KNOW-C19

Adjusting the Australian response

Policy, health response and implementation considerations for the epidemic of COVID-19

Burnet Institute
Medical Research. Practical Action.

Victoria

Stage 1 - Initial containment
Preparation and planning, maximising case detection, minimising transmission, engaging the community, characterising the virus, the disease, and the epidemic

Stage 2 - Targeted action
Slowing the spread, community based actions, healthcare system actions, adopting sustainable strategies and models of care, appropriate management of workforce and supplies, supporting and maintaining quality care for those who most need it

Stage 3 - Peak action [from PM 30/03/20]
Managing impacts, protecting capacity, managing triage and models of care to minimise morbidity and mortality,

Post - stand-down and recovery
Coordinate response to minimise risk news reports, social media and other grey literature sources that are equally valuable to inform the Australian response.

New Zealand

Alert level 1 - Prepare

COVID-19 present but contained
border measures ; contact tracing ; self-isolation of infected + close contacts ; limits on mass gatherings ; public messaging to practice social distancing / hygiene

Alert level 2 - Reduce

Risk of community transmission growing
increased border measures, limits on mass gatherings, greater emphasis on individual physical distancing, limited non-essential domestic travel, remote working, at-risk to stay at home

Alert level 3 - Restrict

Heightened risk of community transmission e.g. community transmission evident or multiple clusters
Affected regions shut-down and health system changes such as cancellation of elective procedures, stopping face-to-face GP visits

Alert level 4 - Eliminate [current level]

Not contained - intensive, sustained transmission either locally or nationally
Everyone stay at home, all non-essential services close, rationing of supplies, travel severely limited, all healthcare services reprioritised

General comments

- **Ongoing detection of cases not linked to known cases or international travel implies a degree of community transmission** - this 'degree' is not well understood predominantly because of the nature of the disease itself (non-specific symptoms, mild symptoms, no symptoms) and issues with testing capacity and the type(s) of test(s) we currently have available
- Therefore, **we can't confidently state that COVID-19 is contained**
- And **the spread of the virus in Australia is outrunning the incremental staged approach to responding to COVID-19 that state and federal governments have defined** which outlines certain preparation to be completed, capacities to have been developed and knowledge of the virus to have been gained
- That is, despite tremendous efforts we have not been able to achieve the objectives of Stages 1 and 2 including preparing our health system and our community-based actions, successfully engaging the community, maximising case detection, and even characterising the virus, the disease and the epidemics occurring in each state
- There are manifold lessons from overseas from both countries that have done well and those that have not, but put simply it is that **with the current tools** - tests to help us identify individuals with the disease and stop them transmitting the virus AND enlisting the entire population supported by public health measures to take a step back to limit undetected community transmission - **an early firm approach is the most prudent course of action**
- So **a pre-cautionary approach is to flip the Stages around immediately** which means we don't need to reinvent our planning - start with the firmest measures to buy time for preparation, widen our testing, and better understand the virus and our own epidemic, which will then allow us to walk back the firm measures in the safest way possible
- Australia may be able to progress quickly through these stages if indeed there is little community transmission

Phase	Situation	Purpose	Rationale	Actions
Stage 3 - **Peak action** **SUPPRESS**	Community transmission occurring International borders closed	Reduce the peak' Enhance preparation Improve understanding of the virus and local transmission dynamics Improve understanding of clinical management of severe disease Improve community engagement Protect the vulnerable	Early firm measures most likely to be successful Severe restrictions less likely to need to be maintained for long periods (e.g. China, South Korea)	Detect - acquire testing capacity, characterise the virus, develop & implement new screening the disease, and the domestic epidemics Prevent - enhance community engagement, whole of community engagement to ensure strict public health measures can be effective Respond - prepare hospitals, develop alternative sustainable strategies and models of care, develop systems to manage workforce and supplies, develop services for the vulnerable
Stage 4 - **Targeted action** **RESTORE**	Community transmission risk reducing International borders closed Testing capacity augmented (existing tests) Isolation and containment facilities expanded Treatment capacity maximised Supplies and workforce optimised Understanding of virus improved	Limit disease resurgence - 'keep the curve flat' Limited restoration of socio-economic activity based on understanding of disease and tools available to mitigate disease resurgence	Prompt identification and containment of cases and contacts can allow some services to continue (e.g. Singapore, Taiwan) Strong health systems with limited caseload of severe disease can minimise morbidity and mortality (e.g. Australia Stage 1)	Detect - deploy enhanced testing capacity, rapid research to understand transmission dynamics Prevent - fine-tune & deliver public health messaging for diverse audiences, address misunderstandings, misinformation & disinformation, restore PPE supplies, define and use increased isolation capacity, explain changes in public health responses Respond - initiate and monitor relaxing of public health measures, sustain clinical , testing and public health capacities
Stage 5 - **Eliminate** **RECOVER**	No or very limited community transmission International borders closed Effective public health tools available Novel tests available to aid in understanding disease spread Good understanding of local transmission dynamics and effective strategies to stop spread Novel treatments for severely ill available and deployed	Eliminate disease Prepare for reintroduction when travel bans relaxed Prepare for mass vaccination when vaccine available	Resumption of domestic socio-economic activity can occur on the 'other side' of the peak (e.g. China, South Korea)	Detect - deploy new tests, define testing algorithms for when international borders are opened Prevent - maintain public health messaging, plan for mass vaccination, plan for return to higher phases as needed Respond - monitor changes in disease with further relaxing of public health measures, define treatment protocols for severe disease