Keinya: Welcome and thank you for joining us for a question and answer session about COVID-19 vaccines for children ages 5 to 11. I'm Keinya Lawrence, I'm a program coordinator with Kaiser Permanente's Educational Theatre Program and I've been involved with serving youth and families with health education messages for over 20 years. I'm here today to talk with David Bronstein, MD, who will be sharing his expertise about COVID-19 vaccines for kids. Now we understand that many parents have questions and there's a lot of misinformation circulating, so we're really fortunate to be with a trusted source so that we can learn more. Welcome Dr Bronstein.

Dr. Bronstein: Thank you so much Keinya. It's a pleasure to be here.

Keinya: So alright, I know that you wear many hats with your work and Kaiser Permanente, so could you just tell us a little bit more about yourself before we get started?

Dr. Bronstein: I'm a pediatric infectious disease specialist, but I'm also a general pediatrician. I work out of Kaiser Permanente in the Antelope Valley, in the Palmdale, Lancaster area just a little bit north of Los Angeles.

Keinya: Alright, well thank you for taking the time to talk with us today. I'd like to open the conversation up by asking, what are you seeing amongst your pediatric patients regarding COVID-19?

Dr. Bronstein: So unfortunately kids are getting it. Kids are getting sick with COVID. I can't say that it's particularly severe in a lot of the patients, and in fact, most of the patients do well, but we definitely have had kids having to the hospital. Some kids have had to go to the ICU. Not to mention that multisystem inflammatory syndrome, which we do see cases in Southern California Kaiser, but also elsewhere these things happen, so kids can definitely get COVID. And kids can spread COVID and that's always been a major concern.

Keinya: Thank you for setting that context for with us today. We do have some parents of kids who are now old enough to get vaccinated and they have some questions for you, so I'd like to introduce our first parent and that is Cuirstaun Echols. She is joining us today from Georgia. Can you tell us a little bit about yourself?

Cuirstaun: Yes, hi, my name is Cuirstaun Echols. I'm a mom of two boys, one who is 6 and the other will be 1 next week. We live in the state of Georgia and I just have some questions.

Keinya: Thank you so much for being here. Well let's get into it. What is your question?

Cuirstaun: Well, I'm feeling a little nervous about getting my kids vaccinated and I just wanted to know, are the COVID-19 vaccines for kids different than the ones for adults?

Dr. Bronstein: That's a great question, Cuirstaun. And I know it's been so confusing lately because we have the original vaccines, we've got the booster vaccines, some of those are different doses, and now we wind up having vaccines for kids as well. For the most part, all the vaccines are pretty much the same, but there's a little difference in the dosing. For teenagers, they are only eligible to get the Pfizer vaccine, so anyone 12 and up gets the Pfizer COVID vaccine, and it's exactly the same dose for adults. But for the kids 5 to 11 that recently got the emergency use authorization that we're starting to give right now, that actually is only a third of the dose than we use for the older folks. Same vaccine, just less of it.

Cuirstaun: OK, thank you, that's really helpful to know. I also wanted to know if you can share more about the side effects. Are they different for kids than they are for adults? And if so, are they serious?

Dr. Bronstein: Basically, they're the same side effects, just a little bit less of them. What we saw from the initial studies, the clinical trials, in the 5 to 11 year olds, they did have similar side effects that we saw with older kids and with adults -- so a sore arm, maybe a little bit of redness of the arm, maybe a little bit of swelling. Sometimes, although not very common some have what we call the systemic side effects where you can have a little bit of fatigue, or headache, or fever, usually on the day after, and it usually lasts for less than 24 hours. The good thing though is for the kids that were in the study, they seemed to have less of these side effects and more mild than the older folks they were compared to. I would plan on your kid having some side effects. It's probably a good idea to get the vaccine on a Friday or over the weekend so you don't have them feeling sick and missing school, for example, but for the most part they're very mild.

Cuirstaun: My last question is, what can you tell us about long term effects? I'm just concerned that it hasn't been around long enough for us to know what they might be.

Dr. Bronstein: This is probably the question I get the most and thank you so much for asking that Cuirstaun, because that's on our minds. I've got kids of my own. I've got my own 11 year old and I've got a 13 year old. My 13 year old got her vaccine as soon as it was available. My 11 year old is scheduled to get his now that it's available in his age range. But as a parent, we always worry it's something we're doing now, and is that going to have a problem later in life? And the reassuring thing is, you do know these vaccines and I wouldn't consider them new at all. We've had them for almost a full year now and we've given hundreds of millions of doses just in the United States alone, and we're not seeing anything more than the immediate, what we call reactogenicity, reactions to the vaccine. We're not seeing any sort of long term effects.

Plus, when you look at really all vaccines in the history of vaccines, they don't have long term effects. That's not how vaccines work. They teach your body to make antibodies so you can fight the infection. You can fight the virus that causes it, but then anything from the vaccine is quickly degraded by our

bodies and doesn't stick around to cause any issues later on. It's the antibodies that we make that do stick around so that we have immunological memory to fight off infection in the future if we get sick. So I'm not worried about a long term effect.

One other thing that I hear about, and I don't know if you're thinking this or not, but I hear a lot of parents coming in asking me if there could be an effect on fertility in terms of the long term effect. And again, the answer to that is absolutely not. That is also nothing we have ever seen with any vaccines that has ever been used, and there's not even a scientific explanation how that even could be possible, because, again, these vaccines aren't sticking around. They're not going anywhere where they're going to cause trouble with our genome or elsewhere. So that idea of fertility, I know, that's a rumor or a myth that has been spread and unfortunately, it's probably been spread by people who want us to not get the vaccine. But when you talk to any scientist anywhere, there's really no way that any of that even makes sense, so don't worry about fertility. Trust me, I want to have grandkids as much as the next person here, and we don't need to worry about that or really any other long term effects.

Cuirstaun: Thank you.

Keinya: All right, thank you Cuirstaun for those thoughtful questions. I bet a lot of other parents had the same questions that you did. Alright, let's talk to another parent who is joining us by video and this is Reecha.

Reecha: Hi, my name is Reecha and I am a mom of one 5 year old child, she just started kindergarten. And I have been so worried about her getting infected. So I would like to know how effective are these vaccines for kids? Also, how long would they be protected? Should they be vaccinated? Thank you for your time.

Dr. Bronstein: Thank you Reecha, that really is a great question and I like how you're thinking about it. I really like that you're worried. I mean, I don't want people to be too, too worried, but I am glad that you're concerned about the disease more so than you are about the vaccine, which is really what we all should be, because the vaccine is safe. The vaccine is tremendously effective. The disease itself can be very problematic. And unfortunately for kids, kids can get COVID and kids can spread COVID, and we've been seeing that more so lately than before. Before, it was anywhere around 15 - 16% of all infections were in kids. Now that number is up to close to one out of four infections that we've been seeing over the past few months has been in kids under 18 years of age. Kids have become unfortunately more of a source of spreading COVID. But also, when you look at who's being hospitalized more and who's getting sicker, unfortunately, we are seeing that with the younger generations here. Not to mention kids unfortunately, do get multisystem inflammatory syndrome about a month later after they had COVID. It's very rare, but the kids who get it and there have been over 5000 kids in our country who have gotten this, these kids are very, very sick and wind up in the ICU, and unfortunately, 46 of those children have died, at least as of the beginning of October. So lots of reasons that we should worry about COVID, even though for the most part most kids do well with it. It's still very, very frightening. The good thing is the vaccine is tremendously effective in the clinical trial for the 5 to 11 year olds, the vaccine was over 90% effective, which is really fantastic. And when you look at their antibody response with their dose that they get, which is 1/3 of the dose that the older kids get, they had an equal antibody response there which is fantastic.

So in terms of how long will the protection last from the vaccine, we just don't know that for sure. I know we are all talking about boosters right now, I know I got my booster because I am in a high risk field. And the thought is that once you get around 5-6-7 seven months after your initial series of the vaccine, you do start seeing some waning of immunity. It's particularly a problem for elderly folks where there immunity really does seem to dip down to such a point that they can become sick and are at higher risk of some complications. For the rest of us, though, who aren't elderly and what I would expect it would be the same in kids, is even when you get several months out and you start seeing a dipping of the immune response and antibody production, more than likely they're still going to have tremendous protection against the things that we care the most about, which are hospitalization, ICU stays, death. The vaccine should continue to protect strongly against that even if there are an increase in some breakthrough cases, so it's anybody's guess right now if kids are going to need boosters, you know six months or a year from now, or if the virus itself changes and they need boosters because of that. But I would say don't let the thought of "uh-oh, at some point it's going to wear off, they may need and yet another shot," don't let that prevent you from getting your kids protected right now, because the reality is right now is when we need the protection. Kids are still getting COVID. We still see classrooms being shut down, schools being shut down. And now that we're going into the holiday season, as well, when we are going to have probably some increased spread of COVID, we really need to do everything we can to protect our little ones.

Keinya: Before this conversation, we collected some questions through previous webinars that we've had and this one came up a few times, which I think is worth reading aloud on behalf of others who might be in the same situation.

"Hello, I'm a little embarrassed to admit, but my child is behind on other shots because we haven't been to the doctor for our usual visits like we did before the pandemic. If they are getting a COVID-19 vaccine, can they get all their shots at the same time?"

Dr. Bronstein: That's a wonderful question, and I don't think anyone should be embarrassed by that. I know it's unfortunately very common because we did shut down for a while. The world shut down for awhile and because of that people fell behind not just with vaccines. Adults fell behind with their routine screening tests and taking care of things that they absolutely needed to take care of. We're in this phase right now where we're continuing to have people re-enter the health care system, which is great, but it's very challenging. Of course, while we're also in the middle of yet another phase of this pandemic. So catching up on vaccines as essential. The good thing is you can get any vaccine at the same time as the COVID vaccine. Initially when the vaccines came out we said you should wait two weeks before or after another vaccine just because we didn't know, there wasn't enough data there from any of the clinical trials where these vaccines weren't given at the same time. But that recommendation was lifted many months ago, and now the recommendation is you can give any vaccine at the same time as the COVID vaccine. The one place that I think it's tremendously important to realize is with the flu vaccine, because we're going into flu season right now. Last year, flu took the season off for some reason. We don't quite know why but we are planning on and expecting it to come back with a vengeance this year and so the most important thing that all of us can do in addition to getting

protected against COVID is getting our flu vaccine as well. And, that's something for any kid aged six months and older. We do recommend the flu vaccine and yes, they can be given at the exact same time as the COVID vaccine.

Keinya: Thank you for that information and we do have another parent, and this is Darin.

Darin: Hi my name is Darin Evans. I'm a firefighter paramedic here in Southern California and I have a 10 year old daughter who earlier this year had tested positive for COVID. Does she have any protection against it with the natural immunity? Also, should she get vaccinated and if she should, how long should we wait till she gets vaccinated, post COVID?

Dr. Bronstein: So that's a great question, Darin, and that is a question that comes up quite a lot, especially as we are seeing more and more children that have been infected by COVID, whether they just tested positive or if they had any symptoms. Having had COVID before, she does have some protection, but it's unclear how effective that protection is, and in fact more recent studies are showing that the protection we get from the vaccine seems to be significantly stronger than the protection from just having had the illness before, especially in someone who had an asymptomatic infection where they didn't have any symptoms with it but just tested positive. They seem to have immunity that doesn't last as long as someone who was more severely symptomatic with it. So either way, the recommendation is for someone who had COVID before to get the vaccine. It gives a really wonderful boost in immunity. So it's definitely recommended. She can do it really at any time after she's out of isolation. So after that 10 day period is up. If she's no longer having symptoms, she can go ahead and get the vaccine.

Keinya: Dr. Bronstein, this has been so informative and so helpful. I actually have one final question really on behalf of all of us. How will getting vaccinated help us return to some kind of normal?

Dr. Bronstein: Yeah, that's a great question, and that's definitely the most important part of getting the vaccine, in addition to of course, saving lives and keeping people out of the hospital and such. But that mental relief that you get that sense of, I know I'm protected, I know my kids are protected or, in the case of my son, is going to be protected very soon. That is such a relief. Knowing what this disease can do, and having seen what this disease can do, knowing that we're not going to be susceptible to that, such a big relief.

I know so many kids in my practice as well as other people I just know. The anxiety they've had, the depression they've had, the fear of going out in public and going back to school and back to their normal activities and playing their sports. All of these things. We can get them back to normal if we vaccinate enough of our kids. And to me, that's the biggest societal effect, as well as personal effect, of getting as many kids vaccinated as we can so that sense of relief, knowing that we're protected and the people we care about or protected, that is going to get us back to some sense of normalcy. I'm very much looking

forward to, really, just a few months from now, once we've had enough time to immunize all those kids 5 through 11 and really get all of our lives back on track.

Keinya: We've covered a lot of ground today and I just want to say thank you to all of the parents. Cuirstaun, Reecha, Darin, and Dr Bronstein for just taking the time to be here with us today. You know, conversations like this are not only an opportunity to share concerns or gather information so that we can make informed decisions about our health, but they're also an opportunity to increase our empathy and our understanding for the complexity of the situation.

If you or anyone in your family who is five or older have not been vaccinated yet, you can text your ZIP code to 438829 to find a free vaccine near you.

Thank you for joining us and have a good day.