



Five key reasons why NZ should have an official inquiry into the response to the COVID-19 pandemic

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Here we present five key reasons for why the NZ Government should establish an official inquiry into the COVID-19 pandemic response. Such an inquiry could identify lessons for the near future (eg, for pandemic control if border control

failures occur) but also identify lessons for the organisation and resourcing of public health more broadly. Fortunately, NZ has a fairly solid track record of official inquiries that have resulted in improved systems that advance public safety and public health.

New Zealand has collectively done an extraordinarily successful job in eliminating SARS-CoV-2 transmission, the pandemic virus that causes COVID-19. It ultimately sustained one of the lowest mortality rates from COVID-19 in the OECD (just above Australia), but it went much further than Australia by setting an elimination goal¹ and succeeding by achieving it. As such, it appears to be able to return to a "new normal" level of economic activity much quicker than other countries – which may ultimately reduce the total health and economic fallout from the lockdown and international travel restrictions.

Nevertheless, an official inquiry (that is independent of government) into the NZ pandemic response is critical, and here we outline five key reasons for it. However, because of the ongoing pandemic threat, such an inquiry could probably be split into two phases:

- A rapid 1-2 month process that provides recommendations on any upgrades to current response measures. This phase could focus on the first reason identified below as results could contribute to decisions about ongoing pandemic management, but could also touch on reasons 2 and 3 also.
- A second phase over an additional 6-12 months that could particularly focus on reasons 2-5 below.

Factors influencing the scope and timing of the inquiry would include the continuing development of the pandemic. The policy development process would also be relevant, notably content of the <u>Health and Disability System Review</u> which is likely to include recommendations for public health, and which is expected to be released shortly.

Reasons for an official inquiry

1. The country needs to know the effectiveness of the various pandemic controls and if they could be improved in the short and longer term

First we need to know how prepared NZ was for pandemics and how valid the country's low scoring on the Global Health Security Index² was. Then we need to know about the effectiveness and appropriateness of all the following:

- The strategic goal setting process (ie, elimination vs suppression vs mitigation).
- Border control restrictions, including potential for careful opening to low risk countries.
- The Alert Level system and the lockdown to enforce physical distancing.
- The use of testing and contact tracing (and associated case isolation and quarantine of contacts).
- The use of hygiene interventions and provision of hand sanitiser etc.
- The use of face masks in various settings.
- The communication strategy with the public.
- The use of science advisors and expert advisory groups.
- The surveillance strategy for SARS-CoV-2 infection.
- The legal framework to support the pandemic response.
- The ongoing research strategy (vaccines, treatments etc) and use of state-of-the-art

study designs.3

Fortunately, the effectiveness of various components is being continuously informed by the international scientific literature. Nevertheless, it is often hard to disentangle all the components of multi-layered interventions eg, Taiwan's success with containment from a package of rigorous border controls, digital technologies for contact tracing and very widespread mask use. Therefore comparisons of the intervention packages of different countries are needed.

2. The country needs to know about the costs and acceptability of the various pandemic controls used

Impacts of the lockdown have varied widely and may have had adverse equity impacts on low-income New Zealanders. The lockdown is likely to have contributed to various forms of hardship including mental distress, food insecurity, and domestic violence.⁴ The lockdown would also have been harder on those without home internet, those for whom online shopping was not an option, those living far from parks, and apartment dwellers. Researchers, non-governmental organisations and government officials (eg, from Treasury and Ministry of Social Development etc) need to present information to an inquiry on the full range of social, economic, and employment impacts of the various sectors of NZ society. In particular, there is a need to hear from Māori organisations and iwi about the impact of the pandemic response on Māori and the acceptability of both the response itself and about how decisions were made and communicated. There will almost certainly be lessons around how all the different pandemic controls can be made more appropriate, particularly for populations who were most affected.

3. The country needs to know the implications for how public health systems are organised and resourced in NZ

NZ has suffered from decades of under-investment in public health systems as revealed by outbreaks of measles⁵ and the Havelock North disaster with the world's largest waterborne campylobacteriosis outbreak.⁶ So it is likely that the COVID-19 response can also inform how NZ's public health infrastructure and systems might be upgraded. Certainly, there are many challenges ahead from the potential impact of climate change on health in NZ. Also, there are other future pandemic threats arising, for example, from both emerging zoonoses and synthetic bioweapons.⁷

4. The country needs clarity on all the different health impacts

Although COVID-19 had a relatively small direct health impact in NZ (22 deaths, 1504 cases as per 11 June), we need updated estimates from the international experience as to what health burden NZ's elimination process probably avoided. This estimate would provide needed context for the financial and social losses from the process (see 5 below). Furthermore, we need estimates on the indirect health impacts from delays in treatment associated with the health system response (eg, for treatment of cancer and heart disease). It is also possible that the harm to the economy will have indirect health impacts. For example, increased levels of unemployment are associated with increased suicide risk⁸ and job insecurity is associated with increased risk of cardiovascular disease. Nevertheless, there is also some evidence that the impacts from recessions on health can be beneficial overall. This net benefit might arise from lives being saved by reduced road traffic crashes, reduced occupational injuries, reduced tobacco affordability, reduced incidence of other close-contact infectious diseases, and reductions in air pollution. So given all this

complexity, we need to understand these diverse health impacts. This understanding would help prevent or mitigate further harmful health impacts in the event that border control failures occur and physical distancing restrictions are again required to control COVID-19.

5. The country needs clarity on the long-term societal and economic impacts

The social and economic impact of border restrictions and the lockdown have been large for NZ. Some of these impacts will have been mitigated by government interventions eg, the May budget, job retraining, and conservation-related work schemes etc. But we need to know about the details of all the long-term social and economic impacts, and if the economic response by government could have been improved upon in its design and scale. In particular, did the economic recovery package make the most of opportunities for a "green reset" – so that it contributed to a shift to more sustainable and lower-carbon business models? What were the educational and other impacts of closing schools and universities? And what were the co-benefits that were achieved? Eg, perhaps the increased use of working from home, the increased use of videoconferencing, online medical consultations, the actions to address homelessness, and the expansion of cycling infrastructure by some local governments. But were opportunities missed eg, did it make sense to declare the tobacco industry an "essential industry"?

Official inquiries in NZ have typically been helpful in the past

There seems little doubt that inquiries into disaster events in NZ have generally been useful. For example, Bradt et al¹¹ detail such progressive legislative responses to the Seacliff fire (Otago), the Ballantyne's fire (Christchurch), the Aramoana mass shooting (Otago), the Cave Creek platform collapse (West Coast), the Pike River mine explosion (West Coast), and both the Hawke's Bay and Canterbury earthquakes. Inquiries into various ship sinkings, train crashes and aircraft crashes appear to have contributed to multiple safety improvements and then the marked reduction in mass fatality events from these transport modes for NZ since 1900.¹² Some of these improvements involved unique NZ solutions eg, the Tangiwai railway/volcanic disaster inquiry stimulated improved volcanic warning systems placed on Mt Ruapehu. For slow moving disasters such as the "tobacco epidemic", an inquiry by the Māori Affairs Select Committee resulted in NZ's world-leading Smokefree 2025 Goal.¹³

More specifically for infectious diseases, an inquiry into disease deaths associated with the South African War, identified problems with ventilation on a NZ troopship. A Commission of Inquiry into infectious diseases deaths at Trentham military camp in 1915 resulted in a large number of improvements to military camps. There was a Royal Commission Report into the 1918 influenza pandemic that contributed to a subsequent new Health Act of 1920. Also associated with this pandemic was a Court of Inquiry that identified problems with the lack of ventilation on another NZ troopship in 1918 that probably contributed to the spread of an influenza outbreak with 77 deaths. More recently there was an inquiry into the Havelock North outbreak from campylobacter – which has led to major changes in water quality regulation.

Potential downsides of official inquiries

There are many types of official inquiry used in NZ, and while they are typically described as being valuable, ²¹ we note some downsides. For example, some inquiries can lead to very complex and politicised processes. The disaster involving an aircraft crash into Mt Erebus

led to: (i) an Office of Air Accidents Investigation; (ii) a Royal Commission of Inquiry; (iii) a Court of Appeal ruling; and (iv) a Privy Council ruling. Ultimately, all these processes didn't appear to substantively resolve societal debate about the causes of the Erebus disaster, although tourism flights to Antarctica ended.

As well as sometimes being slow, inquiries can also be expensive. For example, the "Winebox Inquiry" involved a commission that ran for nearly three years and cost taxpayers over \$10 million. The "terms of reference" for inquiries can also be problematic. For example, we consider those for the recent inquiry into the Havelock North campylobacter outbreak were excessively constrained. This meant that this inquiry lost a key opportunity to identify mechanisms for limiting intensive livestock agriculture as a cause of polluted water and the role of climate change in heavy rainfall events. But we suspect all these potential downsides of inquiries can be avoided with the appropriate design of an inquiry and proper resourcing.

Conclusions

We identified five reasons for having an official inquiry into the NZ response to the COVID-19 pandemic. Fortunately, NZ also has a fairly solid track record of official inquiries that result in new laws or systems that advance public safety and public health.

We recommend that a phased official inquiry be held, with the first phase starting within two months. The terms of reference needs to be formulated in an open and transparent way, with input from those most affected by the responses to the pandemic. Given the scale of the impact of the pandemic response, this inquiry needs to be at the highest level (a Commission of Inquiry) and be independent of Government.

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