

Strengthening Childhood Immunization Laws

Vaccines are one of the most practical clinical preventative medicine interventions.¹ They have had a tremendous impact on preventing diseases, saving lives, and improving life expectancy. There has been an overall decrease in infectious disease mortality largely due to immunizations.² According to one estimate², a yearly cohort of vaccinated children in the United States who follow the routine immunization schedule save 33,000 lives. In addition, there was a prevention of 14 million cases of disease, a reduction of direct healthcare costs of \$9.9 billion, and a saving of \$33.4 billion in indirect costs.²

While all 50 states have mandates for childhood immunizations, medical and non-medical exemptions exist and increasing use of non-medical exemptions are contributing to declining immunization rates. Coverage levels are not reaching national goals.³ As such, states have important roles in determining immunization policies. Efforts to improve vaccination rates vary by state and many states are opting for legislation and using a “continuum of tools” to advance policy reform.⁴

Many vaccine preventable diseases have not been seen in developed countries for many years due to the protective nature of immunizations. This is changing as pockets of unvaccinated communities in the United States cause incidences of diseases to rise each year. For example, from January 1, to April 26, 2019, 704 individual cases of measles had been confirmed in 22 states. This is the greatest number of cases reported in the U.S. since 1994 and since measles was declared eliminated in 2000. Similarly, leading up to the introduction of the pertussis vaccine, the CDC reported an average of 175,000 cases in the United States per year; the rates dropped to a low of 2,900 cases, but have gradually risen to 48,277 cases in 2012.⁴

All 50 states have legislation requiring vaccination prior to public primary and secondary entry.⁵ The legal framework for mandatory immunization is set by the landmark 1905 U.S. Supreme Court case of *Jacobson v. Massachusetts*.⁴ The Supreme Court held that the government could compel vaccination to prevent life-threatening contagious disease even in the face of restrictions of liberty.⁴ This landmark case remains good and intact law today. Across the states, there are three types of legal exemptions to vaccination requirements: medical exemptions, religious exemptions, and personal/ philosophical exemptions. All states have medical exemptions: documentation and certification that a specific vaccine is medically contraindicated. Parental concern about the health effects of vaccines are generally not sufficient to qualify. Forty-seven states have varied forms of religious exemptions; Mississippi, West Virginia, and California do not. Courts have upheld the constitutionality of all three state policies. Eighteen states allow philosophical exemptions for those who object to immunizations because of personal, moral or other beliefs.⁵

As non-medical opt-outs become more prevalent, states are pushing back with legislation aimed at increasing rates of immunization. Policies range from elimination of nonmedical exemptions to procedural tightening to increasing education. This continuum of policy choices highlights the challenge of balancing personal decisional autonomy/ parental choice with the good of the public health; from voluntary policy strategies to mandates/and perceived coerciveness. A number of states have embarked on a number of these varied strategies. An example of a more restrictive policy is California's. Motivated by the high profile Disneyland measles outbreak in 2014, what initially started

as an attempt to target complacent parents by allowing non-medical exemptions to occur with proper documentation, turned into a total elimination of non-medical exemptions.⁶ There is preliminary data that support immunization gains, but it is too soon to say for sure, as the implementation began in the 2016-17 school year.⁶ However, there are unintended consequences of eliminating exemptions, as a health policy. For example, some clinicians, who disagree with the ruling, may make fraudulent claims for medical exemptions, as evidenced by the tripled rate of medical exemptions since the law's passage.⁶ In another example, while state immunization laws often apply to private schools, there is some evidence that financially vulnerable private schools may decide to not enforce the requirements and look the other way in order to receive the child's tuition from parents who refuse to vaccinate.⁶ Additionally, while it has been tradition for bipartisan support for vaccine legislation, this policy has led to the further cultivation of political polarization, as evidence by one political party largely supporting the measure, with the other much less so.

On the other side of the continuum, Washington State, in face of increasing nonmedical exemptions, passed a law in 2011 that sought to tighten procedures and exemptions by reducing the convenience of nonmedical exemptions and increasing public awareness about the safety and efficacy of immunizations.⁶ Obtaining a nonmedical exemption was made more difficult by making parents discuss the risks/ benefits of vaccines with a physician before a nonmedical exemption is permitted. The overall goal was to increase public awareness through having a visit with the physician. This policy benefited from a large swath of bipartisan support. After the law was implemented, vaccine coverage for all required vaccines for school entrance increased, as well as "a relative decline of more than 40% nonmedical exemptions" was seen.⁶ Interestingly, geographic clustering of non-vaccinated children decreased (preliminary data from California suggests increased clustering of non-vaccinated children).⁶ Similar proposals in other states have seen parallel results: In Michigan, a standard process for vaccination exemptions that included discussions with clinicians resulted in a 35% decrease in opt-outs of vaccines in just one year.⁷ A survey in Ohio showcased the factors that most influenced a parent's decision to vaccinate: the doctor's recommendation, knowing why they should get vaccines, and knowing which vaccines they need,⁸ all of which support need for increased conversations with medical providers.

As overall immunization rates continue to decline in the United States, the costs and risks to society increase. Our country will bear the tremendous burden of children suffering serious illness and death from vaccine-preventable illnesses if we do not act. While tougher mandates may be more effective in increasing immunization rates, these policies can have profound unintended consequences in terms of social conflict and the appearance of coercion. There have been clear lessons from early state trials. It appears that recommending adding parental counseling as a requirement for non-medical exemptions should be the basis for any vaccine policy reform. Policy makers will need to strike the right balance between liberty and perceived coercion.

References

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