

## Written testimony in support of MD HB699

So we know the risks for youth and young adults with Covid is exceedingly low, IFR 0.014% but we now know there is a real risk from vaccine induced myocarditis.

So let me start with an explanation of what myocarditis is. The word is a combination of muscle heart and inflammation.

The heart is primarily a muscle. And when it is inflamed its function is compromised. Much like when you bruise or strain a muscle. When you strain a leg muscle your doctor tells you to rest it. The difficulty when the heart has a injury even if it is minor is that is very difficult to rest it. It still needs to beat 70 times a minute, 4200 times an hour, 100,800 times a day.

The concentration of my PhD dissertation in cardiovascular Physiology and pharmacology. My area of study specifically looked at what caused the heart to be inflamed.

So can the vaccine cause myocarditis or inflame the heart? We now have data from multiple sources, the American Heart Association meetings this year from Dr. Lin, Dr. Wang writing for Cell Research and Dr. Avolio in Clinical Research all have elegantly shown that the Spike protein, which the current mRNA vaccines ask the body to make, are cardio-toxic and cause the heart to be inflamed. The current public health plan is asking our own body a cardiotoxin. The spike protein sets in motion a cascade of events that activates platelets to form clots and inflames the blood vessels lining the heart and the heart muscle itself.

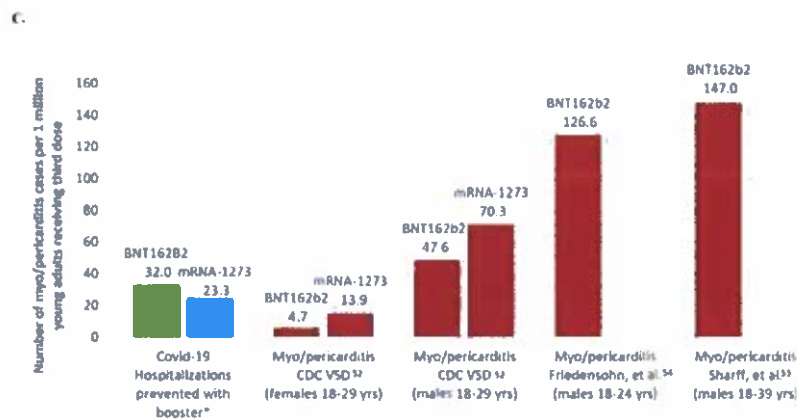
So how often does this happen? That answer comes with many caveats, because the risk is very much associated with age and gender with men 14-40 being at the highest risk. But most alarming was a recent study from Thailand that watched and tested adolescents before and after receiving the Pfizer vaccine. They found that of the 202 adolescent boys that were studied 5/202 2.4% demonstrated myocardial injury and 2/202 1% had irritation of the sac around the heart.

1 in 40 young (14-44) males having their heart inflamed after the vaccination is very concerning.

You may have heard that the unvaccinated are at higher risk for myocarditis than those who are vaccinated.

A large study from the Nordic Countries found that not to be true. The paper in JAMA Cardiology by Dr. Ljung et al showed The highest risk for myocarditis was in those vaccinated males 12-39, two shots were worse than one, Moderna was worse the Pfizer and a Pfizer/Moderna combination was the highest risk of all.

What about college students? The recent paper by Hoeg et al used CDC estimates to show how many students would be saved from hospitalization from COVID by vaccination compared to studies showing the real risk of myocarditis. It showed that males are at higher risk for myocarditis from the vaccine than from going to the hospital.



**Figure 1** (A, B, C) Expected hospitalisations prevented over six months and serious adverse events (SAEs), cases of grade  $\geq 3$  reactogenicity, and vaccine-associated myo/pericarditis among 18–29-year-olds per million BNT162b2 and mRNA-1273 booster vaccinations. \*CDC-estimated number needed to vaccinate (NNV) with a booster to prevent 1 hospitalisation over 6 months in 18–29-year-olds<sup>18</sup> was adjusted for reduced Omicron severity (aOR=0.28)<sup>47</sup> as follows: BNT162b2 (8738/0.28=31 207) and mRNA-1273 (11 994/0.28=42 836). Per million third doses, hospitalisations prevented for BNT162b2 were computed as follows:  $1/(8738/0.28) \times 10^6 = 1/31 207 \times 10^6 = 32.0$  and  $1/(11 994/0.28) \times 10^6 = 1/42 836 \times 10^6 = 23.3$  for mRNA-1273 \*\*SAEs: Three serious adverse events among BNT162b2 booster recipients were deemed by blinded investigators to be related to vaccination (3/5055). These included: moderate persistent tachycardia, moderate transient elevated hepatic enzymes, and mild elevated hepatic enzymes.<sup>18 50</sup> †Reactogenicity rates are BNT162b2 (14/306) and 45 751.6 per million third doses; mRNA-1273 (18/167) and 107 784.4 per million third doses.<sup>50</sup> ‡Estimated reactogenicity rates were computed assuming 63.7% seroprevalence<sup>13</sup> and at least 2x reactogenicity among those with prior SARS-CoV-2 infection.<sup>56 57</sup>

Many of the public health officials have agreed that the vaccines are causing myocarditis but it is mild. Having spent time with thousands of patients, explaining their child’s heart problem, if your child has to be hospitalized in the ICU with myocarditis, even if I call it a mild case, no parents ever think that their child being in the pediatric ICU is mild.

So what can we say about the recovery from the affect of the vaccine associated Spike protein cardio-toxin's long term affects in the heart. That study was recently published in Lancet.



## Outcomes at least 90 days since onset of myocarditis after mRNA COVID-19 vaccination in adolescents and young adults in the USA: a follow-up surveillance study

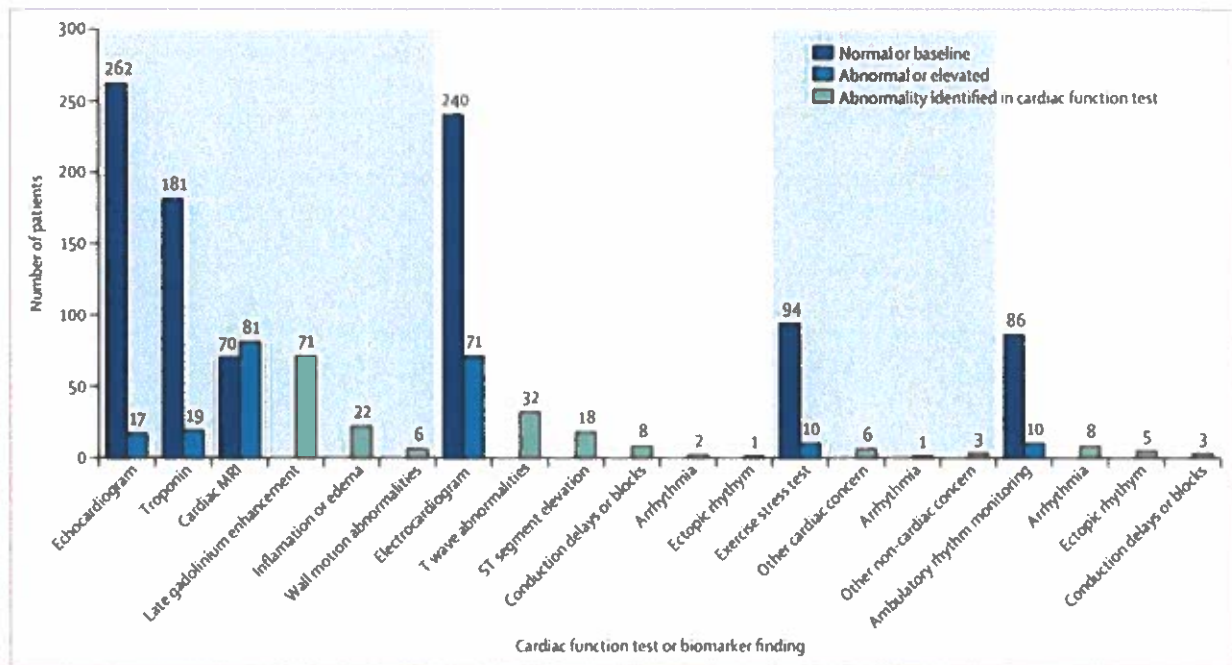
Ian Kucakik, Matthew I Osler, Karen R Broder, Margaret M Cortese, Malerka Glover, Karen Shields, C Buddy Creech, Brittney Romanson, Shannon Novosad, Jonathan Soslow, Emmanuel B Walter, Paige Marquez, Jeffrey M Dendy, Jared Woo, Amy L Valdemarina, Alejandra Ramirez-Cardenas, Agape Assefa, M Jay Campbell, John R Su, Shelley S Magill, David K Shay, Tom T Shimabukuro, Sridhar V Basavaraju, for the Myocarditis Outcomes After mRNA COVID-19 Vaccination Investigators and the CDC COVID-19 Response Team

### Summary

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**Background** Data on medium-term outcomes in individuals with myocarditis after mRNA COVID-19 vaccination are scarce. We aimed to assess clinical outcomes and quality of life at least 90 days since onset of myocarditis after mRNA COVID-19 vaccination in adolescents and young adults.

If we look at the adolescence and young adults who were diagnosed with vaccine induced myocarditis. Please look at the far left side of the graph.

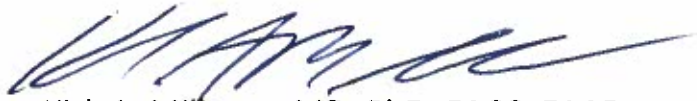


This is what we see. The echocardiogram, ultrasound of the heart or Troponin which is a blood marker for heart damage all of these are essentially normal at the end of 90 days. But if we look at the cardiac MRI which arguably is our most

sensitive test, of the 151 children who had a cardiac MRI, 81 were still abnormal at 90 days and the abnormality was late Gadolinium enhancement, which has been shown to be the most reliable marker for risk of sudden cardiac death. I am passionate for the health of our children and young adults. For our healthy children and young adults, the data show the risk for myocarditis is greater than the benefit of the vaccine products.

As a physician who has vowed to DO NO HARM, my opinion is that we should not mandate harm.

Respectfully,

A handwritten signature in blue ink, appearing to read 'K. Milhoan', with a long horizontal flourish extending to the right.

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