

Sandra Fryhofer, MD, discusses COVID-19 vaccines and variants

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Featured topic and speakers

In today's COVID-19 Update, a discussion with Sandra Fryhofer, MD, the AMA's liaison to the CDC's Advisory Committee on Immunization Practices (ACIP), who takes a closer look at the Delta variant and other variants of concern. She also covers what physicians need to know about authorized COVID-19 vaccines, including real-world effectiveness and rare adverse events.

Learn more at the AMA COVID-19 resource center.

Speaker

- Sandra Fryhofer, MD, chair-elect, AMA Board of Trustees; AMA liaison to Advisory Committee on Immunization Practices (ACIP)

Transcript

Unger: Hello, this is the American Medical Association's COVID-19 Update. Today, we're getting an update on variants, boosters and other information physicians need to know in regard to vaccines for COVID-19. I'm joined today by Dr. Sandra Fryhofer, an internal medicine physician, adjunct associate professor of medicine at Emory University School of Medicine. Dr. Fryhofer serves as the AMA liaison to the CDC's Advisory Committee on Immunization Practices, or ACIP, and is a member of ACIP's COVID-19 vaccine work group. And Dr. Fryhofer was recently elected chair-elect of the AMA Board of Trustees. Congratulations.

Dr. Fryhofer, we have nearly 150 million people now fully vaccinated in the United States. What are

we seeing with the real-world effectiveness of these vaccines?

Dr. Fryhofer: Well, Todd, it's a very exciting time because we now have three safe and highly effective COVID vaccines and there's more great news about real-world effectiveness. A study of health care professionals showed mRNA vaccines are 94% effective after two doses and 82% effective after just one dose. FDA has expanded Pfizer vaccine to children 12 to 15. Moderna is asking for FDA authorization for adolescents and teens. And having two vaccines for this younger age group could greatly increase vaccine available for middle and high school students in preparation for school next year. Moderna's expanded authorization is likely to come soon.

Unger: A lot has changed. I mean, when you think just back even a few months, in terms of logistics and guidelines, a lot's been evolving since we first started the campaign for vaccination back in December and early January. Can you give us an update on what's changed since then and what we've learned?

Dr. Fryhofer: Well, Pfizer's vaccine is now available in smaller quantities, and it could be stored in regular refrigerators for up to a month. Those super freezers are no longer required. Janssen's vaccine can now be stored in regular refrigerators for up to four and a half months. Pfizer's applied for full FDA licensing, so has Moderna. Full licensing could mean more companies mandating COVID vaccination for their employees.

Another new convenience, all COVID vaccines can now be co-administered with other vaccines. This will be very helpful when it comes to catch up for routine vaccinations for both children and adults, but please consider vaccine reactogenicity. You might want to think twice about giving both COVID vaccine and the shingles vaccine at the same visit. This could cause a double whammy of side effects.

Unger: Dr. Fryhofer, what is this new concern that we've heard about heart inflammation with the mRNA vaccines?

Dr. Fryhofer: Well, there have been recent reports of myocarditis and pericarditis linked to mRNA vaccines. Reports have increased since April, mostly in young males 16 and older, several days after vaccination, and more often after the second vaccine dose. Symptoms include chest pain, shortness of breath and palpitations. CDC says do an EKG, check a troponin and a sed rate, or perhaps a CRP if indicated.

ACIP had planned to have an emergency meeting on Friday, June 18, to discuss this, but that was postponed when Juneteenth was made a federal holiday, which is so exciting. This myocarditis discussion will now happen later this week. But more than 135 million people in the U.S. have already received two doses of one of the mRNA vaccines. And at FDA's advisory committee VRBPAC meeting on June 10, CDC announced it was in the process of investigating 573 reports of myocarditis and pericarditis after the second mRNA vaccine dose, as of May 31.

Now, they're investigating. Those are not confirmed reports yet. There does seem to be an imbalance of cases in young males. CDC will likely update the case report numbers, they'll provide some perspective and give clinical guidance later this week. More to come. But if you have a patient with myocarditis or TTS or anything else unusual after COVID vaccination, please send a report to VAERS, which is CDC's Vaccine [Adverse] Event Reporting System, so they can check it out. Without this reporting, CDC can't know the scope of a potential issue, investigate it and provide communication. And if you do report a case and CDC asks for medical records, send them ASAP. It's not a HIPAA violation. And anyone can submit a report to VAERS, it's not just limited to health care providers.

Unger: Well, we'll follow back up with you after that next ACIP meeting. I'd like to shift a little bit from the vaccines to talk about variants, because there's a lot in the news about different variants of concern. Can you first talk about the new kind of classification system for variants and why it's so important?

Dr. Fryhofer: Well, right now there are six VOCs, variants of concern, that CDC's watching closely. Variants of concern may be more transmissible, cause more severe disease and may be more resistant to vaccines and antibody therapies. Each variant now has two names—an alphanumeric name, it's so-called Pango lineage, or Pangolin for short, and now, a new label from WHO which assigns each variant with a letter of the Greek alphabet. Now, this was done to make it easier for the public but which name to use will likely depend on who the audience is. Scientists will likely use the alphanumeric system. Physicians will need to know both.

WHO was concerned that, under the old system, countries wouldn't want to report new strains because of the stigma associated with a variant being branded with their nation's name. But no question about it, Todd, this is a global pandemic. In some ways, to me, having variants connected with a country as a reminder that we're all in this together. COVAX, the global alliance for vaccine equity, reminds us that with a fast-moving pandemic—no one is safe unless everyone is safe—and India and Latin America are really struggling. At our June meeting, AMA adopted policy to promote equitable resource distribution globally in the fight against COVID-19. The policy encourages production and distribution of vaccines and therapeutics for resonance of countries with limited financial or technological resources.

Unger: Can you tell us about of all the variants of concern are the ones that we need to be particularly concerned about right now? I know we've been hearing a lot about the Delta variant, in particular. What do we need to know about that one so far?

Dr. Fryhofer: Well, India's B.1.617.2, aka the Delta variant, is the new CDC variant of concern. Experts say Delta's a super spreader. It was first detected in India in March and it's gone global. WHO says it's already spread to at least 80 countries. It's about 60% more transmissible than the B.1.1.7, the U.K. variant, now newly named the Alpha variant. Delta is now the dominant variant in the U.K.

Delta's probably the most contagious variant we've seen yet, and it's here in the U.S., and already accounts overall for more than 6% of cases and that number is probably going up. Even though this variant is hyper transmissible, a full vaccination series seems to protect against it, but you need both doses of a two-dose series. One mRNA vaccine dose may not be enough.

Unger: You mentioned the B.1.1.7, are there other kind of CDC designated variants of concern besides the Delta one?

Dr. Fryhofer: Yes. The main variant circulating here in the U.S. is still the B.1.1.7, the Alpha, also called the U.K. variant. Our vaccines do work against this one. Next, there's the B.1.351, the South Africa variant, also called Beta. Both Alpha, B.1.1.7, and Beta, B.1.351, the South Africa variant, are 50% more transmissible than the original strain. The South Africa variant's one of the most resistant to vaccine neutralization. So is the P.1 variant, aka the Gamma variant first detected in Japan and Brazil.

The B.1.42s are COVID variants first identified in California in February 2021 and put on the VOC list in March. They're both referred to as Epsilon. And to clarify, India's B.1.617 series has two Greek letters. The 0.2 version, that's the B.1.617.2 is the Delta and the 0.1 version is Kappa. The 0.2 version, Delta, is the newest CDC variant of concern. CDC still considers the 0.1 version, Kappa, a variant of interest.

Unger: Gosh, we're working our way through that Greek alphabet pretty fast. All this talk of variants does raise the question of boosters. Can you tell us kind of what the thinking is and whether we're going to need them?

Dr. Fryhofer: Well, the answer is yes, we will probably all need a booster. The question is of what and, of course, when? And are there certain people who may need them first? And we're still trying to determine the correlates of protection. Boosters will also be discussed at ACIP's meeting later this week.

Variants are wildcards. Vaccine researchers understand this, and that's why Moderna's already working on a B.1.351 specific booster. A new study says Pfizer's 90% effective against B.1.1.7 but only 75% effective against B.1.351. As long as people keep getting infected, new variants will appear. It's like the children's game telephone, every time the message is repeated, it changes.

I worry about patients, for example, those with severe B-cell defects and those on immunosuppressants that don't develop a good immune response after vaccination. I also worry about variants gone wild. When those unprotected people get COVID, especially if they have long-sustained viremia, that's why everyone needs to be vaccinated to protect them and those around them. With this new contagious Delta variant on the scene, it may not be a matter of the vaccinated versus the unvaccinated but instead those vaccinated and those infected. And some of those infected may be asymptomatic but could still spread the virus to more vulnerable people.

Unger: I thought what you said, "As long as people keep getting infected, new variants will appear," is incredibly important, and especially kind of in a global view. Fully vaccinated people are no longer needing to wear masks outdoor and indoors, with some exceptions, and most unvaccinated people still do. Do you think that kind of honor system is enough or do you think that we need some kind of digital vaccine credential?

Dr. Fryhofer: Well, it looks like Europe will not be trusting the honor code for those who wish to travel there and will be requiring vaccination credentials. Our AMA House of Delegates adopted policy on vaccine credentials at our June meeting. The Biden administration says it's not planning to create any federal digital vaccine credentials but, even so, the federal government must be vigilant on issues of equity and privacy. It was clear our AMA House of Delegates did not want to leave these decisions to app developers who could profit by exploiting user data.

Our new AMA policy says that prior to implementing use of digital vaccine credentials, vaccine must be widely accessible which, right now, it is. There must be equity centered privacy protection in place to safeguard data collected from individuals. Provisions must be in place to ensure that digital vaccine credentials do not exacerbate inequities. They also need to address situations in which vaccine is medically contraindicated.

Unger: Any final thoughts, Dr. Fryhofer, that physicians need to keep in mind during this very important time of transition.

Dr. Fryhofer: Well, Todd, more and more patients are relying on social media for medical information and there's a lot of dangerous misinformation out there, especially about vaccines and public health issues. This is concerning. We need stronger integration of verified health information. New AMA policy strongly urges social media companies to do a better job of moderating and monitoring medical and public health information content. AMA has put together a 12-page COVID-19 guide with specifics on media messaging, including how to say and what not to say to get your message across. And remember this, physician recommendation is one of the most effective motivators for vaccination. The mandate says it all, we must continue to get vaccine into arms. That's the only way we're going to end this pandemic.

Unger: So incredibly important. Dr. Fryhofer, Thanks for the update and we'll check back in with you



next week, after the next ACIP meeting. That wraps up today's COVID-19 Update. We'll be back with another segment soon. In the meantime, for more resources on COVID-19, visit ama-assn.org/COVID-19. Thanks for joining us.

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