



Dear Fowler Residents and Staff,

I have been asked to write a few bullet points about the two current Covid-19 vaccines. Before I do, I think it's important to properly frame the arguments for and against.

Whenever we analyze the risks versus benefits of any medical intervention, we need to not only ask "what are the risks and benefits of the intervention?" we also need to ask, "what is the risk of NOT doing it?"

Furthermore, when it comes to a vaccine, we have to look at both personal risk and community risk. This is my best attempt to summarize my thoughts.

- 1. What is the benefit FOR ME and YOU if we take the vaccine? Randomized clinical trials show that 95% of people who took either vaccine [Pfizer or Moderna] were protected from the virus. The 5% of people who did get the virus, were asymptomatic. Thus, the vaccine proved to be 100% effective in keeping people from getting sick and dying FROM the virus.
- 2. What are the risks for YOU and ME if we take the vaccine? Well, so far nobody has died from the vaccine. Approximately 7 out of 1 million people had an anaphylactic reaction, but everyone so far has recovered. One guy dropped his platelets, but it's hard to confidently blame the virus. My biggest fear was a phenomenon known as ADE. The simple summary of ADEs is that the vaccine sets some people up for a hypersensitivity reaction when exposed to the actual virus. In other words, people get sicker than they normally would have been after the exposure. The clinical trials were not powered to ease my concerns, but we have now vaccinated millions of people and we are not experiencing this. I am no longer worried. The side effects have mainly been arm soreness, fatigue, muscle aches, headaches and some instances of fever and chills. I realize that this may feel like it was a rushed vaccine, but the technology behind it has been in development for years. mRNA is the future of vaccines. It is important to point out that we do not know the long-term effects of the vaccine. I do not expect anything serious. Similarly, we DO NOT know the long-term effects of contracting the virus.
- 3. What is the risk for YOU and ME if we do NOT take the vaccine? Over 400,000 Americans have died from the virus. 3/1000 of infected people die. If you are old, frail, chronically ill, overweight (1/3 of all Americans), vitamin D deficient, or type A or B blood then your risk is much, much higher. Furthermore, this virus is highly contagious. If you get it, you WILL spread it to someone else.
- 4. What is the community benefit of taking the vaccine? Well, if 100% of people who get it survive, then theoretically, we will dramatically cut down on the death toll. Equally as important, people who get the vaccine may not spread the virus. The effect on the community would be exponential.

- 5. What is the community risk of taking the vaccine? Simply take the personal risk numbers above and apply it to 320 Million Americans. But, the death total from the vaccine as of today, is zero.
- 6. What is the community risk of NOT taking the vaccine? This virus will only go away once 60% of population has reach herd immunity. You can achieve this through vaccine or infection. If we used infection, then the death toll would be approximately 576,000 Americans. If we chose the vaccine, then it would be very close to zero. This is the most important take home point of anything I have written.

So, take this all into consideration before making your decision. We have the right to choose. Just make sure you are being honest when evaluating the data.

Here are a few extra thoughts:

Are you scared of this new type of vaccine? I am always nervous when we release something new into the wild. But, I am way more excited than I am nervous about this. RNA vaccines are the future of vaccines. One of best things is we can create these vaccines in record speed. It will be a game changer going forward.

How long will the vaccine be protective? We do not know...... but long enough to get herd immunity.

What about the new strains in the UK? Viruses tend to mutate over time. This can make it more contagious or less contagious. It can make it more deadly or less deadly. But it is very difficult for a single mutation to make it resistant to the vaccine. All the more reason to get the vaccine now. Also, all the more reason to use RNA vaccines as it will give us a better arsenal against mutations going forward.

Join me in getting vaccinated!

Steven Bray, MD Medical Director, Juliette Fowler Communities



Steven Bray, M.D.

Dr. Steven Bray is associated with Questcare Matrix Transitional Care and serves Juliette Fowler as Medical Director of our Skilled Nursing. Prior to joining Questcare, Dr. Bray was with MedProvider at Baylor University Medical Center for ten years. During his time at Baylor, Dr. Bray developed protocols to treat delirium, asthma, and COPD. Dr. Bray attended UT Southwestern Medical School in Dallas and completed his Internal Medicine residency at Vanderbilt Medical Center in Nashville, Tennessee.

An active member of Lake Pointe Church in Rockwall, Dr. Bray is married and has two daughters. He enjoys golf, fishing and gardening.