Acting Chief Health Officer Advice to Minister for Health

Advice relating to the making of Pandemic Orders as required by section 165AL of the *Public Health and Wellbeing Act 2008*

Date of advice: 7 July 2022

Introduction and Summary of Advice

1. In response to the request from the Victorian Minister for Health (**the Minister**) made on 7 July 2022, set out below is my advice as Victoria's Acting Chief Health Officer, regarding whether the Minister should renew and revise the current Pandemic Orders (**Orders**) made pursuant to section 165AI of the *Public Health and Wellbeing Act* 2008 (Vic) (**Act**) in relation to the coronavirus of 2019 (**COVID-19**).

2. In providing this advice, I am aware of the legislative context in which the Minister's request is made. Section 165AI of the Act empowers the Minister, at any time on or after the making of a Pandemic Declaration, to make any order that the Minister believes is reasonably necessary to protect public health. The Premier of Victoria has extended the Pandemic Declaration which enables the Minister to deploy legally enforceable measures as part of a focused public health response. Section 9 of the Act requires that the public health response be proportionate to the public health risk that the disease (in this case, COVID-19) poses. Section 10 of the Act requires that, wherever possible, I have regard to the benefits that accrue when there is collaboration between all levels of Government and industry, business, communities, and individuals.

3. This advice relates to the public health measures I recommend continuing in Victoria at the current time. This advice reflects the current COVID-19 context in Victoria and is given in addition to all previous written and verbal advice I have provided to the Minister, as well as written and verbal advice provided by the Chief Health Officer regarding the making of Pandemic Orders.

4. The priorities for the COVID-19 public health response in Victoria continue to be limiting transmission, reducing morbidity and mortality, avoiding further strain on the healthcare system, and preventing disruptions to the operations of essential services and sectors.

5. As provided in my advice to the Premier to extend the Pandemic Declaration, COVID-19 remains a serious risk to public health in Victoria. The challenges that I consider COVID-19 presents to Victoria at this time are as follows:

    i. **Omicron Variant of Concern (VOC) and sublineages, with BA.4/BA.5 now dominant**: the Omicron VOC continues to pose a risk to Victoria as it is highly transmissible and more capable of evading existing vaccine- or naturally-acquired immunity. This has led to waves of epidemic growth caused initially by BA.1 in November 2021, which out-competed the Delta VOC. This was followed by the emergence of BA.2 in early 2022. More recently, multiple sublineages, BA.2.12.1, BA.4 and BA.5, which are increasingly prevalent in Victoria, have demonstrated a growth advantage over BA.2 and increased propensity to evade pre-existing immunity to vaccines and previous Omicron infection. Whilst there is currently insufficient evidence of increased severity of BA.4/BA.5, ongoing assessment is required. Consequently, the prevalence of BA.4/BA.5 is contributing to greater COVID-19 transmission, and hospitalisation as has been observed locally, interstate (particularly in New South Wales and Queensland) and internationally. Without further interventions, this will result in further pressure on our healthcare system over July and August due to increased numbers of inpatients with COVID-19 and workforce impacts. There is also

the ongoing risk that further novel VOCs will emerge with characteristics of higher transmissibility, immune breakthrough or disease severity.

ii. **Plateauing vaccine uptake and waning immunity**: I have also considered the risks posed by the gradual plateau in COVID-19 vaccine uptake across all doses and all age groups, coupled with waning immunity overtime among those who have been vaccinated and those who have previously been infected. I am aware of the decreased vaccine effectiveness against infection with Omicron (and in particular the BA.4/BA.5 sublineages) compared with previous COVID-19 variants. Although vaccine formulations designed to match circulating variants are in development, they are not currently registered or available in Australia (Therapeutic Goods Administration (a), 2022).

iii. **Increased COVID-19 and respiratory infections over winter**: during periods of cooler weather there is an increased risk of respiratory viral transmission as people tend to gather indoors more often and for longer periods. This increase in transmission may result in a further increase in cases and hospitalisations. The concurrent increase in transmission of influenza and other respiratory viruses, and increases in cold weather-related respiratory and cardiovascular illness, are placing additional demand on our health system.

6. Considering these viral, environmental and individual factors, there is a need for ongoing and strengthened public health measures to address the significant public health risk posed. There is ongoing risk of epidemics of COVID-19 due to the factors above, particularly the ongoing emergence of novel variants with immune escape. Immunity as a result of vaccination and/or past infections will of itself be insufficient alone to mitigate significant epidemics, which impact the community, workforce availability, health system pressures, and loss of life.

7. My advice below sets out the measures I consider necessary, appropriate and proportionate to the current context and forecasted impact of COVID-19 over the winter period. The measures I advise are as follows:

i. **strengthened public communications and community engagement** about the risks the virus continues to pose and measures to reduce transmission at the individual and community level. These include maintaining up-to-date COVID-19 vaccination status, wearing a face mask in indoor settings (outside of private homes) and outdoors when unable to physically distance, remaining home when unwell, optimising ventilation and filtration in indoor settings, practising physical distancing, good hand and respiratory hygiene, seeking testing when unwell or otherwise where appropriate, notifying positive test results and initiating antiviral treatment early, if eligible. I strongly recommend that, during the coming period of increased transmission and resulting health system pressure in July and August, people work from home where practical to do so. While I acknowledge that working from home is not practicable for many essential workers, particularly from an equity perspective, I urge workplaces and higher education providers to use their discretion to facilitate working and studying from home if practicable;

ii. **targeted engagement** of persons at highest risk of severe outcomes from COVID-19 and preparedness in priority settings, such as aged care and disability care. This is to ensure that they are able to identify their risk, are up to date with COVID-19 vaccination, are aware of and have access to effective COVID-19 therapies and are able to minimise their risk of acquiring infection through preventive measures and protective behaviours;

iii. **promoting and facilitating up to date vaccination**, particularly for third doses and fourth doses (fifth for immunocompromised) where eligible and among populations at highest risk of adverse health outcomes;

iv. **optimising safer indoor air through ventilation and/or filtration** in indoor environments including education settings, workplaces, venues, sensitive settings such as residential aged care and disability support services, and in the home;

v. **facilitating access to testing** via rapid antigen (**RA**) and polymerase chain reaction (**PCR**) testing to identify cases in a timely manner, enable rapid isolation and treatment if eligible;

vi. **facilitating access to COVID-19 therapies** for those who are eligible, to reduce risk of transmission, severe illness and hospitalisation;

vii. **requiring face masks** in certain higher risk indoor settings and strongly recommending face masks in all other indoor settings outside the household, supported by strengthened communication regarding the benefits of wearing masks for individual and community protection;

viii. **requiring COVIDSafe plans** to minimise the risks posed by COVID-19 and support safe workplace environments;

ix. continuing **test**, **trace**, **isolate** and **quarantine** (**TTIQ**) requirements to limit transmission and making further changes to align with national guidelines if appropriate;

x. requiring certain measures for **international air and sea arrivals** and **cruise ship operators and passengers**;

xi. **requiring COVID-19 vaccination** for certain high-risk workforces;

xii. **entry requirements** for visitors to care facilities including residential aged care, to protect individuals who may be at higher risk of adverse impacts from COVID-19 infection, including severe disease, hospitalisation, and death.

8. I advise that these measures should continue to be implemented to reduce transmission and limit the impacts of COVID-19 on individuals, the healthcare system and on essential services and sectors. As outlined in further detail below, I advise that a set of key measures should be contained in Pandemic Orders, while other measures should be strongly recommended. This suite of recommended and required public health measures will provide the strongest protection for the Victorian community throughout the winter period.

9. In providing this advice, I acknowledge the Minister's obligation to balance social, economic, and operational considerations with public health outcomes, when deciding which public health measures are appropriate to implement and when. I note that the Minister will consider how each public health measure weighs upon Victorians' confidence in the administration of public health, and their understanding of the risks that COVID-19 continues to pose, and of government policy and public health measures more broadly.

10. In providing this advice, I have carefully considered the limits that the proposed measures place on human rights, and the objective of reducing serious risk to public health. Additionally, I have considered whether the proposed measures are the least restrictive reasonably available measures by which to achieve the public health objective, as required by the *Charter of Human Rights and Responsibilities Act* 2006 (Vic) (**Charter**).

How the Act informs this Advice

11. The Act provides that, while a Pandemic Declaration is in force the Minister may make any order that the Minister believes is reasonably necessary to protect public health.[1]

12. If the Minister is considering making Pandemic Orders, the Minister must consult with the Chief Health Officer and consider the Chief Health Officer's advice.[2] This is the advice provided by me in my capacity as Acting Chief Health Officer for the purpose of that provision.

13. The Minister has sought advice about:

    i. *the serious risk to public health posed by the disease specified in the Pandemic Declaration to which the proposed pandemic order relates; and*

    ii. *the public health measures that I consider are necessary or appropriate to address this risk.*

14. Section 3 of the Act defines the phrase "serious risk to public health" as:

    a material risk that substantial injury or prejudice to the health of human beings has occurred or may occur having regard to:

    i. *the number of persons likely to be affected;*

    ii. *the location, immediacy, and seriousness of the threat to the health of persons;*

    iii. *the nature, scale and effects of the harm, illness or injury that may develop; and*

    iv. *the availability and effectiveness of any precaution, safeguard, treatment, or other measure to eliminate or reduce the risk to the health of human beings.*

15. I have taken the Act's definition of "serious risk to public health" into account when giving this advice.

16. I have also noted the Act's requirement that I have regard to:

[1] See section 165AI of the Act.

[2] See section 165AL of the Act.

i. the need to ensure that decisions and actions taken in the administration of the Act should be proportionate to the public health risk (in this case, COVID--19) sought to be prevented, minimised or controlled, and should not be undertaken in an arbitrary manner; and [3]

ii. the benefits that accrue when there is "collaboration between all levels of Government and industry, business, communities and individuals".[4]

This advice is based on the information that is available

17. My advice is based on the relevant and reliable evidence available to me,[5] which I have reviewed and assessed to ensure that it is relevant and reliable. This advice is informed by the current COVID-19 context in Victoria and scientific evidence from local and international literature.

18. Evidence, particularly on the Omicron variant and its sublineages continues to emerge, however as the Act indicates and requires,[6] a lack of full scientific certainty is not a reason for postponing measures to prevent or control the public health risks described below.

Victorian epidemiology and context

Infection data

19. On 7 July 2022, there were 10,265 new COVID-19 cases reported to the Victorian Department of Health in the preceding 24 hours. There were 2,915 cases confirmed by PCR and 7,350 probable cases detected from RA tests (Victorian Department of Health (a), 2022).

20. The 7-day rolling average of new cases is increasing in Victoria. On 7 July 2022, the 7-day rolling average was 8,427 cases. This is greater than the week prior which was 7,263 cases (Victorian Department of Health (a), 2022).

21. The number of cases reported to the Department of Health significantly underestimates the true number of COVID-19 infections as some infections are asymptomatic, not diagnosed due to testing access and capacity issues, or not reported. Data from seroprevalence studies can provide a more accurate indication of the proportion of people within the community who have been exposed to the virus by examining blood samples for SARS-CoV-2 antibodies. A seroprevalence survey among Victorian blood donors undertaken between November 2021 and early March 2022 suggests that 22.5 per cent of this population acquired COVID-19 during the initial Omicron wave (The Australian COVID-19 Serosurveillance Network, 2022). The report also indicated that the true prevalence of COVID-19 in Victoria is higher than official case counts.

Health service data

22. As described in further detail in my advice to the Premier to extend the Pandemic Declaration in Victoria, there are a number of ongoing challenges that are placing the healthcare system under substantial pressure.

[3] See section 4(3) and section 9 of the Act.

[4] See section 4(3) and section 10 of the Act.

[5] See section 4(3) and section 5 of the Act.

[6] See section 4(3) and section 6 of the Act.

23. As of 7 July 2022, there are 51,409 active cases across Victoria (Victorian Department of Health (a), 2022). There are 592 cases in hospital and of these, there are 24 active cases in intensive care units (**ICUs**), with five of the patients in ICU receiving ventilatory support. There are an additional six cleared cases in ICU.

24. The number of hospital admissions for COVID-19 has been rising since 22 June 2022. On 7 July 2022, the 7-day rolling average of hospitalisations was 526, which is a 15.8 per cent increase compared with the proceeding 7-day period (Victorian Department of Health (b), 2022). In addition, hospitals are reporting ongoing high volumes of non-COVID-19 related presentations.

25. The Victorian 'COVID-19 Positive Pathways' program provides care and support for people diagnosed with COVID-19 who can be safely managed at home. As of 7 July 2022, the COVID-19 Positive Pathways program is currently managing 48,559 cases. Since 1 July 2021, the program has cared for a total of 1,823,113 cases (Victorian Department of Health (a), 2022).

26. Alongside the sustained high volume of COVID-19 cases and rising hospitalisations and non-COVID-19 related presentations, the health system is experiencing staff shortages due to the impacts of COVID-19. On 5 July 2022, there were 1,584 staff unavailable to work due to COVID-19, representing a significant increase in unavailable staff over the preceding two weeks (Victorian Department of Health (c), 2022).

27. At the time of writing, the high patient demand combined with workforce shortages in the healthcare sector is contributing to significant pressure on Victorian ambulance services, emergency departments and inpatient units.

28. The healthcare system is expected to remain under stress throughout the winter period. In addition to the hospital demand driven by COVID-19, Victoria has experienced a surge in influenza and other respiratory viruses, and cold weather-related cardiovascular and respiratory illnesses. This increase in health service demand, coupled with ongoing reduced health workforce availability, is placing further strain on the health system.

Mortality data

29. COVID-19 continues to impact the lives of Victorians, with the number of deaths occurring remaining persistently elevated. As reported on 7 July 2022, there have been 4,044 COVID-19 deaths in Victoria during the pandemic with 2,433 (60.1 per cent) occurring in 2022 (Victorian Department of Health (d), 2022).

30. Older Victorians and residents of Residential Aged Care Facilities (**RACFs**) continue to be disproportionately affected by COVID-19. As of 7 July 2022, those aged 70 years and above account for 88.3 per cent of total deaths in Victoria in 2022 (Victorian Department of Health (b), 2022). Additionally, as of 7 July 2022, 44.2 per cent of COVID-19 deaths in Victoria in 2022 have been among aged care residents (Victorian Department of Health (b), 2022).

31. The Australian Bureau of Statistics (**ABS**) continues to monitor patterns of mortality during the COVID-19 pandemic. Mortality information is collected from the Medical Certificate of Cause of Death (**MCCD**), where doctors and coroners provide data about the underlying cause of death and other associated causes. Provisional data from the ABS indicates that from the start of the

pandemic to 30 April 2022 there were 6,052 people who died from or with COVID-19 in Australia. There were 5,335 deaths due to COVID-19 (88 per cent of registered COVID-19 deaths) and 605 deaths where the person died with COVID-19, but it was not the underlying cause (Australian Bureau of Statistics (a), 2022).

32. The ABS has reported that during February 2022, COVID-19 was the fourth leading cause of death, following cancer, dementia and ischaemic health diseases. At the peak of the Omicron wave in Australia during January 2022, COVID-19 was the second leading national cause of death (Australian Bureau of Statistics (b), 2022). This demonstrates the impact that periods of increased transmission have on mortality.

33. There has been a disproportionate burden of COVID-19 mortality across the community. There is an unequal distribution of mortality outcomes across a range of measures including age, sex, country of birth and socioeconomic status (Australian Bureau of Statistics (a), 2022). This is outlined in further detail below in paragraphs 61 to 64.

34. The number of people reported to have died due to COVID-19 is an underestimation of the true mortality impact of COVID-19. Excess mortality is a measure that can provide a more accurate reflection of the direct and indirect impacts of the virus on the community. This measure looks at all deaths that have occurred and not just those officially reported as a COVID-19 related death. Excess mortality is defined as the difference between the observed number of deaths in a specified time period and the average numbers of deaths for that period during previous years. As of 22 June 2022, Victorian Department of Health internal analyses indicates that there have been approximately 4,444 excess deaths between October 2021 and late April 2022 in Victoria. During this period there were approximately 2,176 deaths recorded with or due to COVID-19. Importantly, Victorians aged 80 years old and above were overrepresented and accounted for 2,330 of the total excess deaths (Victorian Department of Health (e), 2022).

35. Similar observations of excess mortality have been reported in Australia and internationally. Provisional mortality statistics from the ABS suggest that in January and February of 2022, the total number of deaths occurring each week across Australia were higher than the average number of the deaths for the corresponding period during previous years (Australian Bureau of Statistics (b), 2022). Throughout January and February there were 29,685 total deaths recorded, which is 5,052 (20.5 per cent) more deaths recorded compared with the average number of deaths for the same period during previous years (Australian Bureau of Statistics (b), 2022). This period of excess mortality aligns with the widespread transmission of Omicron across Australia.

36. Globally, the impact of the pandemic has been substantially greater than indicated from official reported COVID-19 death data. A recent publication reported that although there were 5.94 million reported COVID-19 deaths worldwide, it is estimated that there have been 19.2 million people who died due to the pandemic, indicating substantial excess mortality (COVID-19 Excess Mortality Collaborators, 2022).

37. The underlying causes of these patterns of excess mortality are likely multifactorial and to date are incompletely understood. They may indicate misclassified deaths or incomplete COVID-19 case ascertainment, where some people are dying of COVID-19 but have not had a confirmatory

test. It may also indicate that pressure on healthcare, aged care and other systems that support those at highest risk of death is resulting in alterations to standards of care or changed access to health care with individuals dying from causes other than COVID-19.

Testing data

38. As of 7 July 2022, the proportion of PCR tests returning a positive result in Victoria is 22.7 per cent (Victorian Department of Health (b), 2022). This high rate is likely due to a combination of factors including high case prevalence and prioritising PCR tests for those who are high risk of infection or severe outcomes.

39. There as 7,350 positive RA test results self-reported to the Victorian Department of Health in the 24 hours before reporting on 7 July 2022 (Victorian Department of Health (a), 2022). The positivity rate for RA tests is not able to be determined as RA tests undertaken in the community cannot be monitored easily.

40. The high PCR test positivity rate and the persistent elevated number of positive RA tests indicates that there is a proportion of cases that remain undiagnosed, which are likely contributing to ongoing transmission.

Genomics data

41. Clinical and wastewater genomic surveillance data have enabled Omicron sublineages to be closely monitored. In Victoria, the combined prevalence of the newer Omicron sublineages BA.4 and BA.5 has rapidly increased, and these are now the dominant circulating sublineages (Victorian Department of Health (f), 2022).

42. The BA.4/BA.5 sublineages were first detected in wastewater catchments in Victoria in April 2022 and have since risen rapidly. The BA.4/BA.5 sublineages have increased from less than 5 per cent in late May to an average of 53.5 per cent across all Victorian wastewater catchments by 30 June (Victorian Department of Health (f), 2022). Wastewater analytic methods are unable to distinguish BA.4 and BA.5, therefore wastewater surveillance data reports these two sublineages together. BA.4/BA.5 have together also become the dominant strains in clinical genomic samples, rising to 50.3 per cent in the 2 weeks prior to 20 June.

43. Surveillance data from across Australia indicates that BA.2 has been the dominant variant nationally since March 2022 (CoVariants, 2022). However, BA.4 and BA.5 are increasing rapidly as a proportion of total sequenced samples (AusTrakka National Analysis Team, 2022). In the most recent Austrakka report, across Australia during the two weeks to 22 June 2022, 26.9 per cent of samples were BA.4/BA.5 sublineages, and 71.2 per cent of samples were the BA.2 sublineage (AusTrakka National Analysis Team, 2022). There have been significant increases in BA.4/BA.5 in several jurisdictions across Australia. In NSW, the increase in BA.4 and BA.5 has been associated with a rapid increase in hospitalisations (NSW Health, 2022).

44. The BA.4/BA.5 sublineages are now well documented to evade immunity provided by prior vaccination or COVID-19 infection (Qu, et al., 2022). Internationally, BA.4 and BA.5 are now consistently outcompeting other sublineages (European Centre for Disease Prevention and Control, 2022). In some countries where BA.4 and BA.5 have emerged as the dominant circulating

sublineage, this has resulted in rising cases, hospitalisations and deaths (Our World in Data (a), 2022) (Our World in Data (b), 2022).

45. I anticipate that the increasing transmission of BA.4/BA.5 will result in further increases in COVID-19 infections, re-infections, hospital admissions and deaths in Victoria.

Vaccine uptake

46. In Victoria, the vaccine program has successfully achieved high rates of vaccine coverage, particularly across two dose rates. Rates of third and fourth dose uptake are much lower but continue to slowly rise. As of 7 July 2022 (Victorian Department of Health (a), 2022):

    i. 96.1 per cent of eligible Victorians aged 12 years and above have received at least two doses of a COVID-19 vaccine;

    ii. 72.6 per cent of eligible Victorians aged 16 years and above (including 89.6 per cent of eligible Victorians aged 65 years and above) have received three doses of a COVID-19 vaccine;

    iii. 49.1 per cent of eligible Victorians aged 65 years and above have received four doses of a COVID-19 vaccine.

    Of note, the third and fourth dose uptake is likely higher than the figures above, as the denominator includes all persons for the relevant age cohort rather than only those who are eligible.

47. As a large proportion of the eligible population received their third dose by early 2022 (Victorian Department of Health (g), 2022) it is likely that individuals from this cohort will now be experiencing waning immunity. This is particularly important for approximately 700,000 Victorians aged between 50 to 64 years, most of whom have received their previous dose over six months ago. As outlined in paragraphs 77 to 82, protection against infection, symptomatic disease and severe disease following a third dose declines over time (World Health Organization (a), 2022).

48. On 9 June 2022, ATAGI recommended a third dose as part of their primary course for adolescents aged 12 to 15 years following a primary vaccination course three or more months ago for individuals who are severely immunocompromised, have a disability with significant or complex health needs or have complex and/or multiple health conditions that increase their risk of severe illness (Australian Technical Advisory Group on Immunisation (a), 2022).

49. On 7 July 2022, ATAGI announced a recommendation for individuals aged 50 and above to receive a fourth dose, while also expanding eligibility to individuals aged 30 to 49 (Australian Technical Advisory Group on Immunisation (b), 2022). This is in addition to the guidance provided on 25 May 2022 where ATAGI recommended a fourth dose for people aged 65 years and over, residents of an aged care facility or a disability facility, individuals who are severely immunocompromised, members of Aboriginal and Torres Strait Islander communities aged 50 years or older, and people aged 16 to 64 years with a specified medical condition, significant or complex health needs, or multiple comorbidities, which places them at an increased risk of adverse health outcomes from COVID-19 (Australian Technical Advisory Group on Immunisation (c), 2022). This means that some individuals as outlined above are eligible to receive five doses (Victorian Department of Health (g), 2022).

Influenza data

50. The Pandemic Orders are not enabled to introduce public health measures to manage the risks posed by influenza. However, it is necessary to consider the additional demand that influenza infections and associated hospital admissions may place on the health system. In addition, interventions against COVID-19 may have an impact on influenza and other respiratory infections.

51. As of 2 July 2022, there has been an estimated 33,500 cases of influenza notified to the Victorian Department of Health in 2022. This is a 187 per cent increase compared with the yearly average of 11,657 cases between 2017 to 2019. However, increasing rates of combined COVID-19 and influenza testing may be detecting more cases than in previous years (Victorian Department of Health (h), 2022).

52. In Victoria, this year's influenza case notifications increased sharply in May and peaked in June, with cases declined over recent weeks. There were an estimated 906 cases during the week ending on 2 July 2022 down from 2,256 cases the week prior (Victorian Department of Health (h), 2022).

53. Surveillance from Victoria thus far in 2022 indicates that there have been at least 451 admissions to hospital and at least 30 admissions to intensive care with a peak in June 2022 due to influenza, with 4,957 cases of respiratory syncytial virus (RSV) notified in Victoria. This represents a significant seasonal burden of Influenza-like Illness (ILI) on our health care system (Victorian Department of Health (i), 2022).

54. There have been 401 cases of influenza-COVID-19 co-infection reported in Victoria as of 18 June 2022. Of the cases who have experienced co-infection, 25 per cent are diagnosed in the emergency department and 12 per cent were admitted to hospital (Victorian Department of Health (h), 2022). Recent international evidence suggests that influenza-COVID-19 co-infection significantly increases the odds of receiving invasive mechanical ventilation and the odds of in-hospital mortality (Swets, et al., 2022).

Community mobility and behaviours

55. Patterns of mobility appear to be gradually increasing and may continue to rise over the coming months. Greater mobility may lead to more social and workplace interactions and influence transmission. This is particularly concerning, as the seasonal changes over winter will likely shift population behaviour to indoor activities and heighten the risk of transmission.

56. Recent results from the Behaviours and Attitudes Survey (**BAS**) conducted by Victoria's Department of Premier and Cabinet, indicate that more Victorians are returning to hybrid working patterns and shifting away from working remotely full time. A further proportion of Central Business District (**CBD**) workers intend to return to full time work on site over the next month (Behavioural Insights Unit, 2022). Victorians' intentions to dine out locally remain stable, whilst the proportion of respondents intending to dine out in the CBD is increasing modestly (Behavioural Insights Unit, 2022). Whilst many Victorians reported that they were living their life as they did prior to the pandemic, some individuals at higher risk of severe health outcomes from COVID-19 (people who are older or living with a disability) continue to limit activities and stay home as much as possible.

57. In addition to community mobility, the BAS survey reported a decline in the use of some voluntary protective behaviours. Since January 2022, the proportion of respondents who isolated when experiencing symptoms has been decreasing. Over the same period, mask use on public transport has also been declining. More recently, there has been a reduction in the proportion of Victorians' who intend on isolating at home and notifying their contacts if they receive a positive RA test result. (Behavioural Insights Unit, 2022).

58. A critical finding that arose from the recent BAS survey, is that a very large proportion of respondents who were likely eligible for COVD-19 treatments, did not believe they were eligible (Behavioural Insights Unit, 2022). This finding highlights the need to strengthen engagement and communication strategies to increase awareness of COVID-19 therapies within the community.

Modelling projections

59. In May 2022, modelling conducted for the Department of Health examined the impact of the Pandemic Declaration not remaining in place, which would result in the current case requirements (isolation) and close contact precautions (RA testing, mask wearing) no longer applying. The modelling projections included varying degrees of voluntary uptake of isolation and close contact measures. Results from the modelling indicate that if the requirements were removed, case numbers would increase throughout July and August 2022. Due to the rise in the number of infections, the results suggest that a subsequent wave of hospitalisations and deaths would follow.

60. Recent modelling undertaken for the Department of Health on 7 July 2022 addressed the likely future impact of BA.4/BA.5. The modelling indicated that BA.4/BA.5 is likely to lead to a surge in infections with an expected epidemic peak in August. While there remains uncertainty about the magnitude of the peak, it is expected to be between the BA.1 (January 2022) and BA.2 (April/May 2022) peaks. The modelling also examined the impact of varying degrees of face mask use and fourth dose coverage. Results demonstrated that the early implementation and high uptake of face masks were able to reduce the magnitude of the upcoming BA.4/BA.5 peak. It is expected that increased coverage with face masks could reduce infections and hospitalisation during this peak by up to 20 per cent, and deaths by up to 15 per cent over July to September 2022. In addition, targeting an 80 per cent uptake of fourth dose vaccinations among individuals aged 50 to 64 years could also reduce infections and hospitalisations among this age group by up to 20 per cent.

Impact on priority populations and settings

61. As described in my advice to extend the Pandemic Declaration, the COVID-19 pandemic has disproportionately affected certain priority populations, and I have considered this when recommending the continuation of a number of appropriate and proportionate public health interventions below.

62. Older people continue to experience a disproportionately higher risk of severe illness and death from COVID-19, with most deaths in Australia since the beginning of the pandemic being in those aged 70 years and above (Australian Government Department of Health (a), 2022).

63. Those living in residential aged care facilities are at particular risk of death from COVID-19 (Australian Government Department of Health (b), 2022). The factors contributing to this are the

subject of ongoing analysis but likely include advanced age, frailty, comorbidities, need for personal care and communal living arrangements.

64. Individuals residing in areas of greater socioeconomic disadvantage also experience higher rates of hospitalisation, ICU admissions and deaths (Victorian Department of Health (e), 2022). This effect was sustained after adjusting for vaccination status. This may be due to number of factors underscoring the need to ensure access to testing and care including treatment (Victorian Department of Health (e), 2022).

Summary of evidence underpinning the health advice in relation to the Declaration of a Pandemic

65. In my advice to the Premier on 1 July 2022, I outlined the evidence informing the health advice that COVID-19 remains a serious risk to public health and that the pandemic declaration should be extended. This is summarised in paragraphs 66 to 88 below.

Emerging evidence on Omicron and sublineages

66. As described in my advice to the Premier to extend the Declaration of a Pandemic in Victoria, Omicron remains the dominant variant of COVID-19 globally (World Health Organization (a), 2022). Omicron has multiple sublineages, with the major subgroups being BA.1, BA.2, BA.3, BA.4 and BA.5. BA.5 is the dominant circulating strain globally, accounting for 52 per cent of submitted sequences while BA.4 has also increased to 12 per cent for the period between 27 June to 3 July 2022 (World Health Organization (a), 2022). The proportion of BA.2 and its descendent lineages (together named BA.2.X) have declined to 9 per cent (World Health Organization (a), 2022).

67. The dominance of BA.5 and rise in BA.4 has been associated with a surge in hospitalisations in Israel (Our World in Data (a), 2022), Portugal (Our World in Data (a), 2022) and Singapore (Singapore Ministry of Health, 2022) despite higher third dose vaccination rates than Victoria (Our World in Data (d), 2022).

68. Currently, BA.4/BA.5 are the dominant sublineages in Victoria, having recently replaced BA.2. (Victorian Department of Health (b), 2022). The proportion of cases caused by BA.4/BA.5 has rapidly increased in NSW in recent weeks, with the proportion of specimens thought to be either BA.4 or BA.5 is now around 70 per cent, compared to 35 per cent the week prior (NSW Health, 2022).

69. Omicron is more transmissible than the Delta VOC (World Health Organization (a), 2022). Drawing on the evidence available, it appears that BA.4, BA.5 and BA.2.12.1 have a greater capacity to evade pre-existing immunity, contributing to growth advantage over BA.2. (World Health Organization (b), 2022). Increasing rates of infection, reinfection and consequently increased health service demand.

70. At the current time, it is not clear if there is any change in disease severity for BA.4 or BA.5 compared with previous Omicron sublineages (European Centre for Disease Prevention and Control, 2022). However, there are concerns that BA.4/BA.5 may cause more severe illness than BA.2 due to a specific mutation observed in BA.4/BA.5 (Kimura, et al., 2022). As there is no evidence currently available, the disease severity of BA.2.12.1 is unknown (World Health

Organization (c), 2022). More information is required to accurately assess the severity of these sublineages.

71. For those previously infected with Omicron, there does seem to be a reduced risk of infection with BA.1 if previously infected with BA.2 and a reduced risk of infection with BA.2 if previously infected with BA.1 (World Health Organization (a), 2022). However, emerging evidence is that the same does not appear to be true for newer Omicron sublineages. As indicated in an early pre-print study where blood samples from those previously infected with BA.1 have been analysed to see if the antibodies could neutralise newer Omicron sublineages (BA.2.12.1 and BA.4 and BA.5), there is evidence that new Omicron sublineages can evade prior immunity gained by BA.1 infection (Cao, et al., 2022). As outlined in my advice to extend the Pandemic Declaration, many Victorians were infected early in 2022 during the initial Omicron (BA.1) wave, meaning the natural immunity conferred by this infection is likely now significantly reduced, and may not confer much protection against newer sublineages. The proportion of new cases in Victoria that are reinfections is also steadily increasing, with more than 24,500 Victorians reporting reinfection to the Department of Health during the six-month period from December 2021 to June 2022. This demonstrates that those with recent infection – especially those exposed in January and February – are now once again at risk of infection. This could also explain why newer emerging sublineages are gaining traction in countries where recent Omicron waves have already occurred.

72. For those previously infected with a non-Omicron VOC such as Delta, there appears to be less cross variant immunity for individuals than for previously circulating VOCs (Altarawneh, et al., 2022).

73. While global transmission of COVID-19 remains high, the emergence of new VOCs will continue, along with the chance of increasing immune evasion and potentially reduced vaccine or treatment effectiveness (Ledford, 2022) (Wu, 2022).

74. In addition, evidence is accumulating about the potential long-term impacts of COVID-19 infection on various physiological systems, and how this is contributing to a more significant burden of disease than previously anticipated for individuals, communities and health systems (Chen, et al., 2022). There are a range of potential pathologies described as post-acute sequalae of SARS-CoV-2 (PASC), or long COVID, including long-term damage to the lungs or other organs, lingering symptoms associated with time in the intensive care unit, increased risks of pathologies induced within 90 days of SARS-CoV-2 illness such as myocarditis, pericarditis, low platelets, pulmonary embolism, acute myocardial infarction, cerebral infarction and non-ischaemic stroke, and a syndrome characterised by unexplained exertional intolerance, debilitating fatigue, cognitive and sensory disturbances, headaches, myalgia and recurrent flu-like symptoms (Chen, et al., 2022). A systematic review of 50 international studies of PASC showed that ongoing symptoms remain amongst 25 to 49 per cent of people at one to four months post infection (Xie, et al., 2021).

75. There is also emerging evidence that the risk of adverse health outcomes increases in an additive manner as the number of COVID-19 infections increases, highlighting a cumulative health burden from reinfections (Al-Aly, et al., 2022).

76. Altogether, the evidence further emphasises the importance of reducing transmission to reduce the cumulative burden of disability in the community from PASC. There is also growing evidence that two or more doses of COVID-19 vaccinations reduces the risk of various manifestations of PASC (Antonelli, 2022) (Taquet, 2022). This is another key benefit of widespread, up-to-date vaccination.

Vaccine effectiveness against emerging variants

77. In general, a primary course of the currently available COVID-19 vaccines used in Australia confer less protection against the Omicron VOC compared with previous VOCs. However, estimates of vaccine effectiveness against Omicron remain higher for severe disease than for infection or symptomatic disease (World Health Organization (a), 2022).

78. Booster vaccines increase vaccine effectiveness against Omicron for all measured outcomes – infection, symptomatic infection, and severe disease, regardless of the primary vaccine schedule. In addition, a third dose may prevent some onward transmission of BA.1 and BA.2 (Lyngse, et al., 2022). This demonstrates how critical the three-dose vaccination schedule is and as increasing data surrounding this emerges the eligible cohort is set to expand to incorporate younger age groups. However, booster effectiveness wanes with time, with vaccine effectiveness against infection and symptomatic disease waning faster than the reduction in severe infection (World Health Organization (a), 2022). This is of significance if we observe Victoria's current third and fourth dose vaccine uptake, detailed in paragraph 46, and the time since most people had their last dose.

79. As data continues to emerge on the importance of third doses against Omicron, internationally the eligible cohort for boosters in expanding, with the Centers for Disease Control and Prevention (**CDC**) currently recommending third doses for all those aged five years and over, with additional doses recommended for those aged 50 years and over or 12 years and older who are moderately or severely immunocompromised (Centers for Disease Control and Prevention (a), 2022).

80. Of the newer Omicron sublineages, some emerging evidence suggests the ability for BA.4/BA.5 to cause breakthrough infections in those vaccinated (Wang, et al., 2022), which remains a topic of ongoing interest internationally.

81. Studies on vaccine effectiveness must also be interpreted with caution because of the different designs, vaccine regimens studied and inclusion of boosters.

82. As described in my advice to the Premier, I have also considered the concept of hybrid immunity to COVID-19 which is defined as the immune protection in individuals who have had one or more doses of a COVID-19 vaccine and experienced at least one SARS-CoV-2 infection before or after the initiation of vaccination. While typically this confers improved immunity, there is emerging evidence to suggest 'immune dampening' when exposed to Omicron for those infected with earlier variants (Reynolds, et al., 2022). The impact of hybrid immunity post Omicron infection is not yet well characterised (World Health Organization (d), 2022). With a limited understanding of the future impact of hybrid immunity we need to harness what population level immunity exists, by ensuring rational use of existing vaccines and optimising vaccination coverage in those most at-risk, even if they have previously recovered from infection (Goldblatt, 2022).

Treatment effectiveness

83. As described in more detail in my advice to the Premier to extend the Pandemic Declaration, there are now multiple Therapeutic Goods Administration (**TGA**) approved treatments for COVID-19 available in Australia, including oral and intravenous antiviral agents, and intravenous monoclonal antibody preparations. In general, many of these treatments are prioritised for cohorts at higher risk of progression to severe disease.

84. Of the two oral antiviral agents currently available on the PBS, molnupiravir (Lagevrio®) and the combination of nirmatrelvir plus ritonavir (Paxlovid®), both are effective in treating mild to moderate COVID-19 in adults, who do not require oxygen therapy, and who are at increased risk of progression to hospitalisation or death. These treatments must be administered early within the disease course to provide optimal benefit (usually within five days of symptom onset) (Therapeutic Goods Administration (b), 2022).

85. Multiple other treatments, including monoclonal antibodies given via infusion, are indicated for COVID-19 infection in select cohorts. Some treatments can only be given to hospitalised patients with severe disease while others can be given in mild-moderate disease but because they are infusions, must be given in a hospital or other suitable outpatient setting (National COVID-19 Clinical Evidence Taskforce, 2022), which can limit access or speed of access to timely treatment.

86. In addition, inhaled corticosteroids (budesonide or ciclesonide) are recommended in a cohort of patients who have respiratory symptoms and at least one risk factor for disease progression (National COVID-19 Clinical Evidence Taskforce, 2022).

87. There is some emerging evidence that certain monoclonal antibodies may not be as effective in treating Omicron and its sublineages as previous variants (Yamasoba, et al., 2022). There is no current evidence of reduced susceptibility of newly emerged VOCs including BA.4 and BA.5 to the oral antiviral agents available for treatment of early COVID-19 in the community.

88. Given the constant evolution of the virus, ensuring drug treatments remain effective against all emerging variants continues to pose a challenge to the international community. Additionally, despite therapeutic agents being approved for use in Australia, there remain challenges in ensuring these agents are being administered to those who will receive most benefit within the optimal timeframes.

Overview of necessary and appropriate public health measures

89. Public health and social measures (PHSMs), such as physical distancing, face masks, ventilation and TTIQ, are actions or interventions that aim to prevent or minimise the transmission of infectious diseases such as COVID-19 (World Health Organization (e), 2022).

90. PHSMs have been a key pillar of the public health response and continue to play a vital role in limiting COVID-19 transmission. In the current context of Omicron sublineages, increasing influenza cases, behavioural and seasonal changes associated with winter, a plateau in vaccine uptake and waning vaccine-induced and infection-induced immunity, curbing transmission via recommended and required PHSMs will help protect individuals, the health system, essential services and the wider community.

91. Specifically, population level PHSMs also function to protect at-risk individuals and higher-risk settings by lowering risk of COVID-19 transmission in the community and requiring actions of individuals to reduce the risk of priority populations being exposed to the virus. Those who are at high risk may still develop severe illness and die from COVID-19 despite being vaccinated and prescribed antiviral treatment, hence the need for some low impost but effective public health measures to be retained in Orders to continue to protect those in our community most at-risk of severe outcomes.

92. To manage the risks posed by COVID-19, the Victorian public health response recognises the ongoing need to limit COVID-19 transmission and mitigate its impact on the community and health system. As part of this comprehensive strategy to prevent, detect and respond to COVID-19, ongoing PHSMs are required, including less restrictive actions, such as engagement, communications, and recommendations, to more restrictive interventions, such as vaccination mandates in Orders. The Victorian response should continue to utilise, prioritise and exhaust less restrictive measures prior to implementing more stringent measures, wherever possible.

93. The pandemic response continues to transition towards a model that empowers individuals and industry to understand their risk, utilise public health behaviours and measures to protect themselves, their loved ones, and the wider community. However, with this transition comes challenges to ensure inequities highlighted by the COVID-19 pandemic are not exacerbated during the shift away from centralised, government enforced public health measures, especially in the context of pandemic fatigue in the community. Including, for example, the likelihood that individuals from areas of socioeconomic disadvantage experience disproportionately worse outcomes from COVID-19. To properly support these efforts, there are several key measures that should continue to be strongly recommended, as outlined in paragraphs 96 to 104.

94. In addition, I advise that a set of key public health measures should be retained in Orders at the present time, as set out in paragraphs 105 to 160160. I consider these measures to be necessary, appropriate, and proportionate to the level of risk currently posed by the virus.

95. The combined effort of individuals, communities, workplaces, industry, and government working together to support recommended and required PHSMs will continue to provide Victoria with the greatest level of protection against the impacts of COVID-19 at this phase of the pandemic.

Public health measures that should be strongly recommended and encouraged

96. There are several public health measures and actions that should continue to be strongly recommended and encouraged by government, industry, and community leaders across Victoria.

97. With the gradual transition to a more industry and community led pandemic response, it is crucial that there is strengthened community engagement on prevention and response strategies in order to support this shift and ensure communities are well equipped to mitigate risk, take action when required and reduce the chance of those from lower socioeconomic backgrounds being disproportionately affected by COVID-19.

98. Personal protective behaviours remain an important component of an effective pandemic response. Protective behaviours such as mask wearing, physical distancing, staying home and

getting tested when unwell, as well as hand and respiratory hygiene help protect all Victorians. These actions provide protection against COVID-19 and other respiratory illnesses, such as influenza and seasonal respiratory viruses. Mask wearing remains particularly important in indoor settings and outdoors when physical distancing cannot be maintained.

99. It is critical that access to testing and COVID-19 therapies is enhanced to ensure equitable health outcomes across the Victorian community. Optimising access to both RA and PCR tests will enable prompt identification and isolation of cases and assessment of eligibility for COVID-19 treatments. It is vital that access to COVID-19 therapies for those eligible is strengthened, to reduce the risk of transmission, progression to severe disease, and the associated hospital system strain.

100. Optimising ventilation and filtration in indoor environments should continue to be a key priority to reduce transmission. Ventilation decreases the risk of transmission by reducing the concentration of SARS-CoV-2 particles that may be present in an indoor space (Centers for Disease Control and Prevention (b), 2021). If there are fewer viral particles, then they are less likely to be inhaled and result in COVID-19 infection. There are different types of ventilation that can be utilised to reduce viral particles, including natural ventilation, mechanical ventilation and augmented ventilation (Victorian Department of Health (j), 2022). All forms of ventilation should be optimised, particularly in sensitive settings. Opportunities to enhance ventilation include opening windows, using fans and air cleaning units. One form of augmented ventilation is ultraviolet germicidal irradiation (UVGI), which uses Ultraviolet-C (UVC) energy to disinfect the air (Victorian Department of Health (j), 2022). This technology may be useful in some particularly high-risk settings, such as hospitality venues and nightclubs, however, the timelines required for scale-up are unlikely to allow for measurable impact in the short term.

101. Communication and community engagement continues to be the cornerstone of Victoria's pandemic response. The provision of up-to-date, easily interpreted and well targeted communications and public health messaging will continue to support Victorians to understand measures that:

    i. individuals can take if experiencing symptoms;

    ii. employers can take to keep workplaces safe;

    iii. operators can take to keep venues safe;

    iv. organisers can take to keep public and private events safe; and

    v. Victorians can take to stay safe and help protect themselves and their loved ones for example, getting vaccinated, wearing masks, practising good hand and respiratory hygiene, monitoring and responding to symptoms, and optimising indoor ventilation.

102. I advise that engagement and health promotion activities should continue to be accessible, equitable and culturally appropriate to ensure that the needs of the whole community are met. Health messaging should be developed in appropriate languages and literacy levels in partnership with community healthcare providers, and community and faith-based leaders, including those from culturally and linguistically diverse communities and Aboriginal and Torres

Strait Islander communities. Health promotion activities should include focused campaigns to respond to inequitable outcomes that arise among priority communities or within geographic locations.

103. As the winter period continues, it is critical that tailored strategies that engage, educate, facilitate, and incentivise COVID-19 and influenza vaccination uptake to optimise coverage in accordance with the Australian Health Protection Principal Committee (**AHPPC**) statement on winter preparedness (Australian Health Protection Principal Committee (a), 2022). The announcement that all Victorians could access the influenza vaccine free of charge until the end of June is likely to have supported an increase in influenza vaccination uptake (Victorian Department of Health (k), 2022).

104. At this time of heightened transmission and risk, I strongly recommend that people work from home where practical to do so. I urge workplaces and higher education providers to use their discretion to facilitate working and studying from home if practicable.

Public health measures that should be reflected in Pandemic Orders

105. The measures outlined below (paragraphs 106 to 160) should continue to be reflected in Orders to mitigate the risks posed by Omicron sublineages to individuals and the health system, in the current context of waning population immunity and increased mixing indoors.

Face masks

106. I advise that face mask requirements should continue in higher-risk settings and be re-introduced for individuals aged eight years and older in certain indoor settings outlined below, to reduce the risk of onward transmission. Masks protect healthy individuals from inhaling infectious particles and protects others by containing particles exhaled from infectious individuals (Chu, et al., 2020).

107. Pre-Omicron studies have demonstrated the effectiveness of masks in reducing transmission of COVID-19 (Chu, et al., 2020). In addition to limiting the spread of the virus, mask wearing has been shown to also be a cost-effective and cost-saving intervention (Bartsch, et al., 2022). However, a recent study suggests that although mask wearing provides protection from infection, their effectiveness appears to be lower for the Omicron variant compared with earlier periods during the pandemic (Tjaden, et al., 2022).

108. Face masks are a low impost public health measure and have been generally well accepted by the Victorian community. The recent BAS survey indicates that a high proportion of respondents wore a mask while using public transport and a modest proportion wore a mask in an indoor setting. However, despite sustained community transmission, mask wearing in these settings has generally been declining from January 2022, with a significant proportion of survey respondents referring to other people's lack of mask wearing when reflecting on why they have chosen not to wear a mask (Behavioural Insights Unit, 2022). This could have significant consequences for the coming months if mask wearing were to continue to decline in the face of more transmissible sublineages circulating and people gathering indoors.

109. I advise that face mask requirements should continue in higher-risk settings - including but not limited to - hospitals, care facilities, healthcare settings, public transport (including inside aircrafts

for those aged 12 years and over), and custodial settings. Further to this, in the context of the current epidemiology and health system strain, I advise that face mask requirements should be re-introduced in specific indoor settings, to reduce transmission of Omicron sublineages BA.4 and BA.5 through the community.

110. I advise that face mask requirements should be reintroduced for staff at early childhood services, all staff at primary schools and students in years three to six, all staff and students at secondary schools, workers at retail and hospitality settings and public facing areas of airports. This should also include reintroduction of mask requirements for workers in hospitality and retail venues within airports. While this is converse to my recent advice to the Minister following the AHPPC statement on removing mask requirements in airports (Australian Health Protection Principal Committee (b), 2022), I continue to take into account changing epidemiology and signs of healthcare system strain in Victoria and am of the view that reintroduction of masks in the indoor settings outlined above is warranted and proportionate at the current time. Introducing this measure as a requirement, rather than a recommendation, will support a rapid transition to mask wearing in these settings and provide the strongest opportunity to curb transmission within the community.

111. The reintroduction of the above-mentioned face mask requirements is a low-cost intervention and one of the most rapid means to achieve greater levels of mask use to reduce transmission of COVID-19. This is supported by recent modelling outlined above in paragraph 60, which demonstrates increased mask wearing could reduce infections, hospitalisations and deaths over the coming few months.

112. I acknowledge that face mask requirements are not universally supported in the community, and it is open to the Minister to consider other means to achieve higher levels of mask use, particularly in higher risk settings outlined above as a means of mitigating the increased transmission of COVID-19 during the present wave of infections and resulting health system impact.

113. Further to the above recommendations, I advise that current mask requirements should be retained for cases, close contacts and those who are symptomatic and awaiting a COVID-19 test result when leaving their home or accommodation. All current exceptions from wearing a mask should remain in place.

114. While all masks provide some level of protection, properly fitting N95 or P2 masks provide the highest level of protection and should be encouraged in all high-risk settings (Centers for Disease Control and Prevention (c), 2022) (Burnet Institute, 2022). Individuals at increased risk of severe disease should also be encouraged to wear an N95 or P2 mask in all settings (Centers for Disease Control and Prevention (d), 2022).

115. With a greater risk of transmission due to Omicron sublineages and their increasing growth advantage on a background of sustained high community transmission, and more people gathering indoors during the cooler months, in addition to reintroducing mask requirements in certain settings, I support continued community engagement, education and health promotion messaging to advise the community of the role of masks in limiting the spread of the virus. This

should emphasise the recommendation that masks should continue to be worn in outdoor settings where physical distancing is not possible.

COVIDSafe Plans

116. As COVID-19 continues to circulate in the community there will be an ongoing risk of incursion, transmission, and outbreaks in workplace settings. To mitigate these workplace risks, I advise that the requirement for employers to maintain an up-to-date COVIDSafe Plan for each work premise where workers attend onsite should be retained. I encourage industry and employers to continue to take additional measures to support safe and healthy workplaces including engagement with workforces, guidance resources and workplace requirements.

Management of cases, close contacts and social contacts

117. Victoria's TTIQ strategy remains a core element of the COVID-19 public health response. I advise the ongoing use of testing, isolation and quarantine measures that align with the National Cabinet agreed position as presented in the COVID-19 Test & Isolate National Protocols (Australian Government Department of Health (c), 2022). Consistency on these core measures across jurisdictions will support community adherence with public health advice and guidelines.

118. As I outlined in paragraph 59, modelling undertaken on behalf of the Department of Health reported the impact of removing isolation and close contact management requirements on a number of variables including case numbers, hospitalisations, and deaths. The complete removal of these requirements resulted in a significant upsurge in the number of cases per day. This is projected to correlate with a subsequent and substantial increase in COVID-19 related hospitalisations and deaths.

Testing requirements

119. Testing enables identification of cases of COVID-19 and ensures appropriate public health measures can be implemented rapidly to limit onward transmission and reduce overall adverse outcomes from COVID-19. In addition, timely testing is an important step in the identification of individuals who could benefit from COVID-19 treatments.

120. I advise that testing should continue to be required for close contacts who due to the nature and duration of their contact with a COVID-19 case are at elevated risk of contracting COVID-19. Additionally, testing should be recommended for all other contacts and should be a requirement if they become symptomatic.

121. In alignment with Communicable Disease Network Australia (**CDNA**) guidelines, it is important that PCR testing resources are prioritised to ensure availability for individuals who may be eligible for COVID-19 treatments (including those at risk of severe illness), individuals who need hospital care and instances where additional public health measures may be necessary (Communicable Diseases Network Australia (a), 2022). It is important that PCR testing is accessible and encouraged early in the course of illness to enable timely engagement with treatment pathways and assessment for antiviral treatment. Ample supply of RA tests should also be available and accessible to the public to enable case detection, isolation, and management of contacts.

Isolation

122. To interrupt chains of transmission and limit further exposure to the community, cases should continue to be required to isolate during the timeframe that they are most infectious. In alignment with current CDNA guidelines, this should be for a period of seven days from their positive test result (Communicable Diseases Network Australia (a), 2022).

123. The projected negative impacts of removing isolation requirements for cases, as outlined in paragraph 59, reaffirm my advice that a seven-day isolation requirement for cases continues to be critical. Isolation of cases remains an effective and essential measure to minimise onward transmission, and the negative impacts on the health service and on death rates as we move through winter.

124. I advise that the current reasons an individual can leave self-isolation should be retained. These reasons include – but are not limited to – obtaining medical care or medical supplies, getting tested for COVID-19, in any emergency situation, if required to do so by law and, if other arrangements cannot be made, transporting another person they live with to, or from, a work premises, an education facility or healthcare appointment. In addition to the above, I advise that cases should also be allowed to leave self-isolation to transport another person they live with to obtain essential food. COVID-19 food relief programs will cease or scale back from 30 June 2022, which may contribute to a further, and likely inequitable, risk for Victorians. Providing an additional way for households to continue to obtain essential food is an appropriate and proportionate measure to ensure household members are able to access food for their loved ones.

Quarantine

125. Close contacts are defined as those who have spent more than four hours with a COVID-19 case at a private residence, accommodation setting or care facility. This cohort are at high risk of acquiring and transmitting the virus to other individuals in the community.

126. In order to minimise this risk, I advise that close contacts should continue to be required to either quarantine for seven days or be permitted to leave quarantine if specific additional precautions are taken to reduce the risk of onward transmission. These additional precautions include undertaking RA testing on five of the seven days at least 24 hours apart, wearing a face mask in indoor settings outside their place of self-quarantine and avoiding visiting a hospital or care facility. In addition, I advise that close contacts must notify their workplace or education facility of their close contact status.

127. These measures mitigate against societal disruption and workforce burdens associated with quarantine requirements while taking necessary steps to reduce onward transmission particularly in sensitive settings. If a close contact develops symptoms of COVID-19 at any time during the seven-day period, they should be recommended to undertake a RA or PCR test and self-quarantine- until a negative result is received.

128. I advise that if during this seven-day period the close contact returns a positive COVID-19 test result (either a PCR or RA test) they should then be managed as a confirmed or probable case respectively and follow the isolation requirements outlined above in paragraph 122.

129. As described in paragraph 71, there is emerging evidence that suggests BA.4 and BA.5 can evade immunity gained following BA.1 infection, increasing the likelihood of reinfection. Noting this evidence, I advise that there should be a reduction in the period where recovered cases do not need to be tested or managed as a close contact from 12 weeks to four weeks following the end of their isolation period. This is expected to align with forthcoming advice from AHPPC.

130. For those close contacts who quarantine for seven days (instead of taking the additional precautions as detailed above), there are limited reasons an individual can leave self-quarantine and I advise that these should be retained. These reasons include – but are not limited to – obtaining medical care or medical supplies, getting tested for COVID-19, in any emergency situation and if required to do so by law.

131. I advise the Minister that the Chief Health Officer, Deputy Chief Health Officers and local public health unit (**LHPU**) Directors and Medical Leads retain powers to grant temporary exemptions to confirmed cases and close contacts and reduce the period of their self-isolation or quarantine.

Social contacts

132. A social contact is someone who has spent greater than 15 minutes face-to-face, or more than two hours in an indoor space with a case during their infectious period but does not meet the criteria of a close contact. Given this exposure to an infectious individual, I advise that social contacts should continue to be recommended to undergo daily RA testing for five days following notification. If they develop symptoms of COVID-19 they should be required to undergo testing and self-quarantine until they receive a negative result. These remain proportionate measures that assist with early identification of potential cases and interrupt ongoing chains of transmission.

Obligations to notify

133. I advise that individuals who have a positive RA test should continue to be required to report their positive test to the Victorian Department of Health. Reporting positive test results enables COVID positive individuals to be linked to the COVID-19 Positive Pathways program, which provides community-based support, appropriate care and access to financial support.

134. This requirement also informs the Victorian Department of Health about emerging epidemiological trends and priorities, which will assist planning and the provision of additional supports or resources, such as health messaging, testing and access to treatment pathways.

135. I advise that this personal and health information should continue to be managed in accordance with the privacy protection afforded by the *Privacy and Data Protection Act 2014* (Vic) and the *Health Records Act 2001* (Vic).

136. The requirements for COVID-19 cases to notify all contacts should be retained. Individuals who are confirmed or probable cases should advise their workplace or education facility that they have tested positive to COVID-19 if they attended onsite during their infectious period. Cases should also be required to inform all persons who may be a close contact or a social contact about their diagnosis. These obligations help identify new potential cases and enable appropriate public health measures to be rapidly implemented to limit onward transmission.

International travel

137. Throughout the pandemic, the management of international arrivals has been adjusted in accordance with the risk posed to the Victorian community. Travel requirements were recently revised and the management of all arrivals via air and sea (including all crew except cruise ship passengers and crew) now align.

138. International arrivals should continue to have some limited testing obligations to enable rapid identification of cases and limit onward transmission. As there is widespread community transmission in Victoria, the risk posed from international travel is much less than earlier stages in the pandemic, however, exposure to COVID-19 may still occur during transit and at passenger terminals. For this reason, I advise that international air and sea arrivals (including all crew) should continue to be strongly recommended to undertake a PCR or RA test within 24 hours of arrival. If symptoms develop within seven days of arrival, they should be required to undertake a RA or PCR test for COVID-19.

Cruise ship requirements

139. There is a heightened risk of incursion, transmission and outbreaks on board cruise ships compared with other forms of transport due to the population density and the close quarters shared by people on board (Communicable Diseases Network Australia (b), 2022). Thus, it is essential that strong risk mitigation measures are in place to decrease the chance of widespread transmission onboard and potential subsequent impact to onshore communities.

140. I advise that the power for the Secretary of the Department of Health, Chief Health Officer or Deputy Chief Health Officer to make a protocol that stipulates requirements for cruise ship operators and passengers should be retained.

141. A protocol may have measures including – but not limited to – pre-embarkation traveller communication, vaccinations requirements for crew and passengers, mask requirements for crew and passengers, testing protocols and isolation and quarantine requirements. These measures are appropriate and proportionate to reduce the risk of outbreaks on board cruise vessels.

Worker vaccination requirements

142. COVID-19 vaccines have played a critical role in protecting individuals, workers, and the wider community against the harms of COVID-19. I have outlined the evidence on vaccine effectiveness in paragraphs 77 to 81, and in more detail in my advice to extend the Pandemic Declaration.

Third dose requirements for workforces

143. I have carefully considered the ongoing role of vaccine requirements for specific workers, and the available evidence pertaining to vaccine effectiveness (paragraphs 77 to 81) and advise the Minister that third dose mandates should continue for:

    i. Residential aged care, healthcare and disability workers who provide care to population groups at increased risk of adverse health outcomes from COVID-19 infection;

ii. Emergency services workers who are involved in providing critical operations and essential goods and services to the community;

iii. Custodial employees who work alongside members of the community who may be at greater risk of severe health outcomes, in settings at increased risk of incursion and amplification;

iv. Education facility staff who work in specialist school settings who support the learning and development of children with disabilities.

144. Third dose mandates should be retained for these workforces because they are involved in the care of at-risk populations, are at higher occupational risk of COVID-19 or are critical to providing or maintaining emergency services.

145. Residential aged care, health care and disability workers provide care to individuals who are at higher risk of serious illness, hospitalisation, and death due to COVID-19. There is a risk of transmission to those most at risk when providing essential care as staff may need to work in close physical proximity for prolonged or repeated periods. As described in paragraph 78, a third dose may reduce the risk of onward transmission of BA.1 and BA.2 and therefore conferring additional protection to these high-risk individuals (Lyngse, et al., 2022). The nature of the work also confers an occupational exposure risk for these workforces and this requirement will provide greater protection to staff from severe adverse health outcomes. Protecting the health and wellbeing of these workers may also limit workforce shortages and ensure the ongoing delivery of safe and high-quality care to residents and patients.

146. Emergency services employees work across the community to deliver or support the provision of emergency care. These workforces include – but are not limited to – the police, firefighting services, ambulance services, air ambulance and retrieval services, State Emergency Services, Emergency Services Telecommunications Authority, aquatic safety services and essential infrastructure and services. Due to the nature of their role, there may be circumstances where it is challenging for the above workforces to maintain physical distance, increasing their transmission and acquisition risk. Further, employees providing ambulance, police and other emergency services may also interact with individuals at risk of serious consequence from COVID-19. This measure will confer direct protection to staff and help maintain workforce capacity to support the ongoing provision of essential services.

147. Staff working in custodial settings may work alongside individuals who are at higher risk of severe health outcomes. The physical environment of these settings also confers a risk of virus incursion, amplification and transmission to at-risk individuals.

148. Education staff working in specialist school settings work alongside children who may be at higher risk of severe COVID-19 related outcomes. There is a risk of transmission as staff work in close proximity with children who may have various ability to physically distance and often in indoor settings. This measure will also align with the vaccination requirement for staff working in disability settings.

149. Third dose vaccination requirements for workers in residential aged care, healthcare, disability, emergency services, custodial workers and education staff working in specialist schools continue to be a proportionate measure, as I consider the potential benefits to workers and at-risk cohorts outweigh the potential harms.

150. I advise that the exception to allow workers to leave their residence to escape the risk of harm, including family violence, by being able to attend the workplace even if they do not meet vaccination requirements should continue.

151. Vaccines continue to be one of our strongest defences against COVID-19. Industries and employers should continue to engage, educate, facilitate, and incentivise staff to maintain 'up-to -date' vaccination status where eligible as per ATAGI guidelines, regardless of mandates. This will support safe and healthy workplaces for employees and members of the public who may visit.

Care facilities

152. Care facilities provide care and support for members of the community who may be elderly, frail immunocompromised, have complex care needs or multiple comorbidities. These health factors confer greater risk of severe adverse health outcomes due to COVID-19.

153. Care facilities are a group of very diverse facilities that vary in size, services provided, characteristics of the patients or residents and level of incursion risk. The following settings are included in the definition of a care facility:

    i. Residential aged care facilities;
    ii. Disability residential services;
    iii. Alcohol and drug residential services;
    iv. Homelessness residential services;
    v. Eligible supported disability accommodation (**SDA**) enrolled dwellings;
    vi. Secure welfare services;
    vii. Short term accommodation and assistance dwellings;
    viii. Supported residential services;
    ix. The Thomas Embling Hospital.

Visitor entry requirements and visitor caps

154. I advise the Minister that visitor entry requirements for care facilities should be retained to provide the strongest protection to individuals who are most at risk of severe morbidity and mortality. In the context of sustained community transmission, people gathering indoors due to the cooler weather, waning vaccine-induced and natural immunity among the general population and low fourth dose vaccination, these measures are appropriate and proportionate. Visitor entry requirements include written attestation, pre-entry RA testing and face mask requirements.

155. With these measures in place to limit viral incursion, it remains proportionate that visitor caps (numbers of visitors per resident) continue to be at the discretion of individual facilities. As I have previously expressed, it is vital that care facilities apply a compassionate approach to visitor arrangements. This will ensure residents' health and wellbeing, while the ongoing risks posed by COVID-19 are mitigated.

Testing requirements for care facilities

156. As Victoria continues to experience a high rate of community transmission, RA tests remain an important measure to limit viral incursion into care facilities. RA tests are a useful screening tool as they are quick, convenient and exclude COVID-19 infection with a high level of accuracy.

157. I advise that all visitors to care facilities should continue to have a negative RA test result on the day of visitation. As I recently advised, pre-entry testing can be undertaken prior to arriving at the facility to avoid additional staffing pressures on an already stretched workforce. As part of the entry written attestation, the visitor should be required to attest that a test has been completed and returned a negative result.

158. Current exceptions to pre-entry RA testing should also be retained. This includes end of life visitation, individuals providing professional patient care or persons providing urgent support for a resident's immediate physical, cognitive, or emotional wellbeing and it is not practicable to undertake a RA test prior to entering the facility. Individuals who are excepted from testing requirements should be strongly recommended to complete a RA test after their visit as soon as is practicable. Individuals who have undertaken a PCR test within 24 hours prior to visiting a RACF are should also be excepted from RA testing requirements.

Essential visitors to care facilities

159. In the event of an outbreak at a care facility, I advise the Minister that essential visitors continue to be permitted to enter these facilities under the Benchmark Essential Visitors List (**BEVL**). Essential visitors should include:

    i. Parents or guardians of the resident if they are aged under 18 years;

    ii. Parent, guardian (including guardians appointed by the Victorian Civil and Administrative Tribunal), partner, carer, support, or other named person of a resident who is aged 18 or over to provide emotional and social support;

    iii. Persons providing care and/or support for a resident's immediate physical, cognitive, social, or emotional wellbeing (including mental health support and support for people living with dementia);

    iv. Persons providing end of life support and visits;

    v. Nominated person in the case of a resident's mental illness or incapacity;

    vi. Persons providing learning and/or training to support a resident's care and/or discharge;

    vii. Interpreters or inform language support;

    viii. On-site attendance of contractors;

ix. Aged and disability care advocates;

x. Legal representatives of residents and persons with power of attorney for residents;

xi. Volunteers in the Community Visitors Scheme.

160. Visitors included as part of this essential visitors list who are attending a care facility should continue to be required to complete the care facility visitor pre-entry requirements.

Conclusion

161. The advice set out above details the public health measures I believe should continue to be required or recommended to manage the ongoing challenges that COVID-19 presents to Victoria. I have considered that Victoria is entering an epidemic wave driven by BA.4 and BA.5, in addition to the risks posed by BA.2 and BA.2.12.1 sublineages, coupled with increased transmission during the winter period, and the gradual waning of natural and vaccine-induced immunity to COVID-19 within the community. I have also considered the significant additional pressure these factors may place on an already stretched health system. With these factors considered, there is a need for sustained and comprehensive public health measures with strengthened engagement and communications to address the significant public health risk posed, reduce transmission and limit further impacts on individuals, health resources and the wider community.

Professor Benjamin Cowie

Victorian Acting Chief Health Officer

Dated this 07 Thursday of July 2022

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