

COVID VACCINE VIDEOS

Dr. Steven C. Agle

INTRO:

I'm Steven Agle. I'm the General Surgeon here at Moore County and also have formal training in public health. I received my master's degree, so I have a unique perspective and experience and education related to public health. So I was asked to address some questions that people have about the vaccines.

Before I start answering some of the questions that have been brought up, I just want to kind of let people know my opinion about the vaccine. I personally will get the vaccine. I think that it would be a good idea for everyone that can get the vaccine to get it, but ultimately the decision is an individual decision. I'm not trying to beg anyone to get the vaccine, I just want to answer some of the questions that have been brought forth and then it's ultimately up to the person, the patient, to decide if they want the vaccine or not. There's been a lot of conspiracy theories and rumors and various things that has really muddied the water around these vaccines. I won't specifically talk about each individual conspiracy theory or other things but hopefully by answering these questions in general it will at least give you an idea of what we think at Moore County hospital.

Q. How was it possible to create the COVID vaccines so quickly, when previously it's taken years/decades to produce them? How was it possible to create multiple vaccines in less than a year?

A. The main reason is money. The government put in a lot of money to developing these vaccines and then they also cut the red tape that's involved. In general, when you have a vaccine, you develop the vaccine, then you test it in three phases, and then after you test it in three phases, you build buildings and manufacturing equipment, and you start making the vaccine in large quantities and you build other places to store the vaccine. Well... with the money that was put into these vaccines in the beginning, all of these processes were started at the same time, meaning they were building the equipment, the factory, and actually producing vaccine before it was even tested on anyone to be prepared. So that is the main reason this happened so quickly. The other reason is because we have a lot of experience with previous SARS virus and stuff like that where we, the researchers, were more efficient in being able to develop this vaccine quickly. So there's building upon previous vaccines as well as the massive amount of money that was put in. So as far as cutting corners, for safety and things like that, I don't believe that's going to be an issue in thus far with the, now probably close to a million people who have received the vaccine, it doesn't look like any safety corners were cut because no one's having very unusual reactions.

Q. What were the steps necessary to approve these vaccines?

A. This vaccine was approved the same way other vaccines and other medicines are approved. The research is done, it's published in peer review papers, other peers look through the research, it's presented and then patients are signed up for clinical trials, meaning they make the decision to volunteer to get a vaccine or maybe a placebo and then they're followed. This occurred for these various vaccines as well as other medicines and vaccines in the past. So the approval process gives people vaccines, they watch them, they look for side effects, then they test their immune system, they find out if the person's been exposed to COVID and if they did get the infection or not. So the approval process for this, these vaccines, is similar to previous vaccines. One of the reasons that the approval process has been so quick for this is because the COVID virus and infection is so common. It's very easy for people to have the infection so therefore you can test against it. You can give some a vaccine if someone in their family has been exposed to the virus and everyone gets it except for the person that

was vaccinated, that's a data point that they use. As I said, again, the speed for which this was approved and went through the process does have to do with the amount of people infected, which is high, and it makes it easier to research and study.

Q. Are we being used as guinea pigs for this vaccine?

A. No. We are not. The people that signed up for the clinical trials were the "guinea pigs" if you will. One of the vaccines had 40,000 people studied. And that's just one. And then since that time that vaccine has been given to hundreds of thousands, if not millions of people now. The guinea pigs are the research participants and the ones in the clinical trials. That's in the upper number of 40,000 people that have had this and had it for months and months and months and they've been followed closely. So. No one's going to be a guinea pig that receives the vaccine here.

Q. How does the vaccine work?

A. This vaccine, there's multiple vaccines, it works similar to previous vaccines. What it does is it primes your body to recognize the virus. And the original vaccines that were initially developed, 50, 60 years ago, they would take a virus and they would kill it, they would burn it or heat it up to kill it and then they would inject it into people and the virus is not alive but your body recognizes the virus as foreign and it makes cells and kind of prepares itself to fight that specific virus in the future whenever it's seen. There are, some of the vaccines coming out, do use similar technology to that, but then also there's vaccines that use a new technology which is mRNA and this is actually synthetically made. What it does is, it is a foreign piece of material and when injected into your body your body recognizes it as foreign and then makes the necessary precautions that if it ever comes into contact with it again, it will be ready. Therefore, some virus gets into your system your body already has the troops ready and it just kills it. That's the same way, in general, that all vaccines work.

Q. What are the common side effects?

A. These are actually going to be similar to the side effects of all vaccines. People can have mild symptoms, there are some allergic reactions. People have allergies to different parts within the vaccine, the preservatives, or other things that are added. This vaccine is similar to all vaccines. There are some mild common side effects that you would also see with the flu vaccine and there will always be people who have an allergy to a component of a vaccine. So you will hear about people having bad allergies to this but this is essentially no different than all the other vaccines on the market.

Q. Who should NOT get the vaccine?

A. As of right now, the two main populations where we are not giving the vaccine to is pregnant people as well as children. And the reason we are not giving the vaccine to those two populations is because it hasn't been studied enough to say it's safe. In general, and everything is pointing to it's going to be absolutely fine to give it to children and pregnant women, however, in research we have to have a certain number of people that are going through a clinical trial before we can say it is safe. And since pregnant women and children do not volunteer, get signed up for research as readily as adults, our numbers are lagging behind. So, as of right now, those are the two populations we won't be giving the vaccine to, and as more information and data come in they most likely will be able to receive these vaccines.

Q. What should you do if you already have COVID or have COVID now?

A. Like most infections and illnesses for other vaccines, we generally don't vaccinate someone while they are sick. Meaning if you had a sinus infection at the time you were supposed to get your flu shot, we would recommend you not getting your flu shot until you had gotten over the infection because your body is using a lot of its effort and immune response to fight your sinus infection and won't create a robust immune response to the vaccine. So if you currently have symptoms of COVID, no we do not recommend you getting a vaccine. However, if you've had COVID and you've recovered from it, we do recommend getting a vaccine for it, which is a little bit different than let's say Chicken Pox. The reason is that we don't, this is a new virus, so we don't know how effective your immune response will be if you've gotten the virus yourself. We also don't even know the long term immunity from the vaccine. But by having both, that would seem to make you more immune in the future. We think at least at this point the vaccine may actually give you better immunity than the infection itself. Now, this is a new disease, we don't have long term data to suggest that, but the vaccine is safe and very effective. We know it's 95% effective, we don't know if you getting the infection is that high. So it seems right now that the vaccine is more protective than actually having the infection. So if you have been exposed to COVID, been diagnosed with it, we do recommend you getting the vaccine in addition to that.

Q. What should I do after I get the vaccine?

A. It depends on which vaccine that you get, but with the vaccines that are two parts meaning you get a vaccine and then three to four weeks later you get the second part of the vaccine, in that case after you receive the first vaccine there's... your probably about 50% immune from the COVID 19 virus which actually is the same immunity you have for most yearly flu shots, they're about 40-50% effective. So after you receive the first vaccine if you're getting a two part you still do need to wear a mask. After the second vaccination about three weeks after that you will have the maximum immunity. Now, with the two current vaccines we have it's about 95% effective, which is incredibly high, and as of right now, we are still going to ask people to wear masks even once they've been vaccinated with both of them but those recommendations will likely change over time and then at some point, obviously we won't be wearing masks if you have received both vaccines and are at least three weeks out.

Q. What are some credible resources for information on the vaccine?

A. The CDC, the NIH, and Medical Journals, Medical Websites, Legitimate Medical Websites are the best places to start. The CDC, the FDA, the NIH have great articles about them. You pay for those government entities with your tax dollars so that would be the first place I would look. There's also other legitimate websites, medical websites, public health websites, different universities, that have a lot of good data about this. I would be very apprehensive of getting your news from Facebook or other non-credible social media outlets because the information they have isn't, let say peer reviewed or looked at; they can write whatever they want, make up anything they want, and other than their subscribers, no one kind of outside looks at that. When you are dealing with the CDC, the World Health Organization, and stuff like that, they are under scrutiny continuous, and they don't always agree with each other and they will talk about that. So I would be very careful to use any non-credible websites to get your information about the virus.

RESOURCES:

VACCINE PROCESS:

www.cdc.gov

www.nih.gov

www.who.int

www.historyofvaccines.org

MODERNA VACCINE:

www.cdc.gov

www.modernatx.com

www.idsociety.org

Moderna Briefing Document Available at: <https://www.fda.gov/media/144434/download>

mRNA VACCINES

www.cdc.org

www.dshs.texas.gov

www.health.harvard.edu

newsnetwork.mayoclinic.org

www.medicalnewstoday.com