

RESPONSE ON BEHALF OF HON. DR AYESHA VERRALL TO ROYAL COMMISSION OF INQUIRY INTO COVID RESPONSE (PHASE 2: LESSONS LEARNED)

Provided 1 August 2025

Question 1: What was the scope of your role as the Associate Minister of Health in 2021-2022 and, in that capacity, what were your responsibilities in relation to the COVID-19 pandemic?

(a) How did your responsibilities change or evolve over time?

- 1 I entered Parliament in October 2020, and immediately became an Associate Minister of Health. My delegations were for all matters relating to public health, women's health, natural health products and rheumatic fever, health of older people, rainbow health, and children's health and working closely with, and playing a coordinating role among, the Minister and other Associate Ministers of Health on the COVID-19 response, under the leadership of the Minister for COVID-19 Response
- 2 I was also Minister for Seniors, Minister for Food Safety and Associate Minister of Research Science and Innovation.
- 3 I was appointed as Associate Minister for COVID-19 Response from February 2022. My responsibilities were for all matters relating to case investigation and contact tracing, oversight of testing, liaising with expert advisory groups including the COVID-19 Public Health Expert Advisory Group, and oversight of the development of a new variant strategy and any applicable resurgence plans.
- 4 In June 2022 I became Minister for COVID-19 Response.

Question 2: How did your background as an infection diseases doctor inform your work in 2021-2022?

- 5 I graduated from the University of Otago with a Bachelor of Medicine, Bachelor of Surgery conferred with distinction in 2004. In 2007 I completed a Master of Bioethics and Health Law, also conferred with distinction. My dissertation was on the ethics of human papillomavirus vaccination. I obtained a Diploma in Tropical Medicine and Hygiene from the Gorgas Memorial Institute of Tropical and Preventive medicine in Lima, Peru in 2010. In 2012 I became a Fellow of the Royal Australasian College of Physicians.
- 6 As a junior doctor I worked in hospitals in Wellington and Canberra. I undertook an infectious diseases fellowship at National University Singapore in 2011 and 2012 which included completing training on outbreak response with the World Health Organisation's (WHO's) Global Outbreak Alert and Response Network (GOARN) in Cambodia. My PhD was on the early clearance of *Mycobacterium tuberculosis*. For this work I undertook a large-scale field study of the household contacts of TB cases in Bandung, Indonesia, using contact tracing methodology.

- 7 I have over 39 scientific publications.
- 8 Immediately prior to entering Parliament, when the pandemic began, I was a consultant infectious diseases physician at Wellington Hospital and a Senior Lecturer at the University of Otago. I served on national level committees on vaccines (for Pharmac and the Ministry of Health) and chaired a tuberculosis expert group to update guidelines. I was also serving as a member of the Capital and Coast District Health Board (elected in 2019). I was asked by the Director General to conduct a rapid audit of contact tracing in April 2020.
- 9 The value of this medical and research experience meant that, once I was a member of Cabinet:
 - a I had a depth of knowledge of infectious diseases epidemiology and clinical care that allowed me to scrutinise advice and operational plans and evaluate emerging evidence.
 - b I was accustomed to managing the uncertainty of incomplete health information and / or data.
 - c I had a network of contacts in medicine, public health and epidemiology that I could and did use to seek advice or perspectives on the COVID response. This informed by decision to establish and commission advice from the Strategic COVID-19 Public Health Advisory Group (**SCPHAG**), initially chaired by Sir Professor David Skegg.

Question 3. Other than the Ministry of Health, what sources of information and advice did you rely on in making alert level decisions?

- 10 Alert level decisions were Cabinet decisions, meaning that Ministers took collective responsibility for the decisions. Where decisions were initially made by Ministers with the Power to Act, these decisions were ultimately confirmed by Cabinet.
- 11 As the Cabinet papers from the time show, decisions about alert levels were taken after consideration of a range of information that included or could include:
 - a Advice from Government agencies including the Ministry of Health, Treasury, the Ministry of Education, the Ministry of Business, Innovation and Employment (**MBIE**), the Ministry for Pacific Peoples (MPP), Te Puni Kōkiri, Te Arawhiti, Crown Law, the Ministry of Ethnic Communities, the Ministry for Primary Industries, the Ministry for Social Development, and the Department of the Prime Minister and Cabinet (DPMC);
 - b Disease intelligence including the items listed in response to question 5b below;

- c Advice from the COVID-19 Chief Executives Board, comprised of the CEs of DPMC, the Ministry of Health, the Ministry of Social Development, Treasury, MBIE, NZ Customs Service, the Ministry of Foreign Affairs and Trade (MFAT), the Ministry of Transport, the Ministry of Justice, Te Puni Kōkiri, Crown Law and the Public Service Commission;
 - d Consistency with the New Zealand Bill of Rights Act 1990, including right to life, freedom of movement, freedom of association, peaceful assembly and religious expression;
 - e Advice from the Strategic COVID-19 Public Health Advisory Group (chaired from March 2021 by Sir Professor David Skegg and from 26 August 2022 by Prof Nikki Turner);
 - f Feedback from the COVID-19 Continuous Review, Improvement and Advice Group (chaired by Sir Brian Roche); and
 - g Sentiment and behaviour research conducted regularly with the Research Agency.
 - h the Community panel chaired by Sarah Sparkes;
- 12 Before every Cabinet meeting, papers would be distributed to each government agency and each agency would in turn prepare notes for their Minister relating to the agenda items at the up-coming Cabinet meeting.
- 13 In addition, during outbreaks, every day, including weekends key Ministers would receive daily sitreps and then participate in a multi-agency briefing at 11 am. Officials from the Ministry of Health, MBIE, Treasury, Police, and MSD attended and at times Auckland DHBs CEOs or public health team, and Māori health coordinators would attend the calls. The calls canvassed disease intelligence, updates from key agencies, upcoming decisions, and messages for the 1pm briefing. These sitreps and briefings provided real time and more granular information than the cabinet papers on alert level decisions.
- 14 Further, each Cabinet Minister was also provided with a significant volume of information, which came from both official (such as by agencies through their own portfolios responsibilities), and unofficial (such as electorate and personal networks) channels. Ministers, including myself, brought this information, and their own backgrounds and experience to each Cabinet meeting. Personally, this included information from various sources, including (but not limited to):
- a members of the public including seniors; and
 - b medical professionals and academics from my professional network.
- 15 Decisions were made based on the best information available at the time and incorporating all relevant considerations across a range of sectors and interests.

Question 4: How did Cabinet weigh Ministry of Health advice against other advice when making alert decisions?

- 16 For context, it is important to recognise that decisions about alert levels were made by two different Cabinets. The first alert level framework and the early and most restrictive alert decisions were made by the Cabinet which existed between March 2020 and November 2020 (a period outside the scope of the terms of reference for the Royal Commission COVID-19 Lessons Learned | Te Tira Ārai Urutā (the **Royal Commission**)). This Cabinet was made up of Labour and New Zealand First Ministers, with Green Ministers outside of Cabinet. I was an academic and doctor and not an MP at the time.
- 17 The alert level framework, established by this first Cabinet, continued to be used by the Cabinet of the 53rd Parliament, which I was a part of.
- 18 This question suggests decision-makers were weighing public health outcomes against social and economic outcomes as distinct competing interests. This is incorrect, as I will detail below in response to question 5.
- 19 Although advice from the Ministry of Health was always going to be important given we were responding to a virus, Ministers did not consider Ministry of Health advice as overriding other perspectives and advice. All advice was able to be contested in and before Cabinet, and I frequently took this opportunity. We created mechanisms to promote contestable advice, for example the SCPHAG and the processes above for including community voice at the Cabinet table. We had robust internal debates.
- 20 A study of alert level decision papers does demonstrate some of the breadth of the advice received by Cabinet, but does not reflect all the advice Cabinet received, nor government activity to better understand the social and economic impacts of any given decision. These impacts would often be the subject of their own papers, drafted by different ministries and lead to decisions like providing the economic and social supports.

Questions 5(a): Lockdowns are an important measure for maintaining public health by reducing the risk of transmission of a virus. However, they come with a high economic and social cost. What did you learn in 2021 about how those interests can be balanced in a pandemic?

- 21 This question, like others provided to me, is based on the misconception that Cabinet was balancing health interests against all other interests. For most of the pandemic when elimination was feasible, the best economic and social outcomes were achieved by effective public health control. Eliminating disease transmission allowed New Zealand to have far fewer restrictions, and therefore minimal disruption to social and economic activity. That is what the Minister of Finance meant when he said the best economic response is a strong public health response.

- 22 Even when the elimination strategy was over, it was not a simple matter of balancing health against all other interests, as these interests were interdependent. I would caution against rendering complex decisions in an overly simplistic way.
- 23 As noted above, I was not a Cabinet Minister at the time the New Zealand Government put the country into the first lockdown in 2020. But prior to becoming an MP, as an academic, I studied New Zealand's COVID response. In September 2020, Professor Michael Baker and I published an article in the Medical Journal of Australia, on *New Zealand's COVID-19 elimination strategy*.¹ That article describes how New Zealand had entered the pandemic relying on an existing pandemic plan devised for managing influenza. This plan, based on mitigation not elimination, includes steps designed to slow the entry of the pandemic, prevent initial spread and then apply physical distancing measures progressively to flatten the curve and avoid overwhelming health services. Most Western countries, including North America, were using this approach at the time to manage COVID-19. However, it was performing poorly; health outcomes were catastrophic and economic activity was unable to occur.
- 24 By the end of February 2020 the evidence showed that COVID-19 was markedly different to influenza. The first WHO report from Wuhan showed COVID-19 had a longer incubation period and a lower rate of asymptomatic transmission. These characteristics allow easier interruption of chains of transmission that likely explain how the outbreak in Wuhan was contained. A significant lesson from the COVID-19 pandemic is that these simple epidemiological observations greatly influence the effectiveness of non-pharmacological public health interventions including lockdowns. The option of eliminating the virus and sustaining elimination through border controls was not envisaged in New Zealand's original pandemic plan but appeared increasingly feasible and advantageous.
- 25 Elimination is a concept well understood by infectious disease epidemiologists. It refers to the reduction of the incidence of a disease to zero in a defined geographical area. At the time I co-authored that report, I wrote –

The net economic consequences of an elimination strategy were uncertain and extremely difficult to estimate. An additional challenge was that both the pandemic and its response were likely to have a disproportionate impact on disadvantaged populations. While an elimination strategy would have huge economic and social costs, the alternatives (suppression and mitigation) would have almost certainly have been far more damaging because of the need to continue costly physical distancing measures until a vaccine or other intervention became available.

¹ The Medical Journal of Australia, 7 September 2020, *New Zealand's Covid-19 elimination strategy*
<https://www.mja.com.au/journal/2020/213/5/new-zealands-covid-19-elimination-strategy>

- 26 That view in that paper is still correct. New Zealand escaped the economic and social impacts of other countries because of the elimination strategy and ‘going hard and early’ with comparatively short lockdowns were a key feature of that strategy.
- 27 I am concerned that the question’s framing of lockdown decisions being about trading off health against other outcomes replicates the same errors that underpinned the influenza-based pandemic plan and disastrous responses in many other countries. It would be a shame if this error was reflected the commission’s report and could compromise effective action by future governments.
- 28 Having said the above, it is worth reflecting on the use of lockdowns during the Delta outbreak as elimination ceased to be feasible during this outbreak, and as a result the relationship between public health controls and health, economic and social outcomes changed.
- 29 The day before the Delta outbreak began we had announced Reconnecting New Zealand work programme and the vaccination programme was well underway. Our ‘exit plan’ was a highly vaccinated population, an end to lockdowns and reopened borders albeit with precautions.
- 30 Initially, it appeared elimination of the Delta outbreak was feasible. By the end of August 2021, we were advised R-value was less than one and the outbreak did appear to have peaked on 28 August 2021. However, the vaccination rate was still too low to move alert levels without significant health impacts. Low case numbers throughout September 2021 suggested elimination was still possible. In mid-September 2021 we were advised the outbreak was contained except for the ‘edge of one cluster’, and in late-September we received reports of a persistent tail to the outbreak.
- 31 As time progressed it became clear that the Delta variant’s characteristics made it harder to eliminate, and ongoing stringent lockdowns could not be sustained. For this reason, after a total of 28 days at Alert Level 4, Cabinet agreed to move Auckland to Alert Level 3 on 20 September and the subsequent Alert Level 3 ‘steps’ from 4 October, to help ease the pressure in Auckland. It is not a matter of other interests, but that the stringent lockdowns necessary for elimination are not feasible after a certain point.
- 32 Therefore there was a short period of time – October and November 2021 – where restrictions achieved public health benefits but these did not emphatically outweigh the costs as they had earlier in the pandemic. Throughout that time the government and the public knew that high vaccination rates, reopening borders and reduced restrictions were weeks away. The decisions that were taken do not reflect a lack of priority for economic and social benefits of reopening but uncertainty in the advice received at the time.

Question 5(b): What kind of information do decision makers need to be provided to make well-informed decisions?

- 33 We built a large amount of the infrastructure to support the gathering and synthesis of this information during the pandemic. Ideally, key elements of this will be developed and maintained in the interpandemic period, as much of it is required for routine communicable disease responses. In addition, investment in the expertise to synthesise this information and develop health advice and options based on it needs to be prioritised.
- 34 Looking forward, a comprehensive communicable disease intelligence system is needed. This includes:
- a International epidemiology and surveillance data;
 - b Domestic surveillance including case and contact numbers, and information relating to contacts underpinned by a reliable data system that also links to the clinical pathway for cases and contacts;
 - c Operational performance measures for elements of the response to test and monitor how and whether the steps being taken are effective and / or need to be adjusted, such as the performance measures I developed for contact tracing or measures of testing coverage;
 - d Genomic sequencing information, shared between countries;
 - e Wastewater or sentinel surveillance where relevant;
 - f Transmission and health impacts modelling;
 - g High quality data on the operational capacity and capability of existing infrastructure to manage (particularly the health system, but other departments as well);
 - h Animal health or environmental information where relevant to the pathogen; and
 - i Measurements of knowledge, attitude and behaviours with respect to the virus and the recommended precautions; and
 - j Measures of economic and social activity.²

² Some measures of economic and social activity were reported by government, but others were from third parties (such as traffic movements tracked by Google). I am not an expert in these but suspect because they were brought together in a novel way there is now scope for evaluation of what the most appropriate measures were.

- 35 Overall this information needs to be well synthesized in order to form the basis of advice. In particular the uncertainty of the information provided to decision makers, and its limitations should be reflected. There are numerous examples of this issue, but two are:
- a A surveillance system's sensitivity is higher when testing rates are high, compared to when they are low. This means when testing rates are low we can have less confidence that case numbers reflect the true number of people with the disease.
 - b Modelling is not concrete prediction - it is best used to explore how different scenarios are impacted by different interventions, but is only as good as its source data and assumptions.
- 36 Further, AI tools like those developed by BlueSpot could be a helpful adjunct to future pandemic responses.
- 37 New Zealand has one measure of psychological distress in the annual health survey, which, while helpful for long term service planning, is insufficient to inform action during an emergency. Better information on how hardship impacts the community that can be linked to interventions is needed.
- 38 As per my answers above, advice was, and will need to continue to be, supplemented with information drawn from established and effective networks, which includes:
- a Public sector and their links into the sectors that they regulate;
 - b Iwi and other Māori and Pasifika relationships with the Crown;
 - c Business community (across a wide range of sectors and scale); and
 - d Community outreach.

Question 6: At what point, if ever, did the social and economic harm caused by lockdown outweigh the public good that lockdowns created in terms of protection from Covid-19? Can that tipping point be identified?

- 39 The Royal Commission's Phase One report concluded that mostly we struck the balance right:³

Compared to other jurisdictions, Aotearoa New Zealand's COVID-19 response was effective at both protecting people from the health effects of the virus, and minimising the potential economic, social and wellbeing impacts of a global pandemic. That is not to say the response was perfect; it wasn't, and challenges emerged as the response wore on.

³ NZ Royal Commission COVID-19 Lessons Learned Te Tira Ārai Urutā, *Lessons from COVID-19 to prepare Aotearoa New Zealand for a future pandemic: Main report*, November 2024, page 11.

- 40 Our position throughout the pandemic was that a strong public health response was essential to a strong social and economic response. Our government sought to achieve the best outcome for our country, which as stated above was a complex decision making exercise which considered a wide range of health, social, economic, and legal factors, to name a few.
- 41 As stated in my answers above, I acknowledge that there were a number of challenges in the context of the COVID response, including:
- a the uncertainty inherent in the information we had (as outlined in my answer to question 5(b)); and
 - b our evolving knowledge of COVID-19, which complicated decision making.
- 42 Ultimately, the biggest challenge to any government seeking to minimise harms and maximise benefits is the complexity of weighing different costs and benefits against each other. There is no formula for determining whether an economic opportunity should be foregone to save a particular number of lives, nor for balancing the wide-ranging impacts of any decision on health, mental wellbeing, social cohesion and economic stability. None of the models I studied from New Zealand or elsewhere were suitable for that task. In our diverse country, people attach different values to the “public goods” of health, wealth, fairness and freedom. In a representative democracy, elected officials are given the responsibility of making these assessments. We approached this responsibility with the seriousness it required, and to the best of our ability with the information we had available to us at the time.
- 43 I acknowledge that lockdowns caused hardship for New Zealanders in multiple ways. But I cannot identify a point where the impacts were clearly disproportionate, as was suggested was the case in Melbourne’s public housing towers. Instead it is clear our diverse society has different views on the restrictions, which is unsurprising when health and social problems and economic opportunities are unequally distributed.

Question 7: Are there any decisions in relation to alert levels that, with the benefit of hindsight, you believe should have been made differently?

- 44 Every decision was made to the best of our ability, based on the information we had available at the time and informed by the time constraints necessary to respond to changing circumstances.
- 45 With the benefit of hindsight, and with more sophisticated information such as that identified in the Royal Commission’s Phase One report, it is possible to consider certain decisions should have been made differently. However, in situations requiring urgent action, decisions must be made based on what is known and available at that moment, which is what we did. Future decision-makers will face similar challenges of navigating uncertainty and making timely decisions.

Question 8: What have you learned about the impact of lockdowns, particularly the lockdown in Auckland from August to December 2021, that you did not know at the time?

- 46 There are two impacts I wish to raise – the psychological impact on New Zealanders generally (and the public health response required to address this), and the disproportionate impact on Māori and Pacific communities.
- 47 The pandemic caused psychological impacts that were unlike other natural disasters, such as the Canterbury earthquake. For most people these psychological impacts might best be considered widespread hardship, distress or trauma rather than a formal mental health condition like depression or anxiety. Recognising widespread hardship would steer towards more population level interventions like health promotion campaigns on *Getting through together*. This programme was initiated early in the pandemic but could have been modified as time went on as it would validate people’s experience and build community support and resilience.
- 48 The Delta outbreak disproportionately impacted Māori and Pacific communities in South Auckland. Lockdown restricted practices which are vitally important in these communities, such as the ability to share resources such as food, care or transport. This communal way of life was less likely to be addressed through policy decisions such as the wage subsidy. The availability of ‘no questions asked’ support was important for these communities’ adherence to public health measures, and often important as a starting point for building trust in order to carry out public health investigations.

Question 9: Did you consider lockdowns were or should be used to encourage members of the public to take up the vaccine?

- 49 This was not, and never would be, the reason for imposing lockdowns.

Question 10: What involvement, if any, did you have in the development of the CPF?

- 50 As the Minister who established and held the relationship with the SCPHAG, I commissioned advice on the draft CPF from the SCPHAG. The SCPHAG was, by that time, already recommending a change in approach, given that everyone aged 12 years or older had access to a vaccine that markedly reduced the risk of serious illness or death. In a letter dated 8 October 2021, the SCPHAG advocated for a new strategy of COVID minimisation and protection, but they recommended revision of elements of the draft CPF, some of which were incorporated, and also expressed concerns that transitioning to the CPF when vaccination rate was 86% risked a blow out in cases, as had recently been seen in New South Wales and Victoria.
- 51 I participated in Cabinet decisions on the establishment of the CPF. The development of the CPF was a decision made by Cabinet, meaning that Ministers took collective responsibility for the decision.

Question 11: Another option might have been to amend or alter the alert level system. What was the reasoning behind developing a new system rather than amending the existing one?

- 52 We were aware and advised that a new approach to managing the virus was needed because high levels of vaccination had been achieved and the risk to the population was lower. It is easy to forget that a proportion of the population remained fearful of COVID-19 and the alert level framework reinforced that, given it was part of an emergency response. The presentation of the alert levels, with black and yellow stripes, denoted the emergency mobilisation required early in the pandemic. We needed to move to a more routine sounding regimen that normalised the presence of the virus in the community.
- 53 There had also been several changes to the alert levels already.
- 54 The CPF also accounted for the vaccination status of individuals.

Question 12: What was the basis for and what were the reasons behind Cabinet adopting a target of 90% vaccination of the eligible population prior to the transition to CFP?

- 55 The 90% target was first referred to by the Director-General of Health in a media conference on 16 September 2021.⁴ The following day, the NZ Herald and NZME launched the '90% project', a campaign to encourage people to 'vaccinate Kiwis, save lives, and enjoy freedom.'⁵
- 56 Modelling data was presented to Cabinet on 27 September 2021 by Prof Shaun Hendy of Te Pūnaha Matatini, which supported the view that 90% was required to achieve an R-value of less than one. This was the modelling that the SCPHAG cited in their note that cautioned against adopting the CPF when vaccination rate was lower than 90%.
- 57 However it would be incorrect to represent the modelling as identifying 90% vaccination as a clear threshold above which outbreaks would stop, but below which reopening was unsafe. The results were of course probabilistic and more nuanced than that. The September 27 Cabinet paper stated, "at 90% eligible population coverage around one in 10 outbreaks would grow to more than 1,000 cases without domestic restrictions. At 70%, this would be greater than one in three outbreaks."
- 58 As I will expand on below, New Zealanders expected their political leaders to issue a clear target that they could work towards, and the more nuanced statistical reality would have not motivated enough people to get vaccinated.

⁴ <https://www.stuff.co.nz/nz-news/350521826/covid-19-health-chief-ashley-bloomfield-reveals-vaccine-rollout-target>

⁵ https://www.nzherald.co.nz/nz/covid-19-delta-outbreak-the-90-project-nz-herald-campaign-to-vaccinate-kiwis-save-lives-and-enjoy-freedom/XHDR6DFFVKQWC5CM6EDYXYGVW4/#google_vignette.

Question 13: On reflection and with the benefit of hindsight:

(a) What benefits do you think were derived from the adoption of a 90% target?

(b) What were the downsides?

(c) Do you have any views of whether or when vaccination targets should be tied to legal restrictions like lockdowns in the future?

- 59 People craved certainty during the uncertain times of the pandemic. There would have been no tolerance for us not stating a target. People needed ‘something to work towards’, or a point in time where they could anticipate ‘things going back to normal’. Of course the target was an estimate, and the information that informed it was constantly evolving.
- 60 Lifting the rate of vaccination, particularly in some communities, took time and required extraordinary levels of community engagement at grass roots level. The target was a useful rallying tool and it helped community workers drive up vaccination rates, using events like Super Saturday held on 16 October 2021. Without a target we simply would not have seen the level of vaccination that New Zealand achieved.
- 61 By its nature the target was based on an estimate of the level of coverage needed to reduce the risk of transmission of the virus. The estimate was derived in part from modelling, and in part from observations from overseas. There was no New Zealand sitting in a petri dish in which we could run a simulation of alternative targets.

Question 14: For the introduction of the vaccine pass and employer mandates, what modelling and policy advice were you given as to what would happen to the reproduction number of Covid-19 or rate and level of hospitalisation and illness without the introduction of these measures.

- 62 As per the Cabinet papers, the introduction of vaccine pass and employer mandates was initially proposed to Cabinet by the Minister for COVID-19 Response and the Minister for Workplace Relations and Safety. I participated in these decisions as a Cabinet Minister.
- 63 Although I did not submit these Cabinet papers, I do wish to raise the findings of the Royal Commission’s Phase One report. As stated in the report, there are two benefits of vaccination invoked to justify vaccine requirements - vaccination reduces transmission of COVID-19 from one person to another; and vaccination protects the vaccinated person from illness.⁶

⁶ At 8.5.1.

- 64 The Royal Commission's Phase One report concluded that:
- a Given the importance of keeping COVID-19 out of the country, there was a strong case in 2021 for requiring border workers to be vaccinated (in the same way that they were the first group to be prioritised in the vaccine rollout).
 - b With the Delta outbreak proving hard to contain, there was also a good case for mandating vaccination for those working with vulnerable people or in high-risk settings – including health, aged care and disability settings and prisons.
 - c It was reasonable for the government to introduce a simplified health and safety risk assessment tool in late 2021 that employers could use if they were intending to introduce workplace specific vaccination requirements as the country moved away from use of lockdowns and sought to find a way of 'living with' established COVID-19 transmission.
 - d It was sensible to introduce a vaccine pass system in December 2021 with the intention of reducing the risk of Delta 'superspreader' events and protecting vulnerable groups, while reducing reliance on more stringent public health and social measures.

Question 15: In March 2022 you submitted a paper to Cabinet seeking agreement to revoke the vaccine passport and some other vaccine mandate restrictions. What was your understanding in preparing to remove the passport and mandate restrictions of the likelihood of a more infectious and deadly variant arriving in New Zealand?

- 65 My understanding is that variants arise frequently due to the instability of the coronavirus's RNA genome. A partially effective vaccine is likely to drive the emergence of more transmissible variants that evade vaccine induced immunity, like omicron. A more deadly variant was always possible, and each mutation is a roll of the dice.
- 66 In the face of this uncertainty I thought the best preparedness approach was to outline multiple scenarios, the epidemiological characteristics, and identify key elements of the response that would be needed in each. As per the Cabinet paper of March 2022, my overall advice to Cabinet was to maintain a flexible approach – i.e. at the time I considered we should retain tools in our toolkit, such as vaccine passes, in case they needed to be reintroduced.
- 67 The result was the variant plan announced in June 2022.

Question 16: For pandemic readiness purposes:

- (a) How could we better manage the backlog of delayed screening tests and medical procedures exacerbated by fear of infection, lockdowns and other restrictions on access to health services due to being unvaccinated?**

- 68 I assume the screening tests referred to are mammography, bowel cancer screening and cervical screening and the procedures are planned care (so called 'electives').
- 69 Firstly, the assessment that these are the most deferrable activity in the health system is correct and they did need to stop at times. It is fair to ask if restarting occurred quickly enough and consistently enough across regions.
- 70 Te Aho o Te Kahu / the Cancer Control Agency ran a good system of convening clinicians and cajoling them into returning to treating people, and that worked well. A report published in the Lancet Regional Health - Western Pacific, noted that we had excellent cancer outcomes during pandemic.⁷ It is worth remembering that health workers felt very scared and exposed at that time. Outside cancer care, there wasn't a national forum in which these issues could be worked through collectively and so individual departments may have made idiosyncratic decisions. As Minister of Health I subsequently established national speciality based networks in Health New Zealand that could take the same function te Aho o Te Kahu held for other services in the future.
- 71 We were frequently advised that infection control processes were a barrier to returning to productivity. Good infection control practitioners create a safe but enabling environment that lessens the burden on practitioners and therefore helps maintain productivity. This means strengthening infection control leadership and standing within Health New Zealand, and explicitly giving those groups a mandate to focus on productivity in their guidance and in the procurement of PPE. In addition, because infection control is primarily a function of the physical environment, the safe design of health facilities also needs to be priorities.

(b) Would initiatives like mobile (well ventilated) diagnostic services, extended resort to telehealth and / or community diagnostic centres be in the mix?

- 72 Yes. It is extremely challenging to invest in pandemic preparedness when there are constant challenges to afford day-to-day priorities in the health system. Therefore solutions that address current concerns as well as improving pandemic preparedness need to be identified and championed.
- 73 The landscape for telehealth is very different now than it was pre-pandemic (in part due to the pandemic) but there would still need to be a rapid change in the operating model for most of health care and it is worth thinking about how that is achieved, particularly for those with complex medical or social needs or disabilities. Most community health care providers are small owner-operated businesses, without access to or incentive to acquire the technology platforms to facilitate this. It would not be desirable for a pandemic to force patients to leave the providers who know them well in favour of telehealth platforms.

⁷ Available here: <https://www.sciencedirect.com/science/article/pii/S266660652100081X>.

- 74 There are further initiatives to consider:
- a Wearable technology with AI monitoring and digital support for self-management of other conditions could also help unload in-person services. Again, these initiatives encounter challenges for people with complex needs and risk creating an inequitable situation unless other mitigations are in place.
 - b As I elaborate below, the laboratory network is too centralised, both for a pandemic and for routine healthcare.
 - c Generally community health services are not government-owned and the Commission needs to consider how they would give effect to any effort to raise design standards to make health facilities safer, without putting a lot of costs onto marginally sustainable small businesses. This is relevant to both pandemics and the high burden of respiratory infections our population endures between pandemics.
 - d There are multiple barriers to deploying diagnostics in the community which I will elaborate in my answer to the next question.
 - e It is not possible to use engineering or PPE to make an indoor environment as safe as an outdoor environment. Consider how outdoor environments can maximise comfort and privacy for when they have to be used.
- 75 I note this question does not address digital / wearable solutions for quarantine and isolation. We explored multiple options for this during the pandemic to provide an alternative to MIQ. None of the solutions available at the time were suitable, but this is an area of rapid technological improvement and should be kept under review.

The Terms of Reference direct us to examine in detail “the procurement, development, and distribution of testing and tracing technologies” [section 4(1)]. As the Minister for COVID-19 Response, you were closely involved in decisions about the use of various testing technologies and briefed at multiple points by the Ministry of Health about them. We are interested in your perspectives about how responsive the Ministry’s regulatory system was, and potential lessons for future about how and when to deploy different testing technologies.

- 76 It is my strong view that government procurement faces particular, but predictable, challenges in a pandemic and is an under-recognised area of pandemic preparedness. Through my studies in vaccine ethics I knew about the dynamics around pandemic vaccines where short supply and desperation can lead to very high prices and inequitable outcomes. I also learned when training with the WHO GOARN that outbreak responders get overwhelmed with products, proposals and other offers of ‘help’. That was certainly my experience when, as an academic, I proposed New Zealand adopt digital contact tracing in April 2020 – I must have had a hundred unsolicited emails in the following days proposing various solutions. Among the hundred, only one or two might have been worth exploring further.

- 77 As a Minister, I learned that the Ministry of Health faced this pressure a thousand times over. In our small country, people simply email the Ministry or ‘their friend who works there’ and an unbelievable number of people directly email the Director-General. I imagine those with genuinely useful proposals became frustrated because their initial approach to government was unlikely to receive the consideration they thought it deserved. While there can be minor improvements in how this type of correspondence is managed, I would question whether creating a system to address unsolicited messages in detail as a priority is an effective use of officials’ time, given the other pressing work officials and experts have to do. I consider the best action would be for the Ministry should proactively and regularly update both Ministers and the industry on what its needs are and channel proposals into formats that they can readily assess.
- 78 To procure health technology well for a pandemic response, government needs to understand its current and future public health strategy. This is extremely challenging as there are unknowns related to both the pathogen and the development of technology. Nonetheless an effort should be made to specify what we know we need, and what we think we might need. This needs to be under frequent review in light of technological developments. To address the more uncertain elements government needs to place multiple ‘bets’, as we did with advance purchase agreements for four vaccines under development.
- 79 The Covid Innovation Acceleration Fund was another effort to support the development of products that could be useful in the response. The “feedback loop” between government-supported research and assessment of procurement needs should be better developed, i.e. government should be able to learn from the research it supports and adjust its procurement accordingly. I would not go as far as to say that government backed projects should automatically be purchased.
- 80 The Royal Commission will hear from businesses that feel aggrieved about contracts they didn’t get or were slow to get. Conversely, those that received contracts for products of limited value, or who made excessive profits are unlikely to submit. Pandemics create situations where the risk of profiteering are unusually high. Vendors can promote their products to a desperate public via media who lack the technical expertise to identify false or exaggerated claims. As a minister with technical expertise I was sometimes on the receiving end of these representations and saw examples of both blinkered and unresponsive officials and vendors making unreasonable claims. For example, a proposal for a proximity card was explored and progressed (at an opportunity cost of directing resources to the COVID-19 response). After some further assessment, it was decided that the costs of implementing the proximity card outweighed any benefits.
- 81 The Royal Commission could make a helpful contribution by directing the development of pandemic procurement policies and consultation with business on these prior to the next pandemic. A robust process is much more likely to support the responsible spending of public funds than frustrated vendors appealing to the public and the process becoming politicised.

Question 17: In relying heavily on the nasopharyngeal PCR test for much of the pandemic response, New Zealand effectively faced a trade-off between accuracy, access and speed (since testing capacity was limited and turnaround times lagged during outbreaks). How should governments think about this trade-off in future?

- 82 Testing technologies should be procured with the current and future public health strategy in mind. PCR tests were the only available tests sensitive enough to support the maintenance of an elimination strategy. To use lower sensitivity tests too early would have undermined the elimination strategy. In addition, PCR tests performed in accredited laboratories were automatically uploaded into the NCTS, enabling public health workers to follow up the case to assist with isolation and start contact tracing. This highly reliable system is crucial for reliable intelligence about notifiable diseases.
- 83 PCR tests do take longer than other options, but they don't need to take as long as they did. A 24-hour turnaround time was the result of the highly centralised laboratory network that performs most PCR testing in New Zealand. Options like GeneXpert combine the sensitivity of PCR with accessibility at the point of care. They do need to be used by trained staff (but not technicians) and can only process small batches. If I recall correctly their use was constrained by global reagent shortages. Nonetheless they are exceptionally useful for identifying the start of an outbreak: one sample from a member of a sick family in Hawera could be processed in 30 minutes rather than a six-hour trip to the nearest laboratory. GeneXpert was available from May 2020 and was used. There is a need for a diversity of testing platforms including some that are high sensitivity, widely disseminated, user friendly and linked to public health databases.
- 84 The latter point is worth further consideration. The move to self testing with RATS and other options necessitated the development of a mechanism for users to upload their own result. Clearly, this was less reliable than the automated method and could be thought of as yet another reduction in the sensitivity of the testing system as a whole and another reason why these were unsuitable during the elimination strategy. Theoretically technology could be developed that automates the identification of the patient and the reporting of their test result.
- 85 Disseminating testing infrastructure and improving the reporting of self-testing are needed to improve the experience of care in New Zealand today, and are hard to achieve during a pandemic.
- 86 Existing providers will raise concerns about the quality assurance and results management in those settings, but those concerns can be addressed through training or technology. New Zealand's highly centralised approach to laboratories is a barrier to care for non-pandemic conditions and the regulatory system reinforces that.

Question 18: How satisfied were you with the Ministry of Health’s approach to assessing and introducing new testing technologies? Please explain your answer, and identify any potential improvements that could be made in the future

- 87 There were elements that I was highly satisfied with, particularly the development of whole genome sequencing and wastewater testing. These tests were of high public health utility. The Ministry and ESR (now PHF Science) developed these tests rapidly and incorporated them into the disease intelligence systems well. The new tests became well understood and were effectively incorporated into advice for officials and Ministers. Both platforms are now used effectively on other issues of public health concern. I suspect success here related to established expertise in ESR and a long-standing relationship between ESR and the Ministry of Health.
- 88 However I did have concerns about the process with respect to some other tests, which was partly why I commissioned Professor David Murdoch to undertake a review of testing. Prof Murdoch’s review understandably had an operation focus given when it was written. I can identify four structural issues which need to be addressed for things to be better in the future:
- a There was, and still is, no legislation for a regulator to approve the use of a diagnostic test in New Zealand. This meant the Ministry was had to start regulating products that it did not ordinarily have that much involvement with. The regulatory system we have is for accrediting laboratories that must validate the tests they use. This meant any approvals were slowed down by the need for officials to develop a new process for the pandemic for the use of tests outside accredited laboratories, including RATS. This delay was frustrating for everyone. The Therapeutic Products Act sought to regulate diagnostics and stand up a regulator for them, but this has been repealed by the current government. We desperately need a regulatory framework for diagnostic tests that includes an expedited pathway in public health emergencies.
 - b The role of public health laboratories had not been valued pre-pandemic. Most of the expertise on testing lay in the mostly private laboratories that provide routine diagnostic services. The Ministry was dependant on pathologists from these laboratories for expert input into technical decisions. I don’t doubt their advice was well motivated and given in the national interest, but they would have naturally had more confidence in the tools they used in their own labs, than products from other providers. This could have exacerbated some of the dynamics with vendors mentioned above with the Ministry potentially being the meat in the sandwich. PHF Science needs to have a strong role as government’s expert advisor on diagnostics for communicable disease control, independent of commercial interests.
 - c The response had no real choice other than to use the existing laboratory network for the bulk of testing. So greater use of point of care testing and more disseminated laboratory testing should be developed outside of pandemics if we expect a different outcome.

- 89 Greater clarity on roles and responsibilities is needed in relation to adoption of innovative technologies including diagnostics. I mentioned above the need for the government to articulate its current and future strategy, and therefore the technology that will need to procure and regulate. These are the roles the government must do, and it requires strategic thinking a team that is not part of the day-to-day response and is able to think about the medium term. Government also supported some New Zealand scientists and innovators to develop products that might be useful, and supported piloting of imported products. This is less clearly government's role, even outside of the pandemic period. There is a risk that taking on these roles competes with key elements of the response.

Question 19: Do you think New Zealand could have achieved different outcomes in terms of pandemic management if other testing options (eg, saliva-based PCR, rapid antigen tests, loop-mediated isothermal amplification) had been introduced, or introduced earlier? Please explain your answer.

- 90 I take 'different outcomes' to mean a significant difference in deaths or hospitalisations, or duration of lockdown.
- 91 As noted above, self-administered tests pose a risk to the elimination strategy, and could have increased deaths, hospitalisations and lockdowns if introduced earlier. However, as also noted above there could be technological solutions to mitigate that in future.
- 92 If we consider the Delta outbreak in Auckland, the realistic option for a significantly different outcome would have been if we were able to extinguish the low level of transmission occurring in September 2021. In my opinion testing technology was not the main barrier to case and contact identification during that time, it was trust in authorities among the impacted population who included people in emergency housing and gang networks.
- 93 I don't believe alternative testing technologies would have enabled significantly better case identification, isolation and contact tracing to the extent that they would have allowed the lifting of restrictions in the substantially earlier during the Auckland Delta outbreak. There would have been some benefits in terms of increased convenience, and some downsides due to lower sensitivity or poorer reporting of self-administered tests for the reasons stated above.
- 94 Saliva testing was in use since July 2021. The "value add" is primarily the comfort for people being tested frequently, like MIQ staff. This is a good outcome to pursue to show governments take the comfort of those working on the frontline of the response seriously. For it to have a material impact on pandemic outcomes, we would have had to have had a case of an MIQ worker evading testing when infected and transmission occurring. I am not aware of such a case.

95 Minister Hipkins and I sought pathways for the approval and piloting of RAT and LAMP tests throughout 2021 and early 2022. We were aware that these would be important in outbreaks that followed the vaccine roll out and transition to the CPF. Having these tests available earlier would be more convenient and mean more people would have greater control over their own affairs. As evident from the signed briefings the Royal Commission has access to, we shared the frustrations of some vendors with an unwieldy and frustrating approvals process. However, this must be distinguished from the decision not to use self-tests during the period the elimination strategy was in place.

Question 20: Sir Ashley Bloomfield, in an interview with Paddy Gower in March 2025, said that leaders should have listened more. Do you share his view?

- 96 We worked relentlessly for months and months and a lot of our work was listening. I was a new MP and observed how more-experienced colleagues bring the concerns of their vast array of community contacts into decisions. I was often surprised by the range of people who reached out directly. Prior to becoming an MP I never imagined mayors or business leaders would be calling me directly at night or the weekend to discuss their concerns during a long evolving emergency. All Ministers were being approached, and engaging with community representatives and contacts all the time. For example, when the public health situation permitted, I conducted public meetings as Minister for Seniors where members of the public voiced their concerns.
- 97 As stated throughout my answers, we put in place a wide range of mechanisms used for listening to the perspectives of various communities and expert advisers, including:
- a There were ever developing channels established to hear from Māori, Pasifika, people with disabilities and other minority groups;
 - b There was an Independent Community Panel chaired by Sarah Sparks and facilitated by DPMC;
 - c There were sources of alternative advice including the Strategic COVID-19 Public Health Advisory Group, the Independent Continuous Review, Improvement and Advice Group, and others;
 - d Sector networks were often convened by agencies, including rural communities and remote communities; and
 - e Traditional media and social media were providing 24/7 coverage which was constantly monitored and responded to.
- 98 I was aware at the time that responsible governance involved listening, as well as ultimately reaching decisions that would not be able to make everyone happy.

Question 21: Looking back over the 2021-2022 period, what went right, from your perspective? What could have been done better?

- 99 It is very easy, five years on, to forget the intensity and uncertainty of the pandemic as it reached New Zealand. We had the advantage of being able to watch the rest of the world being struck down by the virus, and those images and the information being shared by global health experts and by governments was sobering.
- 100 New Zealand escaped the worst of COVID-19 and that was not because of good luck. We had the lowest mortality in the world for the first two years of the pandemic and life expectancy increased. We also had the lowest stringency of lock downs / fewer lock down days. All of that was the result of being prepared to listen to experts, including epidemiologists, and careful management.
- 101 What went well?
- a A diversity of voices communicated health and science messages, including many from outside of government.
 - b Parliamentary processes were modified to create greater opportunities for the opposition to interrogate the response, such as the epidemic response committee and ministerial statements. Orders made urgently were reviewed by the regulations review committee, again chaired by the opposition.
 - c Much needed public health technology was developed and deployed at speed. Whole Genome Sequencing technology was developed in public health laboratories.
 - d The digitisation of border processes.
 - e We oversaw a massive increase in the number of negative pressure rooms in hospitals.
 - f The whole country's knowledge of basic hygiene improved, a measure that will have long lasting benefits with respect to transmission of a variety of respiratory pathogens.
 - g Operational arrangements changed overnight in the health system. For example, general practice seeing people outdoors or via telehealth and pharmacists delivering medications to many patients at home.
 - h Massive technological improvements were delivered at pace and with high quality, for example the COVID contact tracing app and vaccine app. Public health is traditionally under-invested in but for the first time public health was leading the rest of the health system on digital health.
 - i We strengthened capabilities for vaccine development and manufacture in New Zealand.

- j Scientific experts suspended their regular work to volunteer their expertise to help their community.
 - k Transparent and accurate reporting of vaccine harms, particularly myocarditis deaths.
 - l Used innovative ways of getting antivirals out to people e.g. direct from pharmacy.
 - m Community outreach like mobile vaccination units that continue to be used today for other health initiatives.
 - n We gave recognition to essential workers.
 - o We doubled sick leave entitlement to help limit the spread of the virus and protect incomes.
 - p We protected businesses through the worst of the lockdowns with subsidies and support. The projections that unemployment would reach as high as 10% were avoided and we continued to export food around the world and maintain export earnings.
 - q We introduced a range of protections for vulnerable families including a rent freeze, mortgage deferrals and eviction protections.
 - r We delivered hundreds of thousands of home learning packs to children at home and we established a learning from home TV channel.
 - s The Prime Minister's communication of complex and difficult decisions was excellent.
- 102 I was proud of officials and how much they sacrificed to run the response. Their contribution was often only seen by Ministers, but it was immense.
- 103 What could have been done better? The Royal Commission's Phase One report identified a number of valuable recommendations. Implementing those without delay, and taking into consideration any additional information I've shared in response to the questions as above, would strengthen New Zealand's preparedness for any future pandemic.

Question 22: Overall, what do you think New Zealand needs to improve or do differently to ensure the health system and leaders are prepared for the next pandemic?

- 104 A strong preparedness approach will give decision makers a better set of options.
- 105 The health system remains vulnerable and recent changes, including the repeal of the Therapeutics Products Act, mean it will be just as difficult to approve the next vaccine or diagnostic tools as it was in 2021.

- 106 The health system capacity and capability we build today determine the options we have in the next pandemic. This includes hospital beds, ICUs and ventilators as well as trained staff. We are yet to see that investment. Recent debates over maternity beds at Wellington Hospital show the capacity issue is worse than ever.
- 107 Equally, our engagement with the community (and with Māori and Pasifika especially) was the result of strong networks built over time. Now those relationships have become strained, so working collaboratively and cooperatively to roll out something like another vaccine programme or public health campaign would be much harder.
- 108 Our health system and our pandemic response had strengths and weaknesses. Our communicable disease control experts should be working together and with international partners in peace time to develop and exchange best practice.
- 109 The current Government needs to be encouraged to implement the recommendations from the Royal Commission's Phase One report without delay.