Please note, some numbers within this document are indicative and should be considered point in time estimates. They are refined on an ongoing basis following Cabinet decisions.

In Confidence

Office of the Minister for COVID-19 Response

Office of the Minister of Health

Offices of the Associate Ministers of Health

Cabinet

COVID-19 Vaccine and Immunisation Programme – Sequencing Framework Update

Proposal

1 This paper provides an update on preparations to implement the COVID-19 Immunisation Sequencing Framework, which is required because we currently have constrained COVID-19 vaccine supply. This paper explains how the Tiers within the Sequencing Framework are defined, how these can be updated to strengthen our commitment to Te Tiriti o Waitangi and equity and seeks direction on the implementation of Tier 3.

2 The decisions you make on this paper will provide greater certainty about who, when and why people will be able be vaccinated as part of the COVID-19 Immunisation Programme (the Programme). These decisions can then be clearly communicated to the public.

Relation to government priorities

3 New Zealand's ability to recover from the COVID-19 pandemic requires obtaining safe and effective vaccines to implement our preferred immunisation programme at the earliest possible time. This paper relates to the Sequencing Framework which will guide the use of COVID-19 vaccines when supplies are limited. We will continue to pursue the COVID-19 Elimination Strategy, in order to ensure that everyone continues to be protected as the COVID-19 Immunisation Programme is rolled out.

Executive Summary

4 New Zealand has secured a portfolio of COVID-19 vaccines for 14.91 million courses through four Advance Purchase Arrangements (APAs) [CAB-20-MIN-0508 refers]. While sufficient quantities of vaccines have been purchased, supplies of COVID-19 vaccines available for use are currently constrained, and are likely to continue to be constrained for some time, depending on global supply and demand. This means that the vaccine volumes we have purchased will be delivered over an extended time period (rather than being delivered all at once), so the Programme will need to:

4.1 sequence access to vaccines in accordance with the Sequencing Framework;

4.2 work with COVID-19 vaccine suppliers to build certainty about the delivery to New Zealand; and

4.3 manage vaccine supply in a way that supports the success of the Programme (e.g. the public and providers have sound expectations and plans, and our supplies of consumables line up with expected vaccine delivery schedules).

5 The Programme is underpinned by the principles of equity, wellbeing and legacy while upholding and honouring Te Tiriti o Waitangi. To achieve equitable outcomes, these principles and aspirations are at the centre of every part of the Programme.

6 Māori and Pacific peoples face persistent and pervasive health inequities. Within this, we know that existing immunisation programmes (e.g. childhood immunisations and influenza) have not always delivered equitable outcomes, particularly for Māori and Pacific peoples.

7 Evaluations of recent immunisation programmes have shown that a tailored approach, early engagement and active participation are key to success. The Programme is proactively adopting these approaches in its planning and recognises that responding to Māori and Pacific inequities will require a persistent and comprehensive approach.

8 The Sequencing Framework guides use of the vaccine where supply is limited. The purpose of the Sequencing Framework is to ensure the right people are vaccinated at the right time with the right vaccine while upholding and honouring Te Tiriti o Waitangi.

9 This paper provides operational detail on the Sequencing Framework to ensure there is a consistent understanding of how it will work in practice. Officials also propose updates to the Sequencing Framework to respond to feedback, provide for equitable outcomes and ensure there are consistent messages about where people fit in. These decisions will then inform detailed communications collateral.

10 We propose to amend the Sequencing Framework to expand Tier 2 of the Sequencing Framework from a focus on just aged-residential care staff and residents, to include staff and residents of all long-term residential settings where there is a risk of increased transmission (due to the nature of the setting) and people are at increased risk of severe outcomes if they contract COVID-19.

11 We also propose to take an innovative approach to the way the Sequencing Framework will apply for Māori and Pacific people, to respond to their increased risk of exposure and harms from COVID-19 and the barriers to immunisation.

12 We recommend the parallel allocation of COVID-19 vaccines to Māori and Pacific providers from Tier 2 to help enable equitable access to vaccines. These providers can work effectively with their communities to reach people who are at high risk of severe outcomes but may not be in a residential care setting. This parallel allocation of vaccines to Māori and Pacific providers would also be implemented for Tier 3 and the national roll-out stages of the Programme.

13 To further support equitable outcomes, we also recommend the application of a risk-adjusted age factor of 15 years for Māori and Pacific people to respond to the

increased risk of exposure and harms from COVID-19 and that whānau-centred approaches are incorporated into the implementation of Tier 3. These approaches are being explicitly adopted as not all Māori and Pacific people access Māori and Pacific providers for their care. Whānau-centred approaches will likely be required to achieve equitable outcomes for refugees and other ethnic groups.

14 Tier 3 of the Sequencing Framework is estimated to include approximately 1.8 million people (depending on the decisions Cabinet makes on Tier 2) and we are unlikely to have enough vaccine to vaccinate everyone in this Tier at the same time. The roll-out of Tier 3 could be phased either nationally or regionally. We recommend a regional, individual risk-based approach to strike the best balance of managing the risks by protecting our most at-risk populations closest to the border early in the Programme.

15 The table below summarises how the proposed adjustments to the Sequencing Framework have altered the size of the population cohorts and the likely timing for the different phases.

Indicative information on the size, focus, delivery models and timing for groups under the Sequencing Framework (NB: numbers may not always round due to rounding)							
Phase		**Objective**	**9 Feb 2021 Cohort Size**	**New Cohort size (indicative estimate only)**	**Focus[1]**	**Approach**	**Indicative timing**
	Tier 1	Protect the border	~50,000	~50,000[2]	Border, MIQ workers (Tier 1a)	Delivery through workplaces	**IN PROGRESS**
					Household contacts	Community pop ups	
	Tier 2	Protect high risk workers & at-risk people living in high risk locations:					
	Tier 2 (a)	Frontline (non-border) health workers potentially exposed to COVID-19 whilst providing care.	~212,625 (consultation with DHBs updated this estimate to 299,000)	~57,000	High risk frontline workforces	Delivery through workplaces	Q1 – Q2 2021

[1] Under low/no transmission scenario,Tier 1 includes Border/MIQ workforces and their household contacts, Tier two includes high risk workforces, and people at highest risk of transmission and severe health outcomes in the community, and Tier 3 includes people at risk of serious illness and the workforces supporting then. See Appendix One for further detail.

[2] Subject to change depending on your decisions on which workers are covered by the COVID-19 Public Health Response (Required Testing) Order 2020.

	Tier 2 (b)	Frontline healthcare workers who may expose more vulnerable people to COVID-19 AND Residents of long-term residential care settings where people are at increased risk of severe outcomes if they contract COVID-19		~290,000 (including approximately 66,000 residents)	People working directly with vulnerable groups. People living in long term residential settings[3] Māori and Pacific people who may not live in formal residential care settings that are at risk of severe outcomes	Delivery through workplaces and long-term Residential settings Community based delivery models	
	Tier 2(c)	Workforces critical for New Zealand's safety and security		~33,000		Delivery through workplaces	
Scaling Up	Tier 3	Ramp up	~1,500,000	~1,800,000	Protect the people most at risk of serious illness and the workforces supporting them	Phased regional delivery approach through workplaces and community pop ups and outreach services	Q2 – Q3 2021
Full Scale Delivery	Open access		~3,900,000	~1,900,000 (16+ only, unless clinical trials currently underway provide evidence to support lowering this age threshold)	General population (Limited to 16 years and over)	Delivery through workplaces, community pop ups, GP clinics, Pharmacies, and DHB Facilities	Q3 2021 onwards

16 The Programme communications are well underway and are focussed on supporting the successful implementation of the Programme for Tier 1 with a media event on 20

[3] Where a high proportion of residents face severe outcomes if they contract COVID-19.

February 2021 marking the start of the Programme. Your decisions on this paper will then be incorporated into updated and new communications material for the Health and Unite platforms.

Background

New Zealand has secured a portfolio of COVID-19 vaccines

17 New Zealand has secured a portfolio of COVID-19 vaccines for 14.91 million courses through four APAs [CAB-20-MIN-0508 refers]. This means that, over time, we expect there to be enough COVID-19 vaccines for everyone in New Zealand. While, sufficient quantities of vaccines have been purchased, supplies of COVID-19 vaccines available are currently constrained, and these constraints are likely to continue to for some time, depending on global supply and demand. This means that the Programme will need to:

17.1 sequence access to vaccines in accordance with the Sequencing Framework;

17.2 work with vaccine suppliers to build certainty about the delivery to New Zealand; and

17.3 manage vaccine supply in a way that supports the success of the Programme (e.g. the public and providers have sound expectations and plans).

18 **Appendix One** includes a summary of the indicative roll out plan, based on estimated delivery schedules. This is subject to ongoing refinement, but indicates that a rollout to Tier 2 can be expected to commence in quarter two, and a wider national rollout could be expected to commence in quarter three 2021.

19 It is important to note that we have certainty of delivery for the first quarter vaccine delivery, there is uncertainty of future delivery schedules. Variations in vaccine volumes and timelines for delivery will ultimately impact both the speed at which we can vaccinate the New Zealand population.

20 s 9(2)(f)(iv) [redacted]

21

The COVID-19 Immunisation Programme is underpinned by equity, wellbeing and legacy while upholding Te Tiriti

22 The Programme is underpinned by the principles of equity, wellbeing and legacy while upholding and honouring Te Tiriti o Waitangi. Every part of the Programme has these principles and aspirations at the centre. Examples of how the Programme is being designed to achieve equitable uptake of COVID-19 vaccines by Māori are attached at **Appendix Two**. The table below outlines what these principles mean for the Sequencing Framework:

Overarching principles		COVID-19 Immunisation Strategy principles	Implications for Sequencing
Uphold and honour Te Tiriti o Waitangi	Equity	Equity	Promote equitable outcomes particularly for Māori, Pacific peoples and disabled people.
		Equal concern	Over time all eligible people will have access to the vaccine.
	Wellbeing	Minimise the health, social, economic, cultural harm of COVID-19	Reduce infection, transmission, morbidity, mortality, and social, economic and cultural harms.
		Regional responsibility	Reduce harm to the Pacific; promote the Pacific's ability to recover.
	Legacy	Value	Cost effectiveness; support recovery.
		Legitimacy	Act in the best interests of New Zealanders, promote trust in immunisation.

23 We do not have reliable ethnicity data across all tiers of the Sequencing Framework. However, if we protect the people who are most likely to contract COVID-19 then we help to protect the community from the harms of COVID-19, including widespread community transmission. We know that in a widespread community transmission scenario, the socioeconomic and health related harms are felt disproportionately by Māori and Pacific people.

24 Māori and Pacific people face persistent and pervasive health inequities. Within this we know that existing immunisation programmes (e.g. childhood immunisations and influenza etc) have struggled to deliver equitable outcomes, particularly for Māori and Pacific peoples. Evaluations of recent immunisation programmes have shown that a tailored approach, early engagement and active participation are key mechanisms to ensure success. The Programme is proactively adopting these approaches in its planning and recognises that responding to Māori and Pacific inequities will require a persistent and pervasive approach.

The Sequencing Framework that will be used when vaccine supplies are limited, promotes equity, wellbeing and legacy, and upholds and honours Te Tiriti o Waitangi

25 COVID-19 vaccine supply will be constrained initially, so Cabinet has approved a Sequencing Framework that will apply when vaccine supplies are limited [CAB-21-MIN-0011 refers]. The purpose of the Sequencing Framework is to ensure the right people are vaccinated at the right time with the right vaccine while upholding and honouring Te Tiriti o Waitangi. The principles of Te Tiriti that must guide the health

system are articulated by the Waitangi Tribunal as partnership, tino rangatiratanga, equity, active protection, and options.

26 The Sequencing Framework is also underpinned by principles of equity, wellbeing and legacy. This includes actively promoting equitable outcomes for Māori, Pacific peoples and disabled people.

27 The Sequencing Framework has been developed to respond to three different epidemiological scenarios (low/no community transmission; some community transmission; or widespread transmission). A copy of the Sequencing Framework agreed by Cabinet is attached at **Appendix Three**.

28 In a low or no community transmission scenario, our first objective is to protect people most at risk of contracting the virus and potentially prevent transmission. Using vaccines to keep COVID-19 out of communities is the most effective way of promoting wellbeing and preventing current inequities from worsening. At the same time, we will continue to maintain strong border and public health settings as part of our Elimination Strategy, in order to ensure that everyone continues to be protected as the COVID-19 Immunisation Programme is rolled out.

29 In February 2021, Cabinet was also informed that officials were actively assessing evidence on groups at higher risk of serious illness and hospitalisation from COVID-19, particularly the Māori and Pacific populations [CAB-21-MIN-0011 refers]. This paper considers the outcomes of that review.

As we prepare to implement the Programme we have established clear definitions of who fits in Tiers 1 and 2 of the Sequencing Framework

30 COVID-19 immunisation began on 20 February 2021. Current preparations for the Programme are based on a low or no community transmission scenario. Officials continue to monitor the current COVID-19 cases in the community closely to ensure they are well prepared, should the situation change.

Officials have received feedback on the Sequencing Framework about how to increase wellbeing and equitable outcomes

31 As officials prepare to implement the Programme, the Ministry of Health has engaged with DHBs, the IIAG, government departments, and other stakeholders on the Sequencing Framework. Some of this feedback has indicated that refinements to Tiers 2 and 3 are needed to ensure the Sequencing Framework delivers equitable outcomes. Key changes requested include to:

31.1 expand Tier 2 of the Sequencing Framework from a focus on just aged-residential care, to include all staff and residents at all long-term residential settings. This is because there is an increased risk of transmission (because of the nature of the setting with people being in sustained close proximity to others) and people are at increased risk of severe outcomes if they contract COVID-19 (previously, this was limited to only aged-residential care settings); and

31.2 take an innovative approach to the way the Sequencing Framework will apply for Māori and Pacific people, to respond to their increased risk of exposure and harms from COVID-19 and the barriers to immunisation.

32 The Ministry has also received correspondence from different industries and employers seeking clarification of how they fit within the Sequencing Framework. When the Ministry receives these queries it assesses: the genuine risk to these groups in a low or no community transmission scenario, and whether they fit the intent and threshold of Tiers 1, 2 or 3. It is important not to divert the currently scarce vaccine resource away from people who would benefit most from it.[4]

33 **Appendix Four** provides details of the current definitions for Tiers 1 and 2 of the Sequencing Framework under a low or no community transmission scenario.

Tier 1 is tightly focussed on MIQ and border workers and the people they live with

34 Tier 1 is tightly focused on border and managed isolation and quarantine (MIQ) workers, and their household contacts. This group is at greatest risk of infection and transmission because of their proximity to cases coming through the border.

35 This promotes wellbeing and equitable outcomes by providing the first line of defence against the virus and enhancing the protection in place for everyone in New Zealand. By vaccinating the household contacts of the border and MIQ workforce we are also recognising the risk that the people who live with border and MIQ workers face.

36 Indicative data suggests that of the border and MIQ workforce, between 12 – 13 percent identify as Māori, and 12 – 14 percent identify as Pacific peoples (although this estimate does not cover all workforces, such as NZ Police working at a MIQ centre). We do not have an ethnicity breakdown for their household contacts.

37 The coverage of workers under the COVID-19 Public Health Response (Required Testing) Order 2020 (the Testing Order) is not a static list. As soon as someone performs the duties or functions covered in the Testing Order, they are then subject to it. A pragmatic application for vaccine scheduling means starting with the workers where the employer is clear they are subject to the Testing Order (e.g. airside cleaning crews and pilots). Following that, scheduling will focus on those workers where the employer has a reasonable expectation that the worker may be required to undertake duties that would make them subject to the Testing Order.

Tier 2 is focussed on people who are in the high-risk environments …

38 Tier 2 is focused on people who work in high risk environments, for example:

38.1 frontline (non-border) health workers potentially exposed to COVID whilst providing care;

38.2 frontline healthcare workers who may expose more vulnerable people to COVID-19;

[4] For example, the WHO advises prioritising teachers early on, but this is to support schools to stay open in countries with widespread transmission and so is less applicable to the New Zealand context where this is not an issue.

38.3 frontline critical workforces due to their role in New Zealand's safety and security (this reflects that these groups would need to respond to any emergencies at MIQ facilities, and if we were in a widespread community transmission these services would need to continue to operate and may not be able physically distance).

39 The approach taken to Tier 2 at this time is to tightly limit the workforces to include only those who: have a genuine risk of close contact with COVID-19 cases, even in a low or no community transmission scenario; or they regularly work closely with people who are at particular risk of severe health outcomes if they contract the virus. This approach has been taken to ensure that any differential access to vaccines on the basis of employment status is justified and is balanced against the risk that members of the wider population face from COVID-19. Like with protecting the border first, if we protect the people who are more likely to contract and transmit COVID-19, then we protect the community from the harms of COVID-19, including widespread community transmission

40 Therefore, consideration of the nature of the risk faced by the worker, the nature of the work undertaken and the potential impact if the worker became infected have been carefully weighed up. A list of the current workers included in Tier 2 are set out at **Appendix Four**.

… and officials recommend Tier 2 is amended to include people living in long-term residential care where a high proportion of the residents are at risk of severe outcomes

41 The version of the Sequencing Framework that Cabinet agreed to on 2 February 2021 included people at highest risk in the community, and notes people living in aged residential care as an example.

42 Officials recommend that this is explicitly amended to include staff and people living in long-term residential care settings who are likely to have a higher proportion of underlying conditions or disability. This addresses the combined risks of close contact living situations and underlying conditions. This group includes residences provided by disability support, mental health and addictions, Oranga Tamariki (including youth justice), Corrections (custodial and community based), and group-based transitional housing for homeless people.

43 The proposed approach of providing early access to vaccines due to people living and working in a high-risk setting is broadly consistent with the approach taken with access to Meningococcal vaccination.

This approach to Tier 2 promotes equity by treating all people who are at risk of severe health outcomes and living in long-term residential care the same

44 The explicit inclusion of people who live and work in long-term residential settings where a high proportion of residents are at risk of severe health or other outcomes if they contract COVID-19, recognises that it is not just residents of aged residential care facilities who face a risk multiplier of both living environment and a particular risk of severe health outcomes. This recognises the needs of a wider population,

including people in mental health and addictions facilities, Corrections facilities and supported living environments. Furthermore, the make-up of these workforces is diverse.

45 This will promote wellbeing and equitable outcomes by reaching more people with health conditions and disabilities, including Māori and Pacific peoples who experience higher prevalence of underlying conditions and disability.

Officials recommend changes to the Sequencing Framework to ensure it supports equitable outcomes for Māori and Pacific peoples

Māori and Pacific peoples experience significant health inequities and are at increased risk of exposure and harms from COVID-19

46 Māori and Pacific peoples experience lower life expectancy and worse health outcomes than other New Zealanders. This includes higher rates of infectious diseases and importantly, the underlying long-term conditions that increase their risk of serious illness if they contract COVID-19. This can be attributed to relevant social determinants, such as close living conditions/overcrowding and inequitable access to health care.

47 Māori and Pacific peoples are also more likely to experience significant cultural, social and economic harm in any pandemic.

48 The higher proportion of cases among Māori and Pacific peoples linked to the August 2020 COVID-19 cluster, demonstrates the significant risk of infection and transmission in these communities. The rate of infection during the second wave was 6 people per 100,000 for Māori (47 cases) and 32.3 people per 100,000 for Pacific peoples (104 cases), compared to rates of 1.3 for European/other and 2.2 for Asian per 100,000.

49 In other epidemics (such as 1918-19 Spanish Flu, and the 2009 H1N1 Influenza A outbreak) Māori and Pacific peoples also experienced the highest rates of serious illness and death.

50 Recent and historical experiences highlight the importance of utilising all levers, including vaccine sequencing, to honour Te Tiriti and to promote equity. Our commitment to Te Tiriti and equity of outcomes mandates the need for specific measures for prioritised vaccination for these communities.

It is difficult to determine precisely the differential health impact that COVID-19 has on Māori and Pacific peoples

51 Small numbers and the characteristics of the outbreaks so far in New Zealand preclude simple quantification of the actual difference in risk by age of Māori and Pacific people from COVID-19. There are currently no reliable, peer-reviewed analyses available. **Appendix Six** identifies a range of factors that suggest that an innovative approach is required to achieve equitable outcomes for Māori and Pacific peoples.

Other jurisdictions are offering the vaccine to high risk indigenous communities early

52 Australia has included indigenous populations early in its vaccine sequencing. Australia will offer the vaccine to Aboriginal and Torres Strait Islanders aged 55 years and over at the same time as older adults in the general population aged 70 years and over.

53 Canada has also included its First Nations people early in its sequencing framework. They have included all adults in indigenous communities in their first tier, amongst older people of the general population, aged residential care residents and staff.

Allocation of vaccine to Māori and Pacific providers, as part of a process that runs parallel from the start of Tier 2, will enable equitable access

54 Māori and Pacific providers already successfully implement immunisation programmes. Therefore, the Ministry will work with Māori and Pacific service providers, and others, to determine the quantity of vaccine and funding that would support successful immunisation programmes that support the aims of the Programme in their communities.

55 Parallel vaccine allocation to providers will need to take account of potential logistical factors associated with constrained supply, including varying quantities of vaccine, storage requirements, varying delivery schedules, and expiry dates. In this context decisions on allocation and distribution may be made on a daily or weekly basis to ensure the vaccine is used and distributed as quickly as possible.

56 However, as an indication we expect that for Tier 2, the volumes allocated (approximately 40,000 courses) would be comparable to the number of courses provided for Aged Residential Care residents. Providers would then have discretion about how to best use these courses to reach Māori and Pacific people with a similar risk of severe illness and transmissions as others in long-term residential care settings like Aged or Disability Residential Care (such as those living in overcrowded and/or intergenerational homes).

57 While there are logistical challenges, officials consider that this approach supports the overall aims of the Programme, upholds and honours Te Tiriti, enables equitable outcomes, promotes wellbeing and provides a legacy for the wider immunisation systems.

58 As part of the wider COVID-19 response, there is an established a framework for the Ministry of Health to commission Māori and Pacific Providers to deliver services.

Not all Māori and Pacific people access vaccines through Māori and Pacific providers so extra guidance is needed to ensure equitable outcomes from the Programme

59 Not all Māori and Pacific peoples will access COVID-19 vaccines through all Māori and Pacific providers. All providers in New Zealand are responsible for enabling equitable uptake for Māori and Pacific peoples, not just Māori and Pacific providers. The Ministry of Health is working closely with DHBs to ensure this is well understood.

60 As part of implementation planning for Tiers 2 and 3, officials will also have particular focus on DHBs that have a high proportion of Māori and Pacific Peoples in their enrolled population to ensure equitable access to vaccines is possible. This includes enabling whānau-centred approaches and ensuring the DHBs receive the support they need to maximise uptake. This would help to ensure that Māori enrolled with other providers are not disadvantaged.

61 Officials recommend that in the roll-out of Tier 3 to older people, a risk-adjusted age factor of 15 years (younger) is to be explicitly applied to Māori and Pacific peoples. The purpose of this factor is to recognise the increase in risk of COVID infection and of more severe outcomes for Māori and Pacific people as set out at **Appendix Six**.

62 To complement this approach, officials also recommend that DHBs and other providers adopt a whānau-centred approach which means that providers could offer to immunise whānau members of older people and people with relevant underlying conditions when they accompany them to the appointment. The provider could apply discretion, and consider factors such as whether:

62.1 they have sufficient doses of vaccine available at the site to meet expected demand until new deliveries arrive

62.2 the whānau or family member faces barriers to access or is in a population group that may have difficulties in accessing the health system (including disabled people, rainbow communities, ethnic minorities and people in remote regions)

62.3 there are other risk factors in the household, such as overcrowding or a multi-generational living arrangement

62.4 the whānau member is a carer of the person presenting for the vaccination.

Tier 3 is a very large group, and we are unlikely to have sufficient vaccine available to immunise the entire group in a short space of time

63 Once the vaccination of Tiers 1 and 2 is well underway, the focus of our immunisation efforts under Tier 3 will be to vaccinate our most at-risk population groups by preventing severe disease (morbidity and mortality) from COVID-19 and to mitigate the cultural, social and economic impacts from the pandemic. Continuing to achieve equitable outcomes for our Māori, Pacific people and disabled people will be a key consideration under Tier 3 sequencing.

64 While population data for Tier 3 is presently limited and is being assembled, we anticipate much larger population groups will comprise this tier compared to the earlier tiers under the Sequencing Framework (for example, there are an estimated 800,000 New Zealanders aged 65 years and over).[5] Our best estimate is that Tier 3 could cover around 1.8 million New Zealanders. This means phasing of Tier 3 will be necessary to match vaccine supply and reach our most at-risk populations before transitioning to general national roll-out. Discussions are underway with Pfizer to smooth the supply of vaccines that are delivered in accordance with contractual obligations.

[5] 2019 Stats NZ Population Projections data, using Census 2013 as the base year for projections

To manage this, officials have assessed the risk of individuals based on their specific age and/or health condition and location

65 The table below summarises the risk of severe outcomes from COVID-19 infections and the regional risk of COVID-19 infection.

Variables associated with increased risk of severe outcomes from COVID-19 infection based on latest evidence	**Risk**
Age: > 65 (increases with age)	> 65 ~ x5
Coronary heart disease	Any ~ x3
Hypertension	~ x2
Stroke	~x2
Diabetes	~x2-4
COPD / Respiratory	~x2-4
Kidney disease	~2-4
Cancer	~ x1.0 – 1.5
Pregnancy	~x1.0-1.5
Regional risk of COVID-19 transmission based on MIQ numbers	High risk: • Auckland has the most MIQs (18) • Christchurch has six MIQs and is the only South Island region with MIQs. Moderate risk: • Hamilton (Waikato) has three MIQs • Rotorua (Bay of Plenty) has three MIQs • Wellington has two MIQs • Northland - due to proximity to Auckland, high number of transient workers and several recent community cases have had links to the region. It also has a high Māori population.

Officials recommend that the roll-out of Tier 3 considers both individual and regional-risk factors

66 Two potential options for implementing Tier 3 sequencing under the current low/no transmission scenario (applicable under controlled outbreaks scenario) have been considered:

66.1 Option 1: Nationwide individual risk-based approach

66.2 Option 2: Regional and individual risk-based approach (the preferred approach)

Appendix Seven provides a table summarising the options for phasing roll-out.

67 Option 2 is the preferred option and factors the risk of severe disease (morbidity and mortality) from COVID-19 infection based on the latest evidence, regional risk of COVID-19 transmission based on the number of managed isolation and quarantine facilities (MIQs), and potential coverage for at-risk Māori and Pacific population groups.

68 Option 1 proposes sequencing to at-risk population groups on a nationwide basis, starting with the older adult population first. We have discounted this option because it will require a high degree of segmentation of the population that would become difficult to administer and would not account for the increased risk of community transmission in regions closer to the border. It would also likely delay access to the most at-risk populations nearest the border with relevant underlying conditions as the older adult population is expected to be large.

Option 2 which has a regional individual risk-based approach would enable the programme to deliver equitable outcomes

69 There will be three distinct phases under Option 2 with different at-risk population groups being immunised. At each phase, we will start with Auckland and then Christchurch first, as these regions represent the greatest risk of COVID-19 transmission based on the number of MIQs and proximity to the border.

70 Depending on available supply, vaccines will then either be made available to the relevant groups nationwide, or we will focus on sequencing to the remaining regions with MIQs next (Waikato, Bay of Plenty and Wellington). Northland could also be included due to its proximity to Auckland, high number of transient workers, and that several recent community cases have been located in Northland. Furthermore, a high proportion of Northland's population are Māori. At this stage we will also begin to roll out to rural communities, and delivery models are being designed accordingly.

71 The table below provides a general ethnicity breakdown of the people living in these regions. It is important to note that these are general estimates for the entire DHB population, rather than those who would be included in Tier 3.

DHB 2021 population projects for 2021		
Identified DHB area	**Proportion of people in region/s identified as Māori**	**Proportion of people in region/s identified as Pacific peoples**
Auckland (including Auckland, Counties Manukau and Waitemata)	12%	13%
Christchurch (based on Canterbury DHB)	10%	3%
Waikato	25%	3%
Bay of Plenty	26%	2%
Wellington (including Capital and Coast, Hutt Valley and Wairarapa)	14%	7%
Northland	37%	2%
Nationwide	**17%**	**7%**

72 It is noted that by linking the regional roll-out to proximity to MIQ facilities means that regions with high Māori populations such as Hawke's Bay and Tairawhiti (28 percent and 55 percent respectively) may get access to vaccines a little later in the programme. The Ministry will work with Māori providers to try to mitigate some of this impact.

73 Tier 3, phase 1 will immunise older adults aged 65 years or older (or 50 and over for Māori and Pacific) and those people under 65 years with a relevant underlying condition and/or disability that are at high risk of severe outcomes from COVID-19 infection.

74 Relevant underlying conditions covered under the first phase of immunisation will include chronic obstructive pulmonary disease (COPD) and other serious respiratory conditions, chronic kidney disease, diabetes, and coronary heart disease.

75 Phase 2 will cover people identified with moderate risk of severe disease from COVID-19, including stroke, other respiratory conditions, hypertension, immunocompromised, pregnant people, and cancer patients.

76 Members of the Immunisation Implementation Advisory Group (IIAG) have suggested that there are a variety of at-risk groups in Tier 3 (those with co-morbidities, disability, homelessness, mental health conditions and addictions) and that, pragmatically, it may make sense to use the Community Services Card (CSC) as a proxy for many of these issues. Officials will continue to work with the IIAG, DHBs and others to understand if this approach is broadly supported as part of Tier 3, phase 2 roll-out.

77 Members of the IIAG have stated that there is an ethical commitment to manage vaccine resources efficiently and effectively and using a proxy such as CSC may mean that we get the vaccine to those in need more quickly and effectively than if we were to use an operationally complex profiling process.

78 Phase 3 will then immunise wider health and social services that are involved in direct and sustained physical contact/care for those potentially at-risk, and who support wider social, cultural and health outcomes. This will likely include frontline staff within Whānau Ora (who were not included earlier), Oranga Tamariki (social workers), Work and Income case managers, primary school and early childhood education teachers, and remaining health workforces not covered under earlier tiers.

79 As stated earlier, there will also be a parallel allocation of vaccines to Māori and Pacific providers throughout Tier 3 and the nationwide rollout, and they will have discretion to target it at whānau most at risk of serious outcomes from COVID-19.

80 Other groups may be included across the phases as further information becomes available and will be determined by the Director-General of Health as part of providing operational guidance on who is included within the scope of Tier 3 and where vaccine supply permits [Refer CAB-21-MIN-0011]. Cabinet will be kept informed about those decisions regularly.

Implementation

81 The COVID-19 Immunisation Programme actively seeks to promote equitable outcomes through a range of measures

82 A recent simulation of the end to end process for Tier 1 of the Programme has been completed. Members of Te Hau Ora a Ngā Puhi reviewed the process and provided a range of recommendations to further enhance the programme and maximise uptake. We consider the recommended approach of allocating vaccines to Māori and Pacific providers as part of a parallel process to Tier 2, 3 and beyond provides a framework for these recommendations to be implemented.

83 It will also support providers to use innovative service delivery models appropriate to their communities to remove barriers and improve access, including outreach services, whānau-friendly vaccination sites, church and Marae based delivery. More detail on this is included in **Appendix Two**.

Cabinet decisions will impact on the size of the population cohorts included in Tiers 2 and 3

84 The decisions you make on this paper will have an impact on the size of population cohorts included in Tiers 2 and 3 of the Sequencing Framework

85 The proposed adjustments to Tiers 2 and 3 and of the Sequencing Framework mean that the size of those Tiers have changed. These changes have a relatively small impact on the anticipated timing for the shifts between Tiers. However, is subject to change because the delivery schedules are still to be confirmed and we don't accurately understand how quickly the public will take up these vaccines.

Indicative information on the size, focus, delivery models and timing for groups under the Sequencing Framework (NB: numbers may not always round due to rounding)

Phase		Objective	9 Feb 2021 Cohort Size	New Cohort size (indicative estimate only)	Focus[6]	Approach	Indicative timing
	Tier 1	Protect the border	~50,000	~50,000[7]	Border, MIQ workers (Tier 1a)	Delivery through workplaces	**IN PROGRESS**
					Household contacts	Community pop ups	
	Tier 2	Protect high risk workers & at-risk people living in high risk locations:					

[6] Under low/no transmission scenario,Tier 1 includes Border/MIQ workforces and their household contacts, Tier two includes high risk workforces, and people at highest risk of transmission and severe health outcomes in the community, and Tier 3 includes people at risk of serious illness and the workforces supporting then. See Appendix One for further detail.

[7] Subject to change depending on your decisions on which workers are covered by the COVID-19 Public Health Response (Required Testing) Order 2020. Numbers may not always sum due to rounding.

	Tier 2 (a)	Frontline (non-border) health workers potentially exposed to COVID-19 whilst providing care.	~212,625 (consultation with DHBs updated this to 299,000)	~57,000	High risk frontline workforces	Delivery through workplaces	Q1 – Q2 2021
	Tier 2 (b)	Frontline healthcare workers who may expose more vulnerable people to COVID-19 AND Residents of long-term residential care settings where people are at increased risk of severe outcomes if they contract COVID-19		~290,000 (including approximately 66,000 residents)	People working directly with vulnerable groups. People living in long term residential settings[8] Māori and Pacific people who may not live in formal residential care settings that are at risk of severe outcomes	Delivery through workplaces and long-term Residential settings Community based delivery models	
	Tier 2(c)	Workforces critical for New Zealand's safety and security		~33,000		Delivery through workplaces	
Scaling Up	Tier 3	Ramp up	~1,500,000	~1,800,000[9]	Protect the people most at risk of serious illness and the workforces supporting them	Phased regional delivery approach through workplaces and community pop ups and outreach services	Q2 – Q3 2021

[8] Where a high proportion of residents face severe outcomes if they contract COVID-19.
[9] Options to further sequence access are set out at Appendix 7.

Full Scale Delivery	Open access	~3,900,000	~1,900,000 (16+ only, unless clinical trials currently underway provide evidence to support lowering this age threshold)	General population (Limited to 16 years and over)	Delivery through workplaces, community pop ups, GP clinics, Pharmacies, and DHB Facilities	Q3 2021 onwards

Financial Implications

86 The financial implications arising directly from the proposals in this paper will be met within the existing appropriation of Implementing the COVID-19 Vaccine Strategy Multi Category Appropriation until December 2021.

Legislative Implications

87 There are no legislative implications resulting from the proposals.

Impact Analysis

Population Implications

88 The COVID-19 Immunisation Strategy has been developed to enable best use of COVID-19 vaccines to support the immediate health response to COVID-19 in New Zealand and the Pacific. Delivering on the COVID-19 Immunisation Strategy may contribute to the full cultural, social and economic recovery from COVID-19.

89 This has potential flow-on implications for specific population groups at increased risk of adverse social, cultural and economic outcomes. For example, some groups are more likely to experience difficulty in returning to employment and subsequent economic hardship over the long-term, such as disabled people, Māori, Pacific peoples and young people who have recently entered the labour market. Employment rates for women and Pacific peoples have also decreased significantly in the September quarter.

90 In addition, vulnerability to the health effects of COVID-19, including death, could disproportionately affect older people and people with underlying conditions. Disabled people, Māori and Pacific peoples are also more likely to experience these impacts, as they have higher rates of underlying health conditions and co-morbidities. Those who live in crowded housing, especially Māori and Pacific peoples for example, living in an intergenerational arrangement, or those who work in particular roles such as border security, are also likely to be more at risk of transmission. Promoting equity for these groups is a focus of the Sequencing Framework, which will determine who receives the vaccine and when.

Human Rights

91 As previously advised, vaccines may be made available earlier to certain people or populations when supplies are limited as per the Sequencing Framework. As with any

limited health resource, there will be a need to prioritise access for a time. However, it is important to note that we have purchased enough vaccines for every person in New Zealand. All people are equally deserving of care, but certain risk characteristics and limited supply will justify prioritisation of vaccine delivery.

92 Vaccines may be made available earlier to certain persons or groups of persons when supplies are limited. This means individuals may be eligible to receive a COVID-19 vaccine sooner who may also have a disability or health condition, be a certain age, sex, ethnicity, or family status. If this differential treatment occurs it will be based on particular risks faced by these people, as well as promoting equitable outcomes.

93 This raises possible issues around discrimination under section 19 of the New Zealand Bill of Rights Act 1993 and section 21 of the Human Rights Act 1993 by potentially prioritising access to specified groups. This response is proportionate and based on evidence and decision-making frameworks underpinned by the principle of equity, with any discrimination in favour of people at greater risk. As such, it is demonstrably justified in a free and democratic society in accordance with section 5 of the Bill of Rights Act.

Consultation

The Māori and Pacific members of the IIAG recommend ring-fenced quantities of vaccine and flexibility to deliver whānau-centred approach

94 The proposed approach has been developed by the Māori and Pacific members of IIAG. They considered some initial options for the roll-out of including:

94.1 ring-fencing a portion of available vaccines for relevant service providers with guidelines to deliver to vulnerable Māori and Pacific communities;

94.2 targeting vulnerable communities (e.g. based on deprivation index or geographical location) which include high populations of Māori and Pacific peoples;

94.3 applying an adjusted age threshold for Māori and Pacific older adults to reflect their level of risk; and

94.4 prioritising Māori and Pacific older adults and others with relevant underlying conditions.

95 The IIAG members supported an innovative approach that combines these options. They noted the significant challenge to achieve equity when vaccine supply is limited.

96 The IIAG members highlighted the importance of framing the approach positively in terms of the risks of exposure and harms, and communities with the greatest needs. Māori members also highlighted the opportunity to build on the success of the Māori Influenza Vaccination Programme. They pointed to examples of Māori prioritising as part of their tikanga, such as the order in which people access food on the marae.

97 Both groups wanted to see a ring-fenced allocation of vaccine to service providers who could effectively deliver to Māori and Pacific communities (not just their enrolled patients) using flexible delivery models, and a risk-adjusted age factor. They

emphasised the need to involve DHBs, and to provide appropriate resourcing and infrastructure support.

98 They acknowledged that Māori and Pacific communities should be considered separately as the best way to engage and the solutions may be different.

99 The IIAG commented that it is hard for Māori providers to make in-roads to be part of early planning and collaboration at a DHB or regional level. Some regions and DHBs are better than others and this was highlighted in the (currently draft) evaluation of the Māori Influenza Vaccination Programme "It's not just a jab". This needs to change, so more leverage has been applied on DHBs to have Māori and Pacific providers lead out their own delivery programmes with appropriate and flexible funding approaches.

100 Officials consider that recommendations in this paper broadly incorporate the views of the IIAG. Officials will continue to work with the IIAG, DHBs and other stakeholders to ensure that the Sequencing Framework will be implemented in a way that promotes equitable outcomes and honours Te Tiriti o Waitangi, and maximises uptake of the COVID-19 vaccines.

101 The Ministry of Health has informed The Treasury, Te Puni Kōkiri, Te Arawhiti, the Office of Ethnic Communities, Corrections, and the Ministries of Foreign Affairs and Trade, Pacific Peoples, Business Innovation and Employment, Justice and Primary Industries of this Cabinet paper and provided a very limited opportunity for comment. The proposals in this paper broadly reflect the engagement the Ministry has had with agencies on previous Cabinet papers on the Programme.

Communications

102 COVID-19 Vaccine and Immunisation Programme communications are well underway and are currently focussed on supporting the successful implementation of Tier 1 of the Programme. A successful media event was held on 20 February following vaccination of the first MIQ workers.

103 A national public information campaign to support the vaccine roll-out will start later this month. The campaign messages will change to support different phases of the roll-out, focusing on different communities and cohorts.

104 A summary of research on vaccine insights was published on Wednesday 17 February on the Ministry website and a media panel hosted a discussion. Further regular research is being commissioned to measure New Zealander's attitudes and public sentiment towards the COVID-19 vaccine during the implementation of the Programme.

105 Close management of comments on both the Unite and Ministry social channels is being conducted to correct misinformation. We are proactively addressing specific concerns as appropriate, for example creating targeted content specifically to address misinformation for Māori communities. We will follow soon with Pacific content.

106 Protocols have been implemented to ensure alignment of messaging across the Unite and Health websites and to ensure subject matter experts and pillar leads have visibility of any content being published on our digital platforms.

107 Following your decisions on this paper, officials will update current content on the Unite and Health websites promptly. Work is also underway to build a web-tool to help people to understand which Tier they fit into and when they are likely to receive their vaccine.

108 More information is included in **Appendix Eight**.

Proactive Release

109 We intend to proactively release this Cabinet Paper (within 30 working days) with redactions as appropriate under the Official Information Act 1982.

Recommendations

The Minister for COVID-19 Response, the Minister of Health and the Associate Minister of Health recommend that the Committee:

1 Note that New Zealand has secured a portfolio of COVID-19 vaccines for 14.91 million courses through four Advance Purchase Arrangements (APAs) [CAB-20-MIN-0508 refers]. While, sufficient quantities of vaccines have been purchased, supplies of COVID-19 vaccines available are currently constraints, and are likely to continue to for some time, depending on global supply and demand.

2 Note the COVID-19 Immunisation Programme is underpinned by the principles of equity, wellbeing and legacy while upholding and honouring Te Tiriti o Waitangi.

3 Note that Cabinet agreed in principle to a Sequencing Framework that guides allocation of vaccine when supply is limited [CAB-20-MIN-0509 refers].

4 Note the purpose of the Sequencing Framework is to ensure the right people are vaccinated at the right time with the right vaccine while upholding and honouring Te Tiriti o Waitangi.

5 Agree to expand Tier 2 of the Sequencing Framework from a focus on aged-residential care, to all long-term residential care settings where people are at increased risk of severe outcomes if they contract COVID-19.

6 Note that the expansion of Tier 2 will include residences provided by disability support, Oranga Tamariki (including Youth Justice), mental health and addictions Corrections (custodial and community based), and group-based transitional housing for homeless people.

7 Note that Māori and Pacific peoples experience lower life expectancy and worse health outcomes compared to other New Zealanders including higher rates of infectious diseases and generally lower immunisation coverage, as well as the underlying conditions that increase their risk of serious illness if they contract COVID-19.

8 Note that Māori and Pacific providers are closer to the communities they work with and already successfully implement whānau-centred approaches.

9 Agree to allocate a proportion of the vaccine to Māori and Pacific providers to distribute among Māori and Pacific communities in parallel with the distribution of vaccines from the implementation of Tier 2 of the Sequencing Framework.

10 Agree that the Ministry will use contractual mechanisms to set expectations of Māori and Pacific providers that are consistent with the purpose of the Sequencing Framework and the aims of the COVID-19 Immunisation Programme.

11 Note that not all Māori and Pacific peoples will access COVID-19 vaccines through Māori and Pacific Providers,

12 Agree to direct DHBs and other providers to apply a risk-adjusted age factor of 15 years (younger) to Māori and Pacific peoples and adopt a whānau-centred approach during Tier 3 to enable equitable outcomes.

13 Note officials consider the approach in recommendations 5, 9 and 10 uphold and honour Te Tiriti o Waitangi, enables equitable outcomes, promotes wellbeing and provides a legacy for the immunisation, and the wider health systems.

14 Note we will continue to keep Cabinet informed of the vaccine allocation proportion and contractual mechanisms to support Māori and Pacific providers.

15 Note that Tier 3 of the Sequencing Framework is a large group (best estimate is approximately 1.8 million people) and we are unlikely to have enough vaccine for everyone at the same time.

16 Agree that the roll out of Tier 3 be regional, individual risk-based approach to strike the best balance of managing the risks by protecting our most at-risk populations closest to the border early in the immunisation programme.

17 Agree to the three phased, regional approach for the roll out of Tier 3 where:

17.1 Phase 1 will immunise older adults and those people under 65 years with a relevant underlying condition and/or disability that are at high risk of severe outcome from COVID-19 infection.

17.2 Phase 2 will immunise people identified with moderate risk of severe disease from COVID-19, including stroke, other respiratory conditions, hypertension, immunocompromised, pregnant people, and cancer patients.

17.3 Phase 3 will immunise wider health and social services that are involved in direct and sustained physical contact/care for those potentially at-risk, and who support wider social, cultural and health outcomes.

18 Agree that at each phase, the programme will start with Auckland and then Christchurch first, as these regions represent the greatest risk of COVID-19 transmission based on the number of MIQs and proximity to the border.

19 Note other groups may be included across the phases as further information becomes available and will be determined by the Director-General of Health as part of providing operational guidance on who is included within the scope of Tier 3 and where vaccine supply permits [Refer CAB-21-MIN-0011].

20 Note that the adjustments to Tier 2 and 3 of the Sequencing Framework are unlikely to have a significant impact on the timing when they will occur.

21 Note the decisions sought in this paper relate to the current transmission scenario and if there are any changes to the transmission scenario, or through the delivery of the programme, Cabinet will receive further advice on sequencing implications or choices.

22 Note following your decisions in this paper, officials will work with the COVID-19 Vaccine Ministers' offices on an updated communication and engagement plan.

Authorised for lodgement

Hon Chris Hipkins
Minister for COVID-19 Response

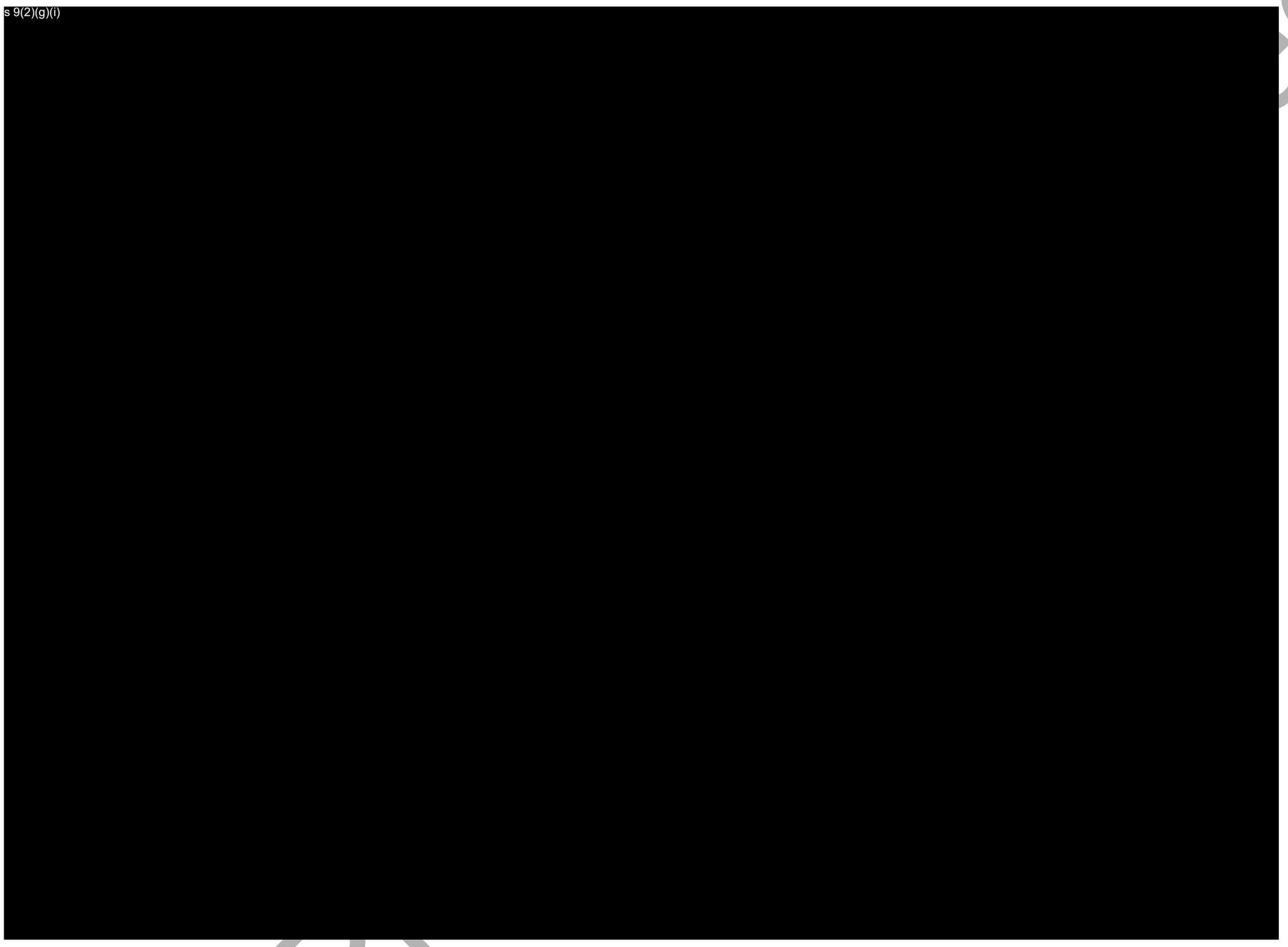
Hon Andrew Little
Minister of Health

Hon Dr Ayesha Verrall
Associate Minister of Health

Hon Peeni Henare
Associate Minister of Health (Māori Health)

Appendix One: COVID-19 Vaccine Rollout Plan *(for illustrative purposes only and based on previous modelling, which will be refined following Cabinet decisions)*

s 9(2)(g)(i)



Appendix Two: Explanation of how the COVID-19 Immunisation Programme is underpinned by Te Tiriti o Waitangi

The COVID-19 Immunisation Programme is underpinned by the principles of equity, wellbeing and legacy while upholding and honouring Te Tiriti o Waitangi. Every part of the Programme has these principles and aspirations at the centre. Examples are set out below:

1. **The programme structure** - strong Māori representation at every level; and the independent Immunisation Implementation Advisory Group (IIAG) has leaders from the sector who are Māori, Pacific people and disabled people.
2. **Vaccine purchasing strategy** ensured there is diversity in the portfolio to increase the likelihood that everyone in New Zealand will be able to access a vaccine that is safe and effective for them, over time.
3. **Service design -** providing ring-fenced funding[10] to support Māori and Pacific service providers to use innovative service delivery models to remove barriers and improve access, including outreach services, whānau-friendly environments, church and Marae based delivery[11] and building on District Health Board (DHB) relationships with Māori and Pacific health providers and iwi to ensure service delivery meets the needs of local Māori and Pacific peoples. This will include a COVID-19 Māori vaccination support service that could include:
    a. vaccine navigators at the local level (who could be from whānau, Hauora/health providers and community representatives),
    b. vaccine coordinators at a regional level (who could be from DHB, iwi, Whānau Ora Commissioning agencies or community groups),
    c. a national virtual support network, and
    d. leaders from the community to act as champions.
4. **Workforce -** commissioning the Immunisation Advisory Centre (IMAC) to provide vaccinator workforce training, with a specific focus on strengthening cultural competency, and to ensure vaccinators work with Māori and Pacific partners and employ Māori and Pacific peoples as engagement advisors. The Ministry has also provided guidance to DHBs suggesting that where known and practical they match the vaccinator staff to address the language and cultural needs of those being vaccinated.
5. **Communications and stakeholder engagement -** developing tailored and easy to access information that is relevant for whānau, hapū and iwi and is in multiple languages. This includes delivering a dedicated social marketing campaign to raise awareness and provide education for whānau, hapū and iwi.
6. **Reporting and monitoring –** the ethnicity of people being vaccinated will be recorded, which will enable reporting on whether uptake is equitable.

[10] Currently $39 million ring-fenced for Māori Service Providers and $16.25 million ring-fenced for Pacific Service Providers.

[11] Additional funding for workforce development is being considered as part of current workforce planning.

Appendix Three: High level summary of Sequencing Framework as Agreed by Cabinet 9 February [CAB-21-Min-0011]

COVID-19 Vaccine Sequencing Framework as at 29 January 2021

The purpose of the overarching COVID-19 Immunisation Strategy is to support "best use" of the vaccines while upholding Te Tiriti o Waitangi and promoting equity.

Part A: Sequencing Framework - Context and Approach

The purpose of the Sequencing Framework is:
To ensure the right people are vaccinated at the right time with the right vaccine and that the principles of Te Tiriti o Waitangi are upheld.

The Sequencing Framework is built on foundational principles linked to the COVID-19 Elimination and Immunisation Strategies

Overarching principles		COVID-19 Immunisation Strategy principles	Implications for Sequencing
Uphold and honour Te Tiriti o Waitangi	Equity	Equity	Promote equitable outcomes particularly for Māori, Pacific peoples and disabled people.
		Equal concern	Over time all eligible people will have access to the vaccine.
	Wellbeing	Minimise the health, social, economic, cultural harm of COVID-19	Reduce infection, transmission, morbidity, mortality, and social, economic and cultural harms.
		Regional responsibility	Reduce harm to the Pacific; promote the Pacific's ability to recover.
	Legacy	Value	Cost effectiveness; support recovery.
		Legitimacy	Act in the best interests of New Zealanders, promote trust in immunisation.

The key assumptions and considerations underpinning the Sequencing Framework include:
- Vaccines may have different effectiveness, for different populations
- Vaccines will protect individuals from serious illness, and may prevent transmission
- The short-medium term focus will be on increasing individual protection, and the medium-long term focus will be on population protection
- Public health measures will continue until population immunity is established
- Improved treatment is unlikely in the short term
- Vaccines will be publicly funded, approved by Medsafe, and voluntary

We are planning for three epidemiological scenarios with aligned objectives → protection and potentially preventing transmission
- Low/no community transmission → *To protect those at highest risk of exposure to COVID-19 and potentially prevent transmission*
- Clusters/controlled outbreaks → *To protect people closely connected to an outbreak and potentially reduce transmission*
- Widespread community transmission → *To protect those most at risk of serious illness and potentially reduce transmission*

Communities with the highest need for the vaccine: we have identified four (overlapping) groups more at risk of…
- Infection (or contracting) COVID-19
- Transmission (or spreading) COVID-19
- Serious illness or death if they contract COVID-19
- Negative cultural, social and economic impacts from the pandemic

Note Māori and Pacific people are likely to be over-represented

Change protocol
- Emerging guidance, advice, analysis, and evidence will be reviewed and appropriate changes made to strengthen the Framework. The Ministry will provide advice to Joint Ministers, programme advisors and the Governance Group where substantive changes are proposed.

Part B: Sequencing Framework – Methodology

Step 1: Determine the epidemiological scenario and the characteristics of available vaccine/s
Scenario 1: Low/no community transmission
Scenario 2: Clusters and controlled outbreaks
Scenario 3: Widespread community transmission

Step 2: Apply Use Decision to use Framework

Step 3: Apply Sequencing Framework

Scenario 1: Low/no community transmission	Scenario 2: Clusters/controlled outbreaks	Scenario 3: Widespread community transmission
→ *Protect people at highest risk of infection and potentially prevent transmission*	→ *Protect people at highest risk of infection, vulnerable people in the community of the outbreak and potentially prevent transmission*	→ *Protect those most at risk of serious illness and potentially prevent transmission*
Tier 1: Protect the Border/MIQ workforces (and household contacts) (est. 55k)	Tier 1: Protect the Border/MIQ workforces (and household contacts) and at risk people in the region of outbreak	Tier 1: Protect people with highest risk of serious illness • Older people • People with disabilities and underlying conditions • People living in long-term residential care
Tier 2: Protect the high risk workforces (e.g. first responders)	Tier 2: Protect the high risk workforces near the region of outbreak	Tier 2: Protect the high risk workforces (e.g. first responders) and other frontline health workers
Protect people at highest risk of transmission and severe health outcomes in the community (e.g. ARC residents) (est. 170k)	Tier 3: Protect the most vulnerable and the workforces supporting them • Older people • People with disabilities and underlying conditions • People living in long-term residential care	Tier 3: All other population groups
Tier 3: Protect the people most at risk of serious illness and the workforces supporting them • Older people • People with disabilities and underlying conditions		

Step 4: If there is insufficient vaccine for an entire cohort, allocate vaccines according to risk

Step 5: Population coverage monitoring (delivery against cohorts)

Areas of the Sequencing Framework that will be updated based on your decisions have been highlighted.

The changes are described at Appendix Five.

Appendix Four: Definitions for Population Cohorts Under Tiers 1 and 2 of the Sequencing Framework

SCENARIO & TIER	POPULATION COHORT	DEFINITION
TIER ONE: THE BORDER AND MIQ		
Tier 1(a)	Border workforce, all workers recorded on the official Border Register as per the Required Testing Order. (~7,700 people)	"Affected persons" at a New Zealand border (airport or marine port) as defined by the COVID-19 Public Health Response (Required Testing) Order 2020. Includes only the workforce that qualify for routine COVID testing as recorded on the official Border Register within the following categories: - Aircrew members who qualify based on the border order - Flight or ship workers who spend more than 15 minutes in an enclosed space (plane or ship) and qualify based on the border order - Airside government officials - Airside DHB workers - Airside retail, food, beverage workers - Airside cleaners - Airline/airport workers interacting with international passengers and baggage - Other landside workers interacting with international passengers - Pilots, stevedores working on/around, and people who board affected ship - Workers who transport to/from affected ship - Other port workers who interact with people required to be in isolation - Health workers providing COVID-19 testing services to these sites.
	MIQ workforce (~4,900 people)	"Affected persons" at a New Zealand border (airport or marine port) as defined by the COVID-19 Public Health Response (Required Testing) Order 2020. Includes only the workforce that qualify for routine COVID testing as recorded on the official Border Register within the following categories: This includes: - All MIQ workers - MIQ healthcare workers including medical, nursing and support staff who provide services to these facilities - Workers who transport to/from MIQ.
Tier 1(b)	Household contacts of the eligible border and MIQ workforce (~40,000 people)	Any person who usually resides in a household or household-like setting with (a border or MIQ worker as set out above), regardless of whether they are related or unrelated people; this will include people who may reside part-time in the household including children and partners not permanently resident in the household.
TIER TWO: FRONTLINE WORKFORCES AND PEOPLE LIVING IN LONG-TERM RESIDENTIAL CARE SETTINGS		
Tier 2 (a)	Frontline (non-border) health workers potentially exposed to COVID-19 whilst providing care. (~57,000 people)	The frontline healthcare workforce in service delivery settings where possible cases will seek healthcare and there is no ability to screen for COVID-19 before the interaction occurs. It includes only staff who are at the front line interacting directly with patients in: - COVID-19 testing (taking samples and laboratory analysis) - Administering COVID-19 testing - Administering COVID-19 vaccinations - Ambulance services - Emergency department front line workforces - Emergency response diagnostics (e.g. radiology) and support staff (e.g. orderlies, security, receptionists) who are interacting with patients - Community midwives and WCTO workers in people's homes - General practice front line workforce including GPs, nurses and receptionists - Pharmacy front line workforce - NGOs (including Whānau Ora) providing first response personal health services directly to patients (excludes mental health and addictions, social support services) - Urgent care clinics and accident and emergency front line staff - Healthcare providers providing treatment services to people in managed isolation. This only includes the four centres with MIQ facilities and only extends to services which receive MIQ patient referrals.
Tier 2 (b)	Frontline healthcare workers who may expose more vulnerable people to COVID	The frontline healthcare workforce working in healthcare service delivery settings interacting with patients/clients.

	(~183,000 people)	Frontline healthcare workers interacting with patients: - Inpatient, ambulatory and outpatient publicly funded hospital services including community staff and diagnostics - All long-term residential care frontline workers, including aged residential care, Corrections (custodial and community-based residences), disability, Oranga Tamariki (including Youth Justice), mental health and addictions, group-based transitional residences for homeless people, and hospice care workers. - Home care support workers including aged care and disability support - Community diagnostics – radiology, laboratories - All other primary care not included in Tier 2 (a) - Community and home-based services - All NGO and community-based services including iwi-based services, mental health - Community public health teams - Outreach immunisation staff - COVID Incident Management Teams at each DHB	
	Residents of long-term residential settings where people are at increased risk of severe outcomes if they contract COVID-19	Any person who usually resides in a long-term residential care setting, including (with indicative estimates of scale where this is known from administrative data, totals to approximately ~66,000 people): - Aged Residential Care (~35,000 people) - Corrections (custodial and community based) (~9,000 people in custodial-based settings) - Disability support (~7,700 people) - Oranga Tamariki, including Youth Justice (up to 100 young people who are over 16 years) - Mental health and addictions (~9,800 people) - Group-based supported transitional residences for homeless people (~4,000 people based on the number of transitional housing places, though actual number is likely to be lower)	- Parallel Allocation of vaccine for Māori and Pacific providers to enable equitable access and recognise the risks faced by older Māori and Pacific peoples who may be living in overcrowded, intergenerational homes, rather than a long-term residential setting. (~40,000 people, using a proxy estimate).
Tier 2 (c)	Workforces critical for New Zealand's safety and security (~33,000 people)	Other critical workforces (with indicative estimates of scale where this is known): - NZ Police – frontline Police only (~10,000 people) - Offshore public servants when in New Zealand: Public sector staff (and their families if relevant) who are required to travel offshore on official Government business to high-risk locations, including diplomatic and consular staff. (~700 people, note this only includes MFAT staff and their families, so the actual figure may be higher) - NZ Defence Force (limited to only frontline responders) (9,500 people) - Fire and Emergency New Zealand. (~8,900 people) - Contact tracing personnel required to respond to prevent community transmission - Non-replaceable, highly specialised personnel that are vital to the maintenance of critical infrastructure that must be maintained to uphold the safety and security of people in New Zealand (Note: this is expected to be a tightly limited category). - NZ Judicial and Court officials that are required to maintain the operation of the Courts through higher Alert Level settings and pose a heightened risk of transmission of COVID-19 to staff and residents of long-term residential settings. (3,400 people, subject to further refinement)	

Appendix Five: Summary of key changes to the Sequencing Framework

Scenario 1: Low/no transmission scenario		
Tier	**Who**	**Why**
TIER 1	• Border workforce • Managed isolation and quarantine (MIQ) workforce • Household contacts of these two groups No changes.	Close, regular contact with highest risk setting.
TIER 2	• Frontline non-border healthcare workers potentially exposed to COVID-19 • Other frontline health workers (e.g. primary care) Changes: • **Workforces critical to New Zealand's safety and security (e.g. NZ Police and Fire and Emergency New Zealand)** • **Adding other long-term residential care settings where people are at increased risk of severe outcomes if they contract COVID-19 (e.g. disability support, mental health and addictions, Oranga Tamariki and youth justice, Corrections (custodial and community based), and group-based transitional housing for homeless people)** • **Parallel Allocation of vaccine for Māori and Pacific providers to support equitable access for older Māori and Pacific peoples who may be living in overcrowded, intergenerational homes, rather than a long-term residential setting.**	High risk settings where transmission of virus is a real risk. Key change is the inclusion of all people living and working in long-term residential care settings.
TIER 3	• At-risk people in the community, including: o Older adults aged 65+ o People with a relevant underlying condition at risk of severe disease from COVID-19 infection Changes: o Wider health and social workforces involved in direct physical contact/care for those potentially at-risk and who support wider social, cultural and health outcomes. Changes: • **Risk-adjusted age factor of 15 years (younger) for Māori and Pacific peoples.**	Protecting people who are at risk of severe outcomes if they contract the virus and mitigate social, cultural and economic harm from the pandemic.

Appendix Six - Summary of factors that suggest that an innovative approach is required to achieve equitable outcomes for Māori and Pacific peoples.

- International evidence that minority and Indigenous communities experience higher COVID-19 rates, hospitalisations, and mortality.
- Māori and Pacific people are disproportionately represented in groups at risk of infection due to their employment and housing circumstances.
- Consistent evidence of higher prevalence of underlying conditions that increase the risk of serious illness from COVID-19, and they occur at younger ages[12][13] for example:
    - Rates of congestive heart failure, chronic pulmonary disease, and diabetes for Māori are similar to those in Europeans 10 to 20 years older *(McLeod et al and Gurney et al)*
    - Māori and Pacific peoples consistently experience stroke at 13 and 15 years younger respectively compared to Europeans with a mean age 75 years[14][3].
- The rate of hospitalisation and mortality for Māori and Pacific people once they have a chronic condition is higher at a given age than for Europeans, for example:
    - Among people enrolled in a diabetes care support service, rates of mortality from all causes and cardiovascular disease, and of hospitalisation for cardiovascular disease and end-stage renal failure in Europeans aged 65-74 are similar for Māori and Pacific 10-15 years younger
- Different age thresholds for Māori and Pacific people are used in some other health interventions, for example:
    - cardiovascular risk assessments for heart disease a condition that increases risk of serious illness from COVID-19), are recommended at age 45 years for women and 55 years for men in the general population; and at fifteen years younger for Māori, Pacific people and South Asian people[15];
    - diabetes screening is recommended at 45 years for the general population, and at ten years younger for Māori, Pacific people and South Asian people.

[12] McLeod, M., Gurney, J., Harris, R., Cormack, D., & King, P. (2020). COVID-19: we must not forget about Indigenous health and equity. Australian and New Zealand Journal of Public Health, 44(4), 253-256. doi:10.1111/1753-6405.13015

[13] Gurney, J., Stanley, J., & Sarfati, D. (2020). The inequity of morbidity: Disparities in the prevalence of morbidity between ethnic groups in New Zealand. Journal of Comorbidity, 10, 2235042X20971168. doi:10.1177/2235042x20971168

[14] Feigin et al., 2015

[15] Ministry of Health. 2018. Cardiovascular Disease Risk Assessment and Management for Primary Care. Wellington: Ministry of Health.

Appendix Seven: Options for Tier 3 implementation

SCENARIO 1: LOW/ NO TRANSMISSION – TIER THREE (APPLICABLE TO CONTROLLED OUTBREAKS SCENARIO)			
Option 1: Nationwide individual risk-based approach		**Option 2: Regional and individual risk-based approach (*preferred approach*)**	
Sequencing (nationwide)	**Population cohort**	**Phase**	**Population cohort**
3a Older adults (NB: age range would be adjusted for Māori and Pacific peoples if Cabinet agrees to the risk-adjusted age threshold).	• Older adults aged 75+ years *(approx. 450,000 people)*	1(a) Auckland and Christchurch	• Cover Groups 3a – 3c as identified under Option 1 *(approx. 350,000 people)*
3b Older adults (NB: as above).	• Older adults aged 65-74 years *(approx. 560,000 people)*	1(b) Nationwide OR remaining regions with MIQs first (Waikato, Bay of Plenty, Wellington), depending on supply	• Cover Groups 3a – 3c as identified under Option 1 *(approx. 830,000 people)* Nationwide access to vaccine for these groups can be provided where vaccine supply permits or sequence to remaining regions with MIQs first. Northland may be included if supply permits.
3c Relevant underlying conditions of **high risk** of severe disease from COVID-19 infection	People under age 65 years identified with the following conditions at high risk (non-exhaustive list): • Chronic obstructive pulmonary disease (COPD) and other serious respiratory conditions • Chronic kidney disease • Diabetes • Coronary heart disease *(approx. 160,000 people)*	2(a) Auckland and Christchurch	• Cover Groups 3d as identified under Option 1 *(approx. 200,000 people)*
3d Relevant underlying conditions of **moderate risk** of severe disease from COVID-19 infection	People under age 65 years identified with having one or more of the following conditions at moderate risk (non-exhaustive list): • Stroke • Cancer • Other respiratory conditions • Hypertension • Immunocompromised • Pregnant people *(approx. 570,000 people)*	2(b) Nationwide OR remaining regions with MIQs (Waikato, Bay of Plenty, Wellington), depending on supply	• Cover Groups 3d as identified under Option 1 *(approx. 370,000 people)* Nationwide access to vaccine for these groups can be provided where vaccine supply permits or sequence to remaining regions with MIQs first. Northland may be included if supply permits.
3e Wider health and social services	People potentially involved in direct physical contact/care for those potentially at-risk and who support wider social, cultural and health outcomes including the following workforces (non-exhaustive): • Whānau Ora • Oranga Tamariki (social workers) • Work and Income case managers • Primary school and/early childhood education teachers • Wider health workforces not already covered under Tiers 1 and 2 • Wider Corrections and Courts workforce *(early estimate – 90,000 people)*	3(a) Auckland and Christchurch	• Cover Groups 3e as identified under Option 1 *(approx. 25,000)*
		3(b) Nationwide OR remaining regions with MIQs (Waikato, Bay of Plenty, Wellington), depending on supply	• Cover Groups 3e as identified under Option 1 Nationwide access to vaccine for these groups can be provided where vaccine supply permits or sequence to remaining regions with MIQs first. Northland may be included if supply permits. *(approx. 65,000 people)*
3f Regions of highest level of deprivation and/or high proportion of Māori and Pacific peoples	• Distribution of vaccines to remaining high deprivation communities (using New Zealand Index of Deprivation (NZDep) or Community Services Card eligibility) on a regional basis to ensure the programme mitigates social, cultural and economic harms from the pandemic for communities not covered earlier. Focus on regions with a high proportion of Māori and Pacific peoples first.	*Additional phase* Regions of highest level of deprivation and/or high proportion of Māori and Pacific peoples	Same - refer to left.

Appendix Eight: Communication update from Ministry of Health – 18 February 2021

- After engagement with border and MIQ agencies, and DHBs, factsheets and guides have been produced and shared across a range of channels: direct to employers, DHBs and border agencies, and available on the Ministry of Health website: www.health.govt.nz/covid-vaccine-resources.
- Key communication collateral, including "Getting your COVID-19 vaccine: what to expect", "After your immunisation" and "FAQs #1" are being translated into 10 languages, initially, to meet the needs of border and MIQ workers. Material suitable for the wider public will then also be translated into an additional 10 languages, to align with the languages on the Unite website.
- Some of the material we have produced is transferable to the wider public and will be available for DHBs and on the Ministry of Health website.
- A series of online health Q&A sessions with MIQ workers have been set up ahead of the vaccine rollout, with clinicians from the *Immunisation Implementation Advisory Group* (IIAG), including Helen Petousis-Harris, Nikki Turner, Dr Rawiri McKree Jansen, Apisalome Talemaitoga and Te Puea Winiata.
- As rollout progresses and our border and MIQ workforce, along with their household contacts, are vaccinated, we will continue to work closely with border and MIQ agencies and employers to ensure we are meeting their communication needs.
- We also continue to update Healthline and the COVID-19 website with key messages and content. We have a dedicated email address for employers to contact us directly with health and safety specific questions.
- As part of the plan for an integrated public information campaign, we are meeting regularly with key Government agencies and working with providers of targeted content and approaches, Mahi Tahi and The Cause Collective.
- The paid advertising campaign will play a supporting role at this stage, and will start after roll-out begins, likely in late February. Its initial focus will be to share the plan to vaccinate our border and MIQ workers and their household contacts first, and ensuring the public know where to go to get information.
- Vaccine branded collateral, including pullup banners, teardrop flags and large posters, are being sent to DHBs for use at vaccination centres.

Māori

- Mahi Tahi have completed a targeted video, praising people around what Māori have done to keep individuals and communities safe. Two more videos are planned and will be posted on Facebook, using known Māori influencers reinforcing safety and answering questions in an authentic way.
- Mahi Tahi and MoH are also in contact with the Iwi Comms Collective to test messaging.
- The first in a series of Q&A sessions for Māori has been set up, with trusted Māori health professional Dr Lily Fraser.

Pacific

- To support our Pacific community, an online fono, organised by MoH and MPP, was held in Auckland on Wednesday evening. It was led by Minister Sio and trusted Pacific health professionals, including Dr Api Talemaitoga and Dr Debbie Ryan. Over 600 people registered to attend.

General

1. Research on vaccine insights was published on Wednesday 17th Feb on the Ministry website and a media panel held: https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-vaccines/covid-19-vaccine-research-insights
   Further sentiment reporting is currently being commissioned to measure the mood of the public as vaccinations are underway

Close management of comments on both the Unite and Ministry social channels is being conducted to correct misinformation
Targeted content is being created specifically to address misinformation, particularly for iwi

2. Protocols have been implemented to ensure alignment of messaging across the Unite and Health websites and ensure subject matter experts and pillar leads have visibility of any content being published through our website(s)