PARENTS PACK

MONTHLY UPDATES ABOUT VACCINES ACROSS THE LIFESPAN

3 PRACTICAL MATTERS REGARDING COVID-19 IN MAY 2023

May 2023

Today (May 11, 2023) marks the official end of the COVID-19 public health emergency. For most, the day is likely to pass without much notice, particularly as many people have not been thinking much about COVID-19 for a while now. Indeed, the weather is getting better. The school year is winding down. And, summer vacations are within reach. But, the virus that causes COVID-19 has not gone away. At the end of April, more than 88,000 cases and more than 1,000 deaths were still occurring weekly in the U.S. While these numbers are lower than during the height of the pandemic, they remind us that the virus is percolating in our neighborhoods. As such, it is useful to stay abreast of the main headlines. With that in mind, we wanted to mention three practical matters that are helpful to be aware of at this juncture.

Item #1: The virus is continuing to change.

Each week, the Centers for Disease Control and Prevention (CDC) monitors the variants that are circulating throughout the U.S. They do this by studying the genetic sequences of thousands of samples collected from a variety of labs throughout the U.S. Because of the time it takes to ship, test and evaluate samples, it takes a few weeks for these data to be posted; however, mathematical modeling is used to project the most recent weeks while the data are being processed.

With this information in hand, we can see how the virus is changing in near-real time. While omicron XBB.1.5 has been the dominant strain so far in 2023, a couple of new, related variants have started to emerge. In recent weeks, two strains have each caused around 10% of cases — XBB.1.16 and XBB.1.9.1, but they are not equally represented in different parts of the country. XBB.1.9.1 has been more prominent in the central region of the U.S., while XBB.1.16 has been more prominent in the areas around the Great Lakes and the Pacific Northwest.

As a practical matter, this means that when we are traveling and spending time around new groups of people over the summer, it is likely that these newer variants will spread.

Item #2: COVID-19 testing is more beneficial for some than others.

While the CDC continues to recommend COVID-19 testing and isolation if you think you were exposed or infected, a better approach for individuals and families may be to limit your interactions with others if you are not feeling well and test if you are high risk and could benefit from taking an early antiviral treatment, like Paxlovid™. In this manner, regardless of whether you have COVID-19 or some other respiratory infection, you will decrease its spread, and if you could benefit from an antiviral medication, you can get it early enough for it to work.

Dr. Offit, VEC Director, recently wrote about testing at this point in the pandemic in his new Substack, "Beyond the Noise" (See "News & Notes" section for more information). Titled "Can We Stop Testing for COVID?" Dr. Offit's article discussed current CDC guidelines, annual rates of other respiratory infections, and his thoughts about what recommendations make sense at this point.

As a practical matter, people most likely to benefit from early antiviral treatment should test for COVID-19 in order to get the prescription and start taking it in a timely manner. Everyone who feels ill or has symptoms of any infection should behave in ways to limit its spread, whether by limiting who they are around, masking, or other means.

Item #3: Available COVID-19 vaccines and recommendations have changed — again.

Since the release of COVID-19 vaccines, the recommendations have evolved numerous times. While these changes have been frustrating to many, they were necessary.

Historically, when new vaccines were introduced, we had years of experience living with and learning about the viruses or bacteria they protected against. Even with that predetermined understanding, vaccine recommendations evolve. They change for two main reasons. First, as more doses of vaccine are administered, the prevalence of the pathogen often changes. Second, we continue to learn more about existing vaccines or new vaccines that come along. For example, after the human papillomavirus (HPV) vaccine was available for several years, the levels of HPV circulating in the community decreased, and we learned that the vaccine worked well enough in those younger than 15 years of age that only two doses were needed to protect people vaccinated when they were younger (9 to 14 years of age).

With SARS-CoV-2, the virus that causes COVID-19, we were in a situation of simultaneously learning about the virus and developing the vaccine. As such, the reasons for changes to vaccine recommendations were three-fold — learning about the virus, changing viral patterns, and gaining experience with the vaccines. Increased understanding of each of these informed and sharpened vaccine recommendations:

- **Learning about the virus.** When COVID-19 vaccines were first introduced, data related to their use in pregnant women were limited, so those individuals were encouraged to talk with their healthcare provider and decide together about getting the vaccine. Later, data showed that when infected, pregnant women were more likely to experience severe disease and complications. By that time, data also showed the vaccine to be safe in this population, so the recommendation changed to indicate that pregnant women should be immunized rather than decide on a case-by-case basis with their healthcare provider.
- **Changing viral patterns.** As the strains of virus changed, additional doses and redesigned vaccines (bivalent versions) led to changes in recommendations.
- **Gaining experience with the vaccines.** Over time, we learned about some rare, but real, severe side effects following vaccination against COVID-19. In the case of the J&J/Janssen vaccine, these findings have led to limited recommended use of this version in the U.S. On the other hand, even though the mRNA and protein-based vaccines can occasionally lead to inflammation of the heart, called myocarditis, the rates are low, and we have learned that this condition is more likely after infection, so the benefits of the vaccine continue to outweigh the risk.

continued >

TRIVIA CORNER

What U.S. president met with vaccine maker Maurice Hilleman to discuss a vaccine for swine influenza?

A. Gerald R. Ford

B. Ronald Reagan

C. Richard M. Nixon

D. James "Jimmy" Carter

Over time, we have also learned that people who were both vaccinated and infected tend to have the most robust immunity. As such, even previously unvaccinated people can benefit from getting the COVID-19 vaccine, regardless of whether they were infected or not. Unvaccinated individuals remain of particular concern because they continue to be hospitalized and die from COVID-19 at higher rates than those who were vaccinated.

The most recent changes (April 2023) are meant to streamline vaccine guidance, so it is easier to understand and administer COVID-19 vaccines:

- Monovalent mRNA vaccines (protecting against only the original, or ancestral, strain of virus) are no longer available in the U.S. The bivalent versions (protecting against both the ancestral and BA.4/BA.5 strains of virus) have been shown to be equally safes and effective.
- Most people are currently only recommended to get a single dose of the bivalent mRNA vaccine. One exception is adults 65 years and older who can get a second dose if at least four months have passed since the previous bivalent dose. A second exception is the youngest group of vaccine recipients (6 months to 4 or 5 years of age) who were not previously vaccinated or who only got one dose of monovalent Pfizer vaccine. They continue to require two or three doses of COVID-19 vaccine, depending on brand.
- The CDC is currently working to update the recommendations for people with immune-compromising conditions.

As a practical matter, vaccine recommendations change over time as we learn more. This has been particularly true of COVID-19 vaccines as we were learning about the virus and the vaccines at the same time. Most people who got one dose of bivalent mRNA vaccine are considered up to date, and those not previously vaccinated against COVID-19 can still benefit from vaccination.

Takeaways

1. The virus that causes COVID-19 continues to change, and as we vacation in new areas and come into contact with different groups of people this summer, we are more likely to be exposed to different strains of the virus, which may cause newer strains to continue increasing in different areas of the country.
2. Some antiviral treatments are only effective if taken early during a COVID-19 infection, so those who might need them should test themselves if they think they may be infected. On the other hand, everyone can spread a virus, be it COVID-19 or any other respiratory virus. As such, we should always implement procedures to limit the spread when we have an infection.
3. As we learn more about SARS-CoV-2 virus and the vaccines to protect against it, vaccines and the recommendations for their use will continue to evolve. People should ensure that their family members are protected against this novel virus.

Resources

For more info about the topics in this article, check these resources:

- COVID-19 variants and strain changes over time: CDC | Infectious Diseases Society of America
- COVID-19 testing | isolation | vaccine recommendations: CDC
- Transitioning away from the COVID-19 public health emergency: HHS

For links to these resources, check out the online version, *bit.ly/May2023FA*.

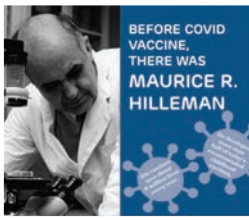
DR. HANDY'S CORNER – Treating a fever: What to consider

In this new video about fevers, Dr. Handy says, "In actuality when you have fever with infection, this is a good thing." Find out why as well as when a fever becomes a concern, how she approaches fevers with her own children, and what to consider when fevers are caused by something other than an infection.

Watch the video: bit.ly/TreatingFever.

NEWS & NOTES

Reminder! Essay contest



The Vaccine Makers Project's annual essay contest for middle and high school students closes on June 9, 2023. Please be sure students in your life are aware of this chance to win a cash prize and more. The contest is open to students in the U.S. and Canada.

Get contest rules and application. [hillemanfilm.com]

"Beyond the Noise," a new place to follow Dr. Offit

Dr. Offit, VEC Director, has started a Substack newsletter. Called "Beyond the Noise," Dr. Offit's posts aim to "sort out the wheat from the chaff" when it comes to conflicting medical and scientific information making headlines. Recent articles have addressed:

- Why, as a country, we will be less prepared for the next pandemic
- Why COVID-19 vaccine mandates at institutions of higher education are not reasonable at this juncture
- Why COVID vaccination of children makes sense

You can subscribe to receive email notices when Dr. Offit publishes a new column or follow him on Twitter.

Vaccines and Your Baby

The Vaccine Education Center's popular booklet, "Vaccines and Your Baby," related to vaccines given in the first few years of life was recently updated.

- Check it out: English | Spanish

The booklet can be photocopied or linked to for sharing with others.

For links to resources, visit News & Notes online, *bit.ly/May2023NN*.

TRIVIA ANSWER

The correct answer is A. During his presidency, Gerald Ford met with Maurice Hilleman and other vaccine makers to discuss a vaccine for swine influenza. This meeting was held because a swine influenza outbreak was occurring at Fort Dix, a military base in New Jersey.

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.