost routine childhood vaccines are effective for 85% to 95% of recipients." ¹⁹³

VI. The Future Of Jacobson And COVID-19

The Court in Jacobson set the stage for determining when a public health emergency exists, clarifying state and local authority to implement strict public health laws. Despite the holding in the case being applied by numerous courts over the last century, under varying levels of scrutiny, the COVID-19 pandemic has highlighted the need for further clarification on how the decision impacts individual liberties after a public health emergency State and local governments have the authority to mandate a vaccine at the height of a pandemic, but does that power shift when an outbreak is no longer a severe threat to public health and safety? Should the United States Supreme Court consider the success of a vaccine in preventing the spread of a deadly illness when determining if a vaccine should still be mandated? Prior history surrounding the requirement of vaccines for less lethal illnesses, such as the seasonal flu, may hold the answers to these questions.

A. The Spread of the Seasonal Flu and Vaccination Requirements

As of 2020, six states and one municipality mandate children enrolled in childcare or preschool programs receive an annual influenza vaccine. ¹⁹⁵ These states are Connecticut, Massachusetts, New Jersey, Ohio, Pennsylvania, and Rhode Island. ¹⁹⁶ No state or municipality statutorily requires adults to receive a flu vaccine annually, and the only city that mandates the flu vaccine for certain children is New York City. ¹⁹⁷

¹⁹³ Six Common Misconceptions about Vaccination and How to Respond to Them, CTRS. FOR DISEASE CONTROL & PREVENTION (Apr. 6, 2001, 12:18 PM), available at

 $[\]label{lem:https://www.orau.gov/cdcynergy/web/im/Content/active information/resources/IM $$ _Common_Misconceptions_about_Vaccination.pdf $$ [https://perma.cc/T5MVBG7V].$

¹⁹⁴ See generally Jacobson v. Massachusetts, 197 U.S. 11, 24 (1905).
195 See State Information, IMMUNIZATION ACTION COAL., (Aug. 20, 2020),
https://www.immunize.org/laws/flu_childcare.asp[https://perma.cc/3R3G-BBWP].

¹⁹⁶ See *id*.

 $^{^{197}}$ See id. (New York City mandates an annual flu vaccine for childcare enrollees).

In 2013, New York did not have a state-wide flu vaccine mandate for school children, leaving it up to municipalities to establish. In response, the "New York City Board of Health... adopted regulations mandating the influenza vaccine for children attending certain child care, prekindergarten, and kindergarten programs." In regulation mirrored state immunization laws by exempting children for health or religious reasons. However, it placed the onus on the educational or child care establishment to monitor compliance. Child care programs and schools were permitted to allow unvaccinated children into their programs but needed to pay a fine for each unvaccinated child that was not exempted from the regulation to attend school.

In 2015, a group of mothers challenged the flu vaccination mandate after they refused to get their children vaccinated and were subsequently barred from attending specific schools.²⁰³ The plaintiffs argued that the mandate was unconstitutional and that only the state had the authority to mandate vaccines for children.²⁰⁴ The Court of Appeals determined that the City of New York delegated its power over health matters to the New York City Board of Health (Board) through the New York City Charter.²⁰⁵

The New York City Charter empowers the Department with "jurisdiction to regulate all matters affecting health in the city of New York and to perform all those functions and operations performed by the city that relate to the health of the people of the city", as well as to "supervise the reporting and control of communicable and chronic diseases and conditions hazardous to life and health" ²⁰⁶

The New York City Department of Health and Mental Hygiene has the authority to further delegate its power to the Board to adopt vaccine requirements to prevent the spread of communicable

¹⁹⁸ See id.

¹⁹⁹ Garcia v. N.Y.C. Dep't of Health & Mental Hygiene, 38 N.Y.S.3d 880, 880 (N.Y. App. Div. 2016), rev'd on other grounds 106 N.E.3d 1187, 1202 (N.Y. 2018).

²⁰⁰ See Garcia, 38 N.Y.S.3d at 881.

²⁰¹ See *id*.

 $^{^{202}}$ See id.

 $^{^{203}}$ See id.

²⁰⁴ See Garcia v. N.Y.C. Dep't of Health & Mental Hygiene, 106 N.E.3d 1187, 1192 (N.Y. 2018).

²⁰⁵ See id. at 1194.

 $^{^{206}}$ Id. The opinion's mention of "Department" refers to the New York City Department of Health and Mental Hygiene. See id. (quoting N.Y.C. Charter § 556 (2004)).

diseases.²⁰⁷ However, the Board cannot act in a legislative capacity and "must act within the strictures of its legislatively-delegated powers."²⁰⁸ New York Courts use what are known as the *Boreali* factors to "clarify[y] the 'difficult-to-define line between administrative rule-making and legislative policy-making."²⁰⁹ These factors consider whether (1) an agency used preexisting guidelines or made its own policy goals; (2) the agency created rules without legislative guidance; "(3) the legislature had unsuccessfully attempted to enact laws pertaining to the issue . . . and (4) the agency used special technical expertise in the applicable field."²¹⁰

In determining the first factor, the court in *Garcia* acknowledged that "there is a very direct connection between the flu vaccine rules and the preservation of health and safety" for vulnerable populations, such as very young children.²¹¹ Although the rule may seem like the Board made its own broad policy decision, the enforcement of the rule was outlined by the New York State legislature, which allowed the implementation of fines.²¹² Likewise, since the rule was limited to certain age groups of children, it was not considered policymaking, and as a result, the first factor favored upholding the rule.²¹³

When evaluating the second factor, the court compared the flu vaccine to the smallpox vaccine mandated in the late nineteenth and early twentieth century. Despite smallpox being a pandemic, vastly more fatal and infectious than the flu, the rationale behind the public health regulations was the same. In both instances, the Department was granted authority to implement health laws for the general health and safety of the public. Over the course of many decades, the State [through its legislature] has repeatedly reaffirmed the authority of the Department (in its various forms) to regulate vaccinations by allowing the agency to add more vaccinations over time. The court noted that repeated amendments to New York's Public Health Law without interference in the Department's ability to

²⁰⁷ See Garcia, 106 N.E.3d at 1194.

²⁰⁸ Id. at 1195.

 $^{^{209}}$ $\emph{Id.}$ at 1193 (quoting Boreali v. Axelrod, 517 N.E.2d 1350, 1355 (N.Y. 1987)).

²¹⁰ Garcia, 106 N.E.3d at 1194.

²¹¹ Id. at 1196.

²¹² See id.

²¹³ See id.

²¹⁴ See id. at 1197.

 $^{^{215}}$ *Id*.

mandate vaccinations highlights legislative approval.²¹⁶ The third factor considers the omissions in law, but was determined to be inconclusive for this case.

Lastly, the Court evaluated the scientific data available when the Board was considering its regulations. ²¹⁷

In debating the virtues of the proposed rules, the Board compiled data and research regarding the prevalence and severity of influenza in the infant population, the effectiveness and safety of the vaccine, and the benefits to the greater population of mandating the vaccination of young children. The Board explained that the flu vaccine rules are supported by research indicating that children have "the highest attack rates of influenza," "serve as a major source of transmission within communities," and, further, that "[v]accinating children produces 'herd immunity' in the general population." ²¹⁸

In reviewing the Board's research, the Court determined that the agency's "technical competence in the health field" was partially relevant, but either way the Board had the power via its "regulatory authority to choose among various enforcement methods to best achieve compliance." Therefore, the fourth factor weighed in favor of the agency. As a result, the Board had the regulatory authority to mandate a flu vaccine, and the rule was upheld. 220

Although not mentioned in the opinion, *Garcia* uses the same analysis as *Jacobson* to determine whether a vaccine mandate is within a government entity's authority and if yes, the extent of that authority. A large part of the analysis views the policy and legal considerations that went into implementing the underlying decision. In *Jacobson*, it was the information presented to legislatures while determining how to vote on a statutory vaccine requirement.²²¹ Likewise, in *Garcia*, the court considered the information weighed by the Board before implementing a

²¹⁶ See Garcia, 106 N.E.3d at 1198 (quoting Greater N.Y. Taxi Ass'n v. N.Y.C. Taxi & Limousine Comm'n, 36 N.E.3d 632, 639 (N.Y. 2015) ("Where an agency has promulgated regulations in a particular area for an extended time without any interference from the legislative body, we can infer, to some degree, that the legislature approves of the agency's interpretation or action.").

²¹⁷ See Garcia, 106 N.E.3d at 1198–99.

²¹⁸ *Id*.

²¹⁹ Id. at 1199.

²²⁰ Id. at 1198–99.

²²¹ See Jacobson v. Massachusetts, 197 U.S. 11, 34–35 (1905).

regulatory mandate.²²² Unlike *Jacobson*, however, the *Garcia* court weighed the scientific value of the underlying information because the *Boreali* factors require technical expertise. In this case, the Board's expertise involves both medical and scientific background. The outcome in *Garcia* shows that science can change the underlying analysis of whether a vaccine should be mandated.

Garcia lays the foundation for courts to reevaluate whether vaccination mandates are necessary outside the paradigm of a public health emergency when supported by science.²²³ The annual flu is far less lethal than the smallpox pandemic. It is estimated that Smallpox killed over 500 million people over the last century, equating to about "5 million annual deaths on average." 224 In contrast, the CDC estimates that influenza caused about 20,000 deaths during the 2019 to 2020 season and 28,000 deaths during the 2018 to 2019 season. 225 Yet, the Court in Garcia upheld the Board's decision to require children between six months and five years old receive the seasonal flu vaccine. This was because children of the aforementioned age group had "the highest attack rates of influenza" and were more likely to spread the illness through the community. 226 Although not as fatal to the children in the identified demographics, the communicability of the illness posed a public health threat to others in the community. requiring the group to be vaccinated, the flu was less likely to spread, forming a herd immunity to protect those who could not get vaccinated.²²⁷ Therefore, the data collected justified upholding the regulation, despite the flu not being a pandemic or traditional public health emergency.

Furthermore, the *Garcia* opinion lays the foundation for government entities to pass vaccine mandates through rules rather than waiting for statutes to pass through the legislature. Legislation can be held up in committees or heavily debated before

²²⁴ Sophie Ochmann & Max Roser, *Smallpox*, OUR WORLD IN DATA (2018), https://ourworldindata.org/smallpox. [https://perma.cc/XJ4W-YU3C].

²²² See Garcia, 106 N.E.3d at 1198-99.

²²³ See id.

²²⁵ Estimated Flu-Related Illnesses, Medical Visits, Hospitalizations, and Deaths in the United States — 2019–2020 Flu Season, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/flu/about/burden/2019-2020.html [https://perma.cc/S37M-XZEB]; Estimated Flu-Related Illnesses, Medical Visits, Hospitalizations, and Deaths in the United States–2018–2019 Flu Season, CTRS. FOR DISEASE CONTROL & PREVENTION,

https://www.cdc.gov/flu/about/burden/2018-2019.html~[https://perma.cc/64EY-MCZT].

²²⁶ Garcia, 106 N.E.3d at 1198.

²²⁷ See id. at 1199.

it is ever presented for a vote. Where there appears to be legislative inaction, there is a legal ambiguity regarding agency authority. The decision in *Garcia* proposes that courts can rely on legislative trends to determine proper agency action and potential legislative intent. The Court recognized that "the state legislature has generally adopted an incremental approach to imposing vaccination requirements for children and has enacted legislation that encourages, but does not require, that children receive the influenza vaccination."228 Through this analysis, it can be determined that the state legislature leans towards requiring vaccination but is hesitant to implement too many at one time. However, an agency taking matters into its own hands could require a vaccine through a rule. Doing so would not be against the intent of the legislature or outside of its statutorily delegated For public health boards or departments, vaccine authority. mandates, absent a statute, would be considered constitutional if in the best interest of public health. As a result, Garcia paves the way for regulatory authorities to mandate vaccines that are generally found to be beneficial to public health, even if a vaccine is only beneficial for a select subsection of society and a legislature did not pass a statute.

B. Balancing Personal Liberties And Necessity Without A Public Health Emergency

As of December 23, 2020, the number of COVID-19 cases in the United States and across the world has increased exponentially.²²⁹ There is a consensus that the increase in cases and COVID-19's status as a pandemic gives rise to a public health emergency.²³⁰ However, Pfizer and Moderna have begun to distribute COVID-19 vaccines to the public in hopes that the vaccine will reduce the spread of the virus.²³¹ Courts need to consider not only when *Jacobson* applies, but how it should be upheld when the potential success of a vaccine drives down infection rates. Courts like the one in *Garcia*, implicitly rely on technical and scientific experience

²²⁸ Id. at 1198 (citations omitted).

²²⁹ See CDC COVID Data Tracker, CTRS. FOR DISEASE CONTROL &

PREVENTION, https://covid.cdc.gov/covid-data-

tracker/#cases_casesper100klast7days [https://perma.cc/QYQ4-JQ53].

²²⁸ See id.; Public-Health-and-Medical-Emergency-Declarations-and-

Waivers.aspx [https://perma.cc/MD33-ZD3S].

²³¹ See COVID-19 Vaccines, FOOD & DRUG ADMIN.,

https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/covid-19-vaccines [https://perma.cc/F965-XQSY].

when evaluating the necessity and legality of a vaccine mandate implemented by agencies with delegated power outside of a public health emergency. Yet, the same analysis has not been applied to statutorily mandated vaccines, either implemented during or after a public health emergency. Although COVID-19 is highly infectious, the vaccine could blur the lines between the necessity for public health and reasonable restrictions on personal liberties.

The distinction between a public health emergency and a policy that is beneficial for general public health is based on scientific data available at the time of enactment. Although Jacobson paves the way for science to be considered in court decisions, it is still not largely accepted to determine the existence of a public health emergency.²³³ For example, the success of a vaccine can be one of the factors a lawmaker considers when deciding how to vote on a vaccine mandate, but it is not generally considered by the courts. 234 During a public health emergency, the decision lies on legislators to act in the best interest of the public, regardless of the data available.²³⁵ In contrast, the success of a vaccine comes into play outside of a public health emergency, years after development, when considering vaccines for school children. Vaccines that are mandated for school children outside of an emergency must still meet Jacobson's necessity test. 236 When determining necessity, courts have balanced whether a vaccine was rationally related to school activities, how contagious a disease was, and the imminent harm to an individual or society.²³⁷ If a vaccine weighed in favor of overall health, then the mandate was upheld, even if implemented by an agency with delegated authority.²³⁸ Garcia and similar cases that evaluate vaccine mandates outside of a public health emergency could provide the blueprint for narrowing the broad powers established over a century ago in *Jacobson*.

Courts are currently conflicted on how to interpret *Jacobson* in light of COVID-19 to determine the existence of a public health

²³² See Garcia, 106 N.E.3d at 1197–98.

²³³ See Michael R. Ulrich, Law and Politics, an Emerging Epidemic: A Call for Evidence-Based Public Health Law, 42 Am. J.L. & Med. 256, 256 (2016).

²³⁴ Cf. Jacobson v. Massachusetts, 197 U.S. 11, 30 (1905).

²³⁵ See discussion supra Part II.A.ii; Wyatt v. City of Rome, 105 Ga. 312, 313–14 (Ga. 1898).

²³⁶ See Mary Holland, Reconsidering Compulsory Childhood Vaccination, 42 N.Y.U. Sch. of L., Pub. L. & Legal Theory Rsch. Paper Series, Working Paper No. 10–64 (2010).

²³⁷ See id. (comparing potential arguments against mandatory vaccines for hepatitis B, HPV, tetanus, varicella, and the seasonal flu); *Garcia*, 106 N.E.3d at 1196–99.

²³⁸ See Garcia, 106 N.E.3d at 1199.

emergency in fear that restrictions may be an "invasion of rights secured by the fundamental law." Regardless of the narrow or broad approach to *Jacobson*, neither test accounts for the end of a pandemic. Using *Garcia* and the modern approaches to *Jacobson*, courts should adopt a two-step test when determining in policies implemented during a public health emergency should remain in place while the threat to public health is mitigated, either through new treatment options or a vaccine. Before beginning the test, however, courts must determine whether the underlying policy was implemented during a public health emergency. This would follow the traditional analysis presented in *Jacobson* and applies regardless of a court's use of a strict or narrow test. Once the underlying law is considered a proper exercise of emergency powers, the analysis for post-emergency legality can begin.

First, courts should narrow the scope of *Jacobson* to determine whether a public health emergency still exists to justify a vaccine mandate by balancing the infection rate and treatment success rate under a rational basis standard. The rational basis standard builds upon the precedent set in Jacobson, where the Supreme Court upheld the Smallpox vaccine mandate based on the common belief or knowledge standard applied by policymakers.²⁴¹ However, rather than rely on the common belief of policymakers, courts should base their decisions on scientific data. Both the infection rate and treatment success rate should come from generally accepted scientific evidence. Factors to determine treatment successes include all medically accepted government-approved options, such as medications vaccinations. Such a threshold quantifies that the public's health and welfare would be significantly endangered by an individual's refusal to get a vaccine, allowing a court to determine whether vaccine mandates are the least restrictive means of preventing the spread of communicable diseases.

In applying the first prong of the two-step test, courts must weigh the types of treatment options available, as well as their success rates. The success of a vaccine, when compared to the success rate of medication to mitigate fatalities, may lead to different outcomes. Where an infection rate is high, but the success rate of a distributed vaccine is low, the test balances in favor of restrictive public health policies, but not necessarily a

²³⁹ Jacobson, 197 U.S. at 31 (quoting Mugler v. Kansas, 123 U.S. 623, 661 (1887)). See supra Part II.B.i.

²⁴⁰ See discussion supra Part II.B.i.

²⁴¹ See discussion supra Part V; Part II.A.ii.

vaccine mandate. Similarly, if an infection rate for an illness is high, but the success of treatment options is high, such as medication to mitigate facilities, the scale balances in favor of individual liberties. Despite being contagious, a vaccine mandate would not be the least restrictive means of protecting public health. In contrast, if the infection rate remains high and the success rate of a vaccine is high, then a vaccine mandate should be upheld.

Such a threshold quantifies that the public's health and welfare would be significantly endangered by an individual's refusal to get a vaccine, allowing a court to see whether vaccine mandates are the least restrictive means of preventing the spread of communicable diseases. This prong allows governments to broadly implement vaccine mandates but narrows their ability to exercise police powers to the scientific data available. It also gives courts discretion to view a public health emergency *in toto*, while allowing for flexibility in decisions depending on the facts of a case. If it determined a public health emergency exists and that a vaccine mandate is the least restrictive means of treatment, courts should continue to step two of the test.

Under step two, a vaccine mandate should remain in place for all individuals when the infection rate falls below the percentage required to achieve herd immunity, by balancing the reason for the infection decline, vaccine exemptions available within a State, and long-term treatment options. The infection rate allowing for the possibility of herd immunity changes for each illness. "Depending how contagious an infection is, typically 50% to 90% of a population must be immune to achieve herd immunity."242 Since infectious illnesses such as COVID-19 are highly contagious and spread quickly, it is likely a threshold closer to ninety percent will be required.²⁴³ For similar diseases, such as Smallpox, WHO recommends vaccinating at least eighty percent of the population to prevent the disease spreading via the rest of the unvaccinated population.²⁴⁴ For COVID-19, the second prong of the two-step test should be based on a twenty percent infection rate, signifying a shift towards herd immunity and potential eradication of the virus.

²⁴² Hub Staff, *COVID-19* and the Long Road to Herd Immunity, JOHNS HOPKINS UNIV. (Apr. 30, 2020), https://hub.jhu.edu/2020/04/30/herd-immunity-covid-19-coronavirus/ [https://perma.cc/WX88-ZJHJ].

²⁴³ Angel Aguirre, *A Tale of Two Pandemics: The Impact of Smallpox and COVID-19*, YORK COLL., https://www.york.cuny.edu/news/a-tale-of-two-pandemics-the-impact-of-smallpox-and-covid-19 [https://perma.cc/LGP8-N274].

²⁴⁴ See World Health Org., Bugs, Drugs and Smoke: Stories From Public Health 9 (Fiona Fleck ed., 2011).

In evaluating the second prong for COVID-19, courts need to balance the reasons behind an established infection rate with the protections available for personal liberties to ensure the least restrictive means are used to achieve public health goals. This closely mirrors the analysis in the first prong. If an infection rate falls due to an increase in the number of individuals vaccinated, but there is no significant improvement in treatment options, a vaccine mandate should remain. However, if the infection decline is not from the success of a vaccine, but treatment options, then it should not be mandated. In that case, a vaccine would be too restrictive on personal liberties to justify enforcement.

Currently, the factors that put *Jacobson* in play are lifted when a public health emergency ceases. History has shown, however, that when vaccine mandates are lifted too soon, the underlying disease is given a chance to mutate and become vaccine-resistant. For example, during the smallpox pandemic, vaccine mandates were struck down in courts due to low infection rates. Within a few years, the pandemic peaked again because herd immunity was eliminated within a generation.²⁴⁵ A two-step test will allow courts to take into consideration that history while establishing clearer, adaptable legal precedent to spark a long-term vaccine conversation.

VII. Next Steps In The Fight Against COVID-19

Both courts and lawmakers will play a vital role in the coming months regarding COVID-19 legislation and litigation. To avoid replicating the lasting implications of the National Swine Flu Immunization Program of 1976, lawmakers should take the time to ensure a vaccine is effective before distributing it to the public. Likewise, under the general policing powers established by *Jacobson*, states and local municipalities should have the sole discretion in determining whether a vaccine should be mandated.

Although the federal government does have the authority to quarantine and take over public health mandates in an emergency if localities are poorly containing contagious illnesses, that authority should be limited to the powers expressly granted in the Public Health Service Act.²⁴⁶ Both judicial and legislative

²⁴⁵ See Kaufman, supra note 28, at 464.

²⁴⁶ See supra Part IV. While this paper focuses on the federal government's authority under the Public Health Service Act, additional authority may be found under other statutory or agency authority. At the time this paper was

precedent has shown that states and municipalities may mandate vaccines. In contrast, the federal government has the authority to ensure the vaccines developed are safe for the public through the FDA's approval guidelines. Rather than hastily legislate to create a federal vaccination program, the agency should strengthen its approval requirements. Doing so will build confidence in state lawmakers to mandate a vaccine and boost the public's confidence in voluntarily getting the vaccine.

As for vaccination mandates, state legislatures should strongly rely on medical science and not common knowledge when deciding if the general public should be required to receive a COVID-19 vaccine. Although there is no standard for effectiveness when determining a vaccine requirement, history has shown that mandated vaccines are at least eighty-five percent to ninety-five percent effective once released to the general public.²⁴⁷ While the ninety-five percent benchmark would be ideal, no vaccine should be mandated unless it at least reaches the eighty-five percent effectiveness threshold. Furthermore, states should wait to remove any religious and philosophical vaccine exemptions until the end of the pandemic. If these exemptions are removed, it may cause more pushback from the general public when and if a mandate is issued. Similar to the mandatory smallpox vaccines, opposition to a mandate may flood the courts with litigation and refuel the anti-vaccination movement. While Jacobson is the binding precedent at the moment, an increase in litigation also increases the chances that it may be overruled. As a result, there may be a lasting impact on a state or municipality's ability to remove exemptions or mandate vaccinations in the future.

If the COVID-19 vaccine is mandated for the general public or children, lawmakers will have the responsibility to ensure that any legislation passed is the least restrictive on individual liberties. In turn, courts will have the responsibility to determine whether vaccine mandates should remain in place or be lifted once a public health emergency ceases. Both lawmakers and judges need to rely

written, the Department of Labor's Occupational Safety and Health Administration (OSHA) announced a rule "[r]equir[ing] all employers with 100 or more employees to ensure their workforce is fully vaccinated or require any workers who remain unvaccinated to produce a negative test result on at least a weekly basis before coming to work." Path out of the Pandemic: President Biden's COVID–19 Action Plan, WHITE HOUSE,

https://www.whitehouse.gov/covidplan/ [https://perma.cc/BA9X-GZ7G]. The authority was issued under the Emergency Temporary Standard, "impact[ing] over 80 million workers in private sector businesses with 100+ employees." *Id.* ²⁴⁷ *See supra* Part V.

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on the scientific data available and balance the data against restrictive public health policies. Although *Jacobson* has been the standard for over a century, the holding needs to adapt to legal and scientific advancements. Common belief should no longer be standard for any public health policy. Legislation should be based on technical, medical, and scientific expertise. This expertise is essential in determining whether a vaccine should be mandated and if yes, at what point those mandates should be lifted.

While this paper urges the federal government and lawmakers to be patient in the development and implementation of COVID-19 vaccine mandates to avoid long-term negative consequences, inaction is not possible. Until all scientific thresholds are met, alternatives to vaccination mandates must be utilized. Employers should remain virtual, when possible. Likewise, states should allow movement within the state, with mask requirements and social distancing remaining in place. Doing so will not only protect the health and safety of the general public, but also ensure the legacy of *Jacobson* continues.