

February 14, 2021

Dear Senator Abrams, Representative Steinberg and members of the Public Health Committee,

I am writing **in support of HB 6423 and SB 568**. I am a pediatrician who provides care to patients in the north end of Hartford, an Assistant Professor of Pediatrics at the University of Connecticut School of Medicine and the President-Elect and Immunization Representative for the CT Chapter of the American Academy of Pediatrics- an organization with membership of over 600 pediatricians and other healthcare providers.

As pediatricians we dedicate our lives to the well-being of children. We are allies for parents and their children and are always putting the health and well-being of children first. At times we are putting their needs ahead of our own, and our own families, and we have made a commitment to our profession to do just that. We do not take any decisions we make for our patients lightly and we practice evidence-based medicine. **As physicians and scientists, we know that vaccines are safe and effective and we view immunizations as a public health issue.** We are strong advocates for preventive medicine and immunizations are one of the best methods we have to prevent diseases and their complications.

While my job is to provide healthcare to children, your job is to set policy. When we elect you as our legislators, we expect that you will do this in a thoughtful manner, looking to subject matter experts and professionals in the field when faced with something that is not in your area of expertise. We have seen that when policy is written reactively, and the outcome is often rushed and not well thought-out, or is forced to implement extreme measures, that it falls short. We have the opportunity to be proactive, to collaborate and to learn from other states that have recently implemented similar policy changes to **strengthen the public health system** and still allow for choice.

The release of school level immunization rates across the state in 2019 was a wakeup call to parents, healthcare providers and policymakers.¹ This data highlights the false sense of security we have surrounding herd immunity. While our statewide average is sufficient, we have too many locations across the state where we fall well below the required level, increasing susceptibility to children who are too young to be vaccinated, have true medical reasons for being unable to receive vaccines, as well as those who chose to go unvaccinated and rely on herd immunity.

Various researchers have published studies that show the outbreaks of vaccine preventable diseases in recent years can be traced to pockets of unvaccinated children

in states that allow non-medical exemptions.^{2,3,4} News reports also corroborate this is an ongoing issue across the country.^{5,6}

In 2008 researchers from Johns Hopkins Bloomberg School of Public Health published in the American Journal of Epidemiology a study on geographic clustering of nonmedical exemptions and associations with geographic clustering of pertussis- (looked at data in Michigan from 1993- 2004). What they said at the time, in 2008, over 10 years ago is something we should have listened to then and should certainly heed now - The overlap of exemptions clusters and pertussis clusters remained significant after adjustment for population density, proportion of racial/ethnic minorities, proportion of children aged 5 years or younger, percentage of persons below the poverty level, and average family size (odds ratio = 2.7, 95% confidence interval: 2.2, 3.3). Geographic pockets of vaccine exemptors pose a risk to the whole community. And this last sentence is one we should really pay attention to: In addition to monitoring state-level exemption rates, health authorities should be mindful of within-state heterogeneity- or local pockets of increased exemption rates.⁷

This is the reason **pediatricians are supporting removal of non-medical exemptions** in Connecticut. While we are not at a crisis point, we are certainly at risk for an outbreak in one of the under-vaccinated areas and we are heading in the wrong direction with rising levels of non medical exemptions year over year.

What we just saw in New York City in 2019- over 600 cases of measles (out of 1282 cases across the whole country) can very easily occur in Connecticut- in a town like Canterbury, Easton, Fairfield, Madison, Milford, Ridgefield, Stafford, where immunization rates in schools are too low to provide herd immunity and an outbreak can occur. This outbreak led to New York authorities mandating vaccines for everyone, fining people if they didn't vaccinate and banning people from public spaces. Seemed like quite a severe reaction in 2019, but as we now live through a pandemic we can understand why they took those actions. In Connecticut we have a very small window where we can remain at or above the level for herd immunity in a community for diseases like measles and still allow people to have some choice. There is a consequence of that choice- restriction from school settings in order to ensure a safe learning environment for children who are unable to be vaccinated for a medical reason, but choice is still there.

Opposition to vaccines has been around for as long as vaccines have been in use. When smallpox vaccine was first developed people opposed it for fear of their children becoming part cow due to use of the cowpox virus in the vaccine. They did not. The Anti Vaccination Society of America was founded in 1879 in opposition to the smallpox vaccine based on many of the same premises you will likely hear today-(unfounded concerns that vaccines cause other diseases, that ingredients are toxic or poisonous, that there is some type of cover up surrounding vaccines, that there is government intrusion/infringement of rights, that vaccines are ineffective).⁸ Fortunately the side of public health prevailed, the courts upheld the right to require immunizations and we have eradicated smallpox from the world.⁹ Around the world public health officials from every country continue to work to eradicate other diseases. And when we get to that point, just like with smallpox, we won't need to vaccinate anymore and those pharmaceutical

companies that some people think are doing this only for profit will in effect put themselves out of the vaccine business. Not necessarily a great business strategy, but they are **doing what is right for society**.

And lastly, some may ask why we need to go so far with removing exemptions. As you know, we tried a few years ago to improve our vaccination rates by making the process to claim a non medical exemption slightly more challenging by requiring a notarized statement. Unfortunately, this did not help our vaccination rates, as we can see in the data that the number of children claiming non-medical exemptions has been increasing since the early 2000s. We are now at the point where we need to be even more proactive and step up our preventive efforts. Data from California shows that removing non-medical exemptions in that state in 2016 has resulted in a statewide average increase of 3.3% in MMR vaccination rates (from 91.8% in 2015 to 95.1% in 2017).¹⁰ Connecticut can do the same.

At the end of the day we need to remember that this is not personal, and it should not be political or partisan. **HB 6423 and SB 568 are about having a strong public health system** and protecting those that have no other way to protect themselves. Please support these bills.

Sincerely,

Jody Terranova, DO
President-Elect and Immunization Representative
Connecticut Chapter, American Academy of Pediatrics

References:

1. <https://portal.ct.gov/DPH/Immunizations/School-Survey>
2. Phadke VK, Bednarczyk RA, Salmon DA, Omer SB, Association between vaccine refusal and vaccine-preventable diseases in the United States: a review of measles and pertussis. *JAMA*. 2016;**315**(11):1149–1158pmid:2697821
3. Imdad A, Tserenpuntsag B, Blog DS, et al Religious exemptions for immunization and risk of pertussis in New York State, 2000–2011. *Pediatrics*. 2013;**132**(1):37–43
4. Gahr P¹, DeVries AS², Wallace G³ et al An outbreak of measles in an undervaccinated community. *Pediatrics*. 2014 Jul;134(1)
5. <https://www.nytimes.com/2018/11/20/health/chicken-pox-vaccine-asheville.html> 6. <https://www.contagionlive.com/view/more-exemptions-and-less-vaccination-the-2-factor-s-driving-us-measles-outbreaks>
7. Omer SB, Enger KS, Moulton LH, et al. Geographic clustering of nonmedical exemptions to school immunization requirements and associations with geographic clustering of pertussis. *Am J Epidemiol*. 2008 Dec 15;168(12):1389-96.
8. Wolfe RM, Sharp LK. Anti-vaccinationists past and present. *BMJ*. 2002;325(7361):430–432. doi:10.1136/bmj.325.7361.430
9. Jacobson v Massachusetts, <https://supreme.justia.com/cases/federal/us/197/11/> 10. Nyathi

S, Karpel HC, Sainani KL, Maldonado Y, Hotez PJ, Bendavid E, et al. (2019) The 2016 California policy to eliminate nonmedical vaccine exemptions and changes in vaccine coverage: An empirical policy analysis. *PLoS Med* 16(12): e1002994.
<https://doi.org/10.1371/journal.pmed.1002994>