A COVID-19 'contain and test' strategy for remote Aboriginal communities

A joint proposal by Central Australian Aboriginal Congress[1] and the Aboriginal Medical Services Alliance Northern Territory[2]

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Purpose

This paper provides a high-level description of a 'contain and test' strategy proposed for implementation in the event of the discovery of a person with COVID-19 in a remote Aboriginal community. Note that while this is a strategic policy paper, following discussions with a range of stakeholders a number of issues regarding implementation are also noted.

Originally developed by Congress, a description of this 'contain and test' strategy has been shared with Aboriginal organisations including the Central Land Council and a Remote Health Board in Central Australia (Mutitjulu) where it was positively received. The approach has been supported by the AMSANT Board as a preferred response for remote Aboriginal communities across the whole of the Northern Territory. It is expected to have relevance for isolated Aboriginal[4] remote communities as well as other 'closed' and potentially vulnerable communities across Australia.

Note that the current Australia-wide steps towards easing restrictions put in place to combat COVID-19 increase the chance of community transmission, and therefore the urgency of agreeing and resourcing a plan to address this scenario should it occur in a remote Aboriginal community. Under these circumstances, and notwithstanding the challenges to successful implementation (see section on *Implementing 'contain and test' in remote communities* below), we consider 'contain and test' to be best practice in reducing the very significant risk posed by community transmission of COVID-19 in remote communities.

Principles

The process of colonisation in Australia has included a long history of the imposition of restrictions on the movement of Aboriginal peoples and individuals. Sweeping interventions in community life, such as the 2007 'Northern Territory Emergency Response' have been enforced without consultation, without evidence, and without consideration of the rights of Aboriginal individuals and peoples. For some Aboriginal people, restrictions under 'contain and test' may have disturbing echoes of these processes of colonisation. Any implementation of 'contain and test' must acknowledge this historical and political context.

However, there are a number of important ways in which a 'contain and test' scenario differs from these processes of colonisation. In particular, it is evidence-based and designed to protect the Aboriginal community from serious levels of harm and death in the face of a public health emergency; it has been developed and supported by a range of Aboriginal organisations, with the aim of holding mainstream systems to account for keeping Aboriginal communities safe; and while the risk of an outbreak is low, the consequences of failing to deal with it effectively will be catastrophic for Aboriginal health, well-being and culture.

International human rights standards require governments to guarantee the right to the highest attainable standard of health for all citizens, and obligates them to take steps to address serious public health threats, recognizing that this may require restrictions on some individual rights. Such restrictions must be non-discriminatory, strictly necessary, time-limited, evidence-based, and proportionate to the risk (that is, using the least restrictive measures necessary to protect the community) [1]. A 'contain and test' strategy must therefore only be implemented:

- to deal with a specific communicable disease emergency that poses a direct and immediate threat to the health and well-being of Aboriginal communities (i.e. where there is an initial or suspected case of COVID-19 in a remote Aboriginal community);
- in a strictly defined location, such as a discrete remote Aboriginal community;
- for a strictly defined period, with extensions only granted on the explicit recommendation of public health expertise including advice from Aboriginal health organisations;
- on a non-discriminatory basis, applying to all residents in a community, Aboriginal and non-Aboriginal
- only in regions where there is the significant support of Land Councils and Aboriginal community controlled health services, noting that the urgency of implementation may make the approval of all local-level community organisations impossible

In addition, implementation of a 'contain and test' strategy will need to be guided by the principles identified in the *Management Plan for Aboriginal and Torres Strait Islander Populations* as developed by the Aboriginal and Torres Strait Islander Advisory Group on COVID-19 and endorsed by the Australian Health Protection Principal Committee (AHPPC) [2], namely:

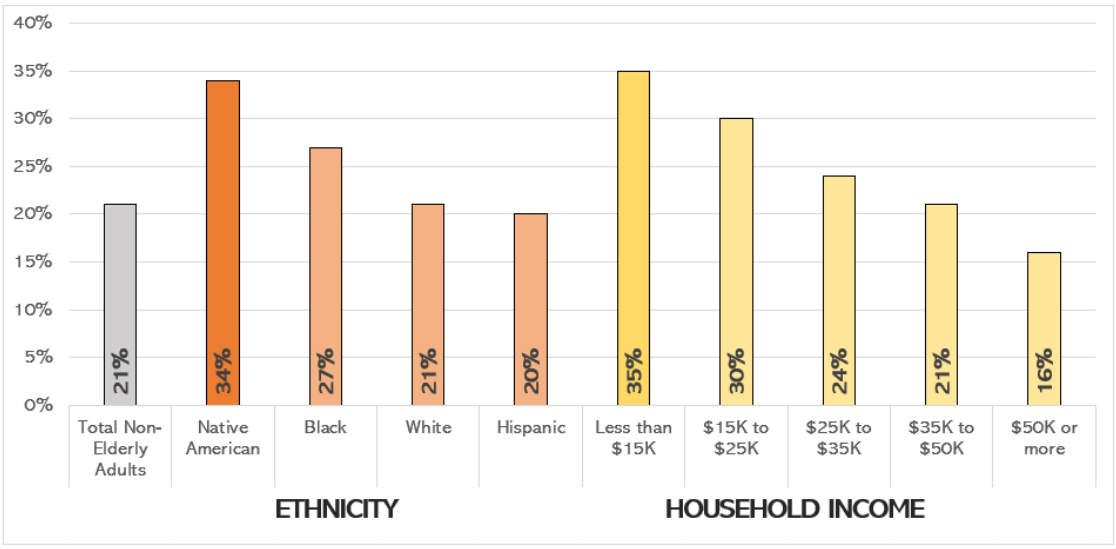
- Shared decision-making between Government and Aboriginal and Torres Strait Islander people
- Community control
- Cultural safety across the whole-of-population system
- Data and evidence.

Background

The COVID-19 pandemic is a threat to the health and well-being of all people in Australia. However, it poses a particular danger to Aboriginal people in remote communities where vulnerability is heightened by inadequate and over-crowded housing; higher levels of chronic disease and ill-health; lack of capacity of local health services; and distances to hospitals [2-4].

The dangers posed to First Nations communities by COVID-19 have been starkly illustrated in the United States, especially in the Navajo Nation which has seen very high levels of infection with 2,973 positive cases and 98 confirmed deaths (as at 9 May 2020) [5, 6]. Emerging evidence from the United States shows a significantly increased risk of serious illness resulting from COVID-19 borne by First Nation, Black and low-income communities [7] (*Figure 1*).

Figure 1: Proportion of adults ages 18-64 at risk of serious illness if infected with coronavirus, by ethnicity and household income (USA)



Adapted from [7]

Fortunately, as at 8 May 2020, a combination of Northern Territory and Australian Government responses to the pandemic (such as closing borders and restricting non-essential travel to remote areas) and the vigilance and hard work of health services have kept these communities relatively safe and there have been no cases of COVID-19 transmission in remote Aboriginal communities in the Northern Territory.

However, COVID-19 is likely to remain a threat for some time. Governments and health services should therefore plan an approach that minimises the risks to individuals, families and communities in the event that someone is discovered to have COVID-19 in a remote Aboriginal community[5].

Why 'contain and test'?

A planned response with input from the community and which is understood by community members is the best way to keep as many people as possible safe.

Without an effective and widely understood plan, the occurrence of a confirmed case may lead people to move away to where they think they will be safe. This is understandable. However, it could lead to greater harm across the region as the disease is spread by infected people.

This is particularly the case because the SARS-CoV-2 virus that causes COVID-19 can be spread by individuals who are well; some may remain well throughout while others will become symptomatic or sick sometime later. Current research suggests that as many as 80% of infections are transmitted by either people who are asymptomatic or those who are not yet unwell (pre symptomatic) [8]. Symptom-based screening by itself is therefore not enough to control the spread of infections, especially in communities of people living closely together where those communities contain high numbers of vulnerable people [9].

This means that if a person with COVID 19 is identified in a remote community, it is extremely likely that there will already be other infected people in their household and/or their community. A strategy of moving the infected person and their household away from the community and testing only those presenting with symptoms is very unlikely to break the chain of transmission[6] [9, 10].

This is why a 'contain and test' approach for the whole community provides the best way to protect people in remote communities from COVID-19. Such a strategy appears to have been carried out successfully in February – March 2020 in a small town in Italy called Vò (population 3,275) [11].

The Vò case

Following the first death from COVID-19 in the Italian town of Vò on 21 February 2020, national and regional governments closed all public services and commercial activities and the whole region was put into quarantine for 14 days.

In Vò, testing of the whole population for the SARS-CoV-2 virus was carried out twice, first in the week following the lockdown (21 to 29 February, 86% of the population tested, 2.6% prevalence) and then at the end of the lockdown period (7 March, 72% of the population tested, 1.2% prevalence). The testing found:

- nearly half (43%) of confirmed infections did not have symptoms
- all new cases detected had either contracted the virus in the community before the lockdown, or from asymptomatic people living in the same household during the lockdown
- no infections were found in children in either survey (234 tests) even where the child was living in a household with people who were carrying the virus.

The study on this strategy in Vò concluded that:

> *The interventions implemented in Vò substantially reduced the transmission of SARS-CoV-2 with unprecedented efficacy and demonstrate that COVID-19 suppression in similar epidemiological and demographic settings can be achieved [11].*

While the social and economic circumstances in Vò are very different to remote Aboriginal Australia, it is important to note that the Italian town contained a high proportion (18%) of people over 70 years old who are particularly vulnerable to the SARS-CoV-2 virus [11].

What is a 'contain and test' strategy?

It is possible that the spread of COVID-19 could similarly be prevented by putting in place a whole-of-community 'contain and test' strategy in a remote community. This would mean:

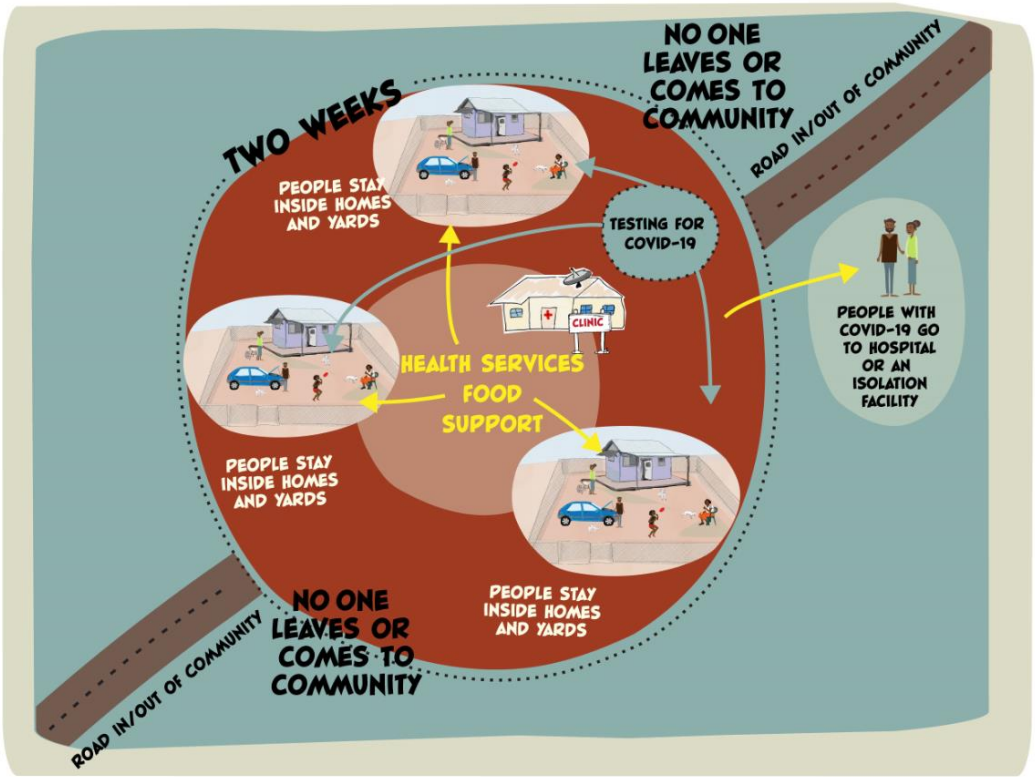
- *confining all community members to their households until two rounds of testing is completed* (up to 14 days), noting that in a remote context this includes outside areas within fence lines / household boundaries, within which other shelter (e.g. high quality tents) could be provided to reduce overcrowding within houses. This would be expected to include non-Aboriginal residents, though non-Aboriginal visitors (e.g. contractors) may be allowed to return to a regional centre for quarantine.
- *multiple rounds of testing for COVID-19 (except children under 5),* initially at the beginning of the 14 days with additional rounds to be determined on the basis of expert advice and further modelling, to make sure everyone with the virus has been identified. Note that:
    - all testing is voluntary
    - testing should be prioritised by epidemiological risk, such that the Point of Care tests are used on the close contacts of the index case first and the more vulnerable contacts
    - re-testing should be prioritised for households with vulnerable members first
    - essential workers should be tested at the same rate as the community
    - confidentiality of test results before and during implementation of 'contain and test' needs to be strictly maintained
- *offering relocation of particularly vulnerable elderly or sick people* to safe quarantine accommodation outside the community
- *restricting all movement in and out of community* (except for health teams and other essential workers and services). This may be supported by preventing the sale of petrol in the community
- *support for improving hygiene behaviour within households,* such as provision / wearing of masks
- *relocating people identified with COVID-19* out of households to safe accommodation outside the community including:

  - those with significant vulnerabilities to be relocated as close as possible to hospital-based care
  - close contacts of the index case might also be removed from the community and put in quarantine in secure facilities outside of the community

- *mobile delivery of health services* to care for people during the two weeks
- *delivery of food, psychosocial support, communications and other essential services to people in their households* during the two weeks of community containment
- *implementing environmental controls* such as decontamination and promotion of widespread hand hygiene practices
- *considering enforcing the rule of everyone staying in their households and not travelling outside the community.* This would require all roads into and out of the community to be blocked by police or the army (Australian Defence Force). In accordance with the rights of Aboriginal people (see *Principles* above), enforcement would not include the use of criminal sanctions for those breaching restrictions.

Congress has prepared a graphic to assist in briefing Remote Health Boards and other Aboriginal organisations on how a 'contain and test' strategy would work (see *Figure 2*).

Figure 2: Community information graphic on 'contain and test'



Implementing 'contain and test' in remote communities

It is outside the scope of this paper to provide a detailed implementation plan for a 'contain and test' strategy. Such plans will need to be developed on a community or regional basis by health authorities / services in consultation with other government and non-government agencies and Aboriginal community controlled health services and Land Councils.

The effective implementation of a 'contain and test' faces significant risks, many of which are identified below. As with any attempt to address a public health emergency, there is no guarantee of success. Contingency plans should be developed in case it becomes apparent that 'contain and test' implementation is ineffective. Strict and timely monitoring of implementation is therefore required.

A 'contain and test' approach would need community input and leadership, significant external support for the remote health team, support to provide essential services such as delivery of food to households, and some way of enforcing restrictions which not all community members may accept. It would also require increased COVID-19 testing capacity being available for the health system.

A contain and test strategy would also have to be implemented simultaneously with decontamination of public spaces, increased availability and promotion of hand hygiene, distribution of face masks and adequate equipment for the protection of health personnel.

Implementation will also need to include plans for keeping neighbouring communities safe given the difficulty of ensuring absolute enforcement of movement restrictions. This should include increased testing; liaison to identify an influx of visitors from the index community; and heightened planning for implementing their own community plans.

A number of challenges would have to addressed including the following.

Health System Challenges

There are possible challenges for already stretched essential services arising from implementing the 'contain and test' strategy, including:

- logistical demands for constructing the testing infrastructure and mobilising sufficient personnel
- ability of local staff to assess and manage people who test positive – rapid and effective evacuation services will be essential with access to appropriate isolation
- medical surveillance of those with symptoms, in a service environment where may be limited numbers of staff with the appropriate skills
- risks of transmission to health personnel during a containment period
- health staff may test positive and need to be evacuated themselves

- extra load of testing and required increased local capacity and reduced turnaround of results
- likely increase in presentation of minor acute respiratory symptoms
- changing role of health care staff may lead to loss of trust.

Non-Health System challenges

There are a number of what may broadly be called non-Health System risks which would need to be addressed for successful implementation, including:

- Compliance: some people may be unwilling to comply with a directive to stay within a designated household for the time required to implement the strategy, even where there has been engagement with local community organisations. Combined with a sudden and large influx of people from outside the community, there is a potential for anger, resentment and social unrest.
- Infrastructure. A high proportion of houses in remote communities are severely overcrowded and in poor repair. Many may not have the capacity in relation to sanitation, heating / cooling, food preparation and storage to sustain high numbers of occupants for long periods
- Enforcement: for those individuals who are unwilling to comply with restrictions, some form of enforcement may be necessary if the plan is accepted by the community in general. This may need to be provided from outside the community, by either the Northern Territory Police Force or Australian Defence Force. Getting the right balance between 'hard' enforcement (through strict action by external agencies) and 'softer' approaches (using local leaders, good will and social norms) is likely to be a key challenge.
- Food, water and communication: failsafe ways of providing adequate food and water for all residents in their households will need to be found, along with methods for their communication to family and kin located elsewhere. This is in the context of the infrastructure challenges above
- Variability in community size and capacity: a contain and test strategy may not be suitable for larger communities through it is not possible to estimate an absolute size. Some communities may have greater local leadership, capacity and willingness to implement such a strategy.
- Legislative authority: an appropriate legislative basis for restrictions will need to be in place. Note that in the Northern Territory, public health legislation allows for this approach in all of the population centres but does not provide the basis for such action on Aboriginal land and the Biosecurity Act will be required.

These challenges to successful implementation of the 'contain and test' approach will only be overcome with the informed support and involvement of Aboriginal leadership at the regional and community level. Accordingly, during this period when there is no apparent community transmission of COVID-19, a major effort should be made to engage with remote communities and their local organisations to discuss the issues involved and to encourage each community to develop and own their particular community plan. This will need to use people trusted by the community, and be informed by a clear understanding of the external supports which will be activated to work with the community should 'contain and test' be needed.

Detailed logistical planning of what is required to implement 'contain and test' is beyond the scope of this paper. However, it is clear that it will require significant additional workforce to be deployed at short notice to affected communities including at a minimum:

- additional remote health workforce to provide treatment and testing for COVID-19; mobile support for other health needs; and psychosocial support [7] including clinical and social support for those with serious addictions
- staff to provide essential services such as delivery of food, water and communications to households
- services available for immediate repair of infrastructure, especially to support healthy living (e.g. water, sanitation, electricity, heating / cooling) and backup accommodation (e.g. tents) if needed
- staff to establish and run quarantine facilities
- staff to safely transport vulnerable community members out of the community, and those who test positive to hospital or an isolation facility
- personnel to enforce restrictions which not all community members may accept.

References

1. Human Rights Watch. *Human Rights Dimensions of COVID-19 Response*. 2020 13 May 2020]; Available from: https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response.
2. Australian Government department of Health, *Australian Health Sector Emergency Response Plan for Novel Coronavirus COVID-19: Management plan for Aboriginal and Torres Strait Islander populations. Operational plan for Aboriginal and Torres Strait Islander populations*, in *Publication number 12750*. 2020, Commonwealth of Australia: Canberra.
3. Communicable diseases Network Australia (CDNA). *Interim National Guidance for remote Aboriginal and Torres Strait Islander communities for COVID-19*. Current version: 1.0, published 21 April 2020, 2020 [cited 4 May, 2020; Available from: https://www.health.gov.au/resources/publications/cdna-interim-national-guidance-for-remote-aboriginal-and-torres-strait-islander-communities-for-covid-19.
4. World Health Organisation, *Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19) 16-24 February 2020*. 2020: Geneva.

5. Navajo Department of Health. *Dikos Ntsaaígíí-19 (COVID-19)*. April 22, 2020 [cited 2020 23 April]; Available from: https://www.ndoh.navajo-nsn.gov/COVID-19.

6. Kovich, H., *Rural Matters - Coronavirus and the Navajo Nation.* N Engl J Med, 2020.

7. Koma W, et al. *Low-Income and Communities of Color at Higher Risk of Serious Illness if Infected with Coronavirus*. 2020 7 May 2020]; Available from: https://www.kff.org/.

8. Moriarty LF, et al., *Public Health Responses to COVID-19 Outbreaks on Cruise Ships — Worldwide, February–March 2020.* MMWR Morb Mortal Wkly Rep 2020, 2020(69): p. 347-352.

9. Gandhi, M., D.S. Yokoe, and D.V. Havlir, *Asymptomatic Transmission, the Achilles' Heel of Current Strategies to Control Covid-19.* N Engl J Med, 2020.

10. Arons, M.M., et al., *Presymptomatic SARS-CoV-2 Infections and Transmission in a Skilled Nursing Facility.* N Engl J Med, 2020.

11. Lavezzo, E., et al., *Suppression of COVID-19 outbreak in the municipality of Vo, Italy.* medRxiv, 2020: p. 2020.04.17.20053157.

Notes

[1] Central Australian Aboriginal Congress (Congress) is the largest Aboriginal community-controlled health organisation in the Northern Territory, providing a comprehensive, holistic and culturally-appropriate primary health care service to Aboriginal people living in and nearby Alice Springs, including five remote communities; Amoonguna, Ntaria (and Wallace Rockhole), Santa Teresa, Utju (Areyonga) and Mutitjulu. Congress is an AMSANT member organisation.

[2] The Aboriginal Medical Services Alliance Northern Territory (AMSANT) is the peak body for Aboriginal community controlled health services (ACCHS) in the NT and advocates for health equity, while supporting the provision of high-quality comprehensive primary health care services for Aboriginal people.

[3] Drafts of this paper have been, and continue to be, discussed with Aboriginal health services and representative organisations, plus experienced public health practitioners, government agencies and policy makers. These discussions have included the *Aboriginal and Torres Strait Islander Advisory Group on COVID-19*. Congress and AMSANT would like to thank all those who commented for their important feedback. Updates and clarifications have been incorporated as follows:

Version 1.3 included additional material on the principles to inform implementation of a 'contain and test' strategy in the historical and political context of colonisation and of human rights.

Version 2.0 includes clarifications that:
- testing would be voluntary
- restrictions would be applied non-discriminatorily (to both Aboriginal and non-Aboriginal residents)
- breaches of movement restrictions would not be subject to criminal sanction.

It also clarifies the role of the paper as a high-level policy paper, but includes acknowledgement of a range of issues that may need to be addressed in implementation including:
- contingency planning should 'contain and test' not be effective in a particular place;
- planning to protect adjacent communities (increased testing; heightened planning for the implementation of their own plans; liaison re influx of visitors)
- testing strategies / prioritisation;
- halting of petrol sales to enhance movement restrictions;
- the need to support those with serious addictions;
- ensuring appropriate compliance / enforcement strategies;
- ensuring a legislative basis for action;
- ability of local staff to assess and manage people who test positive;
- medical surveillance of those with symptoms; and
- the need to engage Aboriginal communities prior community transmission being discovered.

[4] This paper uses the term 'Aboriginal' as the most appropriate term for the Northern Territory context.

[5] 'Contain and test' would be implemented as a response to Phase 2 (Suspected or initial cases in an Aboriginal and/or Torres Strait Islander community) as per the *Management and operational plan for Aboriginal and Torres Strait Islander Populations* [2] and the *Interim National Guidance for remote Aboriginal and Torres Strait Islander communities for COVID*-19 [3].

[6] The exception to this being if the person has been at known risk, such as recently arriving from interstate, and has successfully arranged suitable community accommodation to be able to minimise contact with others [3].

[7] Congress has been providing psychosocial support to hundreds of Aboriginal people in quarantine from March 2020 using social workers, nurses, GPs, psychologists and *ngangkaris* (traditional healers). More than 90% completed their 2 weeks quarantine although some had to be removed due to severe illness, including mental illness. Provision of such services will be essential for implementation of 'contain and test'.