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Mandatory School Vaccinations: The Road to Reform

By Jessica Magliette

I. Introduction

This paper proposes the reformation of the current vaccination exemption laws currently in place at the State level. The focus will be on implementing stricter policies for religious exemptions and to create a bright line rule for states to eliminate all philosophical or personal belief exemptions. Section II discusses the vaccine recommendations from the federal government and how the state laws either implement those recommendations or form their own vaccination policy requirements. Section III takes an in-depth look at exemptions from mandatory vaccination requirements, focusing on States' case law pertaining to religious and philosophical exemptions to statutorily mandated vaccinations. Section IV deals with criticisms of mandatory vaccinations, including but not limited to, adverse medical reactions and governmental abuses, while Section V deals with arguments made by proponents' of mandatory vaccinations. Sections VI and VII examines modern day vaccines and new legislation. Policy recommendations are addressed in Section VIII. This writing concludes that policy reform for mandatory vaccinations is needed amongst all states; specifically, implementing more restrictions on religious exemptions and disallowing philosophical or personal belief exemptions.

The New Jersey legislature is making advances in the right direction, restricting religious exemptions with the recently passed bill. Today, nearly 40% of American parents have refused or delayed giving at least one routine vaccine to their children due to a variety of unfounded fears. Vaccinations against readily transmittable childhood diseases such as polio, rubella, and mumps, should be mandatory for any child of the U.S. who wish to attend school, only allowing

for medical or religious exemptions that meet all newly state imposed requirements. These vaccinations are critical to the control and eradication of deadly infectious diseases.

A vaccine is a product that produces immunity from a disease and can be administered through needle injections, by mouth, or by aerosol.¹ A vaccination is the injection of a killed or weakened organism that produces immunity in the body against that organism.² The first vaccine mandated in the United States was the smallpox vaccine³. By 1922, some states passed laws requiring children to show proof they were vaccinated for smallpox in order to attend school.⁴

Shortly thereafter, the practice of immunization was widely adopted in the U.S. as health officials relied on vaccinations as a widespread, generally safe, and cost-effective preventative tool to protect public health from a variety of communicable diseases.⁵ The enforcement of school vaccination laws played a key role in greatly reducing the number of measles cases in the U.S. in the 1970's.⁶ But measles did not disappear. This discovery drove all states to make proof of vaccinations against measles, as well as polio, diphtheria, and other diseases, required for school attendance.⁷ In the early 1980's, the Center for Disease Control (CDC) recommended that children get 23 doses of seven vaccines (polio, diphtheria, tetanus, pertussis, measles,

¹ See Vaccine Basics (2015), available at <http://www.vaccines.gov/basics/index.html>.

² *Id.*

³ See Center for Disease Control and Prevention, Vaccines and Immunizations (2015), available at <http://www.cdc.gov/vaccines/vac-gen/imz-basics.htm>.

⁴ *Id.*

⁵ See generally Charles J. Russo, *Student Vaccinations: A Brief Pain That's Worth the Gain?*, 241 ED. LAW REP. 519 (2009).

⁶ The History of Vaccines, Different Types of Vaccines (2015), available at <http://www.historyofvaccines.org/content/articles/different-types-vaccines>.

⁷ Steve P. Calandrillo, *Vanishing Vaccinations: Why Are So Many Americans Opting Out of Vaccinating Their Children?*, 37 MICH.J.L. REFORM 353, 382 (2004).

mumps and rubella) to attend kindergarten.⁸ Most states mandated the CDC's recommendation.⁹

The drastic declines in vaccine-preventable diseases, particularly in many high- and middle-income countries, are due to past high immunization coverage.¹⁰ A reduction in the incidence of a vaccine-preventable disease often leads to the public perception that the severity of the disease and susceptibility to it have decreased.¹¹ While the incidences of communicable disease(s) has declined, public concern about real or perceived adverse events associated with vaccines has increased. Additionally, some parents fear that by requiring their children to be vaccinated, the State is overriding their parental rights to raise their children as they see fit. As a result of this heightened level of concern, the number of parents refusing to have their children vaccinated has increased.¹²

School laws have been modified over the years as new vaccines are recommended. Although all 50 states legislate that children must be up-to-date in their required vaccinations before starting school, all states also allow exemptions from this requirement.¹³ The type, details, and enforcement of these exemptions vary from state to state. An exemption to mandatory vaccinations can fall under one of three categories: medical exemptions, religious exemptions, and philosophical or personal belief exemptions.¹⁴

⁸ Center for Disease Control and Prevention, *supra* note 3.

⁹ *Id.*

¹⁰ See generally Saad B. Omer, et al., *Vaccine Refusal, Mandatory Immunization, and the Risks of Vaccine-Preventable Diseases*, N. ENGL J. MED 360, 1981-88 (2009).

¹¹ *Id.*

¹² B. Omer, et al., *Vaccine Refusal, Mandatory Immunization, and the Risks of Vaccine-Preventable Diseases*, N. ENGL J. MED 360, 1981-88 (2009).

¹³ Center for Disease Control and Prevention, *supra* note 3.

¹⁴ Daniel E. Salmon et al., *Health Consequences of Religious and Philosophical Exemptions From Immunization Laws*, 282 JAMA 47, 49 (1999).

II. Federal Vaccine Recommendations and State Vaccine Laws

Federal public health officials at the Centers for Disease Control (CDC) make national vaccine policy recommendations for children and adults.¹⁵ These recommendations of the Advisory Committee on Immunizations Practices (“ACIP”) are adopted and published every year by the CDC.¹⁶ In 2015, the ACIP, recommended that children who have reached 18 months should have received the following vaccines: three doses of Hepatitis B vaccine; three doses of the rotavirus vaccine; four doses of the diphtheria, tetanus and acellular pertussis vaccine (DTap); four doses of Haemophilus influenza type B vaccine (Hib); four doses of pneumococcal vaccine; three doses of inactivated polio vaccine; an annual dose of influenza vaccine.¹⁷ The 2015 guidelines also recommend beginning at twelve months, one dose of measles, mumps and rubella vaccine (MMR); one dose of Varicella; and one dose of Hepatitis A.¹⁸ Between the ages of four and six, the guidelines additionally recommend one additional dose each of Varicella, MMR, and inactivated polio vaccine an additional dose.¹⁹ The ACIP is very influential on state laws requiring vaccinations for school children.

With the approval of state legislatures, public health officials in state health departments make and enforce vaccine mandates.²⁰ That is why vaccine laws and legal exemptions to vaccination vary from state to state. Most states only mandate 29 doses of nine vaccines to attend

¹⁵ Michael Poreda, *Reforming New Jersey’s Vaccination Policy: The Case for the Conscientious Exemption Bill*, 41 SETON HALL L. REV. 765, 3 (2011).

¹⁶ *Id.*

¹⁷ See Ctrs. For Disease Control & Prevention (2015), Recommended Immunizations for Children from Birth through 6 Years Old (2015), available at <http://www.cdc.gov/vaccines/schedules/easy-to-read/child.html>.

¹⁸ See Ctrs. For Disease Control & Prevention, *supra* note 10.

¹⁹ *Id.*

²⁰ See National Vaccine Information Center, Federal Vaccine Recommendations vs. State Vaccine Laws (2015), available at <http://www.nvic.org/vaccine-laws.aspx>.

kindergarten; many states require multiple doses of 13 vaccines for those children enrolled in daycare.²¹ At present, almost all schools have some a vaccination regime that requires parents to have their children vaccinated before they can enroll.²²

In most respects, New Jersey follows the ACIP vaccine recommendations.²³ New Jersey does not require rotavirus; however, no other states require that vaccine either.²⁴ Additionally, New Jersey, along with most states, does not require the Hepatitis A vaccine.²⁵ All three recommended doses of Hepatitis B by the time a child enters kindergarten are required by New Jersey.²⁶ However, New Jersey does not require Hepatitis B for children entering a state-approved day care facility or preschool, in that sense, New Jersey is less demanding than many other states.²⁷ A minority of the states, including New Jersey, require pneumococcal vaccine for day care or preschool.²⁸ Moreover, New Jersey was the first state that made the CDC's recommendation of making an annual influenza vaccine beginning at six months of age a requirement for child care.²⁹

²¹ See National Vaccine Information Center, *Federal Vaccine Recommendations vs. State Vaccine Laws* (2015), available at <http://www.nvic.org/vaccine-laws.aspx>.

²² *Id.*

²³ Ctrs. For Disease Control & Prevention, *School and Childcare Vaccination Requirements 2015* (2015), available at <http://www2a.cdc.gov/nip/schoolsurv/schImmRqmtReport.asp>.

²⁴ Compare *id.* with N.J. ADMIN CODE § 8:57-4.16 (2010).

²⁵ See Ctrs. for Disease Control & Prevention, *supra* note 23.

²⁶ N.J. ADMIN CODE § 8:57-4.16 (2010). Compare *id.*, with CDC, *supra* note 23.

²⁷ *Id.*

²⁸ See Immunization Action Coal., *Pneumococcal Conjugate Vaccine Mandates for Children in Day Care* (2010), available at <http://www.immunize.org/pdfs/pcv7.pdf>.

²⁹ Derrick Henry, *Law on Flu Vaccinations May Be Tested*, N.Y. Times (Jan. 2, 2009), available at <http://www.nytimes.com/2009/01/04/nyregion/new-jersey/04flunj.html>.

III. Exemptions to Mandatory Vaccinations

The United States Supreme Court has articulated what has become the general rule that States have the authority to grant local municipalities the power to order vaccination of students in order to protect the general welfare of all residents. The Court found that a statute empowering local authorities to require everyone to be vaccinated was constitutional.³⁰ Although recognizing the importance of individual liberty with regard to parental choices under the Fourteenth Amendment in seeking to avoid vaccinations,³¹ the Court decided that communities have the right to protect themselves against epidemics and diseases that might present a threat to the general welfare.³² States, although not required by law, have implemented exemptions for vaccinations.

Medical, religious, philosophical, or personal belief exemptions are worded differently in each state. For a parent to receive a vaccine exemption for their child to attend school, they must follow the regulations outlined in their state's vaccine law.³³ In 2014, all 50 states allowed a medical vaccine exemption; 48 states allowed a religious vaccine exemption and 17 states allowed a philosophical, conscientious or personal belief exemption.³⁴

It is very difficult to obtain a medical exemption to vaccination because almost all medical reasons for delaying or withholding vaccines have essentially been eliminated by government and medical trade officials.³⁵ The federal guidelines published by the CDC outlining

³⁰ *Jacobson v. Commonwealth of Massachusetts*, 197 U.S. 11, 25 S.Ct. 358, 49 L.Ed. 643 (1905).

³¹ *Wisconsin v. Yoder*, 406 U.S. 205, 92 S.Ct. 1526, 32 L. ED.2d 15 (1972).

³² See *Jacobson*, *supra* note 89.

³³ See National Vaccine Information Center, Legal Exemptions to Vaccination (2015), available at <http://www.nvic.org/vaccine-laws.aspx>.

³⁴ See National Vaccine Information Center, Medical Exemptions (2015), available at <http://www.nvic.org/vaccine-laws.aspx>.

³⁵ See National Vaccine Information Center, *supra* note 23.

what is and is not considered a medical contraindication to vaccination are followed by most doctors and health care workers.³⁶ Some states will accept a doctor's written medical vaccine exemption for a valid medical contraindication.³⁷ Other states allow state public health officials to review the medical exemption written by a medical doctor or other state designated health care worker and revoke it if health department officials do not think the exemption is justified because it does not conform to federal (CDC) vaccine contraindication guidelines.³⁸

There are severe medical conditions that qualify for an exemption in all fifty states. One medical reason is that the child's immune status is compromised by a permanent or temporary condition.³⁹ For example, the child might have a congenital condition leading to an impaired immune system.⁴⁰ Or, the child might take medications, such as chemotherapy or steroids that impair the immune system.⁴¹ In either case, vaccination could be harmful to the child's health. Another medical reason is that the child has a serious allergic reaction to a vaccine component or that the child has had a prior serious adverse event related to vaccination.⁴² Jones v. State, Dep't of Health, is the only case specifically dealing with a medical exemption. In this case, the state required officials to grant waivers once they received evidence of medical contraindications to the administration of vaccinations.⁴³

³⁶ National Vaccine Information Center, *supra* note 23.

³⁷ *Id.*

³⁸ See National Vaccine Information Center, Medical Exemptions (2015), available at <http://www.nvic.org/vaccine-laws.aspx>.

³⁹ See The History of Vaccines, Vaccination Exemptions- Medical Exemptions (2015), available at <http://www.historyofvaccines.org/content/articles/vaccination-exemptions>.

⁴⁰ The History of Vaccines, *supra* note 28.

⁴¹ *Id.*

⁴² See The History of Vaccines, *supra* note 28.

⁴³ *Jones v. State, Dep't of Health*, 18 P.3d 1189 [151 Ed.Law Rep. [610]] (Wyo. 2001).

The second exemption for mandatory vaccinations is for religious beliefs. Some faiths prohibit acceptance of modern medical advances.⁴⁴ All but two states, Mississippi and West Virginia,⁴⁵ grant exemptions based on religious grounds.⁴⁶ Most courts, in these states, grant religious exemptions as long as they are satisfied that the parents' beliefs are sincere.⁴⁷ Accordingly, some of the states, such as New York, have occasionally upheld certain compulsory vaccination statutes because the parents' religious objections to the vaccination requirements lacked credibility.⁴⁸ The New York court pointed out that if the parents' opposition to immunization was not motivated by religious beliefs but was rather motivated by their personal fears for the well-being of their child, a religious exemption would not be granted.⁴⁹

Although most courts grant religious exemptions if parents have a sincere religious belief, courts differ on the acceptability of statutes that allow exemptions for certain recognized religions. In Massachusetts, religious exemption statutes that granted "preferred treatment" to specific religions were deemed invalid.⁵⁰ The issue before the court was the constitutionality of the Massachusetts statute under which public officials granted exemptions to selected religious denominations.⁵¹ A Kentucky court dismissed a claim by parents who challenged a statute mandating that children be immunized against diphtheria, tetanus, poliomyelitis, and measles.⁵² The court held that the language in the statute refusing to grant religious exemptions to parents

⁴⁴ *Jones v. State, Dep't of Health*, 18 P.3d 1189 [151 Ed.Law Rep. [610]] (Wyo. 2001).

⁴⁵ See National Vaccine Information Center, *State Law & Vaccine Requirements* (2015), available at <http://www.nvic.org/Vaccine-Laws/state-vaccine-requirements.aspx>.

⁴⁶ See National Vaccine Information Center, *Religious Exemption* (2015), available at <http://www.nvic.org/vaccine-laws.aspx>.

⁴⁷ See National Vaccine Information Center, *supra* note 28.

⁴⁸ *McCartney v. Austin*, 298 N.Y.S.2d 26, 527 (N.Y. App. Div. 1969)

⁴⁹ *Id.*

⁵⁰ *Dalli v. Board of Educ.*, 267 N.E.2d 219 (Mass. 1971).

⁵¹ *Id.*

⁵² See *Keid v. Board of Educ.*, 406 F.Supp. 902, 903 (W.D. Ky. 1976).

unless they were “members of a nationally recognized and established church or religious denomination, the teachings of which are opposed to medical immunization against disease,” did not violate the Establishment Clause and therefore was valid.⁵³ Even absent a clear legislative intent, the law had a valid secular purpose of protecting the health and well-being of local residents, had the primary effect of improving and protecting their health, and that the law did not create excessive entanglement, in that no religious group received any financial benefit under the law.⁵⁴ Although there is no single standard applied in all jurisdictions, generally the courts will uphold religious exemptions if the party can demonstrate the sincerity of their belief (sincerity of parental beliefs). When parents seeking religious exemptions comply with statutory requirements, courts do not hesitate to enter judgments in their favor.

The process of claiming a philosophical or personal belief exemption vary among states in their level of complexity. These variances are due to the formality of the procedures and the time and effort required to claim an exemption in each state.⁵⁵ Currently, 17 states allow exemptions to children whose parents have philosophical or personal belief objections to vaccinations.⁵⁶ Some states use a form that requires only the signature of a parent or guardian.⁵⁷ The form is available through the school, and the signature does not need to be notarized.⁵⁸ No research by the parent is required, and no special visits need to be made.⁵⁹ Other states do not

⁵³ *Keid, supra* note 52.

⁵⁴ The court relied on *Lemon v. Kurtzman*, 403 U.S. 602, 91 S.Ct. 2105, 29 L. Ed.2d 745 (1971), citing only for the excessive entanglement requirement.

⁵⁵ Rota JS, et al., *Processes for obtaining nonmedical exemptions to state immunization laws*, AM J. PUBLIC HEALTH 91:645-8 (2001).

⁵⁶ See National Vaccine Information Center, Philosophical, Conscientious or Personal Belief Exemptions (2015), available at <http://www.nvic.org/vaccine-laws.aspx>.

⁵⁷ See Rota, *supra* note 55.

⁵⁸ *Id.*

⁵⁹ See Rota, *supra* note 55.

require notarization but require that the form be obtained from the local health department or that a letter or statement be provided by the parent.⁶⁰ The most complex process for claiming a philosophical exemption are in the states that require the signature on the form or letter be notarized or require both a form, obtained from the health department, and a letter.⁶¹ Moreover, those states may also require an additional letter from a religious official or the signature of a state official.⁶² In most cases, however, parents must file a one-time or annual form with a school district attesting to a personal objection to vaccination.⁶³

The reasons for philosophical exemption to vaccination are likewise varied. Some parents may have a belief in the superiority of other methods of fighting disease, such as alternative treatments or natural immunity.⁶⁴ While others may be concerned about the safety of vaccines.⁶⁵ In New York, parents who espoused chiropractic ethics against immunization, and unsuccessfully sought an exemption, making the argument that they were advocates of “natural immunity.”⁶⁶ This means that they believe the human body possesses the means of healing itself without medical intervention.⁶⁷ Therefore, it was their belief that vaccinations were unnecessary and contrary to the “genetic blueprint” intended by nature.⁶⁸ The court found that the parents’ concerns were based on more secular, rather than religious, beliefs.⁶⁹ Accordingly, the New York court held that regardless how sincerely held the parents’ personal belief was, they were not

⁶⁰ Rota, *supra* note 55.

⁶¹ *Id.*

⁶² *Id.*

⁶³ See Rota, *supra* note 55.

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ See *Mason v. General Brown Cent. Sch. Dist.*, 851 F.2d 47 [48 Ed.Law Rep. [19]] (2d Cir. 1988).

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

entitled to an exemption when the statutory vaccination requirement did not violate their First Amendment religious rights.⁷⁰

Some parents' believe that governmental interference in the health care of their child impedes on their parental rights to raise their child (ren) as they deem fit.⁷¹ This rationale is used as a justification for the use of philosophical exemptions.⁷² Others have suggested that parents request a philosophical exemption simply for convenience.⁷³ Studies show that states with easily obtainable philosophical exemptions tend to have higher exemption rates.⁷⁴ As a result, there has been concern that philosophical exemptions will be used solely for convenience in cases where claiming an exemption is easier than completing the increasingly complex schedule of recommended vaccinations.⁷⁵

In states with all three types of exemptions, personal belief exemptions tend to be the most common.⁷⁶ And, in states that allow philosophical and personal exemptions from vaccination requirements, such use of those exemptions have increased over the years.⁷⁷ It is for this reason that the American Medical Association is opposed to religious and philosophical exemptions; specifically, the impact of granting such requests could have on public health.⁷⁸

⁷⁰ See Rota, *supra* note 55

⁷¹ *Id.*

⁷² *Id.*

⁷³ Rota, *supra* note 55.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ Alicia Novak, *THE RELIGIOUS AND PHILOSOPHICAL EXEMPTIONS TO STATE-COMPELLED VACCINATION: CONSTITUTIONAL AND OTHER CHALLENGES* (2001), *JOURNAL OF CONSTITUTIONAL LAW* 7:4, 1101(2001).

⁷⁷ *Id.*

⁷⁸ See Kevin B. O'Reilly, *Time to Get Tough? States Increasingly Offer Ways to Opt Out of Vaccine Mandates: Too Many Exemptions Have Been Seen as a Risk to Public Health. But a Push to Crack Down Might do More Harm Than Good* (2008), available at <http://www.ama-assn.org/amednews/2008/09/08/prsa0908.htm>.

IV. Criticisms of Mandatory Vaccinations

Historical and modern examples of the real, perceived, and potential harms of vaccination, governmental abuses underlying its widespread practice, and strongly-held religious beliefs have led to fervent objections. School vaccination laws, in particular, have been strenuously challenged by parents and other “anti-vaccinationists” on legal, ethical, social, and epidemiological grounds.⁷⁹ Some opponents express valid scientific objections about effectiveness or the need for mass vaccinations.⁸⁰ Others fear harmful effects arising from the introduction of foreign particles into the human body, and some people worry that vaccination actually transmits, rather than prevents, disease, or may ever weaken the immune system.⁸¹

Compulsory vaccination are viewed by some as an unwarranted governmental interference with human autonomy and liberty.⁸² “Vaccination programs have been legally challenged as (1) inconsistent with federal constitutional principles of individual liberty and due process; (2) an unwarranted governmental interference with individual autonomy; and (3) an infringement of personal religious beliefs under First Amendment principles.”⁸³ With a few exceptions, the court decisions from states have been uniform in holding that health measures

⁷⁹ James G. Hodge & Lawrence O. Gostin. *School Vaccination Requirements: Historical, Social, and Legal Perspectives*. 90 KY LAW J. 831, 831-90 (2001-2002 Summer). Accessed 3/7/2015.

⁸⁰ Hodge & Gostin, *supra* note 76, at 869.

⁸¹ *Id.*

⁸² These claims were evident as the Supreme Court struggled with the issue of vaccination in *Jacobson v. Massachusetts*, 197 U.S. 11, 34 (1905): “some physicians of great skill and repute do not believe that vaccination is a preventive” (quoting *Viemester v. White*, 179 N.Y. 235 (1904); “vaccination quite often caused serious and permanent injury to the health of the person vaccinated” (quoting *Henning Jacobson*, 197 U.S. at 36).

⁸³ See Hodge & Gostin, *supra* note 76 at 870.

prescribed by municipal or school authorities as a condition of school attendance do not conflict with statutory provisions conferring on children the privilege of attending school.

People remain troubled about the safety and potential harms of vaccines.⁸⁴ Concerns relating to the safety of vaccines have been addressed by implementing federal testing regulations for all vaccines.⁸⁵ The federal Food and Drug Administration (FDA) requires manufacturers to rigorously test the safety of proposed vaccines before they are introduced to the general population. The FDA retains authority to prohibit its use if additional safety concerns arise, even after a vaccine is introduced to the public.⁸⁶

Additionally, parents fear children might develop autism and other related spectral disorders from vaccinations.⁸⁷ This possibility was publicized after a 1998 paper by a British physician who claimed to have found evidence that the MMR (measles, mumps and rubella) vaccine was linked to autism.⁸⁸ The potential link has been thoroughly explored; study after study has found no such link, and the original 1998 study has been formally withdrawn by the *Lancet*, which had originally published it.⁸⁹ Studies were also done regarding the possibility of a link between the preservative thimerosal, (a mercury containing compound that is found in many vaccinations) and autism; again, no such link was found.⁹⁰ It's likely that this misconception

⁸⁴ See Gretchen Flanders, *Vaccinations: Public Health's Miracle Under Scrutiny*, STATE LEGISLATURES (March 2000), available at www.ncsl.org/programs/pubs/300vacc.htm#miracle.

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ See Institute for Vaccine Safety at the Johns Hopkins Bloomberg School of Health, *Thimerosal Content in Some US Licensed Vaccines* (2013), available at <http://www.vaccinesafety.edu/thi-table.htm>.

⁸⁸ Institute for Vaccine Safety, *supra* note 87.

⁸⁹ *Id.*

⁹⁰ See Institute for Vaccine Safety, *supra* note 87.

persists because of the coincidence of timing between early childhood vaccinations and the first appearance of symptoms of autism.⁹¹

All recommended childhood vaccines come with certain scientifically accepted risks of adverse reactions, which in rare case can be severe or fatal.⁹² Although adverse reactions are a concern, parents seem to be more fearful of vaccines that might cause chronic health problems, autoimmune disorders, or developmental disabilities like autism.⁹³ However, no epidemiological studies give support to the theories that vaccines cause asthma, autoimmune, or other chronic health problems.⁹⁴ Still, the popular belief that vaccines might cause long-term health problems persists.⁹⁵

V. Impact of Allowing Exemptions

Exemptions for religious or philosophical reasons granted by statute in most states has become a threat to the effectiveness of existing school vaccination policies.⁹⁶ While the statistical proportion of exemptors remains low, the sheer numbers of unvaccinated students in school may detract from the public health benefits of comprehensive vaccination.⁹⁷ The National Immunization Program's public health officials and others have previously concluded that students who are exempt from school vaccination requirements on religious and philosophical

⁹¹ See Institute for Vaccine Safety, *supra* note 87.

⁹² See Ctrs. For Disease Control & Prevention, *Possible Side Effects from Vaccines* (2015), available at <http://www.cdc.gov/vaccines/vac-gen/side-effects.htm>, for a list of scientifically accepted adverse reactions.

⁹³ *Id.*

⁹⁴ Keith Colgove, *State of Immunity: The Politics of Vaccination in Twentieth-Century America* 227 (2006), detailing the growing number of vaccines since 1990).

⁹⁵ *Id.*

⁹⁶ See Jeanne M. Santoli et al., *Barriers to Immunization and Missed Opportunities*, 27 *PEDIATRIC ANNALS* 366, 369 (1998).

⁹⁷ Santoli et al., *supra* note 92 at 369.

grounds are thirty-five times more likely to contract measles than vaccinated children.⁹⁸ Yet, the public health consequences of widespread exemptions does not solely impact unvaccinated students.⁹⁹

The risk that vaccinated students may contract measles from exponents is significantly heightened where the exempt population grows, as evidenced by a 1996 measles outbreak in Utah.¹⁰⁰ A cluster problem occurs when those who apply for the exemptions live in clusters in close proximity to one another.¹⁰¹ Because vaccines are not one hundred percent effective, a percentage of children who have been vaccinated will still be "susceptible to vaccine preventable diseases in the case of an outbreak."¹⁰² This created an environment in the Utah community with a "significant percentage" of exempted individuals which made it possible for a "six (viral) generation-long outbreak" of measles where "more than half of those who eventually contracted the disease had been vaccinated."¹⁰³

Exemptions from routine vaccination make children more likely to contract measles and pertussis than vaccinated children.¹⁰⁴ Numerous accounts exist that detail outbreaks of vaccine-preventable disease among groups with either religious or philosophical exemption to vaccination.¹⁰⁵ In turn, these individuals may transmit disease to children and adults with valid

⁹⁸ See Salmon et al., *supra* note 14.

⁹⁹ *Id.*

¹⁰⁰ See Salmon et al., *supra* note 14 at 51. However, at least some part of the Utah epidemic may be associated with the state's failure to require two doses of the measles vaccine. Utah was one of the few states at the time which did not require two doses of measles vaccine as a condition for school entry. See also P. Etkind et al., Pertussis Outbreaks in Groups Claiming Religious Exemptions to Vaccinations, 146(2) AM. J. OF DISEASES OF CHILDREN 173-176 (1992).

¹⁰¹ See Salmon et al., *supra* note 14.

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ See Fair E, et al., *Philosophic objection to vaccination as a risk for tetanus among children younger than 15 years*. Pediatrics 109:E2 (2002).

medical contraindications to immunization (e.g., children who are immunocompromised due to chemotherapy), as well as to those who are too young to be vaccinated or to those whose vaccinations were not effective.¹⁰⁶

Outbreaks of vaccine-preventable disease often start among children whose parents refused vaccination, spread rapidly within unvaccinated populations, and also spread to other subpopulations.¹⁰⁷ For example, in the United States, between January 2008 and April 2008, four cases of measles outbreaks occurred.¹⁰⁸ Three out of four index cases occurred in people who had refused vaccination due to personal belief.¹⁰⁹ In Washington State, an outbreak of measles occurred between April 12, 2008, and May 30, 2008, involving 19 cases.¹¹⁰ All of the persons with measles were unimmunized with the exception of the last case, a person who had been vaccinated.¹¹¹ Of the other 18 cases, 1 was an infant who was too young to be vaccinated, 2 were younger than 4 years of age, and the remaining 15 were of school age.¹¹²

A recent study found that nonmedical exemptions from immunization in California clustered geographically and were associated with clusters of pertussis cases.¹¹³ Previous studies have found that vaccine refusal and delay are associated with elevated risk of measles and pertussis outbreaks, as well as elevated individual risks of measles, pertussis, varicella, and

¹⁰⁶ Fair E, et al., *Philosophic objection to vaccination as a risk for tetanus among children younger than 15 years*. *Pediatrics* 109:E2 (2002).

¹⁰⁷ See Omer, et al., *supra* note 10, at 1982.

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ Omer, et al., *supra* note 10, at 1983.

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ Atwell JE, et al. *Nonmedical vaccine exemptions and pertussis in California*. *PEDIATRICS* (2013);132(4): 624–630.

pneumococcal infections.¹¹⁴ There is an increase in the local risk of vaccine-preventable diseases when there is geographic aggregation of persons refusing vaccination.¹¹⁵

VI. Modern Day Vaccinations

One of the biggest debates surrounding vaccinations is how do we determine what vaccinations are to be made mandatory going forward. What should the criteria be to deem a vaccine mandatory. Some proponents to vaccinations, have suggested a blanket rule in which all vaccinations should be mandatory in order for children to attend public schools. There is some ambiguity as to what “all” vaccinations necessarily encompasses.¹¹⁶ To the contrary, others suggest that all vaccinations should be voluntary and at the parents’ discretion.¹¹⁷ A common ground is to deem some vaccinations mandatory for attendance in public school, such as childhood preventable diseases likes, measles, mumps, rubella, while making other vaccinations, i.e., HPV vaccine, optional and decided by the individual(s), rather than mandated by the State.

Gardasil, a semi-recent vaccine for the human papillomavirus (HPV) has caused some debate amongst parents. HPV is a sexually transmitted disease that can result in genital warts or cervical cancer.¹¹⁸ Gardasil is a commonly known vaccine developed for the prevention of four of the over one hundred strands of HPV that causes cervical cancer.¹¹⁹ Many state legislators

¹¹⁴ Enger KS, et al., *Geographic clustering of nonmedical exemptions to school immunization requirements and associations with geographic clustering of pertussis*, AM J EPIDEMIOLOG (2008); 168(12): 1389–1396.

¹¹⁵ *Id.*

¹¹⁶ See Shaun P. McFall, *Free Exercise Clause: Vaccination & religious exemptions* (2008), available at <http://www.firstamendmentcenter.org/vaccination-religious-exemptions>.

¹¹⁷ *Id.*

¹¹⁸ Tracy Solomon Dowling, *Mandating a Human Papillomavirus Vaccine: An Investigation into Whether Such Legislation is Constitutional and Prudent*, 34 AM. J.L. & MED. 65 (2008).

¹¹⁹ *Id.*

have introduced bills to add HPV vaccination to the states' vaccination schedule for girls' middle school attendance.¹²⁰ Virginia and Washington D.C. are the only jurisdictions to have already pass a requirement for HPV vaccination.¹²¹ By December 2014, ten states proposed HPV related legislation for the 2013-2014 sessions.¹²² As of March 2015, at least 6 states have proposed HPV-related legislation for the 2015-2016 session.¹²³

Statutorily mandated HPV vaccinations¹²⁴ present an interesting conundrum that pits the rights of parents to raise their children as they see fit and possibly the privacy and individual autonomy interests of young women against the state's desire to fight cervical cancer. HPV is the most common sexually transmitted disease in the United States and has over one hundred strands of the virus.¹²⁵ As Gardasil is known to be extremely expensive,¹²⁶ an argument can be made for a cost-benefit analysis. The Gardasil vaccine requires three different injections each costing \$120

¹²⁰ For a discussion of issues surrounding HPV, see, e.g. Comment, *Please Don't Shot My Daughter! Is there Legal Support or State-Compelled HPV Vaccination Laws? Why Ethical, Moral, and Religious Opposition to these Laws May be Jumping the Gun*, 56 U. KAN. L. REV. 913 (2008).

¹²¹ See National Conference of State Legislatures, HPV Vaccine Policies (2015), available at <http://www.ncsl.org/research/health/hpv-vaccine-state-legislation-and-statutes.aspx>.

¹²² See National Conference of State Legislatures, *supra* note 54.

¹²³ *Id.*

¹²⁴ To date, 41 jurisdiction plus the District of Columbia introduced legislation, and 17 enacted laws designed to educate the public about HPV. Texas became the first state to mandate inoculations for all females aged 11 or 12 as they entered the sixth grade, by way of Executive Order from Governor Rick Perry. The order allowed parents to opt out based on religious and philosophical objections. However, the Texas Legislature quickly enacted a bill overriding the order and Governor Perry choose not to veto the law. Similar disputes previously erupted in Florida and Virginia. Paulina Self, *The HPV Vaccination: Necessary or Evil?*, 19 HASTINGS WOMENS'S L.J. 149, 156 (2008).

¹²⁵ Dowling, *supra* note 118.

¹²⁶ See Dowling, *supra* note 118, at 66.

per dose.¹²⁷ Gardasil would be the most expensive vaccination required for school attendance, followed by measles, mumps and rubella at \$124 a dose.¹²⁸

The states have the police power to enact mandatory vaccination laws for HPV. However, lawmakers should consider whether to make such vaccinations mandatory or optional when considering the realities. States do have a public health interest in eradicating cervical cancer but the long term effects of Gardasil are not fully known.¹²⁹ Furthermore, the cost of this vaccination should also be taken into consideration as it is costly.¹³⁰ Additionally, an argument can be made that young women and their parents should have the right to make the determination to be vaccinated themselves. Cervical cancer, albeit a serious disease, is not as readily transmittable as typical childhood diseases and therefore the justification to impose on their right of privacy is lacking.

VII. New Legislation

The use of nonmedical exemptions has prompted some states to modify existing procedures.¹³¹ Several states have enacted changes in the past either to limit the type of exemption or to increase the effort needed to obtain an exemption.¹³² The rationale for these changes may reflect concern that the exemption process was either too permissive or not adequate in limiting approval to only those for whom the law was intended.¹³³

¹²⁷ See Dowling, *supra* note 118, at 73.

¹²⁸ *Id.*

¹²⁹ See Russo, *supra* note 55, at 536.

¹³⁰ *Id.*

¹³¹ See Rota, *supra* note 55.

¹³² *Id.*

¹³³ *Id.*

On March 9, 2015 the New Jersey Senate panel voted to make it harder for school children to be exempt from mandatory vaccinations because of religious beliefs.¹³⁴ Since 2008 in New Jersey, parents previously only had to submit a letter stating that vaccines violate their religion, without an explanation of how or why, in order for their children to be exempt from school mandated vaccines.¹³⁵ During the 2013-14 academic year, almost 9,000 students were deemed exempt for religious reasons.¹³⁶ Comparing this statistic to the 2005-06 school year, with only 1,641 religious exemptions, religious exemptions are becoming a growing concern to pediatricians and infectious disease specialists.¹³⁷

Senator Vitale indicated that he agreed with the legislation because "it is too easy" for parents to cloak their philosophical grounds behind religious beliefs.¹³⁸ The bill was passed 5-2. According to the new bill, a parent seeking a religious exemption now must provide a notarized letter indicating "the nature of the person's religious tenet or practice that is implicated by the vaccination and how the administration of the vaccine would violate, contradict or otherwise be inconsistent with that tenet or practice."¹³⁹ Additionally, the statement must show the tenet "is consistently held by the person," and is not merely "an expression of that person's political, sociological, philosophical or moral views, or concerns related to the safety of efficacy of the vaccination."¹⁴⁰ A signed statement by a New Jersey doctor demonstrating that the person has

¹³⁴ See Susan K. Livio, N.J. Senate Committee Approves Restrictions on Religious Exemptions for Vaccinations (2015), available at http://www.nj.com/politics/index.ssf/2015/03/nj_senate_committee_approves_restrictions_on_relig.html.

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ See New Jersey Dept. of Health, Immunization Status/ Exemption Reports (2015), available at <http://www.state.nj.us/health/cd/stats.shtml>.

¹³⁸ See Livio, *supra* note 134.

¹³⁹ New Jersey Legislature, Senate N. 1147, 3 (2015).

¹⁴⁰ *Id.*

received counsel about the risks and benefits of vaccinations is also required.¹⁴¹ An exemption to mandatory vaccination would not be allowed for religious beliefs if all of the newly state imposed requirements were not met.¹⁴²

VIII. Policy Recommendations

Whereas earlier generations of parents experienced the seriousness of vaccine-preventable diseases, young parents today may not view these diseases with the same concern and therefore may be inclined to question the need to vaccinate.¹⁴³ Despite the exemptions available, the existence of mandatory vaccination policies, compels parents either to fulfill immunization requirements or to take the necessary steps to file an exemption.¹⁴⁴ One study suggests and evidence tends to prove, that in many states, the actions required to obtain an exemption are simpler and less time consuming than the effort needed to meet the immunization requirements.¹⁴⁵ The process of obtaining an exemption must properly reflect the importance that society has accorded immunization through its laws.¹⁴⁶

When opposition to immunization arising from religious or personal beliefs is not the underlying motivation, the decision not to vaccinate at the individual level is influenced by perceived risk of disease as well as other factors.¹⁴⁷ Lack of knowledge about disease risk or susceptibility, along with the increased attention given to mild or rare reactions from vaccination,

¹⁴¹ New Jersey Legislature, Senate N. 1147, 3 (2015).

¹⁴² See Livio, *supra* note 134.

¹⁴³ Stoto MA, Evans G, Bostrom AB. Vaccine risk communication. *Am J Prev Med.* (1998) 14: 237–239.

¹⁴⁴ *Id.*

¹⁴⁵ See Rota, *supra* note 55.

¹⁴⁶ *Id.*

¹⁴⁷ Salmon et al., *supra* note 14.

can reduce the immediate incentive for parents to have their child fully immunized.¹⁴⁸ The impression given by health providers and officials of the consequences of not vaccinating can be particularly influential to parents when the perceived risk of disease is low.¹⁴⁹ Likewise, the steps involved in obtaining an exemption on religious grounds may serve as an indication to parents of the seriousness of a decision to bypass recommended immunizations.¹⁵⁰

As New Jersey's recent bill passing has lead the state in the right direction with restricting religious exemptions, other states should consider the positive public health impact of implementing similar regulations in their jurisdiction.¹⁵¹ This bill could be more efficient and effective in weeding out the frivolous religious exemptions claims, if there was no automatic renewal of vaccination exemptions. Instead, require that every person receiving an exemption must renew ever year or face waiving their exemption. The goal is to only allow an exemption for persons in limited circumstances, i.e., if a true medical reason exists or if they have a sincere religious belief.

An additional safeguard, as some states have already implemented, would be to have State laws expressly allow for the exclusion of students with vaccination exemptions from school during an outbreak or emergency.¹⁵² Eleven states have some form of policy in place for disallowing exempted students to attend school during an outbreak.¹⁵³ Some of these states even require parental acknowledgment during the exemption application process that students can be

¹⁴⁸ Salmon et al., *supra* note 14.

¹⁴⁹ See Salmon et al., *supra* note 14.

¹⁵⁰ *Id.*

¹⁵¹ See New Jersey Legislature, *supra* note 139.

¹⁵² See Center for Disease Control and Prevention, State School Immunizations Requirements and Vaccine Exemption Laws (March 27, 2015), available at <http://www.cdc.gov/vaccines/imz-managers/laws/state-reqs.html>.

¹⁵³ Center for Disease Control and Prevention, *supra* note 152.

excluded during an outbreak or emergency.¹⁵⁴ However, some states have taken a more extreme approach in their state laws.¹⁵⁵ These states have established laws that might not recognize any exemptions during an outbreak, epidemic, or emergency.¹⁵⁶ The best policy would be one similar to that of the Georgia law, which states that unimmunized children will be excluded from the school or facility until they are (1) immunized against the disease; or (2) the epidemic or threat no longer constitutes a significant public health danger.¹⁵⁷ Again, this would just be a safety measure, in addition to limiting exemptions, to protect the overall public health in an event of an outbreak. This essentially would limit the spread of communicable disease(s) from those with a valid exemption and those that are immunized.

The decision of some states to offer a philosophical as well as a religious exemption may be less important when individual state practices pertaining to interpretation of religious exemptions are considered. Seven respondents in one study reported that the concept of religious beliefs pertaining to immunization has been expanded to include parents' secular beliefs.¹⁵⁸ Therefore, the distinction between a religious exemption, interpreted in this manner, and the philosophical or personal conviction waiver may be negligible in actual practice.¹⁵⁹ The distinction shows that religious exemptions should be allowed, if strict adherence to the exemption process is followed, while philosophical exemptions should be expressly excluded in all states.

¹⁵⁴ Center for Disease Control and Prevention, *supra* note 152.

¹⁵⁵ See Center for Disease Control and Prevention, *supra* note 152.

¹⁵⁶ *Id.*

¹⁵⁷ Ga. Code. Ann. §20-2-771(f) (2015).

¹⁵⁸ Opel DJ, Heritage J, Taylor JA, et al. *The architecture of provider-parent vaccine discussions at health supervision visits*, PEDIATRICS (2013);132(6):1037–1046.

¹⁵⁹ See Opel, *supra* note 158 at 1044.

Discussions between doctors and parents about the benefits of having their child immunized could be advantageous. Some states are requiring a parent to have an enhanced education on the risks associated with not having their child vaccinated in order to obtain an exemption during the application process.¹⁶⁰ Currently, eight states have implemented this policy.¹⁶¹ However, this approach should be a requirement in all states to help minimize the total exemptions that are obtained throughout the nation. Recent studies have found that parental vaccine acceptance was higher when physicians used approaches involving communication that assumed parents would accept all recommended vaccines.¹⁶²

In addition, educational leaders can try to involve parent groups for open discussion of the benefits of vaccines. There needs to be an open dialogue between the legislature and parents about vaccination mandates regarding these benefits. Policymakers and school officials may consider the language of the exemptions and the impact of even granting a small number of vaccination exemptions. Granting such exemptions may lead to a large number of people seeking to have their children exempted with potentially dire consequence to the public welfare.

Conclusion

In the United States, mandatory school vaccination requirements have been a key factor in the prevention and control of vaccine preventable childhood diseases. The constitutional basis for their implementation can be found in the police power of the state. No constitutional right exists to either a religious or philosophic exemption to these requirements, although most states allow religious exemptions and many allow philosophical exemptions. The courts have generally

¹⁶⁰ Center for Disease Control and Prevention, *supra* note 152.

¹⁶¹ *Id.*

¹⁶² Opel, *supra* note 158.

upheld these exemptions. Courts have predominantly focused on the scope of the exemption, holding that religious exemptions must allow all who have sincerely held religious beliefs in opposition to vaccination to qualify. The vaccination laws will be upheld by the courts as long as the balance of protecting the public health is achieved by mandating such requirements. However, because of the abuse of the State exemption laws and the overwhelming increasing of specifically philosophical or personal belief exemptions being obtained, reform is needed.

The entire purpose of vaccination is to promote public health and preventative medicine; if too many people take advantage of such an exemption, as is the current case with personal or philosophical belief exemptions, these values are undermined. If practiced in large numbers, this system can pose a serious threat to public health. As more exemptions are granted in a particular area, the benefits of herd immunity decrease. Without herd immunity, there is concern for the cluster problem which can result in a potential outbreak increase in that area.

Due to the threats to public health and the rights of unvaccinated children, and the difficulty in preventing the overuse and abuse of exemptions, the current exemption system is in need of review and reform. Philosophical or personal beliefs exemptions need to be abolished and the requirement to obtain a religious exemption need to be more stringent in all states. Additionally, a policy needs to be implemented in every state which excludes exempted students from school during an outbreak or epidemic. While informational campaigns, through the school systems and physicians, can help decrease the widespread abuse of the exemptions, the exemptions are in need of fundamental changes to survive constitutional muster. Only then might an exemption system exist that can reconcile the competing interests of those concerned with protecting their individual liberties and those who strongly advocate for overall public health and well-being.