



PARENTS PACK

MONTHLY UPDATES ABOUT
VACCINES ACROSS THE LIFESPAN

FEATURE ARTICLE — JN-WHAT? KP-WHAT? UNSCRAMBLING THE COVID-19 VACCINE STORY

July 2024

It's summer. Most people are thinking about ice cream, baseball and the beach. But, before we know it, school will be back in session and viruses will be more easily shared. Increasingly, fall has become a time to think about vaccines. Influenza, RSV and COVID-19 vaccines all become more top of mind as summer turns into fall and calendars inch closer to the end of the year.

However, to have vaccines in the fall, someone needs to be thinking about them in the summer, particularly for those vaccines that change annually to keep up with evolving viruses. We have been updating influenza vaccines for years, but now, we are also in a situation where COVID-19 vaccines have started to be updated to better match variants of SARS-CoV-2, the virus that causes COVID-19. As newer versions of the virus spread through communities, often referred to as circulating variants, they are tracked so that scientists can determine which ones are causing the most illness.

These findings are then used to update vaccines. This planning is difficult because in the time it takes to go from selecting the variant to producing the vaccine, the virus continues to change. As demonstrated on this image from the Centers for Disease Control and Prevention (CDC), several variants have spread through communities since the start of the pandemic.

SARS-CoV-2 demonstrates the unpredictability of viruses

The difficulty of selecting a vaccine strain of virus was on display during the planning for 2024-2025 COVID-19 vaccines. In early June, the Food and Drug Administration (FDA) met with their advisory committee members to determine which SARS-CoV-2 variant should be used to update COVID-19 vaccines. Two candidate variants, JN1 and KP2, were discussed. The first, JN1, circulated widely earlier in the spring and, as such, was the choice recommended by the World Health Organization (WHO). However, in the weeks leading up to the meeting, KP2 slowly increased its presence in some U.S. communities. Based on these data, the advisory committee recommended JN1. The FDA agreed and provided COVID-19 vaccine manufacturers with this information, so they could begin making vaccines for the fall. However, shortly thereafter, based on more recent data, the FDA revised their instructions to companies, indicating that if possible, they could switch to KP2.

As it turns out, due to manufacturing circumstances, two companies could make the switch (Moderna and Pfizer) and one couldn't (Novavax). That's because Novavax (which is a purified protein vaccine) has a longer production cycle (i.e., about six months) than Pfizer and Moderna vaccines (i.e., three months). So, COVID-19 vaccines available in the U.S. this fall will differ as to which variant will be used. The protein-based vaccine, made by Novavax, will use JN1, and the mRNA-based vaccines, made by both Pfizer and Moderna, will use KP2.

What does this mean for people getting vaccinated this fall?

This difference among vaccines may leave some people wondering whether they should favor one version over the other. The good news is that because these two variants are quite similar, it is likely that they will offer similar immunologic protection. As such, people do not need to worry about which version to get based on the variant the vaccine includes.

TRIVIA CORNER

What famous philanthropist said vaccines are “a miracle,” and that “with just a few doses, they can prevent deadly diseases for a lifetime?”

- A. Oprah
- B. Bill Gates
- C. Warren Buffett
- D. George Clooney



You can find out more and hear a history of the variants used in COVID-19 vaccines in this new video featuring Dr. Paul Offit, Director of the Vaccine Education Center and a current member of the FDA's advisory committee.

Watch the video: bit.ly/covid-vax-variants.

For links to resources in the Feature Article, please visit bit.ly/July2024FA.

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DR. HANDY'S CORNER: ARE THERE VACCINES THAT PEOPLE OF A CERTAIN RACE OR ETHNICITY SHOULD AVOID?

The short answer to this question is no, but in some cases, certain racial or ethnic groups are mentioned in vaccine recommendations. Watch the video to see why.

Watch the video:
bit.ly/vax-race-ethnicity.



NEWS & NOTES

New VEC videos address questions people have in the summer 2024

In recent weeks, stories about H5N1 bird flu have been in the news, and although COVID-19 has not been in the news as much, we have been getting questions and hearing updates. Dr. Paul Offit, the Vaccine Education Center's (VEC's) Director, recently addressed these timely topics.

Check out the new videos for updates or to get your own questions answered:

- Is H5N1 Going to Become a Pandemic?
- Should High-risk People Get More Than One COVID-19 Vaccine Booster a Year?
- COVID-19 Lab Leak Theory: Why It Is Unlikely.

Questions about pneumococcal vaccine for adults?

The pneumococcal vaccine is recommended for many adults, but often, people do not realize they are among the group that can benefit from it. Recently, the VEC released an infographic, "Pneumococcus and Adults," to summarize pneumococcal disease, vaccine types, and the groups of adults recommended to be vaccinated.

Check out the infographic today!

For more information on pneumococcus and the vaccine, you can also check our dedicated webpage, "A Look at Each Vaccine: Pneumococcal Vaccine."

DYK the VEC offers other newsletters?

Did you know that the VEC has three other e-newsletters in addition to the Parents PACK? Each newsletter is free, aimed at a specific audience, and includes new articles written specifically for that publication.

Our other newsletters include:

- *The Hilleman Chronicle* – If you enjoy reading about science and history, you will enjoy this quarterly newsletter.
- *The VMP Chronicle* – If you are an educator or if you interact with children, this bimonthly newsletter, published during the school year, may be of interest.
- *Vaccine Update* – If you work in healthcare, give vaccines, or have general interest in the medical field related to vaccines, this monthly newsletter offers articles and resources that may be of interest.

Check out updated Q&A about several topics

The VEC offers a series of "Special Topics" sheets that address vaccines that are not routinely recommended, diseases that do not (yet) have vaccines to prevent them, and information that is related to vaccines and the diseases they prevent (e.g., fevers, cancer patients, biologics, etc.). Recently, we updated several of these downloadable sheets:

- Ebola
- Human Immunodeficiency Virus (HIV)
- Infectious diseases and cancer patients
- Lyme disease
- Tuberculosis (TB)
- Yellow fever
- Zika

To check out all of the "Special Topics" sheets, visit our dedicated webpage.

For links to resources, please visit bit.ly/July2024NN.

TRIVIA ANSWER

The correct answer is B. Bill Gates, founder of Microsoft, is a known vaccine advocate and founder of End Polio Now, an initiative working towards global polio eradication.

Go to vaccine.chop.edu/trivia to play Just the Vax, the Vaccine Education Center's trivia game, where you can find this question and others like it.

