Document 1

MINUTES: COVID-19 Vaccine Technical Advisory Group

Date:	Tuesday 15 February 2022
Time:	11:00am to 12:00pm
Location:	Teams: s 9(2)(k) [redacted]
Chair:	Ian Town
Members:	Danny de Lore, David Murdoch, Elizabeth Wilson, Helen Petousis-Harris, James Ussher, Nikki Moreland, Owen Sinclair, Peter McIntyre, Sean Hanna, Tony Walls
Ministry of Health Attendees:	Andi Shirtcliffe, Brooke Hollingshead, Chriselle Braganza, Daniel Bernal, Edwin Reynolds, Frances Graham, Juliet Rumball-Smith, Mariana Traslosheros Reyes, Niki Stefanogiannis, Pippa Scott, Sean Driver
Guests:	Rāwā Mahu Karetai Wood-Bodley, Marion Leighton, Alison Cossar, Amy Alexander, Maria Cotter, Kate Taptiklis, Declan Sua
Apologies:	Ian Frazer, Nikki Turner, Sue Crengle, Caroline McElnay, Fiona Callaghan, Imogen Roth, John Tait, Patricia Joseph

1.0	**Welcome and Previous Minutes** Ian Town welcomed all Members and Attendees and Guests in his capacity as Chair of the COVID-19 Vaccine Technical Advisory Group (CV TAG). Minutes of the last meeting (08 February 2022) were accepted.
2.0	**Vaccine Rollout** An update was provided on the vaccine rollout. • First and second doses are high, around 4 million. Most DHBs have reached the target set by MOH, except Northland. • It was noted that paediatric doses were not as high as anticipated, and this was discussed further in point 3.0. • Approximately 2 million booster doses have been administered.
3.0	**Equity and the Vaccine Rollout** • Representatives from the disability and equity teams at the Ministry of Health summarised some of the challenges in the vaccine rollout and specifically for 5-11-year-olds, and their approaches to address these issues. • In the vaccine rollout, it has been observed that people living with disabilities have a preference for going with family or friends to general COVID-19 vaccination centres or events, rather than attending specialised rollout events, but tailored events are still effective. • The significantly lower uptake among tamariki Māori was very concerning to CV TAG, particularly given the assurances given.

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	• Approximately 26% of tamariki Māori are vaccinated, which is markedly lower than the national 5–11-year-old coverage of 45%. Pacific 5-11-years-old have a coverage of around 36%. The rates varied between regions. • Concern was also raised about uptake being lower among Māori 18-49-year-olds. This might be a consequence of poor access to healthcare in this group because of higher rates of living in transient housing, higher rates of poverty, and lack of transport. • While there are community-led programmes targeting each of these groups, there is still work underway to engage these communities through mainstream services. The ability for mainstream services and the health system as they stand to reach Māori without significant changes was queried. • The equity team identified a gap in availability of vaccination outside of work hours. It is likely that routinely using schools as vaccination sites and having more clinics/pharmacies open after hours would increase uptake among tamariki Māori. • Funding has also been approved to assist with any workforce capacity issues due to Omicron and an increase in demand on boosters. Schools have indicated they will be better placed to engage in the paediatric roll out in about 2 weeks.
4.0	**Booster Doses in 12-17 year-olds** Draft recommendations on whether 12-17-year-olds should receive booster doses were discussed. • Draft recommendations were shared for CV TAG to consider, which proposed boosters only be administered to those with underlying health conditions, and for those who live with a vulnerable or immunocompromised household member. These would be offered at 3 months after the primary course with a broader decision made for this age group at a later date. • It was argued that Māori and Pacific young people need to be included for boosters due to epidemiology in NZ and the greater risk of severe disease and hospitalisation in this group. • Differences between the two age subgroups (16-17yo and 12-15yo) were discussed. It was noted that there is a small amount of trial data about boosters in 16–17-year-olds, but none for younger ages. • It was noted that the UK, US and Australia have recommended that all 16-17-year-olds be offered boosters. This option could be considered in NZ, with only high-risk 12-15-year-olds offered boosters. • It was noted that there are many 16 and 17 year olds who are out of school or in the workforce and who may be at high risk of exposure. • There are limited data about boosters for this age group. Medsafe are expecting an application soon for boosters in this age group for Pfizer. AstraZeneca is not currently authorised for use in this age group. • The concern around mandates for this group was noted. • The purpose of offering boosters in this age group was queried, as severe disease is already unlikely. Boosting this age group to reduce transmission would need data to back this up. • Reference to the sequencing framework will be removed as this is now outdated. • Recommendations will be redrafted and shared with CV TAG for approval in the coming days.
5.0	**Dosing interval for 5-11-year-olds** • International and local safety data were shared with CV TAG. Revised recommendations were shared with CV TAG, which proposed that second doses proceed, and that these be given at 8

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<table>
<tr><td></td><td>weeks after the first dose. Māori and Pacific children, children with high-risk pre-existing conditions, and children living with vulnerable people should be prioritised.
• The recommendations were approved.</td></tr>
<tr><td>6.0</td><td>Minimum Vaccination Requirements to enter NZ and Definition of Fully Vaccinated
• Policy requested advice from CV TAG on whether the definition of full vaccination or minimum vaccination requirements needs to be updated to include boosters.
• There was seen to be little evidence to support a requirement for boosters beyond what is currently in the Vaccine Order. Boosters provide substantial personal protection (and potential protection of health care system), but provide less of a benefit for transmission.
• Infection following 2 doses and hybrid immunity was seen to provide equivalent protection as a booster, however it would be difficult to operationalise this as requiring proof would have a significant impact on lab capacity.
• Mixed dose schedules and boosters are still being investigated.
• These questions will be progressed offline between STA and Policy.</td></tr>
<tr><td>7.0</td><td>Future Vaccine Portfolio
Item not discussed due time constraints.</td></tr>
<tr><td>8.0</td><td>Next Steps/Decisions Pending</td></tr>
<tr><td>9.0</td><td>Any Other Business</td></tr>
<tr><td>10.0</td><td>Agenda Items for Next Meeting</td></tr>
<tr><td>11.0</td><td>New Action Items Raised During Meeting
<table>
<tr><th>#</th><th>Agenda item</th><th>Actions</th><th>Action Owner</th></tr>
<tr><td>107</td><td>ME/CFS trial proposal</td><td>Memo to be drafted</td><td>STA</td></tr>
<tr><td>108</td><td>Heterologous Booster</td><td>RfA to be Drafted</td><td>STA</td></tr>
</table></td></tr>
<tr><td colspan="2">Meeting closed at 12:03pm
Next meeting: 22 February 2022</td></tr>
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Open Actions:

#	Agenda item	Actions	Action Owner	Updates
84	Previous infection	Collate advice from peak bodies on immune response and vaccine recommendations.	STA	20/01 – Action raised

85	Alternative schedule: Paediatric dose after adult dose	Protocol to be developed to ensure access to paediatric doses of the vaccine are available to those who may benefit from it.	CVIP Clinical with support from STA	20/01 – Action raised
98	Priority groups for shortened interval among 5-11-year-olds	Memo to incorporate Medsafe data before finalising	STA	01/02 – Action raised 15/02 – Final memo to be circulated next agenda
102	Boosters in 12-17 year olds	Revise memo recommendations for next CV TAG	STA	08/02 – Action raised 15/02 – Final memo to be circulated next agenda
107	ME/CFS trial proposal	Memo to be drafted	STA	15/02 – Action raised
108	Heterologous Booster	RfA to be Drafted	STA	15/02 – Action raised

Closed Actions Since Last Meeting:

#	Agenda item	Actions	Action Owner	Updates
99	Novavax decision to use in primary courses	Finalise recommendations on use of the Novavax vaccine	STA	1/02 – Action raised 10/02 – Action closed
101	Novavax Decision to Use Primary Course	Finalise and circulate memo	STA	08/02 – Action raised 10/02 – Action closed
103	AstraZeneca booster dose at 3 months	Memo to be finalised and distributed	STA	08/02 – Action raised 10/02 – Action closed
104	Vaccine rollout	Ministry's equity team to be invited to the next meeting	Secretariat	08/02 – Action raised 10/02 – Action closed
105	Priority Groups for Shortened Interval Among 5-11-year-olds	Request safety data	STA	08/02 – Action raised 14/01 – Action closed
106	Priority Groups for Shortened Interval Among 5-11-year-olds	Revise recommendations for next CV TAG	STA	08/02 – Action raised 14/02 – Action closed

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Document 2

MINUTES: COVID-19 Vaccine Technical Advisory Group

Date:	Tuesday 01 March 2022
Time:	11:00am to 12:00pm
Location:	Teams: s 9(2)(k) [redacted]
Chair:	Ian Town
Members:	Danny de Lore, David Murdoch, Elizabeth Wilson, Helen Petousis-Harris, Ian Frazer, James Ussher, Nikki Moreland, Nikki Turner, Owen Sinclair, Peter McIntyre, Sean Hanna, Sue Crengle, Tony Walls
Ministry of Health Attendees:	Andi Shirtcliffe, Brooke Hollingshead, Caroline McElnay, Chriselle Braganza, Daniel Bernal, Edwin Reynolds, Mariana Traslosheros Reyes, Niki Stefanogiannis, Pippa Scott
Guests:	Alison Cossar, Allison Bennett, Amy Alexander
Apologies:	Fiona Callaghan, John Tait, Juliet Rumball-Smith

1.0	**Welcome and Previous Minutes** Ian Town welcomed all Members and Attendees and Guests in his capacity as Chair of the COVID-19 Vaccine Technical Advisory Group (CV TAG). Minutes of the last meeting (15 February 2022) were accepted.
2.0	**Vaccine Rollout** An update was provided on the vaccine rollout: • Meetings with Vaccine Ministers are now occurring fortnightly, and there was acknowledgement that the vaccination programme has done what it was intended to do in keeping New Zealanders safe. Discussions are underway about integrating the COVID-19 vaccination with the wider National Immunisation Programme (NIP) as influenza season approaches, and an invitation will be made for the Director of this Programme to speak to CV TAG later in March. • Some members of CV TAG had met with the Ministry of Health NIP equity team to discuss actions underway to improve vaccine uptake among tamariki Māori. School-based programmes will play a larger role going forward to enable greater access, with the rate of the paediatric rollout slowing down since schools went back. • A soft launch of the booster vaccine for 16-17-year-olds will occur in the coming days, prioritising those with clinical need in the 16-17-year age group. 12-15-year-olds with clinical need will also have a pathway available, but a broader rollout will not occur at this stage. However, the focus of the vaccination programme will remain on tamariki and boosting adults.
3.0	**Future Vaccine Portfolio**

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	CV TAG were provided with an update on the vaccine portfolio from the Systems Strategy and Policy team: • It was noted that Ministers recently made the decision to maintain an mRNA-based immunisation programme, and access to mRNA-based vaccines will be maintained. Efforts are ongoing to confirm maintained access for the latter half of the year, and this will include access to any variant-specific versions of Pfizer that may become available. In general, large amounts of both the adult and paediatric doses of Pfizer are currently available. • Cabinet has approved Novavax for use as a primary course. Novavax are expected to submit an application to Medsafe for use as a heterologous booster shortly. The potential for Novavax to be used as a booster among people who have had an adverse event from their Pfizer primary course was noted. Discussion about the use of Novavax as a heterologous booster are anticipated, pending Medsafe approval. • Access to a non-mRNA vaccine will also be maintained. Access to a small volume of AstraZeneca vaccines has been maintained, however the uptake for this vaccine has been very low thus far. • There have been issues with regards to the delivery of Janssen. It is anticipated that there will be little need for this vaccine and advice has been put forward to Ministers about the possibility of donating this vaccine.
4.0	**Novavax as a Heterologous Booster** CV TAG reviewed the reactogenicity, safety, immunogenicity, and efficacy data on all heterologous booster schedules: • Data is available from the UK COV-BOOST study on Novavax and some smaller studies. • The COV-BOOST trial showed that the use of Janssen, Moderna, Valneva and Curevac following a primary course of Pfizer or AstraZeneca. Each was well-tolerated, and serious adverse events were uncommon, however the study cohorts were not large enough to detect rare side effects. Booster doses of an mRNA vaccine offer the greatest protection, however the use of Novavax as a booster elicited a modest increase in neutralising titres after a Pfizer course. • The need for a heterologous booster dose will have to be balanced carefully with the complexity of implementing different booster vaccines. • Half doses of Pfizer may also be a suitable option for those who have side effects after full doses. Evidence on half doses will be compiled and presented to CV TAG at a future meeting. • CV TAG will continue to monitor the evidence in this space and provide recommendations in the future, pending Medsafe approval of any suitable boosters.
5.0	**Pfizer Second Booster (Fourth dose)** CV TAG reviewed the data available on second boosters (fourth doses): • Data from the UK and US shows that vaccine efficacy against symptomatic infection and severe disease caused by Omicron wanes over time, and some countries have recommended the administration of a second booster dose (Israel, the UK, Chile, Hungary, and South Korea). These have been limited to the elderly or individuals at increased risk (of severe disease or exposure). • Data on the safety, reactogenicity and efficacy of second booster doses is currently limited to two studies from Israel. • The rates of confirmed infection and severe disease have been lower after a second booster dose, however CV TAG noted that the rise in immune responses following a second booster is inferior when compared to the rise in responses between the second and third dose.

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	• The data thus far does not support a strong rationale for recommending a second booster at this point in time. • CV TAG will continue to monitor the evidence in this space and provide recommendations in the future, pending Medsafe approval.
6.0	s 9(2)(g)(i) [redacted]
7.0	**CV TAG Recommendation Memos** The latest finalised memos included in agenda for noting: • Use of boosters in 12-17-year-olds • Second dose and interval for 5-11-year-olds
8.0	**Next Steps/Decisions Pending** None.
9.0	**Any Other Business** Clarifications were requested on CV TAG's recommendations on the use of Novavax as a primary course. It was confirmed that CV TAG had recommended that the second dose should be administered at least 3 weeks later, and not at 3 weeks later. Coadministration of the vaccine with the influenza vaccine was considered to be appropriate, with the exception of the adjuvanted flu vaccine. It was noted that CV TAG earlier recommended that vaccines could be given 4 weeks after infection, but CV TAG recommended it be given at 12 weeks, and this has not been updated publicly. Clarification will be sought by the Ministry of Health team.
10.0	**Agenda Items for Next Meeting** None.

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11.0 **New Action Items Raised During Meeting**

#	Agenda item	Actions	Action Owner
109	ME/CFS Trial Proposal	Request revised protocol	STA
110	Any Other Business	Check timeline on updating advice regarding vaccination after infection	STA

Meeting closed at **12:05pm**

Next meeting: **08 March 2022**

Open Actions:

#	Agenda item	Actions	Action Owner	Updates
85	Alternative schedule: Paediatric dose after adult dose	Protocol to be developed to ensure access to paediatric doses of the vaccine are available to those who may benefit from it.	CVIP Clinical with support from STA	20/01 – Action raised
109	ME/CFS Trial Proposal	Request revised protocol	STA	01/03 – Action raised
110	Any Other Business	Check timeline on updating advice regarding vaccination after infection	STA	01/03 – Action raised

Closed Actions Since Last Meeting:

#	Agenda item	Actions	Action Owner	Updates
84	Previous infection	Collate advice from peak bodies on immune response and vaccine recommendations.	STA	20/01 – Action raised 01/03 – Action closed as part of item 110.
98	Priority groups for shortened interval among 5-11-year-olds	Memo to incorporate Medsafe data before finalising	STA	01/02 – Action raised 15/12 – Final memo to be circulated next agenda 28/02 – Memo in agenda. Action closed
102	Boosters in 12–17-year-olds	Revise memo recommendations for next CV TAG	STA	08/02 – Action raised 15/12 – Final memo to be circulated next agenda 28/02 – Memo in agenda. Action closed
107	ME/CFS trial proposal	Memo to be drafted	STA	15/12 – Action raised

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				28/02 – Memo in agenda for 01/03 meeting. Action closed
108	Heterologous Booster	RfA to be Drafted	STA	15/12 – Action raised 28/02 – RFA in agenda for 01/03 meeting. Action closed

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Document 3

MINUTES: COVID-19 Vaccine Technical Advisory Group

Date:	Tuesday 08 March 2022
Time:	11:00am to 12:00pm
Location:	Teams: s 9(2)(k) [redacted]
Chair:	David Murdoch
Members:	Danny de Lore, Elizabeth Wilson, Helen Petousis-Harris, Ian Frazer, James Ussher, Nikki Moreland, Nikki Turner, Owen Sinclair, Sue Crengle, Tony Walls
Ministry of Health Attendees:	Andi Shirtcliffe, Brooke Hollingshead, Caroline McElnay, Chriselle Braganza, Edwin Reynolds, Frances Graham, Juliet Rumball-Smith, Niki Stefanogiannis, Pippa Scott, Sean Driver
Guests:	Alison Cossar, Amy Alexander, Jennifer Keys, James Entwisle, John Tait, Karin Van Bart, Laurence Holding, Thomas Teunissen
Apologies:	Daniel Bernal, Fiona Callaghan, Ian Town, Mariana Traslosheros Reyes, Peter McIntyre, Sean Hanna

1.0	**Welcome and Previous Minutes** David Murdoch welcomed all Members and Attendees and Guests in his capacity as Acting Chair of the COVID-19 Vaccine Technical Advisory Group (CV TAG). Minutes of the last meeting (01 March 2022) were accepted.
2.0	**CV-ISMB Update** An update was provided on the current process for quantifying the risk of myocarditis by CV-ISMB and the Ministry's Post-Event team, and what the current data is telling us: • New Zealand's reporting rates are largely in line with international data, with rates of myocarditis and pericarditis higher among younger age groups and after dose two. Most cases have been mild and self-limiting, though long-term follow-up is needed. • The Ministry is conducting rapid cycle analyses and self-controlled case studies with respect to myocarditis, pericarditis, and other adverse events. • The Ministry is also conducting a study to examine long-term outcomes after vaccine-induced myocarditis, which will look at physical and mental health, physical functioning, and ability of individuals 12 and over to attend work or school 3 months after a clinical diagnosis of myocarditis. • The study has received ethics approval and is expected to be underway with recruitment and surveying at the end of March. There are currently 300 individuals eligible for the study, with more expected to be recruited via CARM. • The overlap between these studies and that being proposed by the University of Auckland remains unclear and requires clarification.

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	• A member highlighted that including post-booster data would be beneficial, as there are individuals who will now be 3 months post-booster. However, the limitations on the parameters of the study at the time of planning limited this.
3.0	**Vaccine rollout** This Item was deferred until the next meeting
4.0	**Coadministration of COVID-19 vaccines and Flu Vaccines** An update on data relating to the coadministration of all COVID-19 vaccines and flu vaccines was provided: • Data is limited to two publications: the UK ComFlu-COV study and a UK phase 3 trial sub-study. The studies showed that coadministration is generally well tolerated with no significant safety concerns. One clinical trial where flu vaccines were coadministered with the Novavax vaccine showed a lower immune response, but vaccine efficacy was not affected. • International peak bodies continue to recommend coadministration, and these include ATAGI, ACIP, JCVI and NACI. • Previously it was advised that Novavax could be coadministered with other vaccines, with the exception of the Zostavax vaccine which should be given 7 days later. However, there is also limited data on coadministering new adjuvanted vaccines. The adjuvanted Novavax vaccine has been co-administered with FluAd Quad (an adjuvanted flu vaccine), however it is difficult to detangle the adverse event profile by age in the Novavax sub-study. A member noted the small sample size of this study and need for further evidence. • Any changes to advice should take this into account. • CV TAG advised an update be made that there should be a 3-day gap between Novavax and Shingrix or FluAd Quad, as all of these are adjuvanted vaccines. This was not seen to cause equity issues as they are only available on the private market and therefore have limited use. There was no dissent to providing this technical update to coadministration advice for these new vaccines.
5.0	**Myocarditis and Booster Options** • The Ministry received a letter from IMAC in February requesting CV TAG's advice on boosters for mandated workers who had myocarditis after their second dose. Concern was expressed about the use of AstraZeneca in this population, due to some reports of myocarditis and the link to thrombosis with thrombocytopaenia (TTS) in age groups under 50. • An evidence review on the risk of myocarditis after Pfizer and AstraZeneca was presented to CV TAG. • Data from the roll-out of boosters in the US and Israel shows myocarditis rates were lower than from second doses. AstraZeneca rates were not higher than background rates, though the risk of TTS must be considered. • A member sort clarification from the RfA highlighting that IMAC was not currently recommending revaccination with Pfizer and have been recommending deferral until now, as is also the policy in the US. This will be updated. NACI in Canada suggest that further mRNA doses can be given at least 90 days post-myocarditis. Australia's advice is a case-by-case approach, noting the risks of AstraZeneca. • TAG members noted the risk of myocarditis for the vaccine against the risk from COVID-19, which still favour getting protection from a booster. • There was discussion among CV TAG members on the varying factors and risk associated with each vaccine booster with regards to previous symptoms, age, sex and infection. It was agreed that

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	if someone had presented with side effects such as myocarditis from Pfizer, they should not have to have a booster of Pfizer. Acknowledgments were made that there are other options for these individuals. • It was agreed that advice must be nuanced and developed on a case-by-case basis, varying by individual to support individualised support plans, in order to account for specific risk factors relating to previous infection, age and sex. • Discussions may be needed with the exemptions team to explore possibilities. • Individuals should be considered for Novavax if approved as a booster. **ACTION:** STA will draft a memo with CV TAG's recommendations and circulate.
6.0	**Third Dose in Severely Immunocompromised 5-11-year-olds** Advice was requested on the need for a third primary dose in severely immunocompromised 5-11-year-olds. • A rapid review of the evidence showed no safety data, however based on first principles and the benefit it has provided to severely immunocompromised older populations, the UK, US, Canada and Australia have recommended a third primary dose be given. Most of these have been at a 4–8-week interval, however ATAGI recommended it be given 2-6 months after the first two doses, with consideration given to timing of treatment. • It was noted that generally children have a good immune response, however emerging data suggests this may wane rapidly against infection, and this would be higher among the severely immunocompromised. • CV TAG members noted emerging data shows an increased waning of immunity in this age group, while still protecting against severe disease and discussed how the current interval for children in NZ might enable greater protection. However, if offered to older immunocompromised individuals it should be available to this age group as well. • It was agreed that a third dose should be made available, however this should be limited to those who need it without clinical discretion to avoid wider availability. **ACTION:** STA will draft a memo with CV TAG's recommendations and circulate.
7.0	**Pre-print on Pfizer vaccine in 5-11-year-olds** A call was made for initial reaction and comments from a preprint exploring data in New York which shows that vaccine effectiveness against infection in this age group wanes rapidly: • CV TAG noted that protection against severe disease was maintained longer, which is the primary goal of immunisation. New Zealand's longer interval between doses suggests duration of protection may be longer than the 3 weeks in the study. The waning may be due to the smaller dose given. • Further data is required before any changes would be made to recommendations however it emphasises the importance of other public health measures such as mask wearing, ventilation etc. • The implications for the public health rationale for vaccinating this age group was raised, noting one aspect in the decision was preventing further transmission to whānau and within the community. However, this was only a small factor in decision making.
8.0	**Next Steps/Decisions Pending** None.

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9.0	**Any Other Business** • Some CV TAG members enquired on the timeframe for operationalising the recommendation to give boosters to 16-17-year-olds as this has not been communicated to the health sector. Currently booster doses are needing to be given off-label. It was noted that while CV TAG's advice has been received, a decision to go ahead has not been made, and approval options are still being considered. • An update was requested for formalising advice on the timeframe for vaccination after infection. Draft advice will be brought to CV TAG next week, to resolve the current disconnect between IMAC and CV TAG.
10.0	**Agenda Items for Next Meeting** None.
11.0	**New Action Items Raised During Meeting**

#	Agenda item	Actions	Action Owner
112	Myocarditis and Booster Options	Memo to be drafted and brought to CV TAG	STA
113	Third Dose in Severely Immunocompromised 5-11-year-olds	Memo to be drafted and brought to CV TAG	STA

Meeting closed at **12:00pm**

Next meeting: **22 March 2022**

Open Actions:

#	Agenda item	Actions	Action Owner	Updates
85	Alternative schedule: Paediatric dose after adult dose	Protocol to be developed to ensure access to paediatric doses of the vaccine are available to those who may benefit from it.	CVIP Clinical with support from STA	20/01 – Action raised
109	ME/CFS Trial Proposal	Request revised protocol	STA	01/03 – Action raised
110	Any Other Business	Check timeline on updating advice regarding vaccination after infection	STA	01/03 – Action raised
112	Myocarditis and Booster Options	Memo to be drafted and brought to CV TAG	STA	08/03 – Action raised
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#	Agenda item	Actions	Action Owner	Updates
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98	Priority groups for shortened interval among 5-11-year-olds	Memo to incorporate Medsafe data before finalising	STA	01/02 – Action raised 15/12 – Final memo to be circulated next agenda 28/02 – Memo in agenda. Action closed
102	Boosters in 12–17-year-olds	Revise memo recommendations for next CV TAG	STA	08/02 – Action raised 15/12 – Final memo to be circulated next agenda 28/02 – Memo in agenda. Action closed
107	ME/CFS trial proposal	Memo to be drafted	STA	15/12 – Action raised 28/02 – Memo in agenda for 01/03 meeting. Action closed
108	Heterologous Booster	RfA to be Drafted	STA	15/12 – Action raised 28/02 – RFA in agenda for 01/03 meeting. Action closed

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Document 4

MINUTES: COVID-19 Vaccine Technical Advisory Group

Date:	Tuesday 29 March 2022
Time:	11:00am to 12:00pm
Location:	Teams: s 9(2)(k) [redacted]
Chair:	Ian Town
Members:	David Murdoch, Danny de Lore, Elizabeth Wilson, Helen Petousis-Harris, Ian Frazer, James Ussher, Nikki Moreland, Nikki Turner, Owen Sinclair, Peter McIntyre, Sean Hanna, Sue Crengle, Tony Walls
Ministry of Health Attendees:	Andi Shirtcliffe, Brooke Hollingshead, Caroline McElnay, Daniel Bernal, Edwin Reynolds, Mariana Traslosheros Reyes, Niki Stefanogiannis, Pippa Scott, Shama Kukkady
Guests:	John Tait, Fran Priddy, Mike Williams, Simon Carson, Tara Swadi, Matt Jones, Laurence Holding, Marion Leighton
Apologies:	Juliet Rumball-Smith

1.0	**Welcome and Previous Minutes** Ian Town welcomed all Members and Attendees and Guests in his capacity as Chair of the COVID-19 Vaccine Technical Advisory Group (CV TAG). Minutes of the last meeting (08 March 2022) were accepted.
2.0	**Vaccine Rollout** • An update was provided on the vaccine rollout. Approximately 2.55 million booster doses have been administered and ~40,400 paediatric 2nd does. • It was noted that the uptake in 5–11-year-olds has slowed, and thoughts on the reasons for this were discussed. • A member noted that some DHBs predicted a slowing in vaccination rates. The increased community transmission may be the cause of this as any further vaccination post infection will be subject to the 3 months stand down period. • Schools were seen as vital to address access and equity issues, and CV TAG noted considerable variation by DHB on school-based rollouts with further guidance needed. • CV TAG encouraged more active use of the National Immunisation Register to recall and follow-up with children who have had their first dose and not their second.
3.0	**Ministry of Health Update on COVID-19 Response** **Antibody Testing**

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	• CV TAG were updated on the short and long-term Ministry of Health thinking on serology including its role in ongoing surveillance, seroprevalence, and strategic planning. Clinical advice was sought on the Orbis point-of-care antibody tests being marketed, to be forwarded to Testing TAG. • There was concern about the utility of these tests, with members noting that there is no good immune correlate of protection, there would be no clinical input in interpreting results, nor guidance on what the results might mean. Pharmacies were not seen as an appropriate setting for the test with greater supervision needed, and concern was also raised about the implications for the vaccination programme and public health measures if individuals received these results. It was also noted this test cannot distinguish between immune response to wild disease and to vaccination. The high cost and impact of equities was also noted.
4.0	**Third Dose for Severely Immunocompromised 5-11-year-olds** • Draft recommendations were presented to CV TAG for discussion and endorsement on the usage, timing (8 weeks post second dose) and who is considered severely immunocompromised. • While there is no data on the safety or effectiveness of a third primary dose, this can be inferred from the data in adolescents. Australia, the UK, Canada, and the US have recommended this group receive a third primary dose, with timing ranging from 4 to 8 weeks after the second dose. • CV TAG recommended a third primary dose be offered to severely immunocompromised 5-11-year-olds. This would be the same list and at the same interval as was given for adolescents and adults, with clinical guidance from the IMAC handbook, noting that this may be reviewed over time.
5.0	**Future vaccine portfolio: Use of AstraZeneca** • Advice was sought from CV TAG on the requirement to hold any ongoing supply of AstraZeneca going forward, noting that there are no concerns surround the future supply of Pfizer. • There was seen to be a temporary overreliance on AstraZeneca since Novavax has not been approved as a booster, however it was also noted that there is no long-term data on Novavax, and therefore if a problem arose, having a small amount of a vector vaccine with long-term data behind it would give some flexibility to the programme. • It was felt that a small amount will be retained in the portfolio but Novavax is the primary choice as an alternative to Pfizer.
6.0	**Second Boosters for elderly/at-risk/healthcare workers** • Draft evidence and recommendations were presented to CV TAG for discussion. • There is evidence of waning immunity after a first booster dose, and protection appears to wane faster for the elderly and those living with other health conditions. Māori and Pacific peoples are also at greater risk of severe disease and hospitalisation. Protection against infection also wanes, but a fourth dose prevents 30% of cases seen in those who only received three doses. • Data on the safety and efficacy of a fourth dose are limited to two studies from Israel, however these show that a fourth dose is safe and effective in the short term. • Some countries have begun rolling out second boosters, however this is mostly limited to the elderly, very elderly, or immunocompromised. Only Austria is rolling out a fourth dose to healthcare workers outside of the Israel trial. The US and Australia have not given advice; however, it is expected within the next week or two. Countries are giving second boosters four to six months after third doses. • Medsafe are yet to approve a second booster, and there is limited data on pregnant people and those under 18.

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- Six months was seen as the best timing for the second booster (if and when it proceeds), and therefore it was noted advice should not need to be urgent, since first boosters only began to be rolled out in November.
- There is some rationale for a 4th dose in the very elderly. Māori and Pacific peoples should have a lower age band, current data indicates that this should be 50 years of age.
- Severely immunocompromised people who had a three-dose primary course and fourth dose as a first booster were also seen to need a second booster dose at six months.
- Further local evidence on the connection between comorbidities and waning was requested.
- There were mixed views on the rationale and evidence for vaccinating healthcare workers, with some noting the undue burden on them within the current outbreak and the need to prevent breakthrough infections. Other members noted need to continue focussing on preventing severe disease and getting boosters to those most at-risk.
- It was noted that there appears to be booster fatigue among younger populations with more comms needed particularly surround those that do not need a booster and are considered well protected with two or three doses.
- It was noted that comms will be needed on the benefits of hybrid immunity among those who have had a booster and infection.
- Discussions and advice will be revisited next week, however it is likely to limit second boosters to a small group initially while further evidence emerges.
- It was felt that the primary focus should remain on ensuring those eligible have received their first booster dose.

ACTION: Memo to up updated with CV TAG recommendations to be discussed in next meeting

7.0 Next Steps/Decisions Pending

None noted.

8.0 Any Other Business

Vaccination after infection

- Advice on this has been issued today. Further nuance should be included on 5-11-year-olds, namely that for this age group, 3 months rather than a shorter interval is preferred.

Myocarditis after vaccination

- Advice will be issued tomorrow, stating Pfizer should not be given, and that clinical advice should be sought on the need for and type of further dose (AstraZeneca or Novavax).

9.0 Agenda Items for Next Meeting

None noted.

10.0 New Action Items Raised During Meeting

#	Agenda item	Actions	Action Owner
114	Second Boosters for elderly/at-risk/healthcare workers	Memo to be updated with CV TAG recommendations for next meeting	STA

Meeting closed at **11:57 pm**

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Next meeting: **29 March 2022**

Open Actions:

#	Agenda item	Actions	Action Owner	Updates
85	ME/CFS Alternative schedule: Paediatric dose after adult dose	Protocol to be developed to ensure access to paediatric doses of the vaccine are available to those who may benefit from it.	CVIP Clinical with support from STA	20/01 – Action raised 22/03 - In discussion
109	ME/CFS Trial Proposal	Request revised protocol	STA	01/03 – Action raised 22/03 - In progress-pending feedback
114	Second Boosters for elderly/at-risk/healthcare workers	Memo to be updated with CV TAG recommendations for next meeting	STA	22/03 – Action raised

Closed Actions Since Last Meeting:

#	Agenda item	Actions	Action Owner	Updates
110	Any Other Business	Check timeline on updating advice regarding vaccination after infection	STA	01/03 – Action raised 22/03 - Advise issued. Action closed
112	Myocarditis and Booster Options	Memo to be drafted and brought to CV TAG	STA	08/03 – Action raised 22/03 – Advise Issued. Action closed.
113	Third Dose in Severely Immunocompromised 5-11-year-olds	Memo to be drafted and brought to CV TAG	STA	08/03 – Action raised 21/03 – Memo added to the 22/03 agenda 22/03 - advice issued. Action Closed.

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MINUTES: COVID-19 Vaccine Technical Advisory Group

Date:	Tuesday 29 March 2022
Time:	11:00am to 12:00pm
Location:	Teams: s 9(2)(k) [redacted]
Chair:	Ian Town
Members:	David Murdoch, Elizabeth Wilson, James Ussher, Nikki Moreland, Nikki Turner, Owen Sinclair, Peter McIntyre, Sean Hanna, Sue Crengle, Tony Walls
Ministry of Health Attendees:	Brooke Hollingshead, Daniel Bernal, Edwin Reynolds, Mariana Traslosheros Reyes, Niki Stefanogiannis, Pippa Scott, Shama Kukkady, Imogen Roth, Sean Driver
Guests:	John Tait, Fran Priddy, Mike Williams, Simon Carson, Tara Swadi, Laurence Holding, Marion Leighton, Alison Cossar, Amy Alexander
Apologies:	Juliet Rumball-Smith, Danny de Lore, Helen Petousis-Harris, Ian Frazer, Andi Shirtcliffe, Caroline McElnay, Matt Jones

1.0	**Welcome and Previous Minutes** Ian Town welcomed all Members and Attendees and Guests in his capacity as Chair of the COVID-19 Vaccine Technical Advisory Group (CV TAG). Minutes of the last meeting (22 March 2022) were accepted.
2.0	**Findings of the Ka Matau, Ka Ora study** The findings of the study were shared with CV TAG: • The study looked at antibody titres following vaccination 28 days after a second dose of the Pfizer vaccine. It included 300 individuals aged 16 and over and was oversampled for people over 65, Māori and Pacific peoples. • The study looked at differences in immunogenicity in relation to comorbidities, ethnicity and age. There was a uniformly good response to the vaccine, with high titres of both binding and neutralising antibodies across different ages and ethnic groups in New Zealand. It was noted that ethnicity had no impact on immune response in this study • The neutralising antibody response to the Omicron variant was reduced, with a less robust response compared to that against the ancestral, Beta, and Delta strains, similar to what has been observed internationally. • Data about a booster (3rd) dose should be available in approximately 2 months.
3.0	**Future of the National Immunisation Programme** The plans for the future National Immunisation Programme were broadly outlined: • Learnings from the COVID-19 response will be applied to the wider schedule. It was noted that the influenza vaccination programme was set to begin this week (April 1st)

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	• Work is underway to ensure the Programme has a clear presence in the new entities and to ensure that successful operational delivery structures from the COVID-19 vaccination rollout are maintained. • CV TAG emphasised a need for Treaty and equity obligations to be a focus within the structure.
4.0	**Vaccine Rollout** An update was given on the vaccine rollout. • Approximately 2.57 million booster vaccines have been administered. • The current rate of vaccination in 5–11-year-olds is at 54%. Further work on understanding the drivers of low uptake is underway.
5.0	**Further booster doses for elderly** A summary of the memo was outlined noting the main points and draft recommendations: • The ATAGI recommendations and the need for pragmatism from a service delivery point of view were noted, with an evidence-based approach using data from local hospitalisation risk wherever possible. • It was noted that the reactogenicity and adverse events among participants in the study. The vaccine is a reactogenic vaccine, with 78.6% (95%CI: 71.2-84.8) of people who received a second booster dose reporting a local adverse event, and 42.9% (95%CI: 35-50.7) reporting systemic adverse events. • The faster waning of protection among the elderly was noted, and there was seen to be a need for protection in age groups aged 65 and older. A younger age band was seen to be needed for Māori and Pacific peoples due to the increased risk of severe disease and hospitalisation. Those living in aged care and disability residential care were also seen to be at risk of increased transmission and protection and were seen to need a further doses. • There was currently seen to be limited and insufficient evidence on the rate of waning in populations with other health conditions, or in younger age groups who may be at increased risk of workplace exposure e.g. healthcare workers, and it was noted only a couple of countries have rolled out second boosters to these groups. This evidence will need to be revisited as more data emerges. • The timing of further boosters was discussed. This should be based on local data if possible (from those hospitalised after a primary schedule and a booster), however this is not currently available. There is limited data on this, and therefore it could be timed to align with the influenza vaccination programme, and this option should be considered. Most other countries are recommending a fourth dose from 3-6 months after a third dose, or after infection. • The eligibility age for Māori and Pacific peoples for the influenza vaccine should be consistent with the age for further booster doses of COVID-19 vaccine, and this would require the National Immunisation Programme bringing down their eligible age to align with that for the COVID-19 vaccine. This could be an opportunity to increase uptake of the influenza vaccine. • It was noted that immunocompromised individuals who received a third primary dose and fourth dose as a first booster are also at risk of waning protection and should also receive a second booster, nothing this would be their 5th dose (second booster). • Recommendations will be revised and finalised.
6.0	**Novavax as a Heterologous Booster** A summary of the draft recommendations was outlined:

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	• ATAGI (Australia) and NACI (Canada) have approved Novavax as a booster, particularly when mRNA vaccines cannot be used, however the UK and the USA have not yet made a recommendation. • Medsafe are yet to receive an application from Novavax, and therefore any recommendations are pending Medsafe approval. • There was seen to be a need for the Novavax vaccine in the New Zealand rollout, particularly for people who have had an adverse reaction to an mRNA vaccine or have vaccine hesitancy towards mRNA vaccines (noting this is now a small population that remain unvaccinated). • CV TAG recommended that off-label access for those who have had myocarditis or pericarditis following a Pfizer primary course vaccination series • The recommendations will be revised and finalised.
7.0	**CV TAG Recommendation Memos** The latest finalised memos were included in agenda for noting: • Boosters after myocarditis • Vaccination after infection • Third primary dose in immunocompromised 5-11-year-olds
8.0	**Next Steps/Decisions Pending** The recommendations will be revised and finalised.
9.0	**Any Other Business** None noted
10.0	**Agenda Items for Next Meeting** None noted
11.0	**New Action Items Raised During Meeting** None noted
Meeting closed at **12:02pm** Next meeting: **08 April 2022**	

Closed Actions Since Last Meeting:

#	Agenda item	Actions	Action Owner	Updates
110	Any Other Business	Check timeline on updating advice regarding vaccination after infection	STA	01/03 – Action raised 22/03 - Advise issued. Action closed
112	Myocarditis and Booster Options	Memo to be drafted and brought to CV TAG	STA	08/03 – Action raised 22/03 – Advise Issued. Action closed.

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113	Third Dose in Severely Immunocompromised 5-11-year-olds	Memo to be drafted and brought to CV TAG	STA	08/03 – Action raised 21/03 – Memo added to the 22/03 agenda 22/03 - advice issued. Action Closed.
85	ME/CFS Alternative schedule: Paediatric dose after adult dose	Protocol to be developed to ensure access to paediatric doses of the vaccine are available to those who may benefit from it.	CVIP Clinical with support from STA	20/01 – Action raised 22/03 - In discussion 29/03 Action closed
109	ME/CFS Trial Proposal	Request revised protocol	STA	01/03 – Action raised 22/03 - In progress-pending feedback 29/03 – Action closed
114	Second Boosters for elderly/at-risk/healthcare workers	Memo to be updated with CV TAG recommendations for next meeting	STA	22/03 – Action raised 29/03 – Recommendations will be revised and finalised. Action closed

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MINUTES: COVID-19 Vaccine Technical Advisory Group

Date:	Tuesday 26 April 2022
Time:	11:00am to 12:00pm
Location:	Teams: s 9(2)(k) [redacted]
Chair:	Ian Town
Members:	Danny de Lore, Elizabeth Wilson, Helen Petousis-Harris, James Ussher, Nikki Moreland, Nikki Turner, Peter McIntyre, Sue Crengle, Tony Walls
Ministry of Health Attendees:	Daniel Bernal, Edwin Reynolds, Juliet Rumball-Smith, Mariana Traslosheros Reyes, Pippa Scott, Shama Kukkady, Sean Driver, Kayla Benjamin, Eloise Williams, Richard Jaine
Guests:	Thomas Teunissen
Apologies:	Ian Frazer, Owen Sinclair, John Tait, Hilary Longhurst, David Murdoch, Sean Hanna, Andi Shirtcliffe, Brooke Hollingshead, Alison Cossar Allison Bennett

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1.0	**Welcome and Previous Minutes** Ian Town welcomed all Members and Attendees and Guests in his capacity as Chair of the COVID-19 Vaccine Technical Advisory Group (CV TAG). Minutes of the last meeting (29 March 2022) were accepted.

2.0	**Active Monitoring - Post Vaccine Symptom Check - Update on Results**
	• An update was presented by the Post Event team on Pfizer vaccination side-effects in the New Zealand population. This survey is conducted in addition to CARM and done so through push text messaging, with a focus on over sampling minority populations.
	• Results:
	  ○ Side effects seen in the general population:
	  ▪ A similar number of reported events were seen with the booster compared to the second primary dose (41% reported for booster and 42% for dose 2)
	  ▪ No increase in myocarditis symptoms were reported after the booster dose relative to dose 1 and 2 of the primary vaccination cause.
	  ○ Side effects seen in 5–11-year-olds:
	  ▪ A low rate of events was reported with 18% for dose 1 and 24% for dose 2
	  ▪ For most tamariki, the reported side effects were often only minor such as injection site pain.
	  ▪ A low proportion of children who presented with side effects, missed school (2% after dose 1 and 4% after dose 2). This was usually only 1 day or less.

	• CV TAG noted the wording around “side effects”, suggesting “symptoms” is more appropriate. Post Event team to follow up with provider about the wording of questions
3.0	**COVID-19 Vaccine Independent Safety Monitoring Board Interim Report** • The ISMB was published last week, this contained an update on NZ cases of myocarditis and pericarditis. • CV TAG noted that New Zealand has reported a disproportionately high number of post vaccination myocarditis compared to other countries such as US, Australia and Canada. • CV TAG members noted this could be due to discrepancies in reporting, case definition and causality criteria between countries. • Specific questions - As the “Brighton Celebration Criteria” is being used for anaphylaxis, but is it also being used for myocarditis? - Number of deaths due to myocarditis reported by New Zealand are disproportionate compared to Australia, US and Canada. Could there be some consultation to clarify the criteria used to produce this number compared to other countries? - The discrepancies may be due to the detection of cases that are not vaccine associated due to the higher reporting rates and higher diagnostic suspicion of myocarditis and pericarditis in general i.e., sensitivity vs specificity and causality. When considering the patterns following dose 1 and 2, could this be the case as many alerts sent out are very specific in asking symptoms remotely related to myocarditis pericarditis (i.e., anxiety)? **Action**: Follow up with Post Event Team whether WHO causality process for adverse events following immunisation is used in this assessment.
4.0	**Vaccine Rollout** An update on the vaccination rollout was given. • Approximately 2.6 million boosters have been administered with ~23% of 5–11-year-olds are fully vaccinated. • A plateauing has been seen across all age groups of the vaccine roll out. This is most prominent within the 5–11-year-old age group. • Concern was raised that the vaccination numbers across all groups will not see a substantial increase. • The vaccine roll out has been actively supported by Māori providers and schools.
5.0	**CV TAG Recommendation Memos** The latest finalised memos were included in the agenda for noting: **Fourth dose for at-risk groups - Second boosters** • Members noted the importance of increasing the uptake of the first booster dose in high-risk individuals prior to the second booster dose rollout and consideration of uptake for not just those over the age of 18 but across multiple age and ethnic groups • CV TAG noted that an equity gap has been identified in the uptake of the booster in high-risk groups. Concern was expressed that the 50 – 65 age group for Māori and Pacific populations are being left behind for first booster doses, emphasising that a 4th dose would increase the equity gap seen with the current 1st booster (third dose) roll out.

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- CV TAG emphasised that the equity gap should not be used as a reason for delay of the second booster availability to at risk/vulnerable individuals.
- Pfizer have not, nor expressed intent to apply for New Zealand approval for a 4th dose (second booster) and therefore consideration on an appropriate approach requires further discussion, if a second booster comes under a vaccine order, a high bar or criteria would be required.
- The timing between a third and fourth dose (booster and second booster) was discussed. The need to consider a 4-month interval (to align with flu vaccine roll out) has now passed given that the flu vaccine is now being rolled out, with a 6-month interval then suggested.

Action: A member noted the need for more New Zealand specific data on people who are fully vaccinated and boosted compared to those who are not within different age groups.

6.0 Next Steps/Decisions Pending

None noted

7.0 Any Other Business

- TAG members were made aware of the questions that will be used to guide and inform the future vaccine strategy have now been revived. These will be discussed at greater length at a future meeting.
    - CV TAG noted that clarity around hybrid immunity, from a combination of infection and vaccination, would be important in the context of informing decisions as around booster vaccine doses and the frequencies thereof.
    - A focus on data relating to the burden of disease in 2 - 5-year-olds would be useful, with an emphasis on whether hospitalisations in this age group were for COVID-19 or with COVID-19.
- CV TAG memos that have been approved by Ministers will be released proactively
- Research funding round is now open. Members were invited to share this widely amongst their colleagues.
- A brief update on VANS/ PAN coronavirus vaccine was given. The clinical data has been collected and analysis has begun. Early data suggest that the Delta candidate provides a good cross protection against Omicron however an Omicron-based version is in the planning stage. The work is ongoing.

8.0 Agenda Items for Next Meeting

None noted

9.0 New Action Items Raised During Meeting

#	Agenda item	Actions	Action Owner
115	COVID-19 Vaccine Independent Safety Monitoring Board Interim Report	STA to check with Post event team if WHO causality process is in use.	STA
116	Fourth dose for at-risk groups	Collate and report any New Zealand specific data on people who are fully	STA

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			vaccinated and boosted compared to those who are not.	

Meeting closed at **11:52am**

Next meeting: **10 May 2022**

Open Actions:

#	Agenda item	Actions	Action Owner	Updates
115	COVID-19 Vaccine Independent Safety Monitoring Board Interim Report	STA to check with Post event team if WHO causality process is in use.	STA	26/04 – Action raised
116	Fourth dose for at-risk groups	Collate and report any New Zealand specific data on people who are fully vaccinated and boosted compared to those who are not.	STA	26/04 Action raised

Closed Actions Since Last Meeting:

#	Agenda item	Actions	Action Owner	Updates
110	Any Other Business	Check timeline on updating advice regarding vaccination after infection	STA	01/03 – Action raised 22/03 - Advise issued. Action closed
112	Myocarditis and Booster Options	Memo to be drafted and brought to CV TAG	STA	08/03 – Action raised 22/03 – Advise Issued. Action closed.
113	Third Dose in Severely Immunocompromised 5-11-year-olds	Memo to be drafted and brought to CV TAG	STA	08/03 – Action raised 21/03 – Memo added to the 22/03 agenda 22/03 - advice issued. Action Closed.
85	ME/CFS Alternative schedule: Paediatric dose after adult dose	Protocol to be developed to ensure access to paediatric doses of the vaccine are available to those who may benefit from it.	CVIP Clinical with support from STA	20/01 – Action raised 22/03 - In discussion 29/03 Action closed
109	ME/CFS Trial Proposal	Request revised protocol	STA	01/03 – Action raised 22/03 - In progress-pending feedback 29/03 – Action closed

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114	Second Boosters for elderly/at-risk/healthcare workers	Memo to be updated with CV TAG recommendations for next meeting	STA	22/03 – Action raised 29/03 – Recommendations will be revised and finalised. Action closed

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MINUTES: COVID-19 Vaccine Technical Advisory Group

Date:	Tuesday 10 May 2022
Time:	11:00am to 12:00pm
Location:	Teams: s 9(2)(k) [redacted]
Chair:	Ian Town
Members:	Elizabeth Wilson, James Ussher, Nikki Moreland, Nikki Turner, Owen Sinclair, Peter McIntyre, Sean Hanna
Ministry of Health Attendees:	Andi Shirtcliffe, Chris Hedlund, Edwin Reynolds, Eloise Williams, Juliet Rumball-Smith, Mariana Traslosheros Reyes, Pippa Scott, Shama Kukkady, Sean Driver (Secretariat)
Guests:	Allison Bennett, Bonnie Jones, Amy Auld
Apologies:	Danny de Lore, David Murdoch, Ian Frazer, Helen Petousis-Harris, Nikki Turner, Tony Walls Sue Crengle, John Tait, Daniel Bernal, Alison Cossar, Susanna Chung

1.0	**Welcome and Previous Minutes** Ian Town welcomed all Members and Attendees and Guests in his capacity as Chair of the COVID-19 Vaccine Technical Advisory Group (CV TAG). Minutes of the last meeting (26 April 2022) were accepted.
2.0	**Vaccine Rollout** • Approximately 2.45 million booster doses have been administered to date and ~119,000 tamariki have been fully vaccinated. Doses continues to increase but incrementally. • A stubborn plateau of vaccine uptake is still present in the 5-11 age group. • A fourth dose (second booster) is still only available when prescribed by medical practitioners. The Government is working to establish a legal mechanism for wider availability. • It was noted that the equity gap seen throughout the vaccine rollout will require a full system examination. **ACTION:** Clarify with Public Health regarding when the Pfizer meeting is scheduled.
3.0	**Aging-in the 3rd Primary Dose** • A brief summary was provided about processes for handling such requests outside of the CV TAG framework.
4.0	**CV-ISMB Interim Report: Response to questions raised last meeting** • It was noted in the previous CV TAG meeting that New Zealand was potentially overreporting myocarditis rates compared to other countries. However, it was confirmed that Brighton Collaboration

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	definitions were being used for myocarditis/pericarditis by CV-ISMB, rather than NZ specific definition.

5.0	**Definitions of Fully Vaccinated**
	• The definition of up-to-date (fully vaccinated) for vaccination was discussed, with draft guidance provided around:
	  • How long after infection SARS-CoV-2 someone is considered up-to-date with vaccination
	  • The maximum time from a previous dose someone would be considered up-to-date with vaccination.
	  • Which overseas schedules (primary and booster) could be considered up-to-date.
	• CV TAG does not currently recommend boosters in those under 18 years of age.
	• Policy, NIP and STA representatives will meet to clarify the purposes for which the definition of 'up-to-date' for vaccination might be used and consequently what the definition should provide. Ongoing discussion will occur with CV TAG to answer these questions.
	• A request was made by DPMC for rapid provision of this advice (on 17th May, for same day advice). This has been postponed until advice is finalised.

6.0	**Future Vaccine Strategy** • The Future Vaccine Strategy work was introduced to CV TAG, outlining questions which will require input from the group. • Follow up meetings to discuss the questions will be arranged with oversight from STA and Policy teams. • A future meeting was planned between now and the next CV TAG meeting due to the short timeline with CV TAG members, with initial responses required by 17 May. • It was noted that some questions required a public health-based approach and an 'equity-first' structure.
7.0	**CV TAG Recommendation Memos** The latest finalised memos were included in agenda for noting: • Novavax as a Heterologous Booster has been issued.
8.0	**Next Steps/Decisions Pending** None.
9.0	**Any Other Business** • CV TAG members requested information about long COVID. **ACTION:** Bring in the researchers from Victoria University and the Ministry of Heath team supporting the science base for the long COVID project.
10.0	**Agenda Items for Next Meeting** None.

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11.0 New Action Items Raised During Meeting

#	Agenda item	Actions	Action Owner
117	Vaccine rollout	Clarify with Public Health regarding when the Pfizer meeting is scheduled.	STA
118	Any other business	Bring in the researchers from Victoria University and the Ministry of Heath team supporting the science base for the long COVID project.	STA

Meeting closed at **11:55am**

Next meeting: **24 May 2022**

Open Actions:

#	Agenda item	Actions	Action Owner	Updates
115	COVID-19 Vaccine Independent Safety Monitoring Board Interim Report	STA to check with Post event team if WHO causality process is in use.	STA	26/04 – Action raised
116	Fourth dose for at-risk groups	Collate and report any New Zealand specific data on people who are fully vaccinated and boosted compared to those who are not.	STA	26/04 Action raised
117	Vaccine rollout	Clarify with Public Health regarding when the Pfizer meeting is scheduled.	STA	10/05 – Action raised
118	Any other business	Bring in the researchers from Victoria University and the Ministry of Heath team supporting the science base for the long COVID project.	STA	10/05 – Action raised

Closed Actions Since Last Meeting:

#	Agenda item	Actions	Action Owner	Updates
110	Any Other Business	Check timeline on updating advice regarding vaccination after infection	STA	01/03 – Action raised 22/03 - Advise issued. Action closed
112	Myocarditis and Booster Options	Memo to be drafted and brought to CV TAG	STA	08/03 – Action raised 22/03 – Advise Issued. Action closed.

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113	Third Dose in Severely Immunocompromised 5-11-year-olds	Memo to be drafted and brought to CV TAG	STA	08/03 – Action raised 21/03 – Memo added to the 22/03 agenda 22/03 - advice issued. Action Closed.
85	ME/CFS Alternative schedule: Paediatric dose after adult dose	Protocol to be developed to ensure access to paediatric doses of the vaccine are available to those who may benefit from it.	CVIP Clinical with support from STA	20/01 – Action raised 22/03 - In discussion 29/03 Action closed
109	ME/CFS Trial Proposal	Request revised protocol	STA	01/03 – Action raised 22/03 - In progress-pending feedback 29/03 – Action closed

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MINUTES: COVID-19 Vaccine Technical Advisory Group

Date:	Tuesday 24 May 2022
Time:	11:00am to 12:00pm
Location:	Teams: s 9(2)(k) [redacted]
Chair:	Ian Town
Members:	David Murdoch, Nikki Moreland, Nikki Turner, Owen Sinclair, Peter McIntyre, Tony Walls
Ministry of Health Attendees:	Andi Shirtcliffe, Daniel Bernal, Edwin Reynolds, Eloise Williams, Euan Russel, Juliet Rumball-Smith, Kayla Benjamin, Mariana Traslosheros Reyes, Pippa Scott, Sean Driver
Guests:	John Tait, Richard Jaine, Susanna Chung, Kris Golding
Apologies:	Danny de Lore, Elizabeth Wilson, Helen Petousis-Harris, Ian Frazer, James Ussher, Sean Hanna, Sue Crengle, Allison Bennett, Alison Cossar, Amy Auld, Bonnie Jones, Jim Miller, Shama Kukkady

1.0	**Welcome and Previous Minutes** Ian Town welcomed all Members and Attendees and Guests in his capacity as Chair of the COVID-19 Vaccine Technical Advisory Group (CV TAG). Minutes of the last meeting (10 May 2022) were accepted.
2.0	**Vaccine Rollout** • An update was provided on the vaccine rollout. Approximately 2.65 million booster doses have been administered and ~122,000 2nd paediatric doses, roughly one quarter of all eligible tamariki are fully vaccinated. • A stubborn plateau of vaccine uptake is still present in the 5-11 age group. • A request was made to provide more information around levels in some key populations at risk of severe COVID-19. **ACTION POINT**: Breakdown data in vaccine report to show booster uptake among individuals aged 65 years and over, and Māori and Pacific people, aged 50 years and over.
3.0	**Development of a National Immunisation Strategy** • Questions relating to the future vaccine strategy have been divided into sections requiring input from the CV TAG, STA, or assigned to other leads for appropriate response. • Preliminary answers for questions relevant to CV TAG were shared with the members for feedback. ○ The CV TAG discussed and advised on multiple topics, including the goals of the future vaccine strategy in capturing the wider picture of long-term health and wellbeing.

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	○ Equity issues in this area are still a concern, noting that there are also still many children yet to be fully vaccinated. It was noted that an additional meeting with key experts will take place, in order to facilitate a structured engagement on equity advice on vaccines not just for COVID-19 but for the future of childhood immunisation in general. ○ There was also discussion on gaps in the current portfolio and the future decisions of what vaccines to buy and vaccine supply, noting the continuing need to monitory new vaccine technology and the frequency of future vaccination. • The need for a meeting with Pfizer was raised. Clarification with Policy team as to when this will be scheduled.
4.0	**Up-to-date vaccination status** • The Request for Advice document on 'up-to-date vaccination' was circulated. This document provides guidance around being 'up to date' with vaccination, with considerations including duration since the last dose of vaccine and recent infection, as well as vaccines received overseas (e.g. non Medsafe approved vaccines). • Members noted that there will be different circumstances for everyone coming from overseas, such as those who may become due (for their next dose, ie a booster) while in New Zealand while also noting that different vaccines have different schedules. • CV TAG discussed the need for clarity and consistency in terminology between 'overdue', compared to 'maximum limits', noting that 'maximum limits' was associated more with mandate terminology than having a clinical relevance. For example, a person having completed a primary course, plus a booster, would be 'up to date', whereas if it's been over 6 months since they had a primary course, or COVID-19 infection, they would be considered 'overdue'.
5.0	**NZ Data Detailing Second Booster Eligibility** • CV TAG members noted the discrepancies in booster dose up-take and booster eligibility, particularly in the immunocompromised group. Emphasis was placed on this information being raised to colleagues and other channels in the sector. An information awareness plan is in place that addresses the concern that there is a gap in vaccination here.
6.0	**Long COVID Evidence Update** • A report on the current long COVID evidence was shared ahead of the meeting with members of the CV TAG. • A Ministry of Health lead for this work was identified, and it was noted that a multidisciplinary group of expert advisors is being formed around this topic.
7.0	**Next Steps/Decisions Pending** None.
8.0	**Any Other Business** • The CV TAG meeting schedule will move towards meetings every 4-6 weeks (currently fortnightly).
9.0	**Agenda Items for Next Meeting**

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10.0	**New Action Items Raised During Meeting**

#	Agenda item	Actions	Action Owner
119	**Vaccine Rollout**	Breakdown data categories into additional areas of boosters in 65 years and older, and 50 years and older in Māori and Pacific people	STA

Meeting closed at **11:52am**

Next meeting: **21 June 2022**

Open Actions:

#	Agenda item	Actions	Action Owner	Updates
119	**Vaccine Rollout**	Breakdown data categories into additional areas of boosters in 65 years and older, and 50 years and older in Māori and Pacific people	STA	119

Closed Actions Since Last Meeting:

#	Agenda item	Actions	Action Owner	Updates
115	COVID-19 Vaccine Independent Safety Monitoring Board Interim Report	STA to check with Post event team if WHO causality process is in use.	STA	26/04 – Action raised 24/05 - Action closed
116	Fourth dose for at-risk groups	Collate and report any New Zealand specific data on people who are fully vaccinated and boosted compared to those who are not.	STA	26/04 Action raised 24/05 – Circulated in Agenda 24/05 - Action closed
117	Vaccine rollout	Clarify with Public Health regarding when the Pfizer meeting is scheduled.	STA	10/05 – Action raised 24/05 - Action closed
118	Any other business	Bring in the researchers from Victoria University and the Ministry of Heath team supporting the science base for the long COVID project.	STA	10/05 – Action raised 24/05 - RfA Circulated in Agenda 24/05 - Action closed

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115	COVID-19 Vaccine Independent Safety Monitoring Board Interim Report	STA to check with Post event team if WHO causality process is in use.	STA	26/04 – Action raised 24/05 - Action closed

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MINUTES: COVID-19 Vaccine Technical Advisory Group

Date:	Tuesday 21 June 2022
Time:	11:00am to 12:00pm
Location:	Teams: s 9(2)(k) [redacted]
Chair:	Daniel Bernal (acting)
Members:	Danny de Lore, Elizabeth Wilson, James Ussher, Nikki Turner, Peter McIntyre, Sue Crengle, Tony Walls
Ministry of Health Attendees:	Andi Shirtcliffe, Edwin Reynolds, Euan Russell, Juliet Rumball-Smith, Kayla Benjamin, Pete Hanl, Sean Driver, Shama Kukkady
Guests:	Antoinette Righarts, John Tait, Kate Taptiklis, Olivia Pearless, Richard Jaine
Apologies:	Alison Cossar, Allison Bennett, David Murdoch, Harriette Carr, Helen Petousis-Harris, Ian Frazer, Ian Town, Mariana Traslosheros Reyes, Nikki Moreland, Owen Sinclair, Pippa Scott, Sean Hanna,

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1.0	**Welcome and Previous Minutes** Daniel Bernal welcomed all Members and Attendees and Guests in his capacity as acting Chair of the COVID-19 Vaccine Technical Advisory Group (CV TAG). Minutes of the last meeting (24 May 2022) were accepted. s 9(2)(ba)(ii) [redacted] CVTAG endorsement of Nuvaxovid as a booster (through email consultation) was discussed, noting: • It's use as a booster should be acceptable • This is likely to be considered as an option by a very small sub-set of the population • Acknowledgment of limited safety data, particularly for rare systemic side effects. • Use of Nuvaxovid as second booster should be acceptable as pragmatically there is no suggestion of an increased risk from the first to second booster dose.
2.0	**Vaccine Rollout** The latest up take of boosters was presented, including the roll out of 2.6 million booster doses, and a breakdown by eligibility, ethnicity and age groups (including 50-64 and 65+).

	CV TAG noted more understanding of the data was needed to understand gaps (e.g., whether booster eligibility was adjusted for last infection). Feedback from CVTAG included: • The need to address inequities and get more people boosted, particularly for Māori, and those aged 50-64 • Some noting better picture for Māori and Pacific people than initially envisaged • More breakdowns were requested, noting booster eligibility impacted by factors such as last infection, and duration since primary course • Noting of vaccinating against influenza being a key priority (not shown in the data presented, but commented on as reflection of the current impact on the health system from flu) **ACTIONS:** • STA to follow up with the National Immunisation Programme on whether data on booster eligibility adjusts for last vaccination and infection with COVID-19. If it doesn't adjust, STA to request for a breakdown of this information. • STA to follow up with Intel on Analytics to obtain data breakdown comparing influenza to COVID-19 and the impact both have on hospitalisations
3.0	**Future Vaccine Strategy** Not discussed due to time constraints and will be brought back at a future meeting.
4.0	**Fourth Dose Update (Second Booster)** CVTAG discussed the draft memo, noting: • Pragmatically, tolerance and side effects for this booster isn't expected to be any different to the first booster, but safety data is very limited • Limited understanding of the risks of myocarditis/pericarditis among younger age groups should be considered • The booster appears effective on elderly and individuals that are at high risk, but effectiveness among others is not clear • Evidence indicates marginal benefit for otherwise healthy healthcare workers from the second booster CVTAG recommendations included: • Focus should remain on having at-risk populations receiving their first booster dose • Advice needs to align with ATAGI recommendations, rather than alignment with influenza roll out. Keeping as close as possible to the ATAGI recommendations will keep the communications clear and simple to understand from a technical perspective • There was no agreement on acceptability of second boosters for young and healthy healthcare workers. There was discussion over making this permissible versus providing a "not recommended" recommendation, but not clear agreement across the group. • Otherwise healthy pregnant women should be not recommended due to lack of safety data, aligning with ATAGI recommendations. • The eligibility be considered for all available COVID-19 vaccines.

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	ACTIONS: • Updated memo to be sent out to CV TAG, considering above advice
5.0	**Booster Eligibility for 12-15s** • Chair noted MedSafe has provisionally approved the Pfizer booster for 12+ • Agreement obtained from CVTAG that previous recommendations remain, with insufficient evidence to recommend boosters for young people aged 12-15, unless clinically very high-risk per past advice issued.
6.0	**Booster Eligibility for 5-11s** Item not addressed due to time constraints and deferred to a later time.
7.0	**Mortality and Hospitalisation Risk Data** Data from 1 Feb 2022 was presented on risk of COVID-19 mortality and hospitalisation, including breakdowns by age and ethnicity. CV TAG requested more in-depth breakdown of data including by vaccination status and older age groups. Similar study currently being undertaken by the University of Waikato was mentioned and a request for this to be presented at next update was made. **ACTIONS:** • Presented data to be circulated by Intel & Analytics to CVTAG • STA to request Intel & analytics to breakdown presented data if feasible by: ▪ Vaccination status ▪ Variants or time ▪ Age <60, <50 (disaggregate against all variables listed) ▪ Infection vs. incidental ▪ ICU admissions ▪ Vaccine spacing ▪ Co-morbidities (disaggregate against all variables listed) ▪ Type of co-morbidity • STA to follow up on Waikato Study with Intel and Analytics team and for this to be presented at next CVTAG meeting.
8.0	**Up-to-date vaccination status** CVTAG noted the Request-for-Advice, including update to terminology for what is considered ‘up to date’
9.0	**Next Steps/Decisions Pending** None.
10.0	**Any Other Business**
11.0	**Agenda Items for Next Meeting**

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12.0 New Action Items Raised During Meeting

#	Agenda item	Actions	Action Owner
120	**2.0 Vaccine Rollout**	STA to follow up with the National Immunisation Programme on whether data on booster eligibility adjusts for last vaccination and infection with COVID-19. If it doesn't adjust, STA to request for a breakdown of this information.	STA
121	**2.0 Vaccine Rollout**	STA to follow up with Intel on Analytics to obtain data breakdown comparing influenza to COVID-19 and the impact both have on hospitalisations	STA
122	**4.0 Fourth dose update (Second booster)**	Updated memo to be sent out to CVTAG by STA, considering above advice	STA
123	**7.0 Mortality and hospitalisation risk data**	Presented data to be circulated by Intel & Analytics to CVTAG	STA
124	**7.0 Mortality and hospitalisation risk data**	STA to request Intel & analytics to breakdown presented data if feasible by: ▪ Vaccination status ▪ Variants or time ▪ Age <60, <50 (disaggregate against all variables listed) ▪ Infection vs. incidental ▪ ICU admissions ▪ Vaccine spacing ▪ Co-morbidities (disaggregate against all variables listed) ▪ Type of co-morbidity	STA
125	**7.0 Mortality and hospitalisation risk data**	Follow up on Waikato Study with Intel and Analytics team and for this to be presented at next CVTAG meeting.	Chair

Meeting closed at **12:09pm**

Next meeting: **19 July 2022**

Open Actions:

#	Agenda item	Actions	Action Owner	Updates

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120	**2.0 Vaccine Rollout**	STA to follow up with the National Immunisation Programme on whether data on booster eligibility adjusts for last vaccination and infection with COVID-19. If it doesn't adjust, STA to request for a breakdown of this information.	STA	21/06 – Action raised. Data presented does not adjust for prior infection, and the adjusted data has been requested from NIP.
121	**2.0 Vaccine Rollout**	STA to follow up with Intel on Analytics to obtain data breakdown comparing influenza to COVID-19 and the impact both have on hospitalisations	STA	21/06 – Action raised.
123	**7.0 Mortality and hospitalisation risk data**	Presented data to be circulated by Intel & Analytics to CVTAG	STA	21/06 – Action raised. This is being followed up with Intel & Analytics.
124	**7.0 Mortality and hospitalisation risk data**	STA to request Intel & analytics to breakdown presented data if feasible by: — Vaccination status — Variants or time — Age <60, <50 (disaggregate against all variables listed) — Infection vs. incidental — ICU admissions — Vaccine spacing — Co-morbidities (disaggregate against all variables listed) Type of co-morbidity	STA	21/06 – Action raised. This is being followed up with Intel & Analytics. May not be ready for distribution at the next CVTAG meeting.
125	**7.0 Mortality and hospitalisation risk data**	Follow up on Waikato Study with Intel and Analytics team and for this to be presented at next CVTAG meeting.	Chair	21/06 – Action raised. Updated memo to be issued late July/early August.

Closed Actions Since Last Meeting:

#	Agenda item	Actions	Action Owner	Updates
119	**Vaccine Rollout**	Breakdown data categories into additional areas of boosters in 65 years and older, and 50 years and older in Māori and Pacific people	STA	24/05 – Action raised 19/07 – Action closed
122	**4.0 Fourth dose update (Second booster)**	Updated memo to be sent out to CVTAG by STA, considering above advice	STA	21/06 Action raised. 28/06 Action closed. Updated memo has been distributed across CVTAG.

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				Additional feedback from CVTAG has been incorporated and final memo has been sent to the DG.

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Document 10

MINISTRY OF HEALTH
MANATŪ HAUORA

Terms of Reference – COVID-19 Vaccine Technical Advisory Group

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01 March 2021

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Contents

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Introduction

The Ministry of Health (the Ministry) is the kaitiaki of the health and disability system in Aotearoa New Zealand. We do this by providing a fair, effective, and sustainable system that people trust. The Ministry is responsible for providing active stewardship and leadership across the health and disability system to ensure it provides people with the highest level of care, regardless of who they are or where they live.

The COVID-19 pandemic has rapidly evolved internationally and in Aotearoa New Zealand. Responding to COVID-19 in a very rapidly changing environment is a significant ongoing challenge.

The Government's overall public health strategy in respect of the COVID-19 pandemic affecting New Zealand is elimination. That is, to apply a range of control measures to stop the transmission of COVID-19 in Aotearoa New Zealand.

There are four pillars to our elimination strategy, these are:

- border controls
- robust case detection and surveillance
- effective contact tracing and quarantine
- strong community support of control measures

The Ministry has established the COVID-19 Health System Response Directorate (the Directorate) to give effect to the elimination strategy. The Ministry is working to ensure the response to COVID-19:

- is evidence-based
- is consumer-centred
- is equity-focussed and guided by the Treaty of Waitangi
- effectively manages clinical and public health issues and risks
- supports an open and transparent culture
- has a continuous quality improvement and safety focus
- monitors and reviews clinical processes and outcomes
- guides the development of the Ministry and All of Government strategies to address COVID-19.

Context

In May 2020, Cabinet agreed the COVID-19 Vaccine Strategy [CAB-20-MIN-0382 refers]. The objective is to secure access to sufficient quantities of safe and effective COVID-19 vaccines, to implement our preferred immunisation programme at the earliest possible time.

On 10 August 2020, Cabinet agreed to purchase a portfolio of COVID-19 vaccines [CAB-20-MIN-0382 refers]. The portfolio manages several dimensions of risk and uncertainty, such as:

- uncertainty about individual vaccine candidate performance or technology platforms

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- unknown long-term vaccine effectiveness and suitability for particular population groups
- delays in development, manufacturing, and delivery to purchasers
- global supply constraints (including in upstream supply chains)
- the potential for source countries to restrict export of vaccines, and
- delays or failure to achieve regulatory approval.

To have confidence in the portfolio's ability to manage risk and support the immunisation programme, we have deliberately "over-purchased" vaccine stocks.

A diverse portfolio increases the chances of having suitably effective vaccines on hand. It gives our immunisation programme the best possible range of vaccine options to choose from to protect our population from the risk and impact of COVID-19.

The purchase of multiple vaccines means that we now must manage:

a. variability in efficacy of vaccines for different population groups

b. potential oversupply of vaccines, if all vaccines in our portfolio successfully gain regulatory approval and we are required to pay for them

c. significant overlap in the delivery schedule for multiple vaccines and at significant volumes

d. complexity of delivery, if we have multiple vaccines available for use and need more than one to cover our desired populations due to the volumes available

e. increased cost, as purchasing multiple vaccines can significantly increase or decrease the overall cost of the portfolio.

Primarily, the impacts of the Portfolio describe above mean that the Ministry of Health will have to advise on which vaccines to use to support a successful immunisation programme and which not to use, given that we are likely to have an oversupply of vaccines.

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Purpose and Function

The COVID-19 Vaccine Technical Advisory Group (CV TAG) will provide independent, practical advice to the Ministry of Health (the Ministry) where requested for the COVID-19 Vaccine and Immunisation Programme, including for whom a COVID-19 vaccine could be used, if and when a vaccine(s) becomes available as part of the portfolio of vaccines that have been purchased.

The advice provided by CV TAG will consider updated clinical and technical advice and assessment of vaccine characteristics and suitability for different priority groups.

The advice provided by the Advisory Group on whether to use or not use a vaccine is independent from Medsafe's role in providing regulatory approval. CV TAG provides advice on how to use vaccines in our portfolio that have achieved regulatory approval from Medsafe.

The COVID-19 Vaccine Technical Advisory Group's role will be to provide advice and make recommendations to the Ministry on the use of COVID-19 vaccines in our portfolio to achieve the best outcomes for the COVID-19 immunisation programme including, but not limited to:

- ensuring that a decision to use any COVID-19 vaccine is honouring the Crown's obligation under Te Tiriti o Waitangi
- positioning equity at the centre which vaccines should be used
- providing a current clinical and science assessment using updated information and assessment of the safety profile, effectiveness, immunogenicity, reactogenicity and duration of immunity and type of immunity
- vaccine suitability of the immunisation programme, including clinical advice about the sequencing framework and priority groups
- implementation considerations including manufacturing, packaging, shelf life etc cross population and use in specific priority groups
- the suitability of a vaccine for whānau, hapū, iwi, Māori communities.
- the suitability for of a vaccine in supporting and equipping Pacific communities to deliver this programme to their communities where possible

CV TAG may convene appropriate subgroups to meet and provide specialist advice when requested by the Ministry. A Chair will be nominated for each of these subgroups.

CV TAG may consider and endorse proposals or plans raised by Ministry staff and/or other advisory groups.

CV TAG does not hold decision-making authority or responsibility for the acceptance or application of advice provided. The scientific and technical advice and recommendations from CV TAG are provided to the Ministry to inform and contribute to decisions, operations, guidelines, and policy required in the management of COVID-19. The Ministry receives advice from a variety of sources including but not limited to CV TAG.

The structure in figure 1 below visually represents where the CV TAG sits in relation to decision-making structures.

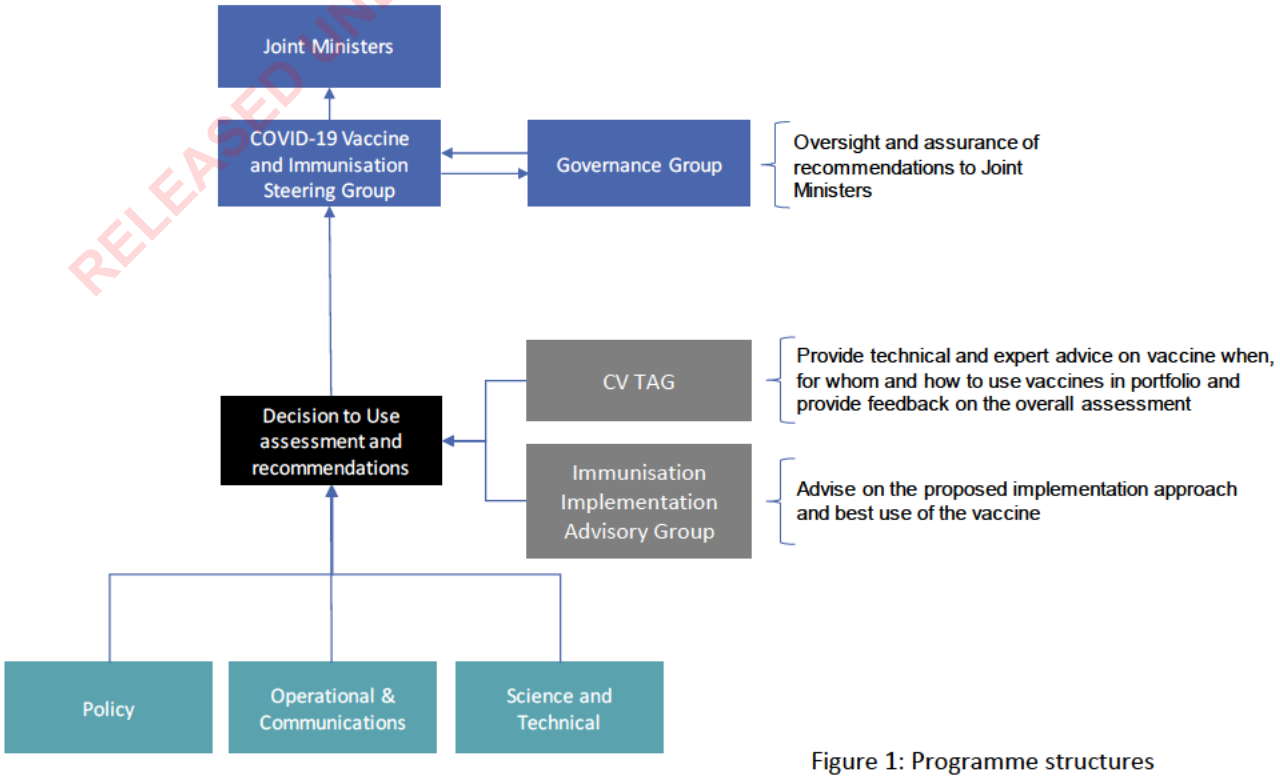

Figure 1: Programme structures

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CV TAG is guided by Te Tiriti o Waitangi principles as they apply to the health and disability sector; tino rangatiratanga, equity, active protection, options, and partnership. This involves the managing of the response to COVID-19 pandemic through evidence-based approaches with the aim of achieving equity of outcomes, and contributing to wellbeing for all, including Māori and Pacific peoples.

CV TAG advice differs from that of the Immunisation Implementation Advisory Group (IIAG) in that it focuses on whether a vaccine is suitable for use and for whom that would best support the immunisation programme. The IIAG will provide advice on the operational and implementation considerations of vaccine once a decision to use has been made.

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Membership

The COVID-19 Vaccine Technical Advisory Group is to provide expert, multi-disciplinary expertise on the latest scientific, clinical, and technical evidence-based, expert advice on COVID-19.

Members of the COVID-19 Vaccine Technical Advisory Group will be asked to:

- provide the Ministry with rapid advice based on the most up to date clinical, scientific, and technical evidence on COVID-19
- identify emerging scientific, clinical, or technical issues and inform the Ministry on ways this advice could be used to design the response to COVID-19 pandemic within Aotearoa New Zealand
- suggest approaches and actions to enact the principles of Te Tiriti o Waitangi and achieve equity for Māori
- advise on ways to reduce inequalities for groups in society negatively impacted by COVID-19, including but not limited to; ethnicity, dis/ability, geographic location, age, gender, health status, socioeconomic position, living and working conditions
- identify areas requiring further research, and/or reviews to inform ongoing response.

The appointment of Members of CV TAG is based on their personal, technical and specialist expertise. This includes acknowledgement of Member's understanding of the systems, structures, stakeholders, and in-depth specialist knowledge in their respective disciplines, with a view to supporting the effective development and application of technical advice.

Members will focus on the core scientific, technical, and/or clinical basis for advice, referencing the evidence base alongside the rationale for advice in the context of operational limitations and/or precedent. CV TAG will comprise equitable Māori representation, alongside representation from Pacific and the disability sector.

Membership of CV TAG will be confirmed through an appointment letter from the Chairperson and a confirmation response from the Member.

Chairperson

CV TAG will be led by Dr Ian Town, Chief Science Advisor, Ministry of Health

Members

CV TAG has a standing membership comprised of external (main job is not Ministry employee) technical experts from disciplines relevant to the response required in the phases and alert levels of the COVID-19 pandemic. The membership also comprises of equitable Māori representation, alongside representation from Pacific and the disability sector.

Ex Officio Advisors

Technical experts within the Ministry can also have membership within the group in the capacity of Ex Officio Advisors as invited by the Chairperson.

Members of CV TAG must agree:

- **to keep all information provided to them strictly confidential** and, except as expressly permitted, not share, publish, copy in whole or in part or modify or adapt any confidential information in any way without the Ministry's prior written consent which may be given or withheld in its absolute discretion.
- **not to use any confidential information** for any purpose other than participating in CV TAG activities without the Ministry's prior written consent which may be given or withheld in its absolute discretion.
- Where the CV TAG Member wishes to use the information provided for research purposes, a detailed letter seeking permission to use the data, and describing how the data will be used including the ethical safeguards that will be used to protect the integrity of the data, must be submitted to the Chief Science Advisor for approval, prior to any research occurring. The Ministry may put conditions on the use of data, including acknowledgements as appropriate.
- Pre-existing intellectual property rights relating to the provision of advice remain the property of their current owner. New intellectual property rights in work created for the Ministry as part of CV TAG become the property of the Ministry when they are created unless otherwise agreed in writing.
- **to declare any real or perceived Conflicts of Interest** - CV TAG Members should perform their functions in good faith, honestly, fairly, impartially, responsibly and avoid situations that might compromise their integrity or otherwise lead to conflicts of interest. The Conflict of Interest form provided by the Ministry must be completed, returned to COVID-19_Science_Technical@health.govt.nz.
- The Member must inform the Ministry upon becoming aware of the existence of the possibility of a conflict arising after completing the form. A register of Conflict of Interest will be recorded and addressed through the processes outlined above.
- Members of CV TAG are **not authorised to make statements on behalf of the COVID-19 Vaccine Technical Advisory Group or the Ministry**. The Ministry has strict protocols for managing media enquiries and all such requests should be directed to media@health.govt.nz and copied to the STA email COVID-19_Science_Technical@health.govt.nz.
- Members have the right to comment to the media on any matter in their professional capacity, as long as they do not attribute the comment to CV TAG or imply that they are speaking on behalf of CV TAG or wider Ministry. If a Member is forewarned of being asked to comment to the media, they should advise

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the STA accordingly. If a Member is not forewarned, they should advise the STA immediately after making comment to the media.

- Members are not authorised to commit COVID-19 Vaccine Technical Advisory Group, any Members of it, or the Ministry to any financial or legal commitments or to otherwise purport to act as agents for the Ministry.

Membership of CV TAG will be for a period of 12 months with the option for a further extension as offered by the Ministry.

A register of membership of CV TAG is maintained and kept within the STA filing system within the Ministry and accessible to Ministry staff. Names of CV TAG Members and any other information provided by Members are subject to the Official Information Act 1982 and the Ministry will be required to release such information on request under that Act unless there are valid reasons for withholding the information under the Act.

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Duties and Responsibilities

The duties and responsibilities for the Chairperson, Members and Ex Officio advisors are outlined below.

Duties and responsibilities of the Chairperson of COVID-19 Vaccine Technical Advisory Group

The Chairperson agrees to:

- provide leadership and ensure the group retains a focus on its scope as defined in this Terms of Reference and priorities as determined by the Ministry
- determine suitability of CV TAG as the recipient of requests for advice, work to be commissioned, tasks, and facilitators of consultation
- ensure meetings are duly convened and that a quorum of Members is present each meeting
- ensure meetings are conducted in an efficient, effective, and focused manner
- ensure the group has the required information to permit provision of advice and to make recommendations
- consider the principles of Te Tiriti o Waitangi in every action, through ensuring CV TAG is supported to interact and act with equity as a key consideration, and provides advice that is congruent with these obligations
- appoint Members to CV TAG based on scientific and technical expertise and the need for effective representation and tino-rangatiratanga (self-determination and autonomy) of Māori and Pacific peoples
- facilitate communications internally and externally, including; with other key stakeholders as appropriate; presenting advice and recommendations to decision makers after each meeting; and summarising any aspects of discussion or advice that should or should not be communicated by Members
- ensure minutes are taken during meetings and approval given for the minutes as an accurate record of the summary of the meeting.

- ensure actions and recommendations are noted and actioned within agreed timeframes
- act as a key contact point for agenda items, responses, absences, and delegations to the meeting, and will be informed of all activities requested of and undertaken by CV TAG.

Duties and responsibilities of a Member of COVID-19 Vaccine Technical Advisory Group

CV TAG Members are not employees of the Ministry. They agree to:

- familiarise themselves with background material (if any) sent prior to and after meetings
- actively participate in meetings or provide feedback and/or comments as required
- undertake additional activities agreed by the group (such as commenting on advice or guidance, providing research material, or contacts), and to alert the Chairperson to limitations on availability and interim delegation arrangements
- share expert knowledge and engage constructively in discussions, acting only in the role they are representing and within their scope of expertise
- individually ensure familiarity with, and provide advice that is congruent with the principles and obligations of Te Tiriti o Waitangi in ensuring the active protection of Māori health, achieving equity across access, quality of care and outcomes
- ensure that all activity and advice is undertaken with consideration of and respect for equity of outcomes across all peoples of Aotearoa New Zealand, including but not limited to; ethnicity, dis/ability, geographic location, age, health, gender and socioeconomic position, living and working conditions
- lead/facilitate the completion of respectively owned action items within the agreed timeframes
- assume collective responsibility for advice through; working together in a collegial manner; seeking consensus on provision of advice wherever possible; and noting any unresolved differences of opinion, limitations of evidence or opportunity for consultation, or concessions made due to time or logistical constraints
- exercise all due professional care and diligence in the performance of their obligations under these Terms of Reference in accordance with the standards of skill, care, and diligence normally practised by suitably qualified and experienced persons in performing services of a similar nature.
- to make themselves available for meetings convened for the purpose of providing advice to the Ministry as described above.

Duties and responsibilities of an Ex Officio Advisors of COVID-19 Vaccine Technical Advisory Group

CV TAG Ex Officio Advisors are employees of the Ministry who hold specialist technical positions in a relevant field. The Ex Officio Advisors are appointed by the Chairperson.

The Ex Officio Advisors agree to:

- represent the Ministry by presenting requests for advice or commissioned pieces of work and providing relevant background information, context, and communications to support the Members in providing advice which is shaped for the question or issue at hand
- familiarise themselves with background material (if any) sent prior to meetings
- share expert knowledge and engage constructively in discussions, acting only in the role they are representing and within their scope of expertise

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- communicate relevant information, activities, decisions, and issues of interest from the Ministry to CV TAG, and vice versa, through endorsed communication channels and methods
- individually ensure familiarity with and provide advice congruent with the principles and obligations of Te Tiriti o Waitangi in ensuring the active protection of Māori health and achieve equity across access, quality of care and outcomes
- ensure that all activity and advice is undertaken with consideration of and respect for equity of outcomes across all peoples of Aotearoa New Zealand, including but not limited to; ethnicity, dis/ability, geographic location, age, gender, health, and socioeconomic position, living and working conditions.

Secretariat of COVID-19 Vaccine Technical Advisory Group

The Secretariat is not a Member of CV TAG supports the group and the Chairperson with secretariat duties including

- disseminating information required for each meeting
- writing-up the agenda as directed by the Chairperson
- writing the minutes and disseminating these within the group
- update any new Members or additional Members with the Terms of Reference
- receive and store the Conflict of Interest declarations
- receive fee claims and organise fees payments
- assist the Chairperson with the onboarding arrangements with Members.

Meeting protocols

Secretariat

The Ministry will ensure adequate secretariat support and other support as may be required from time to time, for CV TAG to carry out their mandate efficiently and effectively.

Meetings coordination

Coordination of the meetings will be managed by the Secretariat through direction of the Chairperson. This will include all the logistics, documentation, and administration. Members will receive relevant documentation through email or other digital tools used within the Ministry.

Members must have regular access to electronic and digital tools in which CV TAG meetings are conducted. Meetings conducted in workplaces must remain confidential and not visual or audible to workplace colleagues.

Delegates

Members will attend all meetings whenever reasonably possible and delegates are not permitted. Apologies must be in writing (email) to the Chairperson and Secretariat prior to the meeting.

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Other attendees

Guests with relevant expertise may be invited to discuss specific issues and when attending the whole meeting will abide by the same Terms of Reference.

Non-Members may only attend by invitation of the Chairperson.

Quorum

A meeting quorum for CV TAG requires 50% of standing external Members, including the Chairperson.

The quorum for a meeting is the minimum number of Members required to make the meeting valid. If a meeting is inquorate, it cannot make recommendations on behalf of the group. It can hold discussions and make recommendations for later confirmation or rejection by the group.

Official Information Act requests

All agendas, emails and other communication and information relating to the Network are subject to the Official Information Act 1982, and the Ministry may be required to release such information on request unless there are valid reasons for withholding the information under the Act.

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

Fees framework

The daily rate has been set in accordance with the Ministry's Fees Framework and has been approved by the Director-General of Health and may be paid to Members who are self-employed or privately employed.

Members who are paid for their time/employed through the wider state sector (eg they work for Universities, District Health Boards, Government departments and State agencies) are not personally eligible for a fee, although on the production of an invoice, the Ministry can reimburse a government funded agency employing organisation for the Member's time.

The membership register will indicate those Members that are eligible to claim a fee under the Fees Framework and the level of the fee, based on the above declaration.

A working day of eight hours is the basis of the daily fee is calculation, with hourly pro-rata rates calculated accordingly. A working day of longer than eight hours does not attract extra payment beyond the daily fee. The daily fee applies to all work, including the work performed outside of meetings that is required for the group to carry out its role (e.g. preparation, representing the group at other forums, or administrative work).

All fees and expenses (where agreed) are to be submitted either on a Ministry claim form or as an invoice. Reasonable expenses are to be agreed in writing in advance and should be supported by tax invoices and/or receipts.

Payments will be made in accordance with the Ministry's accounts payable guidelines.

Work outside of meetings that has been formally commissioned by the Ministry will be formally described in a written request with anticipated days or hours of work required and the fee rate, which the individual or group may accept or decline. Additional days or hours of work required must be agreed in writing with the Manager of STA prior to commencement of the hours worked.

Guidance on organisations that form part of the wider state sector can be found on the SSC website.

For more information, please refer to the Cabinet Fees Framework.

Review of Membership

Membership of the COVID-19 Vaccine Technical Advisory Group will be reviewed by the Deputy Chief Executive, COVID-19 Directorate on or before December 2021.

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