

Some Guidance on COVID Vaccines

Since Edward Jenner's vaccination program against smallpox in the early 1800s and Louis Pasteur's groundbreaking work with rabies eighty years later, vaccines have inspired much controversy and debate. Most recently, this discussion has surrounded the vaccines for COVID-19. In this article we will address some of the concerns, misconceptions, and ethical issues surrounding the COVID vaccines, specifically from a conservative Anabaptist perspective. We know that there are several vaccines that are concerning from an ethical standpoint, but, along with strongly pro-life organizations like the Christian Medical and Dental Associations and an earlier Anabaptist evaluation of vaccines,¹ we recommend the use of vaccines that are made without using aborted fetal cell lines. This recommendation seems consistent with our commitment as God's people to protect and respect those around us.

With this in mind, here are four main reasons to get vaccinated.

Reasons to Consider Vaccination

- 1. Loving our neighbors. The biggest reason to consider vaccination is to prevent spreading COVID to someone who might get a serious COVID infection. People typically shed viruses for 48 to 72 hours before they develop symptoms. During this time, they can (and do) infect others. The chance that one of those people could require a hospital stay seems to be a major reason to consider vaccination.
- 2. Loving healthcare workers. There are many people charged with caring for sick people. Recently, with the COVID pandemic, many healthcare systems were overwhelmed. Preventing severe sickness and the load this places on healthcare workers is another way of loving others.
- 3. Preventing long-term illness. Many have focused on death rates. While it is true that most young people do not die from COVID, a significant number develop chronic cough, shortness of breath, and fatigue that can make homemaking and work more difficult. Vaccines reduce these sorts of chronic effects of COVID.
- 4. Caring for the "least of these." Doing what we can to prevent continued spread of COVID helps those who may not have the resources to be able to deal with a serious COVID infection.

How Vaccines Work

Vaccines allow us to build immunity to a disease without experiencing an infection. In the past, this required growing bacteria or viruses, killing or weakening (attenuating) them, and then giving small doses to facilitate immunity. More recent vaccines have used other techniques

including, giving proteins or mRNA (which will be discussed later) to produce a similar immune response.

For a vaccine to work, there are three main requirements:

- The infection needs to be one to which humans normally develop effective antibodies. For instance, measles typically causes a significant infection and afterwards people are immune for life. On the other hand, hepatitis C usually ends in a chronic infection. While people form antibodies to this virus, those antibodies are not protective. Not surprisingly, there is a vaccine for measles and none for hepatitis C.
- 2. The infection needs to cause severe enough illness that it makes sense to develop a vaccine. This is one of the reasons there is a vaccine against polio, but not against the common cold.
- We need to be able to grow the bacteria and/ or viruses or make a protein that provides immunity. A major challenge in vaccine design is getting viruses and bacteria to grow outside of their human hosts.

Vaccines have been very effective at reducing certain illnesses. Diseases like polio and tetanus (lockjaw) are not seen in the developed world due to vaccines. Vaccines are most effective when enough people are vaccinated that herd immunity is reached.

Herd immunity is the concept that when enough people in a community are immune to an illness, it does not continue to be passed around even if someone gets infected. The percent required to achieve herd immunity is related to the *r number*, or how many people an infected person gives the disease to. If, as with influenza, the *r* number is low, then you need to have a lower percentage of people immune to prevent an epidemic. If the *r* number is high, you need a higher percentage of the population immune to prevent a big outbreak. Immunity here simply means having antibodies against the illness. These will come either from an actual infection or from a vaccination. COVID is moderately infective with an r number between two and three. This means that we may need to see 70 percent of the population immune to have herd immunity.

Vaccines do, however, come with several concerns. Many have worried about the safety and ethics of producing vaccines.

Safety Concerns

Each vaccine has risks associated with it. These are carefully documented and tracked by the Centers for Disease Control. There are several places where they are reported, the Vaccine Adverse Event Reporting site being the most common place. Any adverse reaction to a vaccine, regardless of how recently that vaccine was released, will be followed up by the CDC to see if it warrants further investigation.

Fortunately, the risk with most vaccines is pretty small—things like fevers and muscle aches for a limited period of time. When we consider the risks of vaccines versus the diseases they are designed to prevent, we conclude that vaccines are worthwhile. Experience shows that the side effects of the vaccine are less than the consequences of the illness.

Ethical Concerns

The biggest concern from an ethical standpoint is the use of fetal cell lines in the production of vaccines.

Scientists between the 1960s and 1980s took cells from infants who had been aborted and found that they could keep these cells alive for decades. These became the fetal cell lines that are still used today. There are certain vaccines—German measles (rubella), chickenpox (varicella), and hepatitis A—that are still grown on fetal cell lines. The United States is no longer making new cell lines from aborted babies (there have been some in other countries), but drug companies and vaccine makers do continue to use the old cell lines for testing as well as production of certain vaccines and medications.

We would see a difference between vaccines where fetal cells were used only in testing and those vaccines that are actually manufactured from fetal cell lines. The use of fetal cell lines in testing is widespread and involves many

COVID-19 and Its Vaccines

Probably the biggest news story of the last year has been COVID-19 and the various responses to it. COVID started in China in 2019, but since then has spread to every country on earth. It causes death in under one percent of cases, but still has caused half a million deaths in the United States. While deaths are a big concern, they are not the only concern. As of the end of January 2021, nearly 1.5 million people had required hospitalization for COVID. In addition, the chronic effects of COVID-long-term fatigue, shortness of breath, and depression-have also created hardships in the homes of many. With such a high toll on health, the United States and other countries have invested billions of dollars to get vaccines ready as quickly as possible.

mRNA Vaccines

The first two vaccines (made by Pfizer and Moderna) for COVID were messenger RNA (mRNA) vaccines. All human cells use mRNA. When a cell needs to express a gene, either to make a protein or do some other function, it unzips the DNA in the nucleus and makes a copy of that part of the DNA with mRNA. The mRNA is literally a messenger that goes from the nucleus to the manufacturing center of the cell (the ribosomes). Once it reaches the ribosomes, it functions as a medications in use today even though these medications and vaccines could have been designed without the use of these cells. While we do not condone using these fetal cell lines either for testing or for manufacturing vaccines and medications, and we would steer Anabaptists to vaccines that have as little involvement with these cell lines as possible, it is very difficult to completely identify and avoid all vaccines and medications where fetal cell lines were used in testing.²

template, telling the cell what protein to make next.

It is important to know that mRNA does not last very long—maybe ten or twelve hours on average. When it degrades, the body stops making this protein. This is a natural process that our bodies use all the time and while mRNA is in our cells, it in no way changes our cellular DNA.

Vaccines that use mRNA work by carrying a template for cells to produce a protein that looks like the surface (spike) protein on COVID viruses. As the body sees this spike protein, it will generate antibodies to it, creating the desired immune response.

Effectiveness

Both the Pfizer and Moderna vaccines were found to be 95 percent effective at preventing symptomatic COVID infections after the second shot. Combining the numbers for the two vaccines, out of more than seventy thousand participants, there were nineteen cases of symptomatic COVID in the vaccine group (none with serious symptoms) and 347 cases of COVID in the placebo group. (Forty cases required hospitalization.)

Recent studies in Israel have shown that individuals who got one dose of these vaccines

² For more discussion of the ethical issues, see page 7, "A Pastoral Addendum."

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had higher antibody levels to COVID than those who experienced a "natural" infection. We are hopeful that this means that those who have the vaccine don't get even mild cases, but it is too soon to know for sure.

Side Effects

The vaccines for COVID have a number of side effects. At least 50 percent of people feel badly for twenty-four to forty-eight hours after getting a dose (body aches, fevers, and fatigue). This is a sign that the vaccine is producing the desired effect on their immune systems. If recipients are extremely frail, they might do well to avoid these vaccines. Of course, those people would probably not do well with COVID either. The CDC is saying that the rate of severe allergy (anaphylaxis) with these vaccines is eleven per one million doses.

Vaccines that use mRNA do not work in the nucleus of the cell and do not change DNA. While some people have claimed that these vaccines cause sterility, particularly in women, this is not the case—twenty-four women in the trials got pregnant. If the antibody to COVID caused sterility, we would see issues with those who have recovered from COVID infections, as the antibodies look the same.

Ethical Concerns

While the Moderna and Pfizer vaccines were tested using fetal cell lines, there is no ongoing use of those cells in producing the vaccines. These are the most ethically sourced of the vaccines currently available.

Other COVID Vaccines

Astra Zeneca and Janssen (Johnson and Johnson) are two companies that currently have more traditional vaccines that will be released very soon. Both involve viruses that are grown on fetal cell lines and then inactivated—that is to say, using fetal cell lines is integral to their production. Because of this, they are significantly worse from an ethical standpoint than mRNA vaccines.

Many more vaccines are coming. We think the Charlotte Lozier Institute page³ does an excellent job of documenting which vaccines use fetal cells, both in manufacture and in testing.

Conclusion

Christians have a responsibility to love, respect, and protect those around them. We believe that vaccines are a part of that, but that it is important to choose those produced in the most ethical manner possible.

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³ See link in "Further Reading" section.

Frequently Asked Questions about Vaccines

Is it concerning that children get so many shots at early ages?

Our immune systems are wonderfully made by God and able to fight off illnesses from early childhood on. We also live in a world that is full of bacteria and viruses. Any child who has older brothers and sisters is exposed at a young age to numerous infectious agents. Getting exposed to a few more via vaccination is not hard on their immune system at all.

At the same time, the illnesses that we vaccinate against used to cause a lot of devastation, particularly when infants were affected. Whooping cough (pertussis) in children under one year of age requires hospital admission 50 percent of the time and causes death in about one in two hundred cases. We know that polio caused large amounts of devastation through neurologic damage.

It is important to start vaccines early enough to prevent the illnesses they are designed to treat.

What about all of the toxins that are present in vaccines?

Vaccines contain tiny amounts of preservatives and adjuvants. More harmful toxins, like mercury, have been left out of modern childhood vaccines. Thimerosal was taken out of childhood vaccines in 2001.

There are lots of toxins in the environment as well, and fortunately, a healthy child's liver and kidneys will filter out these microscopic amounts. Even breast milk, as healthy as it is, contains tiny amounts of aluminum and formaldehyde. Formula has significantly higher amounts.

Isn't it different to get a toxin by injection than by mouth?

From the body's standpoint, there isn't a real difference. These toxins are very absorbable when taken orally. The liver does not distinguish between a toxin received via the digestive tract or via an injection.

Aren't vaccinations associated with autism?

Dr. Andrew Wakefield was a physician in England who published an article in 1998 in The Lancet journal, claiming that vaccines caused autism in children. Since that time, his article was retracted and it was found that he falsified data.

Since then there have been huge studies trying to identify if autism is associated with vaccines. If anything, children who are completely vaccinated seem to have a slightly lower rate of autism compared to children who are unvaccinated.

So, what is causing increasing rates of autism?

The answer is that no one knows. There doesn't seem to be just one cause. Some of the increase could be related to changes in the criteria to diagnose autism spectrum disorder. Children that might have been considered a little unusual in another era are now being diagnosed on the spectrum.

It is now thought that at least 80 percent of increased autism rates are related to genetic and in-utero factors. Older fathers and mothers, better survival of extremely premature infants, maternal obesity, and exposures to medications and toxins during pregnancy all probably play a role in this increase.

Are there children who should not be vaccinated?

There are certain conditions that would make it inadvisable for a child to receive a vaccination.

- 1. An allergy to the vaccine. This is unusual, but some children have significant allergies related to a vaccine or more than one vaccine. It would not be a good idea to repeat a vaccine in this situation.
- 2. Significant immune suppression. Children who have extremely weak immune systems often should not receive vaccines. For instance, a child who is on chemotherapy for cancer should not receive vaccines during that time.
- 3. History of a significant reaction to the vaccine. These are unusual, but for instance, if a person develops Guillain Barre Syndrome after a flu shot, he or she should not take further flu shots.
- 4. A current fever. People who are actively sick should not receive a vaccination. If someone has a fever, it is best to put off their vaccination until they are well.

Do mRNA vaccines alter DNA?

The simple answer is that they do not.

mRNA works in the "factory" of the cell called the ribosomes. It carries templates for proteins to that factory and tells the cell to make that specific protein. This does not feedback to the DNA in the nucleus and does not alter the genetic code. Also, it is working in a very small number of cells out of the 30 trillion cells found in the human body.

Do mRNA vaccines cause sterility?

There is a rumor that a small segment of the COVID spike protein looks similar to a protein that is in the placenta and that administration of these vaccines will cause sterility in women. We have found no evidence of this. In the vaccine trials, multiple women got pregnant (with no issues), and the vaccines have since been given to millions more with no sterility issues noted. Furthermore, the antibody to COVID is the same, regardless if it is acquired through a natural infection or through immunization. We have seen no sterility following COVID infections, so the presence of these antibodies should not be an issue.

Were the COVID vaccines developed too quickly?

Operation Warp Speed gave billions of dollars to vaccine makers to develop vaccines against COVID as quickly as possible. The United States government and others guaranteed they would buy a large number of doses regardless of the effectiveness of the vaccine. (If the vaccines proved ineffective, the doses would not be given.) The manufacturers could then produce millions of doses of their vaccines well before the trials were completed.

Having high levels of COVID in communities helped as well. It takes time to recruit forty thousand people to take part in a vaccine trial, but in this case, that was done in a few months. Then they had to wait until there were 180 cases of COVID in the trial participants. That actually happened quickly and showed clear benefits of vaccination over placebo.

What about the long-term risks of vaccines?

Obviously, these are very new vaccines. We do not have years of data on them. At the same time, we do not have years of data telling us what the long-term effects of a COVID infection are. Studies have indicated that young athletes have decreased cardiac function after experiencing COVID. Pulmonologists are saying that post-COVID lungs look like the lungs of patients who have smoked for years, even after mild COVID cases. Other symptoms, like long-term fatigue and muscle aches, are present in many post-COVID patients. It is important to weigh the risks of a vaccination versus the risks of the disease.

What about people who have had COVID already?

The CDC says that COVID disease gives immunity for at least 90 days. So for those who have had COVID, there is certainly no rush to get vaccinated. There are indications that antibody levels decline over time, and there are numerous cases where people have gotten COVID a second time, sometimes worse than the first time.

The vaccines do seem to produce much higher levels of antibodies against COVID compared to what are acquired from a natural infection. This hopefully would reduce the chance of asymptomatic carrier state as well as give longerterm immunity.

This article and FAQs were prepared by ViewPoint: Anabaptists working together on current issues. Writing group: Richard Bean (ON), Bethanie Burkholder (Bangladesh), Nolan Byler (OH), Matt Landis (PA), Brian Martin (PA), David G Martin (PA), Paul A Miller (OH), Jana Nisly (El Salvador/KS), John Waldron (VA), and Nathan Yoder (VA).

How often will COVID vaccines need to be given?

Indications now are that COVID vaccine immunity will last at least two years. It may last longer, but we will need to follow antibody levels to determine the length of immunity.

The bigger question is how much COVID mutates over time. If it mutates enough that the surface "spike" protein looks different than antibodies from a previous infection/vaccine, the antibodies would no longer provide protection. This would require a tweaked vaccine that would cover this new strain.

We welcome your response. Write us at contact@anabaptistviewpoint.org or send a letter to: ViewPoint 28527 Guys Mills Rd Guys Mills, PA 16327

Church leaders, subscribe by sending an email or a letter, or visit **anabaptistviewpoint.org**.

A Pastoral Addendum

It is no secret that people, including conservative Anabaptists, have widely divergent views on vaccines. And these widely divergent views all seem to have their experts who support them. With the potential for the common person to do his or her own research on the web and develop strongly held views (even "convictions") on the subject, what we offer here may seem to be just another voice.

Our goal has been to pool the experience and understanding of a team of conservative Anabaptists who are active in health care and offer a thoughtful and biblically based position. We are concerned that a good bit of misinformation is being passed around on the subject of vaccines. At the same time, we do not offer this as a dogmatic position that needs to be pressed onto the unwilling.

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We must all make decisions with the information and wisdom we have at hand, and we must be open to new information that may help our perspective, remaining alert to moral and ethical dimensions to the issue.

Here are some thoughts that may be helpful:

- Offer this paper as coming from a group of conservative Anabaptist health care workers who have made it their lifework to provide the best care possible to those who are sick. While they are certainly not infallible, they are people who understand the science of vaccines and who approach the subject with a commitment to following Jesus and the Scriptures.
- Avoid argument by being willing to hear people who see things differently and by engaging with them and considering their sources of information.
- 3. Acknowledge that sometimes experts disagree. This is one of the safeguards against peddling wrong ideas and solutions, and it is also why vaccines and medications recommended by the established medical community require vigorous testing. Urge caution toward lone voices among experts, and encourage people to be sure their information is coming from credible sources.
- 4. The development of vaccines too often has relied on the use of fetal cell lines. Because Christians oppose abortion, we must think carefully about how abortions have factored into vaccines available to us and to what extent we ought to benefit if those benefits have been achieved through immoral means. This is a good time to discuss together these ethical considerations. But the answers are not always easy because many of the benefits of modern living are tied to unethical means of receiving those benefits. The position presented in this paper makes a difference between a direct tie to immoral

means and more indirect connections. (See additional considerations below.)

- 5. Recognize that even Christian medical workers may come out at different places as a matter of conscience. Paul urged Jews and Gentiles to respect one another where they had differing conscientious approaches to food and the observance of special days. "Let not him that eateth despise him that eateth not; and let not him which eateth not judge him that eateth: for God hath received him" (Romans 14:3). It would seem that this same advice could be applied to differences in conscience regarding the use of vaccines and medications.
- 6. This is an opportunity to practice Christian graces in discussing differences—listening carefully, speaking respectfully, showing forbearance, and learning from one another. This is not an issue that allows Christians to resort to attacking one another, blustering, accusing, or using demeaning language.

Some additional considerations of the ethical issues

As noted in the article, the biggest ethical issue with vaccines is whether it is right for Christians to benefit from research and manufacturing that includes actions that are morally wrong.

The Scriptures are clear that resorting to immoral means to achieve good ends is ethically wrong. Paul rebukes this line of reasoning in Romans 3:7, 8: "For if the truth of God has increased through my lie to His glory, why am I also still judged as a sinner? And why not say, 'Let us do evil that good may come'?—as we are slanderously reported and as some affirm that we say. Their condemnation is just." Following Paul's line of reasoning, we understand that to use unrighteous means, such as lying, cheating, oppressing others, or killing, to accomplish good results is unethical. Applying this to our subject here, we conclude that because abortions are morally wrong, using tissue from aborted infants to make vaccines and medicines likewise crosses ethical lines.

The ethical issue becomes less clear, however, the further the benefits and beneficiaries are removed from the unethical means. To illustrate, in the Old Testament, it was forbidden to bring an offering of money to the Lord if the money was earned through prostitution (Deuteronomy 23:18). A good action (offering) that was the direct result of an immoral action (prostitution) defiled the good action. But if that money found its way into the market, there is no indication that later, a merchant could not use those same coins as part of his offering to the Lord. Following this line of thought, it would seem that the further removed from the original unethical means, the less it is an ethical issue.

To illustrate this further, if someone were killing street children in order to harvest their organs, we would refuse those organs, even if using them would save our life. But if someone had been killed for some other reason and the person were an organ donor, we would likely consider those organs acceptable, even though the person's death was the result of a sinful action.

With the development of vaccines and medications using cells lines from aborted infants, we have several levels of tie-in to consider. There is no question that abortion is morally wrong. Intentionally taking the life of an infant before birth is still killing a human life. Using the tissue of an aborted infant to good ends (to make a vaccine or medication) still seems, for many Christians, too much like using an immoral means to accomplish a good end. We believe it is ethically wrong for researchers to use tissue from murdered infants, although research using tissue from miscarriages or umbilical cords would seem to be no different from research on cadavers.

But now, is it ethical to continue to benefit from ongoing generations of those fetal cell lines? Some Christians say no-we ought not to use these vaccines because using the original cells was morally wrong. Others conclude that although the original action was wrong, it happened. These are cell lines, but not the original cells. This, they say, is similar to other benefits we have today from past immoral actions. We own and cultivate land, for example, that was acquired originally through war, deception, and terrible exploitation of Native Americans. We buy merchandise that has been imported from foreign manufacturers who exploit their workers. Or we buy merchandise from companies in the U.S. who are known to support LGBT rights. While some Christians take stances against companies that are known to violate Christian ethics, it seems virtually impossible not to benefit at all from wrongs others have done.

As noted in the paper, many drug companies use fetal cell lines in testing and some use them in the manufacture of medicines and vaccines. Using these cell lines in testing (but not in the manufacture) of vaccines, especially when using these cells is not necessary to the vaccine itself, seems like still another step removed from the sin of abortion (that is, the final product was not dependent on the use of fetal cells because the testing could have been done otherwise). Some Anabaptists are okay with vaccines tested and produced by fetal cell lines, because these are cell lines, many generations removed from the original cells (though they would object to what was originally done). Others are okay with vaccines where testing was done with fetal cell lines but the final product did not use them. And others may not want to use vaccines or

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medications if fetal cell lines were used in any part of the development (although as noted in the paper, this would be very difficult to do in today's medical field).

Where Christians draw lines at different places on the vaccines, we ought to respect one another. In Romans 14, Paul urges that we be faithful to our conscience, that we respect one another where our conscience differs, and that we not allow disputes such as these to grow to larger

Further Reading

Baden, Lindsey, et al. 2021. "Efficacy and Safety of the [Moderna] Vaccine." New England Journal of Medicine, 384 (5): 403–16. https://doi.org/10.1056/NEJMoa2035389

Carter, Joe. "**Are Fetal Cells Being Used in COVID-19 Vaccines and Treatments?**" The Gospel Coalition. https://www.thegospelcoalition.org/article/thefaqs-fetal-cells-covid-19-vaccines-treatments/

Centers for Disease Control. 2020. "Vaccine Safety Datalink (VSD)." August 24, 2020. https://www.cdc.gov/vaccinesafety/ ensuringsafety/monitoring/vsd/index.html

Christian Medical & Dental Associations. "**Physician Support for Ethical Vaccines**." Christian Medical & Dental Associations. https://cmda.org/article/ physician-support-for-ethical-vaccines/

Givler, Amy. "'**Am I My Brother's Keeper?**'" Christian Medical & Dental Associations. https:// cmda.org/article/am-i-my-brothers-keeper/ violations. "For the kingdom of God is not meat and drink; but righteousness, and peace, and joy in the Holy Ghost... Let us therefore follow after the things which make for peace, and things wherewith one may edify another" (vv. 17, 19).

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Jones, David, and Stefan Helmreich. 2020. **"A History** of Herd Immunity." *The Lancet*, *396* (10254): 810–11. https://doi.org/10.1016/S0140-6736(20)31924-3

Miggiani, Wolfgang. 2004. *Tainted Vaccines*. Midwest Mennonite Fellowship.

Polack, Fernando, et al. 2020. "**Safety and Efficacy of the [Pfizer] Covid-19 Vaccine**." *New England Journal of Medicine*, *383* (27): 2603–15. https://doi.org/10.1056/NEJMoa2034577

Prentice, David. "Charlotte Lozier Institute | COVID-19 Vaccine Candidates and Abortion-Derived Cell Lines." https://lozierinstitute.org/update-covid-19vaccine-candidates-and-abortion-derived-cell-lines/

Yang, Edward, et. al. 2003. "**Decay Rates of Human MRNAs.**" *Genome Research, 13* (8): 1863–72. https://doi.org/10.1101/gr.1272403

ViewPoint builds on the Anabaptist value of community wisdom. A team comprised primarily of older, ordained men forms the core executive group. Subcommittees are then formed to address particular issues, drawing in people experienced in the subject. ViewPoint was formed in response to repeated calls for help in addressing issues facing conservative Anabaptist leaders. A number of church leaders asked Faith Builders (Guys Mills) to facilitate the effort. The ViewPoint executive committee includes Steven Brubaker (PA), Merle Burkholder (ON), John Coblentz (PA), Matt Landis (PA), Gary Miller (ID), and David Yoder (KS). Materials produced by ViewPoint are intended to assist and encourage church leaders, not to dictate or control them. Leaders are free to use the uncopyrighted materials as best suits their needs.