

HOT TOPIC #22: May 4, 2020

Checking In On Our Current Situation

COVID-19 updates from San Juan County around subjects on the minds of islanders

Antibody Testing: There Are No Shortcuts to Success

There is nothing anyone of us wants more right now than to put the COVID-19 crisis behind us and get down to the work of reopening and restoring our communities.

There is an inclination to think we can fix problems with quick and easy solutions. But as always, the devil is in the details.

You may be reading articles, posts, or hearing conversations about the possible benefits of *antibody testing*. There has been some hopeful discussion that we can use antibody testing as a way to identify those who have had COVID-19, and perhaps that would lead to a faster reopening of our economy.

What are antibodies? In order to kill off harmful bacteria and viruses, our body's immune system creates antibodies to defend our health. Antibodies are created when our bodies have built up a response to a virus. Antibodies are created when we have gotten and successfully recovered from a virus, or by getting vaccinated against a specific disease. One way of testing to see if someone may have had an illness includes testing to see if a person has antibodies for that illness. In many illnesses this confers immunity, though it isn't yet clear that is the case with COVID-19.

While COVID-19 antibody tests are being developed and tested, scientists and doctors have been highlighting several limitations, including that we currently do not know what immunity may be built by having had the infection, and that the test may lead to unwarranted belief that individuals are immune from COVID-19.

San Juan County Public Health Officer, Dr. Frank James explains the challenge, "We want to find tools to fight COVID-19 and make our community safe again. We need to do this with accurate science and real, verified data. Antibody testing may become an important tool in identifying individuals that are immune, but at this time there is not enough evidence to think that it is an immediately viable approach."

Dr. James adds, "More time and research are needed to understand how to use antibody testing results. Antibody tests cannot be used to diagnose someone ill with COVID as it is difficult to tell if a positive test is due to COVID or due to any of the six other coronavirus strains, some of which are responsible for the common cold."

Another challenge noted by James is the real possibility of false positive results with the COVID-19 antibody test. When the infection rate in a community is low (as it is in San Juan County and many other places), data suggests that there may be more false positive results than actual positives. This would potentially skew both our understanding of disease spread, and give those who test positive a false sense of security.

For now, Dr. James makes clear that we know what is working to contain COVID-19. He notes, "The San Juan Islands have not had a positive test for COVID-19 in more than two weeks, and our total number of positive cases remains at 14. We all must keep doing the great things we have been doing. Along with a robust public health response, washing our hands, social distancing and wearing masks in public places

is what has been winning this battle against COVID-19. That's real, verified science and you are making it happen here in our islands."

Dr. James and others will continue to monitor developments around antibody testing. Given the inherent challenges in relying on antibody test results to inform our actions, one of the most useful ways to roll out antibody testing is to offer testing to individuals who have previously tested positive for COVID-19, or to those who had symptoms but were not tested. This phased approach to rolling out a new test allows us to better understand how well the tests pick up true positive results, and how that reflects the pattern of COVID-19 disease in our own community.

Based on how this phased approach to antibody testing goes, and if the antibody testing is shown to be a useful and proven tool to help ensure the safety and recovery of the islands, it will be thoughtfully considered, and quite possibly utilized more broadly in the months ahead.