



After Immunity: Understanding the Post-COVID-19 World¹

Episode Seven: The Next Pandemic After Immunity

Interview with Dr. Allan Detsky

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Ian T. D. Thomson [IT]: Dr. Allan Detsky is a physician and professor of Health Policy Management and Evaluation at the University of Toronto. A member of the Order of Canada, he was the Physician-In-Chief at Mount Sinai Hospital in Toronto during the SARS outbreak of 2003. He was also interviewed on Netflix's Explained Series for an episode examining the next pandemic. Released in October 2019, the episode was eerily accurate in its prediction of the COVID-19 virus and the pandemic.

Dr. Detsky thank you for joining us.

Dr. Allan Detsky [AD]: Ok! My pleasure.

¹ After Immunity is a UMF 101.5 limited series broadcasted out of the University of Manitoba. For more info on the series visit: <https://umfm.com/series/after-immunity>
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IT: I think a really helpful way to kind of kick us off is if you might be able to kind of explain to the listeners what your role was and your kind of experiences during the SARS epidemic in Toronto in the early 2000s.

AD: I had three roles. First, I was the physician and chief at Mount Sinai Hospital, and we had a merged practice plan for the Department of Medicine with University Health Network. So I and my partner, Michael Baker, who was the chief at UHN, and I ran the Department of Medicine for what was essentially four hospitals: Toronto General, Toronto Western, Princess Margaret, and Mount Sinai Hospital. So, we had over 250 doctors, we had hundreds of medical beds, and we took care of patients in both critical care and internal medicine wards during the SARS epidemic, so that was my primary role, that was my day job. Secondly, we had a one-hour conference call, and we had all of the hospitals in Ontario got on the line for a phone call, and so that call took place every day for an hour, and I became the chair of that call. So, I fielded the call and there was no agenda. It was like, what's going on, and what's happening clinically, resource-wise, psychologically, like, what's it like? And then my third role was to coordinate the study that described the clinical course of the patients in Toronto who had SARS, and I with many of the doctors in those hospitals, we wrote up the clinical description of all of the cases in the first wave of SARS. So, there was really three roles: running a Department of Medicine, chairing these hourly calls, and writing up the clinical description.

IT: No, I think that's a really helpful place just to let us and the viewers know just how expansive your role was during this outbreak. Jonah, you have the next question?

Jonah Kotzer [JK]: Upon hearing the news about the virus coming out of Wuhan, what was your reaction? When did you first see COVID-19 becoming a global pandemic or a problem on the global scale?

AD: 2003 was my first experience with a scary infectious disease that could spread nosocomially, which means spread primarily in health care centers, and I had never experienced anything like that. There had been other pandemics in my lifetime. I think there was one in 1967, but they were never really, they didn't have much of an impact on me. So, SARS was my first experience with that and that was quite scary. And then the next experience that was kind of like that was 2009 with the H1N1, and I would have to say that when that happened, I was, "Oh, here we go again", and I found that to be a little frightening as well, but that turned out not to be a problem at all. We vaccinated people, they guessed on the right vaccine, and we were able to distribute that vaccination strategy as it was a much easier vaccine than the one we have now with SARS-COV-2, and we got through that. So, by the time we hit December 2019, I was like, OK, been there, done that. It's not Ebola, it's not SARS-1 which had a 10 percent mortality, I was like, you know, "Bring it on." And I would say, you know, we heard reports in the news, we heard reports in the medical literature, but one of my bell-marks was an old friend of mine who I went to medical school with, who's an infectious disease physician in Boston, and she started to call me. Now, this is somebody I never hear from. So, she called me like three or four - one day she called me three times because she was so anxious. So, I was like, if she's nervous, I wonder what this is going to look like, and for a while we thought it might be contained in China. I learned lots of things from SARS-1, one of which is you can't really, you shouldn't rely on reports in the news about what's really going on halfway around the world. I couldn't even figure out what was going on in Mount Sinai Hospital during SARS, so figuring out from news reports who talked to whom in China, like, I didn't even know

where Wuhan was, so I just kind of absorbed that information. But it became pretty clear in January that even though China, which is very good at handling outbreaks, that they had not handled this one in a way that kept it within China. So, we started to hear reports of lots of illness in Iran, then in Italy, and it became clear at that point that this was like, this is the wind, and you can't stop the wind. So, I would say that in January and February it was pretty clear to me that this was going to be widespread. And then there was a frustrating period where nobody was paying attention, like the man from the WHO, Tedros was on the news every night screaming at us, "This is a state of emergency! This is a state of emergency!" And yet you had people like Donald Trump saying it's three cases, it's going to go away by April, and Doug Ford telling people as recently as March, I can't remember the exact date, it was the week of March the 12th, he was telling people to go on spring break and not to worry about it. And so that was disconcerting because I knew that was wrong, and that was when it was clear to me that we were going to have a lot of trouble in Ontario and in Canada.

IT: You wrote a piece kind of right around the March 2020, for the Journal of Hospital Medicine on what you learned from SARS to help you cope with what was then becoming the COVID-19 pandemic. Can you describe how the pandemic that we're currently facing with COVID-19, how is that different when we compare that to the SARS outbreak in 2003? What are the similarities and differences with these to these two events?

AD: The similarities are they're both coronaviruses. The differences are that there's way more asymptomatic spread with SARS-COV-2 than with SARS-COV-1. With SARS-COV-1, we had no test for it, so it was all phenomenological. You were described as a case or not based on the constellation of symptoms, fever, cough, pulmonary infiltrate. There was no test. We eventually did get a test, but that was after the thing was over. SARS had a 10

percent mortality rate, which was way higher, and SARS really only occurred in two places: in hospitals, and in super spreader places. So, there was the famous hotel in Hong Kong where the physician from China came down and spread it to a bunch of people who then took it to cities, one of which was Toronto. There was the son of the woman who came from Hong Kong who got infected from his mother, who went into the Scarborough Grace. He was a super spreader. There were only certain there were small number of events where the virus clearly became airborne and infected a lot of people, but that was rare. That virus was mostly not that infectious until it wasn't, but the number of times that it wasn't was very small, and so it was much easier to use the old-fashioned methods of testing, well, in that case, we didn't have a test, but of contact tracing and quarantining, it was easier to get around. The other thing is, during SARS, the hospital was completely bizarre. We went in, we got checked, temperature checked, a questionnaire, put on an N95 mask, wore the N95 mask the whole time you were in the hospital, put on a new set of protective gear for every single patient that we saw, including N95 masks. There was no worry about running out because we were the only city in North America that had an outbreak, so inside the hospital looked very weird, and then as soon as I go out of the hospital, it looked completely normal, like there was nothing different. People were, I went to a bat mitzvah, I wouldn't go near anyone, but I went to it, I went to a Leafs' playoff game, like, you can't imagine doing that now. So that part was also quite different. The other thing was it was quite new, and so it was scarier because it was much more unknown. This, because it's lasted longer with the with old COVID, old SARS-COV-2, we know how it spread. We know that farther is better than closer, outdoor is better than indoor, masked is better than not masked, get yourself tested, if even randomly. And we have a set of procedures that we know limits transmission, mitigates transmission. With the variants of concern, the new variants, that's all gone now. So, we have examples of apartment buildings, just like the apartment building in Hong Kong where the first SARS

got into the ventilation system and infected everybody. We have two in Ontario, two apartment buildings where there's been spread from people who weren't in contact with each other, so we're back to square one now. I'm not saying it's exactly like SARS-1, but SARS-COV-2, up until the recent variants, we could definitely understand how it's transmitted, and we have the test for it. We didn't have that the first time.

IT: Hmm. That was very helpful, just to kind of characterize, again, the differences between, you know, what is Canada in specifically kind of just Toronto faced in terms of infectious diseases more recently and what the whole country and the whole world is kind of undergoing right now with the COVID-19 pandemic. Of course, today we're wanting to talk a little bit about, you know, that future oriented post COVID-19 world and more specifically, the next pandemic. The next pandemic is not a matter of if, but when. I think that your experience with was that Netflix show really exemplified that. Just saying that it will happen, it's just a matter of when. You're an expert in this, you've experienced this. When do you see the next pandemic coming along?

AD: Beats me. Sometime in the future.

IT: OK.

AD: Pandemics occur. If you look over the last century, I'd have to go back and exactly count them up, but there's been more than three, so more than three in a hundred years, so that's like every 30 years, but it's actually more frequent than every 30 years. So, they do occur, but you have to understand that the word *pandemic* itself is not scary. You can have an infection that circulates around the world, that infects a lot of people, that doesn't kill a lot of people. Or you can have an infection that gets around the world but is

inefficient, so it runs out of substrate to infect. So, the pandemic by itself simply means an infection that goes all the way around the world; it doesn't necessarily mean that it's going to wreak havoc on health care or the economy like this one. This one is different. This is much more like the influenza pandemic of 1918 to 1920. The ones in between were not like this, but in my lifetime, probably the scariest, I'm not sure that it was called a pandemic, but the scariest infectious disease outbreak was polio in the 1950s, which was also episodic. Polio wasn't always there, it was an endemic virus, but some years it would be bad, other years it wouldn't be bad. Or, in 2003, we had a double whammy. We had SARS and then we had West Nile outbreaks in Ontario, in eastern Canada, and northeastern United States. So, we had two infectious diseases. This is the nature, like we live on a planet with a bunch of things that they don't have brains, viruses don't have brains, they just have evolution, and they live to find things that they can infect, and then when they infect those things, they multiply, and the ones that are more likely to multiply, the mutation versions that are more likely to multiply win out. It's like watching the evolution of mankind, but compressed into a very short period of time.

IT: I appreciate your honesty in saying you don't know when the next one is going to hit. I guess what I'd be curious to know and get your thoughts on because I think I understand where you're going in the sense of pandemics, infectious diseases are always occurring, and if that's the case, do you anticipate the next sort of pandemic or situation where you have these mutations of a virus, do you think that they're just not going to be of the same scale as what we're currently undergoing with the COVID-19 pandemic?

AD: They'll probably be bigger. I mean, the world is much more connected now than it was in 1918. So, you know, this isn't answering the question directly, but it does answer the question. The world is not going to be safe from this virus until everyone is safe from this

virus. So, we could stamp it all out in North America, but if it festers in Asia, it'll get here, quickly. If it festers in a mutated form in Asia, it'll get here quickly. So, we have way more mobility now than we did, but last year, not so much, but but before that. So, whatever is going to happen, it'll probably be bigger, it'll be easier for viruses to sweep around the world than before.

IT: So, I'd just like to get your thoughts on kind of the lessons that we've hopefully tried to learn, probably over the last year or so of being in the COVID-19 pandemic. Do you have any sort of lessons, do you think, that we could kind of take away from what we've undergone in the last couple of months and what might be applicable for that next pandemic?

AD: Well, we're not going to learn those lessons.

IT: Ok.

AD: I'm gonna start with that because we haven't learned them now. So, you can contrast countries like Taiwan. Taiwan is a country, I'm not sure how many people live there, but I'm going to guess it's about the population of Canada, it's on a tiny little island, but they have a lot of people that live there. It has a health care system that it was modeled on the Canadian health care system. It's exactly like our system, but it's right next to China. So, it knows that whatever's going on in China is going to infect it in every way. I don't just mean germs, but anything that's going on in China is going to have an effect or an infect on Taiwan. So, after SARS, and Taiwan was one of the places where they had a SARS outbreak, they got serious. They developed technological infrastructure and communication infrastructure to rapidly mobilize communication systems so that testing

and tracing could be done instantaneously. Now, they didn't turn them all on, but they got the platforms ready. They rapidly were able to turn that on at the beginning of this pandemic because they had laid the groundwork, they had laid the groundwork in public health, they had laid the groundwork legislatively, and they had dealt with issues like privacy laws. And so, they could rapidly isolate themselves, stop people at the border, test them, isolate them, make sure they didn't get into their community, and you can imagine that it's much easier to infect Taiwan than Canada. It's tiny geographically. There's only certain areas that are remote, so, it would be simple for a virus looking around saying, "Where am I going to go?" I'm going to go there because they've got a lot of people on a small island, and it's really close to China. And how many deaths have they had in Taiwan since the beginning of the year? I don't even think it's a thousand.

IT: Mm-hmm.

AD: So now the other difference, I do believe that there are a difference in Asian cultures and North American cultures in terms of things like social responsibility, following government rules, adherence to public health strategies, so, things like masks are very common in the east and they are very foreign here. So, it's not uncommon to see, to go to an Asian country, to Korea or Japan, and see people wearing masks. That wasn't too much of a stretch for them, that was easier for them to get across than here. Here it felt very awkward to wear masks until it became common. So, we were slow to do that. And then you look at countries like Australia and New Zealand. Yeah, they're islands, they don't have this long border with the United States that has an interdependent economy with lots of goods and services crossing the border by truck, people coming in, going out, coming, going out, they don't have that there. It all arrives by plane, it's easier to control, but they controlled it. So, and you know what? That's a Western culture, too. And I don't think

Australians and New Zealanders are any more adherent to public health strategies than Canadians. They seem to be, I've been there, I mean, I wouldn't call myself an expert on Australian and New Zealand cultures, but it looked pretty much like Canada to me. In fact, New Zealand, I call them New Zealand, Canada-lite. They've got the Rockies, they've got the tropics, like, there's a lot more packed into there. It's like all of Canada plus the tropics. So, it's not as if other countries couldn't figure out how to do this, and we didn't figure out how to do this in Canada, and we didn't because we didn't listen, the people in charge didn't listen to the messages. Early on in Ontario, I would say that the Premier, who is in charge, got the message; early on is the wrong word. March, it was right around spring break, and that was a turning point from not taking it seriously to taking it seriously. But then if you look at everything that they've done since then, it's kind of muddled its way through. Testing strategy should have been ramped up in the summer, and I know that plans were delivered to the government to ramp up testing, but they didn't do it. Many people have been critical of the provincial public health leadership. Lots of people pointedly gave the premier excellent advice about how to do it better. Didn't do it. The strategies for testing, tracing, quarantining, and supporting workers in Peel--lots of advice about how to do that. Didn't do it. So, if we can't do this in the middle of what is obviously a crisis, how the f*** do you think we're going to do this 10 years from now?

JK: I think you kind of touched upon this a little bit, but following all this with the COVID-19 pandemic, what do you think the role of the federal and provincial governments should be in preparing for the next large-scale pandemic of this nature? You know, what should they be investing in regarding risk mitigation and what kind of policies should they be pursuing, post-COVID-19?

AD: After SARS, there were national commissions and there were Ontario commissions on how to do it better. David Naylor chaired, I believe, the National Commission. There was a whole playbook. The United States had a whole playbook. All you have to do is follow the playbook. It's not more complicated than that. But understand, three things. (This might turn out to be four things.) Number one: It's a lot of work. Like, during SARS, every day was a lot of work for me because I didn't know what was going to happen on a daily basis, we had a certain number of patients that we had to look after and a certain number of nurses and doctors and other health care professionals, and I didn't know on any given day whether an entire ward was going to be wiped out of its health care workers because they were exposed to somebody who had SARS. So, public health, old-fashioned testing, tracing, supporting, quarantining, is work. You can't just say it, so you have to be prepared to invest in it and you have to understand that it's a lot of work. It's not complicated work, but it's a lot of work that turns into complications because getting from here to there is not that easy. Getting from A to B is not that easy. There's a lot of people that have to be contacted. So, that's issue number one. Jonah, just remind me what your question again because I already lost it.

JK: No, no worries. The questions were investments, post-COVID-19.

AD: So, the first thing is create a plan and understand that it's a lot of work and that you're going to have to have a baseline level of competence, and then you're going to, it's like peak-load phenomenon. You're going to have to raise the bar when the events occur. So that's issue number one. Issue number two is to begin to think about how nationalism intervenes in a crisis. So, we're a small country and we have a small market, and so, in the non-heat of the moment when it's cold, the idea of creating capacity inside the country for things that you're going to require to handle a pandemic like protective equipment, like

vaccines, like syringes, like swabs. If you are dependent on international trade, for fixed factors of production that are required to fight a pandemic, you're going to be at the mercy of nationalism. We see that now with vaccine strategy. There's a plant in Kalamazoo, Michigan. You can practically see it from Sarnia. They make a vaccine. Where are we getting our vaccine from? Belgium. From the same company. So, understanding, and in hindsight, it's easy to see this, but now we've got foresight, so understanding what are the fixed factors of production for fighting a pandemic? Where are we going to be vulnerable to nationalism and investing in that? Overinvesting in that will pay off. We can be a net exporter of that instead of a net importer of that. Now, I do not pretend to understand what it takes to create a vaccine industry in the country, and I hear from news, stories that this was certainly discussed a year ago when the pandemic began, whether Canada should establish lines of procurement through international trade or local production, and there was an attempt to do a local production, that ill-fated partnership with China. I mean, as we say in Yiddish, "How come you're a-China?" Like, why would you be. Why would you be partnering with China when we can't even get the two Michaels out of China? Like, what was the thinking there? So, but that's easy to say now that that didn't work out. But we're looking at the future, so it's understanding where you're going to be vulnerable to nationalism that is important. And the third thing is it's easy. Politics is short-term. People get elected on short-term strategies, so, you can even look at what's going on in Texas now with the electricity infrastructure and understand how short-termism ended up doing that. I remember well the controversy around energy in Ontario and how different governments of different parties kicked it all down the road, and I wonder, "Gee, how vulnerable are we in Ontario?" So, governments have to understand that there are certain things you can't kick down the road and maybe this is one of them. But I am quite certain that human nature is such that when it's out of sight, it's out of mind. If you're not experiencing something directly, it doesn't exist. So, when COVID was in China, that's

China; when it was in Iran, it's Iran; when it was in Italy, it's Italy. It's across the ocean. When it's in New York, it's not even in Canada. People here did not take it seriously until it's right in front of them, and even then, sometimes. So that phenomenon and that's now that's in the middle of it. So, thinking about this, if we don't have another pandemic for ten years, governments are going to forget, and they're going to say, why should I be spending money on this s***? Like, what's with these N95 masks stockpiled? Like, what do we need this for? "That's so 2003", like that, that kind of thinking is going to be normal. And then I guess the last phenomenon is, we saw this in SARS, we gave up too early in Toronto. We thought it was all over because we wanted it to be all over, and the psychology of wanting something to not be, as opposed to looking and seeing whether it is, is a common phenomenon. The Premier was dying for good reasons to lift restrictions in Toronto and Peel as the numbers go down, and it took a lot of voices screaming in his face to say, "You better take these variants seriously because this would be the wrong move." And I'm not blaming the Premier for that. My comments about the Premier are, he was a label manufacturer. Nobody expects him to know how to run a pandemic. I wouldn't expect him to be able to figure this out. I'm a bit disappointed that he hasn't recruited the people who I think could help him do it, but "if something's not in your face, you don't think it's real" and people have a tendency to want something to be true when it's not.

IT: Dr. Detsky, we're very appreciative of your time as well as your blunt and honest perspective on a lot of these questions. And what we know, what we don't know, and what we probably could have done better with this pandemic. With all of these thoughts in mind, I'd be curious, what do you see the legacy of the COVID-19 pandemic being as we enter that post-pandemic world?

AD: Two things. We muddled through in Canada, we muddled through. We didn't do a terrible job, but we didn't do a very good job, we muddled through. Number two, it looks like our ass is going to be saved by science. Because without the vaccine, we would be, as we say in Yiddish, f***ed.

IT: I think they say that in a lot of languages, actually.

AD: We would bethe miracle. See, viruses don't have brains. We have brains, but we have behaviors that allow the viruses to take advantage of us, and those behaviors are, that we just can't not be with each other. Like this whole thing would stop if every single person in the world would stay away from every other person in the world for 14 days, it would be over. But we can't do that. Human behaviors won't allow us to do that. But what we do have is brains and vaccines like this. It is a miracle that these vaccines were developed and produced in less than a year. My prediction in the fall was that we would know about one or two vaccines by December, and that it would probably be about 60 to 70 percent effective at reducing the risk of getting serious COVID infection. We had people being vaccinated in December, not just knowing that not having a Phase 3 trial result, but phase three trial result approval by the federal government authorities, manufactured shipping it here, from Belgium, and I think some of it came from Louisville, but it was Belgium stuff, and we had it in our arms in December. We were vaccinating health care workers and long-term care workers in December. That's a f***ing miracle. I mean, the fact that we're behind now is really a wrinkle on that, because if we had not, if science had not developed this, we would be up Schitt's Creek to use a Canadian expression. So, the two things are we muddled through, and we were saved by science.

JK: Dr. Detsky, thank you so much for joining us today, as well as someone who remembers living through SARS here in Toronto, I want to thank you for your public service and all your help in keeping our city safe. So, thank you again for joining us, and thank you for all your hard work.