WorkCare Briefing: Trending Beyond COVID-19
Questions & Answers
October 6, 2021

The following questions were asked during WorkCare's monthly webinar series on Trending Beyond COVID-19. Anthony Harris, M.D., M.B.A., M.P.H., WorkCare's Chief Innovation Officer and Associate Medical Director, presented the webinar and provided these answers. Please refer to previous Q&As if your question is not answered here.

Here are links for your reference:

- *October 6 Webinar Recording*
- *Questions & Answers from the September 1 Webinar*

VACCINE

Q: Can we consider people fully vaccinated if they mix two different brands of mRNA vaccine?
A: In practice, yes. Evidence in the U.K. indicated that when mixing the Pfizer and Moderna vaccines there were no safety issues, and efficacy was still strong for a lower possibility of transmission, hospitalization and severe illness. However, further data on the safety and efficacy of mixing and matching COVID vaccines with boosters is pending. The FDA will meet later this month to advise on booster doses.

Q: Vaccine efficacy wanes over time. How many months out following vaccination should employers consider that an employee may need a booster shot?
A: Six months for individuals at risk for poor outcomes. This includes age and pre-existing conditions. It is not recommended across the board to have a booster for everyone. The FDA has authorized a Pfizer booster dose. We will see what the FDA recommends for Moderna and Johnson & Johnson later this month. Beyond that, they may need to re-group to see if a booster is recommended for everyone.

Q: If someone received the J&J vaccine months ago, but doesn't feel completely protected, can they get the Pfizer vaccine?
A: The FDA is reviewing a request from J&J to allow extra shots of its single-dose vaccine. J&J previously released data suggesting its vaccine remains highly effective against COVID-19 at least five months after vaccination. The J&J vaccine is manufactured using a process that differs from Pfizer and Moderna; it is not currently recommended to mix them.

Q: Do all vaccines have booster recommendations in all countries?
A: There is not a global consensus on the need for boosters.

Q: Can you speak to what is happening in Israel in terms of vaccination rates versus case rates?
A: We know that Israel is a leading country in terms of vaccinated individuals, with over 70 percent of the population fully vaccinated. They saw a spike in cases because of Delta, which speaks to the lower efficacy of prevention of transmission. They were vaccinated primarily with Pfizer. We know that efficacy of prevention of transmission is low at 39 percent. The prevention of hospitalizations is 88 percent and severe illness is 92 percent. The low rate of efficacy for prevention is why we saw the spike in cases in Israel, like what we saw here in the U.S.

Q: How would countries with very high vaccination rates such as Israel and Iceland compare on the graphs you presented on the trend analysis?

A: The trends are very similar. Israel had a spike just before we did. Again, that spike was in cases, not mortality. We had the spike in mortality while the U.K. and Israel did not. That is most likely because they had higher vaccination rates.

Q: Have the ingredients of Pfizer's Comirnaty vaccine been publicly released?

A: Each 0.3 mL dose of Comirnaty reportedly contains 30 µg of mRNA encoding the spike glycoprotein of SARS-CoV-2 and the following ingredients: lipids (0.43 mg ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2- hexyldecanoate), 0.05 mg 2-(polyethylene glycol 2000)-N,N-ditetradecylacetamide, 0.09 mg 1,2-distearoyl-sn-glycero-3-phosphocholine, and 0.2 mg cholesterol), 0.01 mg potassium chloride, 0.01 mg monobasic potassium phosphate, 2.52 mg sodium chloride, 0.07 mg dibasic sodium phosphate dihydrate and 6 mg sucrose. After dilution, vials are stored at 2°C to 25°C and must be used within 6 hours from the time of dilution. It is preservative-free. Refer to the FDA's Summary Basis for Regulatory Action.

Q: Do you expect Novavax will be available in the U.S.? If yes, when do you think it will be available?

A: The company has said it plans to apply for FDA emergency use authorization in the fourth quarter of 2021. Refer to the New York Time's Coronarius Vaccine Tracker for a Novavax update.

VARIANTS

Q: The Lambda variant seems like it is not escaping the U.S.-approved and authorized vaccines. Can we conclude that the vaccines are effective against the Lambda variant after 2-3 months of it being present in the U.S.?

A: All of the studies that have been conducted by the pharmaceutical companies have shown efficacy against the Lambda, Mu and Delta variants. Regarding efficacy in preventing severe illness and hospitalization, there is still no evidence to suggest that efficacy against Lambda to prevent transmission is higher than what we've seen against Delta. I also refer to data from Israel showing 39 percent efficacy at preventing transmission, which coincides with what we're seeing across industries for breakthrough infections at this point.

Q: How is it determined that Delta is now the predominant strain?

A: The determination is made through genetic testing and sequencing. Laboratories have assays to do the analysis in the U.S. and abroad to understand the genetic profile of the COVID strains that are detected in diagnostic tests. As a result of learning about those genetic strains, we know that Delta is causing the majority of positive cases. The CDC reports it receives approximately 750 samples per week from state health departments and other public health agencies to be evaluated.

HEALTH OUTCOMES

Q: Can you comment on the CDC VAERS database regarding the list of fatalities potentially associated with vaccination? There are over 7,000 "yes" answers in that column of the data. Is this suggesting that there have been more than 7,000 vaccine-related fatalities?

A: VAERS is the Vaccine Adverse Event Reporting System. This database is open to the public and is not an official clinical reporting instrument. There is no cooperation on the number of data points in any category for a particular outcome. It is only a reporting tool so that appropriate levels of governance can investigate. It is not a conclusive set of data to associate 7,000 deaths with the vaccine.

Q: From an overall wellness perspective, what are the statistics (if any are available) for serious illness outcomes for persons who are in overall good health (no identified underlying health issues) versus those who have underlying conditions (cardiovascular illness, diabetes, obesity, etc.) that are known to contribute

to negative consequences from COVID infection. Would a holistic wellness emphasis have a positive effect on COVID impacts?

A: Research shows that advanced age is the strongest risk factor for severe COVID-19 outcomes, and that adults of any age with one or more underlying medical conditions have increased risk for serious illness. However, anyone who is exposed to someone with COVID-19 is at risk of becoming infected regardless of their health status. In one study of 64,781 COVID-19 patients, 30 percent of inpatients and 75 percent of outpatients had no comorbidities. In general, people who practice healthy lifestyle behaviors such as getting regular exercise, eating nutritious foods, not smoking and getting recommended preventive exams reduce the likelihood of developing comorbid conditions. Refer to Underlying Medical Conditions Associated with High Risk for Severe COVID-19.

IMMUNITY AFTER COVID

Q: There are a lot of pending studies regarding natural immunity versus vaccinated immunity. Should employers create policies or practices that recognize some unvaccinated individuals have immunity?

A: Yes. Within 90 days of having COVID-10, policies should be different than after 90 days, when they should revert to what the general approach is for unvaccinated individuals. We know that within the first 90 days of recovery from COVID-19, people are unlikely to have a second episode of COVID infection and do not need to be in quarantine after an exposure because the likelihood of transmission a second time is low. If we look at the data as of August 2021 regarding a second infection in the U.S., after a first COVID-19 infection, the rate of second infection is below 1 percent. There is a very low reoccurrence of infection after recovery from COVID beyond 90 days. After six months, that number goes up. We don't know to what extent since we don't have much data beyond what we've seen after 90 days. Policies should go back to mirroring those individuals who are unvaccinated and have not had COVID-19.

Q: Is there a quantitative antibody test that we can recommend to employees who are asking us whether they need a booster shot?

A: I wish the answer was yes, but unfortunately there is no quantitative antibody test. There is a semi-quantitative antibody test. What does that mean? The semi-quantitative test was first approved by the FDA in November 2020 in terms of the technology and approach from a laboratory standpoint. It is offered widely by Quest, LabCorp and many other laboratories. However, that test does not give us enough information to determine who needs a booster and who does not. If you've heard any of my recent news broadcasts on NewsMax, you know that I am a proponent of understanding who needs a booster and then recommending a booster to those in the general population without pre-existing conditions that put them at high risk for a poor outcome. Unfortunately, the technology does not exist so that we can understand what the titer means from a safety perspective. Studies are doubling down on understanding the significance of neutralizing antibodies. Hopefully, over the next several months we will have enough data to understand what these titer levels mean for each individual regarding their relative protection and potential of contracting COVID.

SURFACES

Q: To what degree do you think employers still need to focus on surface disinfection of high-touch areas, shared tools, etc.? Have there been any recent studies on how long the variants survive on surfaces?

A: I have not seen any evidence specific to the variants and their longevity and survivability on surfaces compared to the wild type. We do know that the virus itself can exist on surfaces for hours, and that contaminating your hand and then rubbing your face can produce a COVID-19 infection. But that rate is far lower than expected as a primary means of infection. Whether that means you need to stop disinfecting is

relative to the level of high touch. If you have areas where there is adequate time in between high touch, meaning there are several days between use, then you may not need to disinfect that area. However, if you have continuous use of high-touch areas where there could potentially be viable pathogens, then you may need to continue to disinfect those areas to help mitigate the risk of transmission.