



[Secular Coalition for Maryland](http://secular.org) Secular Coalition for  
America <http://secular.org>

---

February 12, 2020

The Honorable Shane E. Pendergrass

Health, Government Operations, and Judiciary Committee

Room 241, House Office Building

Annapolis, MD 21401-1991

Re: SUPPORT HB0087 SB0135 Public Health - Immunizations - Minor Consent (Access to  
Vaccines Act)

Chairwoman and Members of the Committee:

Education Article §7–403 and Health - General Article §18–403 declares that parents can refuse to immunize their children by claiming a conflict with their religious beliefs. Such exemptions place innocent children who are denied vaccinations at risk of suffering serious, long term, health impairments. Health - General Article §18–403 also allows adults to refuse vaccinations by citing religious beliefs. Anne Arundel county has been ranked 37th among the counties most likely to experience measles outbreaks in 2019 [Measles resurgence in the USA: how international travel compounds vaccine resistance. The Lancet Infectious Diseases, 2019; DOI: 10.1016/S1473-3099(19)30231-2].

In the mid-1950s the United States had 15,000 cases of paralysis and 1,900 deaths a year from polio. In the early 1960s the United States experienced an outbreak of rubella that resulted in 20,000 children being born with brain damage. In the 1970s, smallpox left many survivors blind, maimed, or brain damaged. Diphtheria, which produces a gray membrane of dead cells in the throat that can block a child's windpipe, causing death by suffocation, killed more than 3,000 young Americans one year in the mid-1930s. Prior to the 1990's there were 20,000 cases of

Haemophilus Influenzae Type B, a major cause of childhood meningitis, pneumonia, and sepsis, sometimes resulting in permanent hearing loss, intellectual deficits, motor deficits. A Rotavirus vaccination now prevents 40,000 to 50,000 hospitalizations of U.S. infants and toddlers every year.

In 2000 the United States declared that measles was eliminated from this country. Yet there have been more measles cases in the United States in the first five months of 2019 than there were in all of 1992 when the last large outbreak occurred. Ongoing measles outbreaks around the world mean that the virus is likely to continue to be brought into the United States. The high U.S. numbers are explained mostly by parental resistance to vaccines.

People have tendencies to miscalculate risk and harm. The “identifiable victim effect” labels the tendency of people to fixate on an unusual example of harm to one specific person over the diminished harm to millions. The “omission bias” labels the tendency of people to prioritize the harms our actions caused over the harms our actions prevented. The “ambiguity aversion” labels the tendency to hold out for an unachievable “100% safe” standard. There are tendencies to favor anecdote over statistics and to prioritize numerators over the “per million vaccine doses” denominators. These illogical, yet common, cognitive asymmetries favor opposition to vaccinations.

In the U.S., children with personal belief exemptions are 35 times more likely to contract measles than properly vaccinated children. Among high-income countries, the United States tops the list of those with the largest numbers of kids who have not received the measles vaccine. UNICEF, the United Nations Children’s Fund, reports more than 2.5 million U.S. children went unvaccinated against the virus from 2010 to 2017. The more people who are unvaccinated, the higher the risk that communicable disease outbreaks will occur and spread, with an additional risk for the disease morphing into a new strain that renders the existing vaccines or treatments less effective. For the most contagious diseases, vaccinating 92-95% of group members confers some protection on unvaccinated members. However, people often move from one “herd” to another. Unimmunized children are not always randomly distributed throughout a state nor are they always surrounded by vaccinated persons.

Infants typically receive their first measles vaccination after age one because antibodies from their mothers inhibit their response to the vaccine before then. When people do not get vaccinated they put at risk infants who are too young to begin getting their shots and those who, for medical reasons, are not vaccinated. They then also pose a risk to properly vaccinated persons whose immunity is compromised without their awareness of it. The second measles shot, which also protects against mumps, rubella, and chickenpox, is given at age four. An analysis of numerous studies and reports finds that unvaccinated or undervaccinated individuals comprised substantial proportions of cases in measles and pertussis outbreaks, and vaccine refusal was associated with an elevated risk for measles and pertussis, including among fully vaccinated individuals, according to a study appearing in the March 15 2016 issue of the Journal of the American Medical Association.

Measles, which can cause permanent deafness or encephalitis, erases some of the immune system's memory of past infections. Following measles, previously healthy kids lose on average about half — and as much as 73% — of their overall antibody diversity. The resulting “immune amnesia” leaves people vulnerable for 2-3 years to other viruses and bacteria that cause pneumonia, ear infections and diarrhea, thereby facilitating the spread of other infectious diseases. When the measles vaccine was introduced in the U.S. in the 1960s rates of childhood deaths from other diseases fell precipitously. The measles virus can linger on surfaces or remain in the air for up to two hours, and is more contagious than smallpox or the flu. An infected person can begin spreading the virus four days before getting the rash. The American Academy of Pediatrics has called for states to [discontinue nonmedical exemptions to immunizations](#).

Vaccines prevent two million to three million deaths globally each year. The Red Cross estimates that 315 children die each day from measles, one of the most infectious diseases known. A study by the European Centre for Disease Prevention and Control (ECDC) examined all 37,365 measles cases reported to the ECDC from 1 January 2013 through 31 December 2017. The researchers found 81% of all reported cases were patients who were not vaccinated. 9% were one year old and 10% younger than one year. Six in 1,000 measles patients who were one year old died and seven in 1000 of those under one year old died. During the first half of 2019 there were 90,000 people infected by measles compared with 44,175 for 2018 in the European region. Germany now imposes a fine on parents of several thousand euros for a failure to vaccinate their children. In 2019 the World Health Organization declared vaccine hesitancy a top-ten international public health problem. Overall there are seven million cases and 100,000 deaths from measles each year.

Every US dollar spent on childhood immunization returns up to \$44 in benefits. A March 10, 2015 poll of the Initiative for Global Markets Economic Experts Panel reveals 95% agreement that “the social benefit of mandating measles vaccines for all Americans (except those with compelling medical reasons) would exceed the social cost” and unanimous agreement that “declining to be vaccinated against contagious diseases such as measles imposes costs on other people, which is a negative externality”. Sometimes the benefits of vaccination extends beyond the vaccine's target. RotaTeq is highly effective in protecting against five strains of rotavirus, a highly contagious virus that can cause severe illness and death in infants and young children. Children who received three doses of RotaTeq were 33 percent less likely to have Type 1 diabetes according to a study published in Scientific Reports.

According to the CDC, almost twice as many children are exempted from vaccination in Maryland for religious beliefs than for medical reasons and the rate of unvaccinated kindergartners in Maryland has nearly doubled since 2009. States have no legal obligation to grant vaccination exemptions because vaccination is a public safety issue. California, Maine, Mississippi, New York, and West Virginia do not allow non-medical vaccination exemptions. Virginia allows non-medical exemptions only for HPV vaccines.

The Supreme Court's long standing jurisprudence on the duty of the State to the children under its protection can sometimes place the interests of children over the free exercise of their parents. **Jacobson v. Massachusetts**, 197 U.S. 11 (1905), was a U.S. Supreme Court case in which the Court upheld the authority of states to enforce compulsory vaccination laws. The Court's decision articulated the view that the freedom of the individual must sometimes be subordinated to the common welfare and is subject to the police power of the state. In **Adams v. Milwaukee**, 228 U.S. 572, 581-82 (1913), the Supreme Court reaffirmed Jacobson's holding that states may delegate the power to order vaccinations to local municipalities for the enforcement of public health regulations. In **Zucht v. King**, 260 U.S. 174, 176 (1922), the Supreme Court held that vaccination laws do not discriminate against schoolchildren to the exclusion of others similarly situated, i.e., children not enrolled in school. In **Prince v. Massachusetts**, 321 U.S. 158 (1944), the Supreme Court concluded that "the right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death". The Mississippi Supreme Court has held that religious exemptions to mandatory vaccination violate equal protection rights under the Fourteenth Amendment because the exemptions "require the great body of school children to be vaccinated and at the same time expose them to the hazard of associating in school with children exempted under the religious exemption who had not been immunized as required by the statute." **Brown v. Stone**, 378 So.2d 218, 223 (Miss. 1979).

Mandatory immunization qualifies as a "compelling state interest" that is "narrowly tailored" and uses the "least restrictive means" to achieve this purpose. **McCarthy v. Boozman**, 212 F. Supp. 2d 945, 948 (W.D. Ark. 2002) "The constitutional right to freely practice one's religion does not provide an exemption for parents seeking to avoid compulsory immunization for their school-aged children." **Sherr v. Northport-East Northport Union Free Sch. Dist.**, 672 F. Supp. 81, 88 (E.D.N.Y. 1987) "[I]t has been settled law for many years that claims of religious freedom must give way in the face of the compelling interest of society in fighting the spread of contagious diseases through mandatory inoculation programs." **Davis v. State**, 294 Md. 370, 379 n.8, 451 A.2d 107, 112 n.8 (Md. 1982) "Maryland's compulsory immunization program clearly furthers the important governmental objective of eliminating and preventing certain communicable diseases." Judge Kevin F. Arthur wrote in a 3-0 August 2019 decision by the COURT OF SPECIAL APPEALS OF MARYLAND (In Re: K.Y-B) "In light of the serious risks of harm to infants from infectious diseases, and the effectiveness of the preventive immunizations that authorities on pediatric disease say should be administered beginning within hours of birth, the juvenile court did not abuse its discretion in concluding that the state's compelling interest in protecting the health of the child outweighs [the] mother's belief that vaccination contravenes her faith."

In 2014 there were many areas in California with low vaccination rates. 70% of children were in counties with less than 95% vaccinated, 36% in counties with less than 90% vaccinated. Some schools had vaccination rates in the low teens. Students without vaccinations were admitted "conditionally", most frequently in poorer districts, or given a formal "personal belief exemption".

California eliminated the personal belief exemption and tightened the rules for conditionally admitting students in 2016. In 2016, 97% of children were in kindergartens with at least 95% of students vaccinated, 99.5% were in kindergartens with over 90% vaccinated. There was no overall change in school enrollment even in those schools that experienced the biggest increase in vaccinations. Vaccine rates increased from 92.8 percent in 2015 to 95.1 percent in 2017 following the bill's passage, according to a study by the National Institutes of Health. Another study by Nathan Lo of the University of California, San Francisco, and colleagues, published PLOS Medicine, found MMR coverage in California increased by 3.3% over what the projected MMR coverage in California would be in the absence of the policy, with the largest increases seen in "high risk" counties with the lower pre-policy vaccination coverage. Non-medical vaccination exemptions decreased by 2.4% and medical exemptions increased by 0.4%. After a similar outbreak in Michigan, health officials there began requiring individuals to formally consult with their local health departments before opting out of otherwise-mandatory shots and as a result the vaccination rate went up.

Although critics call these policies harsh, the outcome from a willful failure to vaccinate is harsher. Over the past dozen years, out of 126 million doses of vaccines against measles in the United States, 143 claims of harm from the vaccinations were compensated according to the National Vaccine Injury Compensation Program. Over the past three decades, 6,600 people were compensated for harm, many of them adults for the flu vaccine, and 70% of those were settlements in which the program officials did not find sufficient evidence to conclude that the vaccines were at fault. In 30 years about 520 death claims were compensated, half of those for an older whooping cough vaccine that is no longer used. A CDC study in 2016 looked at 25.2 million vaccinations over a three-year period and found 33 cases of severe vaccine-triggered allergic reaction—1.3 cases per million vaccine doses. In contrast, the Centers for Disease Control and Prevention estimates that 21 million hospitalizations and 732,000 deaths among children were prevented by vaccinations in the United States alone over a 20-year period. According to the C.D.C., 1-2 of every 1000 people with measles die, and 1 in four people who get measles are hospitalized. The risk of brain damage by measles is 10,000 times greater than by vaccination.

A recent study [Filippo Trentini, Piero Poletti, Alessia Melegaro, Stefano Merler. The introduction of 'No job, No school' policy and the refinement of measles immunisation strategies in high-income countries. BMC Medicine, 2019; 17 (1) DOI: 10.1186/s12916-019-1318-5] concluded that the UK, Ireland and the US would strongly benefit from the introduction of compulsory vaccination at school entry in addition to current immunisation programmes. According to computer simulations, this strategy would allow to reach stable herd immunity levels in the next decades to avoid future outbreaks.

Nursing homes, assisted living facilities, and residential treatment centers in Maryland must respect a patient's wishes to refuse influenza or pneumococcal vaccination. These illnesses can be fatal to the elderly. Accordingly, such institutions should be granted legal authority to administer these vaccinations without first obtaining the consent of the patient. Also,

unscrupulous physicians grant bogus medical exemptions. To address this problem all applications for medical exemptions should require approval of the state health department which should be required to follow the C.D.C. Advisory Committee on Immunization Practices guidelines.

If Maryland is going to continue to allow non-medical vaccination exemptions then Maryland should at least authorize adolescents to self-consent to these vaccinations when their parents withhold consent. As of January 2011, the United States Advisory Committee on Immunization Practices recommends that all teens between ages 11 and 17 receive at least 13 doses of four different vaccines. Furthermore, some adolescents also need catch-up doses of vaccines missed during childhood.

Similarly, if Maryland is going to continue to allow non-medical vaccination exemptions then the laws and regulations in Maryland should at least make it more difficult to obtain an exemption. Four other states have passed laws requiring parents to listen to or watch medically accurate information about vaccines before being granted a belief exemption from immunizations for their children. A study by the University of Colorado Anschutz Medical Campus titled "Impact of Non-Medical Vaccine Exemption Policies on the Health and Economic Burden of Measles" published in *Academic Pediatrics*, 2017; DOI: 10.1016/j.acap.2017.03.001, concluded that states with weaker non-medical exemption policies for vaccinations can reduce the likelihood of a measles outbreak 140 to 190 percent by strengthening them.

Currently, Maryland requires that a parent provide a health history of their child and sign a statement indicating that to the best of the parent's knowledge and belief, their child is in satisfactory health and free from any communicable disease. Maryland could also require a notarized letter elaborating on the reason behind the exemption request, require a signature on a document explaining the public safety risks that can only be obtained from the state health department (not from the Internet), mandate in-person counseling and viewing of a film, require that parents acknowledge their responsibility for keeping their children away from school during outbreaks, require annual renewals of all vaccination exemptions, and impose meaningful penalties on anyone who violates these requirements.