

## To boost or not to boost

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With apologies to The Clash, that iconic band from the 80s, “Darling you got to let me know, Should I vaxx or should I wait?”

Let us be clear. I am a vaccine enthusiast. When the shingles vaccine became available, I was there in a flash. I get the flu shot every year and even in years where it has 50% effectiveness, I deem it worthwhile. The instant I was eligible, I received the first and second doses of the Covid vaccines.

Covid reinfections are occurring and in some case within weeks of contracting the illness, probably with different variants. Anyway, I will be “eligible” for my fourth shot in August, but I am holding back. What has happened? Why have I become vaccine hesitant?

First, Covid in the summer of 2022, is not the Covid of April 2020, when I washed my groceries in the mudroom. Fortunately, that mania died quickly. SARS-Cov-2 validates the theory of evolution by spinning off variants driven by competition to survive. The new variants are much more transmissible, and more easily evade the current generation of vaccines. Fortunately, all evidence suggests they are less lethal.

Second, recent research in the [Lancet](#) shows that the original vaccines designed for the Alpha and Delta variants have quickly waning effectiveness against recent Omicron variants.

Third, recent and preliminary research not yet peer reviewed seems to indicate that three doses of the “first generation” vaccines plus a recent bout of Omicron Covid, confers strong immunity against the BA.5 variant, currently the most prevalent form of SARS-Cov-2. That describes me along with growing numbers.

Finally, governments are clearly befuddled, providing little information on the current disease prevalence. They also garble public health guidance hold information tightly.

Manitoba Health’s weekly update on COVID hospitalizations is a week out of date making any decision on managing the disease like driving using the rear-view mirror. Doesn’t it know that objects are much closer that they seem?

But before we gang up on Ministers of Health, let’s understand the complexity of public health communication in an era awash with health hucksterism and misinformation. An egregious example is a recent Tucker Carlson rant on Fox News about how Covid vaccines are causing all manner of health maladies. He cited the very article I noted above that showed vaccine effectiveness waning. Carlson either completely misunderstood or deliberately distorted the article’s findings. To be charitable, the paper uses a methodology that is not accessible to the casual reader, or even many scientists.

In an era of easy intercontinental travel Managing infectious diseases is tricky. The government's response to monkeypox offers an excellent case study in how complex public health communication has become. Reading the Manitoba Health web site information on, one would never know that monkeypox overwhelmingly afflicts men who have unprotected sex with other men. Possibly out of a desire to avoid stigmatizing gay men, the messaging is vague and non-specific.

No vaccine exists for HIV but there are two vaccines for Monkey Pox, so does it not make sense to go into a full court press to limit its spread? But again, the story is more complicated. The effectiveness of the existing monkeypox vaccines is unverified with the current outbreak, and known side-effects creates risks.

Some might take a moralistic stance and say why should public health focus bother with this minority group. Well, there are two reasons. First, any time we can avoid someone falling ill we reduce the burden on an already strained health care system. We all benefit from that. Second, HIV taught us that an infectious disease can leap laterally. Initially AIDs circulated among gay men exclusively, but then heterosexuals became susceptible and finally blood borne transmission (sharing needles) became a vector for the disease. Crafting a public health message about how to respond to monkeypox is tricky.

Here is my problem. Assume that a vaccine targeting Omicron and other variants (second generation Covid vaccines) becomes available sometime this fall. Also assume that Canada receives sufficient doses to vaccinate all those wishing the jab.. If I vaccinate with the first-generation vaccine in August, and if government applies the rule that vaccination can occur only six months after the last shot, it would not be until January 2023 when I might be able to receive a dose of second generation Covid vaccine.

Or I could trust evolving research and hope my triple vaccination plus experience with Covid in May, will see me through. Complicating this is that an Omicron vaccine may not arrive in time for the expected fall surge. Should I boost with a vaccine that has low efficacy, since any level of protection offers some risk reduction?

I have what decision theorists call a "wicked problem." Deciding when to vaccinate depends not only on my own circumstance and past choices, but on an unknowable and changeable viral and vaccine landscape.

So, should I vaxx or should I wait?