THE MYTH: COVID-19 vaccines can cause infertility in women who want to become pregnant and fetal loss in women who already are pregnant.

THE FACTS: There is no evidence to support these statements and a great deal of evidence against them. Even after being debunked many times, however, these worrying statements stay alive on the Internet because they have so much power to cause fear, making them highly useful for opponents of vaccines.

Those who spread this mis-information argue that because the vaccines against COVID-19 work by teaching the immune system to recognize a protein that forms the spiky "crown" you see in pictures of the virus, the immune system can also attack the placenta which has a similar spike protein.

The argument is very frightening, of course, since it suggests lasting infertility for anyone with antibodies to the virus. But it is wrong. First, the basic notion that antibodies will attack the placenta is wrong.

 Yes, COVID-19 vaccines are designed to teach the body to go after the protein that forms the crown of the virus. But they do not teach the body to go after anything with a crown-like structure – they teach the body to go after this one particular protein, which is different from the protein found in the placenta. This argument is like saying that because dogs chase rabbits that have legs, they are also going to chase tables and chairs. The protein on the virus and the protein in the placenta are both spike proteins, but they are different spike proteins and your antibodies can and do tell the difference.

Second, the limited research findings we have challenge any suggestion that the vaccines prevent pregnancy. While women who were already pregnant were not included in the vaccine trials conducted before the Pfizer and Moderna vaccines received Emergency Use Authorization last December, a number of women in the trials became pregnant while enrolled. Their experience sheds useful information on this topic.

• Between them, the Pfizer and Moderna trials included 36 women who became pregnant. If it were true that the vaccines prevented pregnancy, you would expect that all of the women who got pregnant would have been women in the placebo arm of the study, while none, or very few of the women who got pregnant would have been women who got the vaccine. In fact, the pregnancies in the group were split down the middle: half were women who got the vaccine, half were women who didn't. The vaccine made no difference in their ability to become pregnant.

Third, experience throughout the pandemic counters the idea that antibodies that target the coronavirus will also target the placenta.

• Consider this: Vaccines are not the only way people develop antibodies to fight the COVID-19 virus. People also develop antibodies by becoming infected and fighting off the virus. In fact, a person who is infected is exposed to far more of the protein targeted by antibodies than a person who is vaccinated. So, if antibodies to the virus were going to attack the placenta and cause infertility, getting and surviving COVID-19 would be far more likely to cause infertility than getting the vaccine. There is no experience suggesting that women who have been infected have been unable to become pregnant or give birth.





 In fact, in Los Angeles County alone about 9,000 women have given birth when they were infected or after having infection with COVID-19 since the start of the pandemic. That is almost 1 out of 10 of all of the women giving birth in the County. These births would not have been possible if antibodies were a threat to successful pregnancy.

In summary

Neither basic biology, nor research, nor real-world experience yields any evidence that COVID-19 vaccines cause infertility. This is an argument based not on science or on concern for the health of women and babies. It is an argument driven by false information and designed to instill fear. It is aimed at depriving women and their partners of the facts they need to make the health decisions that are right for them.



