Transcript for CDC Media Telebriefing: COVID-19 Vaccination and Pregnancy

Press Briefing Transcript

Tuesday, February 15, 2022

- Audio recording [MP3 – 4MB]

Please Note: This transcript is not edited and may contain errors.

0:00 / 27:18

Operator:

Welcome and thank you for standing by. At this time, all participants are in a listen only mode until the question and answer portion of today's call. During that time, if you would like to ask a question, please press star one. Today's conference is being recorded. If you have any objections, you may disconnect this time. We now would like to turn the meeting over to Benjamin Haynes. You may now begin.

Benjamin Haynes:

Thank you, Brandon and thank you all for joining us for this briefing to discuss today's MMWR. We are joined by Dr. Dana Meaney-Delman, Chief of Infant Outcomes Monitoring Research and Prevention Branch, who will provide opening remarks. Following her opening remarks, she and senior author, Dr. Manish Patel, will be available to take your questions. I'll now turn the call over to Dr. Meaney-Delman.

Dr. Meaney-Delman:

Good afternoon, everyone. Thank you for joining us today to talk about a subject that is near and dear to me as a practicing obstetrician, gynecologist: vaccination during pregnancy. Today's news provides pregnant people and their families with critical information about COVID-19 vaccines during pregnancy and the effects on young infants. A new study in MMWR adds to the growing evidence CDC has released on the safety and effectiveness of these vaccines during pregnancy. To date, what we know about the effectiveness of COVID-19 vaccination during pregnancy, has primarily focused on health outcomes for the pregnant person. Data have clearly shown that receiving an mRNA COVID-19 vaccine during pregnancy reduces the risk for infection, severe illness and death from COVID-19 among people who are pregnant. For other diseases like flu and whooping cough, vaccination during pregnancy provides protection for infants during the first six months of their lives.

A period when infants are at high-risk for severe illness, but when they're not yet old enough to get vaccinated. When people receive an mRNA COVID-19 vaccine during pregnancy, their bodies build antibodies to protect against COVID-19 and these antibodies have been found in umbilical cord blood, indicating that the antibodies have transferred from the pregnant person to the developing infant. And while we know that these antibodies cross the placenta, until this study, we have not yet had data to demonstrate whether these antibodies might provide protection for the baby against COVID-19. The data CDC is publishing today provides real world evidence that getting a COVID-19 vaccine during pregnancy might help protect infants less than six months of age from hospitalization due to COVID-19. And these findings continue to emphasize the importance of COVID-19 vaccination during pregnancy to protect people who are pregnant and also to protect their babies from being hospitalized with COVID. Using data from the overcoming COVID-19 network of 20

children's hospitals across 17 states from July 2021 through mid-January of this year, the authors examined the odds of COVID-19 vaccination, among mothers, whose babies were hospitalized with COVID-19 and compared that with the odds of COVID-19 vaccination among mother, whose babies were hospitalized for other reasons, and did not have COVID.

The study found that COVID-19 vaccination during pregnancy was 61% protective. Meaning that babies less than six months old, whose mothers were vaccinated, were 61% less like to be hospitalized with COVID-19. And in fact, the majority of babies, actually 84% who were hospitalized with COVID-19, were born to people who were not vaccinated during pregnancy. And most concerning, they found that among babies with COVID-19, who were admitted to the ICU, the sickest babies, 88% were born to mothers who were not vaccinated before or during pregnancy. And the one baby who died in the study was born to a mother who was not vaccinated. The bottom line is that maternal vaccination is a really important way to help protect these young infants. Today's news is highly welcome, particularly in the backdrop of the recent increase in hospitalizations among very young children. This has been the highest of the entire pandemic. Unfortunately, vaccination of infants younger than six months old is not currently on the horizon highlighting, while why vaccination during pregnancy is so important for young infant. COVID-19 vaccination during pregnancy has been and continues to be strongly recommended by CDC and by many medical organizations serving pregnant people.

I personally counsel all my pregnant patients that they are more likely to get severely ill and experience pregnancy complications, such as preterm delivery, or even stillbirth from COVID-19 and I strongly encourage them to be vaccinated. They often ask me whether the vaccine protects the baby and this new study will undoubtedly factor into my future counseling sessions. I cannot emphasize enough how today's findings reinforce the importance of COVID-19 vaccination during pregnancy, both to protect the people who are pregnant and to help protect their babies. CDC recommends that people who are pregnant, breastfeeding, trying to get pregnant now or might become pregnant in the future, get vaccinated and stay up to date with their COVID-19 vaccines through recommended booster doses. Thank you for attention then I will turn it back to you so we can take questions.

Benjamin Haynes:

Thank you, Dr. Meaney-Delman. Brandon, we are ready for questions, please.

Operator:

Thank you. At this time, if you would like to ask a question, please press star one. Please unmute your phone and record your first and last name clearly when prompted your name is required to introduce your question. To withdraw your question, you may press star two. Once again, at this time, if you would like to ask a question, please press star. One moment, please. For our first question, our first question is from Issam Ahmed with AFP, your line is open.

Issam Ahmed:

Thank you for doing this. I saw in the study that the vaccine efficacy appeared to be higher when it was carried out later in the course of the pregnancy might not form the basis for a recommendation for potentially a booster that might would benefit the newborn baby in the future. What are your thoughts on that?

Dr. Patel:

Hey, yes, Issam this is Manish Patel. I can take that question. Yeah. So I think, you know, that's a good observation. Yeah, first I think I would point out, you know, that the good news is protection was high throughout that vaccination throughout pregnancy at any point in pregnancy and we did look at it by early versus late. We were not able to look at it by trimesters per se, because the numbers were too small, but we did look at it early versus late and noted that point estimates were higher later in pregnancy versus early. And the reason we to do that was to test, you know, the strength of our findings in our study, as you note is an epidemiologic study. And so we try to take as many precautions as we can to reduce bias, but you never can be sure. So this is a good way to test the data. And we know you know, while we can't be about the biology of how protection happens. If you look at the antibody data, the higher antibody closer to delivery would theoretically lead to higher levels of protection to the baby as the antibody gets transferred from mother to baby. And that's consistent with what we found. Now I think back to your question of the timing of vaccination, I think that has broader considerations. One being the point you made about boosters, and I'll let Dr. Meaney-Delman comment on that.

Dr. Meaney-Delman:

So, as we talked about, when thinking about the timing of COVID-19 vaccination during pregnancy, it's really important that we remember that the benefits of vaccination are both to the mom and we know severe illness can occur with COVID as well as, based on this study to the baby. And while there are some vaccines that are given primarily to protect the baby, COVID-19 vaccines are critical to protect the pregnant individual, the pregnancy, and might actually help protect the baby as well. So we recommend, as do many other medical organizations, to give COVID vaccine at any point during pregnancy. But if we have a woman who comes in in the first trimester and is vaccinated, she can actually be eligible for a booster vaccine later in pregnancy. We still need to study that and how much antibody is conferred with a booster vaccination. And that's certainly something we're looking into, but for right now, we want to that we are protecting both the mom and the infant. And so as soon as a pregnant woman is willing to be vaccinated we recommend that she go ahead and do so.

Issam Ahmed:

Thank you.

Benjamin Haynes:

Next question, please.

Operator:

Our next question is from Dennis Thompson with HealthDay, your line is open.

Dennis Thompson:

Yeah, I kind of wanted to follow up on that point regarding the protection apparently being stronger later in pregnancy. You know, I take it that at this point, you guys don't really want to put forth any recommendations on getting back vaccinated later in pregnancy, because there's a lot of other health risks that can crop up during pregnancy if you aren't vaccinated. Is that right? Could you go into that a little bit more in detail?

Dr. Meaney-Delman:

Absolutely. So you're correct. We are not changing our recommendations to make a recommendation based on timing during pregnancy. And I want to call out, on our CDC data tracker, you can see that we had the highest number of deaths among pregnant people in August and September of 2021. So very recently we had pregnant people in the ICU, very, very sick. We have yet to see what will happen with Omicron and the reduction in cases, but right now we are not changing our recommendation, given that it's really critically important that pregnant people are protected. So hopefully that clarifies for you.

Benjamin Haynes:

Next question.

Operator:

Next question is from Peter Sullivan with The Hill. Your line is open.

Peter Sullivan:

Hi, thanks. I just had two clarifying questions. First, I noticed the study phrases that as vaccination might help prevent COVID hospitalization and infants. I mean, are you saying it's, there's still some uncertainty what that might language, or are you saying it full on does? And secondly, is this only for women who got vaccinated during pregnancy that these results are looking at? Or what if you were vaccinated before you became pregnant? Does that still confer protection to your baby? Thanks.

Dr. Patel:

Yeah. Hey Peter, I can take that question. This is Manish. So your first point on the use of the term, might, you know, it's really a technical term. This is an epidemiologic study and these aren't, this is not a clinical trial where you randomize mothers and then follow them and look at their babies, which allows the strongest evidence to say that vaccine is protecting the baby. So the technical jargon really an EPI data is that vaccination was associated with reduced risk of protection. And, you know, that gives us a really a truth check as these data are evolving. And it's the full body of evidence on the EPI, you know, the biological science, and then of course all the data on protecting the mothers. So if that gives you some background on that question. The second question with regard to whether we looked at vaccination prior to pregnancy. We did not look at vaccination prior to pregnancy because we wanted to isolate the effects of vaccination during pregnancy. The completion of the series, a few mothers did get vaccinated with their first dose prior to pregnancy, but they finished their series with the second dose during pregnancy. But those were small.

Benjamin Haynes:

Next question, please.

Operator:

Our next question is from Amy Ducharme with Time Magazine, your line is open.

Amy Ducharme:

Hi, thank you. I wanted to ask about the historically or traditionally, fairly low vaccination rates against COVID among pregnant people in the U.S. And what the CDC is doing to try to get those rates up as the pandemic continues.

Dr. Meaney-Delman:

Thank you so much for that question. So some exciting news, and you'll see again, on our data tracker pregnancy page, that in our vaccine safety data link analysis that is on our data tracker. We are seeing increases in vaccination among pregnant persons and persons prior to pregnancy as well. So the numbers are encouraging. They're not quite where we need them to be, and they do differ by race and ethnicity. We still see about a 53% vaccine coverage rate for non-Hispanic pregnant persons, whereas overall, for all race ethnicities, it's about 67%. Now, I will say there's a caveat associated with that, which is this is not national but it is from seven participating academic institutions. So the trend is really, what's most important that the amount or the number of pregnant women who are being is increasing.

Dr. Meaney-Delman:

So that's positive. We still have a lot of work to do to get these numbers where we'd like them to be. And there have been tremendous efforts with clinical professional organizations, with hospitals with community based organizations and I think we're making a difference. I can say when the pandemic, early in the pandemic, I was having trouble convincing pregnant women of the benefits of vaccination. And I think it's getting easier because they're hearing it, not only from me, but from their family members who are encouraging them to be vaccinated as well. So really taking a whole of community approach and not just for vaccination during pregnancy, but taking advantage of any opportunity where an individual accesses the medical system, or even the pharmacies. So a whole of community approaches is how we're approaching this.

Benjamin Haynes:

Next question, please.

Operator:

Our next question is from Lindsey Tanner with Associated Press, your line is open.

Lindsey Tanner:

Thank you. I just need some clarification on whether this data includes, whether this involves breakthrough infections or how these infants became infected.

Dr. Patel:

Hey, Lindsey. Yeah, so your point on breakthrough infections. So, you know, by definition, a breakthrough infection as you know, would be in a person who's vaccinated ends up getting infected. So here, or infants whose mothers were vaccinated during pregnancy, but did end up getting infected. And so that's why you get a point estimate of protection of 60%. So some proportion of infants did go on to get Infection and get hospitalized. Does that answer your question?

Lindsey Tanner:

Yes, I guess, I mean, is that how you presume all of them got infected?

Dr. Patel:

Well, some were fully protected and that would be the risk reduction of 60%. So another way to look at it is that 60% of the kids were never infected and hospitalized, 40%. It's not an easy way to explain that, but some percentage of those infants did get infected and get hospitalized. And that by definition is just a breakthrough infection. If you had a vaccine that protected a hundred percent of the infants, then you would have no breakthrough infections.

Lindsey Tanner:

Right. I meant among the hospitalized infants, I'm wondering if it was the mothers who probably infected them.

Dr. Patel:

I see. Lindsey, we cannot be sure the source of the infection, sorry about that.

Dr. Meaney-Delman:

And Lindsey, this is Dana Meaney-Delman. We know that perinatal transmission is very rare with COVID. So we don't know how these particular infants were infected, but I will say perinatal transmission of the virus is very rare.

Benjamin Haynes:

Next question, please.

Operator:

Our next question is from Cheyenne Heslett with ABC news. Your line is now open.

Cheyenne Heslett:

Hi, thank you. I know this is a bit beyond the scope of the study, maybe, but I'm curious what you would recommend. Once vaccines for kid over six months are authorized, how that would pair with a mother being vaccinated or boosted while pregnant? Would that play at all into the recommendations for an infant then getting vaccinated once they reach six months?

Dr. Meaney-Delman:

I think it's, to really make any recommendations, we would need to really look at a lot of different elements of data before we'd make any recommendations on that in general. With vaccinations, there isn't a relationship between maternal vaccination and vaccination of children. But again, we'd need to look at the data since we follow the science.

Benjamin Haynes:

Brandon, we have time for two more questions.

Operator:

Sure. Our next question is from Lauren Gardner with Politico. Your line is open.

Lauren Gardner:

Hi, thanks for taking my question. Given the limitations in this study on looking at how boosters might have might affect vaccine effectiveness and also pregnant people who might have gotten Johnson and Johnson and then boosted with another vaccine, is that something CDC is planning to look at, or are the sample sizes on that too small? And kind of going off of that, what would you recommend at this moment to those mothers who or mothers to be who have been vaccinated but, you know, aren't currently eligible for an additional dose because that hasn't been recommended yet? Like they're already boosted, waiting to see what more recommendations for more boosters are going to come out.

Dr. Meaney-Delman:

So maybe I'll take the last question. Oh, sorry. Maybe I'll take the last question first. And maybe I can ask Dr. Patel if he has comments on the first, but I think it's premature to, based on these data alone to indicate after someone is fully up to date on their vaccines, meaning they've received the primary series and the booster, if they're eligible, I think it's premature to make any recommendations for an additional booster. But it's certainly something we're continuing to look at. There are large trials that are funded to look at these vaccines in pregnancy. So I do think we need to wait until we have additional data, but this is the first exciting news related to that. In terms of the J&J and the boosting with other vaccines, I mean, we are following up on women who voluntarily enroll in the V-Safe pregnancy registry, and that is a registry that allows women to enroll and then we follow them their infants through the first year of life. We have about 15, almost 16,000, enrolled in the V-Safe registry. And they're of course other registries that exist. So I think that the issue of boosters is one that we do need more information about, and I think we will have more information upcoming months. I don't know, Dr. Patel, if you have more to add.

Dr. Patel:

I think I definitely agree with you on your comments. Laura, in terms of the sample size. Yes, you're absolutely right. I think we just did not have enough mothers with boosters. I think we had 10. We will continue to look at that as we accumulate and accrue the data on boosters. I think it's fair to say from all of the evidence on boosters, increasing protection and antibody levels, that we should see higher protection, definitely not lower protection with boosters. In terms of J&J, we have too few to look at it. I think only four women had received J&J. So it's tough to comment on that.

Benjamin Haynes:

Hi, Brandon, we can open it up for a few more questions.

Operator:

Sure. Our next question is from Eliana Block with WUSA9, your line is open.

Eliana Block:

Hello and thank you for taking my call. Yeah, so my question is about, do we know anything about pregnant women who had COVID-19 and recovered and whether or not any of their antibodies transferred to the fetus?

Dr. Patel:

Hey so in this study, we were unable to look at that because we were looking at infants who were hospitalized and did not have the data back on the mother's history of infections. I don't know if Dr. Meaney-Delman has other evidence from other places on that.

Dr. Meaney-Delman:

So I think it's a really great question and it's one where certain very interested in. We do have the surveillance of emerging threats to moms and babies network at CDC, which is a collaboration with jurisdictions that identify pregnant women who have COVID. And then we follow both the mothers and the infants out to see what happens in terms of health outcomes. So I think we'll have more data on this specific issue specifically around protection to the infant, but it's

premature at the moment. And as I said, there are some ongoing studies as well when they did compare some antibody levels, not protection, but when they did compare antibody levels in some studies they did show that there was higher antibody levels in when women who are vaccinated compared to women who had COVID. But again, what's the impact on the infant, we don't know yet.

Benjamin Haynes:

Next question, please.

Operator:

Our next question is from Brittany Shammas with Washington Post, your line is open.

Brittany Shammas:

Hi, thanks for taking my question. I just wanted to circle back on one thing. I know this particular study didn't look at people who were vaccinated before pregnancy, but I'm just wondering, is there any other evidence out there to suggest that vaccination prior to pregnancy helps protect the infant? Just wondering if you could talk more about that and whether that's something the CDC is looking at or has looked at.

Dr. Patel:

So this is Manish. No, you're right. We, were unable to look at this and part of it is just timing. You know, we enrolled for six months and the vaccine was available prior to that for a few months. So most women were vaccinated during pregnancy in this cohort. I don't think there's other data that have looked at vaccination prior to pregnancy and their effects on infants. Dr. Meaney-Delman, are you aware of any?

Dr. Meaney-Delman:

So I'm not aware of specifically immune protection of infants from women who are vaccinated prior to pregnancy, but I do want take this moment to emphasize one point, which is getting COVID during pregnancy is associated with severe illness. So there's a huge benefit to the pregnancy and to having a healthy mother of getting vaccinated prior to pregnancy. So I don't want us to lose sight of that piece. While we don't know that there's actual immune protection conferred, we know that might protect a mom from getting COVID during pregnancy, which is associated, as I mentioned, with preterm birth, with stillbirth with pregnancy complications. So it's really a good idea.

Benjamin Haynes:

And our last question, please.

Operator:

Our last question is from Damian McNamara with WebMD and Medscape, your line is open.

Damian McNamara:

Yeah. My question is whether you were able to control for breastfeeding, which might offer some sort of protection during the first six months.

Dr. Patel:

Hey, Damien. So we did ask the question about breastfeeding in the paper itself. However, we did have a lot of non-responses. So a lot of what we call missing data to look at the issue of breastfeeding and its interaction with protection in this study.

Benjamin Haynes:

Thank you, Dr. Meaney-Delman and Dr. Patel, and thank you all for joining us today. If you have further questions, please contact the main media line at 404-639-3286 or email media@cdc.gov. Thank you.

Operator:

Thank you for participating in today's conference. All lines may disconnect at this time.

###

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

CDC works 24/7 protecting America's health, safety and security. Whether disease start at home or abroad, are curable or preventable, chronic or acute, or from human activity or deliberate attack, CDC responds to America's most pressing health threats. CDC is headquartered in Atlanta and has experts located throughout the United States and the world.

Page last reviewed: February 15, 2022