



News from the Covid-19 AFC Response Team Thursday, 2 April 2020 Newsletter 2

In case you missed it, here is a brief summary of COVID-19 related news items that has been published over the past couple of days. Each newsletter will be uploaded to our website.

CURRENT SITUATION

Globally

- As at **7:40pm 2 April 2020** internationally there have been 938,923 proven cases of COVID-19 and 47,314 deaths so far (www.worldometers.info).
- Globally mortality is approximately 5%.
- The rate of increase of test positive cases remains exponential.

Nationally

- As at **3:00pm on 2 April 2020**, there have been 5,133 confirmed cases of COVID-19 in Australia. 273 cases have been identified in the previous 24 hours. There have been 23 deaths reported.
- Australian mortality stands at approximately 0.4%

Locally

- There is a total of 385 confirmed cases in South Australia.
- Clusters have been identified in the Barossa Region, Adelaide Airport and Ruby Princess cruise ship. Testing criteria has been changed to reflect these 'hotspots'.
- There are currently 7 patients in the ICU at the RAH who are COVID-19 positive. Hydroxychloroquine is being used to treat some of these patients.
- Currently there have been no reported COVID-19 related deaths in South Australia.

NEWSFEED

Department of Health

- The Australian Government has approved a number of temporary changes to medicines regulation to ensure Australians can continue to access the Pharmaceutical Benefits Scheme (PBS) medicines they need, as the COVID-19 outbreak unfolds:

<https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/ensuring-continued-access-to-medicines-during-the-covid-19-pandemic>

- The Australian Government will provide \$13 million to fast-track research into treatments for the novel coronavirus, COVID-19.
- The Australian Government is investing more than \$2.6 million in cutting-edge diagnostics to detect COVID-19 faster.
- The Government has announced private hospitals, including both overnight and day hospitals, will integrate with state and territory health systems in the COVID-19 response. This will increase capacity of the hospital sector to over 30,000 hospital beds.
- Together with AHPRA, the government has stated that more than 40,000 former doctors, nurses, midwives and pharmacists are being urged to re-join the medical workforce to bolster medical officers during the pandemic.
- According to the Prime Minister, we will be living with this virus for at least six months, so social distancing measures to slow the spread of this virus must be sustainable for at least that long.



SA Health

- Semi-urgent category two and three elective surgeries in private hospitals have been cancelled from 1 April 11:59pm.
- Due to newly identified clusters, testing criteria now includes Barossa region and Adelaide Airport. Please refer to:
<https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/protecting+public+health/alerts/health+alerts/coronavirus+disease+%28covid-19%29+update+16>
- Heat maps are available on the SA Health Website. These maps graphically show confirmed COVID-19 cases in South Australian suburbs. Mitcham council area has the highest number of residents with confirmed infections, with between 30 and 34, followed by Charles Sturt and Marion council areas, each with 25-29 cases. The maps can be found here:

<https://bit.ly/2Jz2jXY>

Diagnostic Tests

- A position statement by the Australasian College of Pathologists stated that rapid serological testing has no role to play in the acute diagnosis of COVID-19 virus infection, and most importantly
- COVID-19 IgG/IgM rapid tests will miss patients in the early stages of disease when they are infectious to other people.
- SA Pathology will be implementing Point-of-Care testing for rapid testing of COVID-19 viral RNA. These test facilities will be in each regional laboratory and all metropolitan hospitals.
- SA Pathology has the capability to test COVID-19 in faecal specimens however do not recommend this as best-practice testing however in certain circumstances it may be considered.

Mental Health

- Many South Australians are feeling overwhelmed by COVID-19 - but now a new support line is available to people to maintain their mental health and wellbeing.
- This service can be accessed by calling 1800 632 753 and is available 8am-8pm, 7 days a week.
- There are also resources available on our website.

MASKS

Background

- There is official recommendation in Australia that wearing a face mask is un-necessary. We have seen media messages to 'not wear a mask'.
- The AFC COVID-19 response team has recommended that staff wear a mask at work. Why the disconnect?
- There is no scientific support for the statement that surgical masks worn by well or asymptomatic healthcare workers and/or community members are "not effective".
- In Asian countries, many of which have succeeded in 'flattening the curve', it is culturally expected or even mandated to wear a mask. Indeed, SARS-Cov-2 can also be transmitted in asymptomatic individuals.
- The literature suggests that wearing a mask can aid in the reduction of transmission of SARS-Cov-2 and would assist in "flattening the curve".

Literature

- N95 masks are designed to filter out the smallest particles (aerosols). They are designed to prevent these particles from carrying the virus down to the alveolae.



- However, latest findings on SARS-Cov-2 viral entry suggest that the major transmission mechanism in communities is not via the fine aerosols but via large droplets which can be found on surfaces or projected via coughing or sneezing.
- Coughing or sneezing can shoot droplet projectiles out of the mouth with a velocity of 50 meters/second (for sneezing) or 10 m/s (for coughing). Droplets can reach distances as far as 6m away. If so, then the much mentioned "safe distance" of 1.5-2m between individuals may not suffice.
- In an experimental simulation of the filtering capacity of masks van der Sande et al. (2008) compared the ability of three masks: (i) home-made (DIY) of tea cloth, (ii) standard surgical masks and (iii) and N95-equivalent masks, with respect to their ability to stop particles from reaching the lower lung.
- For inward protection (i.e., protecting yourself) N95-equivalent masks filtered out >99% of particles (thus, reducing the aerosol load by 100-fold).
- The surgical masks lowered the number of droplets behind the mask by a substantial 4-fold compared to outside of the mask.
- DIY surgical masks lowered the number of droplets behind the mask by 3-fold.
- Interestingly, for outward protection (i.e., protecting others), the effectiveness and differences were not as great (see article for more information).
- Studies have also shown that wearing a mask can also reduce the propensity for people to touch their faces, and therefore prevent transmission via droplets found on surfaces.

Recommendation

- Given that the upper respiratory tract is the major site for SARS-Cov-2 entry into the respiratory tract, and that people are prone to touching their face subconsciously, wearing a simple face mask that reduces the propensity for people to touch their face and blocks projectile droplets, may substantially reduce the production rate R , assisting in "flattening the curve".
- It is our continued recommendation that our review of the evidence supports that all staff wear a surgical mask at work. For more information visit:
<https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0002618&type=printable>
<https://medium.com/@Cancerwarrior/covid-19-why-we-should-all-wear-masks-there-is-new-scientific-rationale-280e08cee71>

ADDITIONAL NOTES

- If you have a topic that you believe is relevant to COVID-19 and applicable to our work processes, please send it through to Dr Renee Petrilli (renee.petrilli@australianfamilycare.com). These items will be distributed via our COVID-19 newsletter and website.
- Please note the design of our new COVID-19 logo above. It reflects the barrier between the SARS-Cov-2 virus and ourselves as individuals, as a family, and as a community. We endeavour to uphold this barrier through effective preparation, planning and response.

ETHOS

- Our ultimate aim is safety for our patients, our families, our community and ourselves. If we are not well we are unable to care for others.

Dr Renee Petrilli and Dr Brian Symon