



# THE FUTURE OF THE PANDEMIC: A Look Ahead With Epidemiologist K.C. Rondello, MD

By Liza Burby

*Adelphi's disaster epidemiologist and CNPH Clinical Associate Professor K.C. Rondello, MD, shares his expert insights and predictions about what we can expect of the COVID-19 virus as we enter 2023. Here, Dr. Rondello offers a positive vision of the future of the virus in a world where, due to collective research, deaths from the virus have decreased and access to vaccines, antivirals and testing has become widespread.*



*Although he said "the disease will not be over in my lifetime," the good news is that "the unpredictable, seasonally unexpected waves of infection like we saw in May, that will come to an end." COVID will then be "much more manageable and much more predictable."*

## **U.S. COVID deaths topped 1 million people in May 2022. Is there any estimate on how many were nurses?**

As of March 17, 2021, Kaiser Health News/Guardian reported that 3,600 healthcare workers died in the United States in the first year alone and that 32 percent of those fatalities were nurses. ... That was at the one-year point. ... I think we'll find that the healthcare-worker fatalities were very front-loaded in that first year.

## **Are there other vaccines being developed for use within the next year or so?**

The vaccines will continue to be tweaked and modified in order to accommodate emerging strains. ... There are multiple

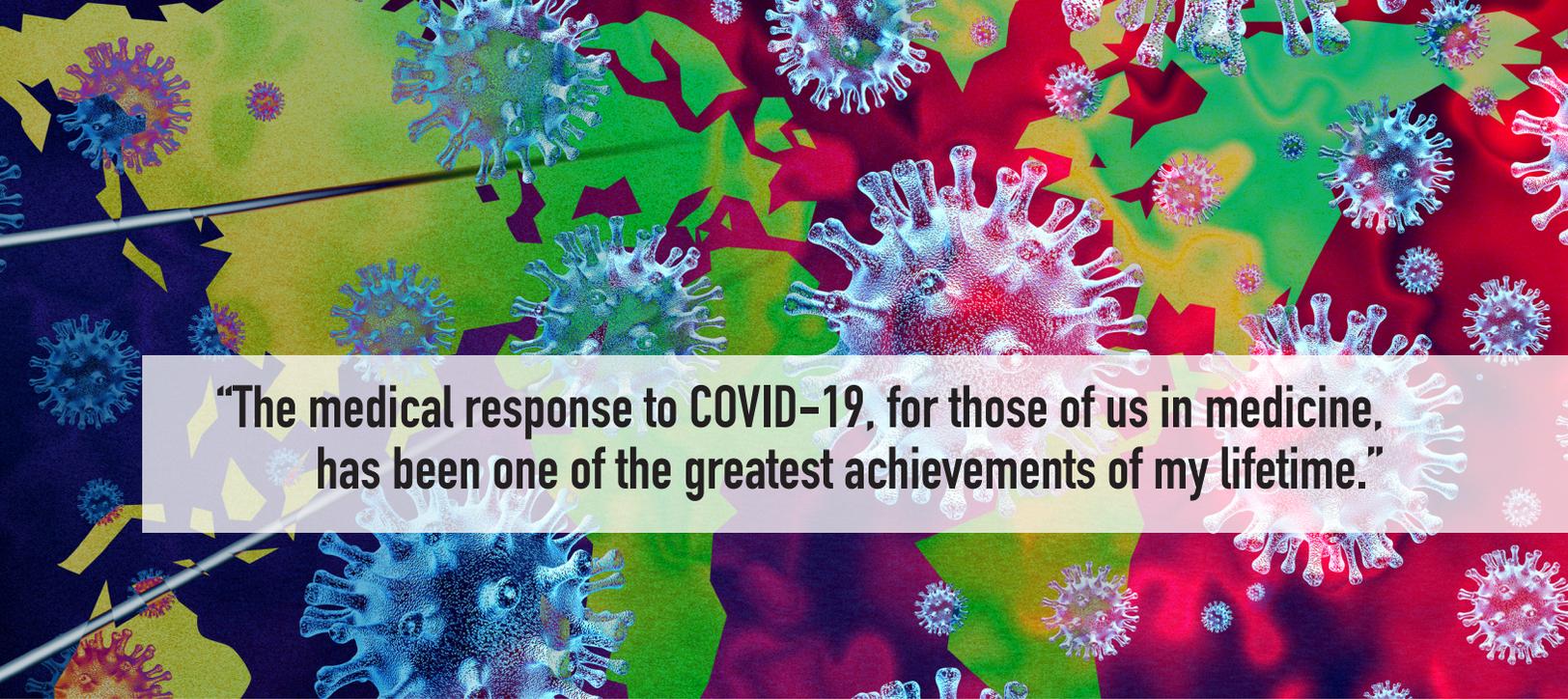
research efforts underway to develop a game-changing pan-coronavirus vaccine, which targets conserved regions of the genetic code of the virus that always remain the same, regardless of any mutations or variations. If successful—and there are lots of people who believe that this is absolutely possible—a COVID-19 vaccine could become a one-and-done type scenario or possibly one with a booster, more akin to what we do for polio or measles than what we do for influenza.

## **Do you expect more aggressive promotion behind other treatments like monoclonal antibodies?**

We've already seen more widespread use of antivirals and monoclonal antibodies as their availability becomes more ubiquitous. Initially, to qualify for monoclonal-antibody treatment or antiviral drugs, you really had to be among the sickest among us. Those treatment regimens are still not as widespread as they need to be, but they are far more available than they were even just a few months ago. Treatment has also improved in how monoclonal-antibody treatment is delivered and how available it is. When it comes to antiviral medications, our understanding of how best to use those tools is evolving as well. There's a phenomenal safety profile for antivirals so there's no disadvantage in taking them.

## **How important are masks, especially in crowded indoor public spaces? Many now seem to regard most masks as ineffective, except perhaps for the KN95 and N95.**

All masks of all types limit the distance that infectious particles can travel when an infected person coughs or sneezes or, some would argue, even speaks or breathes. But many masks



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that are worn by people in the public offer little protection, if any, to them from hazards in their environment. Cloth masks and the blue medical-surgical masks may be more comfortable, less expensive and more widely available and they work in terms of limiting the distance those particles can travel, but those types of masks do little, if anything, to protect the wearer. Higher-quality masks, like KN95s and N95s, do both things. In terms of transmission risk, I think that two and a half years into the pandemic we are well aware that outdoor transmission risk is quite low. However, masks continue to be vitally important in crowded indoor settings, especially in communities where community transmission is high.

**When might this pandemic be scaled down to endemic?**

I don't think there's going to be a specific day that we say: pandemic over; we now are at an endemic level of disease. I think the endgame for COVID-19 is not going to look like smallpox or measles. COVID-19 has features that we now understand make it virtually impossible to eradicate: its high level of transmissibility; the ease with which the symptoms can be mistaken for other respiratory infections; the ability of this virus to circulate amongst the asymptomatic; the constant emergence of variants—all these things make it, in my opinion, impossible to completely eradicate, certainly in my lifetime. So, that means we're left with a goal of getting to a point where it circulates at a persistent, but low, and importantly, predictable and manageable level.

**What do you say to those who complained the scientific advice seems to continually be changing—and use that as an excuse not to follow medical advice?**

We've come to learn and appreciate the fact that COVID-19 is its own animal and, in some ways, has rewritten the rule book. Because of that, I think people need to remember that this is very much an evolving science. So when you see, for instance, changes in booster recommendations or in antiviral-drug

availability and you see changes in policies, that's occurring because we are often in real time adapting to an evolving situation. It's actually a good thing that we have not stuck with a single strategy as the situation has changed and evolved and that we have adapted along with the virus over the course of two and a half years. We are creating our understanding of best practice from nothingness. And frankly, the fact that we've been able to do it as quickly as we have, has been astounding to those of us in medicine, evolving faster than at any point in history of an emerging infection. The medical response to COVID-19, from therapeutics to vaccines to the implementation of nonpharmaceutical interventions, has collectively been one of the greatest clinical achievements of my lifetime.

**COVID-19 Vaccine**



**80%**

U.S. vaccinations, all ages (at least one dose)

**68%**

U.S. fully vaccinated

—The New York Times, January 3, 2023



**1,121,512**

U.S. deaths due to COVID-19

Centers for Disease Control and Prevention, March 21, 2023