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How Bodily Autonomy Can Fail Against Vaccination Mandates; The Few vs. the Many

JASON YADHRAM¹

ABSTRACT. Humans have been a communal species since inception and continue to be so to this day. Because of this, if even a small scale of a measured population becomes severely ill, the entire remaining population and surrounding area is thrown into absolute chaos. In fact, we have seen these circumstances throughout history and in the recent COVID-19 pandemic yet, some of us have forgotten that the only way this chaos can be curbed, is by enacting a mandatory vaccination policy. Since COVID-19 however, vaccination mandates have become an uneasy topic of conversation in the United States for essentially one main reason, some U.S citizens do not like to be told what to do with their body and what to place inside it, further believing their bodily autonomy to be absolute. Data shows that this ideology recently became more widespread from an increase of mistrust of government and pharmaceutical companies, and from political beliefs and affiliations. Nevertheless, what the data also shows is that these same individuals were asserting their right to bodily autonomy against a vaccination mandate in an unduly aggressive manner, and on a very erroneous understanding of the governing jurisprudence, policies and modern scientific data surrounding said vaccination mandates and large scale disease outbreaks.

This article therefore aims to provide a clear and extensive understanding of the proposition that, while bodily autonomy is favored in other aspects of life, this right can fail with respect to deadly disease outbreaks and mandatory vaccinations as there is presently no other practical or feasible alternative. Specifically, this article introduces and/or reminds the U.S public of well-established governing case law, relevant historical and scientific information and the pertinent legislative authority surrounding vaccines, bodily autonomy and vaccination mandates.

¹ J.D. Candidate, Pace University, Elisabeth Haub School of Law, Class of 2024. I would like to thank Professor Barbara L. Atwell of Pace Law, for all the helpful tips and comments that were provided during the writing of this article. This article was initially written as part of Prof. Atwell's Bioethics and Medical Practice course in Spring of 2023, and as part of Pace Law's upper level writing requirement.

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I. INTRODUCTION

Picture the following: cities deserted; schools, courts, recreational facilities, and businesses closed; shipping and all forms of transportation stopped, individual economies on the brink of collapse, local and national government in shambles, hospitals and freezer trucks filled with patients and corpses; mass graves and tears. What I've just described seemingly recites the premise of a hit TV series like "The Walking Dead"² or "The Last of Us,"³ however, as you may be well aware, the above scenario instead summarily describes the year 2020 in the wake of the COVID-19 pandemic, the year the world stood still.⁴

As a nation, despite our political and ideological differences, from the experiences in 2020, there is one thing that is often in agreement: we do not want a repeat of 2020. However, where the disagreement lies is with the means of preventing said repeated scenario and what role, if any, should an individual play to aid in this prevention.

It is well known that currently, the most effective and efficient means of fighting disease outbreaks is by vaccinations,⁵ and in January of 2021, shortly after vaccinations for the COVID-19 virus were announced and efforts to encourage or mandate vaccinations were also announced,⁶ Gallup, a leading worldwide analytics and advisory company, conducted and published the results of a poll that showed an estimated forty-six percent (46%) of Americans reported their refusal to take the newly developed vaccines, citing mistrust of pharmaceutical companies and government, safety issues, concerns of prospective and generational side effects, and pertinently, asserting that the government and the judiciary cannot override their bodily autonomy right to refuse or grant consent⁷ to

² *The Walking Dead* (AMC Studios television broadcast Oct. 31, 2010) (popular and graphic television show that featured a large ensembled cast as survivors of a zombie apocalypse trying to stay alive after the collapse of civilization).

³ *The Last Of Us* (HBO Network broadcast Jan. 15, 2023) (latest hit zombie series that centers on a developing father daughter relationship after the collapse of civilization).

⁴ See *infra* pp. 15-16.

⁵ See FE Andre et al., *Vaccination greatly reduced disease, disability, death and inequity worldwide*, 86 BULLETIN OF THE WORLD HEALTH ORG., NAT'L. CTR. FOR BIOTECHNOLOGY INFO., NAT'L. LIBRARY OF MED., 140 (2008) (discussing how vaccinations can cut health-care costs, whereby the annual return on investments in vaccinations has been calculated to be between 12% and 18% for the healthcare industry, vaccinations also reduce health inequities in low income countries and pertinently, vaccinations have greatly reduced the burden of infectious diseases worldwide by either eradicating some or eliminating its potential to grow and spread among a general population).

⁶ See *infra* pp. 20-24.

⁷ It is imperative to note that "consent" here simply means the ability to grant permission and not the judicial doctrine of "informed consent," that means "the consent from a patient for treatment after they have been given all of the information about their condition or illness." See, *Informed Consent*, BLACK'S LAW DICTIONARY (11th ed. 2019). While informed consent has been touted as a possible defense to vaccination mandates, it is still widely and only recognized as a medical malpractice doctrine against a healthcare related individual or entity and it is often held by various courts that the public health remains an exception to informed consent requirements where time is of the essence in fighting rapid disease outbreaks, as such, the author here further notes that this article's proposition treats bodily autonomy and consent arguments in a mutual manner and except unless otherwise stated, "bodily autonomy" herein can mean consent. See, Anna Zagaja et al., *Informed Consent in Obligatory Vaccinations?*, vol. 24, NAT'L

a vaccine and therefore, they are not required to comply and be penalized for failure to comply.⁸

However, when faced with a devastating and rapid disease outbreak where life and all its amenities are severely impacted, it is worth noting and worth remembering that in the interest of preserving all lives and those aforementioned amenities, within the United States, vaccination mandates currently remain a proper option under the rule of law and as a matter of public policy. Ergo, any opposition or “vaccine hesitancy”⁹ to such a mandate premised on a right of bodily autonomy or integrity and absent a reasonable and applicable exemption, can legally fail.

In support of the above paragraph, Part II of this article accordingly begins by briefly discussing the history and biological nature of vaccines, the different types of vaccines, the effectiveness of vaccines in tackling widescale and accelerated disease outbreaks, and the safety of vaccines, all derived from various sources of the medical community. Moreover, Part II also addresses the history and nature of disease outbreaks and compares and contrasts past outbreaks with the recent COVID-19 pandemic.¹⁰ For the purposes of this article in only focusing on United States jurisprudence, it should be noted that while a disease outbreak often results in different scales such as “epidemics” and “pandemics,” the term “disease outbreaks” used herein means “epidemics” and may be used interchangeably hereafter.¹¹

Part III of this article then dives into the relevant information, history, and legal history that have supported vaccination mandates as well as the doctrine of bodily autonomy in the context of healthcare, where Part IV then finally proposes additional legal and policy reasons that can support the proposition that one’s bodily autonomy can fail against the enactment of a mandatory vaccination policy, provided an exemption does not exist.

LIBRARY OF MED., NAT’L CTR. FOR BIOTECHNOLOGY INFO. (November 25, 2018)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6276839/#:~:text=With%20obligatory%20vaccination%2C%20providing%20consent,ineffective%20and%20impossible%20to%20execute> (noting that with obligatory vaccination, providing consent is only an additional formality...the principle of autonomy and obligatory vaccination are in conflict, therefore, with obligatory vaccination, the right to refuse or withdraw the consent is also ineffective and impossible to execute).

⁸ Megan Brennan, *Satisfaction with U.S Vaccine Rollout Surges to 68%*, GALLUP (March 30, 2021), <https://news.gallup.com/poll/342431/satisfaction-vaccine-rollout-surges.aspx> (reflected within this poll is a chart that displays data showing 46% of Americans refused to get vaccinated in January 2021).

⁹ Edward Chen, *Vaccine hesitancy: More than a pandemic*, HARVARD UNIV.: SCI. IN THE NEWS BLOG (June 29, 2021), <https://sitn.hms.harvard.edu/flash/2021/vaccine-hesitancy-more-than-a-pandemic/> (defining vaccine hesitancy as “delay in acceptance or refusal of vaccination despite availability of vaccination services.”); *See also*, *Ten Threats to Global Health in 2019*, WORLD HEALTH ORG., <https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019> (last visited April 12, 2023) (also defining vaccine hesitancy as “the reluctance or refusal to vaccinate despite the availability of vaccines [that] threatens to reverse progress made in tackling vaccine-preventable disease.”).

¹⁰ *See infra* pp. 15-16

¹¹ *See infra* pp. 10-11.

Additionally, as noted, it is conceded that there may be possible exemptions that can or will protect an individual's right to refuse a vaccine, such as religious exemptions¹² and various medical exemptions.¹³ As such, this article focuses only on the few individuals who are poorly informed on history and judicial rulings and erroneously believe their right to bodily autonomy against a vaccination mandate is absolute, without due consideration for the general public and its many vulnerable populations.¹⁴

II. WHAT ARE VACCINES AND OUTBREAKS?

A. Vaccines

Even if one does not possess a fear of needles, the word "vaccine" and even the thought of taking a "vaccine" often exudes discomfort and a form of paranoia for many individuals. As noted, historically, many of the reasons for these feelings are due to mistrust of pharmaceutical companies and government, and concerns of certain potential health-related risks.¹⁵ Today, vaccines have become a popular topic and have been inducted into many discussions and even political discussions, especially after the election of former

¹² Some states' statutes indicate that to receive a religious exemption under the First Amendment, a family must belong to a religious group with bona fide objections to vaccination...they may, as Iowa does, ask a parent to attest that "immunization conflicts with a genuine and sincere religious belief, and that the belief is in fact religious, and not based merely on philosophical, scientific, moral, personal, or medical opposition to immunizations." Other states simply require a parent to sign a form stating they have religious objections to vaccination. See, *Vaccine Exemptions*, HIST. OF VACCINES, <https://historyofvaccines.org/getting-vaccinated/vaccine-faq/vaccination-exemptions> (last visited April 18, 2023); See also, Alicia Novak, *The Religious and Philosophical Exemptions to State-Compelled Vaccination: Constitutional and Other Challenges*, 7 U. PA. J. CONST. L. 1101 (2005). There are 44 states and Washington D.C. that grant religious exemptions for people who have religious objections to immunizations. See, *States With Religious and Philosophical Exemptions From School Immunization Requirements*, NAT'L CONF. OF STATE LEGISLATURES (last updated May 25, 2022) <https://www.ncsl.org/health/states-with-religious-and-philosophical-exemptions-from-school-immunizationrequirements#:~:text=There%20are%2044%20states%20and,have%20religious%20objection%20to%20immunizations>.

¹³ Currently, all fifty states allow for medical exemptions to vaccinations for children that includes, generally, children who are immuno-compromised, children who suffer from certain forms of cancer, or children who are allergic to vaccines, and the author concedes that medical exemptions in this context, where it is verified by a physician as legitimately found, makes sense, as a child who will suffer more harm than good from a vaccination because of her unique, compromised health situation should not be vaccinated. See, Alan R. Hinman et al., *Childhood Immunization: Laws that Work*, 30 J.L. MED. & ETHICS 122, 124 (2002); See also, James G. Hodge, *School Vaccination Requirements: Historical, Social, and Legal Perspectives*, 90 KENTUCKY L.J. 21, 20 (2002).

¹⁴ Archived: *Vulnerable Populations*, THE COMMONWEALTH FUND <https://www.commonwealthfund.org/programs/archived-vulnerable-populations> (defining vulnerable populations as "those who have poor access to health care, receive poor-quality care, and experience poor care outcomes — often resulting from societal injustices related to race, ethnicity, poverty, gender, sexual orientation, age, first language, or physical or mental health condition.").

¹⁵ See *supra*, pp. 1-2; See also, *Possible Side Effects from Vaccines*, CTRS. FOR DISEASE CONTROL AND PREVENTION, THE DEPT. OF HEALTH AND HUM. SERV. (2020), <https://www.cdc.gov/vaccines/vac-gen/side-effects.htm>.

President Donald Trump and following the start of the COVID-19 pandemic.¹⁶ In fact, on July 15, 2021, a poll conducted by the Economist showed that; i) Republicans were much more likely to reject the vaccine, specifically twenty-nine percent, ii) four percent of Democrats also stated they will not get vaccinated, and iii) both political parties often cited mistrust of their local government or jurisdiction for vaccinations based purely on their political beliefs and political identities.¹⁷

Along with the various political ideologies in rejecting vaccinations, some individuals have even rejected vaccinations based purely on their scientific nature, a fact that is surprising given that vaccination science has been well known and understood for some time both among scientific or medical professionals and among laymen. Hence, it is often unclear if these individuals lack the access to credible information to be properly informed or, maybe there are other socioeconomic factors at play, wherefore, in an effort to ascertain the right answer, some scholars have conducted surveys which have unfortunately demonstrated that a possible reason could be a lack of sufficient education in general, whereby in 2021 again, vaccine hesitancy was considerably lower among people with a bachelor's degree or higher, compared to people with just a high school diploma or GED.¹⁸ However, just understanding the true and basic scientific makeup of vaccinations is crucial to understanding its importance, and it merely requires only basic reading and comprehension skills and no fancy degrees.

To understand how vaccines work, it is important to first understand how the human body fights against various viruses and illnesses. When germs such as bacteria or viruses invade the human body, they attack and multiply and this invasion, called an infection, is what causes diseases.¹⁹ The immune system then uses the available white blood cells to fight the infection, thereby producing the various familiar symptoms such as fever, cough, etc.²⁰ Vaccines accordingly protect against those diseases by imitating the aforesaid infections, and this process then helps in essentially teaching the immune system

¹⁶ See generally Ojea Quintana Ignacio et al., *Polarization and Trust in the Evolution of Vaccine Discourse on Twitter during COVID-19*, 17 EBSCOHOST 1, 1, (2022); L. Hagen et al., *Social Media, Vaccines, and Partisan Division of Health Information*, 58 PROC. OF THE ASS'N. FOR INFO. SCI. & TECH. 594, 597 (2021); Gail Collins et al., *Next Thing you Know You Have Covid*, N.Y. TIMES, THE CONVERSATION (November 16, 2021) <https://www.nytimes.com/2021/11/15/opinion/covid-bannon-rittenhouse.html> at A22 (a discussion between Gail Collins and Bret Stephens about vaccines and the political climate surrounding Donald Trump's presidency).

¹⁷ Kathy Frankovic, *Why Won't Americans Get Vaccinated?*, YOUGOVAMERICA, (July 15, 2021) <https://today.yougov.com/topics/politics/articles-reports/2021/07/15/why-wont-americans-get-vaccinated-poll-data>.

¹⁸ Lydia Anderson et al, *New Tool Tracks Vaccination and Vaccine Hesitancy Rates Across Geographies, Population Groups*, U.S CENSUS BUREAU (April 14, 2021) <https://www.census.gov/library/stories/2021/04/how-do-covid-19-vaccination-and-vaccine-hesitancy-rates-vary-over-time.html> (data can be viewed by utilizing the embed interactive chart and selecting "vaccine hesitancy" followed by selecting "education.").

¹⁹ *Understanding How Vaccines Work*, CEN. FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/vaccines/hcp/conversations/understanding-vacc-work.html> (last reviewed May 23, 2022).

²⁰ *Id.*

how to fight off any future similar infections.²¹ The physical “vaccine” can therefore be in the form of an injection, liquids, pills, or nasal sprays, each used in teaching your immune system in different ways, although injections are the most popular as it dissolves into your bloodstream faster thereby becoming effective faster.²² As there are different forms of vaccines, there are also different types, a factor often overlooked in vaccine education. For example, there are vaccinations that use a weakened form of a germ (Live-Attenuated Vaccines),²³ a dead form of the germ (Inactivated Vaccines),²⁴ pieces of the germ (Subunit, Recombinant, Polysaccharide, and Conjugate Vaccines),²⁵ and even vaccines that just provide your cells instructions on how to create a piece of the germ (mRNA Vaccines).²⁶ Also, some vaccines often require more than one dosage as the immune system, in some cases, fail to respond or the vaccination itself fades over time.²⁷

It is also important to know, at the very least, a brief history of the practice of vaccinations. Centuries ago, people in different parts of the world attempted different ways to fight large-scale illnesses by intentionally exposing healthy people to these illnesses. Sometime around 1000 A.D., smallpox began to ravage the eastern continents of Asia and Europe on an unprecedented scale. In a desperate measure to find a treatment, some populations began to cut out the sores of smallpox from infected persons and deliberately implanting them into healthy individuals, a process known as “variolaion,” however, while few did recover, many died.²⁸ A few centuries later, in May of 1796, English physician Edward Jenner, often nicknamed “the father of vaccination,” took the first scientific approach to variolaion and inoculated eight-year-old James Phipps with matter collected from a cowpox sore on the hand of a milkmaid along with other materials, to fight the reignited smallpox outbreak at the time. Despite suffering a local reaction and feeling

²¹ *Id.*

²² Linda Geddes, *The point of it: Why do vaccine delivery methods vary?*, (May 26, 2021) <https://www.gavi.org/vaccineswork/point-it-why-do-vaccine-delivery-methods-vary>. (noting that this form of vaccine is called “intramuscular” injections and it is the most popular whereby this vaccine is injected into thick fleshy muscle tissue – usually a muscle in our upper arms, thighs or buttocks as these muscles contain lots of blood vessels, meaning, the vaccine is dispersed into the general circulation relatively quickly, as well as immune cells called antigen-presenting cells that mediate lasting protective responses to vaccines, furthermore, intramuscular injections also tend to have very few severe side effects besides mild pain and redness at the injection site).; *See also*, *Vaccines*, MEDLINEPLUS, NAT’L LIBRARY OF MED., <https://medlineplus.gov/vaccines.html> (last updated February 22, 2022).

²³ *Vaccines*, MEDLINEPLUS, NAT’L LIBRARY OF MED, <https://medlineplus.gov/vaccines.html> (last updated February 22, 2022).

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.*

²⁷ *See Supra* note 18.

²⁸ *See* Steve P. Calandrillo, *Vanishing Vaccinations: Why Are So Many Americans Opting Out of Vaccinating Their Children?*, 37 U. MICH. J. L. REFORM 353, 362 (2004); *See History of Vaccination: Vaccine Timeline*, THE COLL. OF PHYSICIANS OF PHILA., <https://historyofvaccines.org/history/vaccine-timeline/overview> (last visited Apr. 12, 2023); *See also A Brief History of Vaccines*, WORLD HEALTH ORG., <https://www.who.int/news-room/spotlight/history-of-vaccination/a-brief-history-of-vaccination#:~:text=Dr%20Edward%20Jenner%20created%20the,cowpox%20were%20immune%20to%20smallpox.&text=In%20May%201796%2C%20English%20physician,the%20hand%20of%20a%20milkmaid> (last visited April 12, 2023).

unwell for several days, Phipps made a full recovery. Two months later, in July 1796, Jenner inoculated Phipps again, this time with matter from an actual human smallpox sore in order to test Phipps' resistance. Phipps then remained in perfect health and became the first human to be scientifically vaccinated against the smallpox disease.²⁹ The term "vaccine" was later coined, and was taken from the Latin word for cow, "*vacca*."³⁰

After Dr. Jenner published his work, multiple countries began to follow suit in developing vaccines to fight smallpox, including the United States, where Dr. Benjamin Waterhouse and President Thomas Jefferson led the charge in vaccinating various populations with new and improved forms of the smallpox vaccines.³¹ The science of vaccinations then quickly progressed. As a result of numerous fatal large-scale disease outbreaks, vaccines were developed for, most notably, rabies in 1894, yellow fever in 1937, whooping cough in 1939, influenza in 1945, polio in 1955, measles in 1963, human papillomavirus (HPV) in 1995, Ebola in 2018, and most recently, COVID-19 in 2021.³²

As seen above, while it is clear that vaccines have historically been the most effective and fastest method of fighting diseases, it has also been subjected to many concerns and criticisms regarding their safety, some with merit and others arguably without. In 1955, known as the "Cutler Incident," small batches of the polio vaccines were linked to cases of paralysis, but it was found that those samples inadvertently contained live portions of the polio virus resulting in the illness.³³ In 1976, U.S. citizens also began claiming that Swine Flu vaccines increased the risk of a serious neurological disorder called Guillain-Barré Syndrome (GBS).³⁴ While these claims were found to be true, the chances were declared to be minimal.³⁵ Moreover, in 2009-2010, the H1N1 vaccine against influenza was accused of producing increased instances of narcolepsy. In 2018, this alleged fact was found to be false.³⁶ One of the most popular allegations regarding the danger of vaccines was rekindled after the COVID-19 vaccines were announced, where vaccine opponents alleged that vaccines were the cause of accelerated cases of autism, especially in newborns. The Centers for Disease Control and Prevention (CDC) and multiple other credible sources, however, noted that the study that produced that research

²⁹ *A Brief History of Vaccines*, WORLD HEALTH ORG., <https://www.who.int/news-room/spotlight/history-of-vaccination/a-brief-history-of-vaccination#:~:text=Dr%20Edward%20Jenner%20created%20the,cowpox%20were%20immune%20to%20smallpox.&text=In%20May%201796%2C%20English%20physician,the%20hand%20of%20a%20milkmaid> (last visited April 12, 2023).

³⁰ *Id.*

³¹ Calandrillo, *Supra* note 27 at 367; See also James G. Hodge Jr. et al., *School Vaccination Requirements: Historical, Social, and Legal Perspectives*, 90 KY L.J. 831, 837 (2002).

³² *Supra* note 28.

³³ *Historical Vaccine Safety Concerns*, CEN. FOR DISEASE CONTROL AND PREVENTION, THE DEPT. OF HEALTH AND HUM. SERV., <https://www.cdc.gov/vaccinesafety/concerns/concerns-history.html> (last reviewed September 4, 2020).

³⁴ Guillain-Barre syndrome (GBS) is a *rare* disorder in which your body's immune system attacks your nerves resulting in symptoms of weakness and tingling in your hands and feet and in the worst case, can possibly lead to paralysis, *Guillain-Barre Syndrome*, MAYO CLINIC (June 14, 2022) <https://www.mayoclinic.org/diseases-conditions/guillain-barre-syndrome/symptoms-causes/syc-20362793>.

³⁵ *Supra* note 32.

³⁶ *Supra* note 32.

was ultimately invalidated based on discovery of the use of multiple instances of improper scientific procedures.³⁷

In mitigating vaccine hesitancy, it is therefore important to understand that no vaccine is perfect, and when an outbreak occurs, efforts to produce and approve a vaccine are accelerated at the highest level from “Emergency Use Authorization” procedures³⁸ to quickly control and prevent a loss of life, and it is reasonable that small cases of various health-related issues are likely to arise. Nevertheless, there have been effective procedures in place for some time to attempt to reduce these instances, and they have often been successful. To be approved, vaccines are required to have a high efficacy rate of 50% or above, and their efficacy is measured in a controlled clinical trial where it is based on how many people who were vaccinated developed the “outcome of interest” (usual disease), compared with how many people who received the placebo (dummy vaccine) and developed the same outcome.³⁹ Furthermore, before vaccines are tested on humans, researchers first use computers to predict how the prospective vaccine will interact with the human immune system and then test said vaccine on animals.⁴⁰ The vaccines then summarily go through three phases of the aforesaid controlled clinical trials before approval by the Food and Drug Administration (FDA), where at each phase, larger groups of volunteers are tested. After the third phase, the FDA then reviews all the clinical trials.

³⁷ See Allison M. Whelan, *Lowering the Age of Consent: Pushing Back Against the Anti-Vaccine Movement*, 44 J.L. MED. & ETHICS 462 (2016) (discussing the article known as “The Lancet” written by Dr. Andrew Wakefield stating that, among other things, vaccines were linked to autism in newborns, however, the article was retracted after substantial scientific flaws and Britain’s General Medical Council banned Dr. Wakefield from practicing medicine in Britain, but the damage was already done as the general public continues to believe the article to this day).; See also *Vaccines: The Myths and the Facts*, AM. ACAD. OF ALLERGY ASTHMA AND IMMUNOLOGY, <https://www.aaaai.org/tools-for-the-public/conditions-library/allergies/vaccine-myth-fact> (last reviewed November 23, 2021); See also Lauren Mattiuzzo, *Anti-Vaccination Movement and the Flu*, HEINONLINE BLOG HEINONLINE, (January 30,, 2018) https://home.heinonline.org/blog/2018/01/anti-vaccination-movement-and-the-flu/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+HeinOnlineWeblog+%28HeinOnline+Blog%29

³⁸ Emergency Use Authorization (EUA) procedures allows the Food Drug and Administration (FDA) to help strengthen the nation’s public health protections against chemical, biological, radiological, and nuclear (CBRN) threats including infectious diseases, by authorizing unapproved medical products or unapproved uses of approved medical products to be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions caused by CBRN threat agents when certain criteria are met, including when there are no adequate, approved, and available alternatives., *Emergency Use Authorization*, U.S FOOD AND DRUG ADMIN., <https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/emergency-use-authorization>, (last revised March 31, 2023); See also Laura Kent-Jensen, *Emergency Use Authorizations in the Time of Coronavirus*, UTAH L REV 413, 418 (2022) (“The EUA process is governed by federal statute 21 U.S.C § 360bbb-3,...[whereby] under the statute, the HHS Secretary must conclude[] ... that, based on the totality of scientific evidence available to the Secretary, ... it is reasonable to believe that ... the product may be effective in diagnosing, treating, or preventing” the disease [and] once the Secretary issues an EUA, the product may be legally introduced into interstate commerce for public use.”).

³⁹ *Vaccine efficacy, effectiveness and protection*, WORLD HEALTH ORG. (July 14, 2021) <https://www.who.int/news-room/feature-stories/detail/vaccine-efficacy-effectiveness-and-protection>

⁴⁰ See *Overview, History, and How the Safety Process Works*, CEN. FOR DISEASE CONTROL AND PREVENTION, U.S. DEPT. OF HEALTH AND HUM. SERV., <https://www.cdc.gov/vaccinesafety/ensuringsafety/history/index.html> (last reviewed September 9, 2020).

If it approves the vaccine, the FDA then continues to, post-licensing, monitor the vaccine to assess its effectiveness on the public.⁴¹

The CDC also plays a role in monitoring vaccinations after they have been approved by the FDA, where three systems were created to receive reports of any issues with any recent vaccinations. The first system is the Vaccine Adverse Event Reporting System (VAERS).⁴² VAERS is co-owned by the FDA and the CDC and essentially acts as an early warning system that allows anyone, including healthcare officials and the general public, to report any claims or suspicions that a vaccine may have been the cause of some adverse effect. However, the CDC expressly states that VAERS does not readily determine or confirm that a vaccine is the absolute cause of an alleged adverse effect but rather just collects the reports to be reviewed by the scientists that are on standby.⁴³ The second system that was developed was the Vaccine Safety Datalink (VSD).⁴⁴ The VSD is perhaps the oldest of the three. Created in 1990, the system is a collaborative effort between the CDC and healthcare organizations and networks nationwide, and uses electronic health data from participating sites to monitor and assess the safety of vaccines. This includes the kind of vaccine given to each patient, date of vaccination, and other vaccinations given on the same day. The VSD also uses information on medical illnesses that have been diagnosed at doctors' offices, urgent care visits, emergency department visits, and hospital stays.⁴⁵ While the VSD has been effective for the most part, it has often been criticized for a lack of transparency, where interested parties, especially healthcare officials, are unable to revisit and re-access the data to provide a more informed medical diagnosis for vaccinations, though efforts have been ongoing to remediate this issue.⁴⁶ The final system used in monitoring vaccinations and any of its potential health issues is the Clinical Immunization Safety Assessment (CISA) Project.⁴⁷ CISA was founded in 2001 and is comprised of a national collaborating network of vaccine safety experts from the CDC's Immunization Safety Office (ISO), seven medical research centers, and other partners to achieve the following goals; (1) to study the physiological basis of adverse events following vaccinations; (2) to study individual risk factors associated with developing an adverse event following vaccination; (3) to serve as a vaccine safety resource for

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.*; See also, Baggs James, et al., *The Vaccine Safety Datalink: A Model for Monitoring Immunization Safety*, PACE U. (May 2011) https://publications-aap-org.rlib.pace.edu/pediatrics/article-abstract/127/Supplement_1/S45/30123/The-Vaccine-Safety-Datalink-A-Model-for-Monitoring?redirectedFrom=fulltext.

⁴⁶ Baggs, *supra* note 44 (discussing the VSD has undergone significant changes including an increase in the number of participating healthcare organizations and enrolled population, changes in data-collection procedures, the creation of near real-time data files, and the development of near real-time postmarketing surveillance for newly licensed vaccines or changes in vaccine recommendations and, as recognized as an important resource in vaccine safety, the VSD is working toward increasing transparency through data-sharing and external input).; See also INST. OF MED., BD. ON HEALTH PROMOTION AND DISEASE PREVENTION, AND COMM. ON THE REV. OF THE NAT'L IMMUNIZATION PROGRAM'S RSCH. PROC. AND DATA SHARING PROGRAM, VACCINE SAFETY RSCH., DATA ACCESS, AND PUB. TRUST, 33 (Normal Grossblatt et al. eds., 1st ed. 2005.)

⁴⁷ *Supra* note 39.

consultation on complex vaccine safety issues; and (4) to assist domestic and global vaccine policymakers in developing guidance for individuals who may be at increased risk for adverse effects following vaccinations.⁴⁸ In other words, through strict procedures, CISA provides helpful and tangible guidance to healthcare officials regarding any vaccine concerns for patients and themselves through readily available consultations, and most of the feedback of this particular system has been positive.⁴⁹

While none of the above systems and procedures are perfect, and it is quite obvious that none will ever be given various factors such as this country's population's size, its diversity, and its remote and urban infrastructures, they have nonetheless created a viable path for vaccines to be productive in tackling deadly disease outbreaks. This is evidenced by the fact that, upon learning about these and other safety procedures that are in place, vaccine hesitancy among the general public during the COVID-19 pandemic substantially decreased during the year of 2021.⁵⁰ As technology continues to be developed and more scientific discoveries are made, it is likely that vaccinations will become even safer and more effective over time.⁵¹ Hopefully, this will reduce the various aforementioned concerns.

B. Outbreaks

An outbreak can be defined as multiple specific instances of an illness that has occurred unexpectedly over a specific or isolated region or population.⁵² It is often only identified when large masses of patients are admitted in medical facilities exhibiting the same symptoms, thereby making it difficult to launch a fight against it before it is too late.⁵³

⁴⁸ *Supra* note 39; See also Elizabeth Williams et al., *Overview of the Clinical Consult Case Review of Adverse Events Following Immunization: Clinical Immunization Safety Assessment Network (CISA) 2004-2009*, EUROPE PUB. MED. CEN. (September 16, 2011) <https://europepmc.org/backend/ptpmrender.fcgi?accid=PMC5832019&blobtype=pdf> (discussing primarily the third goal, whereby said goal is often held as the most important and the CDC created the Clinical Consult Case Review (CCCR) group that meets monthly to address specific questions from healthcare officials and practitioners regarding individual cases after administration of a vaccine, and this group consists of leading and expert professionals such as research coordinators, CDC representatives, top scientists and other top expert officials).

⁴⁹ *Supra* note 39.

⁵⁰ See generally Trinidad Beleche et al., *COVID-19 Vaccine Hesitancy: Demographic Factors, Geographic Patterns, and Changes Over Time*, U.S. DEPT. OF HEALTH AND HUM. SERV. (May 2021) https://aspe.hhs.gov/sites/default/files/migrated_legacy_files/200816/aspe-ib-vaccine-hesitancy.pdf.

⁵¹ See, e.g., Cary Funk et al., *Intent to Get a COVID-19 Vaccine Rises to 60% as Confidence in Research and Development Process Increases*, PEW RSCH. CTR. (December 3, 2020) <https://www.pewresearch.org/science/2020/12/03/intent-to-get-a-covid-19-vaccine-rises-to-60-as-confidence-in-research-and-development-process-increases/> (During this single instant COVID-19 pandemic, data shows that 39% of Americans say they have a great deal of confidence in scientists to act in the public's best interest, an uptick from 35% who said this before the pandemic took hold., and most Americans have at least a fair amount of confidence in scientists).

⁵² *Outbreaks, epidemics and pandemics—what you need to know*, APIC, https://apic.org/monthly_alerts/outbreaks-epidemics-and-pandemics-what-you-need-to-know/ (last visited April 14, 2023).

⁵³ See *Disease Outbreaks*, WORLD HEALTH ORG., <https://www.emro.who.int/health-topics/disease-outbreaks/index.html> (last visited April 14, 2023); See also C.F. Houlihan & J.A. Whitworth., *Outbreak*

Because these outbreaks often occur in different scales, they are often grouped into different terms to readily identify their severity, such as “epidemics” which refer to an increase, often sudden, in the number of cases of a disease above what is normally expected in that population within that area;⁵⁴ “outbreaks” which carries the same definition of epidemics, but is often used for a more limited geographical area;⁵⁵ “clusters” which refer to an aggregation of cases grouped in place and time that are suspected to be greater than the number expected even though the expected number may not be known;⁵⁶ and finally, “pandemics” which refer to an epidemic that has spread over several countries or continents, usually affecting a larger number of people.⁵⁷

Throughout history, and even ancient history, disease outbreaks have ravaged this earth and have taken countless lives in the process. As the old adage states, “those who do not remember the past are condemned to repeat it.” It is therefore worth mentioning a few relevant historic disease outbreaks to further understand the general necessity and practicality of complying with vaccine obligations. The first known disease outbreak occurred during the reign of the Roman Empire, named “the Plague of Galen,” where it was believed that Roman soldiers contracted a form of measles or smallpox and returned home, inadvertently creating the plague and arguably contributing to the fall of Rome. The exact cause or disease however is still unknown.⁵⁸ Centuries later, in East Asia, Africa and medieval Europe, the Bubonic plague or “the Black Death” killed over 20 million people with infected persons having symptoms of large black boils that oozed blood and puss with blackened infected skin. Out of dire desperation, governing and religious officials then implemented and endorsed extreme measures to eradicate the disease, such as mass executions and the denial of re-entry of ships at the ports and docks.⁵⁹ Fast forwarding to a little more recent era, in the 1600s, smallpox became one of the longest-standing illnesses and is believed to have arrived in North America through ships from England, where symptoms included high fever, chills, severe back pain, and rashes.⁶⁰ Nearly two decades later, in 1978, the last smallpox case was documented from collaborative and extensive vaccination efforts after publication of Dr. Jenner’s research,⁶¹ where the World Health

science: recent progress in the detection and response to outbreaks of infectious diseases, 19 CLINICAL MED. J. 140, 140 (2019) (noting that the frequency of disease outbreaks of highly contagious or highly pathogenic diseases is increasing, and efforts to detect them are increasing but unfortunately are still not helpful in most areas that are underdeveloped and lack sufficient technological means).

⁵⁴ *Lesson 1: Introduction to Epidemiology Section 11: Epidemic Disease Occurrence, Level of Disease*, CTR. FOR DISEASE CONTROL AND PREVENTION, U.S DEPT. OF HEALTH AND HUM. SERV., <https://archive.cdc.gov/#/details?url=https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section11.html> (last reviewed May 18, 2012).

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ See Fuat İnce & Raish Yazkan, *The Big Outbreak Diseases History And The Covid-19 Pandemic*, 2021 MED. J. SDU, 249, 250 (2021).

⁵⁹ *Id.*; See *Black Death*, HISTORY.COM, <https://www.history.com/topics/middle-ages/black-death> (last updated March 28, 2023)

⁶⁰ *Supra* note 57; See also Pooja Bhadoria et al., *Viral Pandemics in the Past Two Decades: An Overview*, 10 J. FAMILY MED. & PRIMARY CARE 2745 (2021).

⁶¹ *Supra* note 57; Bhadoria, *supra* note 59.

Organization (WHO) officially declared the disease eradicated in 1980.⁶²

During the time of vaccination efforts for smallpox, however, the H1N1 influenza virus or “Spanish Flu” arose in 1918 and devastated global populations even further.⁶³ Notwithstanding its name, it was found that the Spanish flu actually started in the United States.⁶⁴ Just prior to the discovery of this virus, the U.S. entered into World War I in April of 1917, where after concerns of winning the war grew, a draft was then issued to increase the number of soldiers.⁶⁵ Training camps were then created in various states to train these recruits, whereby a training camp situated in Kansas began reporting that most of its recruits were ill with flu-like symptoms that were not smallpox and the Army’s various diagnoses and treatments were unsuccessful.⁶⁶ Since the country was knee-deep into war and was already battling a smallpox outbreak, there was little time and few resources to develop a successful and safe influenza vaccine, so the Army and the various states relied on protocols familiar to us today, such as social distancing, masks, etc.⁶⁷ These protocols, however, were not quite successful where, in addition to citizens, 20–40% of U.S. Army and Navy personnel became ill, which led to about 8,743,102 lost duty days and over 26,000 deaths among American soldiers.⁶⁸ Healthcare officials, such as nurses, were also scarce as they were often deployed to military camps to aid these soldiers.⁶⁹ Strangely, however, this virus largely disappeared, and vaccination efforts were again centered around smallpox. This disappearance unfortunately did not last, where the influenza virus reappeared, and concurrently, the U.S. then entered into World War II in December of 1941. At this time, there was still no influenza vaccine, but efforts to create one were paramount as the health of soldiers were paramount. Over the span of both World Wars, an estimated 21 million people died globally due to the influenza virus, with the United States losing over 675,000 people, more than the casualties that directly resulted from both World War I and World War II.⁷⁰

In 1957, also during the time smallpox vaccination efforts were underway, the world faced yet again a different strain of the influenza virus, nicknamed the “Asian Flu,” where 1.1 million people died globally with 116,000 of those deaths occurring in the United

⁶² *History of Smallpox*, CTR. FOR DISEASE CONTROL AND PREVENTION, U.S. DEPT. OF HEALTH AND HUM. SERV., <https://www.cdc.gov/smallpox/history/history.html> (last reviewed February 20, 2021).

⁶³ *1918 Pandemic Influenza Historic Timeline*, CTR. FOR DISEASE CONTROL AND PREVENTION, U.S. DEPT. OF HEALTH AND HUM. SERV., <https://archive.cdc.gov/#/details?url=https://www.cdc.gov/flu/pandemic-resources/1918-commemoration/pandemic-timeline-1918.htm> (last reviewed March 20, 2018).

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*; See also, David Oshinsky, *The Long History Of Vaccine Mandates In America – The Covid-19 pandemic has revived a debate over public health and individual liberty that goes back to colonial times*, WALL ST. J. (September 18, 2021) <https://www.proquest.com/docview/2573707983?accountid=13044>.

⁶⁸ *Supra* note 62; See Brian P. Elliot et. al., *A historical analysis of vaccine mandates in the United States military and its application to the COVID-19 vaccine mandate*, 40 VACCINE 7500, 7501 (2022) (discussing the historical precedent of vaccine mandates for the U.S. military in regards to the influenza epidemic after the Biden administration announced a vaccination mandate for the military in response to the present COVID-19 pandemic).

⁶⁹ Oshinsky, *supra* note 66.

⁷⁰ Sara Francis Fujimura, *Purple Death: The Great Flu of 1918*, 8 PERSP. IN HEALTH 1020 (2003).

States and with some of those deaths mirroring the gruesome circumstances that occurred in 1918.⁷¹ However, at this time, vaccination science had progressed at a rapid rate after studying the prior viruses, and a vaccine was developed and distributed, although limitedly, to the general public, effectively ending the outbreak in 1958.⁷² Going further into more recent history, in 2009, another form of influenza appeared, nicknamed “Swine Flu,” where, although it was slightly more lethal than its predecessors, it still claimed the lives of over 400,000 people globally before an effective vaccine was produced and slowly ended its reign in 2010.⁷³ Years later, from 2014-2016, the Ebola epidemic killed countless people in parts of West Africa, and although the virus has largely been contained and mitigated, efforts to produce a vaccine are still ongoing and there is a lingering fear that this disease will soon emerge again and severely affect other continents including North America.⁷⁴

This led to the instant disease outbreak, one we are still living in at the moment. In early December 2019, a cluster of patients in China’s Hubei Province, in the city of Wuhan, began experiencing the symptoms of an atypical and unknown pneumonia-like illness that did not respond well to standard treatments.⁷⁵ This was then reported to the WHO office in China, where investigations began, and in January 2020, various countries began reporting large numbers of patients suffering from the same unknown illness which was later confirmed and named as “Coronavirus” or COVID-19, a disease caused by the virus SARS-CoV-2.⁷⁶ It is impractical and unnecessary to list all the aggravating and devastating situations along with the gruesome circumstances that occurred since the start of this pandemic as it is likely that you have lived it, however, what is important to note is that to date, this disease has claimed 6,866,434 lives worldwide and 1,119,762 lives in the United States, making it one of the deadliest disease outbreaks on record, even after the

⁷¹ See, STEPHANIE LUNDQUIST-ARORA, *THE ASIAN FLU PANDEMIC OF 1957* (ReferencePoint Press, 2021) (demonstrated by this death toll, at that time, the U.S had a mortality rate three-times higher than that of the seasonal flu and without the expertise of famed virologist Maurice Hilleman, an American scientist responsible for many of the known vaccines today such as measles, mumps, chickenpox etc., many more would have died).

⁷² *Id.*; See also Claire Jackson, *History Lessons: The Asian Flu Pandemic*, 59 BRITISH J. OF GEN. PRACTICE 565, 622 (2009) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2714797/>.

⁷³ Salaam-Blyther, T., *2009 Influenza A(H1N1) Swine Flu Outbreak: U.S. Responses to Global Human Cases*, H Tiaji Salaam-Blyther, Cong. Rsch. Serv., R40588, *2009 Influenza A(H1N1) “Swine Flu” Outbreak: U.S. Responses to Global Human Cases 1* (2009); Owen Jarus, *The worst epidemics and pandemics in history*, LIVESCIENCE, <https://www.livescience.com/worst-epidemics-and-pandemics-in-history.html> (last updated January 31, 2023).

⁷⁴ See generally Melissa Markey et al., *Ebola: A Public Health And Legal Perspective*, 24 MICH. ST. INT’L L. REV. 433 (2006) (discussing that 2014 was not the first instance of Ebola but rather was the largest and after confirmed cases were discovered in the U.S., efforts to control, mitigate and quarantine were paramount and were instituted immediately thereby controlling the spread in the U.S.).

⁷⁵ CDC Museum COVID-19 Timeline, CTR. FOR DISEASE CONTROL AND PREVENTION, U.S. DEPT. OF HEALTH AND HUM. SERV., <https://www.cdc.gov/museum/timeline/covid19.html> (last reviewed March 15, 2023); See also *Basics of COVID-19*, CTR. FOR DISEASE CONTROL AND PREVENTION, U.S. DEPT. OF HEALTH AND HUM. SERV., <https://www.cdc.gov/coronavirus/2019-ncov/your-health/about-covid-19/basics-covid>

19.html#:~:text=COVID%2D19%20(coronavirus%20disease%202019,%2C%20a%20flu%2C%20or%20pneumonia (last updated November 4, 2021).

⁷⁶ CTR. FOR DISEASE CONTROL AND PREVENTION, *supra* note 74.

Pfizer, Moderna and Johnson & Johnson vaccines were announced and continues to be administered.⁷⁷ There are also multiple discussions, debates, and arguments that have occurred and continue to occur regarding the cause and the alleged poor handling of this outbreak, especially in the United States, as there was ample recorded history that could have been relied on to make better decisions. One topic that is often asserted in these conversations is the one that this article seeks to address, where the claim is that the government lacks legal authority to mandate its citizens to receive vaccinations.

III. RELEVANT INFORMATION, HISTORY AND LEGAL HISTORY OF VACCINE MANDATES AND BODILY AUTONOMY

A. Vaccine Mandates

As stated heretofore, since history plays an important role in analysis and the construction of future legal and policy principles, it is important to state some of the history and legal history of relevant vaccination mandates that were imposed in the past including any mandates for some of the various disease outbreaks listed herein.⁷⁸ Identifying these will further demonstrate how one's bodily autonomy can fail against vaccination mandates.

The very first vaccination mandate began with George Washington in 1777, less than one year after the U.S. declared independence from Great Britain, where during the revolutionary war, smallpox was the biggest threat to the continental Army threatening to inflict far more damage on the troops than the British forces. During that time, as vaccination was not yet invented,⁷⁹ the only practice that was utilized in fighting disease outbreaks was by variolation,⁸⁰ and after learning that Britain was intentionally sending infected soldiers into American camps, Washington out of desperation ordered that all his soldiers be subjected to variolation.⁸¹ While some of the soldiers did die from this dangerous and questionable process, many who complied survived and a majority of the troops were saved.⁸²

A few years later, in 1809, after smallpox yet again devastated several states in the U.S, Massachusetts created its own statutory mandate that required certain localities within the State to have their citizens vaccinated with the newly developed smallpox vaccine. The mandate initially applied to adults but then slowly progressed to other residents whereby students and certain employees then fell under the scope of the mandate in 1855 through the 1900s. Several states, including Virginia, California, Utah and Minnesota, followed

⁷⁷ *COVID Data Tracker: Daily update for the United States*, CTR. FOR DISEASE CONTROL AND PREVENTION, U.S. DEPT. OF HEALTH AND HUM. SERV., <https://covid.cdc.gov/covid-data-tracker/#datatracker-home> (last visited April 14, 2023) (note this data is subject to change and is likely to be larger).

⁷⁸ WORLD HEALTH ORG., *supra* note 52.

⁷⁹ Calandrillo, *supra* note 27, at 362.

⁸⁰ See *supra* text accompanying note 27.

⁸¹ Lindsay Chervinsky, *The Long History of Vaccine Mandates in the United States*, GOVERNING.COM (August 5, 2021) <https://www.governing.com/now/the-long-history-of-mandated-vaccines-in-the-united-states>; Elliot, *supra* note 67.

⁸² Chervinsky, *supra* note 80.

suit and soon implemented their own statutory variation of a vaccine mandate to also fight against the smallpox outbreak that occurred at that time.⁸³ However, as seen today and as can be expected, the smallpox vaccine mandates enacted around this time were not approved or met with much enthusiasm, which then led to some states repealing their mandates altogether.⁸⁴

The landmark Supreme Court case of *Jacobson v. Massachusetts*⁸⁵ was of no help to the aforementioned few who refused either. As noted, in or around 1808, Massachusetts began broadening its vaccine mandate to different persons and entities or businesses. The State's city of Cambridge thereby adopted a smallpox vaccination mandate with some exemptions.⁸⁶ However, Henning Jacobson, a Cambridge minister who did not meet any of the exemptions, refused to be vaccinated and claimed he experienced adverse reactions to previous vaccinations. Jacobson was then fined five dollars, or the equivalent of nearly one hundred and fifty dollars today, and refused to pay said fine where he was then arrested and tried.⁸⁷ Jacobson argued, *inter alia*, that the State's or Cambridge's vaccination mandate violated his Fourteenth Amendment rights prescribed by the Constitution and his right to bodily autonomy, and he should therefore not be ordered to pay the fine.⁸⁸ After the matter reached the Supreme Court, tensions began to run in states that both enforced and repealed mandated vaccinations. The Court then ultimately held, in sum:

*In order to protect public health and safety, the scope of the State's police power includes the authority to enact reasonable regulations to do so. The Constitution secures liberty for every person within its jurisdiction, but does not give an absolute right for each person to be free from restraint at all times and in all circumstances. Every person is required to be subject to various restraints for the common good. The efforts by Cambridge to stamp out smallpox are substantially related to the protection of public health and safety. There has been nothing to clearly justify the Court holding the statute to be unconstitutional.*⁸⁹

While the above holding undoubtedly sent shockwaves throughout the various jurisdictions and made vaccination mandates even more controversial, many states began to enact more and more vaccination mandates for the smallpox disease as a result of the outcome in this historic proceeding. These vaccination mandates began to apply to children where the government mandated vaccines for children against smallpox before being enrolled or attending school. Tensions and concerns began to reignite following this effort. In 1922, the Supreme Court adjudicated these tensions in the matter of *Zucht v. King*.⁹⁰ At the time of *Zucht*, there was no public health emergency because smallpox vaccines were being efficiently administered, and the influenza virus, as noted, strangely disappeared

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Jacobson v. Massachusetts*, 197 U.S. 11 (1905).

⁸⁶ *Id.* at 13.

⁸⁷ *Id.* at 14.

⁸⁸ *Id.* at 14.

⁸⁹ *See id.* (emphasis added).

⁹⁰ *Zucht v. King*, 260 U.S. 174 (1922).

before its reappearance in the 1940s.⁹¹ However, in *Zucht*, pursuant to a Texas statutory vaccination mandate, school officials removed a child, Rosalyn Zucht, from her school because she did not have the required vaccine certificate, and she refused to be vaccinated.⁹² Zucht then brought a suit against the school officials claiming that the statute deprived her of her liberty without due process of law pursuant to the Fourteenth Amendment, by making vaccinations compulsory and by leaving enforcement to the Board of Health's discretion without sufficient guidance. The matter then reached the Supreme Court, where the Court, citing its holding in *Jacobson*, declared that:

*It was within the police power of a State to provide for compulsory vaccination and the suit is dismissed as there was no finding in the record a question as to the validity of the statute, as they conferred not arbitrary power to the administering officials, but only the broad discretion required for the protection of the public health.*⁹³

As a result of the holding in *Jacobson* and *Zucht*, many other suits challenging vaccination mandates on different bases fell, most notably in 1944, in the case of *Prince v. Massachusetts*⁹⁴ where the Supreme Court held that the doctrine of *parens patriae*⁹⁵ provides authority for mandatory vaccinations in children and that the State asserts authority over child welfare and said authority is not nullified merely because the parent grounds his or her claim to “control the child’s course of conduct in religion or conscience.”⁹⁶ The Court then further held that “the parent cannot claim freedom from compulsory vaccination for the child more than for himself on religious grounds.”⁹⁷

Turning to more recent history, in 2021, after the devastating effects of COVID-19 and after four years of political turmoil between Republicans and Democrats, the Biden administration announced a highly controversial vaccination mandate that required federal employees, businesses with one hundred or more employees; and healthcare workers, to be vaccinated against the COVID-19 virus.⁹⁸

While many workers and officials praised the mandate, many rejected it, and the healthcare industry suffered perhaps the worst setback of all where in 2021, 23% of correctional healthcare workers and 17% general healthcare workers refused to be

⁹¹ See *supra* pp. 15-16.; See also Madison N. Heckel, *Do I Have to?: Mandating A Vaccine in A Politicized Pandemic*, 30 ANNALS HEALTH L. ADVANCE DIRECTIVE 183 (2020).

⁹² *Zucht*, 260 U.S. at 175.

⁹³ *Id.* at 176 (emphasis added).

⁹⁴ *Prince v. Massachusetts*, 321 U.S. 158 (1944).

⁹⁵ See *infra* pp. 41-44.

⁹⁶ *Prince*, 321 U.S. at 166.

⁹⁷ *Id.* at 166.

⁹⁸ Press Release, White House.gov, Fact Sheet: Biden Administration Announces Details of Two Major Vaccination Policies (Nov. 4, 2021) <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/04/fact-sheet-biden-administration-announces-details-of-two-major-vaccination-policies/>.

vaccinated against COVID-19.⁹⁹ This trend was especially worrisome given that during the COVID-19 pandemic, nurses played an incredibly large role in caring for and treating COVID-19 patients. As a result, more than 100,000 healthcare workers worldwide died due to COVID-19 infection, and in the United States, from March 2020 to April 2021, more than 3,600 of its own healthcare workers died due to COVID-19, and almost a third of those who died were nurses.¹⁰⁰ Since there was already a shortage of nurses, the remaining ones quitting or being terminated after the announcement of the mandate therefore placed a strain on the healthcare system which can be felt to this day. The situation, to some, arguably became even worse, where following the Biden administration's announcement of the mandate, the Secretary of Health implemented a rule that in order to receive Medicare and Medicaid funding, participating facilities must ensure that their staff, unless exempt for medical or religious reasons, were vaccinated against COVID-19. As one can imagine, hospitals and other healthcare facilities already facing shortages of nurses were now at risk of losing a bulk of their funding. This particular issue also ultimately reached the Supreme Court, where the rule was surprisingly upheld in the matter of *Joseph R. Biden, Jr., President Of The United States, v. Missouri*,¹⁰¹ as the Court stated that the mandate "fit neatly" into the authorities given to the Department of Health and Human Services and these were "unprecedented circumstances" that "provided no grounds for limiting the exercise of authorities the agency has long been recognized to have."¹⁰² While, contextually, the ruling was proper to preserve the health and safety of patients and healthcare officials, the Court did recognize the strain on these facilities, and deadlines for compliance were continuously extended.¹⁰³ Moreover, while vaccine hesitancy or refusal was high resulting in large insufficient staff rates, many healthcare workers including nurses who did not meet any exemptions, eventually rejoined the workforce and accepted vaccinations, with surveillance data from over 2,000 U.S. healthcare facilities showing at least 50% of workers across these facilities were vaccinated by mid-March 2021, increasing up to 77% by December 2021.¹⁰⁴ As of today, it can be presumed that this rate is higher, but the exact figure is unknown.

As noted, the plans for mandatory vaccinations announced by the Biden administration also included, absent applicable exemptions, businesses that employed over

⁹⁹ Mofan Gu et al., *A pilot study on COVID-19 vaccine hesitancy among healthcare workers in the U.S.*, 17 PLOS ONE 6, 6 (2022) (the reasons cited by the surveyed healthcare workers for being vaccine hesitant were that the vaccines were proponents of potential side effects, they were not concerned about becoming seriously ill from COVID, COVID-19 vaccines being promoted by politicians to win votes without sufficient testing, and shockingly, the COVID-19 pandemic was not as severe as many people thought where a greater proportion of participants in the general healthcare worker group and in the jail-based healthcare worker group indicated that nothing would make them reconsider being vaccinated against COVID-19 (63% and 67%, respectively), and in contrast, only 19% of the essential non-healthcare workers expressed a similar unwillingness to reconsider their vaccination status).

¹⁰⁰ Jagdish Khubchandani et al., *COVID-19 Vaccine Refusal among Nurses Worldwide: Review of Trends and Predictors*, 10 VACCINES 230 (2022).

¹⁰¹ *Biden v. Missouri*, 142 S. Ct. 647 (2022).

¹⁰² *Id.* at 652.

¹⁰³ Christophers J. Peterson et al., *COVID-19 Vaccination Hesitancy among Healthcare Workers—A Review*, 10 VACCINES 948 (2022).

¹⁰⁴ *Id.* § 4, ¶ 2.

one hundred individuals, however, this was met with fierce opposition.¹⁰⁵ While businesses were not affected as severely as other industries, many owners and corporations were furious as the costs of implementing and maintaining COVID-19 procedures were already high and burdensome. After the President's announcement, the Secretary of Labor implemented this mandate in the form of an emergency rule under the Occupational Safety and Health Act (O.S.H.A.)¹⁰⁶ resulting in several States, businesses, and interest groups filing suits challenging both the Secretary's authority to promulgate such rule and whether O.S.H.A. had authority to enforce it under agency law. The Supreme Court, in the matter of *National Federation of Independent Business v. Department of Labor, Occupational Safety and Health Administration*,¹⁰⁷ a proceeding that was adjudicated concurrently with *Joseph R. Biden, Jr., President Of The United States, v. Missouri*, struck down the emergency rule and held that, in sum:

Absent occupation-specific risks related to COVID-19, the risk of employees contracting COVID-19 is not a work-related danger for purposes of O.S.H.A. and the Secretary of Labor was only permitted to issue an emergency temporary standard necessary to protect employees against grave danger from exposure to substances or agents determined to be toxic or physically harmful or from new hazards, and while COVID-19 was a risk that occurred in many workplaces, it was not an occupational hazard in most workplaces, and instead it was a universal risk that was part of daily life.¹⁰⁸

This particular mandate was therefore struck down based on grounds of statutory interpretation and not on the grounds of public health policy.

A final famous legal challenge regarding a COVID-19 vaccination mandate was from students at the University of Indiana. This particular COVID-19 mandate was not expressly announced by the Biden administration, but it was enacted along with a few others in different states to allow education services to move forward efficiently and timely. While most historic litigation regarding vaccination mandates involved students who were children or minors, this case was famous as it involved adult students. Also, a large number of educational facilities nationwide were eagerly awaiting its holding to determine if they should enact their own vaccination mandates. In *Klaassen v. Trustees of Indiana University*¹⁰⁹, the university therein adopted a blanket vaccination mandate subjected to certain exemptions whereby all students, faculty, and staff were required to be fully vaccinated, and if not vaccinated, students were not permitted on campus, their emails and

¹⁰⁵ *Supra* note 97.

¹⁰⁶ 29 U.S.C.A § 655; *See OSHA*, U.S DEPT. OF LAB., <https://www.osha.gov/aboutosha> (last visited April 15, 2023) (the Occupational Safety and Health Act of 1970 was used by Congress in creating the Occupational Safety and Health Administration (OSHA) to ensure safe and healthful working conditions for workers by setting and enforcing standards and by providing training, outreach, education and assistance, and covers most private sector employers and their workers along with some public sector employees).

¹⁰⁷ *Nat'l Fed'n of Indep. Bus. v. DOL OSHA*, 142 S. Ct. 661 (2022).

¹⁰⁸ *See id.* at 663.

¹⁰⁹ *Klaassen v. Trustees of Ind. Univ.*, 24 F.4th 638 (7th Cir. 2022).

university accounts were suspended, and their access cards were deactivated. Faculty and staff who refused vaccination also faced termination. Several students who did not meet the exemptions filed suit challenging the mandate on bodily autonomy grounds based on the Fourteenth Amendment and on the holdings of *Cruzan v. Missouri Department of Health*¹¹⁰ and *Washington v. Glucksberg*,¹¹¹ whereby the Court rejected their complaint and held in July 2021 that:

Both *Cruzan* and *Glucksberg* were limited to an individual's choice related to the refusal of lifesaving subsistence or medical treatment with no ramifications to the physical health of others. Vaccines however, address a collective enemy, not just an individual one and "the elimination of communicable diseases through vaccination is one of the greatest achievements of public health in the 20th century," and it continues to be so now in this century, where a vaccine is implemented as a matter of public health, and historically hasn't been constitutionally deterred from a state mandate.¹¹²

It is important to note however, in the interest of judicial clarity, *Klassen's* ruling was vacated in January 2022 by the Supreme Court, but it was not vacated on the basis of the vaccination mandate being improper. The students appealed the ruling in 2021, however, by the time the matter was calendared to be heard in 2022, several students had graduated, and one student declared she would not be returning to the school, whereby the Court then vacated and remanded the case with instructions to dismiss the students' claim as moot.¹¹³ Indiana University continues to implement and enforce a vaccination mandate to this day along with countless Universities across the entire nation.

As such, based on this entire summary of vaccination mandates, it is clear why said mandates have historically been upheld as proper as a matter of law and on the basis of public health policy.

B. Bodily Autonomy

The right of bodily autonomy¹¹⁴ is derived from the simple right to "autonomy,"¹¹⁵ and it is important to briefly state its relevant history and attributes as this helps in understanding why others often assert this right to most purported governmental interferences and why it can fail within the context of this article. However, while this article seeks to demonstrate that this right can fail with respect to vaccination mandates, the author here makes clear that this right is still favored and rooted for in other contexts.

The right of autonomy is deeply rooted in U.S. history and tradition, as it is well

¹¹⁰ See *infra* pp. 29 and note 127.

¹¹¹ See *infra* pp. 30 and note 127.

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ Also often described as personal autonomy, bodily integrity, etc.

¹¹⁵ Body autonomy is the right for a person to govern what happens to their body without external influence or coercion. *Bodily Autonomy*, BLACK'S LAW DICTIONARY (11th ed. 2019).

known that the Constitution's framers were heavily influenced by enlightenment views of popular sovereignty and limited government. For John Locke, often nicknamed “the ideological father of the American Revolution,” liberty was freedom from restraint and the exercise of coercive power by the sovereign was always wrong.¹¹⁶ This principle was adopted and expanded upon by Thomas Jefferson, the author of the Declaration of Independence. Jefferson's hatred for the British crown was not merely based on commercial and political reasons, but also on the natural rights of colonial men, whereby Jefferson regarded those rights as inherent in the individual and irrevocable, and as rights that the King would not have dared to violate in England. This same premise was adopted by all the colonies and George Washington, which eventually led to the American Revolution and to the creation of the Bill of Rights and the Constitution, thereby affirmatively codifying and protecting autonomy forever.¹¹⁷

While the right to autonomy is substantially broad and usually encompasses bodily autonomy, throughout hundreds of years, the concept of “doing what you want with your body” began to carve out its own specific place in U.S jurisprudence and policy matters as people began to be more protective of their physical body and demanded rights to it, especially when it comes to healthcare and medical malpractice issues. While “bodily” autonomy is not expressly found within the Constitution or the Bill of Rights, it first took form under the Fourteenth Amendment's due process clause as a legally recognized common law doctrine in the matter of *Griswold v. Connecticut*,¹¹⁸ under the right of privacy, which was also not found within the Constitution. In *Griswold*, in 1965, the State of Connecticut enacted a statute that banned the use of any drug, medical device, or other instrument in furthering contraception. However, a Gynecologist at the Yale School of Medicine, C. Lee Buxton, opened a birth control clinic in New Haven in conjunction with Estelle Griswold, who was the head of Planned Parenthood also in Connecticut. The two parties were then arrested and convicted of violating the statute, and following their convictions, they appealed the matter challenging the State's interference of the right to contraception under the Fourteenth Amendment's due process clause, whereby Justice Douglas, in employing the constitutional test of strict scrutiny,¹¹⁹ issued a lengthy decision which summarily held that the Constitution did in fact protect the right of marital privacy against state restrictions on contraception, and while the Court explained that the Constitution does not explicitly protect a general right to privacy, the various guarantees

¹¹⁶ Bruce J. Winick, *On Autonomy: Legal and Psychological Perspectives*, 37 VILL. L. REV. 1705, 1708 (1992).

¹¹⁷ *Id.*

¹¹⁸ *Griswold v. Connecticut*, 381 U.S. 479 (1965).

¹¹⁹ Strict scrutiny is one of three forms of review or tests that the Supreme Court utilizes when deciding whether a state statute violates constitutional protections and it is the highest level of judicial review whereby under it, the state's statute must be necessary to achieve a compelling government interest and must be narrowly tailored to achieve that interest. See *United States v. Carolene Products Co.*, 304 U.S. 144, 152 no.4 (1938). The remaining two constitutional review forms or tests includes intermediate scrutiny, where the statute must be substantially related to an important government purpose and finally the lowest form of review, rational basis, where the state's statute must be rationally related to a legitimate government interest. See generally, David L. Hudson, *Substantial Government Interest*, FREE SPEECH CTR. AT MIDDLE TENN. STATE UNIV. (Jan. 1, 2019), <https://www.mtsu.edu/first-amendment/article/1615/substantial-governmentinterest#:~:text=In%modern%constitutional%law%2C>

within the Bill of Rights create penumbras, or zones, that establish said right to privacy.¹²⁰ Nowhere in the opinion did the words “bodily autonomy” appear, but a line of cases following *Griswold* eventually established the known idea that “privacy” actually meant bodily autonomy. In *Eisenstadt v. Baird*,¹²¹ a university professor by the name of William Baird provided contraception to one of his students, where he was then arrested as the state law at the time precluded providing contraception to unmarried men or women. The Supreme Court ultimately held that unmarried couples were entitled to contraception under the *Griswold* decision and “if the right of privacy means anything, it is the right of the individual, married or single, to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether to bear or beget a child.”¹²²

Throughout the following years of *Eisenstadt* and *Griswold*, these bodily rights were then extended to the right to marry interracial,¹²³ the right to homosexuality,¹²⁴ the right to privately view pornography,¹²⁵ the right to an abortion,¹²⁶ the right to procreation¹²⁷ and more, however, during those years, two other cases instead placed somewhat controversial limits on one’s right to bodily autonomy for medical or healthcare decisions.

¹²⁰ *Griswold*, 381 U.S. at 487.

¹²¹ *Eisenstadt v. Baird*, 405 U.S. 438 (1972).

¹²² *Id.* at 453.

¹²³ *Loving v. Virginia*, 388 U.S. 1 (1967) (applying the test of strict scrutiny and holding that the State of Virginia’s interracial ban on marriage was motivated solely to restrict marriage based on race, and by precedent, such laws were found to be a threat to equality and that, at the very least such race-based classifications were subject to strict scrutiny and cannot be upheld unless they are shown to accomplish a permissible state objective independent of the racial discrimination, and here, there is no legitimate overriding purpose independent of invidious racial discrimination that justifies Virginia’s classification, therefore the Virginia statute violated the Equal Protection and Due Process Clauses of the Fourteenth Amendment).

¹²⁴ *Lawrence v. Texas*, 539 U.S. 558 (2003) (holding that the Due Process Clause of the Fourteenth Amendment includes a right to liberty in individual decisions concerning the intimacies of their physical relationship and the fact that the governing majority in a state has traditionally viewed a particular practice is immoral is not a sufficient reason for upholding a law prohibiting the practice...wherefore the private, consensual activity at issue in this case is within the realm of bodily autonomy which the government may not enter and the statute in this case furthers no legitimate state interest that can justify its intrusion into the personal and private life of an individual.)

¹²⁵ *Stanley v. Georgia*, 394 U.S. 557 (1969) (holding that while there is a valid governmental interest in dealing with obscenity, this interest cannot be insulated from all constitutional protections...whatever the other justifications for state laws regulating obscenity, they do not extend to the privacy of one’s home and the First Amendment does not permit the government to regulate the types of books or films a person may read or watch at home, thus, the First and Fourteenth Amendments prohibit making mere private possession of obscene material a crime).

¹²⁶ *Roe v. Wade*, 410 U.S. 113 (1973) (holding that a woman’s privacy interest in seeking an abortion outweighed any countervailing state interests during the first part of her pregnancy when abortion is deemed relatively safe and when the fetus is very early in its development.); *Overruled by Dobbs v. Jackson Women’s Health Organization*, 142 S. Ct. 2228 (2022) (Recently overruled *Roe v. Wade*, holding that, the U.S. Constitution does not confer a right to an abortion and abortion practices are not deeply rooted in American history and tradition).

¹²⁷ *See Baird*, 405 U.S. at 442; *See also, Skinner v. Oklahoma*, 316 U.S. 535 (1942) (applying the test of strict scrutiny and holding that the right to procreate is a fundamental right and that government-imposed involuntary sterilization to certain criminal defendants in this case, must satisfy the strict scrutiny test, of which it did not).

In 1983, in the case of *Cruzan v. Director, Missouri Department of Health*,¹²⁸ Nancy Beth Cruzan was involved in an automobile accident which left her in a "persistent vegetative state,"¹²⁹ and she was sustained for several weeks by artificial feedings through an implanted gastronomy tube. When Cruzan's parents attempted to terminate the life-support system, State hospital officials refused to do so without court approval as a Missouri statute required that a guardian seeking to remove life-prolonging treatment must prove by clear and convincing evidence that the person in the persistent vegetative state would have wanted the treatment withdrawn under such circumstances. The Supreme Court carefully articulated its decision and held that, in sum, while the due process clause protects an interest in bodily autonomy in refusing life-sustaining medical treatment, this right does not extend to guardians of incompetent or incapacitated persons unless they meet the evidentiary requirements of the State's statute in proving that said person has exercised their bodily right to refuse said treatments.¹³⁰

Separately in *Washington v. Glucksberg*,¹³¹ Dr. Harold Glucksberg along with four other physicians, three terminally ill patients, and a nonprofit organization that counsels individuals contemplating physician assisted-suicide, brought an action challenging the constitutionality of the state of Washington's ban on physician assisted-suicide, whereby the Supreme Court then declared that, while in *Cruzan*, the Court there reasoned that the right to be free from unwanted medical procedures is long established in national traditions upholding bodily autonomy, in contrast, the right to assisted suicide shares no such historical support in national traditions and the State's assisted-suicide ban was rationally related to a legitimate government interest because Washington sought to preserve human life and to protect vulnerable groups, such as the poor, elderly, and disabled; from abuse, neglect, and mistakes, thus "it is settled now that the Constitution places limits on a State's right to interfere with a person's most basic decisions about bodily autonomy."¹³²

As noted, the value of bodily autonomy is favored here, but while the promotion of free will over one's body is primary, it is important to understand however, that humans are interdependent and communal and an individual is a component of at least several larger social groups, the family, the work place, a variety of associations, interest groups, the community and even the government.¹³³ Therefore, bodily autonomy can never really be upheld in every context especially those that affect and threaten the general public, which, as discussed more fully hereafter, includes disease outbreaks.

¹²⁸ *Cruzan v. Director, Mo. Dep't of Health*, 497 U.S. 261, (1990).

¹²⁹ See generally Andreas Bender et al., *Persistent Vegetative State and Minimally Conscious State*, 112 DEUTSCHES ARZTEBLATT INT'L, 2015, at 235-242 (A persistent vegetative state (PVS), also known as post-coma unresponsiveness (PCU), is a chronic disorder in which an individual with severe brain damage appears to be awake but shows no evidence of awareness of their surroundings and unlike a "vegetative state," will not be able to follow an object with their eyes, respond to voices, or show emotions).

¹³⁰ *Cruzan*, 497 U.S. at 263.

¹³¹ *Wash. v. Glucksberg*, 521 U.S. 702 (1997).

¹³² *Id.* at 787 (Souter, J., concurring).

¹³³ Winick, *supra* note 115.

IV. HOW BODILY AUTONOMY CAN FAIL AGAINST VACCINE MANDATES

While there has already been enough historical and still prevailing authorities and information stated supporting the proposition of this article, it is worth analyzing some of these authorities more in-depth, predominantly legislative authority, as well as introducing the most applicable and cited supporting public health policy known as herd immunity.

A. The United States Constitution and the States' Police Powers

Former President Calvin Coolidge, an often-forgotten President in United States history, famously once declared, “[t]o live under the American Constitution is the greatest political privilege that was ever accorded to the human race.”¹³⁴ While this is a loaded and highly debated statement given the current state of affairs of our country, there is a large portion of truth to it nonetheless. American citizens have arguably the most freedom in the world under this single document, but most citizens fail to realize that this freedom is still limited, both textually and implicitly, and our forefathers intended it to be so or there would be no country to freely live in at the outset, and this includes limits to one’s bodily autonomy.

As seen in the various aforementioned case law herein, a vaccination mandate is not expressly found within the text of the Constitution or the Bill of Rights but has often been found to be proper under a state’s “police powers.”¹³⁵ As such, it is important to know and understand what exactly is a state’s police power and why vaccination mandates have continuously and will be continuously upheld against many bodily autonomy challenges premised on constitutional claims.

A state’s police power is defined as “the power inherent in a state government to enact laws, within constitutional limits, in order to promote the order, safety, health, morals, and the general welfare of its society.”¹³⁶ As the federal government does not possess the power to directly enact a vaccination mandate due to only possessing enumerated powers,¹³⁷ states have been accordingly granted the use of this “police power” under the Tenth Amendment for this purpose and for the aforementioned purposes, which sets forth that “the powers not delegated to the United States by the Constitution, nor

¹³⁴ *Quotations*, CALVIN COOLIDGE PRESIDENTIAL FOUND., <https://coolidgefoundation.org/quote/quotations-c/> (last visited April 15, 2023).

¹³⁵ *See supra* pp. 19-26.

¹³⁶ FRANCIS C. AMENDOLA, J.D., ET AL., 16 C.J.S. CONST. LAW § 174, 537; *Engelage v City of Warrenton*, 378 S.W.3d 410, 414 (Mo. Ct. App. 2012); *see generally*, *State ex rel. Rouveyrol v. Donnelly*, 285 S.W.2d 669, 693 (1956) (holding that the county’s authority to construct buildings was subject to city’s police power to regulate and control the construction of buildings).

¹³⁷ Expressed powers that limit Congress’s authority that are found in Article I, Section 8 of the U.S. Constitution that includes the power to lay and collect taxes; pay debts and borrow money; regulate commerce; coin money; establish post offices; protect patents and copyrights; establish lower courts; declare war; and raise and support an Army and Navy, however, the Supreme Court has periodically recognized implicit enumerated powers, though vaccination mandates are not one of them. *See* Richard Primus, *The Limits of Enumeration*, 124 YALE L.J. Oct. 2014 at 576; *see also* Linda R. Monk, *Enumerated Powers*, PBS, <https://www.pbs.org/tpt/constitution-usa-peter-sagal/federalism/enumerated-powers/> (last visited on April 15, 2023).

prohibited by it to the States, are reserved to the States respectively, or to the people.”¹³⁸ In other words, the Tenth Amendment provides that so long as the federal government is not explicitly granted a power, and there is no writing anywhere that declares exercise of this power is precluded or unconstitutional, states accordingly reserve the right to exercise that power to enact and uphold laws in promotion of the greater good within its borders.¹³⁹ Furthermore, whether a state’s law is a proper constitutional exercise of its police power is a judicial question, and most often these laws are only struck down if they are manifestly unreasonable, arbitrary or capricious, and have no real or substantial relation to the public health, safety, morals or its general welfare.¹⁴⁰ Therefore, a law is presumed to be a valid exercise of a state’s police power, and the party challenging the law has the high burden of establishing it does not reasonably relate to a legitimate government concern.¹⁴¹

However, while a state’s police power is broad and seems absolute, it is important to note that its application is still limited by other parts of the Constitution, most famously, the Due Process Clause of the Fourteenth Amendment, which sets forth “...nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.”¹⁴² As seen many times herein, almost every constitutional challenge to a state’s police power includes a Fourteenth Amendment due process argument,¹⁴³ but some often fail to realize, as many courts have found, that while a state’s police power is limited by this Clause, the Clause also does not express that one’s rights are absolute and there are therefore similar limits on the different actions one can bring on the basis of this authority. Moreover, some also fail to realize that a claim asserting due process violations requires sufficient evidence to show that there was a violation of both procedural due process rights and substantive due process rights. A violation of procedural due process would require proving that the state government’s procedures of issuing regulations or creating law and using various methods to enforce these regulations or laws, have created harm that have either delayed or prevented the proponent from expressing his or her rights and furthermore, prevented any opportunities to be heard before a judiciary or the government.¹⁴⁴ In contrast, proving a

¹³⁸ U.S. CONST. amend. X.

¹³⁹ *Nat’l Fed’n of Indep. Bus. v. Sebelius*, 567 U.S. 519, 536 (2012) (noting that the Constitution may restrict state governments—as it does, for example, by forbidding them to deny any person the equal protection of the laws. But where such prohibitions do not apply, state governments do not need constitutional authorization to act. The states thus can and do perform many of the vital functions of modern government—punishing street crime, running public schools, and zoning property for development, to name but a few—even though the Constitution’s text does not authorize any government to do so).

¹⁴⁰ *M Massingill v. Dept. of Food & Agric.*, 125 Cal Rptr. 2d 561 (Cal. Ct. App. 2002); *see generally* *Meyers v. Nebraska*, 260 U.S. 390, 399-400 (1923) (holding that the established doctrine is that one’s liberty may not be interfered with, under the guise of protecting the public interest, by legislative action which is arbitrary or without reasonable relation to some purpose within the competency of the state to effect...and determination by the Legislature of what constitutes proper exercise of police power is not final or conclusive but is subject to supervision by the courts); *see also* *McKay Jewelers v. Bowron*, 122 P.2d 543 (1942).

¹⁴¹ *See Hesperia Land Dev. Co. v. Superior Ct. of Los Angeles Cnty.*, 7 Cal. Rptr. 815 (Cal. Ct. App. 1960).

¹⁴² U.S. CONST. amend. XIV, § 1.

¹⁴³ *See supra* pp. 19-26.

¹⁴⁴ *See, Daniels v. Williams*, 474 U.S. 327, 331 (1986) (noting that the procedural due process guarantee protects against “arbitrary takings”, or in the exercise of power without any reasonable justification in the service of a legitimate governmental objective).

violation of substantive due process is much more difficult as it requires, in sum, proving that the state government and its legislature did not have a compelling reason or justification to perform its legal act under its police power.¹⁴⁵

In applying these two constitutional provisions of the Fourteenth Amendment to vaccination mandates, it is no surprise that there would be widespread controversy as there was during the COVID-19 pandemic, but as was stated herein, the landmark and still prevailing case of *Jacobson v. Massachusetts*¹⁴⁶ adjudicated and resolved this matter, including laying out the constitutional basis for its famous proposition that vaccination mandates are inherently a valid exercise of a state's police power and a Fourteenth Amendment due process challenge is ultimately unsuccessful. Specifically, in addition to the excerpted provisions of the Court's holding herein, the Court in *Jacobson* stated the following regarding the Fourteenth Amendment and the state's police powers:

The liberty secured by the Fourteenth Amendment of 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.* There are manifold restraints to which every person is necessarily subject for the common good. On any other basis organized society could not exist with safety to its members. *Society based on the rule that each one is a law unto himself would soon be confronted with disorder and anarchy. Real liberty for all could not exist under the operation of a principle which recognizes the right of each individual person to use his own, whether in respect of his person or his property, regardless of the injury that may be done to others.* This Court has more than once recognized it as a fundamental principle that 'persons and property are subjected to all kinds of restraints and burdens in order to secure the general comfort, health, and prosperity of the state; of the perfect right of the legislature to do which no question ever was, or upon acknowledged general principles ever can be, made, so far as natural persons are concerned.'¹⁴⁷

Courts thereafter continued to expand on this holding and have also held that the judiciary is not allowed to usurp a legislature's authority in exercising its police power under the Tenth Amendment and are only authorized to review whether "a statute purporting to have been enacted to protect the public health, the public morals, or the public

¹⁴⁵ See *Rochin v. California*, 342 U.S. 165 (1952) (noting that the substantive due process guarantee protects against government power arbitrarily and oppressively exercised...and while due process protection in the substantive sense limits what the government may do in both its legislative and executive capacities, the criteria to identify what is fatally arbitrary differs depending on whether it is legislation or a specific act of a governmental officer that is at issue.); See also *Reno v. Flores*, 507 U.S. 292, 302 (1993) (noting that a substantive due process claim relies upon our line of cases which interprets the Fifth and Fourteenth Amendments' guarantee of "due process of law" to include a substantive component, which forbids the government to infringe certain "fundamental" liberty interests at all, no matter what process is provided, unless the infringement is narrowly tailored to serve a compelling state interest).

¹⁴⁶ *Jacobson*, 197 U.S. at 26.

¹⁴⁷ *Id.* at 28 (emphasis added).

safety; has no real or substantial relation to those objects, or is, beyond all question, a plain and palpable invasion of rights secured by the fundamental law.”¹⁴⁸ Courts are therefore only authorized in “asking whether the power has been exercised in an ‘arbitrary, unreasonable manner,’ or exercised through ‘arbitrary and oppressive’ regulations.”¹⁴⁹

Ergo, as the highest source of U.S law expressly demonstrates, and as interpreted by the highest judicial body in the land, and as seen in all the cases found herein, a claim of bodily autonomy premised on the Fourteenth Amendment’s Due Process Clause is moot and absent an applicable exemption, unsupported, as there is no equally high source of law indicating the contrary. Consequently, the many individuals who have asserted their right to refuse a vaccination on a purported legal basis fail to recognize that while a Fourteenth Amendment violation claim can easily bring them into court, this assertion does not guarantee that a violation will be found or that their purported rights to refuse a vaccine without a proper exemption will be upheld under a state’s police power, as there is an extremely high legal burden that awaits them soon after. In fact, it is even more clear that any such assertions brought against vaccination mandates will quickly fail, as, notwithstanding the awaiting high burden, courts have also repeatedly favored legislative policy that centers on the general public being protected and healthy along with anarchy being impeded, rather on a single claim to bodily autonomy.

Also, an argument that is often opined today regarding *Jacobson*’s holding on the Constitution is that in *Jacobson*, the circumstances only included a penalty of paying a fine, whereas, in modern times, the penalties for not complying with a vaccination mandate are much costlier including loss of employment, property, or inability to continue educational studies, etc. While it is conceded that those penalties are indeed more severe than paying a small fine and are arguably not suitable for a failure to comply with a vaccination mandate, the penalties of death and sickness among an entire population that includes vulnerable inhabitants unequivocally remain much more severe and much more of a paramount concern for the legislature and the courts. It is for this reason that the Court stated in *Jacobson* “it as a fundamental principle that ‘persons and property are subjected to all kinds of restraints and burdens in order to secure the general comfort, health, and prosperity of the State.’”¹⁵⁰ The language of this statement was therefore not written in regards to any penalties or its proportion thereof, rather, the Court was clearly aware that the form or proportionality of a penalty is *de minimis* when compared to the interest of protecting its population from a rapid and deadly disease outbreak. Moreover, the Supreme Court has often held that penalties such as these are properly treated as part of the burden of

¹⁴⁸ *Mugler v. Kansas*, 123 U.S. 623, 661 (1887); *see also*, *State of Minnesota v. Barber*, 136 U.S. 313, 320 (1890).

¹⁴⁹ *Lawton v. Steele*, 152 US 133, 136 (1894), cited in *Bimber's Delwood, Inc. v. James*, 496 F. Supp. 3d 760, 773 (2020) (holding that to justify the state in thus interposing its authority in behalf of the public, it must appear-first, that the interests of the public generally, as distinguished from those of a particular class, require such interference; and, second, that the means are reasonably necessary for the accomplishment of the purpose, and not unduly oppressive upon individuals).

¹⁵⁰ *Jacobson*, 197 U.S. at 27.

citizenship.¹⁵¹ Bearing that in mind, the choice is therefore clear before a state's legislature when a disease outbreak occurs, as vaccination mandates are currently the only effective means for tackling and decelerating its death toll,¹⁵² irrespective of the burden imposed on the individual person.

As the highest legal document in the land provides full authority to enact vaccination mandates absent applicable exemptions, vaccination opponents have no legal basis to refuse same, and any burden incurred on said refusal cannot outweigh the value of protecting and preserving human lives.

B. The Public Health Service Act

As noted, the federal government is unable to expressly enact laws to specifically mandate vaccinations as the Constitution only textually provides the federal government with enumerated powers, therefore, vaccination powers are reserved for the states.¹⁵³ However, albeit inferably and implicitly, the federal government does, in a way, possess the power to enact vaccination mandates whereby the government has occasionally exercised this power using the language found within § 264 of the Public Health Service Act (PHSA). The PHSA, codified as 42 U.S.C.A § 264 in July of 1944, was initially enacted to prevent the introduction, transmission, and spread of communicable diseases from foreign countries into the United States.¹⁵⁴ The act has been subjected to many legal criticisms as there is no expressed mention of a vaccination mandate and for the most part, it has only been enforced against immigrants, both legal and illegal, and rarely against American citizens. The PHSA, in sum, allows the Secretary of Health and Human Services to impose quarantine restrictions on immigrants who are exposed to and are unvaccinated against dangerous illnesses and diseases, using various means that are prescribed by other laws and regulations to essentially maintain a humane process.¹⁵⁵ Those under the quarantine restrictions are then offered a vaccine in order to freely visit and engage in business within the country.¹⁵⁶ The act and its application thereof thus purportedly offers some legal support for vaccination detractors, notwithstanding the states' police powers stated heretofore.

However, this act has been revised or amended a number of times, whereby it seemingly now has the power to impose vaccination mandates by essentially exerting pressure on states to exercise their police powers to enact said mandates, irrespective of

¹⁵¹ *Kimball Laundry Co. v. United States*, 338 U.S. 1, 5 (1949) (holding that “in view, however, of the liability of all property to condemnation for the common good, loss to the owner of nontransferable values deriving from his unique need for property or idiosyncratic attachment to it, like loss due to an exercise of the police power is properly treated as part of the burden of common citizenship.”).

¹⁵² *Supra* note 4.

¹⁵³ *See supra* note 135 and accompanying text.

¹⁵⁴ 42 U.S.C.A. § 264 (West 2002).

¹⁵⁵ 42 U.S.C.A § 264(c) (holds except as provided in subsection (d), regulations prescribed under this section, insofar as they provide for the apprehension, detention, examination, or conditional release of individuals, shall be applicable only to individuals coming into a State or possession from a foreign country or a possession).

¹⁵⁶ Daniel Scott Rosenheim, *Constitutional Implications Arising from Federal and State Vaccination Mandates*, 17 FLA. COASTAL L. RE. , 488 (2016).

immigration status or citizenship status. For example, § 243(a), titled “General Grant of Authority for Cooperation” holds:

The Secretary shall also assist States and their political subdivisions in the prevention and suppression of communicable diseases and with respect to other public health matters, shall cooperate with and aid State and local authorities in the enforcement of their quarantine and other health regulations, and shall advise the several States on matters relating to the preservation and improvement of the public health.¹⁵⁷

Moreover, § 264(a), titled “Promulgation and Enforcement by Surgeon General” holds that:

The Surgeon General, with the approval of the Secretary, is authorized to make and enforce such regulations as in his judgment are necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession.¹⁵⁸

As therefore exhibited in the text of the excerpted provisions above, the PHSA, while not expressly mandating vaccinations for all citizens and non-citizens on a federal scale, certainly provides the federal government the power to push states to enact mandatory vaccination laws against all its inhabitants in order to control the spread of deadly and communicable diseases. Furthermore, other provisions of the PHSA, when taken together, expresses that when a state has implemented a mandatory quarantine that falls within the purview of federal regulation, the federal government may impose additional “ancillary” measures as long as it does not “purport to abrogate the quarantine laws of the several states, and these “ancillary” measures are sure to include vaccinations.¹⁵⁹ Likewise, where a state has not implemented measures or has done so in a manner as to inadequately safeguard against highly contagious deadly diseases, the federal government, pursuant to § 264(a) of the PHSA, reserves the power to take measures that are reasonably necessary.¹⁶⁰

The text of the provisions of this act seem aggressive, but it is important to note that the use of the PHSA by the federal government in mandating vaccinations for the states

¹⁵⁷ 42 U.S.C.A. § 243(a) (West 2002).

¹⁵⁸ 42 U.S.C.A. § 264(a) (West 2002).

¹⁵⁹ *Cie. Francaise de Nav. a Vapeur v. Bd. of Health of State of Louisiana*, 186 U.S. 380, 396 (1902) (holding that, after French ships were barred from entering a disease infected port in Louisiana pursuant to the State’s quarantine laws and the federal government’s added immigration restriction regulations, said immigration acts, after scrutinizing them, do not purport to abrogate the quarantine laws of the several states, and that the safeguards which they create and the regulations which they impose on the introduction of immigrants are ancillary, and subject to such quarantine laws...so far as the act of 1893 is concerned, it is manifest that it did not contemplate the overthrow of the existing state quarantine systems and the abrogation of the powers on the subject of health and quarantine exercised by the states from the beginning, because the enactment of state laws on these subjects would, in particular instances, affect interstate and foreign commerce).

¹⁶⁰ 42 U.S.C.A. § 264(a).

is unnecessary as the states already hold this power under the Tenth Amendment and, as noted, all fifty states currently have various mandatory vaccination laws. Therefore, the purpose of stating the PHSA is to inform the public that there is sufficient legal authority still left to the federal government in enacting vaccination mandates, regardless if it is not fully expressed. In applying various canons of construction, it is apparent that the legislative intent behind the PHSA and other similar federal statutes was to protect the health and safety of the general public should state regulations lapse or fail.

C. The Taxing and Spending Clause

Article I § 8 of the U.S Constitution states, “Congress shall have power to lay and collect Taxes, Duties, Imposts and Excises, to pay the debts and provide for the common Defense and general welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States.”¹⁶¹ Known as the Taxing and Spending Clause, it is an enumerated power granted by the Constitution and it has also been recognized as a regulatory provision, whereby in simple terms, this clause allows Congress to levy taxes for two purposes only: to pay the debts of the United States, and to provide for the common defense and general welfare of the United States.

How the Taxing and Spending Clause applies to vaccination mandates is also relatively simple. Under this clause, in most circumstances, the federal government is permitted to substantially withhold or modify funds to state agencies and other state regulatory bodies if it wishes the state to comply with a federal statute or federal regulations, provided it meets the two aforementioned prongs and provided it is not unduly coercive.¹⁶² This ability, ever since the influenza pandemic, has also been applied to state agencies and state regulatory bodies responsible for issuing and enforcing statewide vaccination mandates and other public health protocols. While this is not the federal government mandating vaccinations per se, the federal government’s ability to incentivize state governments into issuing vaccination mandates can be characterized as such, and this ability has been widely recognized as proper by the courts of various jurisdictions.¹⁶³ This is so because, as common sense dictates, if a state is failing to adequately enact and enforce vaccinations, it is likely that a large number of its inhabitants will be infected and incapacitated, thereby affecting the economy of that particular state and other states that engage in commercial activities along with it. Thus, the federal government is permitted to intervene and incentivize the state in mandating vaccinations so as to protect both the federal and the state’s economy from collapse. As was also mentioned herein and as a demonstration of this authority, most recently, the Biden administration mandated that

¹⁶¹ U.S. CONST. art. I § 8, cl. 1.

¹⁶² *South Dakota v. Dole*, 483 U.S. 203, 210 (1987) (holding that Congress may attach conditions on a State receiving any federal funds and “the offer of benefits to a state by the United States dependent upon cooperation by the state with federal plans, assumedly for the general welfare, is not unusual...but the power may not be used to induce the States to engage in activities that would themselves be unconstitutional. Thus, for example, a grant of federal funds conditioned on invidiously discriminatory state action or the infliction of cruel and unusual punishment would be an illegitimate exercise of the Congress.”).

¹⁶³ *See Sebelius*, 567 U.S. at 539 (holding that the individual mandate requiring the public to obtain health insurance or risk paying a tax penalty was constitutionally proper under the Taxing and Spending Clause and Congress can offer grants to states and condition the funds on compliance with certain requirements, as it happens frequently with highway and infrastructure funding, etc.).

healthcare workers in various states receive the COVID-19 vaccinations and for statewide Medicare and Medicaid healthcare facilities, failure to obligate their employees to do so would result in a loss of federal funds, whereby the Court then declared this as proper under these severe circumstances in the matter of *Joseph R. Biden, Jr., President Of The United States, v. Missouri*.¹⁶⁴ Moreover, even if one objects to the federal government's use of the Taxing and Spending Clause in this regard, the Supreme Court has held that through a state's concurrent powers, the state can also implicitly make use of this clause in modifying funds that are issued to state agencies to comply with both federal and state regulations.¹⁶⁵

It is therefore quite clear that, when taken in aggregate, refusing to be vaccinated on the basis of bodily autonomy and absent an exemption can be both directly and indirectly detrimental to the local economy, and the federal government will not sit idly by while this occurs. In this regard, the importance of one's bodily autonomy is far outweighed by the importance of maintaining commercial activities within the surrounding community, as these activities enable the economy to progress thereby preventing extreme financial hardship, loss of assets, and ultimately poverty. If one wishes to live comfortably and to continue to afford the necessities in life during deadly disease outbreaks, compliance with vaccination mandates are necessary.

D. *Parens Patriae* Doctrine

Parens patriae, Latin for "parent for the country or homeland," is a simple judicial doctrine that holds, subject to various exceptions, the federal government, the state, or the courts are permitted to step in to care for and protect the vulnerable individuals of its population such as elders, handicap individuals, mentally incompetent individuals and minors, from neglect or abuse stemming from actions or an omission of actions from a non-vulnerable individual or entity.¹⁶⁶ With regard to its application to these vulnerable groups, the Supreme Court has held that while a state may sue to assert its rights under federal law, it may not sue to protect its citizens from federal law on the grounds that Congress has intruded upon an area of traditional state authority.¹⁶⁷ Despite this strict interpretation, the doctrine has mostly met criticisms for its applications to minors, and as noted herein, the doctrine was first popularized with this controversy in the matter of *Prince v. Massachusetts*, whereby the Court held that the doctrine provides authority for mandatory

¹⁶⁴ *Missouri*, 142 S. Ct. at 651; *Supra* note 100.

¹⁶⁵ *Gibbons v. Ogden*, 22 U.S. 1, 42 (1824) (holding "the power to lay and collect *taxes*, is admitted on all hands to be concurrent and it is constantly exercised by the States, in every form, and both real and personal estate have frequently been taxed by the national and local governments, at the same time...so, under the power to lay and collect *excises*, the same article has frequently been taxed by both governments.").

¹⁶⁶ *Parens Patriae*, BLACK'S LAW DICTIONARY (11th ed. 2019).

¹⁶⁷ *Massachusetts v. Mellon*, 262 U.S. 447 (1923) (holding that, after the State of Massachusetts sought to maintain a lawsuit against the federal government challenging the maternity act, a federal statute that created a grant program to distribute taxpayer funds to states that agreed to cooperate with the federal government to protect the health of mothers and infants, and after Massachusetts argued that Congress had usurped state powers over traditionally local matters in violation of the Tenth Amendment, the Supreme Court held that the state lacked standing to sue on its own behalf because it had no separate sovereign interest that would be affected by the statute and that Massachusetts lacked standing to sue as a representative of its citizens because it was the role of the federal government to act as representative, or *parens patriae*, of Massachusetts citizens with respect to federal laws).

vaccinations in children; the state asserts authority over child welfare, and said authority is not nullified merely because the parent grounds his or her claim to “control the child’s course of conduct in religion or conscience.”¹⁶⁸

Thirty-three years after the opinion in *Prince*, in April 1977, on the basis of *parens patriae*, the federal government enacted the “Childhood Immunization Initiative.” The Initiative had two objectives: to attain immunization levels in the nation’s children of at least 90% by October 1979, and to establish mechanisms to maintain high immunization levels by ensuring that children received vaccinations at the proper times.¹⁶⁹ The initiative was announced to combat the rising levels of measles at the time, although there was no public health emergency for this disease as it was not deemed deadly.

While this program in itself was not a statutory vaccination mandate, the federal government placed a strong emphasis on states to exercise their police powers and enforce existing school-related statutory vaccination requirements and to create compulsory immunization requirements in the states where they did not already exist.¹⁷⁰ In the matter of *Maricopa County Health Department v. Harmon*,¹⁷¹ Arizona parents challenged the State’s use of *parens patriae* and filed suit for using the federal initiative as a basis to enforce a vaccination requirement that removed students for noncompliance, on the grounds that a child’s right to an education should be more important. The Arizona Court of Appeals found the argument unavailing and opined that it was imperative for public safety to exclude those who were unvaccinated from school “when there is a reasonably perceived, but unconfirmed, risk for the spread of measles.”¹⁷² In other words, the Court argued that the conditions of an epidemic do not have to exist for vaccines to be required.¹⁷³

Many other suits filed by parents in the following years in different jurisdictions failed as a result of similar decisions and by the 1998-1999 school year, forty-six states, with the exception of Louisiana, Michigan, South Carolina, and West Virginia, had vaccine requirements for all grade levels from kindergarten through twelfth grade.¹⁷⁴ Today, all states have vaccine requirements for children of all ages to be able to enroll and attend schools with regard to multiple diseases or viruses.¹⁷⁵

Therefore, the relevancy of the foregoing is to essentially demonstrate the proposition that vaccination mandates substantially assist in protecting the most vulnerable

¹⁶⁸ *Prince*, 321 U.S. at 158.

¹⁶⁹ Morbidity and Mortality Weekly Report, *Current Trends Childhood Immunization Initiative, United States -- 5-Year Follow-Up*, CTRS. FOR DISEASE CONTROL AND PREVENTION (May 7, 1982), <https://www.cdc.gov/mmwr/preview/mmwrhtml/00001091.htm> (last visited April 15, 2023).

¹⁷⁰ See Alexis Osburn, *Immunizing Against Addiction: The Argument for Incorporating Emerging Anti-Addiction Vaccines into Existing Compulsory Immunization Statutes*, 56 CLEV. ST. L. REV., 2008, at 159.

¹⁷¹ *Maricopa Cnty. Health Dep’t v. Harmon*, 750 P.2d 1364 (Ct. App. 1987).

¹⁷² *Id.* at 1369.

¹⁷³ *Id.* at 1369.

¹⁷⁴ Chervinsky, *supra* note 80.

¹⁷⁵ *SchoolVax View: Requirements and Exemptions*, CTRS. FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/requirements/index.html> (last reviewed October 12, 2017).

populations among us. If doctrines such as *parens patriae* did not exist, and if one's right to bodily autonomy was upheld against vaccination mandates, the devastating effects of a deadly disease outbreak such as COVID-19 would be far worse. A simple demonstration of this is to imagine a quick scenario where a vulnerable loved one, whether it be a child or an elder, is being cared for by someone who aggressively refuses to be vaccinated and does not meet an exemption. Even if there are other protective measures taken, which as it is well known is not always sufficiently effective in comparison to vaccines, the thought of that individual being able to severely infect said vulnerable loved one should strike enough fear into one's heart that bodily autonomy challenges to vaccination mandates are inherently impractical. Accordingly, this doctrine demonstrates that as vaccines currently remain the only effective means in protecting vulnerable lives during the reign of deadly disease outbreaks, it will always be properly mandated under the rule of law.

E. Herd Immunity

A statement that is often asserted against vaccination mandates is, "if you are vaccinated, why do you care about me and my choice about my body since you are protected?" A valid question on its face but can nonetheless be sufficiently answered with the doctrine of herd immunity. Herd immunity is not a legal doctrine and has no legal weight, however, it is an epidemiological doctrine or policy often cited by legal authority to describe the goal of mandatory vaccination laws. Herd immunity, sometimes referred to as population immunity, is where a large portion of a community (the herd) becomes immune to a disease. This often occurs through vaccinations, making the spread of the disease from person to person unlikely, whereby individuals who are unable to be vaccinated, such as newborns and the immunocompromised, are offered some protection against the rapid and deadly disease outbreak.¹⁷⁶

As laid out by the CDC, to achieve herd immunity, the vaccination coverage needs to be over 95% of the targeted population, and if this percentage drops, three main groups are at risk: pregnant women, young children below the age of immunization or infants, and the immunocompromised.¹⁷⁷

It is therefore clear why the answer to the aforementioned question, known as the "free rider problem," is herd immunity. The "free rider problem" basically sets forth that if the population around a vaccination opponent is immune after receiving vaccinations, then there is no need for that individual to receive a vaccine because there is a very low chance of transmission. The vaccination opponent could then essentially "free ride" on the

¹⁷⁶ *Herd Immunity*, ASSOCIATION FOR PROFESSIONALS IN INFECTION CONTROL AND EPIDEMIOLOGY (Aug. 25, 2015), http://www.apic.org/Resource_/TinyMceFileManager/for_consumers/IPandYou_Bulletin_Herd_immunity.pdf.

¹⁷⁷ See *Vaccination Coverage Among Children in Kindergarten--United States, 2011-12 School Year*, CTRS. FOR DISEASE CONTROL & PREVENTION, U.S. DEP'T OF HEALTH & HUM. SERVS., (Aug. 24, 2012), <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6133a2.htm>; See also Ellen C. Tolsma, *Protecting Our Herd: How A National Mandatory Vaccination Policy Protects Public Health by Ensuring Herd Immunity*, 18 J. GENDER RACE & JUST. 313 (2015).

immunity of others.¹⁷⁸ However, where the problem lies is if every vaccination opponent was allowed to assert this question and be successful in refusing to comply with vaccination mandates, herd immunity would never be attained, the country would remain in a perpetual state of sickness where diseases such as Smallpox would have never been eradicated, and vulnerable populations would continue to be at risk and even worse, would suffer. Moreover, while there are known cases of individuals who have still contracted diseases after applicable vaccinations, such as the current COVID-19 virus, it is important to note that those cases are minimal and largely, vaccinated individuals are still substantially less likely to be infected and suffer severe symptoms when exposed than those who are not, in fact, someone who is vaccinated has less than 0.1% chance of being infected than an unvaccinated person.¹⁷⁹ As such, while this does impact attaining complete herd immunity, the vaccines can still be considered helpful in attaining said complete herd immunity as the disease would at least be manageable thereby buying time to improve and upgrade the applicable vaccine.

As noted, humans are communal and interdependent, and herd immunity ensures the survival of our species as this interdependence would cease to exist if an entire portion of our population remains perpetually sick or dies. In fact, this same line of reasoning was reflected in *Klassen*, whereby the petitioners asserted bodily autonomy rights and the Court therein stated, “Vaccines address a collective enemy, not just an individual one and the elimination of communicable diseases through vaccination is one of the greatest achievements of public health in the 20th century, and it continues to be so now in this century.”¹⁸⁰ While there are also concerns regarding the novelty of the current vaccines in tackling the instant COVID-19 virus, as demonstrated, the vaccines are backed by sound science that has progressed for centuries and likewise ensure some levels of immunity rather than none. Accordingly, a right to bodily autonomy against vaccination mandates is impractical if herd immunity is to be completely attained.

V. CONCLUSION

As stated in the very beginning, none of us would like a repeat of 2020. The extensive history of vaccination mandates and disease outbreaks should have been enough to warrant high levels of compliance with current vaccination mandates in all fifty states during the peak of COVID-19, however, there were far too many protests and civil unrest regarding the vaccines than there should have been. A floating reason is perhaps the political turmoil that immediately preceded the 2020 election, however, we will never know for sure. Moreover, most of the individuals who have protested against the vaccination mandates were not exempted and were unduly aggressive in refusing to cooperate, holding signs that read “my body my choice” while being completely clueless to the science, legal authorities and policies that have supported mandated vaccinations for

¹⁷⁸ Yoka Ibuka et al., *Free-Riding Behavior in Vaccination Decisions: An Experimental Study*, National Library of Medicine, PLOS ONE, Jan. 24, 2021, at 1.

¹⁷⁹ Fiona P. Havers et al., *COVID-19-Associated Hospitalizations Among Vaccinated and Unvaccinated Adults 18 Years or Older in 13 States, January 2021 to April 2022*, 182 JAMA INTERNAL MED. 1071, 1078.

¹⁸⁰ *Klaassen*, 24 F.4th 638 at 399.

centuries. Vulnerable individuals were at significant risk during these protests, and herd immunity was nowhere near its targeted goal. Therefore, based on all the foregoing, including the history, science, legal authorities, and policies stated herein, there is clear and ample support for the proposition that one's right to bodily autonomy can fail against vaccination mandates.