



Connecticut Department of Public Health

Testimony Presented Before the Public Health Committee

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House Bill 5044, An Act Concerning Immunizations

Good morning Committee Chairs, Senator Abrams and Representative Steinberg, Ranking Members, Senator Somers and Representative Petit, and members of the Public Health Committee. My name is Renée D. Coleman-Mitchell, and I am Commissioner of the Department of Public Health. I want to thank you for giving me the opportunity to address the Public Health Committee on the critical issue of immunization and legislation before you that repeals the religious exemption for mandatory school-based vaccination.

In 1959, the Connecticut General Assembly included the religious exemption in Public Act No. 588, "An Act Requiring Poliomyelitis Vaccinations for Each Public School Child," even though Connecticut and many other states were in the middle of a polio epidemic. All that was required was "a statement from the parents or guardian of such child that such vaccination would be contrary to the religious beliefs of such child." The religious exemption for vaccinations has remained part of Connecticut law for more than sixty (60) years. The legislators in 1959 did not foresee the rise in vaccine hesitancy that began in the late 1990s and continues to this day.

Today at this hearing, you will hear about science, beliefs, and philosophy, not only about vaccines, but also about the role of government in protecting the health of the public. The debate over this issue elicits very passionate responses on all sides, and I want to acknowledge everyone in this hearing room today and in the overflow room. Though many may not agree, I think I can safely say that we all want the same thing: the good health of our children and our communities. I also must state that public health is about every child, not one child or community.

As I said last September when Governor Lamont and I announced our support for repealing the religious exemption to mandatory vaccination for school attendance, I believe strongly that children in Connecticut are entitled to learn in an environment that is safe from harmful infectious diseases such as measles. Our declining overall immunization rate for measles among our school-aged population – and pockets of under-immunization in more than 100 schools in Connecticut – threatens our ability to protect our children from this potentially perilous infectious disease.

Numerous published studies indicate that higher rates of vaccine exemption in a school community drive lower immunization rates and increase the risk of vaccine preventable disease in that community. This is true for those who get their shots as well as those who don't. High vaccination rates protect not only vaccinated children, but also those who cannot be or have not been vaccinated. This is called herd or community immunity. This means that enough people in a community are vaccinated so that a dangerous pathogen, like measles, will have a difficult time spreading because it will not find a person to infect.

This overall level of immunity to these devastating diseases is critically important. It protects the most vulnerable in our population who cannot be vaccinated. Schools that achieve community immunity reduce the risk of outbreaks. High vaccination rates at schools are especially important for medically fragile children. Some children have conditions that affect their immunity, such as illnesses that require chemotherapy. These children cannot be safely vaccinated, and, at the same time, they are less able to fight off illness when they are infected. They depend on herd immunity for their health and their lives.

I am here today in support of House Bill 5044, "An Act Concerning Immunizations." I would like to take this time to remind us all why we are here, and how we got to where we are today. I would also like to address some of the concerns that have been shared, both about vaccination and about repealing the religious exemption in Connecticut.

Vaccination History

Before 1963, when the measles vaccine first became available, nearly all children got measles by the time they turned 15 years of age. It was estimated that three to four million people in the United States caught measles every year, and nearly 50,000 people were hospitalized. Measles also caused an estimated 1,000 people every year to get encephalitis, or swelling of the brain, which often had debilitating long term consequences. Before the measles vaccine became available, up to 500 Americans would die of measles every year. This was just 60 years ago. If we ignore our history, we risk repeating negative outcomes of the past.

One place where children were at higher risk for infectious diseases was in school, where hundreds of children spend all day together, every day during the week, for most of the year. So, the public health decision was made – not just in Connecticut but all over the country – to start requiring vaccinations against polio and other child immunizable diseases before children would be admitted to school. This applied to both public and private schools because as a matter of public health, the type of schools did not matter and the risk to young children was the same. By the early 20th century, half of American states required school children to be vaccinated before entering school.

Vaccines were a scientific breakthrough that trigger the body's immune response by putting a very small and weakened form of a virus into the body. They have come a long way since their

inception, have become much safer through monitoring systems, and have revolutionized public health by saving millions of lives.

As the science developed, more states started adding to the list of required vaccines for children to enter school. In the United States, vaccines have been safely used for decades for drastically reducing incidence of diphtheria, tetanus, whooping cough, measles, mumps, rubella and many other diseases. Measles is a very serious, and highly contagious, infectious disease. It is spread through the air. Even in a room where an infected person was present, the disease can be present and contagious for hours after that person is no longer there. If you contract measles, it can weaken your immune system's ability to fight off other infectious diseases. It can also result in death or long-lasting neurological damage in those who survive.

I want to emphasize that vaccines are most effective when the maximum number of people in a community are immunized. Community immunity cannot maintain itself. We must be vigilant to maintain high vaccination levels that prevent these infectious diseases from gaining a foothold in our communities.

Religious Exemption

Seeing the dramatic increase in the number of religious exemptions to vaccines in Connecticut raises public health flags. As a matter of fact, from 2018 to 2019, we saw the largest one year increase in the percentage of school students claiming a religious exemption for kindergarten.

An unfounded fear of the safety of vaccines has been driving the increased religious exemption rates.

In January 2013, the Institute of Medicine (IOM) published the most comprehensive examination of the immunization schedule to date, and the report uncovered no evidence of major safety concerns associated with adherence to the Centers for Disease Control and Prevention (CDC) recommended childhood immunization schedule. "...the IOM committee finds no evidence that the schedule is unsafe. The committee's review did not reveal an evidence base suggesting that the U.S. childhood immunization schedule is linked to autoimmune diseases, asthma, hypersensitivity, seizures, child developmental disorders, learning or developmental disorders, or attention deficit or disruptive disorders."

In 2004, the Institute of Medicine concluded there was no link between autism and vaccines after conducting a review of the extensive research available. Since then, multiple studies that examined hundreds of thousands of children have shown no connection. Vaccines do not cause autism. The science on this issue is clear. No credible, scientific study has ever found a link between vaccines and autism. Concerns about vaccine safety should be put to rest.

Dr. Andrew Wakefield is a British doctor who first proposed that the measles, mumps and rubella (MMR) vaccine is linked to autism in a 1998 paper published in *The Lancet*. In the first half of 2010, the General Medical Council ruled Wakefield had committed “serious professional misconduct,” leading *The Lancet* to officially retract his study from publication. Finally, in May 2010, the General Medical Council banned Dr. Wakefield from practicing medicine in the United Kingdom.

Included in my testimony for the record is the following link to hundreds of vaccine safety publications: <https://www.cdc.gov/vaccinesafety/research/publications/index.html>.

Declining Vaccination Rate

The increase in religious exemption claims in Connecticut has a direct correlation to the overall declining rate of immunization for measles.

Nationally, the Centers for Disease Control and Prevention (CDC) recommends that in order to maintain herd immunity, at least 95% of school students need to be immunized against measles. Here in Connecticut, we have historically had high immunization rates, but that is starting to erode.

Between 2009 and the present school year (2019-2020), the number of religious exemptions from vaccinations required for school entry nearly tripled, from 0.8% to 2.3%. Measles, mumps and rubella (MMR) vaccination rates dropped by 2.3% over the same time period, from 98.5% to 96.2%.

Please take a look at Slides 1 and 2: Slide 1- Kindergarten Religious Exemptions – Connecticut, 2009-2020 and Slide 2 – The Percentage and Number of Schools with Measles, Mumps, and Rubella (MMR) Vaccination Rates Below 95% for Kindergarten – CT 2017-2020.

While overall the religious exemption rate is still relatively low, and MMR immunization rates are still relatively high, in this school year we know that at least 120 schools with 30 or more kindergarten students had MMR immunization rates below 95%, placing our communities at risk for the rapid spread of entirely preventable diseases. That is nearly a quarter of all schools with at least 30 or more kindergarten students.

Each year children attending school who are not vaccinated against measles join the ranks of susceptible children in that school from years past, increasing the population of susceptible students. With the slow and steady accumulation of students who haven't been immunized, we may only be delaying a large measles outbreak in a Connecticut school. The protective effect of herd immunity wanes as large numbers of students do not receive some or all of the required vaccinations, resulting in the reemergence of these diseases.

According to the CDC, measles is one of the first diseases to reappear when vaccination coverage rates fall. The CDC considers the reemergence of measles to be an early sign of a troubled public health system. Just 20 years ago in the United States we had thought measles was eradicated. However, last year, we saw the largest measles outbreak in this country in 25 years.

Connecticut had four cases of measles in 2019. On average, each measles case exposes 200-300 people. Nationally, there were over 1,600 cases of measles in nearly two dozen states. There were two large outbreaks in New York – one in Rockland County and one in Brooklyn. Measles, like other infectious diseases, does not recognize state lines.

School Immunization Rates

In response to the measles outbreaks in New York and other states, this past May, and again in October, the Department of Public Health released school-level immunization rates to provide parents and guardians of immuno-compromised children with vital information, and encourage communities to reduce the risk of vaccine-preventable diseases overall and in schools where the immunization rates are less than optimal to prevent outbreaks.

After looking at the trends, I believe we can no longer afford to put our school children at risk of infectious diseases by allowing non-medical exemptions to vaccination. We should not wait until our vaccination rates decline any further, or wait for the next measles outbreak, to take action.

The World Health Organization named vaccine hesitancy as one of the top ten threats to global health in 2019. Globally, the return of measles is one of the first signs that a country's public health system is starting to weaken and degrade.

Comments on Bill Language

I also have some proposed changes to the bill that I would like to share with you today. The bill as it is currently written calls for students to be excluded from schools if they do not have all vaccinations or a medical exemption by the beginning of the next school year, in the fall of 2020.

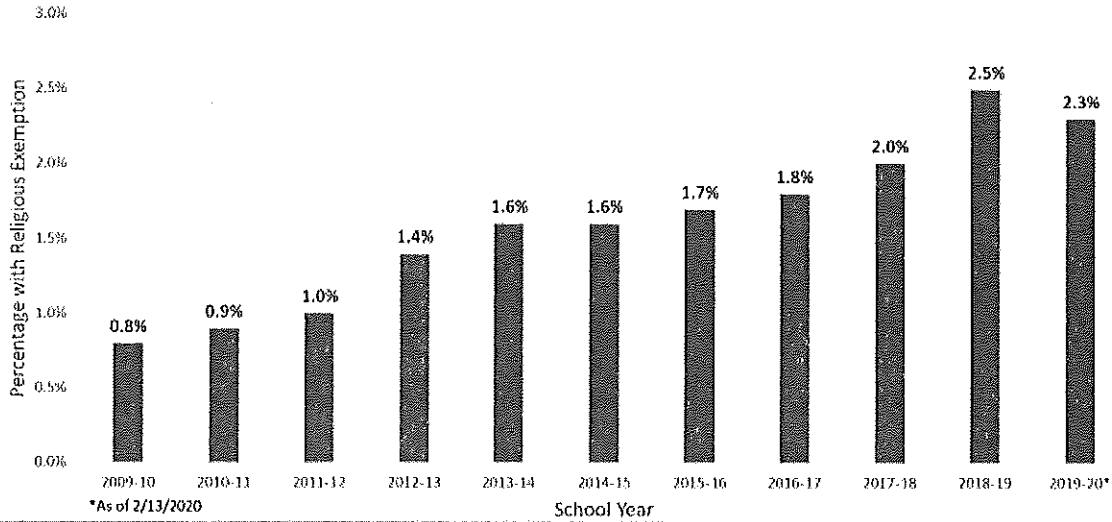
I believe that this timeline is too aggressive, I would prefer we give families objecting to vaccination more time to prepare for the new reality, and would appreciate working with the committee to identify a workable solution.

Also, very importantly, this bill gives the Department of Public Health clear statutory authority to annually release aggregate immunization rates for every school in Connecticut.

These are steps I strongly believe will strengthen the health of our school communities and will be a great step forward for public health in Connecticut.

I will be happy to address any of your questions. We want to give you the public health information that you need to make the best decisions for your constituents and the State of Connecticut.

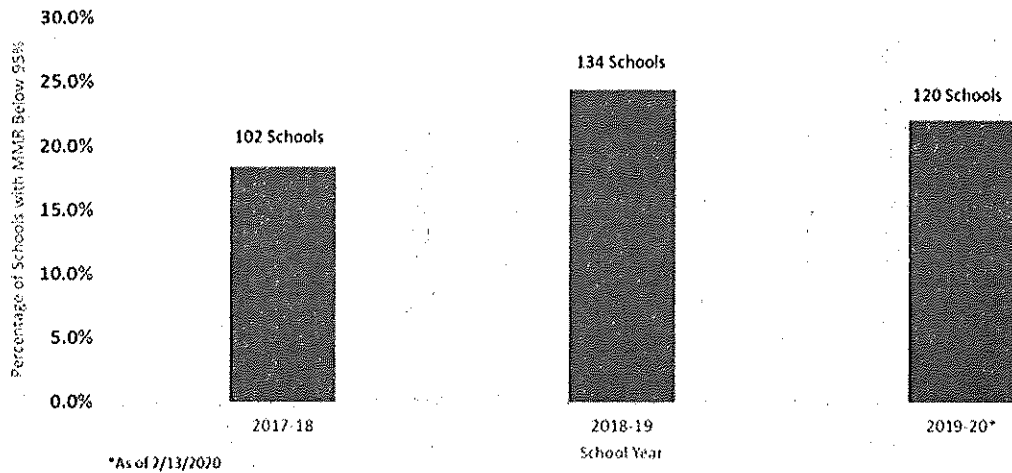
Kindergarten Religious Exemptions—Connecticut, 2009–2020



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Percentage and Number of Schools with Measles, Mumps, and Rubella (MMR) Vaccination Rates Below 95% for Kindergarten—CT, 2017–2020



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