

Health Report

COVID-19 Immunisation Programme: Update

Date due to MO: 11 September 2020 **Action required by:** 25 September 2020

Security level: IN CONFIDENCE **Health Report number:** 20201590

To: Hon Chris Hipkins, Minister of Health

Copy to: Hon Julie Anne Genter, Associate Minister of Health

Contact for telephone discussion

Name	Position	Telephone
Sue Gordon	Deputy Director-General, COVID-19 Health System Response	s 9(2)(a)
Kelvin Watson	General Manager Testing, Immunisation and Supply, COVID-19 Health System Response	

Action for Private Secretaries

Return the signed report to the Ministry of Health.

Date dispatched to MO:

COVID-19 Immunisation Programme: Update

Purpose of report

You have requested an update on the COVID-19 immunisation prioritisation and implementation approach [HR 20201318 refers].

Please note, references to the prioritisation framework has been superseded by the COVID-19 Immunisation Sequencing Framework (The Sequencing Framework).

Summary

- A COVID-19 Immunisation Programme has been established, and resourcing, planning and governance are in place. We are working to ensure we are ready to implement a COVID-19 Immunisation Programme as soon as possible once a vaccine becomes available.
- The report outlines the working assumptions and variables for a range of vaccine scenarios that have been developed, on which your feedback is sought.
- The scenarios will inform implementation decisions based on what we know about the vaccine candidates that are most likely to be successful and the quantities that may become available to New Zealand. The scenarios will be refined as more information becomes available.
- The working assumptions for the scenarios are:
 - New Zealand will continue to pursue an elimination strategy
 - the New Zealand border will be tightly controlled in a safe manner
 - a COVID-19 vaccine has regulatory approval in New Zealand
 - a COVID-19 vaccine is publicly funded
 - a COVID-19 vaccine will not be made compulsory
 - Pacific and Realm countries will be included in New Zealand's COVID-19 Immunisation Programme, to some extent.
- A prioritisation framework is under development that will help to ensure fair and equitable administration of a COVID-19 vaccine in New Zealand in the likely event that demand outstrips supply.
- The report covers updates on lead in times for delivery, cold chain storage requirements, delivery mechanisms and IT support.
- The COVID-19 Immunisation Programme is underpinned by equity considerations and on honouring the Crown's obligations under Te Tiriti o Waitangi.
- Wider immunisation system settings are also being considered with a focus on aspects of the system that will impact the delivery of the COVID-19 Immunisation Programme.
- The COVID-19 Immunisation Communications Strategy will be critical to help keep the health sector and the public fully informed, to manage expectations and to manage vaccine hesitancy.
- You will be updated on the COVID-19 Immunisation Programme regularly through weekly reporting.

Recommendations

We recommend you:

- a) **Note** that a COVID-19 Immunisation Programme has been established, and resourcing, planning and governance is in place
- b) **Note** that the Ministry has developed scenarios, based on what is known about vaccine candidates and on a range of variables, that will inform implementation decisions
- b) **Provide** feedback on the working assumptions for these scenarios, if you wish **Yes/No**
- c) **Note** that the COVID-19 Immunisation Communications Strategy will be a critical tool to help keep the health sector and the public fully informed, to manage expectations and to manage vaccine hesitancy
- d) **Note** that you will be updated on the COVID-19 Immunisation Programme regularly through weekly reporting.

Sue Gordon
Deputy Chief Executive
COVID-19 Health System Response

Hon Chris Hipkins
Minister of Health
Date:

COVID-19 Immunisation Programme: Update

Context

1. You received a Health Report on 21 August 2020 on the COVID-19 Immunisation and Prioritisation and Implementation Approach [HR 20201318 refers]. You requested an update on the approach being taken to deliver a COVID-19 Immunisation Programme, raised some concerns in relation to specific elements of the 21 August advice and asked some specific questions. You:
 - expressed concern about a 12-week lead in time to finalise implementation details
 - asked what the long-term agenda is for a COVID-19 vaccination programme including considering the type of vaccine (for example, will it need to be administered regularly)
 - sought clarification that there are delivery mechanisms in place for the fast and effective administration of the vaccine
 - clarified that track and trace of vaccine inventory is a priority for the development of a support IT system.
2. You have also requested an update on vaccine refrigeration infrastructure and how capacity requirements are being managed.
3. The COVID-19 Immunisation Programme, the COVID-19 Vaccine Purchasing Strategy and National Immunisation System development are all closely connected, have interdependencies and are being developed iteratively. There are structures in place to ensure these three work programmes continue to be well-aligned.

Cabinet has agreed key outcomes for the vaccine purchasing and immunisation programme

4. The key outcomes underpinning the COVID-19 Vaccine Purchasing Strategy and Immunisation Programme are [CAB MIN CAB-20-MIN-0229.01 of 18 May 2020 refers]:
 - sufficient supply of a safe and effective vaccine to achieve population immunity to COVID-19, affordably
 - protection for population groups at particular risk from COVID-19 (a prioritisation framework will apply)
5. A Cabinet report back is due by November 2020 on [CAB-20-MIN-0382 of 10 August 2020 refers]:
 - progress in developing the immunisation strategy, including a 'prioritisation framework'.

Work is underway to enable us to implement an immunisation programme as quickly as possible

6. You raised concerns about the indicative 12 week lead in time identified in the 21 August HR [HR 20201318 refers]. This 12 week lead in timeframe was an initial estimate based on minimal information being available on vaccine candidates, it does not start from the time vaccines arrive in New Zealand.
7. The Ministry has developed detailed scenarios to inform implementation planning so that we can be ready to deliver a COVID-19 Immunisation Programme with the shortest possible lead in time from vaccine(s) purchase to Immunisation Programme roll out.
8. As we receive more information and certainty about key aspects of the vaccine characteristics and likely delivery schedules for vaccines within the portfolio we will continue to refine our scenarios and update our implementation planning accordingly.

Our planning is based on qualities and quantities of the potential vaccines

9. The scenario planning includes planning for delivery mechanisms for the fastest and most effective administration of a vaccine possible, based on the best option(s) that become available.
10. An initial list of top target vaccine candidates has been developed using the key criteria in the decision-making framework [Joint Report HR 20201535 / MBIE: 2021 – 0662 refers] based on current available information:
 - expected vaccine performance
 - expected availability and access
 - contribution to overall portfolio.
11. Target vaccine candidates include those which are either:
 - in Phase II or III clinical trials, or
 - the developer/manufacturer has a very strong track record.
12. The vaccine candidates have different characteristics which are important to consider from an immunisation perspective. Planning has included candidates such as viral vector, mRNA, RNA, and Protein subunit vaccines. Each type of vaccine requires a slightly different immunisation approach because they have different requirements (existing immunity, longevity, storage, administration, and licensure etc).
13. Safety and efficacy is an important factor. Potential vaccine candidates have only been tested on healthy populations of 60 years and under, and we do not anticipate having paediatric trial data for some time. This has implications for how an immunisation programme will initially be delivered.
14. At this stage intended vaccine candidates require two courses, and most candidates would be administered intermuscular. This information, while subject to change, is helping us plan for roll-out (logistics, supply chain etc).

An overview of the working assumptions and variables being used in the scenario planning

15. Several working assumptions have been made to underpin the development of the scenarios as follows:
 - New Zealand will continue to pursue an elimination strategy
 - the New Zealand border will be tightly controlled in a safe manner
 - a COVID-19 vaccine has regulatory approval in New Zealand
 - a COVID-19 vaccine is publicly funded
 - a COVID-19 vaccine will not be made compulsory
 - Pacific and Realm countries will be included in New Zealand's COVID-19 Immunisation Programme, to some extent.
16. Further work will be undertaken to develop and refine these base working assumptions. We welcome your feedback on these assumptions.
17. The variables being factored into the scenarios provide the framework to consider these challenges and constraints and form a basis for implementation decisions to be made from which to deliver a COVID-19 Immunisation Programme.
18. An example of the variables being considered for the range of scenarios include:

Supply

 - the number of doses of vaccines that become available to New Zealand – ability to immunise all or part of the population (prioritisation required)
 - arrival and delivery schedule of the vaccine – all at once or in tranches (the indicative first tranche that will be made available through the COVAX facility is 3% of a countries population)

Nature of the vaccine

 - dose requirements – single or multiple doses
 - duration of immunity – lifetime, boosters required or annual vaccination (annual delivery programme would be needed including ongoing vaccinator workforce capacity)
 - effectiveness of vaccine – for example 90% effective (sterilising) or 50% effective (dampening)
 - storage requirements for a vaccine – for example refrigeration at 2 to 8 degrees, frozen at minus 20 degrees or frozen at minus 70 +/- 10 degrees (new cold chain system capacity would be needed)

Demand

 - vaccination uptake – widespread uptake or vaccine hesitancy (public campaign would be more tailored).
19. Scenario planning is being progressed based on a combination of these and more detailed operational variables, and on the flow-on implications of these variables on delivery infrastructure. The scenarios will be progressed as further information emerges.

We know we will need cold storage for vaccines

20. The successful vaccine candidate will have specific cold chain storage requirements and require associated refrigeration infrastructure.
21. Current refrigeration capacity in New Zealand is likely to be insufficient. The Ministry is undertaking urgent scoping and modelling to inform procurement planning. This includes understanding current supply and capacity, considering global demand and identifying potential supply chains.
22. Further advice will be provided to you in the coming week and the Ministry will be prepared to include a funding request in the Cabinet paper report back due to be considered by Cabinet on 21 September 2020, if required.

Development of an IT system and the track and trace of vaccine inventory is a critical piece of the implementation plan

The NIS will replace the National Immunisation Register (NIR), and the COVID-19 Immunisation Register (CIR) is being built for the Programme.

23. High level requirements and functional design for the National Immunisation System (NIS) have been completed. These aim to re-use much of the existing capability in the National Screening Solution, Contact Tracing and Border solutions. A programme team is in place and is working with existing vendors to procure additional development resources and technology components.
24. A target of January 2021 to have a basic capability in place remains realistic, however this depends on complexities of additional requirements such as ability to support vaccine delivery in the Pacific region, and the ability to communicate vaccine status and adverse reactions directly with consumers digitally.
25. Alongside the development of the NIS, options are being considered for the track and trace of vaccine inventory and how these might interface with the NIS.
26. You will receive an update on the NIS in the week commencing 14 September 2020.

Immunisation prioritisation framework is under development

27. The prioritisation framework will be a critical tool that will help ensure fair and equitable administration of a COVID-19 vaccine in the likely event that demand outstrips supply, both globally and domestically.
28. The COVID-19 Science and Technical Advisory Group have offered initial advice on prioritisation [HR 20201318].
29. The first substantive agenda item of the Immunisation Implementation Advisory Group will be to further consider criteria for a prioritisation framework. This discussion is planned for the week commencing 21 September 2020.
30. The prioritisation framework will aim to:
 - protect those at risk of spreading COVID-19 and protect those at highest risk of exposure
 - protect those at highest risk of COVID-19 associated mortality and morbidity
 - protect Māori, Pacific and at-risk communities

31. Work is underway to ensure there is a shared understanding of the definition and size of certain population cohorts of interest. This will help us to understand the likely impact of prioritisation decisions.
32. International guidance on prioritisation and allocation of a COVID-19 vaccine is being reviewed and applied to the New Zealand context, including from:
 - The Strategic Advisory Group of Experts (SAGE) on Immunization - SAGE is the principal advisory group to WHO for vaccines and immunization. The next meeting of SAGE will be on 5-7 October 2020.
 - The Centers for Disease Control and Prevention (CDC)
 - the National Academy of Sciences, Engineering and Medicine (NASEM) - draft framework for the equitable allocation of a COVID-19 vaccine to the US population released on 1 September 2020.

The Ministry is considering ways to strengthen wider immunisation system settings

33. The Ministry is considering ways to strengthen wider immunisation system settings [HR 20200699 refers] to enhance our ability to deliver the COVID-19 Immunisation Programme in the following areas:
 - decision-making at the system level including roles and responsibilities
 - implementation including distribution and delivery
 - outcomes including equity and reaching vulnerable populations.
34. This work is being progressed to respond to the findings of the report on the "Health Sector Response to the 2019 Measles outbreak" and supply chain challenges identified during the 2019 and 2020 Influenza vaccination programme. The work will prioritise those changes that may impact the delivery of a COVID-19 Immunisation Programme. These include examining the roles, responsibilities and accountabilities in the immunisation system and looking to optimise the supply, distribution and use of vaccines.

A COVID-19 Immunisation Programme plan and governance are in place

35. A Project Brief to implement the COVID-19 Immunisation Programme is in place and is resourced. The main objective identified is to develop an immunisation implementation programme to roll out safe and effective vaccine(s) that supports New Zealand's COVID-19 elimination strategy.
36. An Immunisation Implementation Advisory Group has now been established and will begin meeting in the week of 14 September 2020. You have been provided with a membership list.
37. A COVID-19 Immunisation Communications Strategy will be a critical tool to help keep the health sector and the public fully informed and prepared, to manage expectations and to identify and manage vaccine hesitancy.

38. You raised the idea that the next influenza campaign delivered through current systems could be used as a trial run for a COVID-19 immunisation campaign. You will receive separate advice on this in the coming weeks.

Equity considerations and Te Tiriti o Waitangi will underpin the COVID-19 Immunisation Programme

39. The Project Brief for the COVID-19 Immunisation Implementation Programme emphasises actions to:
- honour the Crown's obligations under Te Tiriti o Waitangi
 - place equity of access and equity of outcomes for all populations, in particular Māori and Pacific peoples, at the centre of the immunisation programme
40. This includes that the prioritisation framework will be developed in partnership with Māori to fulfil the Ministry's obligations to Te Tiriti o Waitangi. Wider community engagement will also be needed to inform and underpin any prioritisation decisions.

Next steps

41. You will be updated on the COVID-19 Immunisation Programme regularly through weekly reporting.
42. We will report to you in the coming weeks on:
- development of the National Immunisation System
 - cold chain infrastructure capacity
 - a COVID-19 immunisation campaign
 - the COVID-19 Immunisation Communications Strategy
43. We will be ready for a November 2020 Cabinet report back on progress in developing the COVID-19 Immunisation Programme, including a prioritisation framework [CAB-20-MIN-0382 of 10 August 2020 refers].

ENDS.