

Response to letter from Sundborn et al. on:

'Chasing elimination through lockdowns is stamping out livelihoods and lives'

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Editorial response

We requested, and received, commentary from the Ministry of Health in response to this letter, published below.

Susan Dovey

Editor-in-Chief

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Response from the New Zealand Ministry of Health

We disagree with Sundborn *et al.*, ¹ as do many epidemiologists, officials and advisors in New Zealand and globally. We provide objective data in support of our current position accumulating from the experience of countries globally.

In May, the Ministry adopted an elimination strategy to COVID-19 as the basis of our advice to Government.² This thinking underpinned the adoption of Alert Levels 3 and 4 controls, which led to the effective elimination of the community transmission of SARS-Co-V-2 in New Zealand in June. Another outbreak in August was contained after a short period of Level 3 controls in the Auckland region, and again led to successful elimination of community transmission. Recently, the November Quarantine Cluster of six individuals has been contained without escalating alert levels beyond Level 1.

The Ministry of Health, in partnership with our key Public Health Units, has continued to speed up and optimise the public health response to avoid more intrusive measures. The recent Cabinet decision on mask wearing on public transport in Auckland is an example of this fine tuning. The most recent update to our Surveillance Strategy, to be published shortly, takes a risk-based approach to surveillance and the recently updated Resurgence Plan outlines a proportionate response to future outbreaks.

Vaccine development is progressing at pace with good efficacy and safety data emerging from large Phase III trials of several candidates. Antibody enhancement, an unwanted outcome, has not been encountered in any current Phase I, II or III trial. The Government-led Vaccine Task Force is aiming to complete advanced purchase agreements with up to four companies before December 2020, and to source sufficient doses to vaccinate at least 80% of New Zealanders from March 2021. Sundborn et al. are unduly pessimistic about the prospects for a safe and effective vaccine. Early data on the effectiveness of the Pfizer candidate is hopeful and it may be able to be deployed in New Zealand next year.³ Efficacy and safety assessments by Medsafe, along with intensive post-immunisation surveillance for adverse events, will be key parts of the vaccine oversight programme currently being finalised.

World Health Organization (WHO) responses to the pandemic reflect international thinking, especially relating to countries with open land borders. New Zealand's remote island status enabled us to restrict importation of the virus, and with managed quarantine and isolation facilities the number of incursions has been remarkably small. Most new cases are detected in managed isolation, providing reassurance that things are working well. The Government has asked for policy options to consider a more risk-based approach to incoming

travellers, and there may be a case for shortening the quarantine period for selected travellers from low-risk countries.

Sundborn *et al.* discuss economic and societal harms arising from lockdowns. The authors quote extensively from a Stanford Professor who has undertaken economic modelling and concludes that lockdown will impact on life expectancy due to economic retraction. Sundborn *et al.* assert that we should be 'flattening the curve' rather than striving for elimination. There is no mention of the adverse health effects of the virus, direct and indirect mortality impacts, nor the impact on health care services and staff. Readers will have noticed that scientists in Sweden are publicly questioning their approach in the face of rapidly rising cases and deaths.⁴

The economic impacts of COVID-19 and government responses are more than just the shortterm impacts of activity restrictions such as lockdowns - large as those impacts are. An equally important issue is how the economy will respond over time as the pandemic and infection control measures evolve. A key success measure for the deployment of infection controls would be that, on average over time, the controls maintain a low health risk environment that supports rapid economic adjustment and resumption of as much normal business and other human activity as possible. Compared to a counterfactual path where health risk is poorly controlled and causes longlasting economic damage, the economic benefits of more rapid adjustment and resumption over the longer term may offset - or perhaps even outweigh - the short-term impacts of the controls on economic activity.

There is early evidence that New Zealand 'bounced back' from the reduced economic activity of the national Level 3 and 4 controls, and that activity was only briefly curtailed by the Auckland Level 3 controls. The New Zealand Activity Index (NZAC, www.treasury.govt.nz) summarises economic activity indicators and showed that activity in April 2020 was almost 21% down on the April 2019 level, but by June 2020 activity had returned to levels comparable to June 2019. The latest NZAC reading, for October 2020, suggests a continuation of activity at similar or slightly higher levels than October 2019.

This recovery of activity in New Zealand appears faster and larger than predicted, with Levels 1 and 2 conditions allowing much economic activity to occur. Many other countries provide contrasting examples of how failing to adequately control infection risk can be persistently damaging to the economy (let alone health, and the social fabric). The prolonged adverse impact reflects both tough restrictions having to be imposed more frequently in response to recurring large waves of infections, and people restricting their activities voluntarily, for fear of getting infected.

International experience to date demonstrates there is no simple relationship between economic and health impacts of COVID-19 associated with different government responses, even in the short term. Some countries have shown good performance on both economic activity and health, others poor performance on both, others good on one but poor on the other.⁵ The current health and economic outlooks for different countries show similar variation. This heterogeneity underlines that we are dealing with a complex phenomenon and that our responses need to be adaptive.

The impacts of any response measure must be assessed in terms of a reasonable counterfactual, or 'baseline'. What would have happened, and what is likely to happen, in the absence of any control measures? Sundborn *et al.* suggest that New Zealand's tourism industry is 'a casualty of the elimination goal'. Here, the relevant baseline is not the pre-COVID path for tourism businesses. Regardless of our border restrictions, international tourism and education would certainly be taking an unavoidable and substantial hit in the current global environment. Across the world, people are voluntarily staying closer to home. In New Zealand, an offsetting boost to tourism activity is that people are holidaying domestically rather than overseas.

Looking at the claims from Sundborn *et al.* that the national lockdown has taken income levels back to that of 2012, the 'bounceback' and other recent evidence suggests that the likely economic path from here is considerably more favourable. Treasury's *Pre-election Economic and Fiscal Update* issued in September⁶ and its *Weekly Economic Updates* published since then⁷ discuss this evidence.

REPLY

It is too early to get a definitive read on the overall economic impacts of COVID-19 and the response so far, but the encouraging recent evidence on economic activity is consistent with the more nuanced approach to border management and other refinements to the Alert Level system that have progressively been implemented. Most of the reduction in the national income level during the lockdown will prove temporary, so it is implausible that it would cause the kind of fall in life expectancy suggested by Sundborn *et al.*

We do not downplay the fact that the controls deployed early in the crisis did seriously curtail activity, including economic activity (to the tune of 21% in the worst month, according to the NZAC), while they were in place. They had to, because of the need to reduce infection risk to manageable levels. The recent experience of some countries deploying new strict controls because other measures have failed to control infection risk, demonstrates that lockdowns remain a necessary last resort and underlines the importance of investing in less costly ways of managing infection risk.

Overall, while the hit to national income from COVID-19 has certainly been substantial at times, with persistent elements that will continue to drag on some parts of the economy for some time, it has not been as large as suggested by Sundborn *et al.*, and not all attributable to the lockdowns and other infection control measures the Government has taken. Much of the hit has been unavoidable. As with the tourism example discussed above, the relevant comparator for judging any response strategy is not the pre-COVID path, but the path in the absence of a response. Overseas experience shows that a counterfactual path involving poor infection risk control, also involves the likelihood of substantial economic damage.

Sundborn *et al.* conclude with an emotional plea for a review of the Elimination Strategy. Such a review is well advanced and includes an all-of-government conversation about exactly the things the authors are calling for, including: alert level settings and triggers; refinement of border controls using a risk based approach; adoption of technologies for COVID-19 testing and contact tracing enhancements. There is a real commitment across all agencies to a wider policy review, including the sorts of choices the newly elected Government will need to make on our behalf.

Other commentators are again more optimistic about the future of this country. We have a chance to re-imagine the economy and use our collective ingenuity to enable all New Zealanders to thrive.

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About the author

Dr Ian Town DM, FRACP, is the Chief Science Advisor at the Ministry of Health. He has played a key role in advising the Director-General on the science and evidence underpinning the Government's response to COVID-19.

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