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## **BRIEF19**

*A daily review of covid-19 research and policy*

### **RESEARCH BRIEFING**

#### **Antibodies still good after 6 months in patients with end-stage kidney disease.**

With each passing day, worries of fading antibodies are fading. The further we get from the initial outbreak and from the vaccine rollout, the more confident we can become about antibody levels staying above detectable and protective thresholds.

One thing we are monitoring closely, however, is how patients with high risk for severe covid-19 are progressing. For example, if antibody levels flag among patients older than 75, that would be a concern, as this is the age group with the highest documented rates of severe illness and deaths. Another group that we are worried about is end-stage kidney disease patients who require dialysis. Fortunately, a [new study](#) in *Annals of Internal Medicine* provides encouraging news.

Researchers tracked antibody levels over time in dialysis-dependent patients who had recovered from covid-19. As in other studies, the antibody levels in the blood fell a bit over time, but on average a small amount. Based on this, and the low number of repeat covid-19 cases in this group (and others), the authors believe that antibodies created in response to natural infection are holding up well. In fact, of the 2,063 covid-19-recovered patients who had detectable antibody levels at the start of the study, only 6.6 percent did not have measurable levels six months later. Whether that minority of patients is at risk of a repeat infection is unclear, as other measures of the immune system were not included in this study. The good news is that patients with diabetes were *less* likely to have undetectable antibody levels. That's important because diabetes is known to be one of the stronger predictors of serious covid-19 illness. In addition, the slow tapering off of antibody levels was not correlated to age, sex, or race/ethnicity. Finally, a report in which demographics do not appear to have had a major impact on the outcome.

—Jeremy Samuel Faust MD, MS

### **POLICY BRIEFING**

#### **Vaccination uncertainty for people with compromised immune systems complicates return to normal.**

From the earliest days of the covid-19 pandemic, the goals of vaccine production have been to reach “herd immunity” by getting as many shots in as many arms as possible to limit the pool of available hosts for the virus to use. The vaccine-hesitant were going to always prove to be a challenge, but one community that has gotten short shrift is those who are, for one reason or another, [immunocompromised](#).

By design, this group of people was excluded from the clinical trials of the major vaccine candidates, and as a result, very little is known about how their bodies respond to the various available coronavirus inoculations. Absent a national or transnational coordinated effort, the studies on these individuals have been anecdotal, local, and unfortunately conflicting. Part of the issue is that there are so many different types of afflictions, be it bone and blood cancers, immunosuppression after organ transplant or for chronic conditions, or a variety of advanced illnesses, and there is no clear information on what sort of protection is provided by vaccination.

As the country is opening up and masking mandates are [falling off](#), people with immune compromise are finding themselves increasingly in a world where they may still be at risk of

exposure, but now without the added protections of social distancing and personal protective equipment use.

Further complicating the picture is recent data from the US Centers for Disease Control and Prevention (CDC) weekly update [showing](#) a significant disparity in vaccination rates between rural and urban communities, as we covered [yesterday](#) in *Brief19*. In effect, this is creating areas of the country where, through no fault of their own, it is unsafe for the immunocompromised to travel or even participate in some daily activities that “the rest of us” are now beginning to resume.

The intent of public health measures is to protect everyone, with small actions from individuals amounting to significant changes in safety for the masses. But if the majority of individuals are moving on to a post-pandemic mentality, how do we continue to protect our most vulnerable? Right now, there is no good answer. *Various*.

—*Brief19 Policy Team*

Kimi Chernoby, MD, JD, Policy Section Founder, Joshua Niforatos, MD Research Section Editor, Frederick Milgrim, MD, Editor-at-Large, Joshua Lesko, MD Lead Policy Analyst, Barb Cunningham, Copy-editor, Benjy Renton, Thread-of-the-Week, Anna Fang, Week-in-Review, Megan Davis, social media, Kane Eifman PhD, Publishing and Design, Jeremy Samuel Faust MD MS, Editor-in-Chief. <http://www.brief19.com/>, Twitter: [@brief\\_19](#) [submissions@brief19.com](mailto:submissions@brief19.com). Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health and public policy.