

Hey Pete! No problem!

I have seen a new rash of terror from people who are "testing positive for COVID-19." The assumption is "I have tested positive for COVID-19, ergo, I have the virus. I have the virus, ergo, I am infected. I am infected, ergo, I am sick. "

So, in hopes of putting this into perspective for you, I thought I would share a short response I made almost two years ago, back in May of 2020, to a colleague of mine who is a regulator with OSHA - when she "tested positive."

Hint - It is impossible to "test positive for COVID-19" and the term is an example of linguistic confusion for the following paradigm: 1) He who controls the risk, controls the politics. 2) He who controls the narrative controls the risk. 3) He who controls the words, controls the narrative. In the last two years, we have seen inventions to words that never had that meaning.

So, here's my response to her:

May 6, 2020

Hello Bxxxxx!

Sorry about the delay in responding. I've been on night shift for five months and just got up and saw your post.

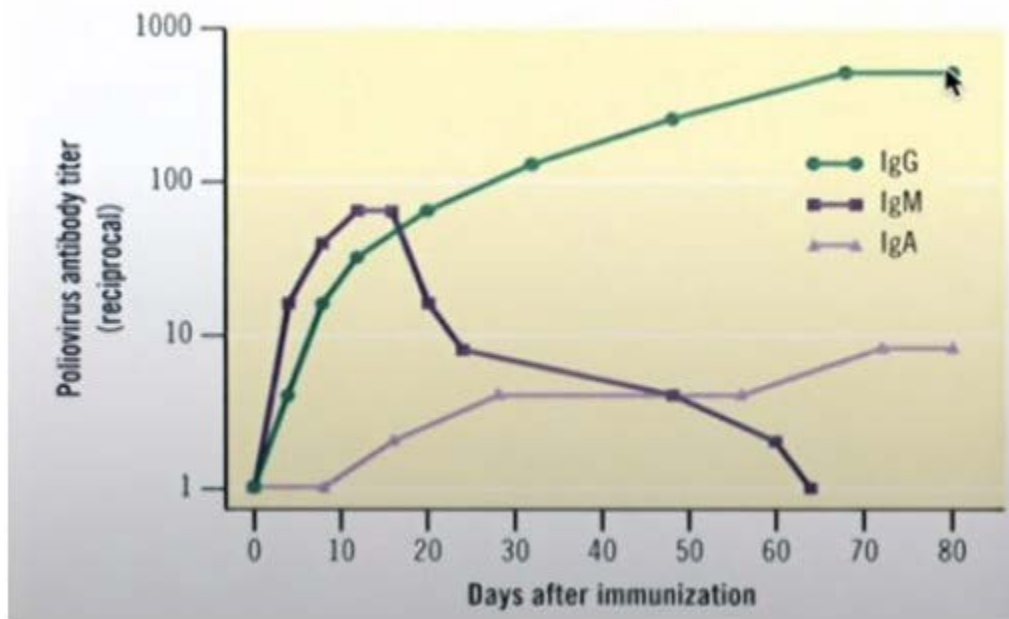
So the numbers don't surprise me at all and here is why - We are inundated with news about so-and-so "tested positive" for either COVID-19 or the SARS CoV-2 virus. But what does that actually mean?

In general, upon infection by a virus, one of the first humoral responses is going to be from the IgM. With low affinity, but high avidity, the IgM titer rapidly increases until the plasma cells can start pumping out high affinity, high specificity IgG. Once IgG titer increases, the IgM titer declines. (See the graphic with this response of a typical poliovirus response - the graphic is from Dr. Vincent Racaniello, and used without permission but in good faith under the "fair use doctrine").

So, by looking at the ratio of IgM to IgG, we can determine the stage of infection. For example, if the IgM is elevated, and IgG is low = early stage. If IgG=IgM, then they are fulminate (although maybe not even symptomatic). If IgG is moderate or low, and IgM is low, then very late stage (that is, they are fully recovered and the infection may be months to years old).

So, these titers can be detected and measured in many ways including the familiar laminar flow ELISAs.

Now, prior even to IgM production is the prodromal period where the virus has infected the host, and (in the case of SARS-CoV-2, for example which is a +sense RNA genome), there is RNA that can be detected using PCR analysis for the unique oligonucleotides in the SARS-CoV-2 sequence.



So, there are several ways to "test positive":

1) Presumptive positive: The person has a cough, and a fever. (It could be due to 100 different diseases unrelated to SARS-CoV-2, but at the moment, it is considered to be COVID-19).

2) The person tests positive by PCR, indicating the virus is present. The person may be completely asymptomatic, may be fulminate, may even be dead from the disease. However, in the overwhelming majority of cases, the infection is so mild, the infected person will not even know they are infected. We know that in the vast majority of "cases" where death has occurred, the host had at least one comorbid condition, and almost always at least two.

3) The person tests positive for SARS-CoV-2 antibodies. The person may have had an infection months ago, was never even symptomatic, and there were completely unaware of the infection. This will be the vast majority of infected people.

4) The person tests positive for elevated IgM titer with sufficient specificity to an SARS-CoV-2 antigen to permit a reasonable conclusion that the invader is SARS-CoV-2. The person may be completely asymptomatic, or fulminate.

5) The person tests positive for elevated IgG. The person may be completely recovered, completely immune to the infection, completely recovered, and completely incapable of shedding viable infectious particles.

So, when we hear that 700 workers "tested positive," it is largely meaningless without knowing more about the parameters of the "tests." So, for example, earlier this year, when the US Navy tested the crew of a ship and discovered that some 66% of the sailors were "positive" for "coronavirus" but none of them were symptomatic - it shocked everyone... except virologists and epidemiologists, who just shrugged their shoulders and said "Yeah, we know, that what we've been trying to tell you."

