MI NURSES Association

MNA COVID-19 Vaccine Information Sheet (rev. 2/19/2021)

What vaccines can we expect in the United States? Who is working on the COVID-19 vaccine?

More than 150 coronavirus vaccines are in progress across the world. Two companies have rolled out vaccine deployment (administration) in the U.S.: Pfizer and Moderna [10,12]. Johnson & Johnson and Astra Zeneca are other vaccines that may be deployed in the U.S., plus others.

How were the vaccine trials constructed?

Both Pfizer/BioNTech and Moderna's vaccine trials were randomized, placebo-controlled, observer-blind, dose-finding studies. This means they had a control group (placebo) and vaccine group, and also are testing different doses of the vaccine on different ages and demographics for efficacy, or how well it works. More than 30,000 people have been in the Phase 3 trials since June/July of 2020 [11].

What did the Pfizer and Moderna study results show? Were there COVID cases in people who got the vaccine?

Pfizer reported that 95% of the COVID cases tracked in the study were in the placebo (control) group [15]. This is an amazing and statistically significant finding.

Initial expectations to proceed with the vaccine trials are that a COVID-19 vaccine would prevent disease or decrease its severity in at least 50% of people who are vaccinated. Both Pfizer and Moderna are reporting 93-95% effectiveness or better [8].

How will the vaccine be given?

The COVID-19 vaccine in the U.S. is two intramuscular deltoid (upper arm) injections 21 days apart [11]. This is similar to most other vaccines such as Hepatitis B, pneumococcal, MMR (measles, mumps, and rubella), and DTaP (diptheria, tetanus and pertussis) vaccines. See common multi-dose vaccine schedules here [4]. Single dose injections (Johnson & Johnson) oral and skin patch vaccines are in development, which may aid delivery, administration and acceptance of the vaccine [14].

Were these vaccines rushed?

Most vaccines in use today have taken years and, in some cases, decades to develop. For this vaccine, governments and companies have dedicated substantial funds and personnel into companies and institutions developing vaccines. These current vaccines were developed over 10 months with unprecedented focus, collaboration and financial support [8].

Given the urgent need, some vaccine developers are compressing the clinical process for the SARS-CoV-2 (COVID-19) vaccine by running trial phases simultaneously. The approval process can also be expedited for favorable trial results [8].

Is this vaccine safe?

Regardless of vaccine urgency, the vaccines have progressed through the required stages of development. Phases 1, 2 & 3 of vaccine trials (animal, small group of people, large group of people) have been maintained. Sometimes phases 1 & 2 can be combined. The steps of approval can be accelerated and were for these vaccines as a priority. This does not mean that the testing was rushed.

One way to ensure continued vaccine safety is to continue to evaluate and monitor everyone that has received the vaccine. The CDC has initiated the Vaccine Adverse Event Reporting System (VAERS) to ensure continued contact and tracking with any vaccine recipient. You can read more here about the CDC's VAERS platform and how you can participate. [4].

What are the COVID-19 vaccine's side effects?

A small percentage (4-10%) of those who received the COVID-19 vaccine experienced symptoms such as body aches, fatigue and headaches. It's similar to what people might experience after a flu shot and is a sign the vaccine is working to create an immune defense. 19,000 participants have been followed and monitored for side effects for at least 2 months [2]. Initial trial participants will be fully followed for 12 months following vaccine administration. No major side effects have occurred or reoccurred in the vaccinated participants that is statistically significant.

I heard about Bell's Palsy as a side effect. Did that happen?

Yes, there were 4 cases of Bell's Palsy in the vaccine group. The FDA stated that the observed frequency of reported Bell's palsy in the vaccine group is consistent with the expected background rate in the general population, and there is no clear basis to state a causal relationship at this time, or, that it cannot be attributed to the vaccine. The agency is recommending surveillance for Bell's palsy cases as the vaccine is deployed at scale.

I heard about bad allergic reactions (anaphylaxis) after getting the vaccine in Great Britain. Did that happen?

Yes, there were 2 cases of severe allergic reaction in 2 people that already carried Epi-Pens for severe allergies and had received the vaccine. Health authorities in Great Britain stated that people with a "significant history of allergic reactions" should not be given the Pfizer/BioNTech coronavirus vaccine. People with a history of severe allergic reactions should check with their health care provider before receiving the vaccine.

Will the vaccine absolutely prevent the disease?

It's not clear yet whether the vaccine would prevent infection altogether for all persons. Its intent and findings are that it makes severe illness from COVID-19 much less likely, as with the flu vaccine. Initial results show that there is dramatically less COVID-19 infection in the participants who have received the vaccine [13] but not enough data yet to state that it stops transmission between individuals.

How does the COVID-19 vaccine work?

The vaccines from Moderna and Pfizer both use a new approach studied in clinical trials for other viruses.

Both of the two companies' vaccines do not use the COVID-19 virus itself, but use messenger RNA (M-RNA) genetic code rather than any part of the virus itself. m-RNA vaccines are different because they contain information about the infectious agent to give a body's cells instructions to make a viral protein that can be recognized by the immune system. The vaccines deliver mRNA which directs cells to make pieces of the spikes that sit atop the coronavirus. Once the vaccine is in the body, the body's immune system makes antibodies that recognize these spikes. If a vaccinated person is later exposed to the coronavirus, those antibodies should recognize and attack the COVID-19 virus [10,12]. Parts of the immune system are then programmed to maintain a defense and be able to stop COVID after the immunization.

Other companies are developing vaccines using other techniques -- the Oxford/AstraZeneca vaccine is made from a harmless modified chimpanzee virus, which is the traditional route to using an inactivated virus.

What kind of participants have been in the COVID-19 trials?

More than 30,000 participants are participating in the ongoing study. Pfizer trial participants have been at 150 trial sites in 6 countries including 39 US states. Recognizing the disproportionate impact of the epidemic on underrepresented minority populations, vaccine developers for both Pfizer and Moderna enrolled 37 to 45% of trial volunteers from diverse racial and ethnic groups, and included volunteers with stable HIV+, Hepatitis B & C, and other chronic diseases [12].

Moderna's trials include more than 11,000 participants from communities of color, representing 37% of the study population, which Moderna said was similar to the diversity of the US population. This includes more than 6,000 participants who identify as Hispanic or Latinx, and more than 3,000 participants who identify as Black or African American.

Moderna stated it slightly slowed down the trial recruitment to ensure that they had a substantial representation of people of color. The vaccine performed well across all of the population groups [9].

How long does the COVID-19 vaccine protection last?

Vaccine researchers do not know how long the vaccine protection will last at present. They will be tracking participants for a total of 12 months after receiving the vaccine [10,13]. There is currently at least several months of vaccine protection and detectable antibodies in the majority of vaccine recipients, similar to the flu vaccine.

How do I know when I can get the vaccine?

Phase 1 rollout of the vaccine started with the 17-20 million healthcare workers and also essential workers (non-healthcare, such as Food & Agriculture, Transportation, Education, Energy, Water and Wastewater and Law Enforcement), persons with high risk medical conditions, adults 65+, and residents of extended care facilities/ nursing homes [7]. There are several stages to vaccine rollout. Geographical area and other factors may also be considered. The best way to stay connected with vaccine distribution in your area in Michigan is to check with your Michigan county health department here.

Should I get the vaccine?

Vaccines have historically been extremely safe and have ended pandemics. If you decide against getting a vaccination, it does have wider implications. Not only will you not have protection against Covid-19, but it could potentially make it harder to achieve community, or herd, immunity. This protects high-risk groups that might not be able to get the vaccination.

It is estimated that a Covid-19 vaccine will need to be accepted by around 75% of the population to provide community immunity, according to the London School of Hygiene & Tropical Medicine, and some scientists anticipate even higher numbers will be needed [9].

Should I get the vaccine if I'm an older adult or have a chronic health condition?

Among the 30,000 participants in the Moderna trial, more than 7,000 Americans were over the age of 65, the company said. It also included more than 5,000 Americans who are under the age of 65 but who have high-risk chronic diseases that put them at increased risk of severe Covid-19, such as diabetes, severe obesity and cardiac disease. Efficacy (or how well the vaccine works) was consistent across age, gender, race and ethnicity demographics; observed efficacy in adults over 65 years of age was over 94% in the Pfizer trial [10,12].

Should I get the vaccine if I'm pregnant?

No human data is currently available for pregnant women and the vaccine. The studies did not deliberately include any pregnant women in initial trials for initial protection of this group. Pregnancy studies with the vaccine are currently in animal trials and data is expected in Spring 2021. MNA recommends following up with your personal provider regarding pregnancy and the vaccine.

Should children get the vaccine?

Pfizer's studies included children 12 years and up. Most participants in the Pfizer and Moderna trials were all over age 18. No data is currently available specifically on children under the age of 12. Children's trials have been initiated with ~2000 children in the Pfizer trials and ~3000 people in the Moderna trials.

Should I get the vaccine if I had COVID-19 antibodies?

Yes, get the vaccine, in most cases. Antibodies from the COVID-19 vaccine have resulted in much higher levels of protection as compared to antibodies retained after having the virus. Data is still being examined for how well the vaccine works on people who have shown previous COVID antibodies. The Pfizer study did include people who previously tested positive for COVID-19. There have not been any reported contraindications for those who have previously contracted COVID-19 and who have received the vaccine. People who have received COVID antibody infusions as part of COVID treatment should check with their physicians.

Can I get the vaccine if I have an egg allergy?

The COVID-19 vaccines have not been formulated with an egg base, as the flu vaccines have frequently used as a base medium. People allergic to eggs can receive this vaccine. Persons who have had vaccine reactions in the past should consult with their health care provider before receiving the COVID-19 vaccine or any vaccine.

Can I get the vaccine if I have an allergy to penicillin?

Yes. There are no ingredients in the Pfizer COVID-19 vaccination that should cause issues in patients with penicillin allergies. The CDC recommends patients with severe allergies get monitored for 15 to 30 minutes after receiving the vaccine as a precaution.

Are there other additives in the vaccine that I could be allergic to?

One ingredient in this vaccine preparation and in some medications is polyethylene glycol (PEG). If you have a known sensitivity to this, please check with your doctor.

Can I get the vaccine if I have a certain blood type?

Blood type is not currently identified as a risk or benefit in receiving the COVID-19 vaccine and immunity [1]. Findings surrounding COVID-19 have varied in relation to blood type. The New England Journal of Medicine suggested that people with blood type A face a 50 percent greater risk of needing oxygen support or a ventilator should they become infected with the novel coronavirus. In contrast, people with blood type O appear to have about a 50 percent reduced risk of severe COVID-19. Symptomatic patients with Type O blood were less likely to test positive for COVID-19. Researchers agreed that blood type is not the risk factor people should be concerned about when it comes to COVID-19.

Who shouldn't get the vaccine?

The current COVID-19 vaccine is not a live vaccine, but a synthesized mRNA vaccine. Traditionally, severely immunocompromised or pregnant persons generally should not receive live vaccines. Persons who have had not mild, but serious side effects after previous vaccines (such as difficulty breathing or anaphylaxis) should consult with their health care provider before receiving the vaccine [3].

Will the vaccine be mandatory for everyone in the US?

Currently there are no plans to make getting the COVID-19 vaccine mandatory on a national level in the USA.

What will the vaccine cost?

Currently there are plans to make getting the COVID-19 vaccine free to as many people as possible.

When I can get the vaccine?

Phase 1 rollout of the vaccine started with the 17-20 million healthcare workers and also essential workers (non-healthcare, such as Food & Agriculture, Transportation, Education, Energy, Water and Wastewater and Law Enforcement), persons with high risk medical conditions, adults 65+, and residents of extended care facilities/ nursing homes [7]. There are several stages to vaccine rollout. Geographical area and other factors may also be considered.

The best way to stay connected with vaccine distribution in your area in Michigan is to check with your Michigan county health department here.

What is the Michigan Nurses Association's (MNA's) position on getting the COVID-19 vaccine?

The Michigan Nurses Association agrees that any vaccine must meet the highest test of public safety as its top priority and not political considerations. We are closely monitoring all data and understand that vaccines should not replace an obligation by healthcare organizations to supply any and all protective measures to employees. Any vaccine position by MNA is not a substitute for consultation with your personal health care provider.

Should my employer get me access to the vaccine? Do I need to get the vaccine to go to work?

The MNA feels that health care employers should make vaccines available to all health care workers (HCW) and all HCW should check their contract language for how vaccination is framed as part of the language around their working conditions.

What if my employer says the vaccine is mandatory?

MNA has a history of rigorously supporting vaccine initiatives. MNA feels that vaccines should not replace other worker protections, such as PPE and other infectious control measures. Please contact your labor representative for any concerns.

For any questions regarding this information sheet , you may contact Larissa Miller, Associate Executive Director of Nursing Practice at Larissa.miller@minurses.org.

For more information, you can refer to the CDC's "Frequently Asked Questions" regarding the COVID-19 vaccine.

For information on the vaccine in Michigan, you can visit the Michigan vaccine information here.

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