

I am submitting this testimony today as a pediatric infectious disease physician to urge you to maintain current vaccine laws, limiting religious and philosophical exemptions to vaccines, in schools. Vaccines are arguably the most important public health intervention to protect children's health, as well as the health of the public at large. Vaccines have, in many cases, been the victim of their own success. It is easy to assume that polio no longer exists, that measles is nothing but a slight rash, and chickenpox is no big deal, but that is most definitely not the case.

In my career, during the past 15 years, I have seen an unvaccinated healthy child die of pertussis, commonly known as whooping cough. I have seen healthy children with brain inflammation due to chicken pox. I have seen children lose limbs due to meningococcal meningitis. In recent months, measles and polio outbreaks have occurred in the United States. These are diseases that have been all but eliminated from our repertoire in the US, but are on the rise again because of vaccine refusal. All of these cases I describe were entirely preventable with vaccines, the exact vaccines that Maine has encouraged under current vaccine law.

Those supporting religious and philosophical vaccine exemptions argue that this is a personal choice. It is argued that if our own children are vaccinated, why should we worry about others choosing not to vaccinate? As a physician, I do worry- I worry for the child with leukemia who cannot receive the chickenpox vaccine due to their immune compromised state, the preterm infant who has been exposed to whooping cough and ends up in the intensive care unit as they are too young to receive the vaccine, the grandparent undergoing cancer therapy, and others, for whom any of these vaccine preventable illnesses would be dangerous or deadly.

Our population relies on herd immunity to protect the most vulnerable, and prior to elimination of the philosophic and religious vaccine exemption, Maine was dangerously close to losing that ability. Measles, which can be fatal, requires 95% of the population to be vaccinated to prevent community spread. Polio has a herd immunity threshold of 80%. Public health requires public participation, to eliminate catastrophic infectious diseases.

Our schools also rely on herd immunity to keep schools open and functioning. One case of chickenpox in the schools causes not only the infected student to miss school for approximately 5 days, but any unvaccinated children to miss schools until 21 days after the latest school case of chickenpox, meaning that unvaccinated children can miss 3 or more weeks of school. When 15% or more of a school has an infection, an outbreak is declared, leading to more investigation, and potentially a short term school closure. Our students do not need to miss school when there are safe and effective vaccines available for childhood illnesses.

Current Maine law does not eliminate medical exemptions-if a child has a medical contraindication to a vaccine, they are still able to be exempt. The current law also does not pertain to all vaccines-most notably it does not include influenza, SARS-CoV-2, or HPV vaccines. Although pediatricians agree that all vaccines are important, there is still a great deal of parental choice in vaccines under the current statute, and the current law protects children from medical contra-indications to vaccines, while continuing to allow for herd immunity, keeping schools open and protecting the most vulnerable. Please allow this effective public health measure to stand, and continue to allow for medical exemptions only for vaccines against childhood illness.

Thank you,

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