

# Preparation for COVID-19 vaccine

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# Purpose of the presentation

To provide an overview of:

- COVID-19 vaccine development around the world
- global efforts towards equitable distribution
- what New Zealand is doing to contribute
- the New Zealand COVID-19 Vaccine Strategy
- planning for use of COVID-19 vaccine
  - in New Zealand
  - Pacific countries

# COVID-19 vaccine development

- First vaccine candidate within 1 week of gene sequencing
- Major world-wide activity investigating ~200 potential vaccines
- WHO leading collective approach – CEPI, Gavi, Gates Foundation, ..
- Collective investment through the ACT-accelerator (CEPI)
- Development mainly individual to date (country / research group / supplier / collaboration)
- A range of different technology platforms being used
- All technologies have advantages and disadvantages
- Difficult to predict when a safe, effective and suitable vaccine will be found
- More difficult to predict when there will be enough for the world

# Vaccine development progress

34 candidates in clinical trials

Phase III: 8      Phase II or combined I/II: 14      Phase I: 12

- in healthy adults, 1 trial includes HIV+ve adults

Many technologies included:

- new regulatory standards and processes being developed

Manufacture requirements:

- from large-scale lab-based to traditional 6-month manufacture

Storage and delivery:

- from frozen injectable (store -18 or -70) to oral, freeze-dried

# WHO looking at “solidarity trial”

- International RCT comparing several candidates
- High enrolment of participants, especially at sites with high COVID-19 rates
- Efficient design, conduct, recruitment, analysis
- Increase likelihood of finding several effective vaccines
- Rapid accumulation of data, rigorous stepped evaluation
- Effective vaccines tested at all sites
- Results within 3-6 months after each vaccine included
- Foster fast and equitable distribution and use
- Increase trust in rigour and quality of information

# Global efforts for vaccine equity

May 2020

World Health Assembly

*"the universal, timely and **equitable access** to and **fair distribution** of all quality, safe, efficacious and affordable essential health technologies and products including their components and precursors required in the response to the COVID-19 pandemic as a global priority..."*

## World Health Organization

Global allocation:

- Principles
- Framework (3%, 20%, beyond 20%)
- Mechanism (through COVAX)

## Gavi, the vaccines alliance

COVAX Facility

- 170+ countries
- 78 "high income" have confirmed intention to participate
- 92 low income "eligible economies" will benefit

# Global context

- A likely shortage of vaccine supply in short to medium term
- COVAX equitable distribution on first 3%, then 20%, then more
- Developers with CEPI funding obliged to provide doses to COVAX
- Increasing collectivity despite many “go-it-alone” vaccine contracts
- 78 high income countries have confirmed intention to participate in COVAX
- Includes EU which also has its own vaccine investment pool
- Many countries investing in advance purchase arrangements that offer access to supply if and when available
- WHO, COVAX equitable distribution may take priority initially

# What New Zealand is contributing

## **Investment and funding**

- \$37m for vaccine research, manufacturing capacity development and distribution in developing countries
- Near future funding for the COVAX Facility for access to vaccine

## **Leadership and influence**

- An early supporter and friend of the COVAX facility
- Participation in “pledge events”

## **Collaboration and support**

- Support for WHO collective approach and equitable distribution
- Focus on Pacific Island nations and ensuring vaccine access



# New Zealand COVID-19 Vaccine Strategy

## Objective

Ensure access to a safe and effective vaccine in order to implement our preferred immunisation strategy at the earliest possible time

## Outcomes

- 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;
- full cultural, social and economic recovery from the impacts of COVID-19;
- recognition of New Zealand as a valued contributor to global wellbeing and the COVID-19 response;
- New Zealand, Pacific, and global preparedness for response to future disease outbreaks.

# New Zealand COVID-19 Vaccine Strategy

## **Global connections**

- Much work with multiple countries and partnerships

## **Research**

- Growing NZ R&D capacity as well as connecting internationally

## **Manufacturing**

- Supporting animal vaccine manufacturers to increase to human GMP standard

## **Regulation**

- Working with trusted partner regulators to expedite & harmonise

## **Supply**

- Secure access through a risk pooling portfolio of advance arrangements

# Planning for use of COVID-19 vaccine


Linked with the Vaccine Strategy is the **immunisation approach** that New Zealand will take:

- planning is underway
- led by Ministry of Health
- drawing on a range of expert input and advice
- based on multiple plausible scenarios
- includes planning for NZ's largest ever immunisation programme
- ... or potentially several smaller programmes
- involving much work on logistics and preparation
- Includes work with Pacific Island countries

# Planning for use of COVID-19 vaccine

When vaccine is available, how it is used and priorities for use may depend on

- ***the situation*** (do we have current disease or outbreaks, quantity of vaccine, greatest transmission sources)
- ***the disease*** (who is at risk of getting it, passing it on, becoming severely ill)
- ***the vaccine*** (who is it effective for, safe for, how long does protection last, are there vaccine choices, what delivery mechanisms are used)
- ***logistics and ability to deliver*** (what is needed for shelf life, storage and supply chain, facilities, workforce, data and digital, public information and promotion)
- ***alternatives*** (other means of preventing, treating or lessening the impacts of COVID-19).



***Nā tō  
rourou,  
nā taku  
rourou  
ka ora ai te  
iwi***

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