



## Receptiveness to COVID-19 Vaccination - A Survey of Nursing Staff by ShiftMed

Since vaccine distribution began in the United States late last year, more than 66 million doses have been administered, reaching 13.6 percent of the total U.S. population, according to [NPR](#). Some people can't wait to get the vaccine, while others are confused and need more guidance. Frontline healthcare workers face a dilemma if they choose to get the vaccine and protect themselves from the virus, or not get it. However, many intend to learn more first or wait until it is more proven. There are many solid reasons, such as immune reactions to vaccines, pregnancy, or existing medical issues. There are also decisions guided by misinformation, which is prevalent about vaccination and COVID-19 vaccines specifically.

To understand the nursing workforce mindset, ShiftMed surveyed nursing professionals about where they stand on getting vaccinated against COVID-19. ShiftMed also wants to understand negative feelings or misinformation that influence how nursing staff feel about this vaccine. This report reveals how nursing staff, mostly RN, LPN, or CNA, feel about the vaccine and why some are reluctant to get vaccinated.

We surveyed 151 nurses and certified nursing assistants, ages 18 to 75, who work in skilled nursing facilities (SNF), hospitals, assisted living facilities, and rehab centers. We wanted to find out if they've received the vaccine or plan to get it. If they did not plan to get the vaccine, what are their reasons? For some, they want to wait and see the results from the current vaccination initiatives and intend to delay receiving the vaccine.

### Numerical Results from the Survey

Seventy-five percent of the responders have not had the vaccine, while 25% have. Of the unvaccinated, 65.5% plan to get the vaccine, while 34.5% of the unvaccinated will not get it. Of the ones that have not received the vaccine, the reasons given include:

- 67.6% believe the COVID-19 vaccine was developed too quickly
- 33.8% think the COVID-19 vaccine might be unsafe
- 33.8% think there might be more side effects
- 29.6% don't trust the government
- 15.5% don't believe vaccines are safe

Multiple responses result in totals greater than 100%.

There is still a lack of information and disinformation on the vaccine, its effectiveness, the immediate side effects, and the long-term effects. As you can see from the responses, many people are confused and don't trust the available information. People have side effects from the vaccine, but most are mild. Reporting and word of mouth often meant the extreme results are covered or sensationalized. Scientific reports show vaccine reactions are not severe.



According to the latest safety update from the CDC's US Vaccine Adverse Event Reporting System (VAERS) [<https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2021-01/06-COVID-Shimabukuro.pdf>], approximately 372 out of every million administered doses of the mRNA vaccines lead to a non-serious reaction report. These slight reactions include headache, pain at the injection site, or fatigue.

Almost 80% of participants have not even asked to get the vaccine. Of the 20% that asked, 37.5% were turned down by their department managers for reasons such as:

- "Some people have reactions, so we are not sure we will give it out."
- "We don't have them in stock."
- "We don't have enough in stock."
- "It is not available at this time at this facility."
- "The vaccine is for our employees only."
- "As a non-employee, you are not a priority."
- "You missed out; they have already been to the facility."

To save lives, protect themselves and their families, health care workers should get the vaccine. Although SNFs and hospitals have not mandated worker vaccination, this may occur after July if there are plenty of vaccines for the entire country. State and county health departments seem to have the best information on getting the vaccine.

Remember that patients and patient families need to know they are safe at the facility. Worker vaccination is one comfort for these families. Trust in the safety of facility and staff may reverse the trend of more rehabilitation and care at home.

We then asked whether the participants were waiting to get the vaccine until more people have been vaccinated. Sixty-two percent replied, "No," while 38% answered, "Yes." People will be more comfortable getting the vaccine after more people are vaccinated. Many were concerned with how quickly the vaccine was developed. One person said, "We still don't have vaccines for illnesses that have been here for a long time, but it's a miracle we have one for COVID-19 in six months."

### **Concern for Reactions**

There is caregiver concern about reactions to the vaccination. These reactions can range from no side effects to a sore arm where the shot was given to flu-like symptoms of a fever, chills, headache, or muscle aches.

A recent article from [The New York Times](#) reported that out of 66 million people who received at least one dose of either the Moderna or Pfizer vaccine, only 36 people were hospitalized. Hospitalizations result from cases of immune thrombocytopenia, a lack of platelets in the blood required for clotting. Thrombocytopenia after vaccination led to the death of one physician in



Miami. The disorder also occurs from other vaccinations, particularly the measles-mumps-rubella (MMR) vaccine. However, doctors believe it is still important to be vaccinated with the COVID-19 vaccine.

The risk of serious illness from the virus is much more significant than developing thrombocytopenia or other rare disorders. Since CDC's Vaccine Adverse Event Reporting System (VAERS) is self-reported, it does not verify whether the vaccine was the issue.

Some people already had COVID and don't feel they need the vaccine. With almost 66 million people vaccinated, out of 382 million citizens in the US more than 13% of the population is vaccinated. Still, over 506,000 deaths have occurred from the 28.4 million positive cases in the US, as of Feb. 24, 2021. Those who had COVID are reluctant to get the vaccine despite evidence that the vaccine reduces illness from any COVID-19 reinfection. Again, health care workers need more information to remove the fear of vaccination.

We also asked how long they would wait to get the vaccine. Two-thirds of the people that answered the survey who want to wait to get the vaccine are willing to wait as long as a full year.

Another survey question, "Would you feel more comfortable getting the vaccine if a celebrity, sports figure, government official, or more well-known individual is vaccinated?" Ninety-six percent of respondents said, "No," while four percent said, "Yes."

Most of the people said this would not influence their decision or make them more comfortable. Participants are more concerned that no one knows what the vaccine's long-term effects will be, nor who will get side effects and how bad those can be. It doesn't matter to most who the person is that got the vaccine; most feel it is a personal decision about whether to get the vaccine.

### **Employer Mandated Vaccination**

Some employers require their workers to get the vaccine, and those in the survey were not thrilled about it. Employers can mandate employees to get the vaccine. It is the law and is consistent with the Americans with Disabilities Act of 1990, the Occupational Safety and Health Act of 1970, and Title VII of the Civil Rights Act of 1964. Employers have the legal right to mandate their employees receive a COVID-19 vaccination, according to guidance released by the [U.S. Equal Employment Opportunity Commission](#).

Employers may mandate the vaccine, especially if they believe an individual will directly threaten others' health and safety in the workplace. There are exceptions to the rule for employees with disabilities and religious beliefs. In our survey, twice as many people did not want their employer to mandate the vaccine compared to those that were okay with it.



Here is what participants said when we asked, “How do you feel about employer-mandated vaccination?”

Those who were okay with it said:

- “I was not mandated to take this vaccine. The pandemic is big, and any conscientious individual should not wait to be told how to protect himself or herself. Just register or make an appointment to take the vaccine before the government runs out of it. People are just afraid of nothing. If you don't take it now, a time may come when you cannot take.”
- “In some environments, the flu shot is mandatory, so this should be as well.”
- “I don't mind it as long as the employer offers the vaccine. If the employer cannot offer the vaccine, then it would be unfair to those who cannot get the vaccine because of limited supply.”
- “I feel it would benefit us all in the long run.”
- “I feel we should vaccinate everyone when their turn comes to help save ourselves and everyone else from being sick, ill, or even worse.”
- “I feel employers should mandate the vaccine because COVID-19 is deadly. And health care workers should be immune against it to work conveniently without fear, effectively and efficiently. It will also serve as an example to patients that are planning to object to the vaccine. Vaccination is better than the disease process and its effect.”

Many participants did not think it was fair to be forced to have to receive the vaccine if they did not want to. Six percent said they would quit working in healthcare if their employer forced them to get the vaccine. Others believe employers shouldn't force anyone to get the vaccine against their will. Compared to the flu shot, which is not mandatory at some workplaces, they question why it would be mandated to get the vaccine. Their comments include:

- “I feel it is unfair. I have severe allergy issues. Had two anaphylactic shock before, so I am concerned about having an allergy reaction. If something happens to me, my employer won't take care of my daughter.”
- “Well, then, I'm not the employee for the job. I'll either work for myself or change careers if I am forced to take the vaccine.”
- “I think it's wrong and should be a person's choice.”
- “I will not take a vaccine against my beliefs, and employers should not force employees to take it.”
- “I don't mind finding another job if that becomes an issue. I have credentials. I don't mind going back to school, getting other certifications, or becoming a business owner.”
- “It is imposing on a person's right to choose or taking away the person right to choose.”
- “Not very happy about getting the vaccine. It is too new, and long-term effects are not known.”
- “I feel you should not be mandated to do anything; everyone has his or her opinion about it.”



- “It violates my rights to make health decisions for myself, especially since most people who get the virus completely recover from it. As long as I take precautions as I have been since the beginning of the pandemic, I have the right to decline. I have yet to contract or infect anyone. It's my decision, not any companies.”

A few participants were on the fence, saying:

- “I dislike people being forced to take vaccines; however, I understand the importance of having everyone vaccinated to keep staff/patients safe.”
- “It may become necessary in the long term to ensure some level of safety. But at this time, because of limited information concerning the vaccine, people are hesitant to get vaccinated.”

The CDC consistently releases more information regarding infection, reinfection, natural immunity, and post-vaccine infection timeframe.

Some people have wild theories such as the government is implanting a chip in people, the vaccine contains seafood and they have seafood allergies, or we are being used as guinea pigs for government trials. None of this is true.

According to [Hackensack Meridian Health](#), the vaccines contain:

- Pfizer-BioNTech COVID-19 vaccine comprises the following ingredients:
  - mRNA
  - Lipids – to protect the mRNA
    - (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis
    - (2-hexyldecanoate), 2 [(polyethylene glycol)-2000]-N,N-ditetradecylacetamide
    - 1,2-Distearoyl-snglycero-3- phosphocholine
    - cholesterol
  - Salts – to help balance the acidity
    - potassium chloride
    - monobasic potassium phosphate
    - sodium chloride
    - dibasic sodium phosphate dihydrate
  - Sugar – helps molecules maintain their shape during freezing
- Moderna COVID-19 Vaccine has the following ingredients:
  - mRNA
  - Lipids
    - SM-102
    - 1,2-dimyristoyl-rac-glycero3-methoxypolyethylene glycol-2000 [PEG2000-DMG]
    - cholesterol

- 1,2-distearoyl-snglycero-3-phosphocholine [DSPC]
- Acids – to maintain the stability of the vaccine – Acetic Acid
- Acids Stabilizers - Tromethamine & Tromethamine hydrochloride
- Salts – Sodium Acetate
- Sugar - Sucrose

We can find more information on reactions to the Moderna vaccine here:  
<https://www.fda.gov/media/144434/download>.

### **Lack of Information**

Much misinformation abounds around the vaccine. This is apparent in the answers received from several questions in the survey, including:

- 1) Thirty-one percent of the participants believe they can get COVID-19 from the vaccine.

Many vaccines use a dead virus to trigger an immune response, but the COVID-19 vaccine is a different type of vaccine. It is an mRNA vaccine that does not contain any virus. The mRNA vaccine teaches our cells how to make a protein that triggers an immune response inside our bodies. The immune response produces antibodies that will protect us from getting infected if COVID-19 enters our bodies. It also reduces illness from COVID-19 variants (mutations). mRNA vaccines cannot give COVID-19 because there is no virus in the vaccine.

- 2) Eighteen percent of the participants believe that since they have had COVID-19, they don't need the vaccine, while 82% think they need the vaccine despite having COVID.

The science shows you will be more protected against the virus if you get the vaccine, despite already having COVID-19. Depending on how severe your reaction was to the virus and how sick you were, your antibodies may be higher or lower. So, getting the vaccine will help build antibodies to protect you even further.

- 3) Sixty-two percent of participants don't think that they used enough people in the vaccine trials.

For a vaccine to be verified by the FDA, it needs to have 6000 people in the trial. The Moderna vaccine trial had 38,000 people, while the Pfizer vaccine had 43,252. They approved the Moderna and Pfizer vaccines for use by the Food & Drug Administration (FDA) under an Emergency Use Authorization (EUA). A EUA makes vaccines available in public health emergencies. The vaccines will continue to be used as long as people benefit from them. Both trials exceeded the required minimum number of trial subjects (people).

To receive a EUA, the FDA requires rigorous testing. Manufacturers will continue clinical trials to file for a Biologic Licensing Application, a more formal application for permanent vaccine use.



This involves laboratory testing and research, testing on people, assessing the manufacturing process, and more. The standard process for vaccine development takes years.

Under the EUA, it requires manufacturers to follow-up with those who have received the vaccine for a period of up to two months.

- 4) Ninety-five percent of participants who received the vaccine still plan on wearing a mask, while 5% believe they don't need to wear one anymore.

After vaccination, the CDC recommends people continue wearing a mask. Wearing a mask limits exposure to the virus. The current vaccines provide up to 95% immunity against COVID-19, so there is still a slight chance people can get the coronavirus. Plus, research is still underway to understand whether people who have received the vaccine can still spread the virus to others.

To stop the spread of COVID-19, we must reach herd immunity. This means enough people will be immune to the virus through vaccination or prior infection. Experts vary on the percentage of the population that must be vaccinated or infected to receive herd immunity, but the indications are 70 percent of the total population of a country or higher.

### **Long-Term Study of Effects from Vaccine**

Are you worried that there are no long-term studies on the vaccine? Seventy-five percent of survey participants answered, "Yes," while twenty-five percent said, "No."

Most believe that there have not been enough studies performed on the virus. It takes years to approve a vaccine typically; they did this in months under the FDA's Emergency Usage Authorization. No one knows the long-term side effects, so many people still feel that more studies should be done.

Of the 75 percent worried there are no long-term studies, comments include:

- "I plan on having kids. I need to know what can and will possibly hurt them."
- "We need to know more about the virus and the side effects of the vaccines."
- "There have been repeated history of vaccines being prematurely used and having devastating results."
- "They developed it in such a short time nobody knows the long-term side effects."
- "Too many things can go wrong. There wasn't enough time, in my opinion, to start vaccinations on humans."
- "No one is sure how long the effectiveness of the vaccine will last."
- "My worry is this vaccine was delivered very quickly in only months, instead of years, and the long-term effects haven't been studied fully."



People are just plain scared and want to know more.

### **More Information, Please**

Healthcare workers need more information on getting vaccinated. We need to raise awareness of the vaccine's effectiveness with more information from a revitalized national vaccination campaign led by the CDC, federal supply chain experts, and other agencies. Understand that people are concerned for various reasons, such as little information on long-term effects. Others are concerned that we don't know how long the vaccines will be effective in humans after vaccination.

According to the [CDC](#), "Current evidence suggests that reinfection with the virus that causes COVID-19 is uncommon in the 90 days after the initial infection. However, experts don't know how long this protection lasts, and the risk of severe illness and death from COVID-19 far outweighs natural immunity benefits. COVID-19 vaccination will help protect you by creating an antibody (immune system) response without having to experience sickness."

We know getting the COVID-19 vaccine, following CDC guidelines, wearing a mask, social distancing, and washing our hands, protects us all. Stopping the virus's spread and chances for the virus to mutate requires people to use all the tools available, starting with getting that vaccination. The COVID-19 vaccine and precautions will reduce viral mutations and lower the death toll.