Experts Discuss COVID-19—Vaccine Questions, School Openings, and More

Rochelle P. Walensky, MD, MPH
Director of the Centers for Disease Control and Prevention (CDC)

On caution over the next few months: I worry that it will be spring and we will all have had enough. Already some states have loosened their mask mandates. Already people are resting on the fact that the numbers are starting to look better. I worry that life will feel and look a little bit better, and the motivation for those who might be vaccine hesitant will be diminished. While I really am hopeful for what could happen in March and April, I really do know this could go bad so fast. We saw it in November. We saw it in December.

On the CDC's blueprint for opening schools: I've had so many people say to me, "Can you promise me that there won't be COVID in the school?" I can't make that promise. What we're trying to do is to evaluate the risk of a COVID outbreak in the school—which we're doing our best to try to give guidance to mitigate—vs all the education loss, all the food security loss, all the mental health, and so many things that we're missing out on and not really quantifying yet.

On resuming domestic travel: Don't travel. In the Morbidity and Mortality Weekly Report on Minnesota and the B.1.1.7 variant, several of the cases came from California. We really, really would advocate for not traveling right now. We're really asking people to abide by that, especially as our numbers are coming down. We're worried about the variants.

On variants and vaccines: We don't know what the efficacy of this vaccine is going to be across these variants, but we are planning ahead. Fortunately, the 2 mRNA vaccines that we have can be easily tweaked to these variants. The pharmaceutical companies are already working to see if they can tweak to the variants, so that if down the line we need a bivalent vaccine or a booster vaccine, we are ready to go.

Denise J. Jamieson, MD, MPH
Professor and Chair of the Department of Gynecology and Obstetrics at the Emory University School of Medicine

On pregnancy and COVID-19: Once pregnant women get COVID, they're more likely to have severe disease—to be hospitalized, to require intensive care, to require ECMO [extracorporeal membrane oxygenation], to be ventilated, and to die. In terms of risks to the fetus, we know that there seems to be an increased risk of preterm birth among women who are infected with COVID. I think the jury's still out whether or not there's increased risk of stillbirth. There are cases where SARS-CoV-2 is transplacentally infecting fetuses, but it's much less common than with other pathogens such as Zika. And we are not seeing concerning patterns of either frequent congenital infections or congenital syndrome.

On vaccinating pregnant health care workers: If you're a health care worker and you would otherwise receive the vaccine if you were not pregnant, I think the vaccine is a good idea. I think about all the years of immunizing pregnant women, and it's likely that in the end, the benefits will greatly outweigh the theoretical risks, none of which we've seen yet. If you're a health care provider and today your health system is offering you the vaccine, think really carefully about declining the opportunity to get vaccinated because that same opportunity may not be available next week or next month. I would advise to get vaccinated soon and not delay regardless of the trimester.

Adam Lauring, MD, PhD
Associate Professor of Medicine in the Division of Infectious Diseases at the University of Michigan Medical School

On viral genomic surveillance: The United Kingdom has done a tremendous amount of sequencing. That degree of sampling allows you to really understand things. In the US we don't sequence as much, so you might see a virus increasing, but it's much less common than with other pathogens such as Zika. And we are not seeing concerning patterns of either frequent congenital infections or congenital syndrome.
a certain area, and it’s prevalent in that area. It’s hard to infer what’s going on unless your sampling is unbiased and broad.

On whether COVID-19 will become seasonal: I think we may get to a place where, just like we have flu epidemics every year, we might have a time of year when we have a lot of SARS-CoV-2 around, and some people get sick, some people get very sick, some people die. But it won’t be where we’re at now. That’s I think where we’re headed.

On use of a live attenuated vaccine for immunocompromised individuals: It certainly might [provide broader protection], or it might potentially stimulate more immunity at mucosal sites, which is of interest for a respiratory virus like SARS-CoV-2. There are always regulatory concerns with a live attenuated vaccine. And are you sure it’s attenuated? Are you sure it’s stable? But it’s certainly something that people are investigating, and it’s worthy of investigation.

Full video and audio of this interview are available online.

Nancy Messonnier, MD
Director of the CDC’s National Center for Immunization and Respiratory Diseases

On postvaccination guidance: Many of us are asking ourselves: if I’m fully vaccinated, does that mean that I can go visit my family and friends without a mask and without social distancing? You want to know whether the vaccine will protect you, not only from getting the disease, but from transmitting to somebody else. It would motivate a lot of people to get vaccinated if they felt like they could let loose some of those restrictions and get back to seeing and hugging their family and friends. (CDC guidance issued on March 8 describes activities that people can safely resume once they’ve been fully vaccinated against SARS-CoV-2.)

On vaccine dosing and timing: Some data that say that after somebody has symptomatic COVID and they get a single dose of vaccine they have really high antibody levels, leading to the question of whether 1 dose is enough. The other question is will you experience more side effects if you get vaccinated in close proximity to the time that you have had COVID? Those are two really complicated questions.

That’s one of the reasons that we have an Advisory Committee on Immunization Practices, to wrestle with those kind of questions for us. Both of those things are going to be discussed.

On why immunocompromised individuals should get vaccinated: Are there any safety signals that would be a deterrent to immunocompromised people to get vaccinated? We haven’t seen them yet. Do we know how effective these vaccines are in all those populations? It will be some time before we really have answers at that level of granularity. For now, our recommendation is when it’s your turn you should get vaccinated; those underlying illnesses are not any reason to hold back from accepting the vaccine.

On vaccine safety: We never stop studying the safety of any of the vaccines that are used routinely, even vaccines that have been around for 30 years. For COVID-19 vaccines, we’re using all those normal systems, but we’re also enhancing them with additional systems. So far, all signals are good.

On equitable vaccine distribution: We know that there are issues of systemic racism that underlie the impact of this pandemic. I also know that there are issues around trust of vaccines in communities of color. Speed is important, but so is equity, and vaccine coverage really has to be considered community by community. Our goal has to be to get the vaccine into every corner of every community but also to make sure that people are prepared to accept it.

Full video and audio of this interview are available online.

Peter Piot, MD, PhD
Director of the London School of Hygiene & Tropical Medicine

On variants necessitating different vaccine approaches: I think we need alternative vaccines. For example, subunit vaccines—you can imagine a cocktail that includes several targets of the virus. And, in the beginning, I was not so high on the classic inactivated vaccines. But now I think that we should definitely look at them very seriously because they will trigger a much broader type of immune response.

On stalled treatments: As much as the development of vaccines was frankly beyond my expectations, I’ve been really disappointed by progress on treatment. I think that probably timing is going to be everything. When do you give what to whom? We’ll have to look into subgroups. It makes sense that antivirals, be it monoclonals or small molecules, will have to be given pretty early on, like for most viral infections. And then the key will be when to start with dexamethasone or other immune modulators.

On monoclonal antibodies: Monoclonal antibody-based therapies are probably far more vulnerable to the impact of variants than vaccines because a monoclonal, by definition, is very specific. So we’ll have to go to cocktails probably. But we need that, not only for treatment but also as prophylaxis.

On publicly discussing his own COVID-19: I was one of the long haulers, and I think it’s not so rare. I got very frustrated by the public messaging here in the UK. It was all about statistics and flattening the curve and never about people. I said, “Look, this is not just about a little flu and if you’re very old or you have underlying conditions, then you end up in intensive care, and 1% die.” I said, “There’s a lot in between.” This was in April last year and long COVID was not yet known. I was hospitalized, and I’d never been sick in my whole life. I had no underlying conditions. But it took about 5 months before I could start running again, slowly.

On international vaccine equity: What keeps me awake at night now at the same level as the variants is vaccine inequity. I’ve been talking a lot to my colleagues in Africa, where there is now a rampant COVID epidemic. This is not only a moral issue, but what I think will be one of the big geopolitical issues of our time. Just imagine a world where the Western world and the richer Asian countries are all very secure against COVID-19, and the poorer countries not. This problem is not going to be solved until it’s solved in every single country. So it’s in our interest. And I hope we’ll have some initiatives to support the low-income countries.

Full video and audio of this interview are available online.

Note: Source references are available through embedded hyperlinks in the article text online.

Editor’s Note: For more coronavirus livestream interviews visit JAMA’s COVID-19 Q&A page.