

Behind the Scenes with Terry and CJ

Sample Videos

Transcript

Sample 1 (00:00 – 03:12)

Guest: ...Inslee, for the opportunity to speak and also to secretary of health uh Wiesman. It's it's really my immense pleasure to to convey our research which I I think really shows how effective masks can be. And I'll emphasize that I'm not wearing a mask now because I'm working from home today uh but yesterday uh in the when I was seeing patients in the Seattle Cancer Care Alliance, of course, I was wearing a mask, and we are so grateful that in that work environment everybody adheres to that so we can keep our, uh, immunocompromised patients safe.

So to just to start the discussion I'd like to step back and actually talk about the basic epidemiology of how this virus works just for a minute, because that's the context upon which we layer masks. So imagine a scenario in which we are doing nothing- in which we're not physically distancing at all, and in which nobody's wearing a mask. The the virus would spread via exponential growth and the way we would see that is that the number of cases would double, uh, perhaps every three to five days. And that's where we were were in early March.

And you know mathematically that's very intuitive to somebody like me who studies the virus, but to experience that in real time was uh strange and terrifying. And I very remember very clearly getting a call from a close friend and colleague who's an Intensivist at Harborview, saying that things had seemed very quiet for two days and then very quickly it seemed like, uh, the the the hospital was overflowing. And I really want to credit you, Governor Inslee, for for uh instituting the stay home stay healthy policy right about that time, because I think had we not done that this could have easily looked a lot like New York, uh, even if we had waited a week or two.

Um and so that policy was very successful and we ended up getting the reproductive number, which is defined as the number of people infected on average by a person who gets infected, to about one. And amazingly that is where we've been um for for many months now in our state and many other states. And

what's important about that number is that it is first associated with some tragedy and sadness that they're, they're, you know, we're not at a place where zero people are dying per day, which would be optimal.

The other thing that's very important about that is that number represents a tipping point in and what I mean by that is, that if things get slightly worse- so if people relax their physical distancing a little bit more or they wear masks a little less frequently- the reproductive number goes up above one, the number of cases starts doubling every few days, and the deaths go up.

And and this is precisely what happened in several states, uh, over the summer, uh, including Arizona and uh, Texas And I fear it's what's happening in several other states as we speak. And, and so we are not in a safe place. It may feel as if, you know, we're not seeing the hospitals overrun, but but but that's precisely where we are. The more optimistic take on this is that, uh, there's a tipping point in the other direction. And that that tipping point is that if we can get the reproductive number more in the neighborhood...

Sample 2 (03:15 – 04:42)

Guest: ...the first person is infected and the second person is not. We call this a transmission pair. The first person sheds the virus at a certain amount, and they're most likely to transmit the virus uh, when the virus is at its highest level.

Unfortunately, uh, usually the virus peaks at its highest level before people know they are infected- before they feel symptoms. And so that's one of the reasons we've had such a difficult time containing the virus across the globe.

Now imagine one of those two people is wearing a mask- either the exposed person or the person who is a potential transmitter. What that does- and this is shown in the middle panel here- is it lowers the amount of virus that the exposed person is exposed to. And so it- masks are not perfect- this may not eliminate the possibility of a transmission, but it lowers the possibility.

Now imagine a scenario where the transmitter and the exposed person are wearing a mask. And I'll remind you that the transmitter still doesn't know they're infected in this scenario. So both of these people think they're healthy and well,

the exposure viral load goes down even more. So the benefit is accrued at a much more powerful level. So it's making an imperfect intervention better. When you average this across the population, this is where the masks become incredibly powerful.

So the next slide please... So this is something called a heat map that we...

Sample 3 (04:45 – 06:15)

Guest: ...masks are not perfect, as I stated, but one of the effects that the mask can have is: say you are in a transmission pair and you're wearing a mask, and the person you're exposed to is wearing a mask, but you still get infected. Our model very strongly suggests that the amount of virus that you would be exposed to is much less. And we think that that would make you much less likely to develop a severe version of Covid-19. So the masks are likely to benefit people even if they do get infected.

The second point is that masks are not perfect, and so I think all of us have a tendency to to take stories from our own life, uh, and as anecdotes, and say they're proof. But I I think that what's very important to note is that if you are wearing a mask and you do get infected, it's not evidence that the mask didn't work. In fact, uh, it's possible that your sickness would have been worse had you not been wearing a mask. And if this were a part of a super spreading event, it's possible that the super spreading event would have been worse had people within that scenario not been wearing a mask. And so it's very important to consider these things because, again, it's not perfect and because it's not perfect everybody needs, uh, to comply.

So the the last thing I'd like to say is, uh, this morning there was a fantastic symposium, uh, shared by Johns Hopkins University in Baltimore and the University...

Sample 4 (06:18 – 07:23)

Governor: ...somebody's life, and then that person could be two lives, and that person could be four lives. And it's kind of like little things make a difference, and

make a difference in teams. Look, Seattle Seahawks starting 4-0, Seattle Storm playing for the championship, and they got to be champions by doing little things. And if we do these little things we're going to continue to open up our economy.

A comment also about DC: we're disappointed in the president's pulling the plug on discussions to help our state. It's very disappointing that he has decided to try to ram through a supreme court justice in his goal to eliminate health care for two- about eight hundred thousand Washingtonians in the middle of a pandemic, instead of actually trying to help us with our financial constraints. Very disappointing. But we will soldier on. Now turning to the good part of this, or the happy part of this, uh, discussion...