

COVID-19 Suppress. Release. Restore.

A Strategic Framework

Draft for discussion - Version 1



Summary

The current Australian interventions for COVID-19 have been successful in controlling the epidemic, particularly through the physical and social distancing measures and societal restrictions, which have come at an economic and social cost.

There are 2 current **problems** to address:

1. The need to release restrictions on the community
2. The concern around the current extent of community transmission of COVID-19 and how this will change upon release of restrictions

We present a strategic framework **to ease restrictions on the community in a phased way**, building on the Australian Health Sector Emergency Response Plan for COVID-19

We have proposed 3 additional stages that follow Stage 2 (Targeted Action) and before we enter the Stand Down and Recovery stages:

- New Stage 3 : We are currently in our proposed **SUPPRESS** stage, where targeted actions appear to have been effective in **suppressing** local transmission. However, there is a need to optimise the application and coverage of existing tools to further reduce community transmission, as well as to maximise the chances that easing of restrictions can be successful.

Following close monitoring in a transition phase that precedes each of the next two stages, the potential exists to ease social distancing measures as follows:

- Stage 4: An initial **RELEASE** stage to promote economic activity.
- Stage 5: A **RESTORE** stage to further open the economy and to recommence recreational activities.

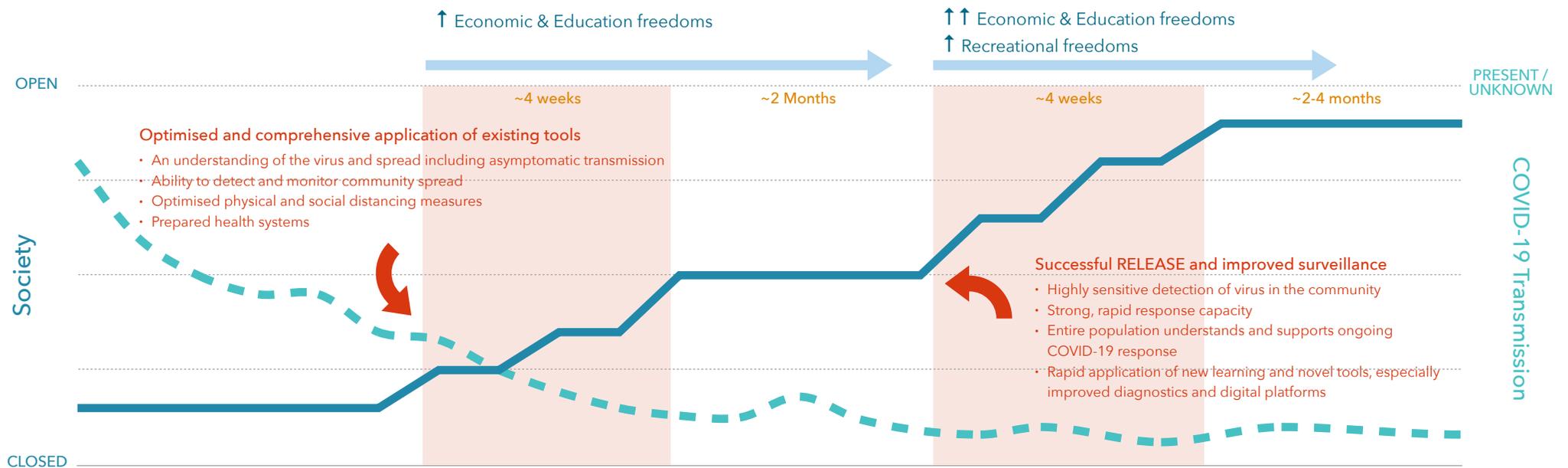
This strategic framework builds on existing tools and surveillance systems to quickly generate **new knowledge** and to allow for the rapid application of new tools currently under development.

Importantly, this framework **does not rely on a 'silver bullet'** therapeutic cure or preventative vaccine.

The key to this approach is to **optimise** and greatly enhance the application of **existing tools** as part of a **comprehensive outbreak response** - testing, contact-tracing and quarantine and physical distancing - coupled with optimisation of individual and community participation in and support for the plan.

This framework places a heavy emphasis on **continuous measuring** and **monitoring of key indicators** and **acting promptly** on that empirical **evidence**.

Trigger points to move to RELEASE and **transition** between stages are crucial and must be carefully defined.



SUPPRESS

Peak actions in Australia appear to have been effective in **suppressing** local transmission

Safely moving out of the current Stage 3 suppression measures toward the resumption of normal socio-economic activities requires:

- The optimisation and comprehensive application of existing tools combined with a level of preparedness and outbreak response planning that can meet unexpected surges in COVID-19
- A flexible, adaptive approach enabling rapid course corrections based on effective monitoring, new information and/or the emergence of novel tools
- Prioritisation of sectors / geographical areas / populations to be 'released' in the next phase

TRANSITION

The first **transition** phase is a short period of gradual releasing of peak actions with intense monitoring (optimised testing & surveillance) for evidence of disease resurgence

An iterative approach is needed: data should drive the response and thresholds / tolerances for key indicators can be defined to determine if there is a further release or a return to peak measures

Community engagement is critical for a flexible response

RELEASE

A gradual **release** of peak actions can take place in a system capable of detecting transmission, responding quickly and effectively to new clusters or an upswing in case numbers, able to learn and apply learnings in real-time, and with the support of the entire population

Economic and educational freedoms would likely be released before recreational freedoms, although data should support these decisions

Releasing peak measures could occur through different approaches (geographic, sectoral, at-risk populations etc.)

TRANSITION

The second iterative **transition** phase would actively monitor the impacts of further relaxing of physical and social distancing measures and explore the possibilities of more targeted rapid responses to surges in case numbers

Communicating with and maintaining the support of the Australian population is an essential element

RESTORE

Further **restoration** of normal domestic socio-economic activities including limited resumption of recreational freedoms

A focus must be maintained on protecting health workers and the vulnerable to avoid serious disease and deaths

Community support for disease control measures must be maintained

Novel tools and learnings may be available for deployment in this phase

PROTECT HEALTH WORKERS AND THE VULNERABLE

EFFECTIVE GOVERNANCE, COLLABORATION (private, public, civil society) and COORDINATION + Platforms for effective analysis of bottlenecks and timely application of new learnings

NOVEL TOOLS (viral and antibody diagnostics, digital platforms for surveillance, vaccines, treatments, prophylaxis)

Current Situation

- The **current interventions** for COVID-19 through the State of Emergency, travel restrictions, contact screening, and Stage 3 physical distancing measures, have been **successful** in reducing the number of cases of COVID-19 being notified
- Lessons from overseas from both countries that have done well and those that have not, illustrates that **an early firm approach** is the most prudent course of action to help identify individuals with the disease and stop them transmitting the virus AND enlisting the entire population supported by public health measures to limit undetected community transmission.
- However, as a result of the rapid escalation to **Stage 3** (Peak action) a number of **key objectives** for **Stage 1** (Initial containment) and **Stage 2** (Targeted action) **have not been fully completed**. This includes: preparing our health system; maximising case detection, successfully engaging the community; characterising the virus, the disease and the epidemic occurring in each jurisdiction; and adopting sustainable strategies and models of care.
- A major **current concern** is that the extent of **community transmission** is not yet well understood because of the nature of the disease itself (non-specific symptoms, mild symptoms, no symptoms) and issues related to testing (how much testing we can do, what type(s) of tests we have, who we're testing). This may lead to a **resurgence** of the epidemic.

Proposed Staged Response

Suppress (new Stage 3)

Stage 3 - Peak actions enacted 30 March 2020

Reducing the peak and being prepared

Building on measures implemented during **Stage 1** (Initial action) and **Stage 2** (Targeted action), peak action measures focus on mitigating impacts, protecting capacity, managing triage and implementing models of care to minimise morbidity and mortality. Planning for the full range of scenarios relating to the size and duration of an outbreak. This should include **optimising** the application and coverage of **existing tools**; prioritisation of segments of the community to be 'released'; a flexible, adaptive approach based on effective monitoring & rapid application of new information.

Transition Phase

A short period of gradual releasing of peak actions with intense monitoring (optimised testing & surveillance) for evidence of disease resurgence.

An iterative process to determine if further release can proceed or if a return to peak measures is needed based on defined indicators related to disease transmission, health system preparedness, unintended health and non-health effects.

Release (Stage 4)

Increasing economic and educational freedoms while keeping the curve flat

Following successful transition phase - a gradual **release of peak actions** can take place. Limited restoration of socio-economic activity likely prioritising economic/education freedoms before recreational freedoms based on: a local disease transmission; highly sensitive surveillance and optimised tools to mitigate disease resurgence.

Transition Phase

A second period of transition to actively monitor the impacts of further relaxing of physical and social distancing measures and explore the possibilities of more **targeted rapid responses to surges** in case numbers. Again,, this is an Iterative process to monitor the impacts of further relaxing of social distancing measures

Restore (Stage 5)

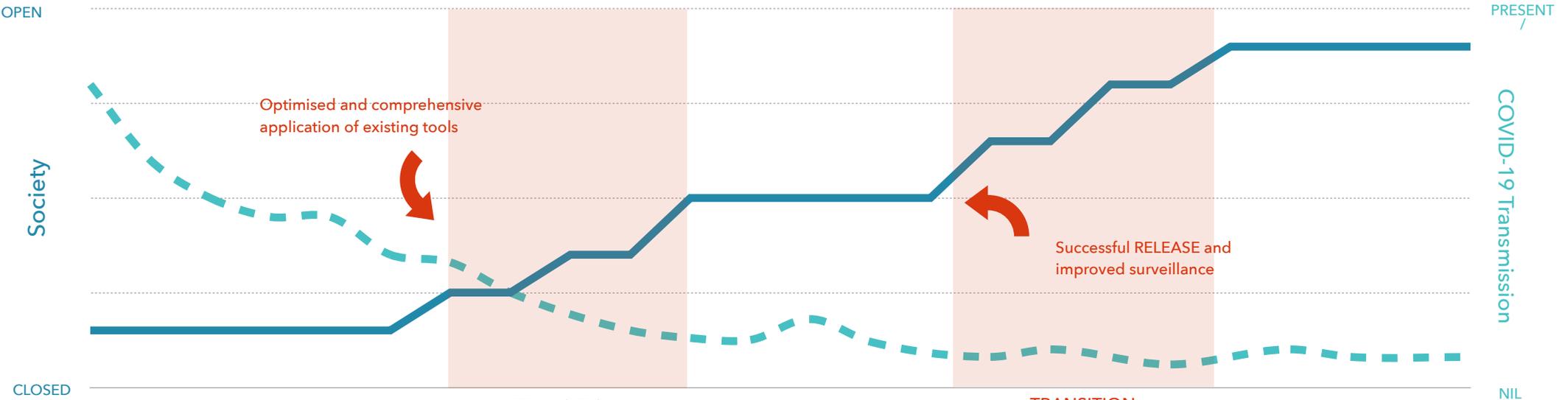
Further economic and recreational freedoms while maintaining control and vigilance

Broader restoration of normal activities, with a focus on: continued **protection of health workers / vulnerable people**; highly sensitive surveillance and effective response capacities ; maintenance of community support for disease control measures; preparation and introduction of novel tools & learnings.

Rationale for a new approach

- The firm measures currently in place to **SUPPRESS (Stage 3)** disease transmission will **buy time** for preparation, to widen our testing, and to improve our understanding of the virus and our own epidemic(s), thereby allowing us to **walk-back** the firm measures in the **safest and quickest** way possible.
- This should be guided by **indicators** and **trigger points** of disease spread, preparedness, health service function, and unintended health and other consequences of the COVID-19 response.
- This approach can inform a period of initial restoration of limited activities (**RELEASE**) followed by a more generous restoration of activities (**RESTORE**) coupled with recovery measures, ongoing surveillance and selected preventive measures where required (e.g. quarantining of new arrivals if borders reopen).
- A short iterative period of intense **transition monitoring** would proceed each stage change to allow for returning to firmer measures if there is a resurgence in transmission likely to overwhelm health services.
- Assuming that the current tools are applied **optimally**, Australia may be able to progress quickly through these stages if there is controlled community transmission.
- The use of **new tools and strategies** for detection and prevention, including new diagnostics and community-based surveillance may enable a faster recovery and avoid the need to reinstate peak actions
- The framework relies on rapid decision-making that will require a strengthened **national coordinated mechanism** and governance approach for information sharing and multi-sectoral cooperation (public, private, civil society).
- The framework seeks to balance the **health, social and economic** consequences of managing an outbreak escalation, while supporting improved community resilience.

Key actions and Monitoring - SUPPRESS ; RELEASE



SUPPRESS

TRANSITION

RELEASE

TRANSITION

RESTORE

	KEY ACTIONS	INDICATORS / MILESTONES	KEY ACTIONS & NOVEL TOOLS	INDICATORS / MILESTONES	KEY ACTIONS & NOVEL TOOLS
1. Evidence	<ol style="list-style-type: none"> Community-based surveillance system to measure transmission Determine the extent of asymptomatic spread Define priority groups and hot spots Implementation modelling of interventions 	<ul style="list-style-type: none"> Understanding of the virus and its spread (including asymptomatic transmission) 	<ol style="list-style-type: none"> Implement and evaluate novel tools Metrics and real-time evaluation framework to identify areas for increased action 	<ul style="list-style-type: none"> Highly sensitive detection of virus in the community 	<p>TO BE INFORMED BY</p> <ul style="list-style-type: none"> NEW LEARNING RESIDUAL KNOWLEDGE GAPS AVAILABILITY OF NEW TOOLS
2. Response	<ol style="list-style-type: none"> Detect: Enhanced contact screening Isolate: Improved compliance Prevent: Social distancing compliance 	<ul style="list-style-type: none"> Ability to detect and monitor community spread 	<ol style="list-style-type: none"> Community based detection and management system for hotspots Evaluate novel point of care testing Compliance monitoring and patient supports Environmental prevention interventions 	<ul style="list-style-type: none"> Rapid, flexible & decentralised response capacity delivered at scale 	
3. Engage	<ol style="list-style-type: none"> Whole of community engagement with distancing measures & intervention Strategies to engage at-risk groups Media and communication 	<ul style="list-style-type: none"> Optimised physical and social distancing measures 	<ol style="list-style-type: none"> Fine-tune and deliver public health messaging for diverse audiences Explain changes in public health responses 	<ul style="list-style-type: none"> Entire population understands and supports ongoing COVID-19 response 	
4. Enable Supportive systems	<ol style="list-style-type: none"> Governance and coordination improved Knowledge translation and learning systems created Prepare hospitals Health system provides for non-COVID services 	<ul style="list-style-type: none"> Prepared health systems 	<ol style="list-style-type: none"> Develop alternative models of care Systems to manage workforce and supplies 	<ul style="list-style-type: none"> Rapid application of new learning and novel tools, especially improved diagnostics and digital platforms 	
Key success measures		<ol style="list-style-type: none"> Community transmission is measured and controlled 		<ol style="list-style-type: none"> Community-based screening & care system is functional with high coverage Acceptability of and compliance with distancing Low mortality 	

Key actions and monitoring - SUPPRESS

Current status

- Self-isolation and quarantine of people with suspected or confirmed COVID-19
- Community physical and social distancing to interrupt transmission chains
- Gradual expansion of testing criteria
- Surveillance limited to testing criteria (symptomatic, aged >65 years, hospital inpatient)
- Unidentified asymptomatic and pre-symptomatic transmission threaten epidemic control

Key Actions

1. Evidence for Action - community-based surveillance & monitoring

- Utilise community-based surveillance systems to monitor disease transmission - impact of outbreak response
- Determine the extent of community transmission through expanding testing strategies and contact tracing - including secondary contacts and to asymptomatic people
- Define priority groups and hot spots and implement modelling of interventions
- Pilot new social, behavioural and biomedical interventions to reduce transmission
- Monitor broad health, social and economic consequences of outbreak response

2. Outbreak Response - detect, isolate & prevent

- Optimise models for testing, self-isolation and quarantine of people with suspected or confirmed COVID-19
- Maximise case detection through enhanced contact screening
- Minimise transmission through community-based models of care and support to improve social isolation compliance
- Prevent peaks in community transmission through social distancing compliance

3. Whole-of-society response - engage communities, businesses and non-government organisations

- Enhance community engagement by providing updated information on progress and next steps

- Promote access to support services through communities, businesses and non-government organisations
- Develop strategies to engage at-risk groups - provide social and material support for the vulnerable populations through community organisations
- Engage media outlets (traditional & social media) to disseminate accurate information - address knowledge gaps, misinformation and disinformation
- Utilise community organisations and trusted media sources as informal source of surveillance information

4. Enable supportive systems

- Establish a national coordinated mechanism for governance and information sharing
- Create knowledge translation and learning systems including epidemiological modelling and support
- Prepare hospitals and complete other preparedness planning to minimise health system impacts with disease resurgence
- Support sustainable strategies and models of care - ensure workforce and essential supplies
- Support health system to maintaining quality care for those most in need - including non-COVID services

Monitoring Results / Tracking Progress

Outcomes

- A. Understanding of the virus and its spread (including asymptomatic transmission)
- B. Ability to detect and monitor community spread - using sentinel and community surveillance systems
- C. Early and prompt identification of all infections
- D. Increased community support and awareness of effective interventions and control measures
- E. Enhanced coordination of responses across jurisdictions and across sectors

Indicators

- A. Number or proportion of community transmission events of total (target based on local models)
- B. Detection cascade: %eligible, %tested, %linked to care, %completed
- C. Reduction in time from testing, detection to isolation
- D. Peaks in Emergency Department presentations