

Webinar: COVID-19 - Health Facts and the Future of Reconnecting the Globe
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Q&A Supplemental Report

Question	Answer
is the seasonal flu virus an RNA virus?	Yes
Has there been attempts to treat with INF early on during the disease process?	The Chinese have used aerosolized interferon but the results have been impossible to interpret because almost all of the reports have either featured random collections of patients without prospectively identified controls or randomizations in which patients in the study also received several other drugs so the independent activity of interferon could not be separated out.
is it possible for the virus to spread via air ducts in office spaces, for example?	Possible but unlikely. Contemporary office buildings include high efficiency filters and have increased external air exchanges to reduce the likelihood. Being in the same room with someone without a mask is a much greater risk.
If you speak to vaccine development: Is there any risk of people being exposed to an ultimately ineffective vaccine (ie in a clinical trial) no longer being able to respond to an ultimately effective vaccine? (counterproductive antibodies, etc)	There is a possibility that one might be in a vaccine trial that uses a particular virus as a vector that presents the coronavirus antigens to the host in a way that does not elicit maximal responses or ones that are not long-lasting. If an effective vaccine that uses the same viral vector is produced later, immunity to the vector could temper responses to the coronavirus antigens in the effective vaccine. Other than for this possibility, I would generally say "no".
Why are we not producing concentrated COVID-Convalescent immune globulin (COVID-IG) that can be administered in a small volume by local intramuscular injection? This can be done in a very short time and likely prevent infection in millions of susceptible persons in the many months before we have safe and effective vaccines or cocktails of monoclonal antibodies that are widely available.	Addressed in the oral session.
the general public doesn't like to wear cloth masks because they get hot, their glasses fog up, etc. would wearing a plastic shield instead of a mask work just as well?	Addressed in the oral session.
Are these studies only for surgical masks? What about the cloths mask most people are using?	Addressed in the oral session.
different kinds of masks offer different level of protection. which masks should we wear, given that the high-protection ones (N95) are hard to find in the US and should be left to medical personnel?	Addressed in the oral session.
How long does the virus survive in the aerosol condition?	Addressed in the oral session.
What did New Zealand do right?	Addressed in the oral session.
Could you talk about the differences between N95 masks and other forms such as cloth masks?	Addressed in the oral session.
What are your thoughts about the virus being enhanced in a laboratory vs organically evolving? Tx.	I think it is more likely to happen as a product of natural evolution. It is more likely that any "enhancements" would be related to transmissibility rather than to pathogenicity. The virus has a no intrinsic "interest" in causing morbidity. Its "evolutionary goal" is enhanced transmissibility.
How is shedding monitored?	A swab is placed in the nose or mouth and then sent to a laboratory at which polymerase chain technology is used to identify SARS CoV-2 RNA.
What advice do you have for nursing homes today?	Masking of all employees and patients. Frequent viral monitoring of residents and staff. Isolation of infected and exposed residents. Home isolation of any staff who are infected or exposed to active cases.
Brilliant talk Chip - do you have any thoughts about what vaccine mechanism might have the best chance for success?	If I had my choice, I'd like a vaccine that induces both neutralizing antibodies and T-cell immunity. There are animal data that passive transfer of neutralizing antibodies reduces viral replication and ameliorates disease. I have not yet seen similar studies reported with passive transfer of T-cells.
If you do not test UCSD students every day, how can you stop infections on campus?	Addressed in the oral session.
I would love to see the travel tips slide that Dr. Schooley zipped past.	Now posted in the updated slides
Masks vs. face shields. Which is better?	Addressed in the oral session.
Given the way the virus spread has increased recently, do you think plans for reopening campuses (UC San Diego, or others) will need to be changed? Are we still safe to come back in the Fall, even partially?	We are monitoring closely the local and national epidemiology. If the recent separation of state governors in red states from the Trump administration continues to gain momentum, we could see substantial improvement over the next 8 weeks. The lack of consistent and coordinated national leadership and intimidation of local Red State officials to follow the White House line are why we continue to see the virus surge.
Thank you for a superb talk. Have we measured immune memory in individuals recovering from infection?	Not yet.

Will the presentation slides be available to review after this talk?	The talk will be posted. If you would like the slides, please just let me know.
Two questions, can you discuss more about the damage to people who are asymptomatic? Also, for asymptomatic individuals, are they only spreading/shedding for the first 2-12 days after exposure? Thank you!	We know that pulmonary recovery is slow in many people - particularly those with more severe disease. We do not yet know whether those with less severe acute disease will have long term sequelae from their acute infection. Based on the tuberculosis experience, we could expect that some of these individuals will have longer term lung damage. Viral RNA can sporadically be detected in some people in nasopharyngeal samples for a month or more after infection but the level of virus subsides relatively sharply after the first couple of weeks of infection rendering people much less infectious after this acute phase.
Is it relatively safe to swim in an empty pool that others have left with regards to infection risk?	We think so. It would, of course, not be good to be swimming laps in adjacent lanes.
Is it safe to approach someone if neither person speaks?	Still better not to do so without a mask. Breathing or an unexpected cough or sneeze could also be problematic.
So NPR (this morning) had a session on kid to kid transmission and PEDI group, said it was not as highly transmissible as adults. This does not seem to make sense. Thoughts?	That is the current party line. We will see what happens when K-12 schools reopen.
What are your thoughts on virus viability as droplets, aerosol or fomites in an outdoor environment such as parks, playgrounds, beaches etc.	Virus can persist on fomites for periods of time indoors or out. One thing about outdoors is that UV light from the sun does result in a rapid decay of infectivity and ambient breezes are less likely to have high concentrations accumulate in any one spot. As time has gone on and more experience with tracking the epidemic has accumulated it really does seem that indoor spread through droplets and aerosols is the most efficient way for the virus to be transmitted. Fomites contribute - but less than respiratory routes.
Is there any evidence that people who have no to minor symptoms can become more dangerously ill with re-infection?	No
How often does testing need to be conducted to be an effective methodology for reducing outbreaks?	It depends on the size of the population, the frequency of introduction of virus into that population and the intensity of exposure. On our campus Dr. Natasha Martin's model suggests we would have a 90% chance to pick up any outbreaks of 10 or more cases if we test 70 - 100% of those on campus each month.