

# Questions and Answers

## Reasons for Vaccine Hesitancy

A survey was done among 11,000 health workers in January 2021 to determine their concerns regarding the COVID vaccines. Respondents were allowed to check more than one concern. Results are below:

- Too quick to market/Not studied enough 72 percent
- Risk of serious adverse reaction 60 percent
- Uses new or unproven technology 50 percent
- Concern about the benefit as masks still recommended 31 percent
- Not concerned about becoming ill from COVID 24 percent

### Additional concerns:

- The use of fetal cells or tissue to create or test the vaccines
- The effect on fertility and safety and efficacy of the vaccines during pregnancy
- Many have had COVID and assume they have natural immunity
- Needle or vaccine phobia
- Fear of being manipulated or coerced by a government they do not trust

### Some say, “I’ve already had COVID.”

- Unfortunately, having had Covid-19 does not provide long lasting immunity. There are many reported cases of people becoming ill with Covid-19 as soon as six (6) months from the initial illness.
- The longer the virus circulates and is allowed to mutate, the more likely more contagious and more virulent variant strains will develop.
- For people who survived the original Covid-19 alpha variant, last winter or earlier, their immunity has waned, and they likely do not have effective immunity to the Delta variant.

## mRNA Vaccines were Initially Developed in 2003

- Initial exploration and development began in 2003 with the SARS epidemic, which also was a Corona virus, so the technology is NOT new.
- Development was further studied in 2012 with MERS, but the epidemic ran its course and human trials were never conducted.
- [Human Trials began with Phase 1 March 2020, Phase 2 May 2020 and Phase 3 July 2020 for COVID vaccine. Human vaccination began in the US \(outside of clinical trials\) in late December 2020.](#)

## COVID Vaccine Safety

- Currently available vaccines have been tested in large clinical trials and the FDA has determined that they are safe and effective.
- For Emergency Use Authorization (EUA) to be granted, the known and potential benefits of a COVID-19 vaccine must outweigh the known and potential risks of the vaccine.

- 355 million doses of vaccine have been administered (08-09-2021), and these vaccines are undergoing the most intensive safety monitoring in U.S. history.
- In Wyoming, 416,523 doses of the vaccines have been given; 196,545 people are fully vaccinated, which is 33.87 percent of the Wyoming population.

## Vaccine Efficacy

No vaccine is 100 percent effective. For example, pneumonia vaccines are 60-70 percent effective.

- **Pfizer** (two doses): 94 percent effective in people >65 years of age (vaccines are generally less effective as you age).
- **Moderna** (two doses): 94.1 percent effective in people 18 years or older.
- **Johnson & Johnson** (single dose): 72 percent effective in the U.S., but people are fully vaccinated in two (2) weeks – a full month earlier than either Pfizer or Moderna.

The rate of breakthrough cases among those fully vaccinated is less than 1 percent.

**All three vaccines completely prevented hospitalization and death in clinical trials.**

## How Do the Vaccines Work?

All three vaccines work by prompting people's own cells to produce the spike protein, so their immune system recognizes and responds quickly to a real infection. This is the basic principle behind the influenza vaccine and pneumonia vaccines.

*Pfizer and Moderna* are mRNA Vaccines. They deliver fat covered bits of chromosomal material to a body's, cells which cause them to make the spike protein followed by an antibody response. To date, these vaccines have excellent safety, and lower incidence of serious complications than current immunizations such as influenza, Shingrix, and Pneumonia vaccines.

*Johnson & Johnson* (J&J) delivers a shell of an adenovirus that has been modified to not replicate or make people sick. The shell of the virus carries chromosomal material into their cells to make the spike protein, which triggers the antibody response. This is more comparable to current vaccines in use.

**The vaccines do not contain live virus, so they cannot make you sick with COVID 19.**

## Vaccine Side Effects

Side effects are normal. They signal that your body is building protection.

### Common Side effects:

On the arm where the shot was given:

- Pain
- Redness
- Swelling

Throughout the rest of the body:

- Tiredness
- Headache
- Muscle pain
- Chills
- Fever
- Nausea

## Mitigation Strategies

- There may be more effective therapies for treating COVID patients like mono-clonal antibodies; however, the most effective strategy is prevention.
- Mitigation strategies include wearing masks, physical distancing, and encouraging as many eligible people as possible to get vaccinated.
- The best way to protect the children, born and unborn, is to surround them with a loving community of vaccinated teens and adults.

## Vaccine Complications Are Rare

**Anaphylaxis after COVID-19 vaccination is rare** and has occurred in approximately two (2) to five (5) people per million vaccinated in the U.S.

**Blood clots and a low platelet count after J&J vaccination is rare.** As of August 6, 2021, more than 13 million doses of the J&J Vaccine have been given in the U.S. CDC and FDA identified 39 confirmed reports of people who got the J&J Vaccine and later developed venous clots. Women younger than 50 should be aware of the rare, but increased risk, of this adverse event. The risk of blood clots in the general population is 1/1million, and with J&J vaccine, the risk doubles to 2/1million.

- To date, two (2) confirmed cases of blood clots following the Moderna vaccine have been reported after more than 335 million doses of [mRNA COVID-19 vaccines](#) administered in the U.S. This is comparable to the incidence of blood clots in the general population.

**Guillain-Barre Syndrome** has been observed in people who have received the J&J Vaccine. This is a rare disorder where the body's immune system damages nerve cells, causing muscle weakness and sometimes paralysis. Most people fully recover from GBS, but some have permanent nerve damage. After more than 13 million J&J Vaccine doses administered, there have been approximately 155 preliminary reports of GBS as of August 6, 2021. These cases have largely been reported about two weeks after vaccination and mostly in men, many 50 and older. CDC will continue to monitor for and evaluate reports of GBS occurring after COVID-19 vaccination.

**Myocarditis and pericarditis after COVID-19 vaccination are rare.** As of August 6, 2021, there have been *1,253 reports of myocarditis or pericarditis* among people ages 30 and younger who received a COVID-19 vaccine. Most cases have been reported after mRNA COVID-19 vaccination, particularly in male adolescents and young adults. CDC and FDA have followed up on these reports and *confirmed 730 cases of myocarditis or pericarditis*. As of May 25, 2021, the [incidence of myocarditis or pericarditis is 4.8/million](#) in people vaccinated with a COVID vaccine. CDC and its partners are continuing to investigate these reports to assess whether there is a relationship to COVID-19 vaccination, as there are multiple causes of myocarditis and pericarditis.

**Reports of death after COVID-19 vaccination are rare.** More than 351 million doses of COVID-19 vaccines were administered in the U.S. from December 14, 2020, through August 9, 2021; 6,631 people who were vaccinated have died. The death rate among people who received a COVID-19 vaccine is 0.0019 percent. FDA requires healthcare providers to report any death after COVID-19 vaccination even if it is unclear whether or not the vaccine was the cause. **This does not necessarily mean that a vaccine caused a death.** A review of available clinical information, including death certificates, autopsy, and medical records, has not established a causal link to

COVID-19 vaccines *except for* a plausible causal relationship between the J&J vaccine and a rare and serious adverse event—blood clots with low platelets which has caused three (3) deaths as of May 12, 2021.

**In summary, serious side effects that could cause a long-term health problem are extremely unlikely following any vaccination, including COVID-19 vaccination.** Vaccine monitoring historically has shown that side effects generally happen within six (6) weeks of receiving a vaccine dose. The Pfizer and Moderna vaccines have been in use in the U.S. for greater than six (6) weeks (Pfizer December 2020 and Moderna January 2021) and no serious long-term side effects have been reported with these two vaccines. The J&J vaccine came to use in March 2021 and is associated with blood clots and GBS. The mRNA vaccines are a new concept in vaccination and have not been confirmed to be associated with any serious side effects, although they may be determined to be linked to myocarditis.

## Concerns Regarding use of Aborted Fetal Tissue

Cells derived from elective abortions have been used since the 1960s to manufacture vaccines, including current vaccines against rubella, chickenpox, hepatitis A, and shingles. They also have been used to make approved drugs against diseases including hemophilia, rheumatoid arthritis, and cystic fibrosis.

- For the Pfizer and Moderna vaccines, no fetal cell lines were used to produce or manufacture the vaccine, and they are not inside the vaccine.
- Fetal cells may have been used to test efficacy and/or proof of mRNA concept. These include a kidney cell line grown in the lab from a baby aborted in 1972 and a retinal cell line from a baby aborted in 1985.
- The J&J vaccine did use fetal cell cultures, specifically the retinal cell line that was isolated from an aborted baby in 1985, to produce and manufacture the vaccine.

The following is an excerpt from a document titled [Answers to Key Ethical Questions About COVID-19 Vaccines posted on the USCCB website](#) written by the Secretariat of Pro-Life Activities (January 2021).

### **Is it morally acceptable to receive a COVID-19 vaccine that uses abortion-derived cell lines?**

Given that the COVID-19 virus can involve serious health risks, it can be morally acceptable to receive a vaccine that uses abortion-derived cell lines if there are no other available vaccines comparable in safety and efficacy with no connection to abortion. If it is possible to choose among a number of equally safe and effective COVID-19 vaccines, the vaccine with the least connection to abortion-derived cell lines should be chosen. If a vaccine with no connection to abortion-derived cell lines is not readily available, vaccines that used such cell lines only for testing would be preferable to those that use such cell lines for ongoing production. Such choices may not be possible, however, especially in the early stages of vaccine distribution. In that case, one may receive any of the clinically recommended vaccines in good conscience with the assurance that reception of such vaccines does not involve immoral cooperation in abortion.

### **Is there a moral obligation to receive a COVID-19 vaccination?**

The Congregation for the Doctrine of the Faith (CDF) has noted recently that “vaccination is not, as a rule, a moral obligation and that, therefore, it must be voluntary. In any case, from the ethical point of view, the morality of vaccination depends not only on the duty to protect one’s own health but also on the duty to pursue the common good.” The CDF also said that “in the absence of other means to stop or even prevent the epidemic” vaccination may promote the common good, “especially to protect the weakest and most

exposed.” For a vaccine to be effective in protecting society, most people need to be vaccinated to break the chain of disease transmission from person to person throughout the community. The CDF also noted that those who refuse to get vaccinated must do their utmost, by taking all the necessary precautions, to avoid “becoming vehicles for the transmission of the infectious agent. In particular, they must avoid any risk to the health of those who cannot be vaccinated for medical or other reasons, and who are the most vulnerable.”

### **Concerns Regarding the COVID Vaccine Causing Infertility or Miscarriage**

- This is an old vaccine trope. It circulated when both the Polio and HPV vaccines were released.
- Myth: The mRNA vaccine targets a protein called Syncytin-1 which is a protein contained in the corona virus spike protein complex.
- Fact: Syncytin-1, a protein found in the brain and female reproductive system is essential for the formation of the human placenta. There is a similarity in 7 percent of the order of amino acids between Syncytin-1 and the spike complex. This is not sufficient to turn off the function of Syncytin-1 and effect the formation of a normal human placenta.
- Fact: There has been no difference in the rate of miscarriage between >100,000 pregnant women who received an mRNA vaccine and those who did not.

### **COVID-19 Risks and Vaccine Safety in Pregnant Women**

Pregnant women who become ill with COVID-19 are at risk for pre-term delivery, low-birth-weight infants, and admission to the Neo-natal ICU (NICU).

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|--|--------------------------------|
| • Risk of pre-term delivery in women ill with COVID-19 | 12.17 percent vs. 7.91 percent |
| • Risk of low-birth-weight infants                     | 8.97 percent vs. 7.94 percent  |
| • Risk of baby being admitted to the NICU              | 10.5 percent vs. 8.8 percent   |

COVID-19 vaccines are effective at all stages of pregnancy in reducing the incidence of COVID-19 and preventing the severity of illness and hospitalization and death. Pregnant women are no different from non-pregnant women in this regard. The vaccination builds antibodies that may protect the baby in-utero and with breast feeding.

### **How to Respond to the Following Objections?**

#### **The vaccines are of questionable benefit since we still need to wear masks.**

- No vaccine is 100 percent effective.
- Vaccines do prevent serious illness, hospitalizations, and death.
- There is risk that people could be exposed to COVID following vaccination and have enough virus in their nose and mouth to transmit the virus to someone who has yet to be vaccinated or has contraindications to vaccination.
- At this time, children under age twelve (12) are not eligible for vaccination.
- Wearing a mask gives added protection against COVID when there is a high level of community transmission, as is evident with the Delta variant.

### **“Every time I take a ‘flu shot,’ I get the flu.”**

This is a very common excuse to not take any vaccine, not just influenza and COVID. “Flu” is used loosely in the non-medical community to denote a “cold” or viral gastroenteritis and not just Influenza. There are mild side effects to any vaccine, and they often include headache, low-grade fever, and muscle aches. Those who have Influenza become suddenly ill with a high fever, chills, muscle aches, sore throat, headache, and a cough. Often, they are too sick to get out of bed to go see the doctor.

Nevertheless, after a person receives any vaccine, a healthy immune system will immediately target its focus on building antibodies to the injected vaccine. In a sense, it lets its guard down, and a recently vaccinated person may get the local “cold” that is going around. Medical professionals often advise people to take the flu shot on Friday and hunker down and avoid crowds for the next 48 hours.

### **Lack of concern about getting ill from COVID – “I’ll take my risks.”**

- COVID-19 was initially seen as a risk primarily for people who are older (> age 65) or who have additional risk factors.
- The Delta variant has increased transmission. [One person is transmitting the disease to eight (8) to ten (10) people in Wyoming as of August 12, 2021]. In comparison, the non-mutated virus, which was prevalent in the U.S. last winter, had a transmission rate of 1.5 to 2.
- The Delta variant is causing more severe disease in younger people. Fatalities have been reported in children younger than age five.
- The number of deaths by age, as of August 11, 2021, in Wyoming:
  - Age 30-39                      10 deaths
  - Age 40-49                      11 deaths
  - Age 50-64                      99 deaths
  - Age 65-74                      155 deaths
  - Age 75-84                      204 deaths
  - Age 85 and older              226 deaths
- The average age of patients hospitalized in Wyoming in August 2021 is 30. The average age of patients hospitalized last winter was significantly older.