

Wabash.

December 20, 2021

To: The Wabash Community
From: President Feller
Re: Ongoing COVID-19 Mitigation Plans

Dear Wabash,

When reports on what we now call the Omicron variant emerged during the Thanksgiving break, scientists and public health officials emphasized that it would take several weeks to understand its impact on the pandemic. Indeed, we have learned a tremendous amount from an extensive set of laboratory, clinical, and epidemiological investigations. With yesterday's announcement of the first confirmed Omicron infection in Indiana, this seems like an appropriate time to summarize what we know – and don't know – and consider the potential impact on our spring semester. For those who want the "TL;DR" version, it is simple: First, get a booster shot ASAP if you are six months out from your second Moderna or Pfizer vaccination or two months from your J&J vaccine. Next, upload your documents to the COVID Pass App on the [Wabash website](#).

Public health officials have been trying to answer three primary questions about Omicron: (1) Is it more infectious? (2) Is it more or less virulent, e.g., does it cause more or less severe disease?, and (3) Are current vaccines effective? Not surprisingly, these are also among the issues that we need to understand to develop any changes to our current COVID-19 mitigation tactics at Wabash. If anything has been constant during the pandemic it has been the need to continually reassess and periodically modify our approaches. We are fortunate to have a few weeks before the beginning of the spring semester to continue that work, but the following is my current assessment of the answers to these three key questions.

Is Omicron more infectious than Delta? The simple answer is yes, though attempting to provide a quantitative estimate is challenging. At this point in the pandemic, the rate of disease spread depends on both the intrinsic properties of the virus – often described by the effective reproduction number R_t – and the current immunity levels of the community. The concept of an [immunity wall](#) is helpful in understanding why the same virus, introduced to two different populations, might appear to have very different infectivity, and thus why the transmission dynamics in one country or region might be very different from another.

A week ago, we saw how Omicron spread in a community with an immunity wall presumably similar to ours (at least based on vaccination rates). The rapid spread of [Omicron at Cornell University](#) is certainly cause for concern on our campus. On the other hand, the experience of GLCA colleges this fall (with near identical student vaccination percentages) was quite variable with campuses where as few as 1% of the student body tested positive over the course of the semester and others with as many as 13% testing positive. This suggests a role for [social networks and other factors](#) beyond immunity levels that make it extremely difficult to understand and predict the rise and fall of case numbers in a community.

Does Omicron cause more or less severe disease? This is a tough one to answer with certainty and essentially impossible to quantify at this point. The South Africa experience suggests [greatly reduced hospitalization rates](#) and numerous anecdotal reports describe symptoms as mild. But the virulence, like the infectivity, also depends on characteristics of the population such as age and vaccination status. For this reason, some public health officials are [not ready to declare Omicron milder](#) until more substantial comparisons are complete. There seems to be consensus, however, that Omicron is **not** more severe than Delta and that there is a real possibility that [case numbers will be decoupled from deaths](#).

While I suspect that, ultimately, Omicron will be characterized as less virulent, I remain concerned that we are part of a larger community that could still experience a severe wave based on the sheer number of cases and the [low vaccination rate in this area](#). While it is natural to think of severity in terms of what would happen to me if I became infected, we must also consider the severity of disease in terms of our health systems that are very likely to become more overwhelmed than they already are.

Are vaccines less effective against Omicron? I think this is the question on most people's minds. Vaccination has been, far and away, our most effective COVID mitigation tool individually and as a college community. Similar to the previous two questions, the answer to this one is complicated. As soon as the new variant was identified, laboratory experiments were initiated to test the ability of antibodies from the blood of vaccinated (and previously infected) individuals to neutralize the virus. The bad news is that these experiments showed a greatly diminished ability of circulating antibodies to stop the virus, suggesting a greater likelihood that those fully vaccinated (or recovered) individuals would be infected upon exposure to Omicron as compared to other variants.

The good news is that samples taken from individuals who received a booster (3rd shot), or who had hybrid immunity from either a breakthrough infection or from vaccination following a COVID-19 infection, had [significantly higher levels of neutralizing antibodies](#) suggesting a much greater ability to avoid an Omicron infection.

These laboratory studies are very important, especially in suggesting an important role for boosters, but unfortunately [they cannot be translated directly into vaccine effectiveness \(VE\)](#). And as I described in a previous message, effectiveness against infection may be very different from effectiveness against disease or severe disease. While epidemiological investigations of VE against Omicron are ongoing, many immunologists feel it is likely that our [vaccines will maintain high effectiveness against severe disease](#), hospitalization, and death, *even if there is significant loss of VE against infection*.

To understand the paradox of losing VE against infection while maintaining VE against disease, we need to know that circulating antibodies are only one component of our immune system and that our immune system also includes B cells and T cells, as described in this excellent article, [The Body Is Far From Helpless Against Coronavirus Variants](#), in *The Atlantic*.

What does this mean for Wabash? Questions remain to be answered concerning the infectiousness, severity, and vaccine evasion of this variant. If you were hoping for easy answers, I probably disappointed you. But one thing we know is that **boosters reduce our risk** along all three dimensions. If you have not yet received one, make an appointment today. As a fully vaccinated campus, the risks we face from Omicron are as much operational as health. Infections, even mild ones, will exclude you from school, work, and events. A booster shot dramatically reduces the chance that you are sidelined for 10 days.

In a past message, I mentioned my respect for Dr. Ashish Jha, Dean of the Brown University School of Public Health. His [latest essay](#) provides the balance of hope and motivation that we need at this time when he writes: “Successfully navigating the next wave of the coronavirus pandemic requires charting a middle course – one designed with clear goals in mind: preventing deaths, protecting our hospitals from crushing caseloads, and keeping schools and businesses open. We can do this with the proven, effective tools we already have, while giving in to neither dismay nor dismissal.”

Congratulations on a great Fall semester and best wishes for the holidays and New Year.