

TRANSCRIPT

LEGISLATIVE COUNCIL LEGAL AND SOCIAL ISSUES COMMITTEE

Inquiry into the Victorian Government's COVID-19 contact tracing system and testing regime

Melbourne—Wednesday, 18 November 2020

(via videoconference)

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Dr Samantha Ratnam

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WITNESSES

Professor Mary-Louise McLaws, Professor in Epidemiology, Hospital Infection and Infectious Diseases Control, School of Population Health, UNSW Sydney, WHO Health Emergencies Program Ad-hoc COVID-19 Infection Prevention and Control Guidance Development Group, Focal Point WHO Global Outbreak Alert and Response Network (GOARN); and

Adjunct Professor George Rubin, Public Health, University of Sydney, Conjoint Professor, Public Health, University of New South Wales, and Consultant in Public Health and Clinical Practice Improvement.

The CHAIR: Hello, everyone, and welcome back. This is of course the Standing Committee on Legal and Social Issues and this is our public hearing into the Victorian government's COVID-19 contact-tracing system and testing regime. I am very pleased to be able to welcome Professor Mary-Louise McLaws and Professor George Rubin, who will be joining us for this session. My name is Fiona Patten, as I have mentioned. We have Dr Tien Kieu, our Deputy Chair, and Ms Georgie Crozier, Ms Tania Maxwell, Ms Kaushaliya Vaghela, Ms Wendy Lovell, Dr Matthew Bach, Mr Lee Tarlamis, Mr Enver Erdogan and Ms Melina Bath here today.

Just for your information, all evidence taken at this hearing is protected by parliamentary privilege and that is under our *Constitution Act 1975* and also the standing orders of the Legislative Council. Therefore any information that you provide to us during this session is protected by law. However, any comment repeated outside may not have the same protection. Any deliberately false evidence or misleading of the committee may be considered a contempt of the Parliament. As you would understand, this session is being recorded and also Hansard will be transcribing this session. They will provide you with a draft copy of that and I would really appreciate it if you could have a look at that once you have received it, just to ensure that we have not misrepresented you. We are feeling very privileged to have you here today to help us in our deliberations for this inquiry. I would like to welcome you to make some opening remarks. Professor McLaws, could I start with you, and then we will go to you, Professor Rubin?

Prof. McLAWS: Thank you for asking me to assist the Victorian government to learn, as every country should be learning, as they go. One of the most important elements of any outbreak is not waiting to the end to learn but to have a system of continuous learning and improvement, and I will be pleased to give you any assistance with that from a WHO or global perspective, as I have not worked in Victoria. Thank you very much.

The CHAIR: Thank you, Professor. Professor Rubin?

Adjunct Prof. RUBIN: Yes, Fiona. Thank you very much for having me at this session. I think my contribution should be largely restricted to establishing a public health infrastructure, based on my experience in New South Wales. I am not going to comment on current practice. I defer to my esteemed colleague Professor McLaws on that. So if that is okay, I will be happy to give those remarks.

The CHAIR: Thank you very much. In fact that is very timely. If I could start the questions with you Professor Rubin, much has been talked about with the different systems that operate in New South Wales and Victoria, and that New South Wales over the many decades has created a decentralised public health set-up and in Victoria that has been largely centralised. Do you think that that may have been one of our problems? And from what you have heard, do you think that the decentralised model in New South Wales is something that Victoria can learn from?

Adjunct Prof. RUBIN: Look, I do not want to make any critical comments on the Victorian situation. I think things have worked out extremely well, and I am delighted that the control efforts have been so successful recently. I would have to confine my remarks to past history—almost prehistoric, I would have to say, because pterodactyls were flying around—

The CHAIR: Pre-COVID, whenever that was.

Adjunct Prof. RUBIN: Yes. This was very early. This was in the early 1990s. We had an opportunity, if I can go on just for a little while—

The CHAIR: Yes.

Adjunct Prof. RUBIN: I had spent eight years at the US centers for disease control, and there was a very decentralised model, if you will. In Atlanta, where I was, there was the CDC, which was the central hub, and each of the states had their own state health department and their public health infrastructure for their state, and it worked as a hub-and-spoke model. I was fortunate enough to be able to be selected to be in what was then called the epidemic intelligence service, which was a two-year program. At that stage it was both medical and non-medical. It included people who were medical scientists or nursing people, but people who had done some sort of public health degree at that stage. There was a very, very short induction training program. It was in fact a three-week training program, and you then became an epidemic intelligence officer. You then could serve at any particular point. You had a choice in this. There was a marriage coefficient. You could talk to people who ran the unit in any particular state, or you could work in the central hub at the CDC in Atlanta. After you had done your initial training you were sent out, and then you were conducting what was called shoe leather epidemiology, which was practical public health practice, which means outbreak investigation, investigation of picnic gastroenteritis outbreaks, hepatitis outbreaks. You will be aware that CDC was where a number of diseases were first recognised—legionnaires disease, toxic shock syndrome, in fact HIV through connection with California. A very exciting time.

So when I returned to Sydney I was then asked to set up an epidemiology unit within the health department and the then secretary, I think, had great foresight. He said, ‘George, I want you to spread this epidemiology thing around the state’. The state structure at that time was divided into 16 administrative areas. They were called area health services. We now call them local health districts. He said, ‘Why don’t you give us a proposal as to how you think this might work?’. There was a confluence of opportunity and ideas that had been brought. They were not my original ideas. I guess I was just fortunate enough to be at the right place at the right time when he said, ‘I want you to draft something’. There were some funds left over, end-of-year funds. There was a process in New South Wales where anyone could submit a proposal, which was then assessed and the top proposals were funded. Over a very quick weekend I drafted a very sketchy idea, which was essentially to set up public health units in each administrative area, and I took a notional staffing level, if you will, based on experience from the US situation, and estimated the cost of that for one public health unit in an administrative area, multiplied by 16, and then came up with a figure. In fact it came up to about \$4 million at that stage. Luckily the funding came through—and bang!

This was in 1990–91. We were able then to establish these public health units in each administrative area. Now, at the same time as getting the personnel—and remember this was a time when things were very different. This was in the 90s; there were not a lot of people who had been trained in practical public health. We did three things: we set up the units in each administrative area; we set up a training program for people who had done a master of public health to get public health practical experience—I have referred to that as ‘shoe-leather epidemiology’ in the past; and thirdly, we developed a mechanism for communication of results, so that if one area had an infectious disease outbreak, very quickly we could notify everyone around the state. And that was early times: email was just starting and we had clunky dial-in internet—you will remember when we had the modems and the phone things.

So we had three elements. We had the local public health units with a staffing level of about five people—there was funding for about five people. We had a training program so young people coming through who were interested in a practical public health career could join the training program and immediately, like in the US Epidemic Intelligence Service, go to those units or be working with the central hub, gaining practical experience. We then, in addition to that, had a public health bulletin, which was published both electronically and in print. Very quickly then, the training program was important because it meant every week the people who were training could meet together and discuss how to handle public health outbreak situations. Over a period, once you multiply that by years or decades, you can see that you can build up a cohort of people. In fact the current chief health officer, Kerry Chant, in New South Wales was one of the early trainees of that program—I think she was in the second year—and Jeremy McNulty, who is a spokesperson for health protection in New South Wales, was also one of the early graduates of the program.

The CHAIR: Terrific. Thank you.

Adjunct Prof. RUBIN: Sorry I went so long.

The CHAIR: I was involved in HIV and AIDS in those days, so I remember that public health training. I will move to Dr Tien Kieu.

Dr KIEU: Thank you. Thank you, Professor McLaws and Professor Rubin. We in Victoria are in a very good position now. I think there are zero cases and zero deaths, but there are still some active cases, so we see that there is still something lurking around. In fact according to WHO and CDC, some severe COVID cases could last for 20 days or so and still be contagious. My first question is perhaps about public health. What is your opinion about mandatory testing in order to detect and then control the lurking virus that is still around? And my second question is perhaps in the area of epidemiology and is about mutation. We now have some very good news, as indicated by a few pharmaceutical companies, about the efficacy of vaccines to be confirmed and approved. But moving on, what would be the threat of mutation posed to us even though we may have a vaccine in a few months time? Thank you.

Adjunct Prof. RUBIN: I will defer to my colleague Dr McLaws in the first instance.

Prof. McLAWS: Hello. Thank you, Dr Kieu, for the question. It is a difficult question. I know that in China their number of infections per million population has been one of the lowest in the world—once they got to controlling it and ring-fencing Wuhan. What they do now is that if there are any cases diagnosed, they mandatorily—well, I do not know how mandatory it is—but lots of people from around the area of a positive case go to a public place, such as a parking lot or somewhere, to get tested. They test up to a million people sometimes per one case, so they are very supportive of the testing, and I think that the general community in China can see the advantages of testing. Whether it is mandatory or not, I think it is a bit of both: government wanting it to be done and the population wanting it to be done as well. It certainly has merit, because we know if we stop looking we cannot find. So in Australia we do not usually like things to be mandatory except for when it really is necessary, and I think that I would first try inviting all people to get tested at least once. People might criticise that it is expensive, but I would suggest that a second wave in other states or a third wave in Victoria is far more expensive. And it is a very low-risk test. It gets a higher level of accuracy the more people that are tested. And we have seen—and I have been plotting weekly testing—where the test numbers, when they go down and the positivity rate is slightly edging up it is not a good sign. The testing has to be way above the positivity rate.

Certainly Victoria is ahead of the curve, as they say, for every state and territory. New South Wales has dropped a little bit and South Australia had dropped considerably just before this outbreak. So testing is one of the most important prevention strategies that we have, because as soon as you find somebody is a case then the contact tracing should then fall into line soon after. But I guess you will want to ask me a question later about the indications of good contact tracing.

The CHAIR: Thank you.

Dr KIEU: Sorry—about the mutation. Are there any indications that you can give us?

Prof. McLAWS: Look, I am not an expert in vaccination, but I was attending a meeting—a WHO meeting—a couple of weeks ago with about 500 people talking about the importance of keeping with protocol and not breaking protocol with early good results, and mutation was vaguely mentioned. For a lot of the methods of the vaccine development, mutation should not be enormously problematic, and if it does appear to be slightly problematic the vaccinologists and virologists have learned from influenza how to tweak things. So the most important thing is: what is the vaccine efficacy, in whom does it work well and how long do we have our antibodies for—and then, if there does need to be some tweaking, back to the lab; it should not be the enormous challenge as it was actually developing the vaccine in the first place.

The CHAIR: Thank you. Fascinating. And yes, you are right; we will probably ask those questions going on. Georgie Crozier.

Ms CROZIER: Thank you very much, Chair, and to both of you, thank you so much for being before us this morning. Could I just follow up on some of the questions from Dr Kieu in relation to testing. During the first lockdown Victoria was well behind other states in terms of testing rates and in relation to criteria. We had a number of outbreaks—Cedar Meats; we have just heard their evidence, but that was a significant outbreak at the time—and during lockdown 2 our testing was very inadequate in many, many ways. There was information that was not provided properly. There were issues in relation to errors taking place and delays in that contact tracing follow-up. So I would like to understand from your experience from New South Wales, which was able to manage the outbreaks far more effectively than we could in Victoria, why that was the case—because yes,

we are in this position now, but Victoria let us not forget has been in lockdown for months; the restrictions have been very harsh. Not only have 800 people lost their lives to COVID but there have been very profound mental health issues. So New South Wales have not experienced that degree of distress that we have, and I am just keen to get your perspectives from New South Wales in relation to testing and why they went out very early and were far better at testing than we were here in Victoria. Just if you could provide some comments to the committee, please.

Prof. McLAWS: George, do you want to start?

Adjunct Prof. RUBIN: I do not think it is fair for me to comment on that at the moment, because I am not engaged in the current practical work on the ground.

Prof. McLAWS: Okay. Ms Crozier, I will have a go at this from my analysis of the data. So I have been, I guess, data stalking Victoria for quite some time. I do not have it in front of me at the moment, but around the time of the increase in numbers I developed what would be called, I guess, a traffic light system for when systems seem to get overloaded—and that means pathology and public health officer and contact-tracing overload. The numbers are on an average over a 14-day rolling period. Now, we do not use three-day averages; that is something that statisticians do, and it has got nothing to do with this particular virus. It does not have an average incubation period of three days. We use twice an average incubation period, and that is twice five to six days, although we do like to round it up to a week—so twice a week—so 14 days. The reason that we use twice an incubation period on an outbreak analysis is because a day does not make for a disaster or that the outbreak has finished and neither does one incubation period, because sometimes people can go on for a bit longer.

So I looked at the trend over two weeks on average, not just the total number of cases. When you divided the number of cases per day over 14 days, New South Wales had got into what I termed a very safe place, which was less than five cases on average per day. Subsequently Professor Tony Blakely used that to test what would happen if Victoria lifted its restrictions at a certain level of less than five, and he found that there would be a risk of 3 per cent of a third wave. So I think that it is a—

Ms CROZIER: Sorry, a risk of 3 per cent of a third wave?

Prof. McLAWS: Yes, risk of a third wave if it was lifted at less than five cases per day. I have also had a mathematician at my university check my traffic light system, and he thinks it works well as a simple predictor. So I was looking at this, and New South Wales was in the green zone, less than five cases, for a long time, and that means—and George will attest to this—that the human resourcing can go out there and get onto an outbreak very fast. They are not all over a very large state or city trying to put out the many bushfires of outbreaks; however, Victoria was not. Victoria had been in what I would call the orange or red zone. The orange was five to seven cases on average over a 14-day period and the red zone was over seven. And I noticed that it was creeping up, and I happened to notice, because I was stalking your data, you had a couple of cases in a hotel, in the Rydges. And then I noticed, about a week later or within an incubation period, it happened in a second hotel, and in the meantime it had started to escalate in a college and community, and I knew you were in for a really rough ride. So your cases went from low orange or amber to high red. On 18 June you had just over 100 collective cases over a 14-day period, which meant you had over seven cases on average per day, and I believe that is the reason why, from a human resource perspective, you could not keep up with the demand, because it was stretching across a city that is big and is socially interconnected.

When I explained this to a journalist they thought I meant that there was some sort of social issue going on. But what I meant by that was there is something called social network analysis, and Melbourne seemed to have an ease with which people move around the city. Of course you have got trams, it is flat and they bike, and they are socially connected across a wide area, whereas in Sydney when people get home from work they do not seem to leave their postcode very much, which can actually help in putting out a cluster. So I believe that that was one of the reasons. Apart from already Victoria understanding that it had a centralised system, I think it was because you were not in the green zone and it did not ramp up rapidly like it has, for example, in the last couple of days in South Australia, where they have potentially enough staff to go out and hit this cluster before it becomes a second and a third generation.

The CHAIR: Thank you. I will have to move on, but that was fascinating. Ms Kaushaliya Vaghela.

Ms VAGHELA: Thanks, Chair. Thanks, Professor McLaws; and thanks, Professor Rubin, for your time today. My question is regarding the education and behaviour of the public. Contact tracing has been used in public health to help prevent the spread of infectious diseases and STIs, so would it be true to say that contact tracing is in many ways the process that comes after an infection has spread and that from a public health perspective the goal would be to not have to use a contact-tracing system, which is why health promotion and preventative measures and behavioural changes are an important part of controlling the spread of infectious diseases? Professor McLaws, you have also mentioned that educating the public early on before any outbreak about how to behave helps. Since the pandemic started we have been educating the public by saying, ‘Wash your hands. You need to socially distance, cough into your elbow, wear a mask’. Do you think that education is enough to prevent any further outbreak?

Prof. McLAWS: Thank you very much for the question. It is a very important question, and a very important tool of outbreak management is to engage the public, their hearts and their minds, and tell them the truth. One of the truths that we are not telling them enough is that people do not have to have symptoms before they become infectious, and this is one of the problems of contact tracing as well. So we tell people, ‘Stay home when you’ve got symptoms; get tested when you’re symptomatic’, and that is great. New South Wales Health, if you look on their website, use an idea of an indicator for how fast people get tested—is it one, two or three days after symptoms occur?—and 60 per cent get tested by day 2 and another 40 per cent by day 3. But it is very difficult because people often think first of a summer cold rather than COVID, and I think we need to teach the public, ‘Think COVID before you think anything else; get tested—it’s so much cheaper than a second wave’.

But we also need to explain to them never to let their guard down, and I think they get very pandemic tired. I witnessed this during SARS. They do get pandemic tired, but they have to understand the importance of the fact that it is not just two days, it is actually three days before you develop symptoms that you can become infectious to others. There is something called the presymptomatic period. Some people remain in that forever, and they are about 17 per cent of cases who are asymptomatic. And of course those that remain asymptomatic are infectious to others—about half as infectious, but they still are infectious—and that is why social distancing and wearing a mask are important. But also those that will go on to getting symptoms are infectious from day 3—not as much as they are infectious from day 4 post exposure, but if you go back not just 48 hours but 72 hours before symptoms, you are infectious to others. Therefore we need to tell the public why we want them to do things.

The CHAIR: Right; thank you. That goes back to bits of the benchmarks of fast getting contact with those close contacts. If I could go to Wendy Lovell, please.

Ms LOVELL: Thanks very much. I was just wondering in your observation of other jurisdictions, and I do not mean Australian jurisdictions—internationally—if you could give us an example of the absolute gold standard for contact tracing, the gold standard for testing and also if there is a jurisdiction somewhere that we should be looking at; they may not have absolutely reached the gold standard in both of those but have managed it well and significantly reduced the social and economic impacts of having an outbreak of COVID-19.

Prof. McLAWS: Will I answer this one, George?

Adjunct Prof. RUBIN: Please, Mary-Lou. Yes.

Prof. McLAWS: Okay. Ms Lovell, thank you for the question. The gold standard for testing—there is no particular gold standard at the moment across the world. They are really looking at different indicators for contact tracing. The World Health Organization has a document called *Considerations in the Investigation of Cases and Clusters of COVID-19: Interim Guidance*, from 2 April 2020. They talk about how to run contact tracing but not what are the indicators. Then you move to America, and as George has explained from his, you know, superb training in CDC—and epidemiologists like going to CDC, because it is the mecca for epidemiology—they have, like Australia, states, but they have counties as well. And the states have to ask CDC to come in, and the counties can be slightly different. But there is one particular county that is really interesting, and that is Wyoming. And Wyoming has set up a couple of different indicators, and they are fantastic. So when you look at CDC you often have to drill down in each one of their states or counties.

So what they do is they have decided that they have got a cut point of finding contacts to be interviewed within 48 hours of finding the case—48 hours, so it is quite rapid—and that they have what is called a green level, a yellow level and an orange level. And the green level of top-tier contact tracing is that 90 per cent of contact traces are done within 48 hours, 20 to 90 per cent are done within 48 hours et cetera, and it gets down to the red level of less than 7 per cent are done within 48 hours. And the reason they have done this is because it is based on research that says 70 to 90 per cent of cases contacted and 70 to 90 per cent of all contacts found and isolated within 48 hours can reduce the R_0 to less than 1. So we should be looking at a 48-hour, not a 72-hour, benchmark.

Can I also add, Ms Lovell, that they also have a really good benchmark for the number of cases to tracers. So they believe that for each case there needs to be five tracers. And they believe that because they need to find everybody within 48 hours, and you cannot do that with one tracer to one case or one potential person, because each person every day, without a lockdown, may have five to 20 contacts, easy, particularly if you are young and you go to school or college or you are just young and socially mobile. So 1 to 5 is their gold.

The CHAIR: Great. Thank you, that is really informative. I understand Tania Maxwell has ceded her question to Dr Matthew Bach.

Dr BACH: That is great. Thanks very much, Chair. And thank you both for being with us. Professor McLaws, I might direct my first question to you, if that is all right. I was very interested at the outset of your time with us this morning that you spoke about the importance of government agencies in the context of a pandemic embracing what I think you called ‘a system of continuous improvement’. You also spoke about the need to be willing to continue to learn. Earlier this week on Monday we received a very troubling testimony from no less an organisation than the Australian Medical Association arguing very strongly that such a culture does not exist within the Victorian government. In fact the AMA said that the culture within our Department of Health and Human Services here in Victoria was defensive, there is a refusal to acknowledge errors and a failure to take accountability. I wonder, given your expertise, Professor McLaws, would you mind talking us through the sorts of steps that government agencies might take to start to implement that sort of culture, a really positive culture, that you were talking about?

Prof. McLAWS: Gosh, Dr Bach, I am not necessarily a culture change expert but I have tried to change a culture in clinicians for a patient safety issue, and I was also very honoured to review the issue of a SARS outbreak in Beijing, and in Hong Kong in the SARS-designated hospital. What I noticed during this period of insight was a continuous, ‘Are we getting it right?’, and having an indicator for ‘Are we getting it right?’. The groupthink can be very helpful, you know, if you want to get to space, but if you want somebody to put their hand up and say, ‘I don’t think that works well’, you do not want them to be shouted down or passively aggressively to say that, ‘No, we’ve got that covered’. So from my perspective of looking at behaviour change in clinicians it takes leadership and it takes finding the person who is the early adopter. If you are lucky, the leader will be the early adopter. If you are not, then you find that early adopter who is well loved and highly connected to be that voice of, ‘Let’s think about how we’re going to change’.

One way you can be looking at this is you have got clusters, and in New South Wales we have had clusters and in South Australia there is a cluster going on at the moment, and you want to get it before the second and the third generation. What you should be saying—and I have checked with my WHO colleagues and no-one is doing this yet, and I a bit surprised that we are not doing this—is, ‘How fast are we getting that cluster?’. Now, we know an average incubation period is five to six days, and that is a very short period of time, and you would have to have all of the staff at your behest to be able to probably put out a cluster in five to six days, but surely in twice an incubation period a cluster should change, it should be put to bed. That would be one way of learning: are you doing the right thing, or is this cluster going into a second and third generation? Some clusters have gone on for 30 days and then stopped and then gone on for another 30 days or about that. How did that happen? How did these contacts slip through our fingers, and did they slip through our fingers because we only went to that first level of contact instead of contacts of contacts? Now you are in this wonderful position of having zeros—I think two zeros is a doughnut and I do not know what so many zeros that we have got now is; it is maybe a celebration—this is the time that your department could be saying, ‘We have all the time in the world to do the contacts of the contacts, not for just 48 hours but go back 72 hours to make sure you get them all’.

The CHAIR: Thank you. I am sorry, Dr Bach. We will go to Lee Tarlamis, and I know I have still got Enver, Catherine and Melina who would like to ask questions.

Mr TARLAMIS: Thank you, Chair, and thank you, Professor Rubin and Professor McLaws, for your valuable insights and expertise and for sharing that with us today. Professor Rubin, you have advocated for decentralised local public health teams and, Professor McLaws, you have also called for these to be rolled out. Over the past few months six local public health units have been established across the Victorian community. Can you tell us a bit about why these localised response units are so important in the public health response?

Adjunct Prof. RUBIN: Thanks for the question. Look, when you have local public health professionals, they are aware—usually aware; this is the usual situation—of local cultures, local food establishments, schools, churches, social groupings. There is a much greater attention to the local community and understanding of the local community. In addition to that they are placed in close proximity to that community, so it is much quicker to be able to establish the public health response—I think that is the important thing. But the understanding of the local community dynamics I think is very important in outbreak control. I do not know if Mary-Lou would like to add to that.

If I could just add to Mary-Lou's previous statements in regard to the culture change from the previous question just very quickly, having a regular training program to make sure that people are well trained is important in that. So I agree with everything that Professor McLaws just said, but in addition to that I would say that it would be important to establish a regular training program, number one, and regular exercises trying to test out the system so that people are practically used to what is necessary in the actual situation. I think that is important. And you can demonstrate continuous improvement in one way by saying, 'Well, we have maintained regular training programs and we have regular exercises to show that we are ready'. That is also important in establishing that culture of readiness and continuous improvement.

The CHAIR: Thank you. We might just keep moving on. I will go to Catherine and then we will go to Melina and Enver, and Matthew will have the final question.

Dr CUMMING: Thank you. I am glad my question comes after the last Member of Parliament, because—

The CHAIR: You have got 3 minutes, Catherine, so be quick.

Dr CUMMING: Okay. Professors—and, Professor George Rubin, I guess my question is to you—we apparently only have six local public health units which the DHHS already actually fund, which are our primary care facilities. I have GPs in my local area that have responded—because my area in Western Metro has had the largest amount of the outbreak—and they were concerned. So they actually took it upon themselves to actually contact the council and start a very localised response. Currently here in Victoria we have 79 councils and we could possibly be having 79 public health teams rather than just having the six. My local GPs' criticism is this: the current advisory committee for the suburban hubs has too many hospital specialists on it and only one GP. It should be the exact opposite: one specialist and four to five GPs of different regions and some local government representatives. If the committee believes it is worthwhile, I feel that that is the response when we want a quick response and want health units that understand the community extensively. Would you agree?

Adjunct Prof. RUBIN: I do not want to get into how many numbers of hospital versus other staff, but it is important that geographically located public health units have good relationships, preferably with as many of the GPs as possible. That is a part of the advantage of having a local public health unit—that they tend to know who the GPs are and establish relationships, which is important for reporting with the GPs, who tend to see patients early, notifying the local public health unit of anything that they notice that is out of whack. In addition if that public health unit has good relationships with councils and councils also have public-health trained staff, you can establish a collaborative arrangement between public health units, which tend to be located within the administrative divisions of your health system. You have got local health networks, or your equivalent of our local health districts in New South Wales. With each of those, with a public health unit, establishing within their local geographic distribution relationships with councils and with GPs to try and make sure that, first of all, you have got good reporting systems and well-trained people, so that you have always got a mechanism where you are bringing in young professionals, training up those professionals, who are able to respond in an

emergency situation very quickly, knowing what to do. I think those are success factors. I think that is what it is that you are driving at with your question.

Dr CUMMING: Yes, professor. My—

The CHAIR: I am sorry, Catherine. I wish we had more time, I really do. We will go to Melina, then Enver. Then hopefully, Matthew, we will have some time for a final question from you.

Ms BATH: Thank you, and thank you for being here today with us. Dr Finkel's report that we have been referring to in our hearings talks about clear governance and the need for clear governance in leadership roles, and that is also speaking within departments. It relates to chief health officers. I am interested to understand your opinion on the difference between where the chief health officer in New South Wales, as an example if that is familiar to you, sits in the structure of the department as per Victoria. Are there suggestions for, as part of this good governance and indeed good health public infrastructure, a change being required or a change that would better help the CHO and government as a whole through their decision-making?

Adjunct Prof. RUBIN: Professor McLaws, do you want to comment? I am happy to comment.

Prof. McLAWS: I think you should comment, given that you have recently come from the department of health.

Adjunct Prof. RUBIN: Colleagues, I cannot comment really on the current situation. Let me just explain the situation when it was current for me, and I think that situation still obtains in the New South Wales situation. The chief health officer is directly accountable then to the secretary for health. You have got a different system in Victoria, and I cannot really comment on that. But I think that it is important that the chief health officer reports directly to the secretary, who then obviously reports to the minister. That is a very important role in ensuring that you have got good governance across your whole public health infrastructure and your reporting mechanisms and response mechanisms. I am not sure that I really answered your question there. If you could be more specific, that might help.

Ms BATH: We are looking to do some comparisons, and I think you have answered it there—that in your opinion the CHO has a direct communication with the secretary and then to the minister and government. I guess there have been criticisms in the past in relation to the lack of connection of flow of information, so we are seeking to understand what could be the best model.

Adjunct Prof. RUBIN: You have got the situation where the public health units—because they are located in the administrative health areas or the local health districts—those people are administratively accountable to the chief executives of those local health areas. Correct? Is that the situation in Victoria? So in the acute situation it is important that the chief health officer has the controlling say in the way that the operation is conducted rather than the chief executives of each of the different public health units and health areas trying to exert control. Because that I think then leads to a situation which we have got into nationally where you have got different states differing from the national cabinet, and we got a little bit messy there when the Victorian outbreak occurred—the second wave occurred. I think it is important that the accountability and the line of control is absolutely clear that in an emergency situation, and the Premier could announce, as I think happened, the chief health officer now has the controlling say in the way the outbreak response is managed. I think that is important.

The CHAIR: Great. Thank you. Thanks, Melina. Thank you, Professor Rubin. Enver Erdogan.

Mr ERDOGAN: Thank you. Thank you, Professors McLaws and Rubin.

The CHAIR: This will be the last question.

Mr ERDOGAN: Okay. Professor McLaws, you discussed the importance of good contact tracing. Early on in this pandemic the commonwealth government launched the COVIDSafe app. The app was intended to help contact tracers by providing records of who may have been exposed to someone if they were infectious. As Victoria now opens up, the importance of accurate records and close contacts is more important than ever. What role do you believe the COVIDSafe app is going to play in good contact tracing?

Prof. McLAWS: Thank you, Mr Erdogan. Humans differentiate between an insignificant contact and a significant contact, and I believe that contact tracing has been superior with the humans being able to do that because they can do it rapidly. It is very difficult when you have got a COVIDSafe app that may pick up a lot of contacts that were through a glass wall or door, where you actually have not spent 15 minutes within a metre of them.

Now that we have the QR codes, people do not have to use a battery for their phones—sadly, apps, when they are on, use a lot of battery and people do not like to turn them on. The QR codes are a great idea, but the system is clunky at the moment and does not allow people just to point their phone—and you have to have one of the smartphones—you have to still put in your phone number, your email address and your name. There needs to be a patch or there needs to be a system across the country that is national now we are going to open the borders where you just point your phone or some other thing—you could have even a wristband that can collect the same amount of data—and it can collect the data from you. So you tap in, but you need to also tap out. To make contact tracing even faster, they need to know how long you were there for and did you go, because at the moment you tap in but you do not tap out. I hope that kind of explains it, Mr Erdogan.

Mr ERDOGAN: Yes, it does. I have just one short question. Would you say that the COVIDSafe is of little value to good contact tracing?

Prof. McLAWS: I have not read any formal report. I have only heard from discussion that it has picked up a handful of cases rather than thousands of cases.

Mr ERDOGAN: Thank you.

The CHAIR: Thank you. Thank you so much. Thank you both, Professor Rubin and Professor McLaws. Absolutely fascinating. I think we have all learned a great deal today, and we very much appreciate the time that you have given us. As I mentioned earlier, you will receive a proof transcript of today's hearing. I would encourage you just to have a look at it to make sure that we are not misrepresenting you. We very much appreciate this, and I think in other circumstances we would love the idea that we are very socially interconnected in Victoria—maybe not quite now, given the result that it has led to. But thank you all very much. This has really been terrific. Thank you.

Adjunct Prof. RUBIN: Thanks for the opportunity.

The CHAIR: Thank you so much.

Witnesses withdrew.