AKE Update

COVID-19 Restrictions – 6 April

KEY POINTS

At the time of writing, there were over 1.2 million people infected with COVID-19. Around 270,000 people were reported to have recovered, while over 70,000 people had died. The pandemic has already wrought significant economic disruption.

This report aims to help clients prepare to adapt to the measures introduced in response to the pandemic and understand what triggers may prompt further action.

Countries have introduced a variety of restrictions which are not a sustainable medium term-solution to prevent the spread of COVID-19. The economic damage from the disruption of day-to-day economic activity will be too great for even developed countries to sustain if prolonged. All governments will need to make trade-offs between minimising deaths and incapacitation from COVID-19 and allowing the economy to restart.

The length of restrictions will depend on the:

a. Effectiveness at bringing down the growth of new COVID-19 cases (with a two to three-week lag from the introduction of 'lockdowns')
b. Assessment of their ability to suppress future episodic outbreaks (through extensive testing and contact tracing)
c. Degree of economic damage caused by restrictions

In countries with lockdown, it will take at least **four to six weeks for lockdowns to be lifted. Resumption of partial activity. Measures that will be loosened include the reopening of non-essential businesses.** Countries that have been better at testing and contact tracing will be able to lift some restrictions within three to five weeks.

There will be a cycle of tightenings over the next three months to prevent future community-wide outbreaks.

It will take **between 10 to 12 weeks following their implementation for most internal control measures to be relaxed**, though these timelines may be extended in countries that delayed their initial response. It could take another eight weeks before the majority of cross-border travel restrictions are removed.

Improvements in testing and contact tracing may allow states to lift restrictions sooner.

Developing countries will find it harder to maintain restrictions. Thus, all else equal, it is likely that restrictions will be lifted sooner in less developed states.

About us

AKE has over 20 years of experience working with the financial sector, providing clients with political and economic risk consultancy. Our experienced team provides tailored analysis and strategic forecasting, allowing our clients to better assess risks in challenging environments.

Contact us on: +44 (0)20 3816 9970 / enquiries@akegroup.com **Or visit:** www.akegroup.com / @akegroup

OVERVIEW

At the time of writing, there were over 1.2 million people infected with COVID-19. Around 270,000 people were reported to have recovered, while over 70,000 people had died. While the public health implications are large, the impact of the virus goes well beyond that. In particular, restrictions by states to control the spread of COVID-19 are disrupting everyday life. Different countries have introduced a variety of restrictions, which reflects their experiences in containing the outbreak and the political will to implement measures to slow the spread of COVID-19. The measures include a variety of 'lockdowns', which magnify the economic impact of the pandemic. Countries that have gone into some form of lockdown so far include China, India, France, Italy, Spain, the UK, and some US states.

It is important to place the outbreak in context. While dangerous, it is less concerning than previous outbreaks, and it is far from clear that a purely objective assessment makes the measures necessary to control the virus worth the costs.

The COVID-19 outbreak is most frequently compared to the 1918 Spanish flu pandemic, which led to an estimated 675,000 deaths in the US and up to 50 million deaths globally. However, there is little discussion of other arguably more comparable pandemics.

- 1957 H2N2 pandemic (116,000 deaths in the US and 1.1 million deaths globally)
- 1968 H3N2 pandemic (100,000 deaths in the US and 1 million deaths globally)
- 2009 H1N1 pandemic (12,500 deaths in the US and up to 575,000 deaths globally)
- 2011-2012 seasonal influenza (12,000 deaths in the US)
- 2014-2015 seasonal influenza (51,000 deaths in the US)

COVID-19 is more destructive than the common flu, although at this stage it is unclear where it fits. Nonetheless, some measures to limit the outbreak and slow the spread are objectively reasonable.

However, the current set of restrictions are not a sustainable medium term-solution to prevent the spread of COVID-19. The economic damage from the disruption of day-to-day economic activity will be too great for even developed countries to sustain if prolonged.

All governments will need to make trade-offs between minimising deaths and incapacitation from COVID-19 and helping revive the economy. At this stage it is hard to provide a numerical measure to the economic cost of prevention methods – although globally it will likely be in the trillions. The longer-term effects, as businesses collapse and unemployment rises, will be large. Active monetary and fiscal policy will help mitigate the damage but will do little to prevent a rise in corporate bankruptcies and the potential longer-term ramifications for employment and welfare.

States will relax 'lockdowns' and other restrictions once they judge that the growth of new confirmed COVID-19 cases is stabilising, even at the risk of future infections. Restrictions will not be relaxed in one go and are subject to being tightened at a later date. It will likely take at least three months for the vast majority of domestic measures to be relaxed, with measures temporarily reintroduced. Political pressures in democratic states could also result in a faster removal of restrictions. Some measures will remain in place for longer, including strict border controls and limits on travel, while others, including the closing down of commercial enterprises, will be amongst the first to be lifted.

The length of restrictions will depend on the:

a. Effectiveness at bringing down the growth of new COVID-19 cases (with a two to three-week lag from the introduction of 'lockdowns')
b. Assessment of their ability to suppress future episodic outbreaks (through extensive testing, contact tracing, mitigating the risk to the vulnerable, and increasing health care capacity)
c. Degree of economic damage caused by restrictions

RESTRICTIONS

Existing measures

The table in Appendix 1 is a non-exhaustive list of countries that have imposed restrictions on the operation of businesses and the internal movement of people. The purpose of the restrictions is the enforce 'social distancing', and thus slow the spread of COVID-19. Slowing the spread of COVID-19 may help prevent the exhaustion of scarce medical facilities and provides the government time to improve their ability to respond to the outbreak (through increasing medical provisions, broader and fasting tests, and effective contact tracing).

The details of the measures vary between countries, but can broadly be separated into:

a. Complete lockdowns – closing all non-essential services and limiting residents' rights to leave their premises
b. Partial lockdowns – closing of some businesses (some restaurants, gyms, some shops), but fewer restrictions on movement

In addition, states have introduced restrictions on entry from abroad. These measures include:

a. Bans on entry for almost all individuals, including citizens (e.g.India, Serbia, Argentina, Cuba, Colombia)
b. Ban on non-citizens entering (e.g.Canada, Brazil)
c. Ban on transit
d. Quarantine of all entering the country (e.g.Maldives)

Broadly, the economic and political cost of lockdowns will increase over time. The increase will be non-linear, which implies that the rate of economic harm increases over time. The number of defaults and rising unemployment can be contained in the short term but will increase dramatically as economic activity remains constrained. However, there will also be pressure to maintain measures the prevent unnecessary deaths caused by the spread of COVID-19 and the exhaustion of medical capacity.

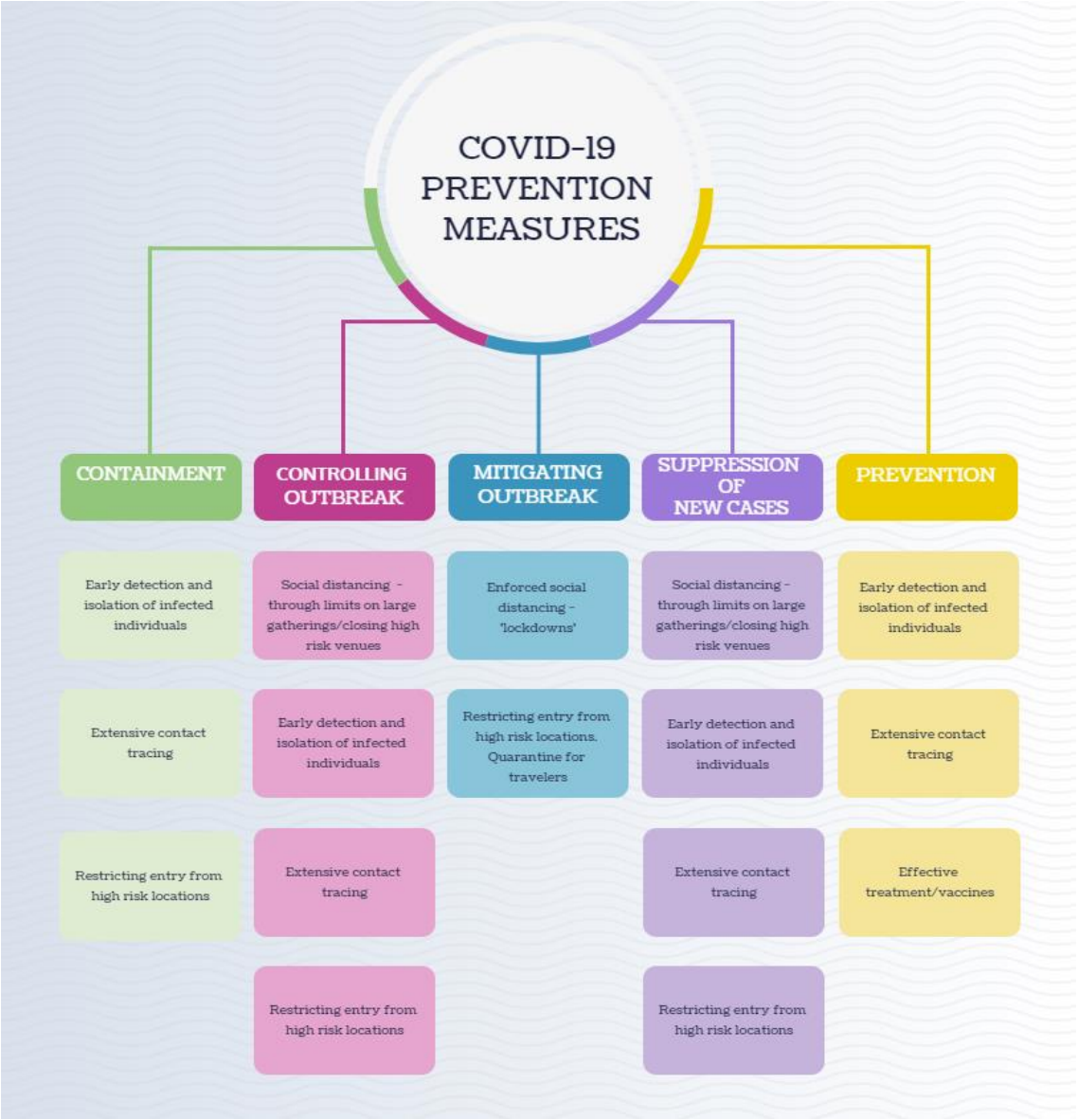
States will make different decisions on the length of their lockdown. China, for instance, maintained strict measures (particularly in Hubei) for more than eight weeks. By the end of that period, community transmission has been brought down to virtually zero. It is, however, unlikely that other states have the political or economic resources to maintain strict measures for that long. This implies that other countries will relax measures even though there is a risk of further outbreaks.

Evolution of measures to contain COVID-19

The appropriate measures from a public health perspective to control the outbreak depend on the current rate of infection and its growth trajectory. AKE has broken down responses into five phases.

Due to state capacity and inadequate planning some states – including most of Western European and the US – failed to take sufficient mitigatory action at an early stage, which led to harsher restrictions. Other states,

including South Korea and Singapore, were more successful in containing and controlling the outbreak. Nonetheless, all states are introducing fairly heavy restrictions.



Phase 1: Containment – low rate of infection, growth of new cases. Limited or no community transmission

During the early stages of COVID-19 (January in China, late-January to February in most of Asia and late-February to early March in the rest of the world) the appropriate response was *Containment*. This involves measures to prevent the spread of the virus, which have marginal impact on overall economic activity. It includes the early detection of cases, insolating those individuals, tracing their contacts and limiting imported cases from high risk areas.

In general, Asia was better prepared to contain the outbreak. This is both due to greater administrative capacity and experience at dealing with previous outbreaks, including SARS. That experience meant that countries, like South Korea, had a legal apparatus and advanced technological systems to contact trace. As a result, Europe, the US and non-Asian developing markets may face a longer outbreak period.

Phase 2: Controlling the outbreak – cases rise and there is some community transmission. COVID is still partially contained and does not spread across the population.

This is the stage that much of Asia is currently in and the position that Europe and the US were in in early March. At this stage, the aim is to 'flatten the curve', that is to prevent a rapid increase in the number of cases. Nonetheless. with an increased number of cases, states need to be more proactive measures. These include more restrictions on travel and measures to prevent the internal spread – including moderate 'social distancing' measures. During the containment phase, testing, tracing and isolation are vital to prevent mass community spread.

If done efficiently, as in South Korea, it can prevent a worsening of the outbreak. Intermediate levels of economic activity can continue and mitigation restrictions will need to be in place for longer.

Phase Three: Mitigation – cases rise rapidly, transmission within the community

The stage in which most of Europe and the US are currently in. Once cases rise, it is no longer as valuable to be able to test all suspected cases and trace their contacts. The virus will spread in communities and there are too many cases to just test and isolate. During the mitigation phase the best response from a public-health perspective is to increase social distancing – potentially through the use of heavy restrictions. While testing is valuable to ascertain the number of cases, the working assumption is that the virus will be spread in the community and not all individuals can be practically identified.

Such measures will take between two to four weeks to reduce number.

Phase Four: Suppression – cases are falling and community transmission is low. There are still a number of other countries with large number of cases and spread remains a risk

Once COVID-19 cases decrease, in no doubt part due to increased social distancing, some measures can be relaxed to allow for economic activity to resume. However, there is a risk of further mass outbreaks if new cases and clusters cannot be rapidly detected and their contacts traced. At this stage testing and isolation are vital.

Travel restrictions will need to remain in place to prevent the importation of new cases. These restrictions can be relaxed once there are accurate and near-immediate testing facilities for those entering the country.

Phrase Five: Prevention – In the final stage, there are very few new COVID-19 cases. There is a latent risk of new cases

The final stage of the COVID-19 pandemic will be *Prevention*. There will still be a latent risk of new cases, although these will tend to be rarer. Nonetheless, until effective treatments or a vaccine are available, there is the potential for a new outbreak. At this stage there will need to be effective testing and contact tracing, but economic life will be able to return to normal.

Future COVID-19 control measures

The economic cost of COVID-19-related restrictions means that they are likely to be relaxed once authorities believe that they have some ability to control the outbreak.

The following set of conditions will likely need to be met:

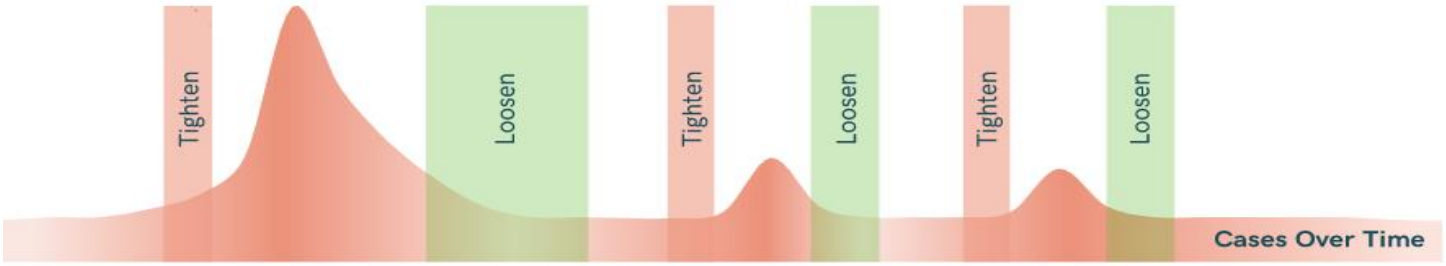
a) A steep reduction in new COVID-19 cases – roughly a decreased number of cases for 14 days
b) Decreasing numbers and proportions of cases not linked to a source case
c) The ability to widely test the population

d) An enhanced ability to 'contact trace' – that is to say, the ability to find those that an infected individual has interacted with
e) A strengthening of facilities to treat the critically ill

Following a loosening, there may also need to be periodic tightening of controls if and when cases reemerge. Tightening will occur when:

a) An increased number of cases – roughly a 10 per cent rise in new cases over three to four days (assuming consistent numbers of tests), or a doubling of cases over around five days
b) High likelihood of mass exposure from a large gathering (sporting event, religious congregation)

In states that are in the mitigation phase, including the US, UK and most of Western Europe, restrictions will roughly follow the trajectory below:



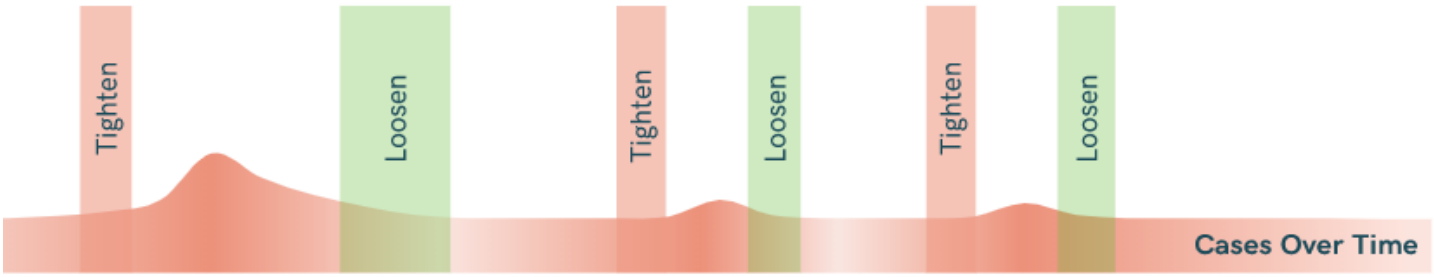
(Resolve to Save Live; Preventing Epidemics)

Assuming that wide testing and tracing is possible, the time between the first major tightening and loosening will be between four to six weeks in the best case. For countries less effective at instituting lockdowns, restrictions will likely remain in place for longer if the disease was able to spread beforehand. Area with less effective lockdowns may keep harsh restrictions in place for six weeks or more.

1. Four-to-six weeks after a lockdown – resumption of partial activity. Measures that will be loosened include the reopening of non-essential businesses. Mass gathering will be restricted, and there will still be guidelines for social distancing. Work from home recommendations will remain in place; non-essential foreign travel will be limited. Schools will remain closed.
2. Eight-to-ten weeks after a lockdown – reimposition of tightening measures. These are unlikely to involve a complete lockdown, although restaurants, bars, and clubs will likely be closed. There will be (potentially enforced) recommendations for vulnerable groups to strictly distance themselves from others.
3. Ten-to-twelve weeks after a lockdown – measures will be relaxed again. Businesses will reopen, and work from home recommendations will be relaxed. There will still be limits on foreign travel.

The removal of most restrictions on travel will depend on the spread of the virus outside of borders, but it could take until the end of August, with some measures remaining on travel from higher-risk locations remaining.

In areas that have managed to control numbers (e.g. Hong Kong, Singapore, South Korea) and thus have not imposed complete lockdown measures, the trajectory of loosening restrictions will be:



(Resolve to Save Live; Preventing Epidemics)

1. A tightening of restrictions to prevent mass community outbreaks. There are likely to be new restrictions in China to prevent continued spread.
2. Four weeks after new measures – which include the shutting of non-essential business and working from home requirements– measures will be relaxed. In cases where schools have been closed, they will be reopened. Mass gathering will be restricted, and there will still be guidelines for social distancing. Non-essential foreign travel will be limited.
3. Eight-to-ten weeks after initial measures – there will likely be a moderate increase in cases. Work from home recommendations will be reintroduced, and there will be new (non-mandatory) measures to encourage social distancing. There will be (potentially enforced) recommendations for vulnerable groups to strictly distance themselves from others. Effective testing and contact tracing will reduce the risk of a mass spread.
4. Ten-to-twelve weeks after the initial measures – existing measures will be relaxed. Some travel restrictions will remain, although the extent will depend on the efficacy of testing, and the COVID-19 rate in other countries.

Potential changes

There are several factors that could result in an acceleration of the relaxation of COVID-19 containment measures.

High throughput, fast-turnaround test

In both the control and suppression phase, high throughput fast turnaround tests are vital. Rapid testing of a large number of potentially infected people allows effective isolation and can thus prevent individual cases resulting in clusters, and clusters turning into outbreaks. Several countries have managed to ramp up testing sufficiently to control the outbreak. South Korea, with its 'drive through' testing centers, has been amongst the most effective at finding who is affected, and thus preventing further spread. Other countries, including the US and UK, have lagged in testing. Once the number of new COVID-19 cases falls, an effective testing regime will make it easier for states to effectively move from the control or mitigation phase to a suppression phase – and thus will allow restrictions to be relaxed sooner. It will also reduce the need for further harsh restrictions.

Surveillance capacity

A surveillance system allows for states to track those who have come into contact with infected individuals. Conventional contact tracing, involving finding every individual who may have come into contact with an infected person through manual interviews and phone calls. COVID-19 appears to have spread too fast for conventional tracing methods to be used. More sophisticated measures exist. South Korea, for instance, uses surveillance

cameras, cell phones and credit card transactions to map the social connections of suspected cases. Contact tracing further requires skilled public health professionals -- and sophisticated data management.

In theory, digital technology allows a wider array of states to effectively contact trace. Beijing, which already had access to a large amount of data, introduced a mobile application (plugged in to WeChat and Alipay) that was required for individuals to move between areas, into public spaces, and use public transport. Western states have some capacity to introduce such measures, although adoption is likely to be slow given concerns over privacy and state overreach.

Healthcare facilities

Developed and developing states are attempting to increase their critical care facilities. Measures include the purchase of ventilators to treat patients, increased access to hospital beds, the provision of protective equipment for medical professionals to allow them to continue to work. Capacity will not be easy to rapidly increase over the space of weeks, although there has been some progress in both developing and developed countries.

Economic damage

There will be continuous reassessment of the economic damage caused by COVID-19. In most developed states, the economic damage will be large but can be mitigated through the use of aggressive monetary and fiscal policy. However, even developed states will struggle to maintain their current restrictions for more than five weeks. Measures could be relaxed sooner if unemployment continues to rise, corporate defaults increase, or if financial institutions begin to fail.

Developing countries will find it harder to maintain restrictions. India, for instance, has introduced a three-week total national lockdown. The measures may help control the spread, but the cost of doing so is devastating to the large number of low-wage labourers. Developing countries, in general, also lack the fiscal space to mitigate the economic costs of continues restrictions. Thus, all else equal, it is likely that restrictions will be lifted sooner in less developed states.

APPENDIX

Country	Location	Type	Date of start	Forecast end	Removal of other domestic restrictions	Normalisation of borders
Argentina	Nationwide	Complete	21/03/2020	Early May	Early June	Late June
Australia	Nationwide	Partial	23/03/2020	Late April	Early June	Late June
	New South Wales	Complete	23/03/2020	Late April	Early June	Late June
Belgium	Nationwide	Complete	17/03/2020	Late April	Late May	Early July
China	Wuahn	Complete	23/01/2020	08/04/2020	Early May	Early August
	Hubei Province	Complete	24/01/2020	25/03/2020	Early May	Early August
France	Nationwide	Complete	16/03/2020	Late April	Mid June	Early July
Germany	Bavaria state	Partial	20/03/2020	Late April	Mid June	Early July
	Freiburg	Partial	21/03/2020		Mid June	Early July
India	Nationwide	Complete	25/03/2020	Late April	Mid May	Late July
Israel	Nationwide	Complete	25/03/2020	Early May	Mid June	Early July
Italy	Nationwide	Complete	09/03/2020	Early May	Mid June	Late August
Kenya	Nationwide	Partial	15/03/2020	Late April	Mid May	Early July
Kuwait	Nationwide	Partial	13/03/2020	Late April	Late May	Early July
Malaysia	Nationwide	Complete	16/03/2020	Early May	Mid June	Early July
Morocco	Nationwide	Partial	15/03/2020	Late April	Mid May	Early July
New Zealand	Nationwide	Partial	25/03/2020	Late April	Late May	Early July
Norway	Nationwide	Partial	12/03/2020	Late April	Early May	Late June
Poland	Nationwide	Partial	13/03/2020	Late April	Late May	Early July
Republic of Ireland	Nationwide	Complete	27/03/2020	Early May	Mid June	Late July
Russia	Moscow	Complete	30/03/2020	Early May	Mid June	Early July
	St Petersburg	Complete	30/03/2020	Early May	Mid June	Early July
Saudi Arabia	Riyadh	Complete	26/03/2020	Early May	Mid June	Early July
	Mecca	Complete	26/03/2020	Early May	Mid June	Early July
	Medina	Complete	26/03/2020	Early May	Mid June	Early July
	Jeddah	Complete	29/03/2020	Early May	Mid June	Early July
Singapore	Nationwide	Partial	07/04/2020	Early May	Late June	Early July
South Africa	Nationwide	Complete	23/03/2020	Late April	Late May	Late June
Spain	Nationwide	Complete	14/03/2020	Early May	Mid June	Late August
UK	Nationwide	Complete	24/03/2020	Early May	Mid June	NA
United States	California	Complete	20/03/2020	Early May	Late June	Early July
	Colorado	Complete	26/03/2020	Early May	Late June	Early July
	Connecticut	Partial	23/03/2020	Mid May	Late June	Early July
	Delaware	Complete	24/03/2020	Early May	Late June	Early July
	Florida	Partial	17/03/2020	Early May	Late June	Early July
	Hawaii	Complete	23/03/2020	Early May	Late June	Early July
	Idaho	Complete	25/03/2020	Early May	Late June	Early July
	New York	Complete	22/03/2020	Mid May	Late June	Early July