The New York Times https://www.nytimes.com/2022/08/12/opinion/pandemic-covid-questions.html

GUEST ESSAY

When Will the Pandemic End? And Other Pressing Questions, Answered

Aug. 12, 2022, 5:00 a.m. ET

By New York Times Opinion

While the risks of deaths and hospitalizations from Covid-19 are substantially lower now, navigating this phase of the pandemic can be frustrating and confusing. The coronavirus is less deadly but more transmissible. There's no set guide to personal behavior. For some, it may continue to be a season of sweaty masks and calculated indoor dining. For others, life is back to normal. Still, questions remain, and making informed choices can help.

So we asked three experts — two immunologists and an epidemiologist — to weigh in on some of the hundreds of questions we've gathered from readers over the past few weeks, based on their expertise and opinion. A selection of those questions followed by responses from the experts are below. They have been lightly edited for clarity and length.

The experts

- Akiko Iwasaki, an immunologist at Yale School of Medicine. She studies Covid-19 vaccines and immunity.
- Jennifer Nuzzo, an epidemiologist and director of the Pandemic Center at Brown University School of Public Health.
- Marion Pepper, an immunologist at the University of Washington, where she studies immune memory.

'Keeping up with vaccines and boosters is so important.'

I feel Covid is now like our annual flu strains. Is there a new type of vaccine coming this fall or winter to help with future variants? — Gerry Moss, Naples, Fla.

Akiko Iwasaki: Although it may feel like Covid is now like annual flu, data show it is still causing more hospitalizations and deaths than the flu does. This is why keeping up with vaccines and boosters is so important. There will likely be an Omicron-matched booster in the fall or winter to help protect against the current variant. Myself and others are also working on nasal booster vaccines and universal coronavirus vaccines designed to reduce infection and spread from future variants. Nasal vaccines will not be available this winter, but if there is government support and coordination, they can be available in the near future, potentially in a couple of years.

'The Omicron-focused vaccine will contain new targets for the immune system.'

I'm 64, in good health, haven't had Covid and have a family wedding coming up, so I went ahead and got a second booster in July. Now I'm afraid that if an Omicron-focused vaccine arrives in the fall, I won't be eligible. Did I make a mistake? — Mary Murphy, Kansas City, Mo.

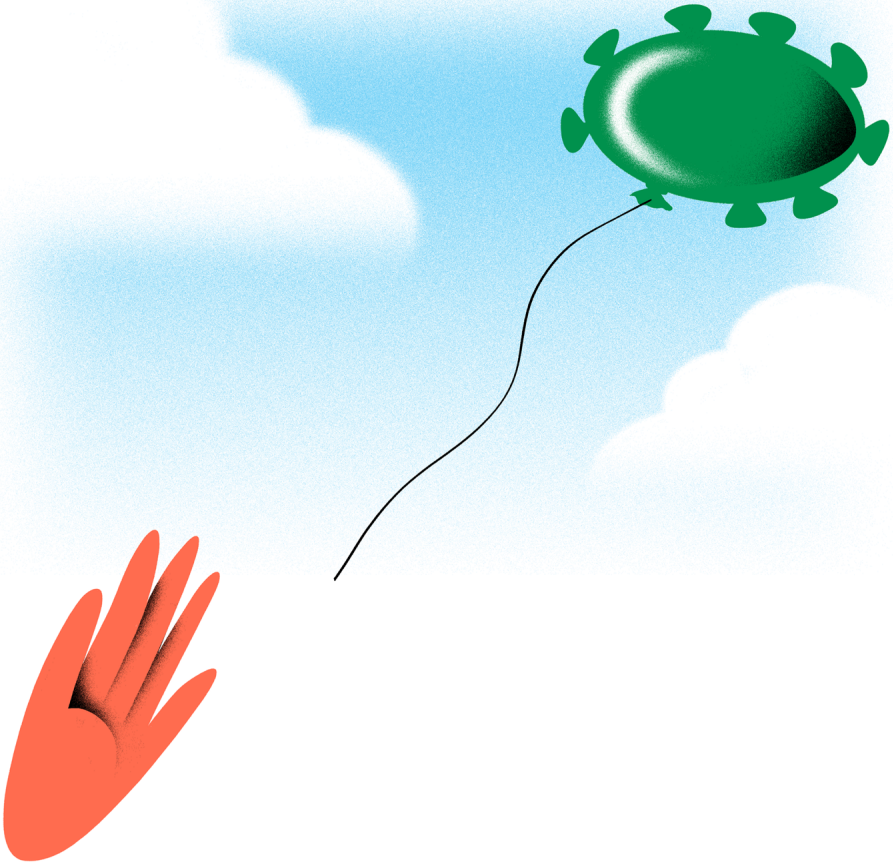
Marion Pepper: Getting a booster in July before a big family wedding was a good idea and certainly not a mistake, even with Omicron-focused vaccines likely arriving this fall. The C.D.C. recommends that non-immunocompromised individuals 18 years and older wait for at least five months after their primary Pfizer or Moderna vaccine doses, and people 50 and older wait for at least four months after receiving a first booster prior to getting a subsequent one. These delays are suggested for several reasons, including the fact that immunity wanes over time, so more frequent boosting with the same vaccine is not needed, and because the immune response also evolves over time and getting an additional vaccine within a shorter time period may impact that response and reduce protection.

However, the Omicron-focused vaccine will contain new targets for the immune system, so these concerns may not be as important as the added breadth of protection introduced by the new vaccine. Most important, if an Omicron-focused vaccine provides better protection against Omicron variants due to these new targets in the vaccine, that would be the most important consideration.

'Getting infected is not inevitable, but ultimately it does come down to a trade-off.'

I do not get close to people and am very cautious, even outside. My friend who is equally cautious, maybe more so than I am, just came down with it. Is it just inevitable? — Carol Kushner, Fire Island, N.Y.

Nuzzo: It's important to realize that the virus is not going away and will remain a risk for the foreseeable future. Getting infected is not inevitable, but ultimately it does come down to a trade-off: How much are you willing to give up to lower your risks of infection and for how long? We all have different answers to those questions and will choose to take on risks based on how much we value certain activities. We know that tools like masks and tests help lower our risks and outdoor gatherings are safest. But we also know that many very cautious people have gotten infected nonetheless. This suggests it will be hard to dodge the virus forever unless we continue to faithfully avoid indoor gatherings, social events and other activities that enrich our lives. My advice to anyone who is looking to reduce their risk of infection is to mask when you are going to a crowded indoor space, particularly when case counts are increasing. But I don't recommend forgoing important life events or not seeing friends and family, as it doesn't seem like a sustainable or happy way to live.



‘A test represents a snapshot in time.’

Are the current at-home tests reliable for BA.5? — Gayle DeRose, Victor, N.Y.

Nuzzo: Yes, the home tests continue to be reliable for detecting when you have a contagious infection. With the emergence of Omicron, there were reports of patients developing symptoms before their rapid tests turned positive. This is likely because our immune system may respond to the virus, causing symptoms before the virus grows to levels that are high enough to be contagious and detectable by the rapid tests. It has always been the case that a rapid test represents a snapshot in time. If you test negative, it does not mean that you are free of infection. You may subsequently turn positive if you have symptoms or were exposed to someone who had Covid-19. Rapid tests work best when they are repeated.

‘Additional vaccination will help to protect your 4-year-old.’

My 4-year-old got Covid for the first time this week, as did the rest of our family. He is the only one not vaccinated yet and had the worst symptoms, but it was much like other childhood illnesses. Will he really benefit much from a vaccine now? — Morgan Morris, Kansas City, Kan.

Pepper: Studies from our lab and others have demonstrated that while a prior infection provides you with some immune protection, getting an additional vaccine enhances that immune response significantly and creates even greater immune protection. So yes, additional vaccination will help to protect your 4-year-old by boosting that protection and potentially prolonging his immune protection.

Nuzzo: Several studies have demonstrated that hybrid immunity (vaccine plus infection) may be more protective than infection alone. So vaccination would likely add additional protection, as Marion suggested. The C.D.C. recommends delaying vaccination for three months after infection (measured from the date his symptoms started or date of positive test if he didn't have symptoms). By that timing, your 4-year-old would enter the winter and holiday months with some additional protection, which is a benefit given that we tend to see large case increases that time of year.

'The risk of long Covid is likely to be reduced with every new exposure.'

If you've been vaccinated and boosted and still get Covid, are your odds of having long Covid the same as someone who is unvaccinated? Or do vaccines help reduce the chance of developing long Covid too? If there is a benefit, how large is it? — Mark Hurwich, Chicago

Iwasaki: The reported impacts of vaccines in preventing long Covid vary between studies. Some say vaccines halve the odds of long Covid, while others find around a 15 percent reduction. Vaccines are very likely to reduce the risk of developing long Covid, and boosters help this even more.

Pepper: There are also some interesting preliminary studies in animal models suggesting that treatment with antiviral medications may help to prevent some clinical symptoms associated with long Covid, so it will be important to see if that is the case in humans treated with antiviral medications as well.

If we're going to see the virus 10 or 15 times over the next five years, does the risk of long Covid increase with every exposure? It's impossible to know what to do with our kids. — Carmen McAlister, South Lyon, Mich.

Iwasaki: Based on immune responses that fortify with every exposure, the risk of long Covid is likely to be reduced with every new exposure. However, in certain populations, the risk may be cumulative. Of course, it's not possible to say for certain what will happen over the next five years, but most of what we know suggests that multiple exposures will lead to milder outcomes.

Nuzzo: So far, the more rigorous studies show that the risks for long Covid in children seems to be low, occurring much less frequently than among adults who are infected. This along with Dr. Iwasaki's explanation of why we may generally expect the risk of long Covid to decrease with subsequent exposures and vaccination may provide some reassurance. But there is some uncertainty here and people will navigate that uncertainty differently.

When it comes to my kids, I am not as worried about long Covid, especially now that they are fully vaccinated. I am more worried about being too restrictive with their childhoods. They missed out on a lot of socialization already, and now that the worst threat is over, we've resumed most of our usual activities. I feel this is important for their growth and development.

'Covid-19 has strengthened the world's preparedness in important ways.'

To what extent is the world now better prepared for a whole new pandemic? — Helen Kara, Uttoxeter, England

Nuzzo: Covid-19 has strengthened the world's preparedness in important ways. We have seen that with enough political will and scientific determination, we can develop multiple safe and effective vaccines, rapid tests we can use in the privacy and convenience of our own home and new medicines for treating infections. The path taken to develop these tools has the potential to help alleviate human suffering from other serious diseases, including future pandemic threats.

But in watching our continued response to Covid-19 and now monkeypox, I do continue to see deeply concerning gaps in readiness for future pandemics. The biggest one in the United States is that we don't fund and staff our public health departments to be able to meet the demands of infectious disease emergencies like the continuing hazards they are. Instead of letting

emergency funding lapse every time political attention to an event wanes, we need to permanently equip every health department with enough staff and modern data systems to effectively respond to infectious disease emergencies, including the possibility of multiple emergencies at the same time.

Pepper: I feel that there is generally a greater understanding and appreciation of the biology of infection and the immune response. My hope is that this heightened awareness of these topics and how scientists and biomedical researchers have been consistently working in the background to create new vaccine technologies and drugs will lead to enhanced funding. Additional funding would speed up drug and vaccine development and ensure that we have the tools in place to respond to the next pandemic *when* it emerges. The will seems to be there, but we will see if that translates to better funding and preparedness.

'We will reach a point where we move on from having the virus be a daily concern in our lives.'

Will the pandemic end and if so, how soon? — Gary McCormick, Searcy, Ariz.

Nuzzo: There is no defined state that constitutes the "end" of a pandemic. The virus that caused our last pandemic, 2009 H1N1 influenza, continues to sicken people every year as a seasonal flu virus. But we don't talk about that virus much because it no longer upends our lives as it once did.

Like the H1N1 virus, it is clear that the virus that causes Covid-19 will not disappear. But how it will play out in the coming months and years is uncertain, particularly as the virus continues to evolve. I do think we will reach a point where we move on from having the virus be a daily concern in our lives. In my view, that happens when we no longer worry about hospitals becoming overwhelmed with surges of patients.

Vaccines and treatments help us get there by lessening the virus's ability to severely sicken people or kill them. But not enough of us benefit from the protection that these tools offer. About half of people age 18 and older have received a booster shot. Getting people up-to-date on their vaccinations and ensuring that people who are at high risk for severe illness can access treatments if they get infected is key to ending Covid's ability to disrupt our lives, which in my view is what defines a pandemic.

The Times is committed to publishing a diversity of letters to the editor. We'd like to hear what you think about this or any of our articles. Here are some tips. And here's our email: letters@nytimes.com.

Follow The New York Times Opinion section on Facebook, Twitter (@NYTopinion) and Instagram.