I am submitting my testimony in opposition to Ohio House Bill 248. Vaccinations are an amazing tool that have protected and saved many Ohioans from life altering diseases throughout their lives. Vaccines are, in large part, are helping us return to normal now. We all agree that seatbelts in cars make them safer, should we be involved in a crash. Likewise, guard rails and speed limits also minimize injuries to drivers and others on the road. Vaccines do the same thing for society, particularly among those who have immune system issues or are at high risk of catching a disease.

Having schools and businesses mandate certain vaccines are necessary, allowing for rare medical exemptions, is important because it helps build up the guard rails of our collective immune system that allows children to grow and learn while also allowing adults to work without more interruptions or missing work to take care of family. Employers also want this right because it is important for them to have a healthy workforce, and in some cases, protect those that they serve who may be extremely susceptible to catching a preventable disease. I was always told growing up in scouting, that I do not have the right to endanger or harm others. Vaccines help us uphold that basic moral principle.

Vaccines are, in some capacity, their own worst enemy. Many of us don't realize how much they protect us and keep us safe. This causes us to forget how many people caught these diseases, with some numbers I'll list later. Personally, I know a person who chose not to vaccinate their child. They later regretted it, when their child caught a preventable disease that ravaged their liver and at the age of 3 had to have a liver transplant and are now forced to live on transplant medications for life. Luckily, modern medicine afforded them that very special second chance at life. We've seen outbreaks of these diseases in our own state, where vaccination rates where low, that ended up costing taxpayers hundreds of thousands of dollars to help end in 2014. This case alone should really shine a light on why vaccinations are here to and have helped us. With the current pandemic, we are seeing just how important it is when we are missing one vaccine, let alone others.

I understand that vaccination a child, or anyone, is health-based discussion. For roughly 350,000 Ohio who are immunocompromised, we need vaccines to help protect them. This number (~3% of Ohioans based on CDC data) does not account for those who are also at high risk due to other factors like age. The CDC also estimates that routine vaccination of children born between 1994 and 2018 has prevented 419 million illnesses, avoid over 900,000 deaths and saved society over \$1.9 trillion dollars. Vaccines do so much good with so little harm. Some charts are included below to help show the relative risk of various adverse reactions and to show how much we have regular vaccines have reduced the burden of disease. I really can't stress enough how much vaccines have allowed us to live in a healthy and productive society.

I urge you to vote in opposition to House Bill 248, for our economy and our safety. I urge this of you not only as a pharmacist and someone who knows the math and science to both sides of this discussion, but also as an uncle of 2 immunocompromised nieces who rely on herd immunity to help protect them. I also urge this of you as a father of Annabelle, who will be attending Ohio public schools in the next few years, hopefully in a safe and protected environment.

Thank you for your time.

Eric K. Geyer, PharmD

Expected rates of AEFIs following some childhood vaccines

1	3			
Vaccine	Estimated rate of severe reactions			
BCG	1 in 1 000 to 1 in 50 000 doses			
OPV (oral polio vaccine)	1 in 2–3 million doses (or 1 in 750 000 doses for the first dose)			
Measles	1 in 1 million doses			
DTP	1 in 750 000 doses			

(BCG vaccine is not routinely used in the US as Tuberculosis is not very common or widespread)

Vaccine	Peak cases in prevaccine era	Vaccine coverage in children 19-35	Cases in 2017	Disease reduction
	(year)	months old (% [95% CI])	(n)	(%)
Smallpox	110,672 (1920)	-	0	100
Diphtheria	30, 508 (1936)	94.0 (93.3 - 94.7)	0	100
Measles (non-imported)	763, 094 (1958)	91.5 (90.6 - 92.3)	99	99.99
Mumps	212, 932 (1964)	91.5 (90.6 - 92.3)	6,109	97.13
Rubella	488, 796 (1964)	91.5 (90.6 - 92.3)	7	100.00
Congenital rubella syndrome	20,000 (1964 - 65)	2-1	5	99.98
Pertussis	265, 269 (1934)	94.0 (93.3 – 94.7)	18,975	92.85
Polio (paralytic)	21, 269 (1952)	92.7 (91.9 – 93.5)	0	100
Tetanus	601 (1948)	94.0 (93.3 – 94.7)	33	94.51

Sources:

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