CONSTITUTIONAL IMPLICATIONS ARISING FROM FEDERAL AND STATE VACCINATION MANDATES

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I. INTRODUCTION

Measles is a highly contagious viral infection that is communicable through human interaction via "large respiratory droplets." The virus has two stages: the prodromal phase and the maculopapular rash. The prodromal phase expresses itself roughly ten to twelve days after exposure. The symptoms produced during the prodromal phase include "progressive fever, cough, coryza, and conjunctivitis." Four days after the expression of these symptoms, a maculopapular rash begins to form on the "face and head gradually spread[ing] throughout the body." During the maculopapular rash phase, symptoms include "headache, fever[.],] and seizures." A maculopapular rash consists of a combination of two rashes: a macule

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2 Id.
3 Id.
5 See GOURLEY & EOFF, supra note 1, at 849-50.
rash and a papule rash. A macule rash consists of flat discolored blemishes, usually red in color until they recede, at which point they turn brown and eventually disappear. Papule rashes are raised lesions or pustules that often erupt and vary in size and color. The maculopapular rash will continue for approximately six weeks, during which the body is susceptible to "secondary bacterial infections." Measles present numerous complications including "pneumonia, otitis, encephalitis, and death."

A. History and Development of Measles Vaccine

The first record of measles vaccination came in the ninth century through the work of a Persian philosopher by the name of Muhammad ibn Zakariyā Rāzī ("Rhazes"). Rhazes’s account of symptoms and differential analysis of the disease established a foundation for our modern-day knowledge of measles. However, incidence of infection and death continued to rise throughout the world because there was not a clear understanding of the disease’s transmission and dissemination. Additionally, with the rise of world exploration in the 1800s, measles spread to Cuba, Honduras, Mexico, Central America, and the Incan Empire. The European explorers brought vast amounts of disease,

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8 See id.
10 Lam, supra note 6 (finding that secondary bacterial infections include "otitis media, pneumonia or gastroenteritis").
11 GOURLEY & EOFF, supra note 1, at 849-50.
13 Id. at 96.
14 See E. Fuller Torrey & Robert H. Yolken, Their Bugs Are Worse Than Their Bite, WASHINGTON POST (Apr. 3, 2005), http://www.washingtonpost.com/wp-dyn/articles/A20453-2005Apr2.html (finding that "[i]t has been estimated that between 1840 and 1990, measles killed about 200 million people worldwide").
including measles, to the Americas during its colonization. These diseases resulted in the death of nearly 95% of the Native American population over the next 150 years. While vaccinations and etiology helped reduce the impact of some of these diseases, it would be 471 years after the introduction of measles to the New World before a cure was found.

The measles disease was not widely reported in the United States until 1912. At that time, the disease was killing roughly twenty-six people for every one thousand reported cases.

In the first decade of reporting, an average of 297,216 cases were reported each year, representing a mean reported measles incidence of 289/100,000. In the same period, an average of 5948 measles-related deaths were reported annually.

The average annual number of reported measles cases increased to 530, 217 (incidence, 310 cases/100,000) in the decade preceding licensure of measles vaccine (1953-1962). Population-based surveys suggested that reported cases underestimated actual cases in the pre-vaccine period by 85%-90%. By 1953-1962, the mean annual number of fatal measles virus infections had decreased to 440, despite more reported cases.

The disease plagued the United States until 1963, when the Food and Drug Administration licensed the first measles vaccination for use by the American public. After distributing the vaccination among the

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16 Id.
17 Id.
18 Id. (stating that measles came to the New World in 1492, and a vaccine was first licensed in 1963).
19 Id.
20 Id.
22 See Measles, HIST. VACCINES, http://www.historyofvaccines.org/content/timelines/measles (last visited Mar. 16, 2015). From 1958 to 1963—when the measles vaccination was being developed—the first version of the vaccination was tested “on
public, the disease incidence rate dropped to one death for every one thousand cases. Over the next twelve years, nearly nineteen million vaccinations were administered, targeting preschool and school-age children. However, the vaccination came at a cost. The Centers for Disease Control ("CDC") estimates that roughly 3.8 billion dollars were spent annually to reduce the disease incidence rates, while measles-related deaths still averaged 1,800 per annum in the United States. Although the measles vaccination was safe and effective—reducing the number of measles cases from "several million to several thousand"—the cost of care was a burden. These seemingly boundless economic efforts propagated a movement towards an all-encompassing "booster" vaccine known as the measles, mumps, and rubella vaccination ("MMR").

After MMR's development in 1971, the CDC announced a goal in 1978 for the complete eradication of measles by the year 1982. One method of eradication was a school vaccine mandate, which every state eventually adopted legislation on. Although the CDC's goal of eliminating measles by 1982 was not met until the year 2000, the number of reported cases looked promising:

An average of 1.3 cases per 100,000 population was reported during 1982–1988, compared with an average of 313 cases per 100,000 during 1956–1960. Nevertheless, a resurgence of measles occurred during 1989–1991, again demonstrating the serious medical
burden of the disease. More than 55,000 cases, 123 deaths, and 11,000 hospitalizations were reported. Two major causes of this epidemic were vaccine failure among a small percentage of school-aged children who had received 1 dose of measles vaccine and low measles vaccine coverage among preschool-aged children.\footnote{Orenstein et al., supra note 25, at S1.}

Until recently, the measles incidence rate remained at a record low and was deemed by the CDC to be eliminated.\footnote{See History of Measles, supra note 30; see also Pearce, supra note 15.} However, in 2014, an Amish community in central Ohio hatched the largest measles outbreak in two decades—a reported 383 cases and twenty-three outbreaks from a single case of measles.\footnote{See Measles Cases and Outbreaks, CDC, http://www.cdc.gov/measles/cases-outbreaks.html (last updated Feb. 10, 2016).} The courier of the virus was an Amish missionary worker returning from the vastly unvaccinated Philippines.\footnote{Sarah J. Tribble, Measles Outbreak in Ohio Leads Amish to Reconsider Vaccines, NPR (June 24, 2014, 3:31 AM), http://www.npr.org/blogs/health/2014/06/24/323702892/measles-outbreak-in-ohio-leads-amish-to-reconsider-vaccines.} The courier returned home to an Amish community that consisted of approximately 33,000 unvaccinated Amish citizens in a contiguous six-county area.\footnote{Id.; Pearce, supra note 15.} Moreover, only 8,000 people residing in the same six-county area were vaccinated.\footnote{See generally id. (explaining that most of the Amish community was not vaccinated and because it spreads so easily the CDC was involved).} The CDC placed blame for the outbreak on the concentrated number of unvaccinated citizens living in close proximity.\footnote{See Transmission of Measles, CDC, http://www.cdc.gov/measles/about/transmission.html (last updated Mar. 31, 2015).}

B. Impact of a Vaccinated Population

Vaccination is fundamental to the health and well-being of our nation. MMR is arguably more necessary than the all-popular flu vaccine due to the measles’ highly contagious nature.\footnote{Id., supra note 15.} So contagious in fact, the CDC finds that “if one person has [measles], 90% of the people close to that person who are not immune will also become
infected.” In fact, a measles carrier has the ability to infect twelve to eighteen people. While in contrast, a carrier of the flu virus will typically infect “one to two non-immune people.” The benefits associated with vaccinations are far more abundant than the risks. Among those benefits—arguably most important—is herd immunity.

Herd immunity is considered the most important secondary characteristic of vaccinations, providing both individual and communal protections. The principal theory of herd immunity is that the larger the immunized class of people within a population is, the lower the incidence or the more restricted the contagious disease will be. The CDC suggests that roughly 90% of the population would have to be immunized to create a sufficient barrier against measles. Furthermore, reaching herd immunity is essential for the health of newborns and immunocompromised individuals. The CDC suggests that the more protected a population, the higher chances there are of

40 Id.
45 See Kevin M. Malone & Alan R. Hinman, Vaccination Mandates: The Public Health Imperative and Individual Rights, in LAW IN PUBLIC HEALTH PRACTICE 262, 263 (Richard A. Goodman et al. eds., 2007), http://www.cdc.gov/vaccines/imz-managers/guides-pubs/downloads/vacc_mandates_chptr13.pdf. However, herd immunity can also create a false sense of protection. Id. For instance, the more people immunize, the more ill effects or side effects of vaccines there are brought to light. Id. Therefore, individuals’ own best interests begin to fight against the positive effects of vaccinations. Id.
46 Id. at 264.
vaccination risks coming to the forefront.\textsuperscript{48}

"Measles is the greatest vaccine-preventable killer of children in the world today and the eighth leading cause of death among persons of all ages worldwide."\textsuperscript{49} The minimal side effects of MMR are grossly outweighed by its positive individual and community outcomes.\textsuperscript{50} Furthermore, the likelihood of experiencing "moderate" side effects is one in three thousand doses and the odds of experiencing "severe" side effects are one in one million.\textsuperscript{51} In contrast with common over-the-counter remedies, "12 out of 10,000 people who take an aspirin are at risk of intracerebral hemorrhage, or bleeding in the brain. People who regularly take too much acetaminophen are the largest group of people hospitalized for acute liver failure."\textsuperscript{52} Yet, there does not appear to be an anti-over-the-counter drug movement.

Part II of this Article will provide a look into the constitutional issues surrounding federal enforcement of mandatory vaccination programs. This Article will then further explore the Public Health Services Act and its role in enforcing state compulsory vaccination

\textsuperscript{48} See Malone & Hinman, \textit{supra} note 45.
\textsuperscript{49} Orenstein et al., \textit{supra} note 25.
\textsuperscript{50} Nicole J. Kutlesa, \textit{Creating a Sustainable Immunization System in Canada—The Case for a Vaccine-Related Injury Compensation Scheme}, 12 \textit{Health L.J.} 201, 212-13 (2004) (finding that the vaccination’s protections outweigh the risk associated with MMR).
\textsuperscript{51} \textit{Vaccines and Immunizations}, CDC, http://www.cdc.gov/vaccines/vac-gen/side-effects.htm#mmr (last updated Nov. 5, 2015) (discussing the approximate chances of experiencing mild problems, to include “fever (up to 1 person out of 6); Mild rash (about 1 person out of 20); Swelling of glands in the cheeks or neck (about 1 person out of 75”)”). Moderate Problems include “Seizure (jerking or staring) caused by fever (about 1 out of 3,000 doses); Temporary pain and stiffness in the joints, mostly in teenage or adult women (up to 1 out of 4); Temporary low platelet count, which can cause a bleeding disorder (about 1 out of 30,000 doses).” \textit{Id.} Severe Problems (Very Rare) include “Serious allergic reaction (less than 1 out of a million doses); Several other severe problems have been reported after a child gets MMR vaccine, including: deafness, long-term seizures, coma, or lowered consciousness, permanent brain damage. These are so rare that it is hard to tell whether they are caused by the vaccine.” \textit{Id.}
mandates through federal quarantine laws. Next, this Article will turn to the constitutional issues surrounding state enforcement of compulsory vaccination laws. Then, this Article will analyze state-recognized exemptions that allow citizens to attend daycare, as well as public and private schools without being vaccinated. Next, this Article will turn to the states' role in providing for a child's best interest under the doctrine of parens patriae—a doctrine that provides the states a loophole in compulsory vaccination. Then, this Article will focus on federal remedies available to those who experience severe reactions to publicly and privately provided vaccinations under the National Childhood Vaccination Injury Act. Lastly, this Article will focus on the public uncertainty and distrust of MMR and the postulation of scientifically denounced theories that it somehow correlates with autism.

II. ANALYSIS

A. Constitutional Issues Surrounding Federal Enforcement of a Mandatory Vaccination Program


The federal government derives its jurisdiction over public health and safety matters under the Commerce Clause of the U.S. Constitution. The Commerce Clause states, in relevant part, that Congress has the power to "regulate Commerce with foreign Nations, and among the several States . . . ." Also known as the Affirmative Commerce Clause, this provision provides Congress with the powers to enact legislation that may restrict state powers in regulating interstate

53 See discussion infra Section II.A.2.
54 See discussion infra Section II.B.1.
55 See discussion infra Section II.B.1.a; infra Section II.B.2.
56 See discussion infra Section II.B.1.b.
57 See discussion infra Section II.C.
58 See discussion infra Part III.
59 U.S. CONST. art. I, § 8, cl. 3.
60 Id.
commerce or interstate economic activity. \(^61\) Concurrent with these enumerated powers, Congress has enacted several laws that facilitate control over communicable diseases. \(^62\)

Historically, congressional committees have fought to gain control over facilitating vaccinations and quarantines against citizens of states plagued by a disease. \(^63\) The first attempt at usurping state powers to form control over Asiatic cholera came in a bill proposed by a Republican senator, Zachariah Chandler, in 1866. \(^64\) Democrats unanimously opposed the bill and Republicans were divided on the issue. \(^65\) A staunch oppositionist to the bill was a Republican senator from Iowa by the name of James W. Grimes. \(^66\) Senator Grimes opposed the bill, for it proposed that the government adopt federal officers and not appoint New York state officers to implement quarantine procedures. \(^67\) Going further, Senator Grimes said, “Let us . . . allow the [s]tates to take care of themselves as they have been in the habit of taking care of themselves.” \(^68\) This is most likely a demand for limiting the federal government from exercising state police powers. \(^69\)

2. The Public Health Services Act

The Public Health Services Act (“PHSA”) was promulgated to

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\(^61\) See Heart of Atlanta Motel, Inc. v. United States, 379 U.S. 241, 257 (1964) (“Congress was not restricted by the fact that the particular obstruction to interstate commerce with which it was dealing was also deemed a moral and social wrong.”).


\(^63\) See, e.g., CONG. GLOBE, 36th Cong., 1st Sess. 1672, at 2444-46 (1866) (demonstrating congressional debate over facilitating vaccinations and quarantines in states plagued by disease).

\(^64\) Id.


\(^66\) CONG. GLOBE, 1st Sess. 1672, at 2445-46. Senator Grimes was a member of the Joint Committee on Reconstruction of the Fourteenth Amendment. Benedict, supra note 65.

\(^67\) CONG. GLOBE, 1st Sess. 1672, at 2446.

\(^68\) Id.

\(^69\) See supra notes 63-68.
prevent federal overreach regarding the enforcement of state police powers.\textsuperscript{70} This allows the Secretary of Health and Human Services to "make and enforce regulations as are necessary to prevent the introduction, transmission or spread of communicable diseases" between states.\textsuperscript{71} Although the PHSA does not specifically mandate vaccines, the Secretary maintains authority to quarantine "exposed persons . . . to prevent the uncontrolled spread of highly dangerous biologic agents."\textsuperscript{72} However, a person subject to the quarantine provision "may be offered . . . [a] vaccination as the [CDC] Director deems necessary."\textsuperscript{73} Mandating vaccinations—which, not allowing for choice—would violate the most fundamental principles of privacy and personal autonomy under the Constitution.\textsuperscript{74} Therefore, the government incentivizes vaccination under the quarantine provision of the PHSA through a conditional release program—conditioning one's release from quarantine upon receipt of vaccination and medical treatment.\textsuperscript{75}

The PHSA presents a broad spectrum of quarantinable diseases, but does not specifically mention measles.\textsuperscript{76} While measles are not specifically mentioned, the legislature drafted the provision sufficiently broad to include "other respiratory illness, [that are] transmitted from person to person predominantly by the aerosolized or droplet route, and, if spread in the population, would have severe public health

\textsuperscript{70} See generally 42 U.S.C. §§ 264-271 (2012 & Supp. II 2014) (explaining how the Surgeon General has the power to make such regulations over controlling communicable diseases from not just foreign countries, but also between the states).

\textsuperscript{71} Id. § 264(a).

\textsuperscript{72} See id. § 264(b) (authorizing the "apprehension, detention, or conditional release of individuals except for the purpose of preventing the introduction, transmission, or spread of such communicable diseases as may be specified from time to time in executive orders of the President upon the recommendation of the Secretary, in consultation with the Surgeon General"); see also 42 C.F.R. § 70.6 (2015).

\textsuperscript{73} See § 264(c); see also 42 C.F.R. §§ 70.6, 70.9.

\textsuperscript{74} Alvin Nelson El Amin et al., Ethical Issues Concerning Vaccination Requirements, PUB. HEALTH REV., Nov. 1, 2012, at 1, 7-8.

\textsuperscript{75} See § 264(b); see also Control of Communicable Diseases, Control of Communicable Diseases, 70 Fed. Reg. 71,892, 71,903 (Nov. 30 2005) (explaining that "[m]edical treatment, prophylaxis, or vaccination shall occur on a voluntary basis, provided that persons who refuse remain subject to provisional quarantine").

consequences." Therefore, such an overinclusive definition could be construed at the discretion of the Secretary to include measles.

Furthermore, and unlike Senator Grimes suggested, the PHSA does not appear—at least facially—to utilize or appoint state officers for quarantine purposes. Senator Grimes’s main justification in ruling against the quarantine mandate was the destruction of state powers. This line of reasoning does not seem to be disturbed. However, the question remains as to what powers under the PHSA the federal government retains, and what powers, if any, have they stripped from the states.

First, it has been suggested that “in the face of a serious outbreak” the federal government may enact policies to incentivize vaccination and place restrictions on or quarantine those who may refuse. Furthermore, the PHSA, as well as other laws, retains the right for the federal government to reach over the states to implement measures to halt the spread of communicable diseases. For instance,

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77 Exec. Order No. 13,295.
78 See supra notes 1-11 and accompanying text.
79 See also 42 U.S.C. § 264(e) (emphasis added) (finding that “nothing in this section . . . may be construed as superseding any provision under state law”). But see 42 C.F.R. § 70.2 (2015) (emphasis added) (holding that “whenever the Director of the Centers for Disease Control and Prevention determines that the measures taken by health authorities of any [s]tate or possession (including political subdivisions thereof) are insufficient to prevent the spread of any of the communicable diseases from such state or possession to any other state or possession, he/she may take such measures to prevent such spread of the diseases as he/she deems reasonably necessary”).
80 See generally CONG. GLOBE, 36th Cong., 1st Sess. 1672, 2444-46 (1899) (indicating Senator Grimes stated in jest that “one thing would certainly result from [this law], and that is that it would give cholera to the Treasury of the United States if it should be enacted into law.”). However, Senator Grimes concedes that the federal government does have power to mandate quarantine during times of war. Id.
81 Id.
82 See infra notes 83-88.
84 See 42 U.S.C §§ 264-271 (indicating military, executive order, and time of war are reasons to implement measures); 42 C.F.R. § 70.2 (explaining that the CDC may take any measures as it deems “reasonably necessary” to prevent the spread of a disease).
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."\(^8\)

However, where a state has not implemented measures or has done so in a manner as to inadequately safeguard against the spread of measles or other highly contagious deadly diseases, the federal government reserves the power to "take such measures . . . reasonably necessary."\(^8\) Thus, as Senator Grimes alluded, it is of the utmost importance and necessity to maintain a system of separate powers.\(^8\) However, it may come to require federal intervention to suppress and maintain the spread of a deadly disease such as measles.\(^8\)

Unlike interstate and intrastate regulation of citizens for the purposes of vaccination and quarantine measures, citizens of foreign countries are required to be vaccinated—apart from some slim exceptions.\(^8\) Aliens attempting to enter the United States from foreign countries will be denied visas and admission if they are "determined [] to have a communicable disease" or "fail[] to present documentation of having received vaccination against vaccine-preventable diseases."\(^9\)

Included in the list of required vaccinations are "mumps, \textit{measles}, rubella [MMR], polio, tetanus and diphtheria toxoids, pertussis, influenza type B and hepatitis B."\(^9\) The purpose of such legislation is

\(^8\) The Director may quarantine and incentivize vaccination whenever he or she:
- reasonably believes that a person or group of persons are in the qualifying stage of a quarantinable disease. [T]he Director's belief that a person is in the qualifying stage of a quarantinable disease will be based on scientific principles such as clinical manifestations, diagnostic tests or other medical tests, epidemiologic information, laboratory tests, physical examination, or other available evidence of exposure or infection.

\(^8\) See \textit{CONG. GLOBE}, 36th Cong., 1st Sess. 1672, at 2444, 2446 (1866).
\(^8\) See 42 U.S.C. \S 264(a).
\(^9\) \textit{Id.}
\(^9\) \textit{Id.} (emphasis added).
to safeguard the public from the importation of disease.\textsuperscript{92} Within the first seven months of reporting in 2008, 89\% of measles outbreaks in the United States were attributable to foreign nationals traveling to the United States.\textsuperscript{93} The mandatory vaccination requirement raises serious concerns regarding illegal immigrants entering the United States without appropriate protections.\textsuperscript{94} Without such appropriate protections, unimmunized citizens of the United States are at grave risk of infection.\textsuperscript{95} The population of unvaccinated citizens is small, however the import of illegal and unimmunized people place the country’s herd immunity in limbo.\textsuperscript{96} Thus, the federal government has the ultimate authority—independent of the states—to limit entry into the United States.\textsuperscript{97}

\textbf{B. Constitutional Issues Surrounding State Enforcement of a Mandatory Vaccination Program}

1. State Police Powers and Compulsory Immunization Laws

Upon unionizing under the U.S. Constitution, the states reserved an essential right that allows them to enact legislation independent of Congress or the federal government.\textsuperscript{98} This right is generally referred to as the states’ police power.\textsuperscript{99} This reservation of power is codified under the Tenth Amendment of the U.S. Constitution.\textsuperscript{100} The Tenth Amendment reads, “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the

\textsuperscript{92} Criteria for Vaccination Requirements for U.S. Immigration Purposes, 74 Fed. Reg. 58,634, 58,635 (Nov. 6, 2009).
\textsuperscript{93} Update: Measles, MORBIDITY MORTALITY WKLY. REP. (Aug. 22, 2008) http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5733a1.htm (finding that within the seven months of reporting in 2008, seven outbreaks befell the United States attributing to 135 infected persons).
\textsuperscript{94} Id.
\textsuperscript{95} Id.
\textsuperscript{96} Frequently Asked Questions about Measles in the U.S., CDC, http://www.cdc.gov/measles/about/faqs.html (last updated Oct. 19, 2015) (finding that the United States’s population of MMR immunized citizens is approximately 95\%).
\textsuperscript{97} U.S. CONST. art. I, § 8, cl. 4.
\textsuperscript{98} Jacobson v. Massachusetts, 197 U.S. 11, 25 (1905).
\textsuperscript{99} Id. at 24-25.
\textsuperscript{100} U.S. CONST. amend. X.
States respectively, or to the people." 101 Thus, all powers not reserved by the federal government are delineated to the states. 102

The states generally, with exception to preemptory issues, retain the right to enact laws to protect the health, safety, and general welfare of its citizens. 103 Within this broad category of powers rests the right of the states to mandate vaccinations. 104 In Jacobson v. Massachusetts—arguably the most important case regarding a state’s power to mandate vaccines—the Court upheld a Massachusetts law that mandated smallpox vaccination against anyone twenty-one years of age or older and not under guardianship. 105 More specifically, the Massachusetts law “required the inhabitants of a city or town to be vaccinated only when, in the opinion of the board of health, that was necessary for the public health or the public safety.” 106 This idea of protecting the public’s health and safety is premised on the same ideology that drives herd immunity. 107 The Court expressed the state’s need to enforce this policy by stating that “a community has the right to protect itself against an epidemic of disease which threatens the safety of its members.” 108

In upholding the compulsory vaccination law, the Court expressed that the states are not without limitations when mandating vaccines. 109 The Court found that such laws must bear a “substantial relation to” public health or safety or must not be “a plain, palpable invasion of rights secured by the fundamental law.” 110 The Court established that the state and the federal government are well within

101 Id.
102 Id.; 2 ANNALS OF CONG. 1897, 1947 (1791) (explaining that “If the power was not given, Congress could not exercise it; if given, they might exercise it, although it should interfere with the laws, or even the Constitution of the States.”).
105 Id. at 12 (upholding the state’s medical exception and finding that “[a]n exception is made in favor of ‘children who present a certificate, signed by a registered physician, that they are unfit subjects for vaccination.’”).
106 Id. at 27.
107 See supra notes 43-48 and accompanying text.
108 Jacobson, 197 U.S. at 27.
109 See id. at 28, 29, 31.
110 Id. at 31.
their powers under the Constitution to enact compulsory vaccination laws through a “mode and manner” of their choice; however, such laws “shall [neither] contravene the Constitution of the United States, nor infringe any right granted or secured by that instrument.”

The petitioner argued, however, that his rights under the Constitution were “contravened” when the state “subject[ed] him to fine or imprisonment for neglecting or refusing to submit to vaccination.” More specifically, the petitioner argued,

A compulsory vaccination law is unreasonable, arbitrary, and oppressive, and, therefore, hostile to the inherent right of every freeman to care for his own body and health in such way as to him seems best; and that the execution of such a law against one who objects to vaccination, no matter for what reason, is nothing short of an assault upon his person.

In striking down the petitioner’s argument, the Court stated that the fundamental aspects of liberty under the Constitution may be slightly curtailed for the health and safety of the community and thus do not give an “unrestricted license to act according to one’s own will.” This means that “liberty secured by the Constitution of the United States to every person within its jurisdiction does not import an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint.” Thus, citizens may be individually subject to compulsory vaccination laws per the simple “common good” ideology with some exceptions and limited to the reasonableness test.

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111 Id. at 25.
112 Id. at 26.
113 Id.
114 See id. at 26-27 (striking down the petitioner’s argument for a personal choice and autonomy exception to compulsory vaccination).
115 Id. at 26.
116 See generally id. at 27. The Court noted three exceptions to the compulsory vaccination laws, including (1) a medical exception (doctor’s release), (2) a religious exception, and (3) a military exception. See id. at 30; see also infra Section II.B.2.
a. Public and Private School Vaccination Mandates

State school vaccination mandates serve a compelling governmental interest that is essential to public health and safety.117 In 1827, Boston was the first city to enact a law requiring children entering public school to be vaccinated.118 However, this law was met with harsh cynicism, which led to states failing to enforce the laws and to increased incidents of disease.119 In order to curb the disease incidence rates, states soon began monitoring local school policy, turning irregular enforcement into rigid mandates.120 Such mandates ushered in a decrease in disease incidence rates, which was accompanied by reduced public resistance to state compulsory vaccination laws.121 At the beginning of the twentieth century, nearly half of the states mandated vaccines for children entering the public school system, but enforcement was less than firm.122 In the push to eradicate measles in the late 1970s and early 1980s, the CDC reported that states that enforced the compulsory vaccination laws in the public school system saw 40% to 51% less measles cases.123

In the wake of vast public animosity towards vaccination mandates for public school admission in 1922, the Supreme Court upheld such a law in Zucht v. King.124 In Zucht, the petitioner was denied access to both public and private schools based on a local ordinance that provided “no child or other person shall attend a public school or other place of education without having first presented a

117 Jacobson, 197 U.S. at 27, 35.
119 See generally id. at 851-52 (noting how diseases increased in many cities that were apathetic to the new vaccination laws, such as Chicago).
120 Id. at 852.
121 Id.
122 Malone & Hinman, supra note 45, at 269.
123 Id.
Rosenheim certificate of vaccination.” The Court held that “these ordinances confer not arbitrary power, but only that broad discretion required for the protection of the public health.” Ruling in favor of the respondents, the Court upheld its previous decision in Jacobson that “it is within the police power of a state to provide for compulsory vaccination.”

b. Parens Patriae Doctrine

A growing area of concern regarding the vaccination mandate involves the doctrine of parens patriae, whereby “the state [acts] in its capacity as provider of protection to those unable to care for themselves.” It stands as a safeguard for protecting children’s best interests if the State believes the parents are not serving the children’s best interests. This doctrine plays a role as a secondary effect of the compulsory vaccination laws. For instance, a child who is withheld from school for lack of vaccination may be required to become vaccinated because the State, as parens patriae, may restrict the parents’ control by requiring school attendance. The Court found in Prince v. Massachusetts that “[t]he right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death.” Therefore, it is suggested that the State, through the doctrine of parens patriae, may circumvent the parents’ best wishes if the State can show a “clear and present

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125 Id. at 175.
126 Id. at 177.
127 Id. at 176 (quoting Jacobson v. Massachusetts, 197 U.S. 11, 37-38 (1905)).
129 Id.
130 Malone & Hinman, supra note 45, at 273.
131 Compare Prince v. Massachusetts, 321 U.S. 158, 166 (1944) (explaining how the state has the power to protect society from an unvaccinated child, objecting on religious grounds), with W. Va. State Bd. of Educ. v. Barnette, 319 U.S. 624, 642 (1943) (explaining that a parent has the right to practice a religious belief against the state’s compulsory need for patriotism), and Pierce v. Soc’y of Sisters, 268 U.S. 510, 534-35 (1925) (explaining that a parent has a right to choose the kind of education for their child), and Meyer v. Nebraska, 262 U.S. 390, 399-403 (1923) (explaining that a parent has control over the child’s language education).
132 Prince, 321 U.S. at 166 (citing People v. Pierson, 68 N.E. 243 (N.Y. 1903)).
Some states have found parents guilty of child neglect where they have knowingly failed to provide their children with immunization, with exception to religious exemptions. In In re Christine M., the parents of an adolescent child were found guilty of child neglect when they failed to immunize their child during a statewide measles outbreak. During times of a contagious disease outbreak or epidemic, a child who has not been immunized, according to state law, has been placed in “clear and present danger” under Prince. The court in In re Christine M. established that an outbreak is an indication of a “clear and present danger.” The evidence showed that approximately 2,500 cases of measles with eight associated deaths in December 1990 were reported to the state and federal agencies. By May 1991, the outbreak had resulted in 5,600 reported cases and nineteen associated deaths in New York City alone. While the court did not specifically define what constitutes an “outbreak or epidemic” for purposes of determining “clear and present danger,” the CDC defines outbreak and epidemic as “an increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area.” In 1987, only two years prior to the outbreak in In re Christine M., the state of New York reported only 469 cases of measles. Thus, New York experienced a 91.63% spike in measles in a matter of two years, which would appear to fall within the definition of an outbreak and pose a “clear and present danger” as noted by the court in In re Christine M.

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133 Id. at 167.
135 Id.
136 See Prince, 321 U.S. at 166-67.
137 See In re Christine M., 595 N.Y.S.2d at 607-08.
138 Id.
139 Id.
141 Update: Measles, supra note 93.
2. Religious and Philosophical Exemptions

Currently all fifty states and Washington D.C. follow a compulsory vaccination mandate. However, only thirty states recognize religious exemptions, and only twenty-five states recognize philosophic exemptions. In the seminal case of Wisconsin v. Yoder, the Supreme Court upheld an action under the Free Exercise Clause of the First and Amendment. In Yoder, the parents of a devout Amish sect brought suit after being convicted under Wisconsin’s compulsory school attendance law, which requires a child’s attendance until sixteen years of age. The parents challenged the statute on the grounds that “their children’s attendance at high school, public or private, was contrary to the Amish religion and way of life.” Furthermore, they argued that “sending their children to high school would not only expose themselves to the danger of the censure of the church community, but . . . also endanger their own salvation and that of their children.”

The State argued, however, that its interest in “compulsory education is so compelling that even the established religious practices of the Amish must give way.” The Supreme Court rejected the State’s argument holding that “[w]here fundamental claims of religious freedom are at stake . . . we cannot accept such a sweeping claim[,] despite its admitted validity.” The Court further stated, “We must searchingly examine the interests that the State seeks to promote by its requirement for compulsory education . . . and the impediment to those

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143 Id at 10.
144 Id.
146 Id. at 207. The record indicates that they were part of the “Old Order Amish religion and . . . the Conservative Amish Mennonite Church.” Id.
147 Id. (explaining that the parents removed their sons from school at the ages of fourteen and fifteen, a few years before the statutory age threshold).
148 Id. at 209.
149 Id.
150 Id. at 221.
151 Id.
objectives that would flow from recognizing the claimed Amish exemption.”

Thus, to stake a claim under the religious exemption of compulsory vaccination laws, the claim “must be rooted in religious belief.” The Court in *Yoder* defined “‘religious’ belief” as “one of deep religious conviction, shared by an organized group, and intimately related to daily living.” Therefore, one cannot simply claim a “religious belief” under a “subjective evaluation and rejection of the contemporary secular values accepted by the majority . . . .” Such individualistic views would not fall within the purview of the religion clause and would constitute a philosophical belief rather than a religious one. For instance, the court in *Phillips v. City of New York* struck down a petitioner’s claim for religious exemption under a state compulsory vaccination law finding that “mandatory vaccination as a condition for admission to school does not violate the Free Exercise Clause.” Furthermore, the court found that the petitioner’s claim was “primarily health-related and did not constitute a genuine and sincere religious belief.” Therefore, a claimant must assert a genuine claim based on religious principles, not a mixture of subjective religious and medical ideologies.

The religious exemption under compulsory vaccination laws also provides parents with an exception under the doctrine of parens patriae. The Court in *Yoder* rejected the State’s contention that the “State as parens patriae [can] extend the benefit of secondary education

152 Id.
153 Id. at 215.
154 Id. at 215-16.
155 Id.
156 See id. at 216.
157 Phillips v. City of New York, 775 F.3d 538, 543 (2d Cir. 2015).
158 Id. at 541 (noting that the petitioner “did not know of any tenets of Catholicism that prohibited vaccinations”); *see also In re Christine M.*, 595 N.Y.S.2d 606, 614, 616 (Fam. Ct. 1992) (holding that the claimant could not claim protection under religious freedom because his sect of Christianity did not have tenets against vaccination or medical treatment).
159 See *In re Christine M.*, 595 N.Y.S.2d at 618.
160 See supra Section II.B.1.b.
to children regardless of the wishes of their parents."\textsuperscript{161} The Court found that "[t]his case . . . is not one in which any harm to the physical or mental health of the child or to the public safety, peace, order, or welfare has been demonstrated or may be properly inferred."\textsuperscript{162} Therefore, the Court indicated that a religious exemption may not withstand the rule delineated in \textit{Prince}, that a parent "cannot claim freedom from compulsory vaccination for the child more than for himself on religious grounds. The right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death."\textsuperscript{163}

Thus, it is likely that a State may impose mandatory vaccinations on its citizens on the condition of school attendance irrespective of their religious canons.\textsuperscript{164} Imposition of vaccines in this manner is sustained by strong public policy.\textsuperscript{165} For instance, under an outbreak cluster theory,\textsuperscript{166} when a large religious sect—like the Amish—is living within a community or in close proximity to one another and the members are not inoculated against a highly contagious and preventable disease such as measles, the disease incidence rates rise steeply and the chances of others contracting the disease increase substantially.\textsuperscript{167} Based on the MMR schedule provided by the CDC, children should not be inoculated until twelve months of age.\textsuperscript{168} Therefore, children between one day and twelve months of age are highly susceptible to contracting measles, with some exception to passive immunity provided via natural breast milk from the mother to

\begin{itemize}
\item \textsuperscript{161} Yoder, 406 U.S. at 229.
\item \textsuperscript{162} Id. at 230.
\item \textsuperscript{163} Prince v. Massachusetts, 321 U.S. 158, 166-67 (1944).
\item \textsuperscript{164} See generally \textit{id}. (discussing that the rights of religion are not beyond limitation in regard to the health of children).
\item \textsuperscript{165} See \textit{id}.
\item \textsuperscript{166} See generally \textit{Principles of Epidemiology, supra} note 140 (stating that a "cluster refers 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.").
\end{itemize}
breast-feeding infants. Furthermore, it has been reported that "persons with religious or philosophic exemptions were 35 times more likely to contract measles than were vaccinated persons." Thus, achieving a high vaccination rate among the majority of the population is essential in providing protection for the minority of the population medically unable to vaccinate.

C. Compulsory Vaccination Remedies Under Federal Law

Most, if not all, medications taken over the counter or via prescription contain a list of possible side effects; although the likelihood of experiencing such effects are slim, they are still possible. Therefore, to encourage the development, study, and public acceptance of vaccinations, Congress approved the National Childhood Vaccination Injury Act ("NCVIA"). This law was created during the height of the CDC's efforts towards achieving the goal of eradicating measles by 1982. The NCVIA also allowed the "Department of Health and Human Services to coordinate and oversee all activities within the U.S. government related to vaccine research and development, vaccine-safety monitoring, and vaccination activities." However, and most importantly, NCVIA established the National Vaccine Injury Compensation Program, allowing those who experience serious adverse reactions to vaccinations to receive compensation for injury and medical costs.

To receive compensation under this program, the claimant must

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170 See supra note 45, at 274.
171 See id.
174 See supra notes 29-32 and accompanying text.
175 Malone & Hinman, supra note 45, at 267.
176 § 300aa-1.
file suit against "the Secretary of Health and Human Services, as the
guardian of the compensation fund created by the [NCVIA]."177 The
first step in bringing a claim under the NCVIA is that the claimant must
demonstrate (1) "a vaccinated child suffered an injury listed on the
Act's Vaccine Injury Table" or (2) "the vaccine caused or significantly
aggravated an injury or condition."178 Next, the claimant must show
that the injured person suffered the effects of the injury for more than
six months and "incurred unreimbursable expenses . . . in an amount
greater than $1,000."179 Lastly, the claimant must bring the action
within the proscribed statute of limitations period.180

Furthermore, because the NCVIA was developed to promote the
free development and research of vaccines, Congress has constricted a
claimant's access to file an action against vaccine manufacturing
companies or vaccine administrators.181 More specifically, 42 U.S.C. §
300aa-11(a)(2)(A) provides,

No person may bring a civil action for damages in an
amount greater than $1,000 or in an unspecified amount
against a vaccine administrator or manufacturer in a
State or Federal court for damages arising from a
vaccine-related injury or death associated with the
administration of a vaccine after October 1, 1988, and no
such court may award damages in an amount greater
than $1,000 in a civil action for damages for such a

177 See id. § 300aa-10.
178 Deborah F. Buckman, Annotation, Validity of National Childhood Vaccine Injury
179 § 300aa-15(a)(1)(A)-(B); Black v. Sec'y of Health & Human Servs., 93 F.3d 781,
784 (Fed. Cir. 1996).
180 § 300aa-16. The statute of limitations is as follows:
If a vaccine was administered before October 1, 1988, the
limitations period is 28 months from the date of administration. For
injuries from vaccinations administered after October 1, 1988, the
limitations period is 36 months from the occurrence of the first
symptom of an injury, or 24 months from the date of death, which
occurred as the result of the administration of the vaccine.

Buckman, supra note 178.

181 See § 300aa-11(a)(2)(A).
vaccine-related injury or death . . . .\textsuperscript{182}

This legal safeguard is important in creating a more streamlined and highly accessible vaccination program.\textsuperscript{183} In enacting the NCVIA, Congress intended the system “to be expeditious and fair.”\textsuperscript{184} Thus, Congress recognized the fundamental difficulty in attaining a national acceptance of vaccination programs, while also recognizing the chance—albeit minute—of adverse side effects stemming from MMR.\textsuperscript{185} This program not only incentivizes the use of vaccinations, but also allows for the free development of vaccines without an underlying fear of lawsuits clogging the production of vaccinations for all.\textsuperscript{186}

However, critics argue that the NCVIA creates a “moral hazard” by providing “insurance against loss to reduce incentives to prevent or minimize the cost of loss.”\textsuperscript{187} In simpler terms, it creates an incentive to protract litigation on the expense of the taxpayer.\textsuperscript{188} Thus, when a “victim” under the NCVIA chooses not to receive the compensation offered by the Secretary of Health and Human Services, he or she may continue litigating the merits under what some call “free judicial review.”\textsuperscript{189} While this may have some merit, the claimant litigating under the NCVIA must prove a causal connection between the injury

\textsuperscript{182}Id.
\textsuperscript{183}See id. § 300aa-11(a).
\textsuperscript{185}See id. at 5, 9.
\textsuperscript{186}See id. at 12, 78.
\textsuperscript{188}National Vaccine Injury Compensation Program, IN.GOV, http://www.in.gov/isdh/files/VICP.pdf (last visited Mar. 1, 2016) (finding that “[f]or vaccines administered prior to October 1, 1988, awards are compensated from Federal tax dollars allocated by Congress at $110 million per year. For vaccines administered on or after October 1, 1988, awards are paid from the Vaccine Injury Compensation Trust Fund, funded from an excise tax of $.75 on every dose of covered vaccine that is purchased.”).
\textsuperscript{189}Timothy M. Todd, The Tail that Wags the Dog: The Problem of Pre-Merit-Decision Interim Fees and Moral Hazard in the National Vaccine Injury Compensation Program, 63 U. KAN. L. REV. 1, 13 (2014) (finding that because the NCVIA is funded primarily on “excise taxes on various vaccines,” it offers incentives to litigate on someone else’s dime).
and the administration of the vaccination, as well as a host of other hurdles that lessen the claimant’s chance of receiving review of his or her claim. It has been suggested that most claims brought to vaccination court do not often clear the hurdle simply for failing to establish the requisite causal connection.

III. Conclusion

Fear of MMR and vaccinations in general can be directly correlated with “the father of the anti-vaccination movement”—Dr. Andrew Wakefield. In 1998, Dr. Wakefield published a controversial article in The Lancet, a British medical journal, in which he, along with twelve coauthors, chronicled a direct correlation between MMR and “incidences of chronic enterocolitis, inflammatory bowel disease and regressive developmental disorder.” Dr. Wakefield’s falsification of case histories was necessary to establish the correlation, which was later completely refuted, and Dr. Wakefield’s medical license was subsequently stripped in 2010 by the United Kingdom’s General Medical Council. The falsification not only laid primarily in the tale of a direct correlation but also in the falsification of eight children’s case histories.

Since the publication and retraction of Dr. Wakefield’s article,

190 See supra notes 177-80 and accompanying text.
193 Id.
194 Id.
195 Id.
there has been an express reaction against, and public distrust of, MMR.\textsuperscript{196} Although many medical journals released contrary studies, and the CDC continues to refute the connection between MMR and autism, public skepticism has failed to subside.\textsuperscript{197} In fact, in America “the average age of diagnosis with an autism spectrum disorder (ASD) is around 4 years of age.”\textsuperscript{198} For a child to be admitted to daycare, or public or private school, the child must be inoculated with MMR—with exception to religious, medical, or philosophical exemptions—between the ages of twelve and fifteen months and between four and six years of age.\textsuperscript{199} Thus, unless autism expressed itself, or was diagnosable before or around the age of fifteen months, it is impossible to correlate or even provide concrete evidence to support a causal connection between the inoculation and the onset of autism.

This is not to discredit the symptoms people may experience after MMR inoculation.\textsuperscript{200} The CDC sets out numerous symptoms or allergic reactions that may occur after receiving the vaccination.\textsuperscript{201} Furthermore, those who experience severe symptoms, in many cases, will be able to recover under the NCVIA.\textsuperscript{202}

Moreover, the CDC is continually attempting to build public

\textsuperscript{196} See id.

\textsuperscript{197} See Possible Side-effects from Vaccines, CDC, http://www.cdc.gov/vaccines/vacc-gen/side-effects.htm#mmr (last updated Mar. 31, 2016) (showing that among the most severe side effects, autism is not listed); see also Vaccines Do Not Cause Autism, CDC, http://www.cdc.gov/vaccinesafety/concerns/autism/ (last visited May 11, 2016). “One vaccine ingredient that has been studied specifically is thimerosal, a mercury-based preservative used to prevent contamination of multidose vials of vaccines. Research shows that thimerosal does not cause ASD.” Vaccines Do Not Cause Autism, supra.


\textsuperscript{199} Q&As About Vaccination Options for Preventing Measles, Mumps, Rubella, and Varicella, CDC, http://www.cdc.gov/vaccines/vpd-vac/ combo-vaccines/mmr/vacopt-faqs-hcp.htm (last updated Mar. 12, 2014) (providing the recommended schedule for MMR).

\textsuperscript{200} MMR (Measles, Mumps & Rubella) VIS, CDC, http://www.cdc.gov/vaccines/hcp/vis/vis-statements/mmr.html (last updated June 18, 2013).

\textsuperscript{201} Id.

\textsuperscript{202} See supra Section II.C.
confidence in MMR and vaccinations throughout the United States after the release of the unsubstantiated claims brought forth by Dr. Wakefield.\textsuperscript{203} However, people have curtailed these efforts in large part because of the public confidence and admiration towards celebrities.\textsuperscript{204} Celebrities play a large role as activists and philanthropists, but they also shape millions of people's ideologies through public activism.\textsuperscript{205} The largest outbreaks in the last decade can be traced to wealthy metropolitan areas such as New York and Los Angeles.\textsuperscript{206}

Celebrities such as Jenny McCarthy and Jim Carey have effectively undertaken Dr. Wakefield's false study, heedless of the correct information, postured a celebrated face, and publicly denounced vaccinations as "a recipe for autism."\textsuperscript{207} Postulating scientifically denounced theories that MMR is correlated with autism is a recipe for danger, not autism. Many people in the United States rely heavily on herd immunity to protect themselves from the dangers of measles and other vaccine-preventable diseases.\textsuperscript{208} Thus, fewer vaccinated citizens will lead to a destruction of herd immunity and a substantial rise in outbreaks around the United States.\textsuperscript{209} This places a vulnerable part of the population unable to receive immunizations—such as infants, those

\begin{itemize}
  \item \textsuperscript{203} See supra notes 196-202 and accompanying text.
  \item \textsuperscript{204} Tierney Sneed, How Much Harm are Anti-Vaccine Celebs Doing?, U.S. NEWS (Mar. 18, 2014 6:01 PM), http://www.usnews.com/news/articles/2014/03/18/from-mccarthy-to-cavallari-how-much-harm-are-anti-vaccine-celebs-doing ("Part of the reason that the seemingly personal decision made by a star brings a different level of concern than the typical mockery of celebrity parenting techniques is that the research on which the anti-vaccine movement has based its stance has been widely discredited. Nationwide, the level of confidence in vaccines has remained high and stable . . . although vaccine hesitancy has been more variable on the state and local levels.").
  \item \textsuperscript{205} Id.
  \item \textsuperscript{206} Nakia S. Clemmons et al., Measles—United States, January 4-April 2, 2015, CDC (Apr. 17, 2015), http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6414a1.htm#fig1 (finding that in four months, from January 4, 2015, to April 2, 2015, there were 111 cases of measles that were reported to the CDC).
  \item \textsuperscript{207} David Gorsky, Jenny McCarthy, Jim Carrey, and “Green Our Vaccines”: Anti-vaccine, not “pro-safe vaccine,” SCI. BASED MED. (June 9, 2008), https://www.sciencebasedmedicine.org/jenny-mccarthy-jim-carrey-and-green-our-vaccines-anti-vaccine-not-pro-safe-vaccine/.
  \item \textsuperscript{208} See supra notes 39-48 and accompanying text.
  \item \textsuperscript{209} See supra notes 44-52 and accompanying text.
\end{itemize}
with immune deficiency disorders, and those who suffer from severe allergies—at an increased risk of serious illness and possibly death.\footnote{See supra Section I.B.}

While herd immunity projects a false sense of security based on the likelihood that one’s child might contract a preventable, communicable disease such as measles, MMR is necessary in combating the high number of outbreaks and disease incidence rates that were prevalent in the 1960s and 1970s when the CDC announced its war on measles.\footnote{See supra notes 22-38 and accompanying text.} Without a scientifically supported link to autism, a low side effect rate, and a federal vaccine injury reimbursement program, the benefits of MMR inoculation further outweigh the potential risks of vaccination and offer little to no argument for the anti-vaccine movement.