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Note

Victor Diego Gonzalez^{a1}

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RELIGION IN THE TIME OF MEASLES: PRESCRIPTIONS FOR MINIMIZING THE PUBLIC HEALTH THREATS ASSOCIATED WITH RELIGIOUS EXEMPTIONS FROM MANDATORY VACCINATIONS

INTRODUCTION	414
I. BACKGROUND	419
A. Types of Exemptions Defined	419
B. Why Some Parents do not Vaccinate their Children	422
i. Child too Young to be Vaccinated	422
ii. Vaccination is Medically Contraindicated	423
iii. Inability to Build Immunity Against Disease	423
iv. Social Reasons for Not Vaccinating	424
II. CONSTITUTIONALITY OF MANDATORY VACCINATIONS	424
A. States' Power to Enact Mandatory Vaccination Laws and Their Authority to Limit or Expand Their Scope	424
B. Mississippi's Approach to Non-Medical Vaccination Exemptions	427
III. RELIGIOUS BELIEFS DISTINGUISHED FROM PHILOSOPHICAL BELIEFS	428
A. The Supreme Court's Definition of Religious Beliefs in the Context of the Conscientious Objector Statute	428
B. Religious Beliefs Distinguished from Philosophical Opposition in the Context of New York's Mandatory Vaccination Law	430
IV. HERD IMMUNITY	432
A. Herd Immunity and Clustering Defined	432
B. Philosophical Exemptions to Mandatory Vaccinations Increase Exemptions Rates, Threaten Herd Immunity	434
V. DETERMINING BONA FIDE RELIGIOUS EXEMPTORS	435
VI. PRESCRIPTIONS FOR MINIMIZING THE PUBLIC HEALTH RISKS ASSOCIATED WITH RELIGIOUS EXEMPTIONS	437
A. Easy Non-Medical Exemption Policies Lead to Higher Exemption Rates	437
B. Policies Designed to Heighten the Requirements Necessary to Receive a Non-Medical Exemption	438
i. Rigorous Religious Exemption Criteria	438
ii. Elimination of the Philosophical Exemption	439
iii. Exclusion from School or Mandatory Vaccination in Times of Disease Outbreak	439
iv. Requiring Sworn Affidavit Confirming Sincerity of Religious Beliefs	440
v. Review Mechanisms to Ensure Sincerity of Beliefs of Religious Exemptions	440
vi. Educating Parents About the Safety of Vaccines and the High Risks Associated with not Vaccinating their Children	441
vii. Effective Enforcement Mechanisms to Deter Non-Compliance with Vaccination Requirements	442
viii. Ideal Vaccination Exemption Policy	442
VII. CONCLUSION	443

*414 INTRODUCTION

The balancing of competing social interests is a basic dilemma in the childhood vaccination debate.¹ On one side, there are parents who have genuine religious beliefs that would not allow them in good conscience to vaccinate their children.² On the other side, there are parents who do not have such beliefs and want to ensure that their children will not be exposed to potentially life threatening vaccine-preventable diseases.³ The following real-life narrative demonstrates the importance of finding such a balance.

Officials identified fifty-eight cases of measles in two neighborhoods in the borough of Brooklyn; all cases involved members of the orthodox Jewish community.⁴ The cases originated from a 17-year-old boy who returned with the virus from London on March 13, 2013.⁵ *415 The boy's parents intentionally did not vaccinate the boy.⁶ He spurred the largest outbreak of measles in the United States since 1996.⁷ All the cases occurred in persons who did not have a documented measles vaccination at the time of exposure.⁸ Twelve of the cases occurred in infants too young (younger than twelve months) to receive the routine measles vaccination.⁹ The first identified case occurred in Brooklyn's Borough Park neighborhood.¹⁰ Twenty-eight cases occurred in that neighborhood, and the median age of those infected was ten years old.¹¹ Seven of the cases in persons older than twelve months came from three extended families that declined to use the measles vaccination.¹² The second outbreak occurred in the Williamsburg neighborhood,¹³ and the median age of the 30 persons infected was 19 months.¹⁴ Nine of these cases occurred in persons who refused to use the measles vaccination.¹⁵ Efforts to limit the spread of the outbreak included notifying schools and daycares, immunization audits of schools, and meetings with religious leaders and elected officials.¹⁶ A few extended families that declined to use the measles vaccine amplified the outbreak.¹⁷ High levels of vaccination coverage within the Brooklyn orthodox Jewish community, the insular nature of the affected community, and the high vaccination coverage of the population surrounding the affected community, likely limited the further spreading of the infection.¹⁸

 [New York's Public Health Law Section 2164](#) authorized those parents in Brooklyn, as well as parents across the state of New York, to not vaccinate their children.¹⁹ As a prerequisite to public school, private *416 school, or daycare enrollment,²⁰ parents or guardians must show that their children have been vaccinated against a variety of common infections, including measles.²¹ However, parents or guardians can enroll their children in school or daycare without vaccinating their children if to do so would violate their genuine and sincerely held religious beliefs.²²

Perhaps if New York had allowed philosophical exemptions as well as religious exemptions to its mandatory vaccination law, the number of measles infections would have been greater.²³ A New York Senator's most recent attempt to enact a philosophical exemption to the state's mandatory vaccination law failed on February 9, 2015.²⁴ Since at least 2001 a bill has been introduced either in the New York State Assembly or Senate, or both, seeking to establish a philosophical exemption, but all of the bills have been unsuccessful.²⁵

*417 California,²⁶ Mississippi,²⁷ and West Virginia²⁸ are the only states that allow neither religious nor philosophical exemptions.²⁹ Forty-seven states allow religious exemptions.³⁰ Additionally, eighteen states allow philosophical, or personal belief, exemptions to their mandatory vaccination requirements.³¹

Since it is extensively documented that religious and philosophical exemptions to mandatory vaccinations increase the risk of children contracting diseases, this Note will call for restrictions to exemptions from mandatory vaccinations.³² However, a concern is that an overly restrictive approach to vaccination exemptions would work against vaccination policy by inflaming public opinion.³³ Additionally, several *418 states have religious freedom restoration acts (state

RFRAs), which would typically require state and local laws that impede religious exercise to be the least restrictive means of achieving a compelling government interest.³⁴ The “least restrictive means” test is a component of the “strict scrutiny” analysis, which is most stringent analysis of constitutional validity.³⁵ In order to avoid an increase in animosity and skepticism towards vaccinations--and statutory barriers--states should continue to allow persons to obtain religious exemptions, but with some meaningful conditions.³⁶ Moreover, the evidence shows that philosophical exemptions to mandatory vaccination laws by themselves increase the number of children at risk of contracting preventable diseases.³⁷ Therefore, this Note will call for the elimination of philosophical exemptions to mandatory vaccination laws, a strengthening of the standards used in determining bona fide religious exemptions, and the adoption of exemplary policies from various states that decrease the public health risks that religious exemptions pose.

Part I of this Note defines the different types of exemptions to vaccinations available throughout several states and identifies why some parents do not vaccinate their children. Part II provides state and federal case law that identifies states' authority to enact vaccination laws. Part III discusses case law that defines statutorily recognized religious beliefs, and identifies the difference between religious beliefs against *419 vaccination laws as opposed to philosophical opposition to such laws. Part IV introduces the concept of herd immunity, highlighting the importance of minimizing the public health risks that non-medical exemptions to mandatory vaccinations pose. Part V explores approaches to creating a robust standard for determining who qualifies for a religious exemption to mandatory vaccination laws. Part VI offers a sample of selected laws from several states that provide examples of policies that other states could enact to minimize the risks that religious exemptions to mandatory vaccinations impose on the general public.

I. BACKGROUND

A. Types of Exemptions Defined

The three types of exemptions to mandatory vaccinations are: medical, religious, and philosophical (also known as person belief).³⁸ All fifty states have laws that allow exemptions from mandatory vaccinations for medical reasons.³⁹ Generally, for a child to qualify for a medical exemption, parents need to provide a statement from a physician that a certain vaccination is medically contraindicated--meaning that it could harm the child's health to receive the vaccination.⁴⁰ Common reasons for a medical exemption include: that a child has a compromised immune system, that a child has allergies to vaccine ingredients, or that a child has had an adverse reaction to a prior administration of a vaccine dosage.⁴¹ The justifications for allowing medical exemptions to vaccination requirements are self-evident.

Policies used to determine whether to grant religious exemptions vary throughout the states; for example, in New York, for a child to qualify for the religious exemption, the law requires that the administration *420 of the vaccination be contrary to the guardian's “genuine and sincere religious beliefs.”⁴² In other states, the criteria for being granted a religious exemption is membership in a “recognized religious denomination” with practices and tenets in conflict with vaccinations.⁴³ New York's vaccination statute does not specify membership in a “recognized religious organization” as a condition for qualifying for a religious exemption, which can be attributed to the case *Sherr v. Northport-East Northport Union Free School Dist.*⁴⁴ *Sherr*, a District Court case invalidating an earlier version of New York's vaccination law, held that limiting the availability of religious exemptions to “bona fide members of a recognized religious organization” violated the Establishment and Free Exercise Clauses of the First Amendment.⁴⁵ In Delaware, religious exemptions are granted to those that “subscribe to a belief in a relation to a Supreme Being involving duties superior to those arising from any human relation” which forms the basis of opposition to vaccinations--borrowing language from Supreme Court case law defining religious beliefs in the context of conscientious objectors to war.⁴⁶ Evidently, there are a variety of approaches states take in determining who qualifies for a religious exemption.

Philosophical exemption policies have a unifying quality--they are typically easy to obtain.⁴⁷ For example, Arizona's vaccination law allows parents to exempt their children from vaccinations if upon understanding the risks and benefits of immunizations, due to their personal beliefs; those parents do not consent to the immunization of their children.

*421⁴⁸ Parents in Arizona only have to submit a signed statement to the school administrator in order to receive a philosophical exemption.⁴⁹ In contrast, some states condition the philosophical exemption on fulfilling additional requirements. Arkansas's vaccination law similarly provides an exemption if parents object to vaccinations because of their philosophical beliefs.⁵⁰ However, in order for parents in Arkansas to receive a philosophical exemption, they must complete an annual recertification process, submit a notarized request to the state's Department of Health, and complete an educational component regarding the benefits and risks of vaccinations.⁵¹

Some commentators have described philosophical exemptions as “exemptions of convenience” because some parents find it more convenient to sign a waiver than to comply with a state's vaccination schedule.⁵² Philosophical exemptions are also seen as a response to constituents' senses of personal freedom and individualism.⁵³ In those cases, philosophical exemptions may have been enacted to subdue the stiff resistance met by legislatures from constituents regarding mandatory vaccinations.⁵⁴

For example, in *Boone v. Boozman*, the Arkansas District Court struck down a provision of the state's vaccination law, which provided an exemption to members of recognized religions with tenets in opposition to vaccinations.⁵⁵ The state's ability to establish which religions are “recognized” was held unconstitutional.⁵⁶ Subsequently, the Arkansas legislature added a philosophical exemption as an attempt to balance parent's rights to choose to vaccinate their children with the attendant public health risks that come with failure to vaccinate.⁵⁷ Religious opposition to vaccinations became functionally reframed as a philosophical opposition to vaccinations and thus recognizable under *422 the law.⁵⁸ It was generally understood that the philosophical exemption would not be denied if the requisite paperwork were submitted.⁵⁹ Arkansas' philosophical exemption requirements, and even more so Arizona's philosophical exemption requirements, demonstrate the ease with which one can obtain a philosophical exemption.

B. Why Some Parents do not Vaccinate their Children

Beyond religious or philosophical reasons for a parent's choice to not vaccinate their child, children can also go unvaccinated for reasons largely outside of a parent's control. Reasons why parents may choose to not vaccinate their child include: the parents claim religious or philosophical exemptions to vaccines; the child is too young to be vaccinated; a vaccine is medically contraindicated for a child; a child, even after receiving the vaccination, is unable to build immunity against the disease; and societal reasons, such as inability to access care.⁶⁰ Given the wide range of reasons for a child going unvaccinated, parents who chose to not vaccinate their children because of their own beliefs put their child, and other children--who do not have such objections to vaccinations--at risk of contracting a disease.⁶¹ Discussing and considering all reasons is important for a well-rounded discussion on the issue as a whole, as provided below; however, for the purposes of this Note, the information will focus on the critical underlying issue--the changes that could be made to non-medical exemption policies to increase the yields of children receiving vaccinations.

i. Child too Young to be Vaccinated

The Centers for Disease Control and Prevention recommends administering the first dose of MMR, Varicella, and HepA (hepatitis A) vaccinations when the child reaches one year of age.⁶² The final dosages of some vaccinations, such as for DTaP (diphtheria, tetanus, and *423 whooping cough (pertussis)), IPV (polio), MMR (measles, mumps, and

rubella), and varicella has a recommended administration anytime between the child's fourth and sixth year of age.⁶³ Additionally, for many vaccines, multiple dose administrations are necessary to reach the maximum rate of immunity--a child who has not received all the doses of a vaccine is susceptible to the disease until the final dosage administration.⁶⁴ A child may contract a disease before he or she has even had the chance to build immunity against the disease through vaccinations.⁶⁵

ii. Vaccination is Medically Contraindicated

There may be a specific medical danger that does not allow for a child to receive a vaccination. For example, the MMR vaccine is contraindicated for children with hypersensitivity to gelatin, who are undergoing immunosuppressive therapy, or who have leukemia.⁶⁶ Children who cannot receive vaccinations because it is medically contraindicated are more likely to contract a disease in two ways: they can contract the disease when an unvaccinated child brings in the disease from the outside community, causing an outbreak; or, when there are so many unvaccinated children in a community that herd immunity is lost and a disease outbreak can more easily spread.⁶⁷ It is easy to imagine a scenario where a child, who would otherwise be vaccinated absent a medical reason, contracts a disease from a child whose parents had a philosophical or religious objection (belief objections) to vaccinations.

iii. Inability to Build Immunity Against Disease

Some children who receive the required doses of a vaccination are nonetheless unable to develop immunity for that disease.⁶⁸ For example, the DTaP vaccination is generally effective for up to eight or nine out of ten children who receive the vaccine.⁶⁹ The unvaccinated children *424 whose parents have belief objections to vaccinations jeopardize the health of the children who received the vaccination, but were nonetheless unable to develop immunity to the infections.

iv. Social Reasons for Not Vaccinating

Social reasons for parents not vaccinating their children include ignorance of the vaccine or inability to access healthcare.⁷⁰ Social reasons for not vaccinating only become a problem when the school that is supposed to enforce vaccination requirements does not assure compliance with the law.⁷¹ Furthermore, some parents may have fallen victim to the anti-vaccination movement, which largely focuses on the theory that vaccines can cause autism in children.⁷² At the foundation of this movement is the fact that instances of mortality from vaccine-preventable diseases are at record lows, which make vaccines seem unnecessarily dangerous to some parents.⁷³ Parents hear of children reacting negatively to vaccines through stories that the media sensationalizes, which make negative reactions to vaccines appear more common than the diseases the vaccines are intended to protect against.⁷⁴ Those parents can then seek a philosophical exemption or claim a religious exemption, where available, based on their concerns. Of course, those parents ignore the weight of scientific evidence, which proves that vaccines are a safe and effective method of avoiding disease.⁷⁵

States, keeping in mind that for some children vaccinations are not an option, should take all steps necessary under their authority to provide as much protection as possible to all children.

II. CONSTITUTIONALITY OF MANDATORY VACCINATIONS

A. States' Power to Enact Mandatory Vaccination Laws and Their Authority to *425 Limit or Expand Their Scope

The landmark Supreme Court case of *Jacobson v. Massachusetts* makes clear that states, pursuant to their police powers,⁷⁶ have the authority to compel mandatory vaccinations.⁷⁷ The Court upheld the constitutionality of the statute at issue in *Jacobson*, which provided that the state's Board of Health had the authority to compel vaccinations against smallpox. Furthermore, the Supreme Court, in *Zucht v. King*,⁷⁸ upheld a lower court's holding,⁷⁹ which upheld the constitutionality of mandatory vaccinations as a prerequisite to enrollment in public or private school.⁸⁰ However, the Supreme Court has not explicitly dealt with the constitutionality of religious exemptions to mandatory vaccinations.⁸¹ Supreme Court case law suggests that states have the authority under the U.S. Constitution to not grant religious exemptions to mandatory vaccinations.⁸² The Supreme Court in *Employment Division v. Smith* *426 held that a state statute criminalizing peyote and denying unemployment benefits to those who used the drug did not abridge petitioner's exercise of religion.⁸³ The Court emphasized that they have never allowed religion to form the basis for an exemption from conduct that a state can lawfully regulate.⁸⁴ The parallel drawn in the context of vaccinations is that if a state has a law that compels vaccinations, a state is not obligated by the U.S. Constitution to provide a religious exemption.⁸⁵

Similarly, in an earlier Supreme Court case, *Prince v. Massachusetts*, the Court rejected the petitioner's theory that her First Amendment freedom of religion rights provided her an exemption to Massachusetts' child labor laws.⁸⁶ In dictum, the Court mentioned that States, as *parens patriae*,⁸⁷ could restrict parents' control over their children in many ways, notably, that states could deny parents' wishes to exempt their children from mandatory vaccinations when the exemption is based on religious grounds.⁸⁸

*427 *Parens patriae* has been a justification for the regulation of children's health in a way that exceeds states' power to do so in the lives of adults.⁸⁹ Children do not have the same degree of decisional autonomy as adults.⁹⁰ Furthermore, states have an interest in promoting the overall health and socialization of children who will become tomorrow's adults.⁹¹ This concern is seen as states' interest in protecting future social capital.⁹² In order to protect states' interest in preserving future social capital, states rely on their police power and *parens patriae* role to regulate parents' decisions about their children's health care, even in ways that conflict with parents' wishes.⁹³

Police power and *parens patriae* form the basis for states' ability to impose vaccination requirements on children.⁹⁴ The same reasoning that allows states to mandate vaccinations, even in opposition to parents' religious beliefs, can justify states' authority to mandate the vaccination of children in opposition of the parents' philosophical beliefs.⁹⁵ As is the case for religious exemptions, there is no constitutional right to philosophical exemptions to mandatory vaccinations.⁹⁶

B. Mississippi's Approach to Non-Medical Vaccination Exemptions

Mississippi, a state that has neither religious nor philosophical exemptions to mandatory vaccinations,⁹⁷ has taken a novel approach in addressing the state's power to abolish belief exemptions to vaccination laws. Mississippi's Supreme Court has held that religious exemptions to mandatory vaccinations violate the Fourteenth Amendment.⁹⁸ The *428 Court reasoned that allowing religious exemptions to mandatory vaccinations would discriminate against the majority of children whose parents do not claim religious exemptions, denying those children equal protection under the law, while exposing them to the dangers of associating with unvaccinated children whose parents claimed the religious exemption.⁹⁹ This holding has not been followed in other state supreme courts; however, it has garnered support in academia as correctly identifying the fact that belief exemptions to mandatory vaccinations are incompatible with constitutional protections.¹⁰⁰

III. RELIGIOUS BELIEFS DISTINGUISHED FROM PHILOSOPHICAL BELIEFS

A. *The Supreme Court's Definition of Religious Beliefs in the Context of the Conscientious Objector Statute*

Determining the source of the beliefs that form the basis for refusal to vaccinate is important because it determines which exemption, if at all, an individual is entitled to claim. Federal case law provides insights into the distinction between statutory religious exemptions and philosophical opposition in the context of conscientious objectors to war. In *United States v. Seeger*, which came as a challenge to a conscientious objector statute that required a belief in a “Supreme Being” in order to receive an exemption from combat, the Court held that belief in a supreme being is tested by inquiring whether that belief is parallel in sincerity and meaning to an orthodox belief in God by a person who would clearly qualify for an exemption under the statute.¹⁰¹ The Court *429 further elaborated that Congress' intent behind including the words “Supreme Being” was to include all religions in the scope of the statute and to also exclude merely philosophical, sociological, or political views.¹⁰² As to one of the petitioners who stated that he did not belong to a religious sect or organization but stated that it was contrary to his moral code to take a human life, a code he held higher than his obligation to the state,¹⁰³ the Court found that his beliefs were protected by the conscientious objector statute.¹⁰⁴ *Seeger* was largely relied upon in *Welsh v. United States*,¹⁰⁵ where the Court held that sincere and meaningful beliefs that cause one to object to war need not be based in a traditional religion;¹⁰⁶ rather, the Court held that purely ethical or moral beliefs could form the basis of one's duty to refrain from participating in war, which is similar to the duty a person possesses from a traditional religion with such convictions.¹⁰⁷ *Seeger* and *Welsh* suggest that religious beliefs do not need to come from a traditional religion, but do have to be deeply and sincerely held to the point that they impose a “duty of conscience,” in order to cross the line from philosophical to the equivalent *430 of religious beliefs.¹⁰⁸

B. *Religious Beliefs Distinguished from Philosophical Opposition in the Context of New York's Mandatory Vaccination Law*

Other federal case law further elucidates where the line between religious beliefs and philosophical opposition may lie, specifically, in the context of mandatory vaccination laws. The Second Circuit decision of *Mason v. General Brown Cent. School District*,¹⁰⁹ makes a clear point that not all members of any religion will qualify for a religious exemption to vaccinations laws.¹¹⁰ The appellants in *Mason* were members of the Davenport Universal Life Church (DULC).¹¹¹ In the discussion of the DULC, the Court found that the “Church,” exists essentially to provide its members a tax dodge and to provide “religious” legitimacy to the chiropractic ethics of its members,¹¹² who are largely chiropractors or chiropractic students.¹¹³ The appellants based their opposition to vaccinations on their strong convictions about the necessity of a “natural existence,” their belief that vaccinations are unnecessary and harmful because the body has the ability protect itself from disease without medicine, and their belief that vaccinations are contrary to the “genetic blueprint” of nature.¹¹⁴ The state's Commissioner of Education and the school district denied the appellants' religious exemptions after the determination that the appellants had failed to present sufficient evidence that their religious beliefs formed the basis for their opposition to vaccinations.¹¹⁵ In dismissing the appellants' First Amendment free exercise of religion claims, finding it without merit,¹¹⁶ the Court held that the appellants' belief in a “genetic blue print” was simply the embodiment *431 of secular chiropractic ethics.¹¹⁷ To make this assessment, the Court relied on the *Seeger* standard of what is deemed a religious belief--that being a belief that “occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God.”¹¹⁸

Furthermore, the Court relied on federal case law to conduct a threshold inquiry in considering the difference between religious and secular or scientific beliefs.¹¹⁹ The Court's threshold inquiry provided that claims do not have a religious basis if grounded in a subjective evaluation and rejection of the majority's contemporary secular values,¹²⁰ if they are

purely secular philosophical concerns,¹²¹ or if they are just a matter of personal preference.¹²² With these standards in mind, the Court found that the appellants' beliefs of natural living and a "genetic blueprint" did not rise to the level of religious beliefs; rather, the Court found them to be closer to philosophical or personal beliefs.¹²³ The Masons' beliefs, which the Court described as a "lifestyle choice," may have been supported by strong convictions, but the fact that the decision to live a natural existence was important to them did not render their beliefs religious under the law.¹²⁴ The *Mason* court examined *432 the sincerity and the motivation behind the beliefs and did not rely on the fact that the appellants purported their beliefs as mandated by their religion. The holding in *Mason* demonstrates a narrower interpretation than the Supreme Court's interpretation in *Seeger* and *Welsh* of what qualifies as a religious belief.¹²⁵

States' ability to discern between religious and philosophical beliefs, which form the basis for parent's objections to vaccinations, is an important tool, one that will allow the states to reject philosophical exemptions and will contribute towards protecting herd immunity.

IV. HERD IMMUNITY

A. Herd Immunity and Clustering Defined

Vaccinations are not 100 percent effective; therefore, the effectiveness of any vaccination regime relies on a high enough percentage of the population being vaccinated so as to avoid the outbreak of vaccine-preventable diseases.¹²⁶ When this threshold level is met, children who are not vaccinated face less risk because it is less likely that they will be exposed to a disease.¹²⁷ This "herd immunity" occurs if a high enough percentage of the population receives vaccines. Herd immunity can be lost if enough people do not receive vaccinations.¹²⁸ The percentage of vaccination coverage necessary to achieve herd immunity varies for each disease, but it generally ranges from 83 to 94 percent.¹²⁹ For example, the percentage of coverage required to reach herd immunity for smallpox ranges from 80 to 85 percent, whereas for pertussis it ranges from 92 to 94 percent.¹³⁰ In order for herd immunity to successfully protect children who cannot receive vaccinations either for medical reasons or because they are too young, exemptions to vaccinations need to be granted discerningly.¹³¹

*433 Although on a national level non-medical exemption rates hover between 1 to 2 percent of the population, locally, levels of exemptions can far exceed the national rate.¹³² For example, in 2012-13, Oregon had the highest vaccination exemption rate at 6.4 percent as a state.¹³³ In California, some county-level non-medical exemption rates were as high as 17 percent in 2010.¹³⁴ In Arizona, some school-level nonmedical exemption rates were as high as 68 percent in the 2010-2011 school year.¹³⁵ This phenomenon, known as clustering, refers to a disproportionate amount of people in a locality seeking an exemption to mandatory vaccinations as compared to the general population.¹³⁶ Clustering threatens herd immunity because people who have religious or personal views that would prompt them to seek an exemption from mandatory vaccinations often live in close proximity to each other.¹³⁷ When the number of vaccine exemptions reach a "critical mass," it is more likely that herd immunity will be compromised within that locality.¹³⁸ Additionally, not every vaccinated child achieves immunity to the disease;¹³⁹ as a result, clustering exposes children who cannot be vaccinated due to medical reasons, and children who are vaccinated but do not achieve immunity, to disease.¹⁴⁰ As illustrated in the case of the Brooklyn measles outbreak, clustering can also threaten the health of children who are too young to receive a vaccine against a preventable disease.¹⁴¹

*434 *B. Philosophical Exemptions to Mandatory Vaccinations Increase Exemptions Rates, Threaten Herd Immunity*

States that offer philosophical exemptions in addition to religious exemptions have higher exemption rates,¹⁴² and heightened rates threaten herd immunity.¹⁴³ Additionally, those states also have higher rates of people infected by vaccine-preventable diseases.¹⁴⁴ In states that offer philosophical exemptions, that exemption is increasingly becoming a majority of exemptions.¹⁴⁵ For example, in 2003, the Arkansas General Assembly passed a bill to allow philosophical exemptions to mandatory vaccinations, in addition to the already present religious exemptions.¹⁴⁶ Prior to the enactment of philosophical exemptions in 2003, religious exemptions in the 2001-2002 and 2002-2003 school years accounted for nearly 80 percent of the exemptions granted.¹⁴⁷ After the enactment of philosophical exemptions, in the 2003-2004 school year, religious exemptions decreased to account for nearly 40 percent of exemptions, while philosophical exemptions accounted for nearly 53 percent of exemptions.¹⁴⁸ The percentage of philosophical exemptions granted grew in the 2004-2005 school year to account for 63 percent of the exemptions, while the percentage of religious exemptions decreased to about 32 percent.¹⁴⁹ From the 2001-2002 school year to the 2004-2005 school year, nonmedical exemptions grew from 419 to 1,083.¹⁵⁰ States that offer philosophical exemptions similarly experience an increase in rates of exemptions, whereas states that offer only religious exemptions have not experienced such an increase.¹⁵¹

*435 V. DETERMINING BONA FIDE RELIGIOUS EXEMPTORS

Short of abolishing religious exemptions to mandatory vaccination laws, an available option to reduce the risk to the public would be for states to develop a standard that would allow them to determine when to grant religious exemptions based on a person's sincerely held religious beliefs.¹⁵² Creating such a standard would allow states to balance individual rights and public health risks.¹⁵³ Existing case law addressing conscientious objector statutes could provide the model for this standard. This position has garnered support based in part on the similarities between mandatory conscription and mandatory vaccinations.¹⁵⁴ Society as a whole benefits from conscription (increased national security) and from mandatory vaccination (increased public health).¹⁵⁵ Recognizing the benefits of both mandatory vaccination and conscription, legislatures have at times enacted laws requiring conscription¹⁵⁶ and laws requiring vaccinations.¹⁵⁷ Conversely, legislatures have also instituted religious exceptions to both conscription¹⁵⁸ and mandatory vaccination.¹⁵⁹ Supreme Court cases suggest that a person qualifies for conscientious objector status when a person holds a sincere and meaningful objection¹⁶⁰ to any and all wars¹⁶¹ that is "spurred by deeply held moral, ethical, *436 or religious beliefs, [that] would give them no rest or peace if they allowed themselves to become a part of an instrument of war."¹⁶² This Note will not attempt to construct an analogous standard for the context of vaccinations, but states clearly have varying standards for determining the sincerity of the exemptor's religious beliefs.¹⁶³

However, states can seek guidance from Delaware's non-medical exemption requirements, which closely follows the language of a conscientious objector Supreme Court case regarding what beliefs are considered grounded in religion.¹⁶⁴ Additionally, in order to guard against the continuing increase of preventable diseases, legislatures should enact a review mechanism, which would allow either state or school officials to review the sincerity of the religious beliefs and the content of the religious beliefs that form the basis for parents' requests for religious exemptions from mandatory vaccinations.¹⁶⁵ The governing body assigned the task of determining whether a person's beliefs qualify them for a religious exemption can seek guidance from the Second Circuit's reasoning in *Mason v. General Brown Cent. School District*, which denied a religious exemption from the state's vaccination requirements to members of a church that, existed primarily to provide its members a tax dodge.¹⁶⁶

***437 VI. PRESCRIPTIONS FOR MINIMIZING THE PUBLIC HEALTH RISKS ASSOCIATED WITH RELIGIOUS EXEMPTIONS**

A. Easy Non-Medical Exemption Policies Lead to Higher Exemption Rates

Beyond creating a standard based on Supreme Court cases that will allow states to establish legally cognizable religious beliefs, states can adopt policies of other states to make their religious exemption application processes more onerous, as a way of deterring individuals who do not have bona fide religious objections to vaccinations.

A 2012 study analyzed the non-medical vaccination exemption policies of the 48 states and the District of Columbia that allowed nonmedical exemptions from 2006 to 2011.¹⁶⁷ The study categorized exemption policies into three groups: easy exemption policies, medium exemption policies, and difficult exemption policies.¹⁶⁸ States that had easy non-medical exemptions policies had 2.31 times higher exemption rates than states that had difficult exemption policies.¹⁶⁹ From 2006 to 2011, states with easy non-medical exemption policies experienced an average exemption rate growth of 13 percent, reaching an average exemption rate of 3.3 percent in 2011.¹⁷⁰ In that same time period, states that had difficult non-medical exemption policies had an average exemption rate growth of 8 percent, reaching an average exemption rate of 1.3 percent in 2011.¹⁷¹ These figures demonstrate a need to limit the accelerated increase of non-medical exemption rates.¹⁷² This study suggests ***438** that making non-medical exemptions harder to obtain will decrease the amount of non-medical exemptions, which will in turn benefit the public's wellbeing.

B. Policies Designed to Heighten the Requirements Necessary to Receive a Non-Medical Exemption

i. Rigorous Religious Exemption Criteria

States that offer generous opt-outs to mandatory vaccination requirements frustrate efforts to eradicate preventable infectious diseases.¹⁷³ Due to the pervasiveness of religious exemptions to mandatory vaccinations¹⁷⁴ and state RFRAs,¹⁷⁵ the elimination of the religious exemption is likely politically unfeasible.¹⁷⁶ Public health initiatives face growing skepticism when they affect a person's individual rights.¹⁷⁷ Instead of eliminating the religious exemption to mandatory vaccinations, which would probably create animosity and increase skepticism in vaccinations and the public health system as a whole, states should increase public knowledge about the life-saving benefits of vaccinations, about the remote risks posed by childhood vaccinations, and about the avoidable risks that non-vaccinations impose on other children.¹⁷⁸ Additionally, states should implement more rigorous policies to combat the risks inherent to religious exemptions.¹⁷⁹ In addition to creating a uniform standard to determine bona fide religious exponents,¹⁸⁰ states can model their religious exemption laws after other states' laws that have in place more restrictive conditions attached to their exemptions, as discussed below.¹⁸¹

****439 ii. Elimination of the Philosophical Exemption***

States should model their exemption statute to only allow religious exemptions,¹⁸² or to specifically exclude philosophical exemptions.¹⁸³ States that make exemptions widely available by offering philosophical exemptions in addition to religious exemptions experience higher exemption rates of exemptions than states that only offer religious exemptions.¹⁸⁴ The continuance of philosophical exemptions threatens herd immunity and ensures that vaccine-preventable diseases will continue to breakout, and possibly increase in frequency and in geographic scope.¹⁸⁵

iii. Exclusion from School or Mandatory Vaccination in Times of Disease Outbreak

Beyond the elimination of the philosophical exemption, states can adopt other practical measures to reduce the risk of outbreak of preventable diseases. For example, Georgia's immunization statute allows for the exclusion of children from school when there is an epidemic of a preventable disease until the student is immunized or until the epidemic is no longer a public health threat.¹⁸⁶ Kentucky's immunization law imposes further conditions in the presence of a preventable disease outbreak.¹⁸⁷ Kentucky's law provides that in the presence of an epidemic, the state may require individuals in the area of the epidemic to receive vaccinations against the disease responsible for the epidemic.¹⁸⁸

iv. Requiring Sworn Affidavit Confirming Sincerity of Religious Beliefs

In Delaware, parents who seek a religious exemption must submit a notarized affidavit where they swear that the parents "subscribe to a belief in a relation to a Supreme Being involving duties superior to those arising from any human relation,"¹⁸⁹ and that the "belief is sincere and meaningful and occupies a place in [their] life parallel to that filled by the orthodox belief in God."¹⁹⁰ The affidavit further stipulates that parents understand that their children could be excluded from school in the event of an outbreak and that they have been given the opportunity to review information regarding the medical benefits of vaccinations and risks associated with choosing to not vaccinate their children.¹⁹¹ Having parents fill out a notarized affidavit will provide documentation useful for reviewing the sincerity of the parents' beliefs by a designated review board.

v. Review Mechanisms to Ensure Sincerity of Beliefs of Religious Exemptions

States vary in the review mechanisms they have in place to determine the sincerity of religious exemption applications.¹⁹² Three proposed options to increase the protective strength of vaccinations through the review of exemption applications are: 1) the designation of the health department, a school official, or another related official to review and approve the exemption application; 2) the requirement that the application be reviewed for sincerity of religious beliefs; and 3) the requirement that the content of those sincere religious beliefs be determined to be the reason for the refusal to vaccinate.¹⁹³ These review mechanisms would allow states to sensibly grant exemptions and make it more difficult for parents to unduly impose risks on others.¹⁹⁴

vi. Educating Parents About the Safety of Vaccines and the High Risks Associated with not Vaccinating their Children

Before parents are granted a religious exemption, states should provide educational counseling to parents regarding the dangers of not vaccinating their children.¹⁹⁵ To qualify for a religious exemption in Vermont, parents must sign a statement that stipulates they: have reviewed and understand educational material about immunizations provided to them by the state; understand that the failure to have their children vaccinated increases the risk that their children and other children will contract a preventable disease; understand that for some children, vaccinations are medically contraindicated, and that for those children, being infected by a preventable disease could be life-threatening.¹⁹⁶ The hope of sharing this information may be to ensure that parents will not take the decision to not vaccinate their children lightly.

Oregon's immunization law goes further by requiring a heightened educational requirement.¹⁹⁷ In order for a child to qualify for a non-medical exemption in Oregon, parents must either provide a signed statement from a physician verifying that the physician has explained to the parents the risks and benefits of immunizations or a certificate showing that the parents have completed a vaccine education module.¹⁹⁸ The education module contains information supplied

by the Centers for Disease Control and Prevention regarding epidemiology, *442 the prevention of disease through vaccinations, and the safety and effectiveness of vaccinations.¹⁹⁹ Oregon's education policy is characterized as an "informed refusal" process.²⁰⁰ The aim of this process is to allow parents who are seeking an exemption to have an in depth discussion with their physician about the benefits and risks of immunizations so as to increase the likelihood that parents would choose to vaccinate their children.²⁰¹

vii. Effective Enforcement Mechanisms to Deter Non-Compliance with Vaccination Requirements

States should also be cognizant of the effects of their enforcement mechanisms in addressing violations of mandatory vaccination requirements.²⁰² For example, Georgia has authorized the imposition of fines and imprisonment for officials who permit children to remain in school, or for parents who do not comply with the vaccination requirements, in violation of the state's immunization laws.²⁰³ Similarly, Tennessee's vaccination laws stipulate that parents who refuse to have their children vaccinated, absent a valid exemption, can be found guilty of a misdemeanor.²⁰⁴ The availability of civil or criminal penalties for violators of states' mandatory vaccination laws can strengthen the protective strength of those laws.²⁰⁵

viii. Ideal Vaccination Exemption Policy

An ideal policy, one that seeks to make getting a religious exemption worth the effort only to those with bona fide religious beliefs that are in opposition to vaccinations,²⁰⁶ would expressly reject philosophical opposition to vaccinations as the reason for granting an exemption; *443 provide that exemptions to vaccinations may not be recognized in times of disease outbreak; require a notarized affidavit affirming that the parent understands the dangers of not vaccinating their child, that the parents "subscribe to a belief in a relation to a Supreme Being involving duties superior to those arising from any human relation,"²⁰⁷ and that the "belief is sincere and meaningful and occupies a place in [their] life parallel to that filled by the orthodox belief in God;"²⁰⁸ require an educational component so that parents could make an "informed refusal" decision to not vaccinate their children; designate a body of officials or an official to review religious exemptions for sincerity and for content; and would specify civil or criminal penalties for failure to comply with the provisions of the law as a deterrent to noncompliance.

VII. CONCLUSION

States have the legal authority to mandate the vaccination of children, with the exception of children for whom the vaccination is medically contraindicated.²⁰⁹ States furthermore do not have a constitutional obligation to provide their constituents with either religious or philosophical exemptions to their vaccination requirements.²¹⁰ However, forty-seven states provide their citizenry with religious exemptions and eighteen states additionally allow philosophical exemptions to vaccinations.²¹¹ These exemptions threaten herd immunity, because herd immunity relies on the immunization of a high enough percentage of the population in order to protect those who cannot physically be vaccinated--children for whom vaccinations are medically contraindicated or children who are too young to be vaccinated.²¹²

Eliminating religious exemptions may undermine the public health goals of vaccinations by inflaming public opinion.²¹³ Furthermore, the absence of a religious exemption may be prohibited by a state's religious freedom act.²¹⁴ A balanced and practical approach to minimize *444 the number of vaccine exemptors, and thus to maximize public health outcomes, would be to adopt the ideal vaccination policy as set forth above in Part VI.B.viii. The goal of these policies

would be to make the process of applying for a religious exemption worth the effort only to parents who have sincere beliefs in opposition to vaccinations, thus decreasing the rates of exemptions granted and promoting public health.

Footnotes

- 1 See Ross D. Silverman, No More Kidding Around: Restructuring Non-Medical Childhood Immunization Exemptions to Ensure Public Health Protection, 12 ANNALS OF HEALTH L. 277, 278 (2003).
- 2 *See id.*
- 3 *See id.*
- 4 Robert J. Arciuolo et al., Measles Outbreak Among Members of a Religious Community-Brooklyn, New York, March - June 2013, 62 MORBIDITY AND MORTALITY WKLY. REP. 752, 752-753 (Sept. 13, 2013).
- 5 *Id.*
- 6 *Id.*
- 7 *Id.*
- 8 *Id.*
- 9 Arciuolo et al., Measles Outbreak Among Members of a Religious Community (Sept. 13, 2013).
- 10 *Id.*
- 11 *Id.*
- 12 *Id.*
- 13 *Id.*
- 14 *Id.*
- 15 Arciuolo et al., Measles Outbreak Among Members of a Religious Community (Sept. 13, 2013).
- 16 *Id.*
- 17 *Id.*
- 18 *Id.*
- 19  N.Y. PUB. HEALTH § 2164 (McKinney 2015).
- 20 *Id.* (“The term ‘school’ means and includes any public, private or parochial child caring center, day nursery, day care agency, nursery school, kindergarten, elementary, intermediate or secondary school.”).
- 21 *Id.*
- 22 *Id.*
- 23 See Arciuolo, *supra* note 4 (The author explains the qualities that likely reduced the impact of the outbreak. “The insular nature of the affected community and high population-level vaccination coverage outside this community likely prevented further spread of measles.”).
- 24 S.B. 1536, 2015-16 Reg. Sess. (N.Y. 2015) (The relevant section of the bill reads: “[T]his section shall not apply to a person who holds PERSONAL OBJECTIONS OR genuine and sincere religious beliefs which are contrary to the practices herein required,

and no certificate OF IMMUNIZATION, MEDICAL TESTS AND TREATMENTS shall be required as a prerequisite to such person being admitted or received into or attending an institution.”) (original emphasis).

As of February 9, 2015, the bill has been recommitted and the enacting clause has been stricken. New York State Assembly, http://assembly.state.ny.us/leg/?default_fld=&bn=S01536&term=2015&Summary=Y&Actions=Y (last visited Feb. 13, 2015).

25 Former State Senator Frank Padavan has introduced a philosophical exemption bill in the Senate from the 2001-2002 to the 2009-2010 legislative cycles. S.B. 0711, 2001-2002 Reg. Sess. (N.Y. 2001); S.B. 0695, 2003-2004 Reg. Sess. (N.Y. 2003); S.B. 0305, 2005-2006 Reg. Sess. (N.Y. 2005); S.B. 3031, 2007-2008 Reg. Sess. (N.Y. 2007); S.B. 2337, 2009-2010 Reg. Sess. (N.Y. 2009). State Senator Martin Malavé Dilan, whose district covers large areas of the Williamsburg neighborhood in Brooklyn, has introduced the philosophical exemption bill in the Senate from the 2011-2012 legislative cycle to the 2015-2016 legislative cycle. S.B. 1331, 2011-2012 Reg. Sess. (N.Y. 2011); S.B. 3934, 2013-2014 Reg. Sess. (N.Y. 2013); S.B. 1536, 2015-2016 Reg. Sess. (N.Y. 2015). Sister bills have appeared in the New York State Assembly from the 2003-2004 to the 2009-2010 legislative cycles and the 2013-2014 to 2015-2016 legislative cycles. Assemb. B. 10326, 2003-2004 Reg. Sess. (N.Y. 2003); Assemb. B. 0885, 2005-2006 Reg. Sess. (N.Y. 2005); Assemb. B. 5468, 2007-2008 Reg. Sess. (N.Y. 2007); Assemb. B. 4886, 2009-2010 Reg. Sess. (N.Y. 2009); Assemb. B. 6359, 2013-2014 Reg. Sess. (N.Y. 2013); Assemb. B. 0943, 2015-2016 Reg. Sess. (N.Y. 2015).

26 [Cal. Health & Safety Code § 120325 \(West 2016\)](#) (“[I]t is the intent of the Legislature to provide ... [e]xemptions from immunization for medical reasons.”) There is no mention of a religious or philosophical exemption to the state's mandatory vaccination law. *Id.*

27 [MISS. CODE ANN. § 41-23-37 \(2015\)](#) (“A certificate of exemption from vaccination for medical reasons may be offered on behalf of a child by a duly licensed physician and may be accepted by the local health officer when, in his opinion, such exemption will not cause undue risk to the community.”). There is no mention of a religious or philosophical exemption to the state's mandatory vaccination law. *Id.*

28 [W. VA. CODE § 16-3-4 \(2015\)](#) (“A request for an exemption to the compulsory immunization requirements of this section must be accompanied by the certification of a licensed physician stating that the physical condition of the child is such that immunization is contraindicated or there exists a specific precaution to a particular vaccine.”). There is no mention of a religious or philosophical exemption to the state's mandatory vaccination law. *Id.*

29 See National Conference of State Legislatures, States With Religious and Philosophical Exemptions From School Immunization Requirements, NCSL.ORG, <http://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx> (last visited Oct. 5, 2015).

30 *See id.*

31 *Id.* The states that have personal belief exemptions are Arizona ([ARIZ. REV. STAT. ANN. § 15-872](#), 873 (2015)), Arkansas ([ARK. CODE ANN. § 6-18-702](#) (2015)), Colorado ([COLO. REV. STAT. § 25-4-902](#), [903](#) (2015)), Idaho ([IDAHO CODE § 39-4801](#), 4802 (2015)), Louisiana ([LA. STAT. ANN. § 17:170\(A\)](#); 40:31.16 (2015)), Maine (ME. STAT. tit. 20-A, § 6355 (2015)), Michigan ([MICH. COMP. LAWS ANN. § 333.9208](#), 9215 (2015)), Minnesota ([MINN. STAT. § 121A.15](#) (2015)), Missouri ([MO. REV. STAT. § 167.181](#), [210.003](#) (2015)), North Dakota ([N.D. CENT. CODE § 23-07-17.1](#) (2015)), Ohio ([OHIO REV. CODE ANN. § 3313.671](#) (2015)), Oklahoma ([OKLA. STAT. tit. 70, § 1210.191](#), 192 (2015)), Oregon ([OR. REV. STAT. § 433.267](#) (2015)), Pennsylvania (28 PA. CODE § 23.83, 84 (2015)), Texas ([TEX. EDUC. CODE ANN. § 38.001](#) (2015)), Utah ([UTAH CODE ANN. § 53A-11-301](#), 302 (2015)), Washington ([WASH. REV. CODE § 28A.210.080](#), 90 (2015)), and Wisconsin ([WIS. STAT. § 252.04](#) (2015)).

32 *See, e.g.* Eileen Wang et al., Nonmedical Exemptions From School Immunization Requirements: A Systematic Review, AM. J. OF PUB. HEALTH, Nov. 2014, at e62, e80-81.

- 33 Lawrence O. Gostin, Law, Ethics, and Public Health in the Vaccination Debates Politics of the Measles Outbreak, 313 [J]AMA 1099, 1100 (2015).
- 34 See Christopher C. Lund, [Religious Liberty After Gonzales: A Look at State RFRA's](#), 55 S.D. L. Rev. 466, 475-76 (2010). Twenty-one states currently have a religious freedom restoration act. National Conference of State Legislatures, State Religious Freedom Restoration Acts, NCSL.ORG, <http://www.ncsl.org/research/civil-and-criminal-justice/state-rfra-statutes.aspx> (last visited Sept. 23, 2016). As of April 5, 2016, ten additional states are considering legislation related to religious freedom restoration. National Conference of State Legislatures, State Religious Freedom Restoration Act Legislation, NCSL.ORG, <http://www.ncsl.org/research/civil-and-criminal-justice/2016-state-religious-freedom-restoration-act-legislation.aspx> (last visited Sept. 28, 2016). For an example of a state RFRA see, [ARIZ. REV. STAT. ANN. § 41-1493.01](#) (2016) (“Government may substantially burden a person's exercise of religion only if it demonstrates that application of the burden to the person is both [i]n furtherance of a compelling governmental interest [and] [t]he least restrictive means of furthering that compelling governmental interest.”).
- 35 Richard H. Fallon, Jr., [Strict Judicial Scrutiny](#), 54 UCLA L. Rev. 1267, 1274 (2007).
- 36 See Ross D. Silverman, No More Kidding Around: Restructuring Non-Medical Childhood Immunization Exemptions to Ensure Public Health Protection, 12 ANNALS OF HEALTH L. 277, 293 (2003).
- 37 See, e.g. Joseph W. Thompson et al., Impact of Addition of Philosophical Exemptions on Childhood Immunization Rates, 32 AM. J. OF PREVENT. MED. 194 (2007).
- 38 Dorit Rubinstein Reiss & Lois A. Weithorn, [Responding to the Childhood Vaccination Crisis: Legal Frameworks and Tools in the Context of Parental Vaccine Refusal](#), 63 BUFFALO L. REV. 881, 915 (2015).
- 39 Wang et al., *supra* note 32, at e62.
- 40 See, e.g., [CAL. HEALTH & SAFETY CODE § 120370](#) (2015) (“If the parent or guardian files with the governing authority a written statement by a licensed physician to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances that contraindicate immunization, that person shall be exempt from the requirements”).
- 41 See Vaccination Exemptions, THE HISTORY OF VACCINATIONS (Jan. 17, 2016), <http://www.historyofvaccines.org/content/articles/vaccination-exemptions>.
- 42 [N.Y. PUB. HEALTH LAW 2164 \(9\)](#) (McKinney 2015).
- 43 IOWA CODE § 139A-8 (2015). See also [N.M. STAT. ANN. § 24-5-3 \(2015\)](#) (providing an exemption from immunization for parents who provide “affidavits or written affirmation from an officer of a recognized religious denomination that such child's parents or guardians are bona fide members of a denomination whose religious teaching requires reliance upon prayer or spiritual means alone for healing.”).
- 44 Reiss & Weithorn, *supra* note 38, at 916-17.
- 45 [Sherr v. Northport-East Northport Union Free School Dist.](#), 672 F. Supp. 81, 99 (E.D.N.Y. 1987). See also [Dalli v. Board of Educ.](#), 267 N.E.2d 219, 223 (Mass. 1971) (holding that a Massachusetts statute providing a religious exemption only to members “of a recognized church or religious denomination,” was unconstitutional under the First and Fourteenth Amendments to the United States Constitution).
- 46 [DEL. CODE ANN. tit. 14, § 131](#) (2015) (using language from [U.S. v. Seeger](#), 380 U.S. 163, 175 (1965)).
- 47 See Calandrillo, *infra* note 52 (describing philosophical exemptions to vaccinations as “exemptions of convenience.”).

- 48  [ARIZ. REV. STAT. ANN. § 15-873 \(2015\)](#).
- 49 *Id.*
- 50  [ARK. CODE ANN. § 6-18-702 \(2015\)](#).
- 51 *Id.*
- 52 Steven P. Calandrillo, Vanishing Vaccinations: Why Are So Many Americans Opting Out of Vaccinating Their Children?, *U. Mich. J.L. Reform* 353, 417 (2004).
- 53 *Id.*
- 54 *Id.*
- 55  [Boone v. Boozman, 217 F. Supp. 2d 938 \(E.D. Ark. 2002\)](#).
- 56 *Id.*
- 57 Thompson et al., *supra* note 37 at 195.
- 58 *Id.*
- 59 *Id.*
- 60 Allan J. Jacobs, [Do Belief Exemptions to Compulsory Vaccination Programs Violate the Fourteenth Amendment?](#), 42 *U. MEM. L. REV.* 73, 81-82 (2011).
- 61 *Id.* at 83.
- 62 2015 Recommended Immunizations for Children from Birth Through 6 Years Old, *CENTERS FOR DISEASE CONTROL AND PREVENTION* (Jan. 18, 2016), <http://www.cdc.gov/vaccines/parents/downloads/parent-ver-sch-0-6yrs.pdf>.
- 63 *Id.*
- 64 Jacobs, *supra* note 60, at 82.
- 65 For an example of a child contracting a disease before the administration of a vaccine, see Arciuolo, *supra* note 4.
- 66 M-M-R II (measles, mumps, and rubella virus vaccine live) - Full Prescribing Information. PDR (Jan. 18, 2016), <http://www.pdr.net/full-prescribing-information/M-M-R-II-measles-mumps--and-rubella-virus-vaccine-live-363#referencesall>.
- 67 Jacobs, *supra* note 60, at 83.
- 68 *Id.* at 82.
- 69 Pregnancy and Whooping Cough, *CENTERS FOR DISEASE CONTROL AND PREVENTION* (Jan. 18, 2016), <http://www.cdc.gov/pertussis/pregnant/mom/vacc-effectiveness.html>.
- 70 Jacobs, *supra* note 60, at 82.
- 71 *Id.* at 83.
- 72 See Amanda Z. Naprawa, [Don't Give Your Kid That Shot: The Public Health Threat Posed by anti-Vaccine Speech and Why Such Speech Is Not Guaranteed Full Protection under the First Amendment](#), 11 *CARDOZO PUB. L. POL'Y & ETHICS J.* 473, 487-500 (2013).
- 73 Anna Kata, A Postmodern Pandora's Box: Anti-vaccination Misinformation on the Internet, 28 *Vaccine* 1709, 1709 (2010).

- 74 Id.
- 75 Kevin M. Malone & Alan R. Hinman, Vaccination Mandates: The Public Health Imperative and Individual Rights, in *LAW IN PUBLIC HEALTH PRACTICE* 263-64 (Richard A. Goodman et al. eds., 2nd ed. 2007).
- 76  [Jacobson v. Massachusetts](#), 197 U.S. 11, 24-25 (1905).
- 77  *Id.* at 27.
- 78 [Zucht v. King](#), 260 U.S. 174 (1922).
- 79 [Zucht v. King](#), 225 S.W. 267 (Tex. Civ. App. 120).
- 80 The statute at issue in *Zucht* provided “that no child or other person shall attend a public school or other place of education without having first presented a certificate of vaccination.” [Zucht v. King](#), 260 U.S. at 175. The *Zucht* Court dismissed the petitioner's writ of error and let the lower court's holding stand. *Id.* at 177. The lower court had determined that the “ordinances were enacted in pursuance of a grant of wise and valid power, which the Legislature expressly delegated to the city council through its charter, ‘to enforce vaccination.’” [Zucht v. King](#), 225 S.W. at 272. The court further pronounced “its validity without reference to the actual existence of smallpox or not”
- 81 Daniel A. Salmon & Andrew W. Siegel, Religious and Philosophical Exemptions from Vaccination Requirements and Lessons Learned from Conscientious Objectors from Conscription, 116 Pub. Health Rep. 281, 291 (2001).
- 82 *Id.* at 921-22. There may be statutory obligations within that state that would nonetheless require the state to provide a religious exemption, such a state Religious Freedom Restoration Act (RFRA). A state RFRA is the state analogue to the federal RFRA invalidated by *Boerne v. Flores*. National Conference of State Legislatures, State Religious Freedom Restoration Acts, NCSL.ORG, <http://www.ncsl.org/research/civil-and-criminal-justice/state-rfra-statutes.aspx> (last visited Sept. 23, 2016). Twenty-one states have a state RFRA. Forty-seven states provide a religious exemption to their mandatory vaccination laws. National Conference of State Legislatures, States With Religious and Philosophical Exemptions From School Immunization Requirements, NCSL.ORG, <http://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx> (last visited Oct. 5, 2015). Therefore, it is not necessary to analyze the situation where a state has a state RFRA, but does not have a religious exemption to mandatory vaccinations. Mississippi is the only state that has a state RFRA and also does not allow for religious exemptions to mandatory vaccinations. See National Conference of State Legislatures, State Religious Freedom Restoration Acts, NCSL.ORG, <http://www.ncsl.org/research/civil-and-criminal-justice/state-rfra-statutes.aspx> (last visited Sept. 23, 2016) (showing that Mississippi has a state RFRA); National Conference of State Legislatures, States With Religious and Philosophical Exemptions From School Immunization Requirements, NCSL.ORG, <http://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx> (last visited Sept. 23, 2016) (showing that Mississippi does not allow religious exemptions to mandatory vaccinations) (by comparison of both sources, it can be concluded that Mississippi is the only state that has a state RFRA and does not provide a religious exemption from mandatory vaccinations). However, a decision by Mississippi's Supreme Court holding religious exemptions to vaccinations unconstitutional may explain this incongruity. See discussion *infra* Part II.B.
- 83  [Employment Division v. Smith](#), 494 U.S. 872 (1990). In response to the holding of *Employment Division v. Smith*, Congress enacted the Religious Freedom Restoration Act (RFRA). Neal Devins, [How Not to Challenge the Court](#), 39 *Wm. & Mary L. Rev.* 645, 645 (1998). RFRA was subsequently invalidated by the 1997 U.S. Supreme Court case *Boerne v. Flores*. *Id.* at 646.
- 84  *Id.* at 878-89.
- 85 Nat'l Conf. of State Leg., States with Religious and Philosophical Exemptions from School Immunization Requirements, <http://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx> (last visited Oct. 5, 2015). (Nonetheless, 47 states provide a religious exemption to their mandatory vaccination laws.)
- 86  [Prince v. Massachusetts](#), 321 U.S. 158 (1943).

87 *Parens Patriae* in Latin means “parent of his or her country” and is defined as “[t]he state regarded as a sovereign; the state in its capacity as provider of protection to those unable to care for themselves ...” *Parens Patriae*, BLACK'S LAW DICTIONARY (10th ed. 2014).

88  [Prince v. Mass.](#), 321 U.S. 158, 166-67 (1943) (Providing several examples of where State's *parens patriae* may trump a parent's religious objection to interference: “Acting to guard the general interest in youth's well being, the state as *parens patriae* may restrict the parent's control by requiring school attendance, regulating or prohibiting the child's labor and in many other ways. Its authority is not nullified merely because the parent grounds his claim to control the child's course of conduct on religion or conscience. Thus, he 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.”).

89 Dorit Rubinstein Reiss & Lois A. Weithorn, [Responding to the Childhood Vaccination Crisis: Legal Frameworks and Tools in the Context of Parental Vaccine Refusal](#), 63 BUFF. L. REV. 881, 905 (2015).

90 *Id.* at 906.

91 *Id.*

92 *Id.* at 905-06.

93 *See id.* at 907.

94 Kevin M. Malone & Alan R. Hinman, *Vaccination Mandates: The Public Health Imperative and Individual Rights*, LAW IN PUBLIC HEALTH PRACTICE 280 (Richard A. Goodman et al. eds., 2nd ed. 2007).

95 *Id.*

96 *Id.*

97  MISS. CODE ANN. § 41-23-37 (2015).

98 *See* [Brown v. Stone](#), 378 So. 2d 218, 223 (Miss. 1979).

99 *Id.* at 223 (The Court makes explicit its conclusion that the constitutional protections of the Fourteenth Amendment do not allow for the existence of exceptions to vaccinations. The Court explains that “[t]he exemption of children of parents whose religious beliefs conflict with the immunization requirements, would discriminate against the great majority of children whose parents have no such religious convictions. To give it effect would result in a violation of the Fourteenth Amendment ... equal protection of the laws, in that it would require the great body of school children to be vaccinated and at the same time expose them to the hazard of associating in school with children exempted under the religious exemption who had not been immunized as required by the statute.”).

100 Allan J. Jacobs, [Do Belief Exemptions to Compulsory Vaccination Programs Violate the Fourteenth Amendment?](#), 42 U. MEM. L. REV. 73, 90-91 (2011).

101  [United States v. Seeger](#), 380 U.S. 163, 165-66 (1965). (The relevant text from the opinion which sets forth the test of belief “in a relation to a Supreme Being” is whether a given belief that is sincere and meaningful occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God of one who clearly qualifies for the exemption. Where such beliefs have parallel positions in the lives of their respective holders we cannot say that one is “in a relation to a Supreme Being” and the other is not.”) (quoting 50 U. S. C. App. § 456 (j) (1958 ed.)

102  *Id.* at 165.

- 103  *Id.* at 169. (Referring specifically to, the conscientious objector in Seeger, “[i]n his Selective Service System form he stated that he was not a member of a religious sect or organization In a later form ... he appended a statement that he felt it a violation of his moral code to take human life and that he considered this belief superior to his obligation to the state.”).
- 104 *Id.* at 187-88 (The Seeger Court explains why the petitioner qualified for an exemption as a conscientious objector: “Peter acknowledged ‘some power manifest in nature ... the supreme expression’ that helps man in ordering his life. As to whether he would call that belief in a Supreme Being, he replied, ‘you could call that a belief in the Supreme Being or God. These just do not happen to be the words I use.’ We think that under the test we establish here the Board would grant the exemption”).
- 105  *Welsh v. United States*, 398 U.S. 333 (1970).
- 106  *Id.* at 339.
- 107  *Id.* at 340 (The Welsh Court, incorporating analysis from Seeger, explains how belief in a traditional religion is not required to qualify for an exemption as a conscientious objector: “If an individual deeply and sincerely holds beliefs that are purely ethical or moral in source and content but that nevertheless impose upon him a duty of conscience to refrain from participating in any war at any time, those beliefs certainly occupy in the life of that individual “a place parallel to that filled by ... God” in traditionally religious persons. Because his beliefs function as a religion in his life, such an individual is as much entitled to a “religious” conscientious objector exemption under § 6(j) as is someone who derives his conscientious opposition to war from traditional religious convictions.”) (citations omitted).
- 108 *Id.* (The Supreme Court uses the term “duty of conscience” in the Welsh case).
- 109  *Mason v. Gen. Brown Cent. Sch. Dist.*, 851 F.2d 47 (2d Cir. 1988).
- 110  *Id.* at 54.
- 111  *Id.* at 49.
- 112 *Id.* at 53.
- 113 *Id.* at 49.
- 114 *Id.* (The Court provides additional details about the Mason's self-proclaimed religious beliefs: “The Masons advocate a ‘natural existence.’ They believe, for example, that the human body possesses the means of healing itself without medical intervention, and that, therefore, immunizations are unnecessary and indeed contrary to the ‘genetic blueprint’ intended by nature. Similarly, they are convinced that any interference with natural neurological and physical functions results in decreased physical capacity and increased disease.”).
- 115 *Id.*
- 116 *Id.* at 54.
- 117 *Id.* at 51.
- 118 *Id.* (quoting  *United States v. Seeger*, 380 U.S. 163, 166 (1965)).
- 119 *Id.* (The Court demonstrates skepticism in individuals' self-attestation of their religious beliefs and identifies the need for a threshold inquiry. “An individual's assertion ... does not, however, automatically mean that the belief is religious. To the contrary, ‘a threshold inquiry into the ‘religious’ aspect of particular beliefs and practices cannot be avoided’ if we are to determine what is in fact based on religious belief, and what is based on secular or scientific principles.”) (quoting *Int'l Soc'y for Krishna Consciousness, Inc. v. Barber*, 650 F.2d 430, 433 (2d Cir. 1981)).

- 120 *Id.* (“[I]f plaintiffs assert their claim ‘because of their subjective evaluation and rejection of the contemporary secular values accepted by the majority,’ their claims do ‘not rest on a religious basis.’”) (quoting [Wisconsin v. Yoder](#), 406 U.S. 205, 215-16 (1972)).
- 121 *Id.* (“[P]laintiffs’ claim ‘must be rooted in religious belief, not in ‘purely secular’ philosophical concerns.’”) (quoting [Callahan v. Woods](#), 658 F.2d 679, 683 (9th Cir. 1981)).
- 122 *Id.* (“[I]f the belief asserted is ‘philosophical and personal rather than religious,’ or is ‘merely a matter of personal preference,’ it is not entitled to protection.”) (quoting [Fiedler v. Marumscow Christian Sch.](#), 631 F.2d 1144, 1151 (4th Cir. 1980)).
- 123 *Id.* at 51-52 (The Court explains the qualities that make the Mason’s beliefs philosophical and personal, rather than religious: “We do not question that the Masons may have strong convictions so far as their belief in a ‘genetic blueprint’ is concerned However, this choice of lifestyle does not rise to the level of religion To the contrary, much like Thoreau’s choice to isolate himself at Walden Pond, the beliefs are philosophical and personal, and as such, are neither protected by the religion clauses nor exempted under [§ 2164](#).”).
- 124 *Id.* (The Court compares the Mason’s lifestyle choices to those made by all other families, which are not considered religiously motivated. “Everyone makes basic choices about where to live, what to eat, and how to raise children. Merely because these decisions are important, and may be supported by strong conviction, does not render them religious.”).
- 125 Malone & Hinman, *supra* note 75, at 278.
- 126 Thomas May & Ross D. Silverman, ‘Clustering of exemptions’ as a collective action threat to herd immunity, 21 VACCINE 1048, 1048 (2003).
- 127 *Id.*
- 128 *See id.*
- 129 Centers for Disease Control and Prevention, Dogma Concerning Smallpox Prior to Eradication Program, <http://www.bt.cdc.gov/agent/smallpox/overview/intro-to-smallpox.pdf> (last visited Nov. 1, 2015).
- 130 *Id.*
- 131 *See* Stephanie Stadlin et al., Medical Exemptions to School Immunization Requirements in the United States--Association of State Policies With Medical Exemption Rates (2004-2011), 206 J OF INFECTIOUS DISEASES 989, 992 (2012).
- 132 Wang et al., *supra* note 32, at e64.
- 133 *Id.*
- 134 Wang et al., *supra* note 32, at e64.
- 135 *Id.*
- 136 May & Silverman, *supra* note 126.
- 137 *Id.* at 1049.
- 138 *Id.*
- 139 *Id.* (“Herd immunity, though not requiring 100% compliance with mandatory vaccination, nonetheless requires a very high percentage of the population to be vaccinated (since not all of those who are vaccinated will achieve immunity).”).
- 140 *See id.* at 1050 (The author provides an example of cases where vaccinated children nonetheless contract disease. “The dangers that the ‘clustering’ phenomenon poses goes beyond the groups that opt out of vaccination. For example, in Colorado public

health records confirmed that, for 11% of vaccinated children who contracted measles between 1987 and 1998, the exposure source was unvaccinated children ...”).

141 See Arciuolo, *supra* note 4.

142 Saad B. Omer et al., Nonmedical Exemptions to School Immunization Requirements: Secular Trends and Association of State Policies With Pertussis Incidence, 296 JAMA 1757, 1761 (2006).

143 Thompson et al., *supra* note 37, at 199.

144 Y. Tony Yang & Ross D. Silverman, Legislative Prescriptions for Controlling Nonmedical Vaccine Exemptions, 313 JAMA 247, 247 (2015).

145 Wang et al., *supra* note 32, at e80.

146 Thompson et al., *supra* note 37, at 195.

147 *Id.* at 196 (figure 1).

148 *Id.*

149 *Id.*

150 *Id.*

151 *Id.* at 199.

152 *See generally* Salmon & Seigel, *supra* note 81.

153 *Id.* at 291.

154 *See id.* at 292.

155 *Id.*

156 *See, e.g.*, Act of Mar. 3, 1863, ch. 75, 12 Stat. 731 (1863) (an act for compulsory conscription) (“[A]ll able-bodied male citizens of the United States ... between the ages of twenty and forty-five years ... are hereby declared to constitute the national forces, and shall be liable to perform military duty ...”).

157 *See, e.g.*,  W. VA. CODE § 16-3-4 (2015).

158 *See, e.g.*, 50 U. S. C. App. § 456(j) (“Nothing contained in this title shall be construed to require any person to be subject to combatant training and service in the armed forces of the United States who, by reason of religious training and belief, is conscientiously opposed to participation in war in any form.”).

159 *See, e.g.*, WIS. STAT. § 252.04 (2015) (“The immunization requirement is waived if the student, if an adult, or the student’s parent, guardian, or legal custodian submits a written statement to the school, child care center, or nursery school objecting to the immunization for reasons of health, religion, or personal conviction.”).

160  *United States v. Seeger*, 380 U.S. 163, 166 (1965) (“[T]he test of belief ‘in a relation to a Supreme Being’ is whether a given belief that is sincere and meaningful occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God of one who clearly qualifies for the exemption.”) (quoting 50 U. S. C. App. § 456(j) (1958 ed.)).

161  *Gillette v. United States*, 401 U.S. 437, 443 (1971) (“[C]onscientious scruples relating to war and military service must amount to conscientious opposition to participating personally in any war and all war.”).

162  *Welsh v. United States*, 398 U.S. 333, 344 (1970).

- 163 Daniel A. Salmon et al., Health Consequences of Religious and Philosophical Exemptions from Immunization Laws: Individual and Societal Risks of Measles, 281 JAMA 47, 52 (1999).
- 164 Compare DEL. CODE ANN. tit. 14, § 131 (2015) (requiring parents, in order to qualify for a religious exemption, to submit an affidavit where they affirm that they “subscribe to a belief in a relation to a Supreme Being involving duties superior to those arising from any human relation,” and that the “belief is sincere and meaningful and occupies a place in [their] life parallel to that filled by the orthodox belief in God.”), to  United States v. Seeger, 380 U.S. 163, 165-66 (1965) (The relevant text from the opinion which sets forth the test of belief “in a relation to a Supreme Being” “is whether a given belief that is sincere and meaningful occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God of one who clearly qualifies for the exemption.”).
- 165 Yang & Silverman, *supra* note 144, at 247-48.
- 166 See discussion *supra* Part III.B.
- 167 Louis R. Caplan, Vaccination Policies and Rates of Exemption from Immunization, 2005-2011, 367 NEW ENG. J. MED. 1170 (2012).
- 168 *Id.* at 1170. The author of this article based his categories on a 2001 study by Rota et al. *Id.* The Rota study creates three levels of complexity, from level one to three, with complexity level three being the most difficult. Jennifer S. Rota et al., Processes for Obtaining Nonmedical Exemptions to State Immunization Laws, 91 AM. J. PUB. HEALTH 645, 646 (2001). Complexity level one was assigned to states that only required parents to sign a form provided by the school to qualify for a non-medical exemptions. *Id.* Complexity level two was assigned to states that required the form to be provided by a health department--this requires a visit to the health department--or to states that required parents to write a statement. Complexity level three was assigned to states that required either a notarized form or a letter, or a signature or letter from a religious or state official or some combination thereof, in order to be granted a non-medical exemption.
- 169 Caplan, *supra* note 167, at 1171.
- 170 *Id.*
- 171 *Id.*
- 172 *See id.*
- 173 Lawrence O. Gostin, Law, Ethics, and Public Health in the Vaccination: Debates Politics of the Measles Outbreak, 313 JAMA 1099, 1100 (2015).
- 174 See NCSL.ORG, *supra* note 29.
- 175 See State Religious Freedom Restoration Acts, NCSL.ORG, *supra* note 34.
- 176 Yang & Silverman, *supra* note 144, at 248.
- 177 Silverman, *supra* note 36, at 297.
- 178 *Id.* at 293.
- 179 *Id.*
- 180 *Supra* discussion Part V.
- 181 Conditions attached to religious exemptions should be designed so that they will withstand a state RFRA challenge. See *supra* note 34 and accompanying text; Fallon, *supra* note 35 and accompanying text. For example, Kentucky has a state RFRA. KY. REV. STAT. ANN. § 446.350 (West 2016). Kentucky law also stipulates that a child may be required to receive a vaccination against a specific disease in the case of an epidemic, even if the child claims a religious exemption. KY. REV. STAT. ANN. § 214.036 (West 2016). The co-existence of these two statutes suggests that the condition attached to the religious exemption

may withstand a RFRA challenge within that state. Similar analyses should be conducted for each state with a state RFRA that seeks to impose conditions on religious exemptions to mandatory vaccinations.

- 182 See, e.g., [ALA. CODE § 16-30-3 \(2015\)](#); [HAW. REV. STAT. § 302A-1156 \(2015\)](#).
- 183 See, e.g., [DEL. CODE ANN. tit. 14, § 131 \(2015\)](#) (A religious exemption is provided given that “[t]his belief is not a political, sociological or philosophical view of a merely personal moral code.”); [N.J. ADMIN. CODE § 8:57-4.4 \(2015\)](#) (“The school, preschool, or child care center shall be prohibited from exempting a child from mandatory immunization on the sole basis of a moral or philosophical objection to immunization.”).
- 184 Omer et al., *supra* note 142 at 1758.
- 185 Gostin, *supra* note 33, at 1100.
- 186 [GA. CODE ANN. § 20-2-771 \(2015\)](#); *See also* [ARK. CODE ANN. § 6-18-702 \(2015\)](#) (“At the discretion of the Department of Health, the unimmunized child or individual may be removed from day care or school during an outbreak if the child or individual is not fully vaccinated; and ... [t]he child or individual shall not return to school until the outbreak has been resolved and the Department of Health approves the return to school.”); [WYO. STAT. ANN. § 21-4-309 \(2015\)](#) (“In the presence of an outbreak of vaccine preventable disease ... school children for whom a waiver has been issued and who are not immunized against the occurring vaccine preventable disease shall be excluded from school attendance for a period of time determined by the state or county health authority”).
- 187 *See* [KY. REV. STAT. ANN. § 214.036 \(West 2015\)](#).
- 188 [KY. REV. STAT. ANN. § 214.036 \(West 2015\)](#); *see also* [HAW. REV. STAT. § 302A-1157 \(2015\)](#) (“If at any time there is, in the opinion of the department of health, danger of an epidemic from any of the communicable diseases for which immunization is required[,] ... no exemption from immunization against the disease shall be recognized. Quarantine shall be a legal alternative to immunization.”).
- 189 [DEL. CODE ANN. tit. 14, § 131 \(2015\)](#).
- 190 *Id.*
- 191 *Id.*
- 192 Gostin, *supra* note 173, at 1099.
- 193 Yang & Silverman, *supra* note 144, at 247.
- 194 See Gostin, *supra* note 33, at 1100. Those tasked with reviewing religious exemption applications can take guidance from Supreme Court case law defining religious beliefs, see discussion *supra* Part III, or as it is set out in Delaware's notarized affidavit policy, see discussion *supra* Part VI.B.iv. Additionally, states can take guidance from the Second Circuit's reasoning in *Mason v. Gen. Brown Cent. Sch. Dist.* in denying a religious exemption, see discussion *supra* Part III.B.
- 195 *See* Salmon, *supra* note 81, at 294.
- 196 [VT. STAT. ANN. tit. 18, § 1122 \(2015\)](#).
- 197 *See* [OR. REV. STAT. § 433.267 \(2015\)](#).
- 198 [OR. REV. STAT. § 433.267 \(2015\)](#).
- 199 [OR. REV. STAT. § 433.273 \(2015\)](#).
- 200 Yang & Silverman, *supra* note 144.

- 201 *Id.*
- 202 *See id.*
- 203 GA. CODE ANN. § 20-2-771 (2015).
- 204 TENN. CODE ANN. § 68-5-106 (2015) (“Every person who refuses to be vaccinated or prevents a person under such person's care and control from being vaccinated ... unless in the written opinion of another physician it would not be prudent on account of sickness, commits a Class C misdemeanor.”).
- 205 *See generally* Yang & Silverman, *supra* note 144, at 247-48.
- 206 *See* Caplan *supra* note 167, at 1171, for a discussion of how more difficult exemption criteria lead to lower exemption rates.
- 207 DEL. CODE ANN. tit. 14, § 131 (2015).
- 208 *Id.*
- 209 *See* discussion *supra* Part II.A.
- 210 *Id.*
- 211 *See* National Conference of State Legislatures, *supra* notes 30-31.
- 212 *See* discussion *supra* Part IV.
- 213 *See* Gostin, *supra* note 33.
- 214 *See supra* note 34 and accompanying text; *see* Fallon, *supra* note 35.

15 CDZPLPEJ 413

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