

'Zero Covid' - an impossible dream

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It is not realistic to eliminate a respiratory virus like SARS-CoV-2, any more than it is to eliminate the 'flu or the common cold.

Zero Covid is the public health strategy that seeks to eliminate COVID-19. It has influential backers,¹ notably Nicola Sturgeon,² Devi Sridhar,³ Independent Sage,⁴ British trade unions, Labour MPs such as Jeremy Corbyn and Diane Abbott as well as Jeremy Hunt from the Tory side. They advocate a strategy of “*zero infections and elimination of the disease*” and routinely refer to “*the Asian model*”.⁵

The Zero Covid campaign group, to which at least 18 organisations (mostly trade unions) are affiliated, defines the approach as follows:⁶

1. A full UK-wide lockdown until new cases in the community have been reduced close to zero;
2. An effective find, test, trace, isolate and support (FTTIS) system, run locally in the public sector, to quickly squash any further outbreaks.
3. COVID-19 screening, and where necessary quarantine, at all ports of entry to the UK.
4. Guarantee the livelihood of everyone who loses money because of the pandemic.

“Close to zero” is usually defined as something like fewer than 10 cases per 100,000 people.⁷ Proponents cite Australia, New Zealand, Taiwan, Vietnam, China and South Korea as examples of countries which have successfully adopted this approach.

It is true that these countries have had low infection and deaths rates from COVID-19. However, it is wrong to claim that they have successfully ‘defeated’ the virus. They have simply isolated themselves by closing borders, but now find themselves in a world where the virus is endemic and will remain so for the foreseeable future.

In the short term, some, notably Taiwan, have benefitted from their isolation, avoiding lockdowns and suffering no damage to GDP.⁸ They have the further luxury of observing other countries’ treatment strategies and vaccination outcomes before finalising their future course of action. Others, notably Australia, have suffered prolonged city and state lockdowns at considerable cost to both the economy (AU\$100m per day for 3 months) and to the fabric of civil society.⁹ Each of these ‘sequestered countries’ must shortly choose whether to remain in indefinite isolation or to re-open to the world and trust the efficacy of vaccination and treatment options.

Their experience is, however, of little immediate relevance to the UK. Any chance of isolating ourselves from the virus evaporated a year ago (not that this would have been a sensible course of action). Nowadays, we are a country where SARS-CoV-2 is endemic and where approaching half the adult population has detectable antibodies from being infected or receiving at least one dose of a vaccine. This is in addition to those with acquired immunity from exposure to the virus itself.

The four numbered components of the Zero Covid approach (above) make little sense against this background. To address them each in turn:

1. The notion that strict lockdowns reduce established COVID-19 to minimal levels is refuted by many countries retaining persistently high rates despite prolonged lockdowns¹⁰ and by the expansion, in SE England, of the Kentish B.1.1.7 variant during the UK's second lockdown. In the Spring of 2020 COVID-19 rates reduced similarly in France (strict lockdown), the UK (moderate lockdown) and Sweden (no lockdown). These similar trajectories¹¹ support the notion that declines in infections were largely contingent on seasonality, not lockdowns. The only convincing demonstration of lockdown promoting 'Zero Covid' is in Melbourne/Victoria, where the time and cost were far higher than anticipated and where the starting point was a few hundred cases.¹² Some 'Zero Covid' supporters believe that Wuhan "eliminated the virus",¹³ but China is a country with a long and questionable history of state propaganda. It would be extremely naive of anyone to take as 'fact' the claims made by the CCP regarding disease epidemiology.
2. The usefulness of FTTIS¹⁴ is dubious once a country has a vaccinated population. Will the vaccinated be asked to isolate if identified as case contacts? If so, why? There are claims that vaccination prevents infection as well as disease, which, it is hoped, will turn out to be proven.¹⁵ Chasing unlikely-to-be-infected (and very-unlikely-to-become-severely-ill) contacts, in a vaccinated population, is a poor use of resources. This must be added to (i) the considerable deficiencies of the UK's £22bn FTTIS system for COVID-19, described by Sir Nicholas Macpherson (former Permanent Secretary to the Treasury) as '*the most wasteful and inept public spending programme of all time*',¹⁶ and (ii) the fact that a hundred years of (local public sector) contact tracing has still not eradicated STDs.
3. The occasional infected traveller will, no doubt, introduce infection, but will do so to a population with considerable acquired immunity, meaning that the hazard of serious consequences is slight. This is completely different to the situation in countries that have excluded COVID-19 and which retain unvaccinated and unexposed populations.
4. The notion that COVID-19 losses should be made good indefinitely by the taxpayer is naive. As with the 'Bounce-Back Loan' scheme,¹⁷ it will create perverse incentives for failing and fraudulent businesses. Simultaneously, the fear of arbitrary closure will discourage legitimate new businesses.

Proponents of the 'Zero Covid' strategy support going *“hard and early in introducing new lockdowns and measures to tackle any new outbreaks”*. They claim: *“Overreaction is the most effective response when it comes to stopping exponential growth.”* They further assert that a focus on achieving 'Zero Covid' through swift and strict measures *“would be mentally good for the population”*.¹⁸ Some proponents seemingly do not believe vaccines are the solution, arguing that they are not perfect, will take many months to roll out and take effect, and may be vulnerable to mutations. In the meantime they claim that the “cruel” restrictions must continue to avoid mass deaths, and the 'Zero Covid' approach will allow them to be lifted sooner. They argue travel will eventually resume between “Covid-free jurisdictions” and “any suspension due to an outbreak would be short”.¹⁹

Again, these points disregard current reality. Vaccines have been rolled out remarkably swiftly. Approaching half the UK adult population, including the most vulnerable, are protected by them or by antibodies from prior infection; more will be protected by other aspects of the immune system such as T cells. Exponential viral expansion consequently is implausible. The notion that *“any suspension [of liberties] due to an outbreak would be short”* is not supported by the experience of e.g. Melbourne and the approach disregards the devastating effects of social isolation and long-term school closures on the physical and mental health of populations, especially the young. To assert that strict measures *“would be mentally good for the population”* ignores overwhelming evidence to the contrary.²⁰

The most fundamental problem with 'Zero Covid' as a strategy is that fundamentally it is not realistic to eliminate a respiratory virus such as SARS-CoV-2, any more than it is to eliminate the 'flu or the common cold.

Matt Hancock²¹ and Chris Whitty²² both acknowledge this, saying that we will need to live with Covid just as we do with influenza, which causes 10,000-30,000 deaths in a typical winter. Jacinda Ardern, Prime Minister of New Zealand, likewise gets the point, even in a country that has largely excluded COVID-19, saying that she intends to make this shift:

*“Our goal has to be though, to get the management of COVID-19 to a similar place as we do seasonally, with the 'flu. It won't be a disease that we will see simply disappear after one round of vaccine across our population.”*²³

Proponents of Zero Covid spurn this realism, saying that measles, polio and smallpox have been eliminated. In fact only smallpox has been truly eradicated and this took decades of mass vaccination and increased herd immunity to achieve.

Professor Donald Henderson, who directed the international campaign against smallpox set out three ways in which eradication of disease fails :²⁴

1. An inability to accurately diagnose every case;
2. Interventions to prevent transmission are not 100% effective;
3. The pathogen can replicate in the environment or in another animal host.

All of these caveats are pertinent to COVID-19. Vaccines are expected to reduce the risks of disease to a manageable level but not, as with smallpox, to be completely protective. Next, although there is growing evidence that vaccines prevent transmission, they may leave a 'tail' of sub-clinical cases, and these will be especially difficult to trace even with a far more sophisticated (and intrusive) FFTIS than at present. Furthermore, vaccines against SARS-CoV-2 are potentially vulnerable to mutated variants, whereas the measles and smallpox viruses are not so mutable. Last, SARS-CoV-2 has been shown to cross into mink, with the selection of new variants, illustrating the potential for non-human reservoirs.²⁵

No respiratory virus has ever been eliminated and influenza vaccines that target an even more mutable virus than SARS-CoV-2 need repeated reformulation to combat new variants. This may well be the future with SARS-CoV-2 as well.

'Zero Covid' has loud advocates, but that doesn't make it any more realistic or less harmful as an approach. It means living indefinitely with tightly sealed borders and a continual threat of sudden lockdown. Who will open a new bar, hotel, or restaurant with that constant threat above their head? It means accepting a 'new normal' of mass testing and the requirement to self-isolate for contacts who, with vaccination, are unlikely to experience infection let alone disease. It means giving up on living a normal life to pursue the unreachable dream of eliminating an increasingly manageable seasonal respiratory virus.

It is perplexing how this notion has managed to gain traction in sensible scientific or media circles. It flies in the face of the known tenets of biology and reflects a world where risk perception has been heavily distorted. Even prior to vaccine deployment, the experience of countries and states that adopted a light touch approach, such as Sweden and Florida, showed that COVID-19 epidemics are self-limiting and manageable without draconian restrictions.^{26,27} Exponential rises are brief and stall as population immunity builds. Vaccine deployment will now dramatically reduce disease (and infection) incidence and impact. Pursuing Zero Covid against this changed background is a misplaced goal, imposing immense and unjustifiable societal and economic costs.

Endnotes

1. [Inside the Zero Covid campaign](#)
2. [COVID-19: Should the UK be aiming for elimination?](#)
3. [The Zero Covid debate: can the disease be eliminated?](#)
4. [Martin McKee: Opinion Piece in the Guardian on 'Zero Covid'](#)
5. [Independent SAGE - 'Zero COVID UK' - YouTube](#)
6. [We could be living without the virus](#)
7. [We can be Zero! Time for a strategic change to combat virus variants?](#)
8. [UPDATE 1-Taiwan raises 2021 economic view as Q4 growth jumps](#)
9. [City Locked Down for Three Months Has Bleak Lessons for the World](#)
10. [Stay-at-home policy is a case of exception fallacy: an internet-based ecological study](#)
11. <http://worldometers.info/coronavirus>
12. [City Locked Down for Three Months Has Bleak Lessons for the World](#)
13. [Zero Covid: Frequently Asked Questions](#)
14. [The Independent SAGE Report 5: Final Integrated Find, Test, Trace, Isolate, Support \(FTTIS\) response to the Pandemic](#)
15. [Real-World Evidence Confirms High Effectiveness of Pfizer-BioNTech COVID-19 Vaccine and](#)
16. [Test and Trace most wasteful and inept public spending programme of all time, says former Treasury chief](#)
17. [Bounce Back Loan Scheme corrupted by fraud](#)
18. [We can be Zero! Time for a strategic change to combat virus variants?](#)
19. [Zero Covid: Frequently Asked Questions](#)
20. [Psychiatrists see alarming rise in patients needing urgent and emergency care and forecast a 'tsunami' of mental illness](#)
21. [Exclusive: We hope to live with Covid like flu by end of the year, says Matt Hancock](#)
22. [Coronavirus press conference \(22 February 2021\)](#)
23. [Jacinda Ardern declares 2021 'the year of the vaccine'](#)
24. [Lessons from the eradication of smallpox: an interview with D. A. Henderson](#)
25. [Preliminary report of an outbreak of SARS-CoV-2 in mink and mink farmers associated with community spread, Denmark, June to November 2020](#)
26. [Mortality in Norway and Sweden before and after the COVID-19 outbreak: a cohort study](#)
27. [Will the Truth on COVID Restrictions Really Prevail?](#)