Chapter 18 'Go Hard, Go Early': New Zealand's COVID-19 Elimination Strategy



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Abstract The author describes how New Zealand successfully eliminated the virus. 'Go ahead, Go early' was New Zealand's moto. Strict border controls and high compliance with lockdown measures proved to be effective in controlling the pandemic.

New Zealand's official campaign 'Unite Against COVID-19', was later changed to 'Unite for Recovery' as the focus shifted from elimination to recovery. It has now changed back to 'Unite for Recovery' and this will remain until the international threat of COVID-19 is eliminated.

The strategy was guided by science and data. The government relied on public health advice and evolving evidence. And, of course, leadership played a crucial role. The Prime Minister was resolute, confident, and pragmatic. The messages she re-iterated at the daily press conferences became catch phrases. Discipline came to the fore. People did not complain. They did not protest. They simply followed the rules, placing utmost trust in their government and its clear communications. Trust in political leaders and health experts was the key reason for the success of the program. And kindness was the *Mantra*!

Amid the gloom and doom that our world is currently battling, God was spotted in New Zealand. Someone asked God 'What are you doing?' 'Working from home, Bro'.

The Timeline of the Virus

'Go hard and go early' has been New Zealand's motto for the elimination of the coronavirus in the country. Combined with strict border controls and high compliance with lockdown measures from 'the team of 5 million', it seems to have worked.

However, since this was written, the Delta Variant in New Zealand emerged in early 2021, and since then there have been surges in a number of regions. The strategy has now changed from elimination to a Covid Protection Framework.

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The first case of COVID-19 in New Zealand was reported on February 28, 2020. As of October 30, 2020, the country has had a total of 1594 confirmed and 356 probable, and to date, 25 people have died from the virus (Appendix 1).

New Zealand closed all its borders and entry ports and required returning nationals to self-isolate on March 19, 2020. After April 10, all returning nationals were sent into managed isolation for a period of two weeks.

A four-level alert level system was introduced on March 21, 2020 to manage the outbreak within New Zealand (Appendix 2). The alert level was first set at Level 2, but was then raised to Level 3 on March 23, 2020. As of March 25, 2020, the alert level was moved to Level 4, putting New Zealand into a nationwide lockdown. The alert level was moved back down to Level 3 on April 27, 2020, partly lifting some lockdown restrictions, and then down to Level 2 on May 13, 2020, lifting the rest of the lockdown restrictions but maintaining physical distancing and gathering size limits. The country moved down to Level 1 on June 8, 2020, removing all remaining restrictions, except border controls.

Then, on August 11, 2020, four cases of COVID-19 from an unknown source were reported in Auckland, breaking the 102-day cycle of zero cases. On August 12, the Auckland Region was put on Alert Level 3, and the rest of the country on Level 2. On August 30, 2020, at 11:59 pm, Auckland moved back to 'Alert Level 2.5', an adapted version of Alert Level 2, but with limitation on public gatherings, funerals, and weddings. On September 23, 2020, at 11:59 pm, Auckland moved back to Alert Level 2, while the rest of the country moved to Alert Level 1 on September 21, 2020, at 11:59 pm [1].

...Prompted the Strategies Applied

On October 18, 2020, one case in the community was discovered and on October 21, 2020, there were two more community cases. Since then, there have been two further cases in the community which have been contained. However, a few cases are coming through the border and are being managed in the government's managed isolation and quarantine facilities. One of the main reasons for the success of the avoidance of an almost second wave has been the government's emphasis on contact tracing. The NZ COVID Tracer is a Ministry of Health app that allows one to create a digital diary of places visited by scanning the official quick response (QR) codes at shops, businesses, and other places. This gives contact tracers a head-start with identifying anyone who may have been exposed to COVID-19 so that the chain of transmission can be quickly broken [2]. By the beginning of September 2020, approximately 2.1 million people had downloaded this app, of which about 50% were New Zealanders above the age of 18 years [3] (Fig. 18.1).

So, what were the key elements of New Zealand's successful COVID-19 strategy? New Zealand's fight to contain the virus followed, by and large, the classic pattern intended by the science of virus transmission. This included stopping the virus from arriving into the country via travelers; securing personal protective equipment to

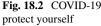
Fig. 18.1 New Zealand COVID tracer



protect essential workers; testing, contact tracing, and isolating those who tested positive; and, most of all, mobilizing the public to lockdown and physically distance in an attempt to slow or break the chain of transmission. And how did New Zealand implement this? (Figs. 18.2 and 18.3).

Travel Restrictions

New Zealand's COVID-19 pandemic response began ominously. Two days after the World Health Organization (WHO) declared the virus a 'Public Health Emergency of International Concern', New Zealand responded by prohibiting the entry of flight passengers who had started in or traveled through China during a 14-day period prior to arrival. Flights from everywhere else continued to be allowed to come in, however, allowing both New Zealand residents and travelers from other countries to enter, provided that they self-isolated for 14 days. It was not till April 9, 2020, that the New Zealand Minister of Health issued an order requiring that all airline or marine passengers entering New Zealand from overseas had to undergo medical testing and



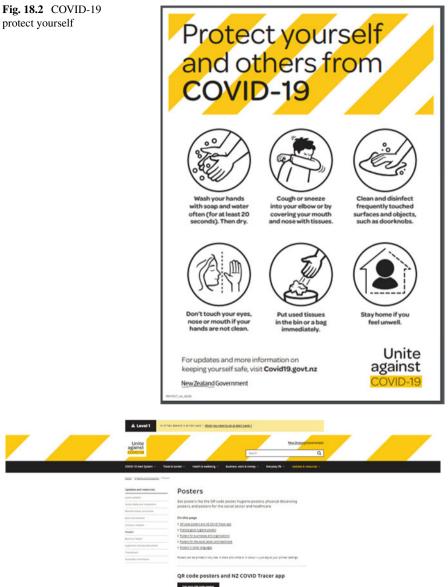


Fig. 18.3 COVID-19 government of New Zealand updates



Fig. 18.4 Travel and the border

quarantine in a supervised quarantine facility. However, once that happened, the government stopped the influx of the virus into New Zealand (Fig. 18.4).

Personal Protective Equipment (PPE)

New Zealand also immediately developed a live national register for personal protective equipment to identify Kiwi manufacturers that could help in the fight against the virus by manufacturing all kinds of equipment. Local businesses promptly responded by ramping up domestic production or coordinating with affiliates in China to obtain large supplementary purchases of masks, sterilized gowns, hand sanitizer, and face shields.

Testing

In the area of testing and in a global scramble for scarce supplies, the New Zealand government speedily organized a public–private consortium to acquire test kits and reagents from other suppliers. By the middle of May 2020, New Zealand had conducted more than 100,000 coronavirus tests, at a rate of about 2200 tests per 100,000 people—a figure much higher than either South Korea or the United States achieved during the same period.

Contact Tracing

Once someone has tested positive, standard COVID-19 pandemic protocols entail a concentrated effort to identify and test all those with whom that person came in close contact with over the past 14 days. New Zealand accomplished this through both lowand high-tech methods. The main tracing tool was the Ministry of Health's low-tech method, whereby officials interviewed each person who tested positive to find out whom they had interacted with over the past 14 days. The national government later developed a COVID-19 tracing cell phone application to assist people to retrace their steps when a contact tracer informs them that they have the virus (Figs. 18.5 and 18.6).

Fig. 18.5 Sign-in. Stop the virus. QR code













Fig. 18.6 QA on New Zealand COVID tracer

Lockdown

Arguably, the most difficult challenge for any government responding to a novel pandemic threat is that of getting the population to take the threat seriously and change to behavior radically and instantly, to break the chain of virus transmission. With this step, New Zealand's government made history. It put in place very strong restrictions in an effort to not just mitigate, but to eliminate community transmission of the virus [4].

Ongoing through this entire period has been managed isolation of incoming Kiwis. However, as of November 3, 2020, travelers are legally required to have a voucher before flying into New Zealand. Travelers to New Zealand will now need to register on the Managed Isolation Allocation System as the first step to securing their place in managed isolation. Once the individual traveler, couple or family group has completed their registration on the system, they are issued a voucher that confirms their allocation to a place in managed isolation. They need to present their voucher at the airport in order to board their flight. The Managed Isolation Allocation System is for travelers who have the legal right to enter New Zealand. Although there is no fee for getting a voucher, some people are charged for their stay in managed isolation or quarantine [5].

The New Zealand Government's official pandemic campaign was 'Unite Against COVID-19'. The campaign was later changed to 'Unite for Recovery' in mid-June 2020, as New Zealand's focus shifted from elimination to economic recovery, and has now changed back to 'Unite against COVID-19' until the international threat of COVID-19 is eliminated. The Government of New Zealand called on the entire population to unite as a 'team of 5 million' to protect their families, friends, and neighbors (Figs. 18.7 and 18.8).

New Zealand worked on a strategy comprising speed, guided by science and data, and ensuring that at no stage was the guard let down. The Director-General

Fig. 18.7 Unite for the recovery



Fig. 18.8 Unite against COVID-19



of Health, Dr Ashley Bloomfield says the country's strategy is based on speedy testing, contact tracing and isolation, while at the same time rigorously adhering to public health guidance. At every step of the response, the Government of New Zealand was guided by public health advice and evolving evidence, Dr Bloomfield says 'Technical guidance, outbreak updates and risk assessments from WHO played a key role. The International Health Regulations (2005), known as IHR (2005), also provided an invaluable framework for sharing information about the virus and its evolution. New Zealand recognizes the very critical role that WHO plays in public health emergencies and has valued its global and regional leadership and the sharing of information and expertise throughout the response to COVID-19', he adds. 'New Zealand continues to be vigilant', Dr Bloomfield says. 'The Government is rightly cautioning that the virus is still circulating around the world and that New Zealand must work hard to keep it from returning. They must also maintain readiness to reintroduce control measures if it does'.

...Along with the Economic Response

But as has been the case in all countries, strategies have had to balance between protecting the health of citizens and their economic livelihood. New Zealand went 'hard and early' with regard to taking health and related measures. However, alongside, the Prime Minister and the Finance Minister, Grant Robertson also began putting in place a number of economic measures and COVID-19 response packages. The first step was that on March 17, 2020, the New Zealand Government announced an initial \$12.1 billion COVID-19 Economic Response Package. This package was expanded as the situation changed. The COVID-19 Economic Response Package allocated \$12.1 billion to support New Zealanders and their jobs from the global impact of the pandemic. It included

- Initial \$500 million boost for health.
- \$5.1 billion in wage subsidies for affected businesses in all sectors and regions, available from March 17, 2020.
- \$126 million in COVID-19 leave and self-isolation support.
- \$2.8 billion income support package for the most vulnerable, including a permanent \$25 per week benefit increase and a doubling of the Winter Energy Payment for 2020.
- \$100 million redeployment package.
- \$2.8 billion in business tax changes to free up cash flow, including a provisional tax threshold lift, the reinstatement of building depreciation and writing off interest on the late payment of tax.
- \$600 million initial aviation support package.

Grant Robertson emphasized that 'this is not a one-off package, it is just the beginning. As we go through this crisis toward economic recovery the government will be constantly monitoring the situation and adjust its response. As with every action we have taken we will be constantly reviewing every measure to ensure it is getting to the people and businesses that need it the most'. And this is exactly the strategy that they followed [6].

Budget 2020, delivered by the Minister of Finance on May 14, 2020, complemented the initial response to COVID-19. In the main, the budget focused on meeting cost pressures and supporting public services to fight and rebuild the economy. The \$50 billion COVID-19 Response and Recovery Fund (CRRF) established in the budget supports initiatives from the budget and further measures announced since.

After Budget 2020, \$20.2 billion remained in the COVID Response and Recovery Fund (CRRF). Investments made since then include

- extension of the Wage Subsidy Scheme and the COVID-19 Income Relief Payment for those who lost their income as a result of the pandemic.
- extension to the Small Business Cashflow Scheme.
- additional funding for personal protective equipment for healthcare providers.

As at July 20, 2020, \$14 billion remained in the COVID-19 Response and Recovery Fund, which was set aside in the event that, for example, New Zealand experiences a second wave of the pandemic. On August 21, 2020, the government announced a new two-week wage subsidy available to businesses that experienced a 40% revenue drop across a 14-day period between August 12, 2020, and September 10, 2020, when compared to a similar period last year [7]. Thus, there has been ongoing economic support to business and organizations in parallel to the health measures taken by the government.

...Backed by Kiwi Ingenuity

And of course, overarching all of this, leadership played a key and crucial role. The Prime Minister, Jacinda Ardern, was resolute and confident, emotional and pragmatic. The messages she reiterated in daily press conferences have turned into catchphrases. 'Stay home'. (in your household bubbles) 'Be kind'. 'We must go hard, and we must go early'. Along with all of this, self-reliance lies at the heart of the country's identity. The view that New Zealanders are most innovative when left to their own devices even has a name here—it is called 'Kiwi ingenuity'.

Physical distancing, lockdowns, masks, Zoom calls, the inability to be with loved ones, and the singular purpose of keeping oneself and others safe have become paramount. How can that leave anyone unchanged! Yet, from behind the sometimescold exterior (of what one now knows as stress and anxiety caused by trying to make sense of a rapidly changing world), peaks New Zealand's kind old recognizable face, of concern and helpfulness. Discipline has come to the fore like never before. Kiwis did not complain, they did not protest, and they simply followed rules, placing utmost trust in their government and its clear communications. This trust, which political leaders and health experts were able to cultivate amongst the population, is a key reason for why the results in New Zealand have been so strikingly different from other countries of the developed world. Everything was about collaboration, working together, and positive language—rather than fear. And kindness was and is the mantra! All of this and the indomitable Kiwi spirit has put them at the forefront of success in the war against COVID-19. And it is with pride that one is part of this now famous 'Team of Five Million'. In this New Zealand, which one can't but love, one can be one's true self and is encouraged to bring that self to every space one occupies—to work hard and early to defeat even the seemingly most unconquerable of adversaries such as COVID-19. Which is why, amidst the gloom and doom that our world is currently battling, one needs to end on a note of optimism: God was spotted in New Zealand, and someone asked—'What are you doing in Aotearoa, God?' 'Working from home, bro!'

Appendix 1: The COVID-19 Timeline

December 29—2019 Chinese authorities advise the WHO of cases of pneumonia of unknown cause, originating in Wuhan, Hubei province.

January 7, 2020—China isolates a novel coronavirus, at first called 2019-nCoV and later SARS-CoV-2.

January 13—First lab-confirmed case outside China identified, in Thailand.

February 3—New Zealand temporarily bans entry of foreigners from, or who have traveled through, mainland China.

February 12—Disease renamed COVID-19.

February 20—Six New Zealanders enter the quarantine facility after being evacuated to New Zealand by air from the Diamond Princess cruise ship in Japan. Four New Zealanders from the ship were admitted to hospital in Japan with the virus.

February 28—New Zealand's first confirmed case reported to Ministry of Health. **March 4**—New Zealand's second confirmed case announced, and then, cases started rising.

March 11—WHO declares the outbreak a pandemic.

March 16—Government bans nonessential outdoor gatherings of 500-plus people; schools and universities exempt.

March 17—Government announces \$500 million in funding for health services to combat the disease, as part of \$12.1 billion COVID-19 economic package.

March 19 —Government bans indoor events with more than 100 people; exemptions for workplaces, schools, supermarkets, and public transport.

March 19—Nationals were advised not to travel, and those overseas were directed to return to New Zealand.

March 20—Border closed to most foreigners. Exempted categories include essential health workers.

March 21—Alert level system announced. New Zealand is at Level 2.

March 23—Government lifts country to Alert Level 3 and announces widespread restrictions on movement will come into effect at 11.59 pm on March 25 under Alert Level 4.

March 29—New Zealand's first COVID-19 death—a woman in her 70 s in hospital on the West Coast. Sixty-three new confirmed or probable cases. Combined total 514.

April 7—The New Zealand curve is flattened with 65 recoveries and 54 cases.

April 10—Second New Zealand death reported, a woman in her 90 s who died at Burwood Hospital in Christchurch on April 9. Forty-four new confirmed or probable cases. Combined total 1283.

April 11—Two new deaths, bringing the total of deaths to four. Twenty-nine new confirmed or probable cases. Combined total 1312.

April 15—Deaths total remains nine. Twenty new confirmed or probable cases. Combined case total: 1386.

May 4—Normality slowly returns. No new cases. One probable case reclassified as a confirmed case. Combined total remains 1487.

May 9-12—One to three cases a day.

May 13—No new cases. In stages over the coming days, New Zealand moves from Alert Level 3 to 2 from 11.59 pm.

June 8—New Zealand now has no active cases. The last remaining case has been symptom-free for 48 h is regarded as recovered and has been released from isolation.

June 8—New Zealand steps down to Alert Level 1 from 11.59 pm.

June16–July 24—One to three cases a day on average. Combined total: 1556. **Through to August 10—**One to three case per day on average. Combined total: 1569.

August 11—Five new confirmed cases. Combined total: 1574. Four of the new cases are in the community, in Auckland, and do not have a known source. It has been 102 days since the last case that was acquired locally from an unknown source.

August 12—Auckland goes into Alert Level 3 lockdown from midday, until midnight on August 14. The rest of New Zealand goes into Level 2 for that period.

Through to September 20—Cases rise and then start declining. Four new confirmed cases. Combined total: 1815.

September 21—New Zealand, except Auckland, moves to Alert Level 1 at 11.59 pm.

October 7—Auckland to come down to Level 1 [8].

Appendix 2: New Zealand's Alert levels

Alert levels are cumulative—each level includes the restrictions of the level below it. The levels are as follows:

Level 1—Prepare

COVID-19 is uncontrolled overseas. The disease is contained in New Zealand, but isolated household transmission could be occurring (Fig. 18.9).

- Border entry measures to minimize risk of importing COVID-19 cases.
- Intensive testing for COVID-19.
- Rapid contact tracing of any positive case.
- People arriving in New Zealand without symptoms of COVID-19 go into a managed isolation facility for at least 14 days.
- People arriving in New Zealand with symptoms of COVID-19 or who test positive
 after arrival go into a quarantine facility and are unable to leave their room for at
 least 14 days.



Fig. 18.9 Unite against COVID-19—Alert Level 1

- Mandatory self-isolation may be applied.
- Schools and workplaces open and must operate safely.
- Physical distancing encouraged.
- No restrictions on gatherings.
- Stay home if you are sick, and report flu-like symptoms.
- Wash and dry hands, cough into elbow, and do not touch your face.
- No restrictions on domestic transport—avoid public transport or travel if sick.

Level 2—Reduce

COVID-19 is contained, but the risk of community transmission remains.

People can connect with friends and family, go shopping, or travel domestically, but should follow public health guidance.

- Physical distancing of two meters from people you do not know when out in public is recommended, with one meter physical distancing in controlled environments like workplaces unless other measures are in place.
- No more than 100 people at indoor or outdoor gatherings (subject to any lower limit, e.g., fire regulations).
- Sport and recreation activities are allowed, subject to conditions on gatherings, contact tracing, and—where practical—physical distancing.
- Public venues can open but must comply with public health measures.
- Health and disability care services operate as normally as possible.
- Businesses can open to the public, but must follow public health guidance including in relation to physical distancing and contact tracing. Alternative ways of working encouraged where possible.
- Schools, early childhood education, and tertiary education providers can open with appropriate public health measures in place.
- Those at high risk are advised to take more precautions.

Level 3—Restrict

The disease is not contained. New clusters of cases are to be managed by testing and contact tracing. Community transmission could be there.

- People instructed to stay home in their bubble other than for essential personal movement—including to go to work, school if they have to or for local recreation.
- Physical distancing of two meters outside home (including on public transport) or one meter in controlled environments like schools and workplaces.
- People must stay within their immediate household bubble, but can expand this
 to reconnect with close family/whānau, or bring in caregivers, or support isolated
 people. This extended bubble should remain exclusive.
- Schools (years 1–10) and early childhood education centers can safely open, but will have limited capacity. Children should learn at home if possible.
- People must work from home unless that is not possible.
- Businesses can open premises, but cannot physically interact with customers.
- Low risk local recreation activities are allowed.
- Public venues are closed (e.g., libraries, museums, cinemas, food courts, gyms, pools, playgrounds, and markets).
- Gatherings of up to ten people are allowed but only for wedding services, funerals and *tangihanga*. Physical distancing and public health measures must be maintained.
- Healthcare services use virtual, non-contact consultations where possible.
- Inter-regional travel is highly limited (e.g., for essential workers, with limited exemptions for others).
- People at high risk of severe illness (older people and those with existing medical conditions) are encouraged to stay at home where possible and take additional precautions when leaving home. They may choose to work.

Level 4—Eliminate

It is likely the disease is not contained. Community transmission is occurring, and there are widespread outbreaks and new clusters.

- People instructed to stay at home (in their bubble) other than for essential personal movement.
- Safe recreational activity is allowed in local area.
- Travel is severely limited.
- All gatherings canceled, and all public venues closed.
- Businesses closed except for essential services (e.g., supermarkets, pharmacies, clinics, and petrol stations) and lifeline utilities.
- Educational facilities closed.
- Rationing of supplies and requisitioning of facilities possible.
- Reprioritization of healthcare services [9].

References

- Roy EA. "Go hard, go early"—now New Zealand goes back to the drawing board. The Guardian. 2020.
- 2. Ministry of Health. NZ COVID tracer app. Ministry of Health NZ Manatu Hauora.
- 3. NZ Herald. Breaking news, latest news, business, sport and entertainment. NZ Herald.
- 4. Parker RW. Lessons from New Zealand's COVID-19 success. The Regulatory Review. 2020.
- Managed Isolation and Quarantine. Secure your place in managed isolation. Managed Isolation and Quarantine.
- 6. Robertson HG. \$12.1 billion support for New Zealanders and business. The Beehive. 2020.
- 7. The Treasury, COVID-19 economic response measures. Te Tai Ohanga, The Treasury.
- 8. NZ Doctor Rata Aotearoa. Timeline—Coronavirus. New Zealand Doctor.
- New Zealand Government. About the alert system. Unite against COVID-19. New Zealand Government.

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