



COVID-19 vaccines: What you need to know

A critical intervention to help end the pandemic.

By Kendra McMillan, MPH, RN

SCIENTISTS began work to develop a safe and effective vaccine soon after identifying the SARS-CoV-2 genome in January 2020. By November, five vaccine candidates were in Phase 3 clinical trials in the United States, and over 140 were in development globally. Then, in December, the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices recommended prioritizing critical healthcare workers and the elderly in long-term care facilities for the first series of allocated doses. Here's what you need to know about the COVID-19 vaccines.

What is an mRNA vaccine?

Study of mRNA for therapeutic use isn't new. In fact, decades of research using mRNA as the basis for therapeutics and vaccines date back to the 1990s along with research that began in 2002 on SARS and MERS. What is new, however, is the federal approval of an mRNA vaccine for immunization. According to the CDC, mRNA vaccines are different from vaccines we're most familiar with, such as the influenza vaccine, which introduce a weakened or inactivated virus to trigger an immune response. Instead, mRNA vaccines focus on the spike protein that binds to the cells that cause the infection to spread in our bodies. By introducing the genetic material that tells the body how to respond to the spike protein, the vaccine triggers the immune response.

What should I expect after receiving the vaccine?

The most common side effects identified during the two leading Phase 3 clinical trials of mRNA vaccines include pain at the injection site, fatigue, headache, fever, chills, and muscle and joint pain. During clinical trials, these side effects were reported the most after the second vaccine dose. Not everyone experiences these symptoms, and not all side effects may occur,

but you potentially may not feel well enough to work for 24 to 48 hours after getting vaccinated. If vaccination is offered at the worksite, nurse managers should stagger administration to accommodate time off for staff who feel unwell. Likewise, if you receive your vaccination elsewhere, inform your manager when you're due for your second dose so appropriate staffing plans can be made if you need time off.

What's my role in vaccine administration?

Nurses are vital to educating patients and other community members about immunization practices and administration. You'll want to understand the vaccine science so you can provide fact-based information about how the vaccine works and what to expect after receiving it. For vaccines requiring two doses, ensure the recipient understands the importance of returning for the second dose for maximum effectiveness. Individuals also should be informed about tracking and adverse event reporting systems through programs such as the Vaccine Adverse Event Reporting System (VAERS) that's co-managed by the CDC and the Food and Drug Administration. VAERS allows patients to submit reports of adverse events via their smartphones. Another option is V-Safe, a smartphone-based monitoring program for COVID-19 vaccine safety that uses text messaging and web surveys to check in with vaccine recipients. This information is vital to understanding the vaccine's effectiveness and safety.

Remember, you're not only a nurse; you're a patient, too. After you're vaccinated, track and report your experience. Learn more at ANA's COVID-19 Vaccine Education Page at bit.ly/37uvo3T.

AN

Kendra McMillan is a senior policy advisor in the Nursing Practice and Work Environment Department at the American Nurses Association.