

Your Ref: Our Ref: Contact:

The Honourable Mark McGowan MLA Premier of Western Australia 13 Floor, Dumas House 2 Havelock Street WEST PERTH WA 6005

**Dear Premier** 

## CHANGES TO PUBLIC HEALTH AND SOCIAL MEASURES

On 28 February 2022, I provided advice regarding transition to Level 2 Public Health and Social Measures (PHSMs), which were designed to reduce the increase of COVID-19 cases and the consequent increase in hospitalisations and Intensive Care Unit (ICU) admissions. My advice was informed by modelling work done by the Department of Health modelling team, which clearly showed that Level 2 (moderate) PHSMs would reduce the size of the outbreak peak and flatten the epidemic curve. As discussed in my advice of 28 February 2022, PHSMs need to be applied to effectively manage the outbreak, including with variants that may have different transmissibility and severity, and used in a way that is proportionate to the risk. As Western Australia (WA) is now approaching its peak number of new cases per day, this advice proposes a recommended path toward release of PHSMs that is consistent with progress towards WA's goal of 'living with COVID'.

## **CURRENT SITUATION**

The Omicron outbreak in WA was declared on 17 January 2022. Over the course of the first month of the outbreak, cases were largely limited through effective contact tracing efforts. On the 16 February 2022, I advised that PHSMs, in the form of mask use, density and capacity limits, would be required to reduce the growth rate of new cases. This advice led to the staged implementation of Level 1 and then Level 2 PHSMs on 18 February 2022 and 03 March 2022. In combination with high levels of vaccination, the PHSMs have been highly effective in supressing the outbreak, as WA has experienced a rate of growth of cases that has been lower than any other jurisdiction in Australia.

Since the declaration of the Omicron outbreak in WA, there has been over 115,000 confirmed cases of COVID-19 reported to the WA Department of Health. WA's reported cases have steadily increased, and it is currently unknown if WA has reached its peak of cases, with 8,616 new cases reported in the 24-hour period to 8pm on 23 March 2022, which is the highest number of new cases to date. The pattern of increase

of cases towards the middle of the week is one that has been observed during other outbreaks, and has been reported in other jurisdictions during COVID outbreaks, thought to be due, in part, to the greater inclination of people to attend for testing on weekdays than weekends.

The State Health Incident Coordination Centre is supporting the management of outbreaks. To date, outbreaks have been associated with 750 schools, 53 residential aged care facilities, 42 disability care facilities, 59 other congregate living facilities, 24 remote Aboriginal communities, 9 healthcare facilities and several workplaces, including abattoirs.

# Modelling

The modelling conducted by the team at the Department of Health predicted that the use of PHSMs, at both Level 1 and Level 2, would substantially reduce the epidemic curve, with fewer active cases, hospitalisations and ICU admissions. The modellers also noted that 'prematurely releasing PHSMs will increase the risk of a resurgence in epidemic growth'<sup>1</sup>.

The Omicron modelling conducted by the Department of Health estimated that the likely peak of cases would be at the end of March 2022; more recent modelling conducted by the Doherty Institute has confirmed independently that this is likely to be the case. While additional forecasts were made, based on outbreak data from other jurisdictions, that this may occur earlier than the end of March, and potentially in the week of 14-20 March 2022, this has not proved to be the case. Based on WA's current case numbers, the modelling and the trends observed, reaching a peak within the next week is likely, noting that the date of the actual peak may not be confirmed until at least one week after it has been reached.

## Other jurisdictions

Other Australian jurisdictions, having experienced and recovered from an Omicron BA.1 variant wave between December 2021 and February 2022, are all in the early stages of an Omicron BA.2 variant outbreak. In WA, the Omicron variant has substantively changed in the last 6 weeks. In January 2022, when WA had its first cases of Omicron variant, these were all either the BA.1 or BA1.1 variant. Since early February 2022, there has been a transition to the Omicron BA.2 variant, which has gone from less than 3% of cases to over 90% of cases. Although data is lacking to make conclusive statements about this variant, international evidence suggests that the BA.2 variant may be 1.5 times more transmissible than BA.1, but of similar severity. Given this finding, modelling of case numbers, hospitalisation rates and anticipated peak dates may be impacted.

To compare the growth rate of the WA outbreak cases, Figure 1 shows the WA outbreak superimposed against outbreak epidemic curves from other jurisdictions, based on the number of days into the outbreak and shown as the changing rate of

<sup>1</sup> WA Department of Health (February 2022). Omicron COVID-19 modelling. https://www.wa.gov.au/system/files/2022-02/20220223WA-Health-COVID-Modelling\_0.pdf

GOVERNMENT OF WESTERN AUSTRALIA

cases per 100,000. What can be seen by this comparison is that WA's epidemic curve has taken a less steep trajectory, in large part due to the early implementation of Level 1 and Level 2 PHSMs in WA in combination with higher vaccination coverage at the equivalent time point.

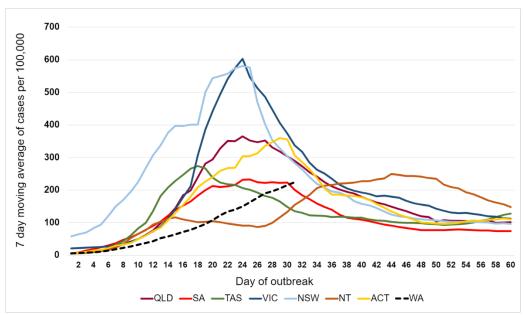


Figure 1: Epidemic curves of recent Omicron outbreaks in Australian jurisdictions.

## LEVERS OF CONTROL

In November 2021, I provided advice that outlined the levers of control available to the State during the COVID Transition Plan, which included the COVID Vaccination Program; the Testing, Tracing, Isolation and Quarantine (TTIQ) arrangements; and PHSMs. While the optimisation of each of these is important, the relative importance of each measure, and its probable impact, changes as the outbreak progresses.

WA's vaccination rates are now very high, with a dose 2 rate of 90% (age 5+ years) and a booster rate coverage of 73% (age 16+ years). This vaccination coverage is higher than what has been achieved elsewhere in Australia, particularly at this stage of the outbreak, and the effect of this high coverage on the relative morbidity due to the COVID outbreak is not fully understood. Vaccination rates, particularly the booster rate, is likely to have resulted in reduced hospitalisation, ICU and death rates in WA.

While increasing the booster vaccination dose rate remains important, WA's population immunity due to vaccination is also impacted by waning vaccine-induced immunity, particularly in the over 70 age group and healthcare workers, who started receiving boosters in November 2021. Achieving a higher population booster dose rate, while important at an individual level, may not have further positive impact on morbidity at a population level during the current outbreak, given the waning of some people's immunity. The WA Health modelling data showed the peak vaccine immunity will be reached in March 2022.

The second main lever of control has been the TTIQ lever. At its most stringent, the TTIQ lever required people exposed to COVID, even fleetingly, to quarantine. The original TTIQ guideline required close contacts to quarantine for 14 days and surveillance testing was recommended for a range of people who were known to be at 'higher risk' of exposure. Since the start of the Omicron outbreak, WA has transitioned these TTIQ settings in a step-wise fashion, from the strict requirements to a more manageable state of 'living with COVID'. The settings have moved from a state of 'no community transmission', to 'high case load settings' and then 'very high case load settings', which has seen WA Health reduce the number of people captured as 'close contacts' and reduce the quarantine/isolation requirements asked of them. While the TTIQ settings are still more stringent that the national TTIQ guidelines, I envisage that these requirements will reduce further over coming weeks.

As a lever of control, TTIQ will continue to reduce in effectiveness over the coming weeks. As the outbreak progresses, testing will capture fewer cases, and not all close contacts will be identified and quarantined. Already, there are many people that have either no symptoms or such mild disease they do not get tested, and, as a result, there is ongoing transmission in the community. Further changes to the TTIQ settings are unlikely to have a major impact on case numbers or hospitalisations, as there are many cases already that are simply not captured by the formal surveillance system.

The final lever of control, which is most likely to make a difference on case numbers during the growth phase of an outbreak, is the PHSMs. The use of low to moderate (akin to level 1 and level 2) PHSMs has been strongly supported by the Australian Health Protection Principal Committee (AHPPC), as articulated in their statement of 22 December 2021.<sup>2</sup> Together with a higher vaccination coverage, the implementation of early and stringent PHSMs in WA has likely been the main point of difference between our State's and other jurisdiction's management of the Omicron outbreak and is likely to be a large factor contributing to WA's success to date.

The three main PHSMs currently in place are mask use, density limits and capacity limits. The Level 2 PHSMs include density limits of one person per two square metres with capacity limits of 150 or 500, depending on the venue. The underlying aim was to reduce the number of non-household people that can gather and mix, with subsequent transmission of COVID, particularly at higher risk venues, where masks may not be consistently worn, such as venues serving food and drinks. While it is difficult to quantify the impact of the PHSMs, as documented in my advice of 28 February 2022, there is ample international and interstate evidence that PHSMs are a valuable lever to reduce case numbers and transmission. It is anticipated that PHSMs are the most effective lever WA has remaining to control the outbreak at the current time.

## IMPACT ON THE HEALTH SYSTEM

The PHSMs and outbreak management efforts have the primary purpose of reducing transmission and slowing the rise in case numbers. This will reduce the number of people who require hospitalisation, and preserve hospital capacity for the care of

GOVERNMENT OF WESTERN AUSTRALIA

<sup>&</sup>lt;sup>2</sup> Australian Health Protection Principal Committee. Omicron public health implications and response options. 22 December 2021. https://www.health.gov.au/news/ahppc-statement-on-the-omicron-public-health-implications-and-response-options

COVID cases and other patient care activities. To further support this, non-urgent Category 2 and 3 elective surgery in public hospitals has been suspended.

There are currently 209 patients admitted to hospital due to or with COVID, with 9 patients in ICU. While this number of cases is manageable, the hospitals are under strain. The effects of the past 2 years of the pandemic management in the State has meant that staffing levels prior to the start of the Omicron wave were constrained, due to difficulties recruiting to positions and a lack of interstate and international staff. Since the start of the outbreak in WA, many staff have been infected with COVID, or required to furlough due to being a close contact or being required to care for a family member affected by COVID. WA Health has been monitoring staff absenteeism and this has been steadily increasing, to over 1300 staff who were off work last week, and this is likely to be substantially greater when new data is received at the end of this week. I have consulted with the Director General of Health and been advised that the health system is vulnerable to further strain, if community transmission increases sharply, as more staff will be affected either directly or indirectly.

## RECOMMENDATIONS

As previously advised, the implementation of PHSMs needs to be tailored to optimise the management of the outbreak, including with variants that may have different transmissibility and severity, and used in a way that is proportionate to the risk. The current Level 2 PHSMs are proportionate, given WA's case numbers are still increasing and, while there have been slower rates of hospitalisations than expected, this effect is likely due to WA's vaccine coverage and PHSM use.

In making recommendations regarding a change to the PHSMs, I have considered the stage of our current outbreak, the levers of control available to us, the modelling data, the lessons from other jurisdictions and the current impact of the outbreak on our health system. With respect to this outbreak, we are approaching the peak, but are unable, yet, to clearly identify when that will be, although it is anticipated being within the next week, based on the original Omicron modelling and current trends. While WA's hospitalisation and ICU rates are currently tracking lower than the modelling, they are unlikely to peak until 1-2 weeks after the cases peak. The peak may also be flatter and persist for longer, given the impacts of the vaccination coverage and the PHSMs.

The levers of control have been effective to date, with PHSMs remaining the principal measure available in controlling the growth of this outbreak. Re-examination of the modelling data reinforces the use of PHSMs as an important means to slow the growth rate of cases, and to reduce hospitalisations and ICU admissions. The effect of a premature relaxation of PHSMs, particularly if the peak has yet to be reached, will be difficult to quantify, but will most likely lead to an increase in cases, hospitalisations and ICU admissions. In my advice of 28 February 2022, I noted that up to a further 228 hospital beds and 33 ICU beds may be required at peak if the Level 2 PHSMs were never fully implemented.

Based on this, it is my advice, as Chief Health Officer, that Level 2 PHSMs should ideally not be downgraded to Level 1 PHSMs until a minimum of one week and preferably two weeks after the peak of Omicron cases has been reached in WA. Any reduction of Level 2 PHSMs prior to that should be conducted with caution. A transition to lowering PHSMs prior to the peak can be considered, in the full knowledge that this may have the effect of increasing cases and hospitalisations.

Should such a transition be required, and deemed appropriate by Government, I recommend the following changes to PHSMs be implemented on or after 0001 hours on 31 March 2022, which is likely to be after the peak of cases:

- 2 sqm requirements for all venues to continue.
- Mask wearing required for those aged 8 years and over indoors, other than in the home and unless an exemption applies.
- 2 sqm requirement for fitness venues (e.g. gyms, pilates, yoga, dance), entertainment venues, community recreation facilities, cultural venues and places of worship.
- 2 sqm requirement for hospitality venues, convention centres and function centres. Capacity limits of 500 patrons to apply until 14 April 2022.
- 2 sqm rule for beauty/hairdresser/massage parlour/nail salon/tattoo parlour/spa continues.
- 2 sqm rule applies to venues and events. Masks would be required for indoor events.
- 2sqm and 75% capacity for entertainment venues that are seated and forward facing (i.e. theatres and cinemas). Masks would be required indoors.
- 75% capacity for major stadiums including Optus, HBF etc. Masks would be required indoors.
- Aged care and disability services restricted to two visitors per resident per day, as per current Level 2 restrictions.
- Hospitals two visitors, except for parents/carers of children, birth partners and for compassionate reasons, as per current Level 2 restrictions.
- Higher education (including TAFE, pathway colleges, English language schools) – masks indoors.
- Home gatherings maximum of 30 people at indoor private gatherings in homes, 200 people outdoors (up to 200 in total, inclusive of up to 30 indoors).
- Outdoor private gatherings in public spaces 200 people.
- Weddings and funerals as per venue, indoors or outdoors, 2 sqm rule.
- Community sports as per indoor venue, 2 sqm rule. Outdoors, no restrictions.
- Crown complex 2 sqm rule for casino gaming floor.
- Nightclubs 500 capacity limit, 2 sqm rule.
- QR codes and contact tracing registers to be reduced to only those venues with Proof of Vaccination restrictions (except for those that do not have them currently)

Once WA has passed the peak by 2 weeks, I would recommend that, except for visitors to hospitals, aged care and disability services, which should be reviewed, WA fully moves to the Level 1 PHSMs, as outlined in my advice of 16 February 2022. I will continue to monitor the situation and the latest evidence and changing advice, and will

need to re-consider the above advice should there be significant changes in the public health situation.

Yours sincerely

Dr Andrew Robertson

**CHIEF HEALTH OFFICER** 

24 March 2022