Thank you for allowing me to write.

I'm pro vaccine. I have a degree in biochemistry. I have a sophisticated understanding of biology and immunity. I had my twin babies vaccinated on schedule. But we had a rare reaction to one round of the vaccines which cannot be explained. If you read one story, it has to be ours. It is the most convincing plea in this controversy. Please, if any email is read in full, let it be this.

We as a society need to allow exemptions so we may continue to search for answers to unanswered questions. People's immune systems are not fully understood. As soon as every state removes all exemptions, the pressure over vaccine manufacturers and public health agencies will relax and it is certain that more injuries will arise. Vaccines may have always been effective, but they have not always been safe, not for all individuals. And we know this with certainty. Our society needs the checks and balances so vaccines continue to become safer, while maintaining their effectiveness.

It is the job of the government to protect the population, but it is the job of the parent to protect their individual child. There are situations in science we don't fully understand. There are many situations under reported. We don't have all the answers. But if states pass laws to remove exemptions, there will be no more incentive to continue to search for what causes rare reactions. Our society needs to narrow down these unusual reactions so that all our children are protected from injury. Isn't that the point?

My family fell into a rare situation and it shocked me. I gave birth to premature twins and I was determined to get them vaccinated on schedule. But a few days after the round that included the MMR at 13 months, my identical twin boys had intense seizures on and off for 4 days. The seizures presented in the same exact way. But what was odd? There was no apparent fever. I was breastfeeding them 7 times a day at this point and I was almost never separated from them. As a well-trained person of science, I kept notes of everything. If they ever had a fever, it was so low that it didn't register. I called my doctor's office and the nurse told me not to worry because there was no fever. I relaxed. But now I don't know what to think.

One of the boys had more intense and more frequent seizures than the other, and that child has since been diagnosed with 15 different issues including permanent brain damage. This situation isn't as simple as it sounds at this point, so please keep reading.

There was so much going on with my twins still at age 4, that when it came time to get the MMRV booster, I panicked. I remembered the seizures. With my strong background in science and a sophisticated ability to think critically, I knew something was missing. My sweet boys have a lot of atypical neurology in their family history. There are severe migraine disorders, autism spectrum disorders, Alzheimer's Disease, and Parkinson's Disease. Many in our family are in STEM fields with exceptional intelligence. Because my children are identical and because there was no fever, I just wanted to understand what kind of risk they faced going into the booster. And because we'd already been dealing with a devastating medical past, present, and future, I didn't want to put either one at more risk. They'd had a few dozen other low and high fevers in their lives, but with no seizures. And they'd had the seizures, but with no fever. And they're identical twins. Also considering their family history, they make up a super tiny population of people.

No one has been able to answer my questions. Not developmental pediatricians, not pediatric neurologists, no one. I got a nervous, but scripted response, "Vaccines are safe and effective."

I found no study to clearly explain what happened.

I did find a study in Denmark that supported a genetic connection between seizures and vaccine response:

https://nam01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fsciencenordic.com%2Fbreakthrough-why-mmr-vaccine-can-give-children-febrile-

 $\frac{seizures\&data=02\%7C01\%7C\%7C097fce6b52d04523f49c08d69e6d648c\%7C84df9e7fe9f640afb435}{aaaaaaaaaaaa\%7C1\%7C0\%7C636870589999330208\&sdata=cUiEkyEg1JGkZJAzAxbGVDYJZtjChr3w5\\ \underline{Lpr5JIDC4Q\%3D\&reserved=0}$

I also found that there were a few cases in Germany of nonfebrile seizures from the MMRV. One boy was age 9:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3697452/

I read that seizures wouldn't cause lasting effects. But it's not convincing to me because seizures come in varying degrees. And they're just finding out that if seizures happen close enough together that the compounding may be damaging.

https://www.epilepsyadvocate.com/blog/what-are-long-term-effects-seizures

And I know many of these situations are underreported, partly because emergency visits are expensive, and because pediatricians don't want to touch situations like this. Our situation wasn't reported!

We may never know, but it's possible my child had a stroke after the vaccine. That the seizures in his situation may have been just enough because of the condition of his brain at the time of the vaccine to cause a mild stroke that caused him to have subtle right side weaknesses which were never visible until after the vaccine.

I found a lone study saying that there would be no risk of seizures again if they had them the first time, except it was obvious to me this study was manipulative. They didn't say which vaccines they studied but the way it was written, I was led to believe it was the DTap not MMR or MMRV. We all know that MMR and MMRV cause many more seizures than the DTap in the first place. And being that most are worried about seizures with the MMR/MMRV, there would be no way the study wouldn't clear as day say it was the MMR/MMRV if those were what were studied. I wonder how many who had seizures with the first round even got a booster in the first place? We did not.

We made a personal exemption for just that single booster because our situation, for some reason, didn't warrant a medical exemption. Because doctors are under so much pressure to avoid medical exemptions like an actual plague unless there is anaphylaxis. No convincing grey areas allowed.

I wondered, why was it so hard for a doctor to give my children a medical exemption? Isn't herd immunity here to protect the vulnerable? Why is risk of seizures less important than risk of anaphylaxis? Would you want to give your child a seizure for no reason? **Especially when they're already immune to the disease?**

I noticed the first draft of HB 3063 didn't even include the allowance of titers/proof of immunity in place of a booster. Please, at the very least, include this. It is a fair compromise. It protects those who take the risk and get their children vaccinated on schedule, but then have an unusual reaction that isn't yet

considered because of the subjectivity. If we are really about protecting children, instead of checking boxes, this will be included.

I got my children titers a month ago, and almost 7 years later, their AB scores were 178 and 208. Only a 25 is needed to be considered immune.

We have another reason to avoid a booster: Merck, the manufacturer of the MMR and MMRV, doesn't list this as a clear contraindication, but does claim one should "use caution" if there was a cerebral injury in the patient. And this also happened to us.

https://www.merck.com/product/usa/pi circulars/m/mmr ii/mmr ii pi.pdf

My boys had Twin to Twin Transfusion Syndrome in my pregnancy. The child who had more intense and frequent seizures was the one who we saw have an abnormal brain doppler in utero, before we had a surgery, at 21 weeks gestation, to correct the transfusion. The reason I don't let the anti-science anti-vaxxers take my story, and because I've never shared this publicly until now, is because I don't want them to manipulate the facts. It is possible that 100% of my child's diagnoses are from that situation. But it's also possible that my children were at risk to start, because of their situation in utero and/or their genetic makeup, and that a vaccine injury complied on top of original injuries and/or issues. My other twin also has sensory processing and attention issues as well as cyclic vomiting syndrome (which has a genetic relationship with migraine disorder). There is a strong correlation with how many issues each child has as compared to how many seizures as compared to how high their titer score. One twin: had more seizures, had a higher score, had more diagnoses. The other: same correlations of lesser degree.

But let's take all that away for a moment and claim it's irrelevant.

Why should we be forced to get another MMR, when my children are immune, and where there is a risk of seizures? Why should my children be denied special education services because of this one missing checkmark from one booster in their charts, when they are already immune? Why are we going to put them at risk of more injury, not just to the brain, but to them physically, when they're already immune? My vulnerable child could become unbelievably hurt physically if he had seizures again. It was hard enough at age one, to keep the seizures from causing physical injury. Today, my child struggles to fully function at recess in his full capacity. I can't imagine how much we'd risk for 4-14 days after a booster, when seizures could potentially happen. Even if the seizure itself has no lasting effects, what could happen to them while having a seizure? The government doesn't allow someone with epilepsy to drive a car after a seizure for good reason. So why is it okay to give my child a vaccine he doesn't need if there is a chance he could have a seizure?

Absolutely, we as a society, do not know 100% the cause of outlying situations. An injury is not always going to be clean with a stark cause and effect situation like anaphylaxis. Lack of evidence is not evidence of absence. Just because the vast majority of people react positively to vaccines doesn't mean there aren't rare reactions causing injury that have yet to be clearly documented. This part of our population deserves to be protected with herd immunity like anyone else.

Please allow exemptions so we have the incentive to keep searching for answers to these rare situations. Or allow certain subpopulations to develop a little bit longer so they may be stronger for certain vaccines. Our children and our future depend on checks and balances to incentivize the search

for factual understanding. Or at the very least, please allow titers/proof of immunity to serve in place of a check mark.

Thank you for reading.