

TIME TO GO GREEN: WHY IT IS TIME TO BUILD A UK COVID 'GREEN ZONE'

FEBRUARY 2021



**FUTURE
HEALTH**

EXECUTIVE SUMMARY

The UK's vaccine rollout is an undoubted success. The Government has reached its target of vaccinating 15 million by the 15th February and has committed to provide all adults with a jab by the end of July. But vaccinations alone will not get the UK through this pandemic. This paper argues that the Government needs to adopt a strategic approach to its policy making that it has lacked to date; but that it appears from the recent roadmap to be moving closer too.

Specifically it calls for an end to the health-economy 'see-saw' in the Government response which was in evidence last year as we exited the first lockdown. Instead this paper calls for the UK to set a clear aim to become a Covid 'green zone' country. Green zone style models have already had success in a number of countries worldwide including New Zealand, Australia and Taiwan and is being discussed in Canada¹ and Europe². A 'green zone' is defined as a country with no local Covid transmission in 14 days; no borders open with red zone countries (countries where local transmission is happening) and where new cases effectively isolated when they enter the zone³.

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Such an ambition would be significantly challenging for the UK. However a UK Covid green zone, where infection rates are held low (below 1,000 per day), borders are closed with red zone countries and new infections entering the country are isolated is possible. In its G7 Presidential role, adopting this objective would demonstrate the UK's commitment to defeating the pandemic not just nationally but internationally.

FIVE STEP PLAN

In getting the UK to the 'Green Zone' this paper advocates a five step plan.



01 — Vaccination

Maintaining the pace of the vaccine programme, particularly ensuring harder to reach groups and those who have so far been most resistant to uptake of the jab get vaccinated as quickly as possible



02 — Test, trace and isolate

Rolling out rapid mass testing to support the reopening of the economy, and providing the right financial support for those asked to isolate due to the virus



03 — Borders

Tighter border controls with non green zone countries where there is still transmission of the virus, and enhanced surveillance and quarantine processes to stop and catch new variants entering the country



04 — Non pharmaceutical interventions

The maintenance of non pharmaceutical interventions such as masks and social distancing in higher risk settings, and a gradual easing as infection rates fall



05 — Business support

Maintaining targeted support for businesses impacted by continued restrictions – for example venues being able to open at reduced capacity levels

Going 'green' for Covid will set an objective and course for the UK in the coming months which balances the health of the population, the capacity of the health service and the safe opening up and recovery of the economy. The Government rightly wants this to be the last lockdown. A UK Covid green zone is the way to ensure this.

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THE HEALTH ECONOMY SEE-SAW

Faced with managing the challenge of coronavirus the Government has found itself on a policy 'see-saw' that has pitched the health and the economy against one another.

There are multiple reasons for this situation, including:

- The lack of resilience in the healthcare system at the start of the pandemic
- The challenges in building or acquiring adequate pandemic defence infrastructure at pace, whether Personal Protective Equipment (PPE), Test and Trace or the NHS App
- The silo-ed nature of Whitehall which often sees departments pitching against one another based on their interests rather than working together
- The scale of the financial impact of Covid as a result of a closed and restricted economy

Policy making on this see-saw is highly unfortunate and unlikely to ever be wholly effective. Public health policy experts regularly state that economic outcomes and health outcomes are strongly interlinked (a healthier society is a wealthier society and vice versa).⁴

The Government began the pandemic 'following the science', but with scientific discovery moving at frenetic pace and shifting to catch-up, this approach resulted in veering between two paths; measures designed to protect the health system and healthcare of the population on the one hand and those aimed at re-opening the economy on the other.

The strongest elements of the Government's 2020 response have been those where health and the economy have been properly intertwined and connected. During the first lockdown in March the 'stay at home, protect the NHS, save lives' message cut through strongly suppressing the infection rate and ensuring that the NHS from a Covid perspective at least was not overwhelmed (there is an argument to be had about whether

the cancellation of operations and missed diagnoses qualifies as a system that was managing effectively, but this is not explored in this research briefing). This was combined with innovative and fast thinking responses from the Treasury to support businesses the UK economy through lockdown.

Fast forward to the summer and autumn of 2020 and the launch of schemes such as Eat Out to Help Out aimed at supporting the badly affected hospitality industry, the arrival of new Covid variants and open borders, a tiered system of restrictions which was complex to follow, difficulties with testing and the return of Universities, and rapid u-turns on 'work from home' policies gave the UK policy response a feeling of a series of compromises (aimed at balancing the see-saw) that lacked resilience.

Some will argue that stepping out of such severe restrictions, with the pandemic still live, was always going to involve trade-offs, and a need to try and keep the reinfection rate (R) below 1. But in sitting on the health-economy see-saw the Government found itself rocking backwards and forwards rather than being in a secure and stable position. Former Chief Scientific Adviser, Sir Mark Walport summarised the result of this compromise as "having not succeeded in preventing severe damage either from the disease or from its social and economic consequences."⁵

THE VACCINE OPPORTUNITY

Fortunately as the Government sets a path to exit this lockdown, it has one major new piece of ammunition; vaccines.

The vaccine developments are a clear game changer for the response. However it has also simultaneously raised expectations about the end of the pandemic. As more and more people in the UK receive their vaccine there are growing calls for restrictions to be lifted and for normal life to return quickly. Some are even talking about a Vaccine Victory Day like VE Day at the end of the Second World War.⁶

The vaccines are the primary way out of the pandemic, but they are not sufficient on their own to end it soon for a number of reasons:

- We do not yet know completely how effective the vaccines will be at stopping transmission of the disease and infection rates (though the early signs are positive)⁷
- We do not know over how long a period of time the vaccines will be effective for
- New variants could emerge which the current vaccine(s) could be ineffective against
- Not everyone will be able or want to be vaccinated and compulsory vaccination is not Government policy

The Government's roadmap published on 22 February 2021 includes four tests for moving along the path to exiting lockdown:⁸

- 1 There have been no interruptions to the vaccine programme
- 2 The vaccines are reducing hospitalisations and the number of deaths
- 3 The latest changes have not led to rising infections that put pressure on the NHS
- 4 There are no new variants of concern

This model demonstrates that the Government has learnt from 2020 in a significant way. It is seeing this crisis less as a competition between health and economic interests and viewing it in a co-ordinated fashion, where both are intrinsically connected.

Caution in exiting lockdown has now replaced speed. Getting the exit right and avoiding further lockdowns has become the objective. This is highly welcome. We know lockdowns devastate both economies and population health. Future national lockdowns must be avoided.

But if the Government is to really end the Covid pandemic in the UK it will need to go further.

The pace of the UK vaccine programme is faster than most other countries. But this creates risks of complacency and impatience creeping in.

Without strong protective measures in place and until vaccine coverage is widespread; there is the danger of new variants being imported that could risk more lockdowns.

THE RISE OF THE GREEN ZONES

In Germany a group of clinicians and academics recently authored a “no-Covid strategy”. The strategy includes three steps. A reduction in numbers of infections to zero; the use of rigorous test, trace and isolate systems alongside travel restrictions and rapid outbreak management regionally if outbreaks emerge. Regions with no Covid cases are labelled green zones.⁹

The EndCoronavirus (ECV) coalition defines a green zone along these lines:

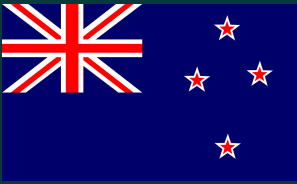
- A country or region with no local Covid transmission in 14 days
- No borders open with red zones countries (countries where local transmission is happening)
- A region or country where cases effectively isolated when they enter the zone¹⁰

Baker et al argue that it should also include a presence of a high performing surveillance system including sufficient testing to tackle outbreaks.¹¹

There is good evidence globally that this ‘green zone’ style approach is the one most likely to protect the UK from future lockdowns and suppress the pandemic, particularly (but not exclusively) for island nations.

Comparing individual countries poses obvious challenges with geography, diversity, history and culture. However there are a number of themes that emerge in the examples below regarding border restrictions, testing and tracing, preparedness and compliance with non pharmaceutical interventions that when combined with the impact of vaccines, can help the UK move into a new phase of its pandemic response.

The following sets out examples of countries who have adopted ‘green zone’ type models.



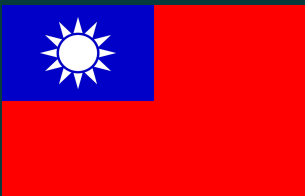
NEW ZEALAND

New Zealand's approach to tackling Covid is regularly cited as being one of the most successful. The Prime Minister Jacinda Arden moved quickly to restrict travel and introducing quarantine in the first wave. Borders were shut early and this was widely seen as being important to slowing the spread of the virus. New Zealand is currently at its lowest coronavirus alert level, level one, meaning life is virtually back to normal. The only major exception is the border which has remained closed; according to Arden it will remain so until New Zealanders are protected and there is 'a certain level of normality in the world.'¹²



AUSTRALIA

Like New Zealand, Australia adopted a hardline approach to tackling the virus. Its borders remain closed to international travellers and so far it has had less than 30,000 cases and fewer than 1,000 deaths. The Australian government has moved fast to lock down cities where infections have emerged, including this month in Victoria, which included Melbourne where the Australian Open tennis tournament was being held. Life is returning to normal and business confidence is now at a seven year high.¹³



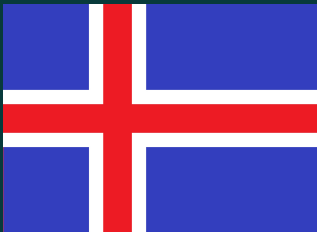
TAIWAN

Taiwan has had only 9 deaths and less than 1,000 cases of Covid.¹⁴ The country with a population of over 20 million people has not had to go into lockdown. Strict border controls, including bans on visitors and quarantining for returning citizens, effective pandemic preparedness, alongside widespread use of masks have all been key to the effective response. Open government and open source data platforms have also underpinned the Government action. Taiwan remains vigilant and Health Minister Chen Shih-chung told the BBC recently that it was important to remain alert during the vaccine rollout.¹⁵



SINGAPORE

Singapore has had just 29 deaths from Covid 19 and won recognition for its preventative measures, the use of digital apps and physical tokens to access services safely and a well respected contact tracing system.¹⁶ Not wearing masks brings substantial fines and preparation based on Sars and Mers is also seen to have been important. Commentators have cautioned however that Singapore's model of Government-citizen relationship does not make it easily replicable.¹⁷



ICELAND

Iceland began re-opening its economy this month and is currently the only country to be rated by the European Disease for Disease Prevention and Control as 'green'.¹⁸ Iceland has benefited from its isolation but according to the Financial Times experts have praised its test, trace and isolate regime and use of data analysis following a difficult second wave. Iceland has also won praise for its genetic-tracing approach.¹⁹ The country has kept its borders open to tourists from some countries. Although the criteria set for entry are strict. Visitors must either self-quarantine for 14 days after arrival or participate in two screening tests: one on arrival,²⁰ followed by five to six days of quarantine, then a second test.²⁰ Life is returning to normal indoor performances and religious services can currently accommodate 150 people.²¹



NORDICS

Norway and Finland took a very different approach to their virus response from Sweden which adopted more voluntary restrictions. Sweden has had over 600,000 cases and 12,000 deaths. In comparison Norway has had just over 60,000 cases and 600 deaths, and Finland a similar number (just over 50,000 deaths and 720 deaths). Tough border controls including mandatory testing and quarantine for all travellers were seen as critical to keeping infections and deaths down.²²

THE FIVE STEPS TO A UK GREEN ZONE

In the UK a 'green zone' where economic growth returns, social life is near normal and health systems are functioning effectively is a strong ambition.

However implementation and the objective of zero infections would be very challenging for a few reasons:

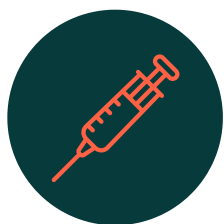
- Some of the successes outlined in the previous section are the result of countries taking early action last year to prevent the virus getting a foothold in their countries, which is clearly different from the situation now in the UK
- The reliance on citizen data sharing with Government in some Asian countries will not work in the UK
- Any UK wide strategy would need to be coupled with a similar approach in the Republic of Ireland

Experts such as Professor Niall Ferguson have said that going for zero Covid in the UK could lead to 'forever lockdowns'.²³ Given that the objective of the new Covid policy is to actively avoid lockdowns a revised model is therefore needed.

For the UK a green zone would be defined as one where:

- Infection rates were at very low levels. The British Medical Association has stated that the UK should be aiming for a seven day case rate of 10 or fewer per 100,000. This equates to a daily case rate of 1,000 or below.²⁴ To put this in context on 20 February there were 10.406 cases²⁵
- Borders are open with other green zone countries, with health passes (a combination of vaccine and testing information) used to facilitate safe travel. Borders are closed with red zone countries. New cases are effectively isolated at the border through quarantine and testing measures
- Surveillance systems of testing and data and information sharing are working effectively to put out outbreaks early through targeted and fast localised lockdowns when any flare ups do occur

For the UK to 'go green' the following steps would be needed:



01 — VACCINATION

The Government and NHS would need to keep its momentum up on the vaccination programme. Penetration of older demographics has been incredibly high, but there are pockets of challenge amongst healthcare workers and minority groups and concern that the vaccine will not have the level of salience to younger groups, who do not have the same incidence of death and hospitalisation.

Under these circumstances infection rates if not suppressed, could rise, leading to possible increasing cases of long Covid. Whilst hospitalisation rates may be lower than experienced in previous waves the total number may still be high enough to disrupt NHS services and care, where backlogs of care have built up.

Seeing the vaccination project to the end is essential. Further work will be needed to engage harder to reach groups and those who are more sceptical. Lessons can be taken from the Israel vaccine programme here in working with Orthodox communities to break down prejudices and misinformation.²⁶

Welcome effort is already underway to do this, but serious resource and effort is needed including:

- (1) much better marketing to hard-to-reach groups,
- (2) better use of patient records and
- (3) a trusted vaccination certification or pass that can support a safe return to work and travel.

Serious consideration should be given to vaccination programmes for children as is customary for flu in order to prevent them becoming vectors for infection and keeping infection rates at the low levels needed for green zone status.



02 — Test, trace and isolate

The Government has always seen mass testing as a core component of Covid 19 management. To give Test and Trace a chance to deliver impact, there is a need to drive down both the stock and flow of infections much, much lower so that scale of the challenge is at a manageable level. There is a need to embrace the latest technologies in testing to reduce costs and turnaround times, to improve the user experience and quality of data, and to increase accuracy and take-up rates.

Recent data from Government scientists has revealed that contact tracing only reduces the infection rate by between 2 and 5%.²⁷ The focus therefore needs to be on wider and quicker testing and effective isolation policies. On isolation there is a need to look at what payments are available to those being asked to self isolate.²⁸ Latest NHS Test and Trace data have suggested up to 20,000 people a day are not self-isolating.²⁹



03 — Borders

The Government will need to toughen its border policies. Passengers from non red list³⁰ countries have to quarantine at a place of residence and complete two tests. Those from red list countries (1) undertake a pre-flight test, (2) complete a Passenger Landing Form, (3) stay in quarantine hotels for a period of 10 days and (4) the completion of two negative Covid tests to exit.

However the practical difficulties of implementing this mixed model effectively have already been noted with red list and non red list passengers mingling at airports and potentially spreading the virus.

The tougher approach of hotel quarantine could be extended to all countries (both red and non red list countries) if variants of coronavirus emerge of concern. This is the policy currently in Scotland, but not in England. Other interventions to toughen borders include the use of security “wearables” to toughen up isolation measures and which could open the door to robust at-home isolation measures if hotels reach capacity. Clearer measures will be needed to handle hauliers who are essential to the smooth running of supply chains but represent potential vectors of infection.

Global variant surveillance with increased genomic sequencing capacity will be important to link through to border monitoring and controls.



04 — Non-pharmaceutical interventions

As the economy starts to open up – as set out in the roadmap – the Government will need to ensure that the non pharmaceutical interventions we have lived with for nearly a year are used to help keep the R rate down. This will include mask wearing inside, some limitations in gathering numbers and social distancing measures, alongside regular and clear public health messages information campaigns.



05 — Business support

The greatest advantage of the Green Zone approach is the potential for opening schools, universities and businesses in unintrusive fashion. But to do this safely there is a need for close infection control partnership with a commitment to asymptomatic testing, the implementation of hygienic workplace best practice (screens, handwashing, etc) and a readiness to stand-down when outbreaks occur.

The Government will need to continue to support businesses through the journey to the green zone. But as the economy opens up, there are opportunities for greater flexibility in what proportion of support and for what sectors is needed. This should primarily be based on the level of disruption as a result of the UK green zone commitment.

The above steps will help drive down the infection rate, prevent new cases from entering the country, and support the safe opening up of society and the economy. They would represent a triple win.

THE UK COVID GREEN ZONE

Once the UK reaches the green zone, the above model can underpin the ongoing management and surveillance of the virus. Specifically:

- Updating the vaccines as and where necessary and deploy them to face up to any new variants that emerge
- Rapid mass testing, for example to get larger gatherings and events held and to keep schools safe and open
- Borders to be opened up with other green zone countries, but restrictions to remain for those red zone countries (ie those countries still seeing local transmission). The use of vaccines or health passes (that include information on recent negative tests) presents an opportunity to allow people to travel safely between countries
- Some limited continued action of some non pharmaceutical interventions such as masks and social distancing in certain places and hygiene protocols in businesses
- Tailored and flexible Government support for businesses where activities remain restricted

If such an approach and model is not adopted then the danger will be that the UK experiences a late spring/early summer high followed by a return to tighter restrictions again in the autumn and winter as new variants and outbreaks emerge meaning infections, hospitalisations and deaths all increase.

This will not be good for either our health or our economy.

For the sake of both, the Government should now go further and commit its Covid strategy to 'going green.'

ABOUT FUTURE HEALTH

Future Health is a global specialist healthcare policy research centre based in the UK. Founded by former Special Adviser to the UK Secretary of State for Health and Social Care, Richard Sloggett the research centre works on evidence development and policy solutions to tackle major healthcare public policy issues.

The Research Centre currently has three live core research programmes covering the relationship between healthcare, technology, prevention and the economy. The Centre is also working on set piece projects in relation to the G7 meeting in the UK in June. This research paper forms part of its global health programme.

Richard Sloggett is Founder and Programme Director. Richard has been named one of the top 100 most influential people in healthcare policy by the Health Service Journal and is a PhD student at the University of Liverpool researching the development of preventative healthcare systems.

Whilst working at the Department of Health and Social Care Richard worked on the NHS Long Term Plan, the creation of NHSX, the VPAS agreement with the life science sector and the Prevention Green Paper. Prior to his work at the Department of Health and Social Care, Richard worked in consultancy for over ten years specialising in health and social care policy. He started his career as a researcher in the UK Parliament.

He is an Advisor to the COVID 19 Recovery Commission and the All Party Parliamentary Group for Longevity.

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