

HEALTH IN OUR HANDS!

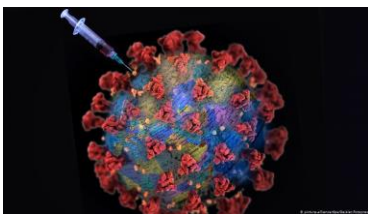
The Arkansas State University Wellness Program Newsletter
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COVID-19 Vaccinations

Introduction

From the onset to date, an estimated 83.1 million people (data current as of March 31, 2021) in the United States have been infected with SARS-CoV-2, the virus that causes COVID-19. This global pandemic has been going on for more than a year. People are still being affected by the virus. In December of 2020, vaccines were released in stages to protect us from the virus. Vaccines are a huge leap forward to ending this pandemic. This newsletter will address what vaccines are available, the comparison between the three vaccines, the misconceptions of the vaccines, and what doctors and scientists are saying about the vaccines.



What Vaccines are Available?

Currently, there are three vaccinations available. They have been authorized and are

recommended to prevent COVID-19. The three vaccinations are Pfizer-BioNTech (Pfizer), Moderna, and Johnson and Johnson/Jassen (J & J).

Comparing the Three Vaccines

The three vaccines that are currently available are similar, yet different, in how they protect us from the virus. Pfizer was the first vaccine released on December 11, 2020. Moderna followed quickly behind on December 18th, 2020 and J & J was the last to be released on February 27th, 2021. With Pfizer and Moderna, you need two shots to be fully vaccinated. J & J is a one-shot vaccination. Pfizer and Moderna are both mRNA vaccines, while J & J is a vector vaccine. An mRNA vaccine trains your immune system to make antibodies for specific diseases without injecting the virus into your body. A vector vaccine uses genetic material from the COVID-19 virus that is placed inside a weakened version of another virus. This instructs your cells to copy the spike protein that is unique to COVID-19 and

create antibodies against the virus. According to the FDA, Pfizer and Moderna have a 95% efficacy rate and the J & J vaccine has a 72% efficacy based on clinical trials. The Pfizer vaccine can be administered to anyone 16 years or older. With Moderna and J & J, you have to be 18 or older. Currently, Moderna is being tested on children 12 -17 years of age.



Misconceptions

For almost anything, there is usually a misconception about it whether that be small or big. As for the misconceptions of the vaccines, there are a few I will share with you.

Misconception #1- The COVID-19 vaccine is unsafe because of expedited development.

- The vaccine was produced quickly compared to other

vaccines. But the virus that caused COVID-19 is not completely new, so research had already begun before the pandemic. Also, the development can be attributed, in part, to the substantial public and private financial support for creating the vaccine.

Misconception #2- The COVID-19 vaccine will alter DNA or cause gene editing.

- Some concerns have been expressed related to the use of mRNA and its impact on our DNA. DNA is housed in the cell nucleus, and the mRNA delivered through the COVID-19 vaccines does not enter the nucleus. Thus, COVID-19 vaccines that use mRNA technology do not change the DNA of your cells.

Misconception #3- Patients recovered from COVID-19 do not need to be vaccinated.

- False. The natural immunity from infection with COVID-19 may last at least 6-8 months. However, although uncommon, it is possible to be diagnosed with a second case of COVID-19 after recovery of a previous infection even within a few months of having COVID-19. You should still get vaccinated!



What Doctors Are Telling Their Patients

According to the Advisory Committee on Immunization Practices (ACIP), doctors around the world are telling their patients to “get vaccinated as soon as you can, when it's your turn, and with whichever vaccine is available. That's how we're going to end this pandemic.” They are also saying that there may be side effects post-inoculation. You may feel tired, have soreness at the injection site, experience a mild fever, and have body aches. If you have side effects, it usually comes between the 24–48-hour window.



Final Thoughts

As of April 9th, 20.1 % of the U.S. population has been vaccinated and 17.2% of Arkansas residents have received the vaccine. Those numbers look OK and fortunately are continuing to rise each day. Will you be in the percentage that is striving to end this pandemic?

References

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Other News:

**If you have any suggestions for newsletter topics, please contact Dean Susan Hanrahan at hanrahan@astate.edu.

The Arkansas State University Employee Wellness Newsletter is published monthly during the academic year by the College of Nursing and Health Professions. Health questions can be addressed to Dean Susan Hanrahan, Ph.D., ext. 3112 or hanrahan@astate.edu. Produced by Katie Axson, a graduate student in the College of Nursing and Health Professions, Doctor of Physical Therapy Program.