Australian Government
National Health and Medical Research Council

NHMRC

National COVID-19 Health and Research Advisory Committee[1]

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Testing and rapid response in Indigenous Australians

Focus:

The focus of this report is on:

- current testing protocols and strategies for SARS-CoV-2 and COVID-19 in Indigenous people in urban, regional, rural and remote settings. This includes consideration as to who is being tested, what tests are being performed, and the time taken for results to be known.
- the capacity to respond to positive tests results and prevent resurgence of COVID-19.

This report is point in time and may need further review as more evidence is available.

This report was developed by the NCHRAC Indigenous working group (see membership at **Attachment 1**).

Conclusions:

NCHRAC conclusion 1: Indigenous Australians should be considered a group at high risk of infection, and of severe clinical disease outcomes after COVID-19 infection.

At this stage, epidemiological information suggests that Indigenous people have not been infected with SARS-CoV-2 at a higher rate than the rest of the population, but high prevalence of risk factors for viral transmission (e.g. household crowding) suggest that Indigenous people remain a population at particular risk for viral infection. The low rate of infection to date is likely due to the success with which Australia has contained community transmission and the success with which Indigenous communities have controlled entry of disease into their communities. However, Indigenous people are at a higher risk of developing more severe clinical disease after COVID-19 infection. This is largely due to the higher prevalence of underlying health conditions among Indigenous people.[1,2] These health conditions include chronic diseases such as respiratory diseases (e.g. asthma chronic obstructive pulmonary disease), heart and circulatory diseases, high blood pressure, diabetes, obesity, kidney diseases and some cancers. These chronic conditions tend to occur at younger ages in Indigenous people. Other risk factors such as smoking and poor nutrition also contribute to a higher risk of infection and severe clinical disease outcomes. These risks

[1] NHMRC is providing secretariat and project support for the Committee, which was established to provide. advice to the Commonwealth Chief Medical Officer on Australia's health response to the COVID-19 pandemic. The Committee is not established under the NHMRC Act and does not advise the NHMRC CEO.

are exacerbated by reduced health literacy and poor engagement with health messaging, which can result in slower symptom recognition and late presentation, and by challenges related to hospital surge capacity in regional and remote communities and testing delays.

NCHRAC conclusion 2: There is a high risk of resurgence (and/or emergence) of COVID-19 amongst Indigenous Australians.

Previous advice[3] from NCHRAC has concluded that:

> Population groups and occupational settings at high risk of transmission of infection and/or low participation in testing should be identified to target communications to encourage testing and adherence to public health measures in order to prevent and limit outbreaks of disease.

In line with this, NCHRAC identifies the following characteristics that apply to many Indigenous Australians and are also associated with a higher risk of resurgence:

- the high levels of household crowding among Indigenous Australians in all settings (urban, regional and remote)[4]
- cultural practices mean that Indigenous people interact with a higher number of people more frequently. This is true in urban, regional and remote settings. For example, many urban Indigenous households comprise large, intergenerational groups of people and cultural events (such as funerals and festivals) are often very large (over 40 people).
- evidence that poverty in some Indigenous communities will mean that it is more difficult for families to buy hand sanitiser, face masks, disinfectant and soap
- issues with food security that may impact nutrition and general well being
- relaxation of biosecurity determinations that had restricted travel for many people living in remote and very remote communities and the increased interaction between urban/regional and remote community members
- evidence that suggests that Indigenous people face greater barriers to participation in screening and follow-up for COVID-19.[5] The importance of high testing coverage and appropriate response has been demonstrated in countries with high testing levels and no resurgence despite lifting of containment measures.[6] In contrast, countries that successfully controlled transmission through containment but with limited testing are seeing resurgence of community transmission.[7,8]

This conclusion also aligns with the Management Plan from the Aboriginal and Torres Strait Islander Advisory Group on COVID-19 (see Background).

The high risk of resurgence means that Indigenous people in all communities should have improved and prioritised access to tests and rapid turnaround time for test results similar to the access and turnaround prioritisation for health care workers. This will ensure equitable access for Indigenous communities to contact tracing of COVID-19 and that timely implementation of response from public health agencies occurs to stem resurgence.

NCHRAC conclusion 3: It is vital that systems and processes are put in place urgently to detect and respond rapidly to new cases of COVID-19 in Indigenous Australians in urban, rural, regional and remote settings.

The features of systems and processes that must be optimised to support early detection and quick response to new COVID-19 cases include both technical aspects (such as the type of test used in each situation, transport of samples, where the tests are conducted and timeliness of results being returned to services and individuals undergoing testing) as well as jurisdictional considerations to ensure rapid access to testing in all communities.

NCHRAC supports the position of the WHO[9] and Public Health Laboratory Network[10] that 'point of care (POC) or near-POC assays can be performed on a bench without employing a biological safety cabinet, when the local risk assessment so dictates and proper precautions are in place.' The precautions include ensuring the assays are performed 'by personnel with demonstrated capability, in strict observance of any relevant protocols at all times'. Given Conclusions 1 and 2, NCHRAC concludes that equipping ACCHSs and public health care services with the capacity and expertise to conduct rapid testing with the GeneXpert platform is essential. Where GeneXpert or another appropriate POC assays for virus RNA detection are not available, it would be equitable and advisable from an outbreak prevention perspective to set a maximum turnaround time for test results to be available from swabs sent to a laboratory. Ideally this time should be a maximum of 24 hours, whether an urban, rural or remote setting.

Increasing the number of GP respiratory clinics specific for Indigenous people would also close current gaps in coverage and reduce time to receive test results.

Both the rollout of the GeneXpert platform and increasing the number of clinics would have longer-term benefits than just for the COVID-19 pandemic, since both could be used to test for other infectious diseases in the future.

As stated in Conclusion 2, Indigenous people should be given access to rapid testing and prioritised similar to health care workers to prevent COVID-19 resurgence. NCHRAC notes that the Aboriginal and Torres Strait Islander Advisory Group is currently exploring ways to address prioritisation of Indigenous people for testing. Systems and processes to detect and respond rapidly to new cases of COVID-19 will require the development of a framework for prioritisation that supports practical decisions made by ACCHSs/public health care services. This will require guidance about the relative prioritisation of different groups (for example, Indigenous people versus close contacts of new cases versus other at-risk groups such as homeless people) and what tests should be conducted (e.g. use of the GeneXpert platform).

Processes must also include a strategy for contact tracing. It is critical that when a case occurs, ACCHSs or other culturally-appropriate services are closely involved in the testing, tracing and management processes. This will ensure that public health measures are implemented within a mantle of cultural safety. These measures should include the quick mobilisation of a testing team working in concert with public health units to conduct contact tracing, manage the isolation and quarantine processes and determine whether additional testing of contacts at risk is required.

COVID-19 screening centres and health services need to be well equipped to support all communities presenting for screening—free of racism and bias towards any community group. For example, in Western Australia, the urban-based ACCHSs are working with key state government departments to coordinate the COVID-19 response. This includes developing plans about how best to prevent and manage cases. The Nyoongar Boodjar plan (not publically available) includes information on maintaining quality care and access to general practitioners and health care services, and clinical care/public health management.

Public health experts[11] have identified some of the following barriers to testing, and these may be particularly applicable to Indigenous people:

- casual workers may not be able to afford to take time off work to self-isolate whilst waiting for test results and therefore avoid being tested
- people from lower socioeconomic backgrounds may struggle to attend testing clinics due to a lack of private and public transport, and
- living in remote areas, especially areas with travel restrictions..

Barriers to Indigenous people seeking and accessing testing and follow-up must continue to be examined and removed. Multiple elements of access need to be examined including perception of need, the ability to reach testing and the acceptability of the service provider.[12]

This conclusion that systems and processes need to be in place urgently is supported by evidence that inadequate systems have led to more severe communicable disease outbreaks in Indigenous communities, such as syphilis[13] and meningococcal disease[14] in Australia. The poor outcomes for Indigenous peoples in these examples emphasises the need to act urgently and not wait for further evidence.

NCHRAC conclusion 4: There are blind spots in the systems and process currently in place for testing and responding to potential new COVID-19 cases in Indigenous Australians that must be immediately addressed.

NCHRAC acknowledges the significant work carried out by the consortium of ACCHSs (ACCHSs and others) to identify ways they can respond to the COVID-19 pandemic and their focus on preventing, supporting and managing COVID-19 in their communities.

However, NCHRAC is concerned about potential “blind spots” in the systems and processes set up for testing and responding to new COVID-19 cases in Indigenous communities that could contribute to a greater risk of resurgence.

This conclusion is based on largely anecdotal evidence, which has identified the following potential blind spots:

- many ACCHSs have been involved in and leading the testing and follow up process, however there are areas where this is not the case. For example, some ACCHSs have not been notified about testing results related to their patients. This is a missed opportunity for optimising testing uptake and follow up.[15] These ACCHSs should,

where possible, be the lead agency in contact tracing and community engagement around outbreaks of infectious diseases such as COVID-19.

- inadequacies in the number of GP respiratory clinics specific for Indigenous people and in drive-through testing.
- Indigenous people have been turned away and deterred from accessing screening, which has the potential to limit this community's screening uptake and transmission control. [16]
- inconsistences in the rollout of the GeneXpert platform across jurisdictions and concern about the supply of new platforms from the USA and the long-term availability of cartridges.
- the lower availability and uptake of routine PCR testing by ACCHSs in urban and regional centres.
- inadequate recording of Indigenous status on some COVID-19 pathology (forms, results and reporting). This is critical for monitoring the impact, reach and coverage of screening and testing regimes in ACCHS-led GP respiratory clinics, mainstream and other settings.
- the misperception that Indigenous people mostly live in remote communities. The vast majority (79%) live in urban areas and these communities have unique challenges in preventing the spread of COVID-19.[17]

In addition, we know that only around 50% of people with acute respiratory illness are being tested for COVID-19 across the Australian population[18], which means that the uptake of testing in symptomatic individuals is still too low. It is likely that uptake is even lower in Indigenous communities due to the higher barriers they face in accessing health care.

The blind-spots must be immediately addressed by ensuring high uptake of testing in symptomatic individuals, and addressing the barriers that prevent timely access to testing and results in this group.

Given these blind-spots, ACCHSs and public healthcare services responsible for testing for new COVID-19 cases must be supported, with both the expertise and funding, to fully review their capabilities and processes. This must take place urgently, across all Indigenous communities (urban, regional, rural and remote) by jurisdiction. By supporting the ACCHSs and affiliates themselves, they will be able to rapidly respond to the evidence and implement changes as necessary. The components of this review are described below.

NCHRAC conclusion 5: A full review by ACCHSs and public healthcare services of the systems and processes currently in place for testing and responding to potential new COVID-19 cases in Indigenous communities should enable additional blind-spots to be identified.

Each of the following aspects of the testing and response systems and processes must be examined, evaluated and reported on:

1. Are the local context-specific procedures to respond to a new COVID-19 case set up?
    - Does the community have adequate testing resources (both for rapid tests and regular tests)?
    - Does the community have the knowledge and expertise to conduct tests?

    - Is there a clear protocol for when point-of-care tests should be used, based on the *CDNA National guidelines for public health units on COVID-19*[19], including when should the GeneXpert platform be used (is it for case finding, rapid close contact screening, extended contact screening, healthcare worker screening or community-wide screening?)
2. Has the community conducted an audit of what is required to respond to the first case?
3. Is there a model in place for responding to the first case, including when to evacuate cases and contacts from a community, and has the community been trained and engaged? The model must include testing the symptomatic person, close contacts, extended contacts and the community. This should be informed by the *CDNA Interim National Guidance for remote Aboriginal and Torres Strait Islander communities for COVID-19*.[20]
4. Has the community identified workforce surge requirements?
5. Is the community prepared to close down borders?
6. Have COVID-19 free supply chains been established?
7. Has there been communication with the community about what to expect if a new case of COVID-19 occurs?

One strategy for answering the above questions could be through supporting services to conduct scenario exercises based on, for example, identification of a suspect and/or confirmed case in the community, and conducting retrospective reviews of the response if there has been suspect and/or confirmed cases identified to date.

Many ACCHSs have developed their own messaging which is reportedly more effective than mainstream messaging and communication material. An audit and repository of the materials developed by ACCHSs would assist other organisations. A central platform such as the website https://covid19.firstnationsmedia.org.au would assist with streamlining this process.

Background

The Aboriginal and Torres Strait Islander Advisory Group on COVID-19 provides culturally appropriate advice to the Department of Health and Chief Medical Officer, including for Indigenous health services and communities about COVID-19. The advisory group reports to the Australian Health Protection Principal Committee (AHPPC). The advisory group was consulted during the preparation of this advice paper.

This Advisory Group developed the *Management Plan for Aboriginal and Torres Strait Islander Population*[21], which supports the objectives of the *Australian Health Sector Emergency Response Plan for Novel Coronavirus (COVID-19)*. The Management Plan focuses on culturally appropriate testing and care for Indigenous peoples, and for specific locations including remote communities. It has been endorsed by the AHPPC.

AHPPC regularly releases statements on issues related to COVID-19. On 14 May 2020, AHPCC released a statement about the role of asymptomatic testing[22]. This statement refers to the prioritisation of testing described in the Pandemic Health Intelligence Plan[23].

The Communicable Diseases Network Australia (CDNA), another subsidiary committee of the AHPPC, provides nationally consistent, interim guidance on how Indigenous communities can protect themselves against COVID-19. The conclusions in this paper are in line with the *CDNA Interim National Guidance for remote Aboriginal and Torres Strait Islander communities for COVID-19*.[24]

The Australian Government funds organisations to provide various primary health care services—including prevention, diagnosis, treatment, and referral—to Indigenous Australians at a community level. Most of these organisations are Aboriginal Community Controlled Health Services (ACCHSs). ACCHSs are primary care health services built and run by the local Indigenous people and controlled via an elected board of management. ACCHSs provide culturally appropriate healthcare to the community. ACCHSs operate in urban, rural and remote areas of Australia and range from large multi-functional services employing several medical practitioners and providing a wide range of services, to small services without medical practitioners where Indigenous health workers provide the bulk of primary care services. ACCHSs often function in remote areas with scarcity of doctors and nurses and Indigenous health workers perform a wide range of skilled services. NACCHO is the national peak body representing 143 ACCHSs across Australia. The services form a network, but each is autonomous and independent both of one another and of government. ACCHSs can include Aboriginal Medical Services (AMSs) if they are community controlled. Some AMSs are not community controlled—these are instead government health services run by state or territory governments.

There are also other organisations funded to provide primary health care services to Indigenous Australians run by government and non-government organisations.

Other considerations

There are several other important COVID-19 related issues to be considered for Indigenous peoples that will be addressed in subsequent advice papers.

In particular, it is vital to reduce the risk of resurgence and to reduce the risk of severe disease, other than through testing and rapid response. Examples of how to do this include equipping ACCHSs and organisations to continue to manage chronic disease and to conduct appropriate health promotion and education, and support ACCHSs and communities to develop and implement solutions for protecting vulnerable groups that are acceptable and feasible for all in the community considering ways to get the most at-risk individuals out of crowded environments.

In addition, it will be important to look at new technologies and other testing platforms that are more easily available, scalable to larger scale surveillance and can be used in remote settings as well as urban. This will involve a review of evidence related to tests, their performance and their feasibility.

NCHRAC agrees that use of point-of-care rapid tests such as the GeneXpert platform will be vital for preventing resurgence. Whilst out of scope for this paper, NCHRAC is highly

supportive of a national pre-positioned stockpile of GeneXpert machines and cartridges for deployment.

Finally, NCHRAC is aware that there is a high level of concern in the community about the vulnerability of incarcerated Indigenous people to COVID-19 infection. This issue may be addressed in future work, and extend to other institutionalised settings that could lead to a higher risk of infection.

Attachments

Attachment 1: Membership of the NCHRAC Indigenous working group.

References

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[22] https://www.health.gov.au/news/australian-health-protection-principal-committee-ahppc-coronavirus-covid-19-statements-on-14-may-2020
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Attachment 1

About the Committee and the Working Group

About the National COVID-19 Health and Research Advisory Committee

The National COVID-19 Health and Research Advisory Committee (NCHRAC) was established in April 2020 to provide advice to the Commonwealth Chief Medical Officer advice on Australia's health response to the COVID-19 pandemic. NCHRAC provides rapid and evidence-based advice (or expert advice in the absence of evidence) on Australia's health response to the COVID-19 pandemic with the aim of preventing new cases, optimising the treatment of current cases, and assisting in optimising overall health system readiness to deal with the pandemic as it progresses.

Further information on the terms of reference and membership of the Committee is available at: www.nhmrc.gov.au/nchrac. NHMRC is providing secretariat and project support for the Committee. The Committee is not established under the NHMRC Act and does not advise the NHMRC CEO.

Working Group Membership

NCHRAC convenes working groups of its members and external experts to deliver its reports. The following NCHRAC members were involved in the development of this advice:

Committee Members

Professor Sandra Eades (Chair)

Professor Bart Currie

Professor Jonathan Carapetis

Dr Ruth Stewart

Professor Alex Brown

A/Professor Kamalini Lokuge

Dr Michael Freelander MP

Additional experts

The following members of the Aboriginal and Torres Strait Islander Advisory Group on COVID-19 provided advice during the preparation of the advice paper:

Dr Dawn Casey (co-Chair of the advisory group)

Dr Lucas de Toca (co-Chair of the advisory group)

Professor James Ward (member)

Dr Jason Agostino (member)

Dr Mark Wenitong (member)