Anti-Vaccination: A Growing Epidemic?

by Elizabeth Angeley*

The question of whether or not to vaccinate has been hotly debated for quite some time. While there have always been families that have made the decision not to vaccinate their children, there has been an uptick over recent years.¹ Parental decisions not to vaccinate stem from medical concerns, religion, personal choice, and a lack of access (physical and financial) to vaccinations, primarily from a lack of insurance coverage as well as geographic location.2 Regardless of the reason, the decision is not one made in a vacuum and can carry serious implications. In Part I, this article will provide a brief history of vaccination, and will address public policy concerns, and Part II gives an overview of legislation addressing vaccination in the United States generally, New York, and Australia, including limitations and penalties placed on those electing not to vaccinate. Part III examines existing exemptions to governmental vaccination mandates. Part IV surveys existing United States and Australian case law addressing parental decisions not to vaccinate, and background on the recent measles outbreak in New York. Finally, Part V explores the future of vaccination mandates. The case law examination will include the constitutional basis for vaccination and legal rationales advanced by courts for placing custody with a particular parent when parents dispute whether to vaccinate. This article will not comment on the validity of existing constitutional support for vaccine mandates, but rather will provide an

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¹ Holly A. Hill, *Vaccination Coverage Among Children Aged 19 – 35 Months – United States, 2017,* 67 Ctrs. for Disease Control: Morbidity & Mortality Wkly. Rep. 1123 (Oct. 12, 2018), https://www.cdc.gov/mmwr/volumes/67/wr/mm6740a4.htm.

² *Id*.

overview of current constitutional case law addressing the issue of vaccination.

I. History of Vaccination

A. Development of Vaccinations

While vaccines have been slow to reach the widespread use of today, they have a long history. The earliest known use of vaccination dates back to 1000 AD in China, where inoculation was used to protected against smallpox.³ Around that time, similar precautions were also being taken in, what are today, Africa and Turkey.⁴ The use of vaccines in the United States was first promoted in response to a smallpox outbreak in 1721; however, the advent of routine vaccines did not come until 1796, when Dr. Edward Jenner created the first smallpox vaccine.⁵ The smallpox vaccine Dr. Jenner created, albeit with some updates, remained in use for hundreds of years and is responsible for eradicating smallpox.⁶

As scientific innovations resulted in the development of demonstrably effective vaccinations, state mandates and federal agencies focusing on vaccines and their use began to appear. In 1809 Massachusetts became the first state to require vaccination for the general population; specifically, a law was passed mandating smallpox vaccination. Shortly thereafter, in 1813, on the federal level, an Act to Encourage Vaccination was enacted by President James Madison and resulted in the creation of the National Vaccine Agency, which still exists today as a division of the U.S. Department of Health and Human Services. In 1855 Massachusetts became the first state to legally require that school children be vaccinated, and over the next thirty-four years, New York, Connecticut, Indiana, Arkansas, Illinois, Virginia, Wisconsin, California, Iowa and Pennsylvania slowly followed suit.

³ History of Vaccines, ProCon.org (Mar. 7, 2019), https://vaccines.procon.org/history-of-vaccines/

⁴ *Id*.

⁵ *Id*.

⁶ *Id*.

⁷ *Id*.

⁸ *Id*.

⁹ *Id*.

However, for as long as vaccines have been promoted, there have been those who protest against them. For example, in 1879, in New York the Anti-Vaccination Society of America was founded by William Tebb, with similar groups appearing in Pennsylvania, Maryland and Massachusetts.¹⁰

B. Public Health Concerns

Statistics on vaccination reflect a small, but steady, increase in the number of unvaccinated individuals: in 2011 0.9 % of children aged twenty-four months had received no vaccinations, compared with 1.3% of children aged twenty-four months in 2017.11 From a public health perspective, available data suggest that this increase in unvaccinated individuals is associated with an increase in the incidence of previously eradicated illnesses.¹² As of the year 2000 the measles was considered to be eradicated in the United States.¹³ According to the Centers for Disease Control, for the period of time January 1, 2019 to August 15, 2019, there were 839 reported cases of the measles in the United States.¹⁴ Eight months into 2019, this figure represents the highest number of reported cases of the measles infection since 1992 and is almost three times the 372 reported cases for the entirety of 2018.15 If this trend is not broken, the United States elimination status will be in jeopardy, potentially joining Great Britain which lost its elimination status in 2018.16 The increasing incidence of measles in the United States is, unfortunately, consistent with increases around the globe, during the first half of 2019

¹⁰ Sara Novak, *The Long History of America's Anti-Vaccination Movement*, DISCOVER (Dec. 2018), http://discovermagazine.com/2018/dec/fostering-fear.

¹¹ Hill, supra note 1.

¹² Angelica LaVito, *New York Measles Outbreaks Worsen, Bringing Nationwide Total to 839 Cases So Far This Year*, CNBC (May 13, 2019, 9:47 AM), https://www.cnbc.com/2019/05/13/measles-outbreaks-in-new-york-worsen-drive-us-cases-to-839-cdc-says.html.

¹³ Id.

¹⁴ *Id*.

¹⁵ Id.

¹⁶ Nick Paumgarten, *The Message of Measles – The Largest Outbreak in Decades Tells Us How Diseases and Ideas Spread*, New Yorker, Sept. 2, 2019, at 38.

there were more reported cases of measles worldwide than in any full year since 2006.¹⁷

C. Public Policy and Access to Education

In addition to the serious public health concerns raised by an increase in unvaccinated individuals, whether a child is vaccinated can also impact access to education. For example, in the United States, depending on the state, where a child is not vaccinated and this lack of vaccination is not medically justified, based upon sincerely held religious beliefs or philosophical objections to vaccination, that child would not be permitted to attend public school. The right to make educational and medical decisions, including whether to vaccinate, are considered fundamental to parenting a child. However, where separated or divorcing parents are unable to resolve a disagreement with respect to whether to vaccinate (a decision that, in certain cases, will limit available educational choices), court intervention may be necessary for parents to enforce their rights. ²⁰

II. Governmental Vaccination Mandates

A. United States

In the United States, the concept of mandatory vaccination is not new. While there is not any Federal law mandating vaccination, all fifty states and Washington D.C., have statutory mandatory vaccination requirements for children attending school.²¹ This type of mandate has long been recognized as a valid exercise of a state's police power under the Constitution and not violative of the due process or equal protection rights

¹⁷ *Id.* at 41.

¹⁸ See, e.g., Mass. Gen. Laws ch. 76, § 15 (2019) (permitting medical and religious exemptions to vaccination); See also Mich. Compiled Laws ch. 380 § 380.1177 (permitting exemption to vaccination "because of religious convictions or other objection to vaccination")

¹⁹ See Pierce v. Soc'y of Sisters, 268 U.S. 510, 140 (1925).

²⁰ See Grzyb v. Grzyb, 79 Va. Cir. 93, 101 (2009).

²¹ States with Religious and Philosophical Exemptions from School Immunization Requirements, National Conference of State Legislatures (June 19, 2019), http://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx.

bestowed by the Constitution.²² While these mandates are not without exception, all fifty states and Washington D.C. recognize medical exemptions to vaccination, forty-five states and Washington D.C. support religious exemptions, and fifteen states allow for more general philosophical exemptions from vaccination for those opposing it based upon personal, moral, or other beliefs.²³ Where exemptions do not apply, all fifty states and Washington D.C. require that children be vaccinated against the following diseases: diphtheria, tetanus, pertussis, polio, measles, and rubella.²⁴ Forty-nine states (Iowa does not require this), where exemptions do not apply, require vaccination for mumps and varicella (chickenpox).²⁵ Forty-three states and Washington D.C. mandate vaccination for Hepatitis B.²⁶

B. New York

In the early 1960s, when state vaccination mandates were in their relatively early days, New York was among those states that did not yet require the vaccination of school age children.²⁷ However, this changed in 1966, with New York becoming the first state with a vaccination mandate that included a religious exemption.²⁸ Fast forward to June, 2019, when New York joined Maine and California in their removal of the religious exception to state vaccination mandates.29

The measles, a disease deemed eradicated in the United States as of 2000, has recently seen a swift and noticeable resurgence, with cases being identified in twenty-nine states.³⁰ As of the end of August, 2019 of the 1203 cases of measles identified in

²² Zucht v. King, 260 U.S. 174, 176-77 (1922).

States with Religious and Philosophical Exemptions from School Immunization Requirements, supra note 21.

²⁴ State-by-State: Vaccination Required for Public School Kindergarten, PROCON.ORG (July 23, 2018) https://vaccines.procon.org/state-by-state-vaccinations-required-for-public-school-kindergarten/.

²⁵ Id.

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²⁷ Paumgarten, supra note 16, at 38.

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States with Religious and Philosophical Exemptions from School Immunization Requirements, supra note 21.

³⁰ Paumgarten, *supra* note 16, at 38.

the United States, 1046 were located in New York.³¹ For purposes of comparison, during the entirety of 2018 there were 375 cases of measles reported nationally.³² The outbreak in New York began in October 2018, in Rockland County, with patient zero being an unvaccinated fourteen year old boy who had travelled home to Rockland County from Israel, where he contracted the disease.³³

On October 1, 2018 for the fifth time in four days, the boy attended services at his synagogue which was at capacity, holding 7000 people.³⁴ The boy did not feel well and, following services, went to the community health center which had served the community for almost thirty years.³⁵ While most of the clinicians there had never seen a case of the measles, over the previous decade they had seen the community they serve become increasingly resistant to vaccinating its members.³⁶ The boy had been infected with the measles and, consistent with protocol, the clinic contacted the Centers for Disease Control to conduct an investigation, focused on determining who may have been infected.³⁷ In total, it was determined that the boy infected eleven people.³⁸ From that point, the measles began appearing in other places. For example, one man traveling from New York to Detroit was found to have infected thirty-nine people in Michigan.³⁹

In response to the spreading measles outbreak, on April 9, 2019, New York City Mayor Bill de Blasio declared a state of public health emergency.⁴⁰ The outbreak in New York City originated in a heavily Orthodox Jewish community in the Williamsburg area of Brooklyn, where there had been 285 reported

³¹ *Id*.

³² Ctrs. for Disease Control and Prevention, Measles Cases and Outbreaks (Oct. 11, 2019), https://www.cdc.gov/measles/cases-outbreaks.html.

Paumgarten, supra note 16, at 38.

³⁴ *Id*.

³⁵ *Id*.

³⁶ *Id*.

³⁷ Id. at 38-39.

³⁸ *Id.* at 41.

³⁹ Id.

⁴⁰ Morgan Winsor, *New York City Declares Public Health Emergency as Measles Outbreak Reaches 285 Cases*, ABC News (Apr. 10, 2019, 3:37 AM), https://abcnews.go.com/Health/york-city-declares-public-health-emergency-measles-outbreak/story?id=62269641.

cases from October, 2018 to April, 2019.41 According to Dr. Oxiris Barbot, the city's Public Health Commissioner, "this outbreak is being fueled by a small group of anti-vaxxers in these neighborhoods. They have been spreading dangerous misinformation based on fake science."42 The declaration required that individuals unvaccinated for measles living in or near Williamsburg must obtain the measles, mumps, and rubella (MMR) vaccine or be faced with a \$1,000.00 fine.43 The city enforced the declaration, issuing three summons to people failing to comply with the vaccination requirement.⁴⁴ New York City also closed four schools as a result of their failure to provide the required vaccination and attendance records for their students.⁴⁵ A lawsuit to challenge the law, filed by parents wishing not to vaccinate, was denied.46 The lawsuit raised the question of "whether the Respondent Commissioner has a rational, non-pretextual basis for declaring a public health emergency and issuing the attendant orders challenged herein."47 This question was answered in the affirmative, with the court stating that "[a] fireman need not obtain the informed consent of the owner before extinguishing a house fire. Vaccination is known to extinguish the fire of contagion."48

Ultimately, in connection with the outbreak, excluding the 654 cases of measles reported in New York City, there were an additional 392 identified cases in New York State.⁴⁹ A staggering 296 of those cases were located in Rockland County, where the outbreak originated, in Orthodox communities with low vaccination rates.⁵⁰ Ultimately, in June 2019, in response to this

⁴¹ Id.

⁴² Id.

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⁴⁴ Mark Osborne, New York City Issues Fines of \$1,000.00 to 3 People Who Refused to Be Vaccinated Against Measles, ABC News (Apr. 19, 2019, 2:43 AM), https://abcnews.go.com/Health/york-city-issues-fines-1000-people-refused-vaccinated/story?id=62501784.

⁴⁵ Id.

⁴⁶ Id.

⁴⁷ Id.

⁴⁸ C.F. ex rel v. N.Y.C. Dep't of Health & Mental Hygiene, No. 508356/ 19, 8 (N.Y. Sup. Ct. Apr. 19, 2019).

⁴⁹ Paumgarten, *supra* note 16, at 41.

⁵⁰ Id.

measles outbreak, over the vocal objection of those opposed to vaccination, New York State removed its religious exemption to mandatory vaccination.⁵¹

C. Australia

Australia has notoriously strict vaccination laws.⁵² Not only are medical exemptions to mandatory vaccination laws the only permitted exemptions, but those individuals who elect not to vaccinate for non-medical reasons, generally, may not attend school and are prohibited from obtaining certain government subsidies, and daycare centers admitting non-vaccinated children may be subject to significant monetary penalties.⁵³ The Australian Government Department of Health provides the National Immunization Program, detailing the recommended vaccination schedule.⁵⁴ As with many developed countries, including the United States, all six of the Australian states have some form of restriction on unvaccinated children attending school.⁵⁵ While the majority of Australian states require compliance with the National Immuni-

⁵¹ Id. at 38.

⁵² Tess Sohngen, *In Australia, Kids Will Have to Be Vaccinated to Start Kindergarten*, Global Citizen (July 24, 2017), https://www.globalcitizen.org/en/content/south-australias-new-legislation-on-child-vaccinat/.

⁵³ Andre Picard, 'No Jab, No Pay.' In Australia, No Excuse Accepted for Unvaccinated Kids, Globe & Mail (July 9, 2018), https://www.theglobeandmail.com/opinion/article-no-jab-no-pay-in-australia-no-excuse-accepted-for-unvaccinated/.

⁵⁴ National Immunisation Program (Childhood) Schedule Changes from 1 July 2018, Austl. Gov't Dep't Health (July 31, 2018), https://www.health.gov.au/resources/publications/national-immunisation-program-childhood-schedule-changes-information-for-parents-and-carers.

⁵⁵ See Immunisation Requirements in Primary and Secondary Schools, N.S.W. Gov't (Oct. 31, 2018), https://www.health.nsw.gov.au/imm unisation/Pages/immunisation-in-schools.aspx; See Childcare Immunisation Requirements, Queensl. Gov't (Apr. 16, 2018), https://www.qld.gov.au/health/conditions/immunisation/childcare; See South Australia Toughens Vaccination Policy for Kids, SBS News (Jan. 1, 2017), https://www.sbs.com.au/news/south-australia-toughens-vaccination-policy-for-kids; See Public Health Act 1997 div. 2, § 59 (Tas. Gov't); See School Policy Immunisation Victoria, Vict. State Gov't (Feb. 22, 2019), https://www.education.vic.gov.au/school/principals/spag/health/Pages/immunisation.aspx; Immunisation Requirement For Child Care Services, Kindergarten and Schools: Overview of WA's Immunisation Requirements, Gov't W. Austl. Dep't, https://ww2.health.wa.gov.au/immunisationenrolment (last visited Oct. 25, 2019).

zation Program vaccination schedule for children to attend school, South Australia and Tasmania require that vaccination records be provided, but will only exclude unvaccinated children from schools in the event of an outbreak of a vaccine preventable disease.⁵⁶

Unlike the United States, which does not have federal laws addressing mandatory vaccinations, in addition to vaccination requirements on the state level, Australian federal law also advaccination.⁵⁷ 2015, the Australian dresses In government introduced the No Jab No Pay law, which prevents individuals whose children are unvaccinated for non-medical reasons from taking advantage of certain available exemptions which provide monetary benefits, specifically, the Family Tax Benefit Part-A end-of-year supplement, Child Care Benefit (CCB) and Child Care Rebate (CCR) payments.⁵⁸ As of July 1, 2018 the law was changed to add a penalty on welfare payments (paid every other week), deducting \$28.00 (Australian dollars) for each unvaccinated child in a family, their family tax benefit (\$2,170.00 per child annually), and childcare rebate (an annual value of up to \$7,500.00).⁵⁹ As a result of these penalties, families who elect not to vaccinate could potentially lose \$15,000.00 (Australian dollars) annually in government benefits.60

⁵⁶ See South Australia Toughens Vaccination Policy for Kids, supra note 55; See Public Health Act 1997 div. 2, § 59 (Tas. Gov't).

⁵⁷ Rachael Heath Jeffery, *Vaccination and the Law*, 44 Royal Austl. Coll. Gen. Practitioners 849, 851 (2015).

MICHAEL KLAPDOR & ALEX GROVE, BUDGET REVIEW: 'NO JAB NO PAY' AND OTHER IMMUNISATION MEASURES, PARLIAMENT OF AUSTL. (May 2015), https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/BudgetReview201516/Vaccination.

⁵⁹ No Jab, No Pay Changes, Austl. Med. Ass'n (May 4, 2017), https://ama.com.au/gp-network-news/no-jab-no-pay-changes (derived from transcript of No Jab No Pay Changes, Dr. Gannon, ABC Radio (May 1, 2017)).

⁶⁰ Picard, supra note 53.

III. Exemptions to Governmental Vaccination Mandates

A. Medical Exemption to Vaccination

All fifty states, and Washington D.C., allow for medical exemptions to vaccination.⁶¹ The medical exemption is used legitimately in various situations.⁶² Very generally, the medical exemption to vaccination is appropriately granted to children with permanently or temporarily compromised immune systems (e.g., chemotherapy treatment), and where the child has had a serious allergic reaction to a component of a vaccine or where the child has had some other type of serious adverse reaction to a vaccination.⁶³ In these cases, a child would appropriately qualify for medical exemption to vaccination.⁶⁴

While this type of exemption is, arguably, the least controversial, there are, unfortunately, those who exploit it.⁶⁵ In 2015, when California removed its religious exemption to vaccination, which was also interpreted to include a philosophical exemption, there was an uptick in medical professionals selling illegitimate medical exemptions.⁶⁶ In response, on September 3, 2019, the California State Assembly passed Bill 47-17 providing state public health officials the authority to investigate physicians issuing more than five medical exemptions annually and schools with vaccination rates falling below 95%.⁶⁷ This is consistent with the fact that the World Health Organization has deemed 95% the necessary vaccination rate to effectively prevent measles outbreaks.⁶⁸

⁶¹ States with Religious and Philosophical Exemptions from School Immunization Requirements, supra note 21.

⁶² Vaccinations Exemptions,, HISTORY OF VACCINES (March 16, 2020), https://www.historyofvaccines.org/content/articles/vaccination-exemptions.

 $^{^{63}}$ Id.

⁶⁴ *Id*.

Paumgarten, supra note 16, at 41-42.

⁶⁶ Id

⁶⁷ California Bill Targets Doctors Who Sell Fake Vaccine Medical Exemptions, Physicians Wkly. (Sept. 4, 2019), https://www.physiciansweekly.com/california-bill-targets-doctors-who-sell-fake-vaccine-medical-exemptions/.

⁶⁸ Measles Cases Spike Globally Due To Gaps in Vaccination Coverage, World Health Org. (Nov. 29, 2018), https://www.who.int/news-room/detail/29-11-2018-measles-cases-spike-globally-due-to-gaps-in-vaccination-coverage.

B. Religious Exemption to Vaccination

There are currently forty-five states within the United States with religious exemptions to vaccination requirements; specifically, New York, Maine, California, Mississippi, and West Virginia do not permit such an exemption.⁶⁹ Where religious exemptions are permitted and an individual is exercising that right, states generally require that the individual provide written certification of the religious exemption.⁷⁰ For example, the applicable Massachusetts statute states as follows:

In the absence of an emergency or epidemic of disease declared by the department of public health, no child whose parent or guardian states in writing that vaccination or immunization conflicts with his sincere religious beliefs shall be required to present said physician's certificate in order to be admitted to school.⁷¹

Despite the prevalence of religious objection to vaccinations, there are surprisingly few faiths that actively discourage members from vaccinating.⁷² The Catholic Church has been a long-time advocate of its members obtaining vaccines.⁷³ However, in circumstances where vaccines are created from descendent cells of aborted fetuses, the Church encourages the use of alternative vaccines, if available.⁷⁴ Similarly, while a central tenant of the Jewish and Muslim faiths is to abstain from the consumption of swine products, which is used in many vaccines, the use of vaccines has been deemed permissible by both groups.⁷⁵ The Church of Christ, Scientist (Christian Science) and the

⁶⁹ See States with Religious and Philosophical Exemptions from School Immunization Requirements, supra note 21; See also Aleksandra Sandstrom, Amid Measles Outbreak, New York Closes Religious Exemption for Vaccinations – But Most States Retain It, PEW RES. CTR. (June 28, 2019), https://www.pewresearch.org/fact-tank/2019/06/28/nearly-all-states-allow-religious-exemptions-for-vaccinations/.

⁷⁰ See Wash. Rev. Code § 28A.210.080 (1979), amended by Substitute House Bill 1802 of July 22, 2007; See also Mass. Gen. Laws ch. 76 § 15 (2019).

⁷¹ Mass. Gen. Laws ch. 76, § 15 (2019).

⁷² Najera, supra note 62.

⁷³ Emily Benson, *Vaccines Preserve 'Moral Health' of Communities, Say Church Experts*, NAT'L CATHOLIC REP. (June 19, 2019), https://www.ncronline.org/news/people/vaccines-preserve-moral-health-communities-say-church-experts.

⁷⁴ Sandstrom, supra note 69.

⁷⁵ *Id*.

Dutch Reformed Church are the most commonly cited religious denominations that encourage their followers not to vaccinate.⁷⁶

The Church of Christ, Scientist was founded in Lvnn, Massachusetts in 1879 by Mary Baker Eddy.⁷⁷ At the time it was founded the stated purpose of the Church was to "reinstate primitive Christianity and its lost element of healing."78 Central to this purpose is the belief that the cause of illness and disease is rooted in the human mind, not to be healed by medicine but, rather, the power of faith.⁷⁹ While the official Christian Science website contains no formal objection to vaccination, with its foundational belief being an unquestioned devotion to what is, essentially, the placebo effect, the resistance of the church to vaccination is no surprise.80 Discussion of the issue on the website simply states "[m]ost of our church members normally rely on prayer for healing. It's a deeply considered spiritual practice and way of life that has meant a lot to us over the years. So we've appreciated the vaccination exemption and sought to use it conscientiously and responsibly."81 Curiously, it is reported that Mary Baker Eddy, the founder of the Church of Christ, Scientist was in favor of vaccination.82

The Dutch Reformed Church is a Protestant religious denomination that originated in the Netherlands during the Protestant Reformation.⁸³ Similar to the Church of Christ, Scientist, this religious denomination does not maintain any formal objec-

Najera, supra note 62.

⁷⁷ Stephen Gottschalk, *Mary Baker Eddy*, ENCYCLOPEDIA BRITTANNICA, https://www.britannica.com/biography/Mary-Baker-Eddy (last visited Nov. 7, 2019).

⁷⁸ *Id*.

⁷⁹ Id

⁸⁰ A Christian Scientist's Perspective on Vaccination and Public Health, Christian Science, https://www.christianscience.com/press-room/a-christianscientist-s-perspective-on-vaccination-and-public-health (last visited Nov. 7, 2019).

⁸¹ *Id*.

⁸² Antonia Blumberg, *Here's Where Major Religions Actually Stand on Vaccines*, Huffington Post (Mar. 31, 2017, 5:47 AM), https://www.huffpost.com/entry/heres-where-major-religions-actually-stand-on-vaccines n_58dc3ef0e4b08194e3b71fc4.

⁸³ Dutch Reformed Church, ENCYCLOPEDIA BRITANNICA, https://www.britannica.com/topic/Dutch-Reformed-Church (last visited Nov. 7, 2019).

tion to vaccination.84 However, members of the Dutch Reformed Church have historically resisted vaccination, claiming that it can interfere with an individual's relationship with God.85

While some people with "sincerely held" religious beliefs legitimately exercise the religious exemption, this exemption has also been exploited by people who object to vaccination for nonreligious reasons but do not have the option of claiming a philosophical objection.⁸⁶ It is easy to see how this exemption may be abused. Where an individual claims exemption to the vaccination requirement based upon religious beliefs, in most jurisdictions, short of bringing the issue before a court to be adjudicated, there is no mechanism by which to police the legitimacy of a claimed religious exemption to vaccination.87 Many states do not even require that parents provide any sort of explanation for claiming a religious exemption to vaccination.88 While that is not true for all states - for example, Nebraska requires parents to submit "an affidavit signed by a legally authorized representative stating that the immunization conflicts with the tenets and practices of a recognized religious denomination of which the student is a member" -this does not resolve the issue of exploitation.89 For example, in 2003 Donald G. McNiel, Jr. wrote a piece for the New York Times detailing how he had joined a church founded by chiropractors for the sole purpose of assisting its members in opting out of vaccines.90

In the event parties are in a position to litigate a disagreement as to the vaccination of children that is rooted in one party objecting for religious reasons, the objecting party would be required to produce evidence supporting the legitimacy of their religious belief.⁹¹ In addition to testimony of the objecting party as to the legitimacy of their religious belief, evidence presented should also include the objecting party's religious leader, or other person with sufficient knowledge to testify to the sincerity of

⁸⁴ Id.

⁸⁵ Blumberg, supra note 82.

Paumgarten, supra note 16, at 38.

⁸⁷ Sandstrom, supra note 69.

⁸⁸ Id.

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⁹⁰ Paumgarten, supra note 16, at 42.

See Grzyb, 79 Va. Cir. at 96.

their claimed religious objection.⁹² Whether the religious objection to vaccination existed prior to the parties' separation is also relevant.⁹³

C. Personal Philosophical Objection to Vaccination

There are currently fifteen states that recognize personal philosophical exemptions to vaccination requirements.⁹⁴ Generally, this exemption is used by parents with concerns about vaccine safety and those who believe that it is beneficial to children's immune systems to get sick.⁹⁵ Many of the alleged safety concerns, for example the theory that vaccinations cause autism, are entirely unsupported by scientific research.⁹⁶ Websites advocating against vaccination present extremely alarmist positions with no credible scientific support.⁹⁷

To take one of many examples, Health Impact News posted on its website a piece entitled "4,250% Increase in Fetal Deaths Reported to [Vaccine Adverse Events Reporting Systems] After Flu Shot Given to Pregnant Women," blaming the spike in fetal deaths on the flu vaccine. The post is devoid of any scientific support, provides no verifiable facts (documentary or otherwise) for the figures contained in the post, does not provide any specific description of the "documentation" purportedly received from the National Coalition of Organized Women claimed to contain the raw "data" touted by the post and claims an inability to access the reports from the Centers for Disease Control that

⁹² *Id*.

⁹³ *Id*.

⁹⁴ See States with Religious and Philosophical Exemptions from School Immunization Requirements, supra note 21.

⁹⁵ What Are the Rules on Vaccine Exemptions?, WebMD https://www.webmd.com/children/vaccines/what-are-the-rules-on-vaccine-exemptions (last updated Apr. 16, 2019).

⁹⁶ Stanley Plotkin, Jeffery S. Geber, & Paul A. Offit, *Vaccines and Autism: A Tale of Shifting Hypotheses*, 48 CLINICAL INFECTIOUS DISEASES 456 (Feb. 15, 2009), https://academic.oup.com/cid/article/48/4/456/284219.

⁹⁷ See Christina England, 4,250% Increase in Fetal Deaths Reported to VAERS After Flu Shot Given to Pregnant Women, HEALTH IMPACT NEWS, https://healthimpactnews.com/2012/4250-increase-in-fetal-deaths-reported-to-vaers-after-flu-shot-given-to-pregnant-women/?fbclid=IWAR0cWj_w9UvSju VPo3uxc98EuqHRh8EsOdAGaXqb0_il2L87n9RFcB3-650 (last visited Nov. 15, 2019).

⁹⁸ See id.

purportedly supports the thesis of the post.99 While an internet search did not result in a website for the National Coalition of Organized Women, it did yield a link to the biography of its founder, Eileen Dannemann. 100 Ms. Dannemann describes the coalition as "an organizing force, a coalescing energy based on the Unified Field and quantum physics which defines it. NCOW has no matrix, no special tax status, no agenda. It cannot be found because it is everywhere and nowhere at the same time."101

To provide another example, Investment Watch posted a piece entitled "UK Scientist Speaks Out About the Dangers of Aluminum Adjuvants in Vaccinations."102 The post, referencing an interview conducted with Dr. Christopher Exley of Keele University in the United Kingdom points to specific concern with "exceptionally high levels of aluminum" in Gardasil, the vaccination developed to prevent the human papillomavirus (hereinafter "HPV").103 HPV is associated with various different types of cancer; specifically, cervical, vaginal, vulvar, anal, throat, and penile cancers.104

The post alleges that one in fifty people (2%) who receive the HPV vaccine will become "ill," with the implication that these figures were obtained from a Merck "product information leaflet."105 Review of the referenced pamphlet does not appear to support Dr. Exley's stated conclusion, in fact, it indicates that reports of serious systemic reactions among those taking the pla-

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¹⁰⁰ Eileen Dannemann's Bio and Curriculum Vitae, PROGRESSIVECON-VERGENCE.COM, http://www.progressiveconvergence.com/eileen-dannemannbio.htm (last visited Nov. 15, 2019).

¹⁰¹ Id.

¹⁰² UK Scientist Speaks Out About the Dangers of Aluminum Adjuvants in Vaccines, Investment Watch (Dec. 26, 2018), https://www.investmentwatch blog.com/uk-scientist-speaks-out-about-the-dangers-of-aluminum-adjuvants-invaccines/.

¹⁰³ UK Scientist Speaks Out About the Dangers of Aluminum Adjuvants in Vaccines, supra note 102.

¹⁰⁴ Suzanne M. Garland et al., Impact and Effectiveness of the Quadrivalent Human Papillomavirus Vaccine: A Systematic Review of 10 Years of Realworld Experience, 63 CLINICAL INFECTIOUS DISEASES 519, 519 (Aug. 2016).

¹⁰⁵ UK Scientist Speaks Out About the Dangers of Aluminum Adjuvants in Vaccines, supra note 102.

cebo drug actually exceeded those taking Gardasil.¹⁰⁶ Strikingly absent from this post is any definition of what constitutes becoming "ill" (the word does not even appear anywhere in the pamphlet), indication of who would make such a determination, what population of people were considered (including geographical location), and what controls were in place.¹⁰⁷

The post also references various articles published by Dr. Exley, for example, his article entitled "Insight into the Cellular Fate and Toxicity of Aluminium Adjuvants Used in Clinically Approved Human Vaccinations." As a preliminary red flag, this research was funded, in large part, by the Child Medical Safety Research Institute (CMSRI), an anti-vaccine group founded by Claire Dwoskin. The CMSRI is known for spreading anti-vaccination misinformation and was formerly funded by the family foundation of Albert Dwoskin, Claire's Dwoskin's exhusband. However, according to an article Published by *The Daily Beast*, Mr. Dwoskin regrets his involvement with the organization, and has withdrawn his family's funding, stating that "[a]fter seeing a great deal of evidence, I have concluded that the concerns about the safety of vaccinations is unfounded"

Reaching the substance, Dr. Exley advances the proposition that aluminum adjuvants in vaccinations have been linked to adverse reactions in human vaccinations. In support of that conclusion he cites two studies, one authored by Christopher A. Shaw and Lucija Tomljenovic (of the Department of Ophthalmology at the University of British Columbia) and the other list-

Merck, Highlights of Prescribing Information; Gardasil, at 7 (2015), https://www.merck.com/product/usa/pi_circulars/g/gardasil/gardasil_pi.pdf.

¹⁰⁷ Id.

Matthew Mold, Emma Shardlow & Christopher Exley, *Insight Into the Cellular Fate and Toxicity of Aluminium Adjuvants Used in Clinically Approved Human Vaccinations*, NATURE.COM, https://www.nature.com/articles/srep3157 8#article-info (Aug. 12, 2016).

¹⁰⁹ Children's Medical Safety Research Institution, https://www.cmsri.org/about/background/ (last visited Nov. 15, 2019).

¹¹⁰ Jackie Kucinich, *Dem Megadonor Pulls Funding From Anit-Vax Group, Regrets Involvement*, Thedailybeast.com (June 20, 2019), https://www.thedailybeast.com/dem-megadonor-pulls-funding-from-anti-vax-group-blames-wife-for-initial-involvement.

¹¹¹ Id.

¹¹² Mold et al., supra note 108.

ing Dr. Shaw as a co-author.¹¹³ Dr. Shaw and Dr. Tomljenovic have been criticized for publishing "research" falsely blaming aluminum adjuvants in vaccines for various adverse effects in children, most notably, autism.¹¹⁴ They have had their work retracted on numerous occasions and their research has been discredited by the World Health Organization.¹¹⁵

There is a dearth of case law addressing disagreements between parents relating to the exercise of the personal philosophical belief exemption with respect to vaccination. However, where the issue has been raised in the context of the medical and sincerely held religious belief exemptions it is clear that, to be successful parties would have to produce credible expert testimony in support of their position. 116 As demonstrated above, locating credible scientific support for the antivaccination position that does not qualify for the medical exemption presents a challenge. While this article provides a mere two examples of the entire body of literature in support of the antivaccination position, it demonstrates the difficulty parents wishing not to vaccinate their children under the personal belief exemption would encounter if required to present expert testimony in support of their position. However, even if such an expert was located, courts will not consider the issue of vaccination in isolation and will, instead, focus on the totality of the circumstances as they relate to the best interests of the child.117 Notwithstanding that,

¹¹³ Id.

¹¹⁴ See Beth Mole, Enough Is Enough: Study Claims Vaccines-Autism Link; Scientists Find Fake Data, Have Rage Stroke, ARS TECHNICA (Oct. 11, 2017), https://arstechnica.com/science/2017/10/study-claims-vaccines-autism-link-scientists-find-fake-data-have-rage-stroke/; See also World Health Org. Weekly Epidemiological Record, 30 WORLD HEALTH ORG. 282, at 282-83, (July 27, 2012), https://www.who.int/vaccine_safety/committee/reports/wer8730.pdf?ua=1.

¹¹⁵ See Lukas Schulze, UBC Stands Behind Vaccine Studies Discredited by WHO, GLOBE & MAIL (Mar. 4, 2015; updated May 12, 2018), https://beta.the globeandmail.com/life/health-and-fitness/health/ubc-stands-behind-vaccine-stud ies-discredited-by-who/article23302328/?ref=http://www.theglobeandmail.com &; See also Shannon Palus, Journal Temporarily Removes Paper Linking HPV Vaccine to Behavioral Issues, Retraction Watch (Feb. 15, 2016), https://retractionwatch.com/2016/02/15/journal-temporarily-removes-paper-linking-hpv-vaccine-to-behavioral-issues/.

¹¹⁶ See Grzyb, 79 Va. Cir. at 95-98.

¹¹⁷ Id. at 99-100.

given the lack of scientific support for decisions not to vaccinate, except where a child falls under the medical exemption, it would seem that, in the event a case did boil down to a "battle of the experts," the parent claiming a philosophical exemption to vaccination would have difficulty prevailing.

IV. Existing Case Law

A. Vaccination and the U.S. Supreme Court

While this article is not intended to analyze the validity of existing constitutional support for vaccine mandates, an overview of how the issue has been treated by the Supreme Court is warranted. Although in many instances the Supreme Court has declined to hear issues related to vaccine mandates, determining that it is an issue more appropriately addressed by the states, on those occasions it has weighed in, the Court has upheld vaccine mandates.¹¹⁸ Examination of how vaccine mandates are treated through case law in the United States and, in particular the Supreme Court, starts with the 1905 case of Jacobson v. Massachusetts.¹¹⁹ In 1902, there was a smallpox outbreak in Cambridge, Massachusetts. In response, the city required its residents to be vaccinated against the disease and strictly enforced the requirement.¹²⁰ Mr. Henning Jacobson, a Cambridge resident, refused to comply with the requirement and the city of Cambridge filed charges against him.121

Ultimately, the case made its way to the Supreme Court. 122 The thrust of Jacobson's argument was that the Massachusetts Statute (§ 137, c. 75) mandating vaccination was in contravention of the right to liberty bestowed by the U.S. Constitution, that the vaccination mandate was unreasonable, arbitrary and oppressive, and, finally, that the vaccination was "injurious or dangerous." 123 In supporting the City of Cambridge mandate that its residents be vaccinated against smallpox, the Supreme Court pointed to

 $^{^{118}}$ $\it See$ Jacobson v. Massachusetts, 197 U.S. 11 (1905); $\it See$ $\it also$ Zucht v. King, 260 U.S. 174 (1922).

¹¹⁹ See Jacobson, 197 U.S. at 48.

¹²⁰ Novak, supra note 10.

¹²¹ Id.

¹²² See Jacobson, 197 U.S. at 11.

¹²³ *Id.* at 20-21, 23.

the state's police power, indicating that it extends to include the authority of states to enact legislation calculated to promote public health and public safety. 124 The Supreme Court was quick to point out that, while the Constitution protects the liberty of the people of the United States, this right to liberty does not equate to a person's right to, at all times, be free from restraint.¹²⁵ also recognized that, in the event an adopted measure was arbitrary and unjustified by the circumstances, judicial intervention would be warranted. 126 However, where, as here, the statute was put into effect to combat "an epidemic threatening the safety of all," it included an exemption for children deemed "unfit subjects" for vaccination and the appellant was not arguing that he was an "unfit subject" for vaccination, the statute was justified and not arbitrary.127

Finally, Jacobson argued that vaccination was "injurious or dangerous" but failed to provide expert testimony in support of his position and, instead, merely "offered to prove and show by competent evidence" the injurious and dangerous effects he claimed.¹²⁸ The Supreme Court indicated that the result would have been the same even if Jacobson had been permitted to introduce such medical opinions.¹²⁹ The Supreme Court also made clear that fact, not opinion, would be necessary to combat the wealth of scientific studies supporting the efficacy of vaccines and, based upon Jacobson's offers of proof, he would not have been able to overcome this hurdle. 130

The Jacobson case was an important step in the legal regulation of vaccines, creating a valid model for municipalities to enact compulsory vaccination requirements.¹³¹ Its application is most evident in the context of mandatory vaccinations for school chil-

¹²⁴ Id. at 26-27.

¹²⁵ Id. at 28.

¹²⁶

¹²⁷ Id. at 28-30.

Id. at 23.

¹²⁹ Id. at 24.

Id. at 24-25.

Erin Flanagan-Klygis, School Vaccination Laws: Personal Exemptions from Mandatory Vaccination Requirements Ensure Peaceful Coexistence Between Personal Autonomy and Social Responsibility, 5 VIRTUAL MENTOR 386 (Nov. 2003).

dren.¹³² For example, seventeen years after the *Jacobson* decision, *Zucht v. King* came before the Supreme Court.¹³³ Ordinances issued by the City of Antonio, Texas, providing that "no child or other person shall attend a public school or other place of education without having first presented a certificate of vaccine," were challenged.¹³⁴ Resting upon its decision in *Jacobson*, the Court found that the ordinance was a valid exercise of state police power.¹³⁵

The rallying cry of those opposed to vaccination mandates is that parents should have the right to make decisions with respect to the care and upbringing of their children. The United States, in fact, has a long history of promoting parents' rights to make decisions for their children. In 1925, the U.S. Supreme Court decided Pierce v. Society of Sisters, affirming an injunction preventing public officials from enforcing the Compulsory Education Act of 1922 (hereinafter "Act").¹³⁶ The Act mandated that children between the ages of 8 to 16 years old attend public schools. This action arose from private primary schools challenging the constitutionality of the Act. 137 The Supreme Court found the Act to be an unconstitutional violation of parent's Fourteenth Amendment due process rights, stating that parents have the liberty "to direct the upbringing and education of children." 138 The opinion goes on to say that "the child is not the mere creature of the State; those who nurture him and direct his destiny have the right, coupled with the high duty, to recognize and prepare him for additional obligations."139 The Pierce decision continues to be cited in support of the proposition that parents have the right to make decisions for and control the upbringing of their children.¹⁴⁰ However, this right is not without limitation, since the State has a "compelling interest to protect children

¹³² *Id*.

¹³³ Zucht, 260 U.S. 174.

¹³⁴ *Id.* at 175.

¹³⁵ *Id.* at 176-77.

¹³⁶ Pierce, 268 U.S. at 536.

¹³⁷ Id. at 533.

¹³⁸ *Id.* at 533-34.

¹³⁹ *Id.* at 535.

¹⁴⁰ See Commonwealth v. Dorvil, 32 N.E.3d 861 (Mass. 2015) (parental use of corporal punishment); See also Troxel v. Granville, 530 U.S. 57 (2000) (grandparent visitation rights and a parent's right to rear their children).

from actual or potential harm."¹⁴¹ For example, in *Prince v. Massachusetts*, what is considered a watershed case on the limits of parental rights, the Court famously said that the "right to practice religion freely does not include the liberty to expose the community or the child to communicable disease or the latter to ill health or death."¹⁴²

B. Vaccination and U.S. Case Law

When presented with child custody determinations in connection with the issue of vaccination, courts do not typically reach constitutional questions surrounding the decision to vaccinate but, rather, focus on a traditional child custody analysis. 143 Given current polarized attitudes toward vaccination, it is no surprise that courts are increasingly faced with adjudicating disagreements between parents with shared legal custody who disagree whether their children should be vaccinated. 144 As is evident from the below custody cases which include the issue of parental disagreement with respect to vaccination, in rendering custody decisions, courts often avoid directly weighing in on the issue of vaccination itself and, instead, rely upon the totality of facts and circumstances.

In *In re Marriage of Botofan-Miller*, an Oregon case, the court ultimately switched sole legal custody and, therefore, the right to make medical decisions, including whether to vaccinate, from the parent objecting to vaccination to the non-objecting parent. The change in custody, based upon a material change in circumstances, was supported by the mother's struggle to vaccinate the child as required by court order, her issues communicating with the child's medical providers, and her failure to maintain the child's therapeutic care. At the time of the parties' divorce, notwithstanding some indications that the mother might be suffering from some mental health issues, the father

¹⁴¹ Blixt v. Blixt, 774 N.E.2d 1052, 1059 (Mass. 2002).

¹⁴² Prince v. Massachusetts, 321 U.S. 158 (1944).

See Grzyb, 79 Va. Cir. 93; See also In Re Marriage Botofan-Miller, 406P.3d 175 (Or. Ct. App. 2019).

¹⁴⁴ Grzyb, 79 Va. Cir. at 93.

¹⁴⁵ *In re* Marriage Botofan-Miller, 446 P.3d 1280 (Or. 2019).

¹⁴⁶ *Id.* at 1291-92.

agreed to the mother maintaining sole legal custody of the parties' minor child.¹⁴⁷

During the course of the divorce proceedings, the father learned that the mother had failed to comply with the pediatrician's recommended vaccination schedule and that the mother was resistant to vaccinations. As a result of this failure, in February, 2011 the mother was ordered to comply with the pediatrician's vaccination recommendations and, in April, 2011, as part of a limited judgment, the lower court found that "[t]here has been a significant gap in the healthcare of the minor child" and, as a result, required that parties follow the pediatrician's recommendations "as to all health care issues, including vaccinations." This obligation carried through to the judgment of dissolution, with the court also including the requirement that the mother "confer with the [child's] pediatrician to ensure that a proper vaccination schedule is in place for the child."

For three years following the judgment of divorce, the father grew increasingly concerned about the mother and her ability to make medical decisions consistent with the best interest of the child.¹⁵¹ Most notably, the mother fell behind on the pediatrician recommended vaccination schedule and, for ten months, delayed a surgery recommended by the child's ophthalmologist, risking that the child's double vision resulting from crossed eyes could become permanent.¹⁵² The mother spent dozens of hours discussing the surgery with the child's doctors and office staff, sought out a second (concurring) medical opinion, as well as opinions from on-line forums as to alternatives to surgery for treatment of the condition.¹⁵³ It was not until the father threated to seek sole legal custody that the mother ultimately acquiesced to the surgery.¹⁵⁴

Evidence presented at trial showed that, during the ten month delay in the mother's moving forward with surgery, the

¹⁴⁷ Id. at 1282.

¹⁴⁸ *Id*.

¹⁴⁹ Id. at 1283.

¹⁵⁰ Id

¹⁵¹ Id. at 1283-84.

¹⁵² *Id.* at 1283.

¹⁵³ *Id.* at 1283-84.

¹⁵⁴ *Id*.

child developed balance and coordination problems (e.g. falling over while coloring), began getting regular stomach aches, and struggled academically. 155 In conjunction with this, the mother also failed to properly follow vaccination schedules, claiming general resistance to the child being vaccinated, failed to take the child for regular dental check-ups, refused fluoride treatments for the child (misrepresenting that they were being done at home); and when the child developed significant emotional problems while under the mother's care, she failed to take the child to therapy appointments causing discontinuation of treatment, and frequently changed the child's healthcare providers, often seeing multiple pediatricians and eye doctors at the same time.156

During the course of proceedings the court appointed a neutral custody evaluator to conduct a custody and parenting time evaluation.¹⁵⁷ Included in the evaluator's report was the observation that the mother often presented factually inaccurate information when discussing past events in order to make her actions appear more justified. 158 Ultimately, that evaluation supported a custody change from the mother to the father. 159 In reaching that decision, the evaluator pointed to the mother's "anxious attachment parenting style" and indicating that parents falling in this category often struggle with promoting their children's development as separate individuals.¹⁶⁰ Consistent with the evaluator's findings, the court found that a material change in circumstances had occurred, and that it was in the child's best interests that the father assume primary custody of the child.¹⁶¹ This decision was supported by the mother's struggle to implement the vaccination schedule, work with the child's primary care providers, and maintain the child's therapeutic treatment. 162 The mother did not ofany expert testimony supporting her "resistance" to vaccination, nor did the court opine as to how, if at all, this would

¹⁵⁵ Id

¹⁵⁶ Id. at 1284.

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¹⁵⁸ Id. at 1286.

¹⁵⁹ Id. at 1286.

¹⁶⁰ Id

¹⁶¹ Id. at 1288.

¹⁶²

have impacted its decision to change custody to the father. However, where the issue was originally addressed prior to the parties' divorce and the parties' judgment of divorce affirmatively required that the child be vaccinated in a manner consistent with pediatrician recommendations, it is likely that the post-divorce presentation of expert evidence on the issue would not have altered the outcome, particularly where the mother's objection was described as mere "general resistance" to vaccination. 164

In contrast, in *Grzyb v. Grzyb*, the court ultimately placed sole medical decision making, including the right to determine whether the child would receive routine vaccinations, in the hands of the parent objecting to vaccination.¹⁶⁵ The circumstances of the case are as follows: over the father's objection, the mother refused to permit the parties' child to be vaccinated, citing her religious beliefs, and an exemption permitted under the Virginia Code.¹⁶⁶ On September 19, 2008, the parties had been granted shared physical and legal custody of the parties' minor child which, necessarily, included joint medical decision making.¹⁶⁷

Approximately two months later, on November 25, 2008, the father filed a motion to authorize healthcare decisions, requesting that he be granted sole decision making authority over medical and healthcare decisions for the child. The court acknowledged that, absent a material change in circumstances, the parties' existing custody arrangement would not be disturbed, but went on to say that, in these circumstances, the court had "no difficulty" finding that a material change of circumstances had occurred. In finding that a material change had occurred, the court pointed to the facts that not only had the parties been entirely unable or unwilling to resolve the issue of vaccination but, during the short two-month period of time they had shared legal custody, had been unable to agree on various other medical and healthcare decisions affecting the child, in-

¹⁶³ Id. at 1283-88.

¹⁶⁴ Id. at 1284.

¹⁶⁵ *Grzyb*, 79 Va. Cir. at 101.

¹⁶⁶ Id. at 93.

¹⁶⁷ Id. at 93-94.

¹⁶⁸ *Id.* at 93.

¹⁶⁹ *Id.* at 94.

cluding whether the child required allergy testing and whether the child should receive antibiotics for a sinus infection.¹⁷⁰ In connection with the pending action, both parties requested that they be granted the sole authority to make medical decisions for the child.

In reaching a decision, the court examined three overarching questions: (1) the parties' positions with respect to vaccination during the marriage, (2) whether the wife had a bona fide religious objection to vaccination and (3) the medical evidence before the court.¹⁷¹ With respect to the parties' position as to vaccination during the marriage, despite testimony from the father to the contrary, the court found that during the parties' marriage they were both opposed to vaccination, noting that this called into question the sincerity of the father's change of heart.¹⁷²

The court then considered the authenticity of the wife's religious objection to vaccination. The wife testified that she formed the objection while she was pregnant, stating that she "prayed about a lot" and "felt led by the holy spirit" to her belief that the parties' child should not be vaccinated.¹⁷³ She also testified that she had "never felt so strong about anything outside of faith as I do about vaccination."174 The wife's pastor also testified on her behalf. He testified that, the Baptist Church does not advocate against vaccination, rather, it is an area not specifically addressed by the Bible. 175 This would leave the decision to the individual member of the church, by applying:

the best understandings of our truth of the scripture and also the sensitivities believing as the Holy Spirit and come to a conviction about it. And that furthermore if they do come to a conviction based upon those things, that they are then obedient to that conviction because the Bible is clear that If a person has come to a conviction that they do believe is from God, that to the best of their ability that they believe that in good faith before the Lord, that if they do not then pursue that directive of that decision that they are in sin. 176

¹⁷⁰ Id.

¹⁷¹ Id. at 95-98.

¹⁷² Id. at 93, 96.

¹⁷³ Id.

¹⁷⁴ Id.

¹⁷⁵ Id.

¹⁷⁶

The pastor indicated that he had no doubt of the sincerity of the wife's beliefs in connection with vaccination.¹⁷⁷ Based upon this testimony from the wife and her pastor, the court found that her religious objection was bona fide.¹⁷⁸ Finally, the court turned to the medical evidence presented. The wife's medical expert, a Canadian neuropsychologist, was unavailable for cross-examination and, as such, his testimony was stricken.¹⁷⁹ As a result of that testimony being stricken, the husband's medical expert, a Johns Hopkins University pediatrician trained in epidemiology, preventative medicine, and infectious diseases who testified in support of administering routine vaccinations to the parties' child, was unchallenged.¹⁸⁰ With that uncontradicted evidence, it was undisputed that the parties' child would benefit from vaccination.¹⁸¹

Nevertheless, the court placed the right to make medical decisions solely with the mother, requiring only consultation with the father.¹⁸² This determination was based on the court's findings that the parties were unable to communicate regarding medical decisions; the mother had been the primary parent interacting with the child's pediatrician; the mother was in frequent contact with the child's pediatrician; the mother obtained a referral to an allergist (the father obstructed this treatment); and the father placed the child on antibiotics without consulting the mother. 183 The court noted that its only reservation with this decision was the mother's stance on vaccination.¹⁸⁴ Where the mother's objection to vaccination was largely religious in nature but the court had found this objection to be bona fide, and the Virginia Code permitted a religious exemption, it rendered the uncontroverted medical testimony in support of vaccination significant but not dispositive. 185 The court also noted that the mother's objection was limited to routine vaccination and, based

¹⁷⁷ Id

¹⁷⁸ *Id.* at 97.

¹⁷⁹ *Id.* at 98.

¹⁸⁰ Id.

¹⁸¹ *Id*.

¹⁸² *Id.* at 99-100.

¹⁸³ *Id.* at 100-101.

¹⁸⁴ Id. at 100.

¹⁸⁵ *Id*.

upon her testimony, did not extend to vaccinations that may become necessary following exposure to a specific disease. 186

In San Marco v. San Marco, a Florida case, the issue of vaccination arose not solely from parental objection but, also, parental failure to act.187 At the time of the parties' divorce the mother was awarded primary physical custody, with the parties sharing legal custody and the father having parenting time with the parties' son. 188 Subsequent to the parties' divorce, the mother filed a modification seeking to limit the father's parenting time to the weekends, claiming that the father's lack of punctuality resulted in the child being tardy to school. 189 The father counterclaimed, requesting primary physical custody, alleging that the mother was failing to provide the child with proper medical care, that the child had not been vaccinated for chicken pox, that the mother had failed to vaccinate the child in a manner consistent with applicable Broward County Ordinances, that the mother had failed to provide the father with her residential address and, finally, that the mother moved frequently.¹⁹⁰ During trial, the mother testified that her failure to vaccinate the parties' daughter against chicken pox was the result of "personal objection," offering no further explanation.¹⁹¹ Even if, arguendo, the mother had presented evidence of the philosophical objection to vaccination, however credible, this is not an exemption recognized in Florida and, thus, would have been unsuccessful.

Expert testimony in support of vaccination came from a pediatric nurse in the daughter's physician's office revealing that the mother had missed the child's measles, mumps, rubella, chicken pox, and pneumococcal vaccines and, further, attributed the daughter's contraction of numerous ear infections and chicken pox to those missed vaccinations.¹⁹² The nurse also testified that, in circumstances where parents truly object to their children receiving vaccines, there is a procedure through Broward County that must be followed, including the completion of a

¹⁸⁶ Id. at 100.

San Marco v. San Marco, 961 So. 2d 967 (Fla. Dist. Ct. App. 1997). 187

¹⁸⁸

¹⁸⁹ Id.

¹⁹⁰ Id.

¹⁹¹ Id. at 969.

¹⁹²

form, but there was no evidence that the mother completed that form, despite her alleged "personal concern" with the chicken pox vaccine.¹⁹³ During trial the mother testified that she had moved six times in four years, offered various different excuses for her failure to vaccinate and also testified that she often waited for the father to pick up their daughter for his parenting time so that he could take her to the doctor. 194 In contrast, the father had gotten remarried, had a steady job that included health insurance benefits, purchased a home in a good neighborhood and school district, had been the primary contact with the child's pediatrician and dentist and had taken the child to the dentist on more than ten occasions in comparison to the mother's once. 195 At trial, the court found that sufficient evidence was presented to support the father's claims and, based upon that evidence, including the mother's failure to vaccinate the child, found that a material change of circumstances had occurred, upon which the court switched custody from the mother to the father.196

C. Vaccination and Australian Case Law

In *Director-General, Department of Community Services; Re Jules*, the New South Wales Supreme Court ordered the parents to bring their infant son to the hospital to be immunized, after the parents had already ignored a prior court order to do the same.¹⁹⁷ The child was born prematurely and his mother was infected with the Hepatitis B virus at the time of his birth, as such, the child was already at high risk of becoming a chronic Hepatitis B carrier.¹⁹⁸ Expert medical opinion recommended that children in such circumstances receive a combination of specific injections shortly after birth, which would generally reduce risks to long-term health and avoid potentially serious and life-threatening consequences and infections and, more specifically, reduce the

¹⁹³ Id.

¹⁹⁴ *Id*.

¹⁹⁵ *Id.* at 769-90.

¹⁹⁶ Id. at 790.

Director-General, Department of Community Services; Re Jules [2008]NSWSC 1193 (2 Sept. 2008).

¹⁹⁸ *Id.* at #1.

risk of developing Hepatitis by 92% 199 When the parents opted not to have the child vaccinated, the Director-General of the Department of Community Services ("Director-General") requested, and was granted, orders from the court that the parents immediately bring the child to the hospital for administration of the vaccines, and made the child a ward of the court.²⁰⁰ The parents, yet again, did not bring the child to the hospital, and the Director-General sought another set of orders from the court requiring the parents to have the child vaccinated.²⁰¹

The court discussed its parens patriae jurisdiction, noting its responsibility to "safeguard and oversee the welfare of those who are unable to attend to their own welfare and, in particular, children."202 In its discussion the court noted that while it "endeavours to act as would a wise parent," it simultaneously would "interfere only to the minimum extent necessary," to avoid unnecessary meddling in parents' autonomy and decisions regarding the care of their children.²⁰³ However, the court admonished the parents for ignoring prior orders to immunize the child; by avoiding presentation of the child to the hospital for treatment, they essentially brought about their own desired outcome of avoiding vaccination simply by disregarding the orders.²⁰⁴ The court decided that the child would remain a ward of the court to ensure the child's best interests, "unless and until the parents demonstrate that they are appropriate persons to have and to be entrusted with parental responsibility."205

In a similar Australian case, the Queensland Supreme Court ordered a child born to a mother already infected with Hepatitis B to be immediately vaccinated.²⁰⁶ The parents stated that they were generally opposed to vaccination based on religious objections, philosophical concerns about companies' uses of vaccines for profit rather than general health and well-being, and the potential risk of infection resulting from vaccines.²⁰⁷ Therefore,

¹⁹⁹ Id. at ##1 - 3.

²⁰⁰ Id. at #4.

²⁰¹ Id. at #5.

²⁰² Id. at #7.

²⁰³ Id. at #15.

²⁰⁴ Id. at #30.

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²⁰⁶ In re H [2011] QSC 427 (Dalton, J).

²⁰⁷ Id. at 1-3 to 1-4.

even though the court was asked to order that the child be vaccinated in compliance with the generally recommended schedule of two, four, and six months old, ultimately the court stated that it would not make "more intrusive orders . . . than absolutely must be in [these] urgent circumstances," and ordered the child to be vaccinated by a doctor "as they deem reasonable in the child's interests." ²⁰⁸

In Kingsford & Kingsford, the court ordered the parents to "do all acts and things necessary to ensure that the child . . . received any and all childhood vaccinations/inoculations as are recommended" by the family doctor.209 The parents had been separated since shortly after the child's birth; the child had not been fully vaccinated according to the recommended schedule, since the mother followed a homeopathic lifestyle that did not include traditional vaccinations, while the father's new wife encouraged him to adhere to modern medicinal best-practices.²¹⁰ The father started the child's traditional course of vaccinations without informing the mother and had hoped to "secretively vaccinate the child throughout her childhood" without the mother finding out, believing that "the end justifies the means." 211 After summarizing the parents' strained relationship, the court commented that the child had been "disadvantaged" and had "suffered as a result of her parents' behaviours and rigid attitude of non-engagement," in other words, the parents had allowed their own personal grudges against one another to overshadow the need to provide for their child's health and well-being.²¹²

V. The Future

Over the past year, worldwide vaccination rates have decreased, resulting in outbreaks of vaccine-preventable diseases.²¹³ In connection with this decrease in vaccination and increase in vaccine preventable disease there have been various knock-on effects, for example, in 2018, the United Kingdom lost

²⁰⁸ *Id.* at 1-5 to 1-6.

²⁰⁹ Kingsford & Kingsford [2012] FamCA 889 at 2.

²¹⁰ *Id.* at 2-2.

²¹¹ *Id.* at 14.

²¹² *Id*.

Paumgarten, supra note 16, at 41.

its elimination status for the measles.²¹⁴ Although the incidence of unvaccinated individuals is attributable to various factors, it seems that the anti-vaccination movement is gaining strength.²¹⁵ Unfortunately, if the United States is any indicator, recent history would seem to imply that one way to combat the stream of misinformation and unsupported science propagated by those who advocate against vaccination is the outbreak of vaccine-preventable diseases.216

In recent years, in reaction to the outbreak of vaccine-preventable illness, states have tightened their mandatory vaccination laws. In 2015, following a measles outbreak in Disney Land, California removed its provision permitting a philosophical exemption to vaccines which, in the State of California, was read to include religious exemptions, leaving only its medical exemption.²¹⁷ Similarly, in response to its October, 2018 measles outbreak, New York has now removed its religious exemption to vaccination, leaving only medical exemptions to mandatory vaccination.²¹⁸ In Maine, which has the highest rate of whooping cough infection in the country, roughly half of the state's kindergarten classes do not meet the 95% necessary for effective "herd immunity."219 Maine's 2019 removal of all non-medical exemptions to vaccines, which will take effect in September of 2021, came in reaction to a series of whooping cough outbreaks across three state counties.220

Washington State, in reaction to its worst measles outbreak in two decades, is also pushing measures through its state legisla-

²¹⁴ Id. at 38.

²¹⁵ Lena H. Sun, Anti-Vaxxers Face Backlash as Measles Cases Surge, WASH. POST (Feb. 29, 2019, 7:31 PM), https://www.washingtonpost.com/nation al/health-science/anti-vaxxers-face-backlash-as-measles-cases-surge/2019/02/25/ e2e986c6-391c-11e9-a06c-3ec8ed509d15_story.html.

Id.; See also Paumgarten, supra note 16, at 41.

Paumgarten, supra note 16, at 41.

²¹⁸ Carlo Allegri, New York Eliminates Religious Exemption to Vaccine Requirements, NBC News (June 13, 2019, 5:52 PM), https://www.nbcnews.com/ health/kids-health/new-york-eliminates-religious-exemption-vaccine-requirements-n1017431.

²¹⁹ Evan Simko-Bednarski, Maine Bars Residents from Opting Out of Immunizations for Religious or Philosophical Reasons, CNN (May 27, 2019, 11:36 AM), https://www.cnn.com/2019/05/27/health/maine-immunization-exemptionrepealed-trnd/index.html.

²²⁰ Id.

ture to remove all non-medical exemptions to mandatory vaccinations.²²¹ However, encouragingly, even without the impetus of state specific outbreaks of vaccine preventable diseases, Arizona, Iowa, and Minnesota have introduced laws that would remove all personal and philosophical exemptions to vaccines.²²² Similar measures have also been introduced in Vermont and New Jersey.²²³ While these have yet to be successful, the general pattern of states removing religious and philosophical exemptions to vaccination represents a backlash against the anti-vaccination movement and, hopefully, forward progress that will result in increasing vaccination rates.

Beyond lawmakers, many social media outlets are taking steps to combat the misinformation and unsupported positions of the anti-vaccination movement.²²⁴ For example, late last year Pinterest made vaccine content unsearchable.²²⁵ GoFundMe has also banned users from using the website for the purpose of raising money to support the spread of misinformation in connection with vaccines.²²⁶ There has also been talk of Facebook removing anti-vaccine content from its recommendations and YouTube removing advertisements supporting anti-vaccination.²²⁷

VI. Conclusion

There are indications that the vaccination vs. anti-vaccination argument may be reaching a turning point, with more governments taking increasingly restrictive measures to ensure high vaccination rates to combat the precipitous decline over the past decades due in large part to the anti-vaccination movement. However, parents will continue to disagree as to whether to vac-

²²¹ Sun, supra note 215.

²²² *Id*.

²²³ Id.

²²⁴ *Id*

²²⁵ Brett Molina, *Pinterest Is Blocking All Searches on Vaccinations to Stop Spread of Misinformation*, USA Today (Feb. 21, 2019, 12:46 PM), https://www.usatoday.com/story/tech/news/2019/02/21/pinterest-blocks-vaccination-searches-halt-anti-vaxx-misinformation-spread/2938629002/.

²²⁶ GoFundMe Bans Anti-Vaxxers in Fight Against Vaccine 'Misinformation,' ABC News (Mar. 26, 2019, 11:18 PM), https://www.abc.net.au/news/2019-03-26/gofundme-crackdown-anti-vaccination-campaigns-social-media/10936724.

²²⁷ Sun, *supra* note 215.

cinate, forcing courts to adjudicate the issue. Depending on the laws of the jurisdiction in which the issue arises, parents disagreeing on the issue of vaccination will have various avenues (e.g. medical, religious, or personal philosophy objections) through which they can attack or defend a decision not to vaccinate. In deciding the vaccination issues, it appears that courts across jurisdictions are consistent in evaluating, on a case-by-case basis, the best interests of the children in the context of expert testimony for and against vaccination and the facts and circumstances of each case. Hopefully, through legislation, judicial decisions, and education of the world's citizens, truth and science will prevail and vaccination rates will continue to increase to safe and effective levels.