









VACCINATION
Fact Sheet

Exemptions to School Entry Vaccines and Corresponding Vaccine Coverage

History of School Entry Vaccines and Exemptions

The first state law requiring vaccines for children entering school was passed in 1855 in Massachusetts as a response to a deadly outbreak of smallpox.¹ By 1963, twenty states had joined Massachusetts in requiring vaccines for school entry.² Today, all 50 states and the District of Columbia require vaccines for school entry, including those for MMR (measles, mumps, and rubella), DTaP (diphtheria, tetanus, and pertussis), polio, and varicella (chickenpox).³ For a single birth-year cohort (2009) of children, school entry vaccines were estimated to prevent 20 million cases of disease and 42,000 deaths.⁴

In 1902, before school entry vaccine requirements became the norm, the city of Cambridge, Massachusetts adopted a regulation requiring all residents to be vaccinated against smallpox. A man named Henning Jacobson was issued a fine for refusing vaccination. Jacobson challenged the regulation, claiming in part that the city did not have the authority to mandate a vaccination, and that it was an infringement on his liberty. Unsuccessful in state courts, Jacobson appealed to the Supreme Court of the United States, which ruled in favor of Cambridge and established vital public health precedent that is still relied upon to this day (*Jacobson v. Massachusetts*). The Supreme Court in *Jacobson* ruled that the state law that allowed Cambridge to adopt a vaccine mandate was a valid exercise of the police power reserved to the states in the U.S. Constitution, and that "the liberty secured by the Constitution of the United States...does not import an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good." In other words, Cambridge could require residents to receive the smallpox vaccine because there was strong scientific agreement that vaccinating as many individuals in the community as possible would help curb the spread of smallpox, and the community's interest in doing so trumped Jacobson's individual objections.

Medical Exemptions

In his challenge to the Cambridge vaccination requirement, Jacobson also claimed that he was unfit for vaccination and should be exempt for medical reasons. While the Court disagreed that Jacobson was unfit for vaccination, finding no evidence to that effect, it did make clear that medical exemptions to vaccine mandates must be available. Logically, if a vaccine does more harm than good to a recipient, requiring that person to be vaccinated can no longer be justified with claims of disease prevention and health protection. Therefore, every state will exempt a child from school entry vaccine requirements if a physician certifies that sufficient evidence exists to suggest that receiving a specific vaccine would be detrimental to the child's health (the child is "contraindicated"). If medical exemptions are granted only in appropriate cases, the few children who are contraindicated (e.g., because of severe immunodeficiency), can protected by herd immunity when the rest of their peers receive their vaccines as recommended.⁷

Nonmedical Exemptions

Most states go a step further and allow nonmedical exemptions to school entry vaccine requirements. In 28 states and the District of Columbia, parents and guardians may request religious exemptions for their children if they hold religious beliefs opposing vaccination. States vary in the proof required to receive a religious exemption. The First Amendment severely limits the ability of courts to inquire into the sincerity or validity of a person's stated religious beliefs, making it difficult* for states to question a person claiming a religious exemption.⁸ Therefore, many states require only a signed form from the child's parent or guardian broadly stating that they have a religious opposition. Some, such as Vermont, require the parent or guardian to review educational materials about vaccine safety, effectiveness, and public health impact before signing the exemption form.⁹ Evidence suggests that the easier it is procedurally to receive a nonmedical exemption, the higher the rate of exemption, so policies like Vermont's could discourage exemption utilization.¹⁰

Sixteen states allow both religious and "philosophical" exemptions. Philosophical exemptions allow parents or guardians to exempt their children from vaccine requirements if they have a strongly held personal belief against vaccines. Philosophical exemptions function similarly to religious exemptions, but do not require parents and guardians to state that their beliefs are based on an established religion.

Table 1, below, lists all 50 states and the District of Columbia based on type of exemptions offered for school entry vaccines, including citations.

Table 1: Type of exemptions offered by jurisdiction

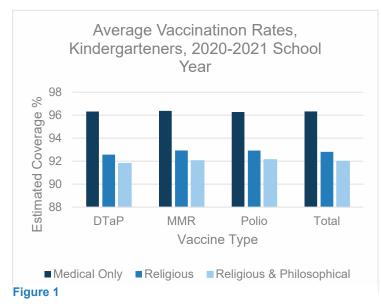
	California (Cal. Health & Safety Code § 120325,	Mississippi (Miss. Code Ann. § 41-23-37)	
Jurisdictions without Nonmedical Exemptions (6)	et seq.)	New York (NY Pub. Health § 2164)	
	Connecticut (C.G.S.A. § 10-204a)	West Virginia (W. Va. Code, § 16-3-4)	
	Maine (20-A M.R.S.A. § 6355)		
	Alabama (Ala. Code § 16-30-3)	Kansas (<u>K.S.A. 72-6262</u>)	New Mexico (N. M. S. A. 1978, § 24-5-3)
Jurisdictions with Religious	Alaska (<u>4 AAC 06.055</u>)	Kentucky (<u>KRS § 214.036</u>)	North Carolina (N.C.G.S.A. § 130A-155, 157)
Exemptions (29)	Delaware (<u>14 Del.C. § 131</u>)	Maryland (MD Code, Education, § 7-403)	Rhode Island (<u>Gen.Laws 1956, § 16-38-2</u>)
	District of Columbia (DC ST § 38-506)	Massachusetts (<u>M.G.L.A. 76 § 15</u>)	South Carolina (Code 1976 § 44-29-180)

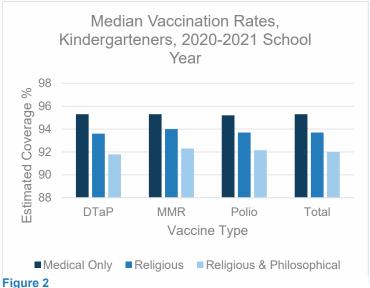
^{*} It is not impossible for a court to decide that a person's religious beliefs are insincere. In NM v. Hebrew Academy Long Beach, the court ruled that a mother's claimed religious opposition to vaccination was not connected to her faith but was instead a selective personal belief about her children's health (155 F.Supp.3d 247 (2016)). Though she was a devout Orthodox Jew, there was not enough evidence connecting her faith to her objection to vaccinating her children.

	Florida (<u>F.S.A. § 1003.22</u>)	Missouri (<u>V.A.M.S. 167.181</u>)	South Dakota (SDCL § 13-28-7.1)
	Georgia (<u>Ga. Code Ann., § 20-2-771</u>)	Montana (<u>MCA 20-5-405</u>)	Tennessee (<u>T. C. A. § 49-6-5001</u>)
	Hawaii (<u>HRS § 302A-1156</u>)	Nebraska (Neb.Rev.St. § 79-221)	Vermont (<u>18 V.S.A. § 1122</u>)
	Illinois (<u>105 ILCS 5/27-8.1</u>)	Nevada (<u>N.R.S. 392.437</u>)	Virginia (VA Code Ann. §22.1-271.2)
	Indiana (<u>IC 20-34-3-2</u>)	New Hampshire (N.H. Rev. Stat. § 141-C:20-c)	Wyoming (W.S. 1977 § 21-4-309)
	lowa (<u>I.C.A. § 139A.8</u>)	New Jersey (<u>N.J.S.A. 26:1A-9.1</u>)	
	Arizona (<u>A.R.S. § 15-872</u> , <u>874</u>)	Minnesota (M.S.A. § 121A.15)	Pennsylvania (28 Pa. Code § 23.84)
	Arkansas (<u>A.C.A. § 6-18-702</u>)	North Dakota (NDCC, 23-07-17.1)	Texas (V.T.C.A., Education Code § 38.001)
Jurisdictions with Religious and	Colorado (<u>C.R.S.A. § 25-4-903</u>)	Ohio (R.C. § 3313.671)	Utah (<u>U.C.A. 1953 § 53G-9-303</u>)
Philosophical Exemptions (16)	Idaho (<u>I.C. § 39-4802</u>)	Oklahoma (<u>70 Okl.St.Ann. § 1210.192</u>)	Washington (RWCA 28A.210.090)*
	Louisiana (<u>LSA-R.S. 17:170</u>)	Oregon (O.R.S. § 433.267)	Wisconsin (<u>W.S.A. 252.04</u>)
	Michigan (<u>M.C.L.A. 333.9215</u>)		

Comparison of Childhood Vaccination Rates by Exemption Availability

Limiting available exemptions to school entry vaccine requirements may raise vaccination rates. Data on MMR, polio, and DTaP vaccines for students entering kindergarten in the 2020-2021 school year from the Centers for Disease Control and Prevention's (CDC) "SchoolVaxView" tool were collected and analyzed to estimate the relationship between exemption availability and vaccination rates. 11† The data suggested that jurisdictions without





^{*} A philosophical objection cannot be used to exempt a student from receiving the MMR vaccine in Washington.

[†] Data for Alaska, Illinois, and West Virginia were unavailable.

nonmedical exemptions may have higher childhood vaccination rates than jurisdictions with religious exemptions, and jurisdictions with religious exemptions may have higher rates than jurisdictions with both religious and philosophical exemptions. Though the magnitude of the differences in rates varies based on what method of calculation is used, the overall relationship remains the same. Figures 1 and 2, above, depict these differences. In addition to a correlation between exemption availability and vaccination rates, a 2013 study in California found a correlation between likelihood of disease outbreak (pertussis) in children and availability of nonmedical exemptions. An older study from 2009 found that incremental increases in exemption utilization led to a significant increase in severity and duration of disease outbreak.

Although Figures 1 and 2 indicate a straightforward trend, exemption availability is not the sole indicator of vaccination rate. Organizing jurisdictions in ascending order of average vaccination rate for all three vaccines studied (DTaP, MMR, and polio) makes this clear (see Figure 2).* New York and Mississippi do not offer nonmedical exemptions and have the highest rates, but states such as Louisiana and Pennsylvania, which offer both religious and philosophical exemptions, have higher rates than the remaining states without nonmedical exemptions. In addition to exemption availability, factors such as per capita income, literacy rate, urbanization, employment status, and political leaning (see Figure 4) can also impact uptake of school entry vaccines. A Some jurisdictions may also have larger religious populations that are more likely to utilize nonmedical exemptions, and states without nonmedical exemptions may have some individuals fraudulently obtaining a medical exemptions (see below).

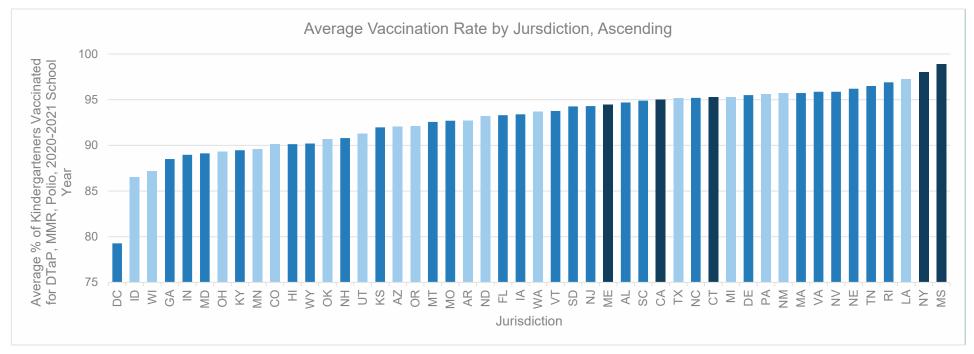


Figure 3: Average vaccination rates for all three vaccine types observed, in ascending order.

^{*} Figure 3 uses the same data as displayed in Figure 1 and Figure 2.

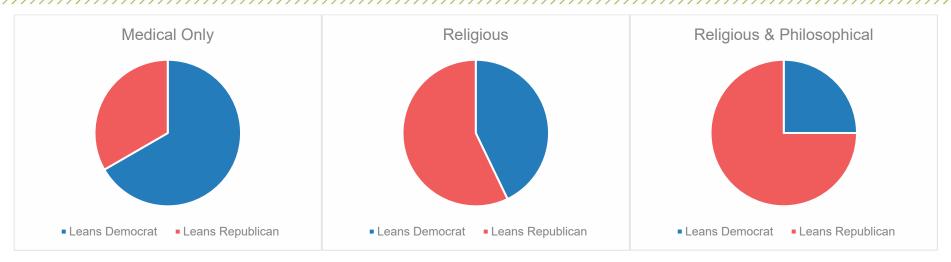


Figure 4: Portion of states in each category of exemptions leaning Democrat vs. Republican. Data from FiveThirtyEight.com, based on the 2020-2021 election cycle.

Legal and Practical Challenges to Eliminating Nonmedical Exemptions for School Entry Vaccines

Legal Challenges

Numerous legal challenges to states' lack of nonmedical exemptions to school entry vaccine requirements have been brought, but based on *Jacobson* and related precedent, courts have upheld the states' laws in every instance. Some examples are included below.

- We the Patriots USA, Inc. v. Connecticut Office of Early Childhood Development, _F.Supp.3d_ (2022): Parents challenged Connecticut's removal of the religious exemption to school entry vaccine requirements as, among other claims, a violation of the Free Exercise Clause. The court found no violation because the removal was motivated by protecting public health in response to declining student vaccination rates, not by religious animus, and the removal affected all students equally regardless of religious belief.
- Love v. State Dept. of Education, 29 Cal.App.5th 980 (2018): Plaintiffs challenged a statute that repealed California's personal belief exemption to school vaccination requirements on state constitutional grounds. The court denied all of plaintiffs' claims, including claims based on the right to bodily autonomy and to refuse medical treatments, the rights to make decisions as parents, privacy, public education, and free exercise of religion, finding the repeal of the exemption did not violate any of these rights.
- V.D. v. State, 403 F.Supp.4d 76 (2019): Parents of children with disabilities claimed the removal of the religious exemption to school vaccination requirements violated the Individuals with Disabilities Education Act by preventing their children, who had not been vaccinated and had previously been attending school with religious exemptions, from accessing the special education and other services they needed. Based on the "ample discretion afforded to states to protect [public health]" and the general applicability of the vaccine mandate, the court disagreed with the parents. Parents also claimed New York did not have authority to remove the religious exemption and again the court, citing Jacobson, disagreed.

Practical and Implementation Challenges

Numerous studies and news articles cite concerns regarding over-utilization of medical exemptions in states without nonmedical exemptions, indicating that simply eliminating nonmedical exemptions may not be sufficient to encourage increases in school entry vaccination. ¹⁵ To combat this, states and individual

school districts can subject medical exemption requests to third party review, and/or strengthen the language defining a medical exemption. Examples of these approaches can be seen in New York and California.

Before New York removed its nonmedical exemptions to school entry vaccination, the state had a regulation in place that required medical exemptions to "[contain] sufficient information to identify a medical contraindication to a specific immunization," and allowing school principals to "require additional information supporting the exemption." This allows a school to deny entry to a child whose medical exemption certification lacks sufficient detail about how their condition would be affected by vaccination, and/or when the physician recommending against vaccination has views inconsistent with the consensus within the medical field. In *Lynch v. Clarkstown Cent. School Dist.*, the medical exemption request of a student with a disability was deemed to have been rightfully denied after the district's Chief Medical Officer independently investigated side effects of vaccines in children with that disability and consulted with national experts, concluding that the child's condition did not prevent her from being vaccinated. ¹⁷

After New York removed its nonmedical exemptions in 2019, the State Commissioner of Health adopted further regulations to prevent medical exemptions from being overutilized. These regulations defined when a vaccination "may be detrimental to [a] child's health" and could therefore merit a medical exemption. A vaccine may be detrimental to a child's health if "a physician has determined that a child has a medical contraindication or precaution to a specific immunization consistent with [Advisory Committee on Immunization Practices (ACIP)] guidance or other nationally recognized evidence-based standard of care." In a constitutional challenge, a U.S. District Court upheld the regulation, finding that "the medical exemption is reasonably related to the State's public health objective: to sustain a high vaccination rate," and "the regulation seeks to ensure that medical exemptions are issued for medical reasons based on evidence-based guidance."

After California removed its nonmedical exemptions to school entry vaccines in 2016, the state saw a "dramatic increase in medical exemptions." In response, the state legislature passed a law in 2019 that made changes to medical exemption regulations to ensure that only valid exemptions were granted. The change in law:

- requires physicians to use a standardized online form to grant medical exemptions;
- grants the California Department of Public Health power to review exemption forms submitted to schools with low immunization rates, forms submitted by physicians with more than five medical exemptions in one year, or forms submitted to schools that have not reported their immunization records;
- allows the state Public Health Offer to revoke medical exemptions that do not align with CDC or other similar guidelines for exemptions;
- revokes medical exemptions issued before January 1, 2020, if the issuing physician has been subject to disciplinary action by the Medical Board or Osteopathic Medical Board; and,
- subjects physicians with questionable records of granting medical exemptions to review by the state Medical Board.²¹

Parents of a California high school student challenged this 2019 change to medical exemptions.²² The student had her medical exemption revoked because the issuing physician had been subject to disciplinary action, and her current physician refused to issue a new exemption. The student's parents claimed the 2019 change violated their Fourteenth Amendment rights to parental choice, bodily integrity, and informed consent. The court disagreed, citing *Jacobson*. The parents also challenged the 2016 revocation of nonmedical exemptions, make First Amendment free exercise of religion claims which the court also rejected.

Equity Implications of School Entry Vaccine Exemptions

Utilization of nonmedical exemptions to school entry vaccine requirements is more prevalent in communities with larger White populations and higher median income, and in private schools.²³ However, the highest rates of under vaccination exist in schools with higher Black populations and more families with low income.²⁴ This discrepancy may be explained by barriers to compliance with requirements, where families are neither vaccinating their children nor seeking exemptions. The state of Washington, for example, audited selected school districts in 2019 to investigate causes of low vaccine uptake and identified issues such as "limited access to vaccination resources and language barriers that contribute to poor understanding of requirements."²⁵ Although providers can make

required vaccinations available to uninsured and underinsured children at no cost through the federal Vaccines for Children program, 26 children not covered by insurance might have decreased access to providers to administer the vaccines. School administration must also be actively involved in educating parents and tracking and enforcing the vaccine requirements, which requires resources underfunded schools may be unable to dedicate. Language barriers between the practitioners administering vaccines and parents can lead to confusion on what is required of parents, and significantly restricts the ability of the parties to have an open and educational conversation about the safety, risks, and side effects of vaccines. It is therefore not surprising that parents of children in lower income areas and/or with more racial and ethnic diversity do not take the extra step of seeking an exemption as often as their White and/or higher-income neighbors. So, while the existence of exemptions does not directly harm or target children in families with low incomes or Black children, the difference between demographic trends in exemption utilization and vaccination rate highlights the need for targeted, school-based interventions to increase compliance.

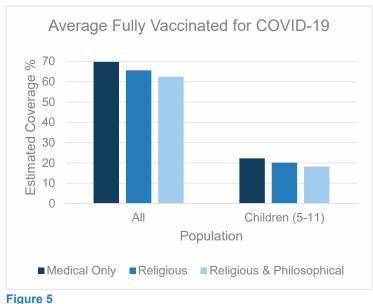
School Entry Vaccines and COVID-19

COVID-19's Impact on School Entry Vaccination Rates

The pandemic has influenced individuals' daily health behaviors and brought virtual interactions into arenas such as school, work, and even health care visits. With a decrease in pediatrician's visits, in part due to fear of the spread of COVID-19,27 the pandemic has also led to a decrease in childhood vaccination rates. In Southern California, an examination of childhood vaccination rates during the same time periods in 2019 and 2020 showed a decline for all children in vaccine uptake during the pandemic. 28 In Michigan, fewer than half of children aged 5 months were considered up-to-date for all recommend vaccines in May 2020 (a reduction from approximately two-thirds of children during 2016–2019 for the same age group).²⁹ To alleviate this decrease in vaccine uptake, some health care providers conducted drive-thru or mobile vaccination campaigns. 30 The decrease in vaccination rates during the pandemic brings forth real concern for an increase in vaccine-preventable outbreaks.

Exemption Availability and COVID-19

Studies indicate that the vaccines for COVID-19 have slowed the pandemic and prevented deaths all over the world.31 However, vaccine distribution has not occurred without roadblocks such as vaccine hesitancy and antivaccine conspiracy theories, so improving vaccination rates is crucial to continue saving lives. School entry vaccine exemptions may play a role in doing so: there is a correlation between state policy regarding exemptions for school entry vaccine requirements and COVID-19 vaccine uptake for



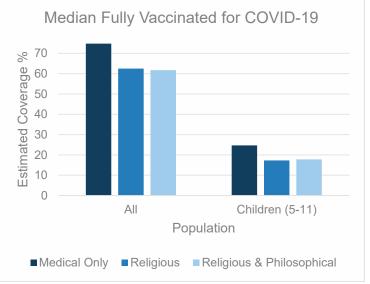


Figure 6

both school-aged children and the general public. As seen in Figures 5 and 6, above, the trend in vaccination rates for both the general public ("All") and school-aged children ("Children (5-11)") seem to follow the trend seen in Figures 1 and 2.³² Generally, more people living in jurisdictions that do not permit nonmedical exemptions to school entry vaccine requirements have been fully vaccinated for COVID-19 than people in jurisdictions with religious and/or religious and philosophical exemptions. * However, many factors, such as political leaning, information availability, social influence, or simple lack of availability or access, can impact COVID-19 vaccination rates. ³³

Conclusion

Vaccine requirements for school entry have a long history dating back to the 19th Century. States requiring vaccinations for certain vaccine-preventable diseases as a condition for school entry has decreased disease incidence and mortality across the country, and the fewer exemptions a jurisdiction offers for these types of vaccines, the higher the childhood vaccination rate tends to be. Jurisdictions offering fewer exemptions for school entry vaccines also tend to have higher COVID-19 vaccination rates. However, due to a recent decline in vaccination rates, the risk of a vaccine-preventable disease outbreak has increased. Laws and policies that make vaccination access more equitable and remove or make it more difficult to obtain non-medical exemptions to school entry vaccine requirements can lead to increased uptake of vaccines for many communicable diseases.



SUPPORTERS

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New Orleans, Louisiana is requiring students to be vaccinated for COVID-19 before entering school starting with the 2022-2023 school year.

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