

Supplementary report on COVID-19 and the impact on New South Wales prisoners

Introduction

We have been asked by Legal Aid New South Wales (NSW) to provide our expert opinion on COVID-19 and the impact on NSW prisoners, in light of new updated Government policy and materials, as well as current known rates of transmission of COVID-19 in NSW.

Our qualifications and experience

This is outlined in my earlier report.

Our instructions

We have been instructed to address the below questions, in light of the following updated policy and materials in respect of COVID-19, as well as current known rates of transmission of COVID-19 in NSW.

1. Letter to Legal Aid NSW dated 8 May 2020;
2. COVID-19 Sentinel Surveillance Protocol;
3. Technique for collecting respiratory specimens;
4. Further information provided by Justice Health to Legal Aid; and
5. Additional information concerning Correctives NSW policy is available here: <https://coronavirus.dcj.nsw.gov.au/services/corrective-services> (last updated 4th May 2020).

Questions

1. What is meant by the term “sentinel testing”?
2. Your report dated 16 April 2020 observed that

*Test for COVID-19 routinely used in Australia require a clinical sample (sputum, throat swab or nasal swab). The sensitivity of the test is highest for sputum, followed by nasopharyngeal swab, followed by throat swab. Throat swabs may be falsely negative multiple times in people with confirmed illness. **To date, there are no screening tools that offer high sensitivity to detect individuals with COVID-19 in NSW Correctional Centres (page 7).***

Does this statement still apply in light of the Sentinel Surveillance Protocol and screening of new inmates by nasal swab in selected centres after 1 May 2020?

3. What is the relevance, if any, of the exclusion from the Sentinel Surveillance Protocol of:
 - inmates who have entered custody *prior to* 1 May 2020

- Corrective NSW's staff?
4. Assuming that the measures described are implemented by Corrective Services, is there a residual risk of COVID-19 entering one or more correctional centres via:
 - Correctives Staff;
 - Imperfect quarantine measures (such as by the movement of goods, linen, or other items within a Centre);
 - People who decline to consent to testing, or who are unable to be tested (or unable to provide consent) because of health (including mental health) reasons;
 - Asymptomatic cases within quarantine cohorts; or
 - Some other vector?
 5. Assuming you have identified a residual risk above, would the testing regime implemented by Corrective Services identify an asymptomatic case of COVID-19 which was contracted *after* reception?
 6. Your report dated 16 April 2020 observed that:

The concepts of crowding and prison cell spatial density are relevant to COVID-19 transmission as they have been linked to adverse health outcomes, including the transmission of infectious diseases.

The Report makes further observations about known NSW correctional centre capacity levels and further opines that:

Given the current threat that COVID-19 presents to places of detention and the wider community, and alongside standard plans to improve prison hygiene, screening, testing and the isolation of sick people in adequate spaces, decarceration strategies ought to be prioritised as a mechanism to reduce cell spatial density thereby reducing the risk of infectious diseases transmission.

As at 19 April 2020, there were 12,930 people in full time custody in NSW. As at 3rd May 2020 this figure had reduced to 12,684. We have been advised by Correctives NSW that since March 2020, incarceration rates have dropped overall by approximately 1,500.

In your opinion, should decarceration strategies still be prioritised in light of the following:

- The further information provided by CNSW including the Sentinel Surveillance Protocol
- The reported reduction in the overall prison population since March 2020
- Current known rates of COVID-19 infection in NSW?

The questions asked

Question 1

What is meant by the term “sentinel testing”?

Response

Sentinel testing or sentinel surveillance is where testing of some people at selected sites is conducted, rather than testing everyone, in the expectation that if there is significant transmission, the sentinel testing will detect it. For example, this may take the form of monthly or weekly testing at 2-3 [sentinel] sites in NSW.

Question 2

Your report dated 16 April 2020 observed that

*Test for COVID-19 routinely used in Australia require a clinical sample (sputum, throat swab or nasal swab). The sensitivity of the test is highest for sputum, followed by nasopharyngeal swab, followed by throat swab. Throat swabs may be falsely negative multiple times in people with confirmed illness. **To date, there are no screening tools that offer high sensitivity to detect individuals with COVID-19 in NSW Correctional Centres (page 7).***

Does this statement still apply in light of the Sentinel Surveillance Protocol and screening of new inmates by nasal swab in selected centres after 1 May 2020?

Response

Yes, this still applies. Accordingly, a negative test does not negate the possibility that an individual is infected. There have been positive sputum and faeces samples reported following negative nasopharyngeal samples in patients.¹ However, a nasopharyngeal swab is likely better than a nasal swab in detecting COVID-19, and the nasal swab should be better than a throat swab. A nasopharyngeal swab is taken by inserting the swab deep into the back of the nose until the tip of the swab reaches the pharynx. The sensitivity of the PCR test varies by site of collection and by operator (collector).

Question 3

What is the relevance, if any, of the exclusion from the Sentinel Surveillance Protocol of:

- inmates who have entered custody *prior to* 1 May 2020

Response

There is a possibility that these prisoners may be, or become, infected if any asymptomatic cases were missed at reception prior to 1 May 2020, as detection of COVID-19 for these prison entrants was reliant on the identification of prisoners with clinical signs or symptoms, but this possibility is reduced if all new prison entrants and staff are tested.

- Corrective Services NSW's staff?

Response

Staff may still acquire infection and be undiagnosed.

Question 4

Assuming that the measures described are implemented by Corrective Services NSW, is there a residual risk of COVID-19 entering one or more correctional centres via:

- Corrective Services NSW staff;

Response

There is a residual risk of COVID-19 entering a prison via any person who enters a prison who is not tested. A report by the United States (US) Centers for Disease Control and Prevention published on the 6th May 2020 showed that of 420 prisons which reported at least one confirmed COVID-19 case among prisoners or staff, 53% were among staff members but not among prisoners.² Because staff are not currently tested and can move between prisons and their communities daily, they pose a source of introducing COVID-19 into prisons.

- Imperfect quarantine measures (such as by the movement of goods, linen, or other items within a Centre);

Response

There are studies indicating that aerosol and fomite transmission of COVID-19 is plausible, since the virus can remain viable and infectious in aerosols for hours and on surfaces up to days.^{3,4} Regular and consistent environmental cleaning and personal hygiene measures should minimise fomite transmission.

- People who decline to consent to testing, or who are unable to be tested (or unable to provide consent) because of health (including mental health) reasons;

Response

There is a residual risk of COVID-19 entering a prison via any person who enters a prison who is not tested.

- Asymptomatic cases within quarantine cohorts; or

Response

Under the measures introduced at the beginning of May 2020, asymptomatic cases should *mostly* be detected if tested.

- Some other vector?

Response

No further comment.

Question 5

Assuming you have identified a residual risk above, would the testing regime implemented by Corrective Services NSW identify an asymptomatic case of COVID-19 which was contracted *after* reception?

Response

No. This is because the testing regime introduced tests new receptions *only* and detection of cases after reception relies on the identification of prisoners with clinical signs or symptoms.

Question 6

Your report dated 16 April 2020 observed that:

The concepts of crowding and prison cell spatial density are relevant to COVID-19 transmission as they have been linked to adverse health outcomes, including the transmission of infectious diseases.

The Report makes further observations about known NSW correctional centre capacity levels and further opines that:

Given the current threat that COVID-19 presents to places of detention and the wider community, and alongside standard plans to improve prison hygiene, screening, testing and the isolation of sick people in adequate spaces, decarceration strategies ought to be prioritised as a mechanism to reduce cell spatial density thereby reducing the risk of infectious diseases transmission.

As at 19 April 2020, there were 12,930 people in full time custody in NSW. As at 3rd May 2020 this figure had reduced to 12,684. We have been advised by Corrective Services NSW that since March 2020, incarceration rates have dropped overall by approximately 1,500.

In your opinion, should decarceration strategies still be prioritised in light of the following:

- The further information provided by Corrective Services NSW including the Sentinel Surveillance Protocol
- The reported reduction in the overall prison population since March 2020
- Current known rates of COVID-19 infection in NSW?

Response

The introduction of sentinel surveillance of prisoner entrants, the reported 1,500 reduction in the NSW prisoner population since March 2020, and the declining number of cases detected in the wider community despite a marked increase in testing, are important events that occurred since our original 16 April report, which will limit the risk of COVID-19 transmission in NSW correctional facilities.

However, it is of our opinion that a ‘managed’ decarceration strategy still be prioritised within the following considerations:

- The reported 1,500 reduction in the NSW prisoner population since March 2020 is an aggregate figure. Without further prison-specific data on capacity and prison cell spatial density levels (i.e. cell floor area per person) for March 2020 and current levels following the 1,500 reduction, we are unable to assess whether there has been a substantive increase in spatial separation of prisoners across all prisons or among some prisons and not others.
- Although there has been a declining number of cases detected in the wider community since 16 April 2020, outbreaks continue to occur in the community such as the Cedar Meats abattoir in Melbourne, McDonald's restaurant in Fawkner, and the Newmarch House aged care facility in Western Sydney. Given the residual risks noted above regarding COVID-19 entering a prison, there remains some risk of an outbreak in NSW prison.

If there are current over-capacity and high spatial density issues in particular prisons, then a managed decarceration strategy should still be prioritised for these prisons as a mechanism to increase the spatial separation of prisoners thereby reducing the risk of infectious diseases transmission and outbreaks, which are still occurring in the community. As stated in our original report, any managed approach should ensure adequate health, social and economic supports are in place for prisoners released.

Declaration

The contents of this report are true to the best of our knowledge and belief. We understand that in preparing this report we have an overriding duty to the Court as outlined in the Uniform Civil Procedure Rules 2005, Schedule 7 Expert witness code of conduct, and we confirm that we have complied with this duty. We, the undersigned, would be prepared to attend the Court to give evidence if required.



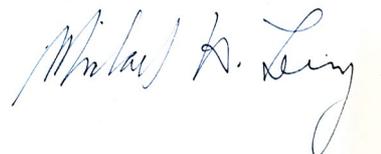
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References

1. Chen C, et al. SARS-CoV-2–Positive Sputum and Feces After Conversion of Pharyngeal Samples in Patients With COVID-19. *Annals of Internal Medicine* 2020;0:null.
<https://www.acpjournals.org/doi/abs/10.7326/M20-0991>
2. Wallace M, et al. COVID-19 in Correctional and Detention Facilities — United States, February–April 2020: U.S. Department of Health and Human Services; 2020.
<https://www.cdc.gov/mmwr/volumes/69/wr/mm6919e1.htm>
3. van Doremalen N, et al. Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1. *New England Journal of Medicine* 2020;382:1564-7.
<https://www.nejm.org/doi/full/10.1056/NEJMc2004973>
4. Chin A, et al. Stability of SARS-CoV-2 in different environmental conditions. *medRxiv* 2020:2020.03.15.20036673.
<https://www.medrxiv.org/content/10.1101/2020.03.15.20036673v2.full.pdf>