PARLIAMENT OF TASMANIA

PARLIAMENTARY STANDING COMMITTEE OF PUBLIC ACCOUNTS

Inquiry into the Tasmanian Government's Continuing Response to the COVID-19 Pandemic:

Preparation for the State Border Re-opening on 15 December 2021

Members of the Committee

Legislative Council

Hon Ruth Forrest MLC
(Chair)

Hon Meg Webb MLC

Hon Josh Willie MLC

House of Assembly

Ms Lara Alexander MP
(from 16 August 2022)

Dr Shane Broad MP
(Deputy Chair)

Mr Felix Ellis MP
(until 25 July 2022)

Mr John Tucker MP
(until 21 November 2022)

Mr Dean Young MP
(from 23 November 2022)

Table of Contents

Charter of the Committee

The Public Accounts Committee (the Committee) is a Joint Standing Committee of the Tasmanian Parliament constituted under the *Public Accounts Committee Act 1970* (the Act).

The Committee comprises six Members of Parliament, three Members drawn from the Legislative Council and three Members from the House of Assembly.

Under section 6 of the Act the Committee:

- must inquire into, consider and report to the Parliament on any matter referred to the Committee by either House relating to the management, administration or use of public sector finances; or the accounts of any public authority or other organisation controlled by the State or in which the State has an interest; and

- may inquire into, consider and report to the Parliament on any matter arising in connection with public sector finances that the Committee considers appropriate; and any matter referred to the Committee by the Auditor-General.

Abbreviations and Acronyms

ACCHS	Aboriginal Community Controlled Health Service
ACEOC	Aged Care Emergency Operations Centre
AEFI	Adverse Event Following Immunisation
AGDH	Australian Government Department of Health
AHPPC	Australian Health Protection Principal Committee
AMA	Australian Medical Association
ANMF	Australian Nurses and Midwifery Federation
AT	Ambulance Tasmania
ATAGI	Australian Technical Advisory Group on Immunisation
CALD	Culturally and Linguistically Diverse
CCC	COVID-19 Coordination Centre
CCMF	Community Case Management Facilities
CDNA	Communicable Diseases Network Australia
CHaPS	Child Health and Parenting Service
CMV	Cytomegalovirus
ComRRS	Community Rapid Response Service
COVID-19	Coronavirus Disease 2019
CPSU	Community and Public Service Union
Delta	COVID-19 B.1.617.2 variant
DEOC	Disability Emergency Operations Centre
DoE	Department of Education
DoH	Department of Health
DORA	Drugs and Poisons Information System Online Remote Access
DPAC	Department of Premier and Cabinet
ECC	Emergency Coordination Centre
ECEC	Early Childhood Education and Care
ED	Emergency Department
EOC	Emergency Operations Centre
FTE	Full-time equivalent
G2G	Good to Go
GP	General Practitioner
HACSU	Health and Community Services Union
ICU	Intensive Care Unit
IT	Information Technology
LGA	Local Government Area
LGH	Launceston General Hospital
MCOT	Multicultural Council of Tasmania
MLC	Member of the Legislative Council
MONA	Museum of Old and New Arts
MP	Member of Parliament
N95/P2	Particulate filter respirators
NDIS	National Disability Insurance Scheme
NPA	National Partnership (on COVID-19 Response) Agreement
NSW	New South Wales
NT	Northern Territory
Omicron	COVID-19 B.1.1.529 variant
PACER	Police, Ambulance and Clinician Early Response
PBS	Pharmaceutical Benefits Scheme
PCR	polymerase chain reaction testing

PESRAC	Premier's Economic and Social Recovery Advisory Council
PGA	Pharmacy Guild of Australia
PHEOC	Public Health Emergency Operations Centre
PHS	Public Health Service
PHSM	Public health and social measures
PHT	Primary Health Tasmania
PPE	Personal Protective Equipment
PSA	Pharmaceutical Society of Australia
QR codes	Quick response code
RACFs	Residential Aged Care Facilities
RATs	Rapid Antigen Tests
RHH	Royal Hobart Hospital
SMS	Short message service
SoNG	Series of National Guidelines
TAHRG	Tasmanian Aboriginal Health Reference Group
TasCOSS	Tasmanian Council of Social Service
TCCI	Tasmanian Chamber of Commerce and Industry
TGA	Therapeutic Good Administration
THS	Tasmanian Health Service
TNDD	Tasmanian Notifiable Diseases Database
TTIQ	Testing, tracing, isolation and quarantine
TVEOC	Tasmanian Vaccination Emergency Operations Centre

Executive Summary

The COVID-19 pandemic created substantial disruption to all areas of life and significant challenges for all governments. The decision to close the Tasmanian border to mainland states and international visitors on 20 March 2020 was generally welcomed by the majority of Tasmanians. This action effectively prevented further community transmission and enabled Tasmanians the opportunity to go about their lives, with a range of public health restrictions and requirements with greater freedom than some other mainland states.

Previous inquiries into the Tasmanian Government's response to the pandemic, including the decision to close the Tasmanian border, are available on the Committee website.[1]

On 23 February 2022, the Committee resolved to conduct an inquiry into the continuing response to the COVID-19 pandemic by the State Government, particularly the preparation for the re-opening of the Tasmanian border to other mainland States and international arrivals. This Report, one of three related Reports, focusses on the planning and preparedness for the re-opening of the Tasmanian border, and should be read in conjunction with the related Committee Reports.[2]

In late 2021, the Tasmanian Government began planning and preparation guided by specific modelling undertaken by the Kirby Institute and national modelling undertaken by the Doherty Institute based on the likely social, health related and economic impacts of the border re-opening. This modelling was based on the predominant variant at the time, the Delta variant.

The date of 15 December 2021 was determined by the Government to be the fixed date to re-open the border. At this time, it became apparent the Delta variant had been replaced by the more transmissible Omicron variant as the predominant variant. The Omicron variant whilst more transmissible, generally caused less severe symptoms.

The hard date for the re-opening of the border was not universally welcomed. The business sector welcomed this announcement to enable retail and hospitality to recover financially and to facilitate travel to enable families to be together over Christmas. The announcement was received with concern by the health care representatives, citing inadequate time to prepare.

High rates of vaccination was encouraged and achieved in the planning for the re-opening of the border in all cohorts other than children between 5 and 12 years of age. Rates of vaccination in this younger cohort remains lower than some other Australian jurisdictions. Public health advice supports the importance of high rates of vaccination as a key measure to reduce serious illness, hospitalisation, intensive care admission and death.

Vaccination was made available free of charge to all eligible Tasmanians through a range of sites. The cost of the vaccination rollout was shared between the State and Australian

[1] See Final Report - Inquiry into the Government's Economic Response to the COVID19 pandemic (No. 13 of 2021) 13 August 2021, https://www.parliament.tas.gov.au/__data/assets/pdf_file/0027/58356/covid-1920inquiry20final20report20full20signed.pdf

[2] See Tasmanian Government's Continuing Response to the COVID-19 Pandemic, https://www.parliament.tas.gov.au/committees/joint-committees/standing-committees/public-accounts-committee/inquiries/tasmanian-governments-continuing-response-to-the-covid-19-pandemic

Governments. Vulnerable Tasmanians were prioritised during the vaccine rollout. The sites included state run vaccination hubs, participating General Practice, participating pharmacies and mobile services. The opportunity for pharmacists to provide COVID-19 vaccinations was delayed due to delays in the timely adoption of the ATAGI guidelines by the State Government, delays that did not occur in some other jurisdictions. When pharmacies were included in the vaccine rollout, the State Government assisted pharmacies with the provision of vaccinations in times of inconsistent supply from the Australian Government channels.

The Department of Health established an Adverse Event Following Immunisation (AEFI) surveillance system to enable close oversight of adverse events, including vaccine administration errors. This system will be utilised to monitor vaccination related adverse events for other non COVID-19 vaccines.

The *Vaccination Requirements for Certain Workers Direction* applied to, among others, all workers employed, or engaged by, public and private health care facilities and included all Department of Health employees. The Committee noted workers subject to the *Vaccination Requirements for Certain Workers Direction* were given the opportunity to comply with the mandate or provide a medical exemption and less than one percent of the State Department of Health's employees had their employment terminated as a result of non-compliance with the vaccination mandate.

The Testing, Tracing, Isolation and Quarantine (TTIQ) requirements and directions were based on the Kirby modelling that assumed the Delta variant as the likely dominant variant. These measures required rapid modification on re-opening of the border to adjust to the more highly transmissible Omicron variant. The rapid transmission of COVID-19 across the State meant declaration of exposure sites became redundant and Public Health moved the focus to settings where vulnerable people were located. Contact tracing was also rapidly moved from an individual case management to self-notification of contacts for COVID-19 positive individuals.

In preparation for and following the border re-opening, the Government conducted a range of regular communications with key stakeholder groups, including vulnerable cohorts. The Department of Health utilised an application, the Reach App, which was well received by health staff and assisted effective and timely communication. The Committee recommends similar communication tools be developed as a general communication tool across other government departments.

Ambulance Tasmania expanded both the paramedic workforce and the ambulance fleet during the pandemic. Infection control measures utilized by Ambulance Tasmania were very effective with no recorded transmission of COVID-19 during the transportation of patients from home or community settings to hospitals.

The COVID@home program was rolled out quickly and provided effective and timely access to care at home for COVID positive individuals whose symptoms could be managed at home. The Committee recommends this program be reviewed to inform service delivery planning for future pandemics. The Committee notes the proposal, referred to in the evidence, to

review the first 150 days of COVID@home, however, to date a report has not been publicly released.

Access to antivirals specific to COVID-19 were developed and made available to vulnerable patients and delivered through the COVID@home program. Initially antivirals were only available in hospital settings. Subsequently, antiviral medications were included on the Pharmaceutical Benefits Scheme (PBS) and could be prescribed by General Practitioners and dispensed through community pharmacies.

The COVID@homeplus program was introduced as an expansion of COVID@home to support people at home with other respiratory illnesses such as influenza. This program was successful and helped people without severe disease remain at home and avoid the acute hospital system.

Community Case Management Facilities were established to provide a safe place for COVID-19 positive patients to be cared for when they did not have suitable accommodation where they could isolate or were homeless and didn't require acute hospital care.

The Committee has made five (5) overarching recommendations to inform future planning for the management of a pandemic. The Committee recommends government take a multi-disciplinary approach to health care and service delivery that includes all health care providers in the acute and community health care settings in all future pandemic planning. This includes services predominantly managed under the Australian Government such as pharmacies and the full utilisation of pharmacist's capability and general practice.

A similar multi-disciplinary approach is recommended to be taken when planning for and managing communication with all key stakeholders and health care providers. The implementation of a timely, coordinated and consistent communication plan during the planning for and management of a future pandemic is also recommended. Such communication plans should ensure the most contemporary information and communication tools are utilised.

The Committee also recommends consideration be given to the use of modelling that can be updated in a timely manner when needed to respond to rapidly changing circumstances including increased health related risks and threats.

The Committee made five (5) recommendations on specific areas related to the planning, preparedness, management of and response to the re-opening of the Tasmanian border on 15 December 2021. These relate to the COVID@home and subsequent COVID@homeplus programs, use of the Reach App, a communication tool utilised by the Department of Health and vaccine accessibility.

The Committee noted the importance of review of the COVID@home program to inform service delivery planning for future pandemics. The Committee recommended the COVID@homeplus program be maintained and adapted to respond to other communicable diseases. The Reach App was a very effective communication tool and one that could have much broader application across a range of government departments. The importance of access to vaccination services was also noted as an important health measure, and the failure

of the State Government to respond promptly to changing guidelines of Australian Technical Advisory Group on Immunisation (ATAGI) was noted as a barrier to access in some regional areas.

The Committee acknowledges the challenges associated with the decision to re-open the Tasmanian border and the lack of universal acceptance of the hard date of 15 December 2021.

The Committee further acknowledges the extraordinary workload of many in the planning and preparation for the border re-opening that was made more challenging by the arrival of the more highly transmissible COVID-19 Omicron variant. This factor created additional pressure on our health system and health care providers and contributed to increased community anxiety with many vulnerable Tasmanians electing to isolate during this period of uncertainty in what was described as a 'shadow lockdown'.

Overall, the significant preparation and planning, supported by high rates of full COVID-19 vaccination by eligible Tasmanians, even in light of the more transmissible Omicron variant, enabled many families to be together over Christmas and make informed decisions regarding their social interactions. The business community welcomed the decision whilst health professionals broadly stated that a greater lead time was needed following the emergence of the Omicron variant as the dominant variant. The Committee acknowledges the competing viewpoints.

Hon Ruth Forrest MLC
Chair

10 October 2023

Summary of Findings

The Committee found:

Area	Finding
Public Health Advice in Support of Re-opening	F1. The Delta variant of COVID-19 was overtaken as the predominant strain by the more transmissible Omicron variant on or about the time of the Tasmanian border re-opening. F2. The Tasmanian-focussed Kirby Institute modelling was used initially for assessing possible outcomes based on the Delta variant. The nationally focussed Doherty Institute modelling was adopted for the Omicron variant. F3. Planning around the border re-opening was based on modelling of the Delta variant. This was challenged by the arrival of the more transmissible Omicron variant. F4. The Tasmanian Government's decision to re-open the State border on 15 December 2021 was not universally supported. F5. The State led multidisciplinary COVID-19 stakeholder meetings were seen as valuable sources of information exchange between the parties.
Long COVID-19	F6. The Department of Health website indicates a post COVID-19 navigation service is available. F7. Other jurisdictions have established clinics that specialise in the diagnosis and treatment of long COVID-19. F8. Long COVID-19 clinics have not been established in Tasmania.
Use and Availability of Anti-Virals in Treating COVID-19	F9. Timely access to and availability of suitable antivirals for COVID-19 treatment in Tasmania is considered vital. F10. The roll-out of antivirals as part of the COVID@home program was effective. F11. Inclusion of COVID-19 antivirals on the Pharmaceutical Benefit Scheme increased accessibility and affordability for patients through pharmacies.
Effective Testing Tracing Isolation and Quarantine	F12. The Series of National Guidelines was developed and updated by the Communicable Diseases Network Australia. These guidelines outlined Australia's national minimum standard for surveillance, laboratory testing, case management and contact management for COVID-19. F13. Testing, tracing, isolation and quarantine measures in Tasmania were guided by national advice and recommendations, as provided in the Coronavirus Disease 2019 Communicable Diseases Network Australia, the Series of National Guidelines, and the Australian Health Protection Principal Committee. F14. Significant work was undertaken to strengthen Tasmania's COVID-19 testing and laboratory capacity prior to opening of the Tasmanian border, based on modelling of demand related to the Delta variant. F15. The emergence of the Omicron variant on the re-opening of the Tasmanian border placed extreme pressure on PCR testing clinics particularly in the last week of December and early January 2022.

Area	Finding
	F16. The decision to introduce the use of Rapid Antigen Tests on 6 January 2022 enabled greater access to timely testing and results. F17. The supply and distribution of Rapid Antigen Tests was effective and generally timely, including through the use of Australia Post for those unable to access a distribution centre. F18. The cost of establishing and operating the state's COVID-19 testing facilities, including staffing and security, and the purchase and distribution of Rapid Antigen Tests was considerable. These costs were shared between the State and Australian Governments. F19. When the Tasmanian border re-opened on 15 December 2021, contact tracing was to play an important role in managing the spread of the virus. F20. The Omicron variant entered the State with the first airline passenger arrivals on 15 December 2021. F21. With the emergence of the Omicron variant contact tracing processes were significantly and rapidly modified to respond to the higher transmissibility. F22. Isolation for positive cases and quarantine for close contacts were in place when the Tasmanian border re opened and timeframes were adjusted as circumstances changed. F23. To address critical workforce shortages and supply chain challenges, quarantine requirements were changed for certain workers on 14 January 2022.
Triaged Models of Care for Positive Cases, COVID@home and COVID@homeplus	F24. The COVID@home and COVID@homeplus interventions were of value in reducing potential hospital admissions during the COVID-19 period. F25. The COVID@home and COVID@homeplus interventions was cost effective due to reducing demand on the acute hospital system.
Community Case Management Facilities	F26. The Community Case Management Facilities were important in accommodating COVID-19 positive patients, who were unable to be managed at home but did not require hospital-level care.
Hospital Capacity	F27. Tasmania was fortunate to have manageable levels of intensive care unit utilisation by COVID-19 patients. F28. Additional beds were brought on-line across the Tasmanian Health Service and through private-public partnerships, enabling elective surgery to continue after the re-opening of the border.
Personal Protective Equipment (PPE) Supply	F29. The State Government made a significant investment in the provision and stock piling of PPE for the State. F30. Under the National Partnership on COVID-19, 50 per cent of PPE costs incurred were funded by the Australian Government.
Ambulance Tasmania Preparedness	F31. In response to COVID-19 pandemic, Ambulance Tasmania increased its paramedic workforce, including the development of the community paramedic role and secondary triage service. F32. COVID-19 infection control measures implemented by Ambulance Tasmania successfully prevented transmission during ambulance transfers. F33. The Ambulance Tasmania fleet was expanded to manage the potential impact of COVID-19 on the Tasmanian community. F34. To provide additional capacity, older vehicles that were assessed as safe were retained in the Ambulance Tasmania fleet.

Area	Finding
Public Stakeholder Communications	F35. The Tasmanian Government conducted a range of regular communications with key stakeholder groups, including vulnerable cohorts, in preparation for and following the border re-opening. F36. The Reach App was well received by health staff and assisted effective and timely communication.
Tasmania's Vaccination Rollout	F37. Tasmania achieved high rates of vaccination across eligible cohorts prior to the border re-opening on 15 December 2021. F38. The Tasmanian Government expended a considerable amount of funding on the Tasmanian vaccination roll-out. F39. As at 16 March 2023, the 5 to 11 year old cohort in Tasmania still lagged behind other age cohorts for COVID-19 vaccinations: 57.34 % for the first dose and 47.97 % for the second dose.
Other Vaccination Related Findings	F40. The Tasmanian Vaccination Emergency Operations Centre was established and commenced operations in March 2021 to support the rollout of COVID-19 vaccines. F41. The Tasmanian Vaccination Emergency Operations Centre liaised with other relevant Emergency Operations Centres to prioritise and support access to vaccination for vulnerable groups. F42. The Tasmanian Vaccination Emergency Operations Centre worked closely with community groups and key stakeholders to support equitable access to vaccination in regional and rural Tasmania. F43. Tasmania's communications and campaign approaches were informed by expert medical advice and decisions from the Therapeutic Goods Administration (TGA), the Australian Technical Advisory Group on Immunisation (ATAGI) and the Australian Health Protection Principal Committee (AHPPC). Communications evolved during the vaccination rollout to include specific guidance on eligibility and clinic locations. F44. The Department of Health established State Community Clinic sites to deliver a high volume of vaccinations across the state to support equitable access and encourage vaccination uptake. F45. The Therapeutic Goods Administration provisionally approved the Pfizer vaccination for children aged 5 to 11 years on 5 December 2021. Due to the variation in dose requirements, exclusive children's clinics were established across Tasmania, operating from 10 January 2022. F46. The Department of Health established an Adverse Event Following Immunisation (AEFI) surveillance system to enable close oversight of adverse events, including vaccine administration errors. F47. Tasmanian pharmacists could not deliver COVID-19 vaccinations as soon as those in New South Wales and Queensland as the Australian Technical Advisory Group on Immunisation (ATAGI) guidelines hadn't been adopted at that time in Tasmania. F48. Pharmacists and access to a local pharmacy played an important role in the delivery of health care and vaccinations during the COVID-19 vaccination rollout when approved to do so. F49. The State Government assisted pharmacies with the provision of vaccinations in times of inconsistent supply from the Australian Government channels.

Area	Finding
Impacts on Vaccination Mandates	F50. Vaccinations were made available to all Tasmanians free of charge. F51. At February 2023, Tasmania's vaccination program was expected to total approximately $27.8 million, with a significant portion dedicated to salaries and wages and operational costs. F52. Cost of the vaccination rollout was shared between the State and Australian Governments with $10.9 million expected in Commonwealth Government funding for 2021-22 and state funding of $16.9 million. F53. The *Vaccination Requirements for Certain Workers Direction* applied to, among others, all workers employed, or engaged by, public and private health care facilities and included all Department of Health employees. F54. Workers subject to the *Vaccination Requirements for Certain Workers Direction* were given the opportunity to comply with the mandate or provide a medical exemption. F55. Less than one percent of the State Department of Health's employees had their employment terminated as a result of non-compliance with the vaccination mandate.

Summary of Recommendations

The Committee made five overarching recommendations:

R1. In all future pandemic planning, Government take a multi-disciplinary approach to health care and service delivery that includes all health care providers in the acute and community health care settings.

R2. During a pandemic, Government take a collaborative approach to communication with all key stakeholders and health care providers.

R3. Government ensure a timely, coordinated and consistent communication plan be utilised for all communications.

R4. When responding to future pandemics, all areas of Government ensure the most contemporary information and communication tools are utilised.

R5. Where practicable, ensure the modelling used can be updated in a timely manner to respond to rapidly changing circumstances, including increased health related risks and threats.

The Committee made five recommendations related to specific areas related to the planning, preparedness, management of and response to the re-opening of the Tasmanian border on 15 December 2021.

Area	Recommendation
Long COVID-19	R6. The State Government continue to monitor the incidence and impact of long COVID-19 and whether long COVID-19 clinics or other services are required.
Triaged Models of Care for Positive Cases, COVID@home and COVID@homeplus	R7. The COVID@homeplus program be reviewed to inform service delivery planning for future pandemics. R8. The COVID@homeplus program be maintained and adapted to respond to other communicable diseases.
Public Stakeholder Communications	R9. The Reach App, or similar, be considered for adoption across other Government departments as a general communication tool.
Other Vaccination Related Findings	R10. In any future pandemic the State Government act promptly to adopt (ATAGI) guidelines when updated with regard to the provision of relevant vaccinations in pharmacies.

Conduct of Review

On 23 February 2022, the Committee resolved to conduct an inquiry into the COVID-19 related responses and measures taken by State Government. Following this resolution, a media release and terms of reference were circulated and published on the Committee's website.[3]

The terms of reference included the Committee undertaking further inquiries into the Tasmanian Government's continuing response to the COVID-19 pandemic. This inquiry had a particular focus on: measures taken by the Government (including relevant Public Health advice) to prepare for the State border re-opening on 15 December 2021, the return to school for the 2022 school year, the vaccination rollout leading up to border re-opening, and relevant business support and the efficacy of the COVID-19 Tasmanian Check-in app.

Re-opening of the Tasmanian Border

- the financial and public health measures taken by Government to prepare for the re-opening of the Tasmanian border to other mainland States on 15 December 2021;
- the Public Health advice that supported the re-opening plan; and
- the financial and social impacts associated with measures implemented to support the border re-opening including (but not limited to) impact on:
    - access to health services;
    - patient outcomes;
    - health professionals; and
    - the broader Tasmanian community and economy.

Return to School Plan

- the financial and public health measures taken by Government to prepare for return to school for students and staff for the 2022 educational year;
- the Public Health advice that supported the return to school plan;
- the financial, social and educational impacts associated with measures implemented to support the return to school plan including (but not limited to) impact on:
    - students and educational outcomes;
    - parents and carers;
    - staff; and
    - the broader Tasmanian community and economy.

COVID-19 Vaccination Uptake and Rollout

- the financial and public health measures taken by Government to support and encourage COVID-19 vaccination uptake;
- the Public Health advice that supported these measures including accessibility to vaccinations across all age cohorts;
- the financial implications of the vaccine rollout to the State; and
- the impact on employment in sectors where vaccination was mandated to continue employment.

[3] See Media Advisory – 24 February 2022 on the Committee's website

Targeted Financial Support Programs and Payments

- the financial and public health measures taken by Government to support businesses impacted by COVID-19 since August 2021;
- the financial impacts associated with these measures; and
- the uptake, timeliness and adequacy of the financial support measures.

COVID-19 Check-in App

- the Government's role related to the Tasmanian COVID-19 Check-in App with regard to the application's:
  - development;
  - effectiveness;
  - use; and
  - associated costs
- the Public Health advice that supported the use and development of the COVID-19 Check-in App;
- the advice around the effectiveness and privacy considerations of the COVID-19 manual check in process; and
- the future planning around tracking and tracing.

This Report is one of three separate Reports related to the above areas of inquiry and is primarily focussed on the government's planning and preparation for the re-opening of the Tasmanian border and COVID-19 vaccination uptake and roll-out.

The Committee wrote to the then Premier Hon Peter Gutwein MP and the following Ministers to advise them of the Committee's intentions and invite them and their respective departments to make a submission to the inquiry:

- Hon Jeremy Rockliff MP (Minister for Health)
- Hon Roger Jaensch MP (Minister for Education, Children and Youth)
- Hon Jane Howlett MP (Minister for Small Business)

On the 21 March 2022, the then Premier Gutwein wrote to the Committee seeking an extension of the deadline for Tasmanian Government departments to respond to the enquiry from Friday, 25 March 2022 to Thursday, 14 April 2022. This extension was granted by the Chair and communicated accordingly. The response was received by the Committee on 21 April 2022.

Premier Gutwein announced his retirement from Parliament and as the Member for Bass on Friday, 4 April 2022. Parliament was subsequently prorogued from Wednesday, 6 April 2022 and did not resume until Tuesday, 3 May 2022. By convention, all Parliamentary Committee activity ceased until the relevant Chambers (Legislative Council and the House of Assembly) reappointed the Committee.

On 12 May 2022, the Committee was re-established and noted the new Premier Hon Jeremy Rockliff MP retained his Minister for Health portfolio and the new Minister for Small Business, Hon Madeleine Ogilvie MP, taking over the Hon Jane Howlett's MLC portfolio.

The Committee wrote to the relevant Ministers and invited them to attend the Committee's public hearings into the Inquiry. The ministerial public hearings were held at Committee Room 2, Parliament House as follows:

Friday, 17 June 2022	Friday, 24 June 2022
Hon Roger Jaensch MP **Minister for Education, Children and Youth** <u>Department of Education Representatives</u> Tim Bullard (Secretary) Jenny Burgess (Deputy Secretary Strategy and Performance) Kane Salter (Deputy Secretary Corporate and Business Services) James Burrows (Manager, Office of the Secretary)	**Hon Jeremy Rockliff MP** **Premier** **Minister for Health** <u>Department of Health Representatives</u> Kathrine Morgan-Wicks (Secretary) Lisa Howes (Director, Office of the Secretary) Dale Webster (Deputy Secretary, Mental Health & Wellbeing) Dr Mark Veitch (Director of Public Health) Dr Tony Lawler (Chief Medical Officer & Deputy Secretary, Clinical Quality, Regulation and Accreditation) Craig Jeffrey (Chief Financial Officer) <u>Department of Premier and Cabinet Representatives</u> Jenny Gale (Secretary) Craig Limkin (Deputy Secretary, Policy & Intergovernmental Relations) **Hon Madeleine Ogilvie MP** **Minister for Small Business** <u>Department of State Growth Representatives</u> Kim Evans (Secretary) Mark Bowles (Deputy Secretary, Industry & Business Development)

The Committee wrote to the relevant Ministers seeking their responses from the questions taken on notice during the public hearings. The responses were received as follows:

- 5 July 2022 (Hon Roger Jaensch MP, Minister for Education, Children and Youth), and
- 26 July 2022 (Hon Madeleine Ogilvie MP, Minister for Small Business).

The Parliament was prorogued again between 1 and 16 August 2022 following the resignation of Hon Jacquie Petrusma MP on 25 July 2022.

On 24 August 2022, the Committee resolved to invite representatives from the Tasmanian Greens and a range of Tasmanian medical and allied health stakeholders to provide evidence with respect to the actions taken and the decisions made by the State Government.

A public hearing with the Tasmanian Greens MPs was held on Wednesday, 19 October 2022 at Committee Room 2, Parliament House:

Wednesday, 21 October 2022
Tasmanian Greens Cassy O'Connor MP (Leader and Tasmanian Greens Member for Clark) Dr Rosalie Woodruff MP (Health Spokesperson and Tasmanian Greens Member for Franklin)

On 2 November 2022, the Committee resolved to receive three public submissions from Tasmanian medical and allied health stakeholders. The Committee resolved to publish the public submissions.[4] In addition, the Committee resolved to invite representatives and nominated individuals to public hearings.

Further public hearings with Tasmanian medical and allied health stakeholders, and the business community, were held on Wednesday, 2 November 2022 and Thursday, 23 February 2023 at Committee Room 2, Parliament House:

Wednesday, 2 November 2022	Thursday, 23 February 2023
Pharmacy Guild of Australia (Tasmania Branch) Monique Mackrill (Branch Director) Caleb Stuetz (Member)	**Pharmacy Society of Australia (Tasmanian Branch)** Dr Shane Jackson (National Vice President) Ella Van Tienen (State Manager) **Tasmanian Chamber of Commerce and Industry** Michael Bailey (Chief Executive Officer) **Australian Medical Association (Tasmania Branch)** Dr John Saul (President) Dr Annette Barratt (Vice President)

[4] See Tasmanian Government's Continuing Response to the COVID-19 Pandemic, https://www.parliament.tas.gov.au/committees/joint-committees/standing-committees/public-accounts-committee/inquiries/tasmanian-governments-continuing-response-to-the-covid-19-pandemic

Background

The Committee tabled its first report on the Government's social and economic response to the COVID-19 pandemic (No. 13 of 2021) in August 2021. That Report published 35 findings and 16 recommendations (see 'Completed Inquiries 2021 – 2022' on the Committee's website for further details).[5]

As at 6 October 2023, the total number of confirmed COVID-19 cases in Tasmania stood at 305,155 and 312 deaths.[6] This is compared to the Australian 11.6 million confirmed cases with 23.13k deaths nationally. Globally for the same period, 771.2 million confirmed cases and 6.96 million deaths.[7]

A brief chronology of the relevant COVID-19 events between 1 August 2020 and 12 April 2022 is included in Appendix 1.

This Report (two of three) specifically deals with the preparation for the re-opening of the Tasmanian border on 15 December 2021 and the COVID-19 vaccination roll-out and uptake.

---

[5] See https://www.parliament.tas.gov.au/__data/assets/pdf_file/0027/58356/covid-1920inquiry20final20report20full20signed.pdf
[6] See Tasmanian Department of Health COVID-19 Weekly Statistics, total cases since 15 December 2021, https://www.health.tas.gov.au/health-topics/coronavirus-covid-19/current-risk-level-and-statistics/weekly-statistics
[7] See COVID-19 Data Explorer, https://ourworldindata.org/covid-cases

Evidence

On 24 June 2022, the following statement was provided by Hon Jeremy Rockliff MP (Premier and then Minister of Health) at the public hearing:

> *Mr ROCKLIFF - ... We welcome the opportunity to provide further information today to the Public Accounts Committee, building on our Government's written submission. Our submission highlights how Tasmania established one of the strongest vaccination rates and entered 2022 with one of the strongest economies in Australia. The submission details financial measures designed to support Tasmanians in anticipation of the borders re-opening, outlines instances where the Tasmanian response exceeded standards and targets set as part of the national cabinet process, and highlights areas where support was extended to ensure the health and financial security of Tasmanians.*
>
> *Of course, the Government's priority has been protecting the health and safety of Tasmanians, and we also continue to support economic outcomes during this very challenging time.*
>
> *The re-opening of Tasmania's border through the Reconnecting Tasmania Plan[8] was carefully planned to strike a balance between protecting public health, while supporting economic recovery. Re-opening borders on 15 December 2021 was based on detailed modelling prepared specifically for Tasmania, the Kirby Institute modelling,[9] public health advice developed at both state and national level, the strong uptake of vaccinations by Tasmanians and the aim of 90 per cent vaccination rate, as well as the social benefits of opening our borders.*
>
> *Our decision-making was guided by decisions and advice at the national level, including national cabinet decisions on the national plan to transition Australia's national COVID-19 response, and regular advice from the Australian Health Protection Principal Committee (AHPPC). However, it took into account local needs and local conditions, based on the State's specific modelling, and advice to balance the national approach.*
>
> *We were deliberately slower and more careful in re-opening our borders, ensuring we had safety nets in place to keep on top of COVID-19 during the initial phases. Additional measures were put in place at our borders to help minimise the risk, including requiring people entering Tasmania to be fully vaccinated, and providing a negative COVID-19 test if coming from certain locations.*
>
> *Our Government has communicated extensively with the Tasmanian public and specific stakeholder groups to ensure people were aware of the changes being made, why they were being made and where to get that information and support. The Government ensured we had in place the necessary health, social and economic measures to minimise the impacts of opening our borders. The Government has adjusted restrictions and support mechanisms to reflect changing public health advice, and provide proportionate measures to the health risks as they change.*

[8] See Attachment A – Reconnecting Tasmania

[9] A health research institute at University of NSW Sydney (see https://kirby.unsw.edu.au/about-kirby-institute) [Accessed 16 March 2023]

The response to the COVID-19 pandemic has demonstrated the resilience of the Tasmanian community and the strong partnerships that exist within our communities. The ability of the Tasmanian state service to effectively engage with a range of stakeholders ensured that opportunities have been seized to improve the lives of Tasmanians through reinvestment in health, education and local infrastructure.

Learning from the outcomes and actions of governments in other states and territories ensured Tasmania avoided the extended lockdowns experienced in all other Australian jurisdictions.

Tasmania has nation-leading COVID-19 vaccination rates. As at 21 June 2022, over 99 per cent of people aged 12 years and over have had their second dose, and we are leading the states with vaccination rates of 5-11-year-olds. That has been consistent.

We also established community case management facilities to support COVID-19 patients unable to isolate at home. As I have said publicly many times, any death is an absolute tragedy. Tasmania currently has the second-lowest COVID-19 death rate per capita, behind only Western Australia. Tasmania was the last jurisdiction in Australia to apply elective surgery restrictions and the first to lift those restrictions.

Importantly, elective surgeries have continued at all of our major hospitals since the Omicron outbreak after borders opened on 15 December [2021] *last year. While the wait list increased in January with a high number of hospital staff furloughed due to contracting COVID-19 or being a close contact, the wait list reduced in February, and again in March and April. Despite these challenges, only 52 fewer procedures were delivered in January 2022 compared to January last year.*

Tasmania's extensive planning and strength in emergency management enhanced our ability to be flexible and responsive. We rolled out the rapid antigen test distribution model to facilitate getting RATs to where they are needed, getting them into the communities well ahead of other states.

The Government notes that the Committee's previous inquiry on the economic response to COVID-19 concluded that the Government's response was timely and effective in controlling and preventing the spread of COVID-19. The Committee acknowledged that the Government and our departments demonstrated an ability to be responsive and agile as demands in situations rapidly changed. Where policy and operational decisions had traditionally made in silos, many of these barriers were removed, resulting in greater collaboration between departments.

The Committee also noted that the state was well prepared, as practices and processes were well established and could be quickly adapted to meet the situation. Since re-opening Tasmania's borders, the Government has continued to focus on preparation and planning, balancing the interests of public health and social and economic need. Ongoing review of public health measures and adjustment of various settings ensure that a flexible approach can be taken that will allow us to respond to issues in a timely manner. We will continue to review public health advice and adjust our approach to suit Tasmanian's needs.

The Tasmanian Government planned thoroughly. We worked together to prepare our essential services within Government and across the broader community. We listened to the needs of those likely to be affected by opening our borders, and we responded to those needs. We showed we could quickly adapt and respond as circumstances and advice changed, to provide the best support for our State.

We successfully managed the difficult task of opening our borders and reconnecting Tasmania, and for that I give my thanks to our entire public service, across the whole of government, for the enormous effort, work and commitment - not only since the border re-opened and leading up to that, but since the commencement of the pandemic early in 2020. For that, I am eternally grateful.[10]

Preparation for the Tasmanian State border re-opening on 15 December 2021[11]

As noted in the Government Submission:

- on 6 August 2021, the National Cabinet agreed to the National Plan to Transition Australia's National COVID-19 Response[12], which centred around changing measures and easing of restrictions with increasing levels of vaccination coverage; and
- that the latter two phases of this plan included easing of domestic travel restrictions, and the opening of international borders when the domestic vaccination rate was greater than 80 per cent.

On 22 October 2021, the Premier released the Reconnecting Tasmania Plan[13]. Under this plan the Government set a goal of having 90 per cent of Tasmanians aged 12+ fully vaccinated by the re-opening of Tasmania's border on 15 December 2021. At 15 December 2021:

- over 90 per cent of Tasmanians aged 16+ were fully vaccinated; and
- just under 90 per cent of Tasmanians aged 12+ were fully vaccinated.

Tasmania's vaccination rate for its 12+ eligible population at the date of re-opening was 95.38% first dose and 89.62% second dose (noting the 12 to 15-year-old population only became eligible for vaccination commencing mid-September 2021).

The Committee was informed that a range of economic and public health measures were employed over the period in preparation of the border re-opening. Economic measures are more fully covered in a separate Report.[14]

[10] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.1-3
[11] See Tasmanian Government – Follow-up Inquiry (https://www.parliament.tas.gov.au/__data/assets/pdf_file/0027/59157/2022042120tasmanian20government20submission20to20covid-1920follow-up20inquiry.pdf), p.2
[12] See Attachment B – National Plan to Transition Australia's National COVID-19 Response
[13] See Attachment A – Reconnecting Tasmania
[14] See Inquiry into the Tasmanian Government's continuing response to the COVID-19 pandemic - Business Support and COVID-19 Check-in App

Public Health Measures[15]

The Committee was informed that the measures taken in Tasmania's COVID-19 response, including in the lead up to the border re-opening, have been guided by public health and health system advice at both a state and national level.

As a member of the Australian Health Protection Principal Committee (AHPPC), Tasmania's Director of Public Health (Dr Mark Veitch) had participated in multiple AHPPC meetings per week (at times daily) and out-of-session consideration of issues throughout the COVID-19 pandemic. This included providing input into the development of national advice on best practice application of public health and social measures (PHSM) to help minimise community transmission of COVID-19, and to protect those most vulnerable. This advice has included AHPPC statements on measures such as mask use, physical distancing and density restrictions, and measures to minimise the risk of COVID-19 transmission in schools and aged care settings.

This national advice was used to guide PHSM at the state level.

In preparation for the re-opening of Tasmania's borders, and prior to that as part of the ongoing COVID-19 response, the Director of Public Health had made a broad range of directions under the *Public Health Act 1997* (Public Health Directions), to mandate key measures. This included a number of Public Health Directions on PHSM, and testing, tracing, isolation and quarantine (TTIQ) requirements relating to both the general public and to specific workers and/or settings.

A range of PHSM were already in place in Tasmania at the time of re-opening that had been implemented throughout 2020 and 2021, as part of broader COVID-19 preparedness and response planning, including:

- advice and guidance on:
  - hand hygiene;
  - respiratory hygiene;
  - maintaining a physical distance of 1.5m from other people;
  - staying home if unwell;
  - getting tested if symptomatic; and
  - being aware of, and complying with, current gathering, business and travel restrictions
- mandatory requirements/restrictions regarding:
  - caps on gatherings in residential premises, and most other premises;
  - in most premises, physical distancing requirements of 1.5m where practicable;
- a range of regulations under the COVID-19 Safe Events and Activities in Tasmania Framework[16] for indoor gatherings above 250 people and outdoor gatherings above 500 people (including capacity limits, density limits, different requirements for seated and standing events, and registration or approval requirements depending on the size of the event).

[15] See Tasmanian Government – Follow-up Inquiry, p.4

[16] See Public Health Guidance: COVID-19 Safety at Events Factsheet (V2 – 12 October 2022) (https://www.business.tas.gov.au/__data/assets/pdf_file/0006/398121/COVID-19_safety_at_events.pdf) [Accessed 9 March 2023]

- additional conditions could be imposed by the Director of Public Health during the approval process.
- mask requirements at:
  - events over 1,000 persons (indoor and outdoor);
  - residential aged care facilities and hospitals (other than for residents and patients); and
  - airports and aircraft, and on parts of the Spirit of Tasmania and its terminals
- requirement to use Check in TAS QR codes at a wide range of locations, businesses and events;
- screening requirements at residential aged care facilities (by way of Public Health Direction) and hospitals (by way of internal policy);
- mandatory vaccination requirements for workers in quarantine facilities, aged care, health settings, and disability care; and
- requirement for all workplaces to have, maintain, and implement, a Workplace COVID-19 Plan setting out measures that the workplace will take to eliminate or mitigate the risk so far as is reasonably practicable.

The following additional PHSM were implemented:

- vaccinated entry requirements at certain licensed venues and events (including pubs and clubs, festivals and events where people move and mingle freely) from 6 December 2021;[17]
- mask-wearing requirements for all indoor public locations from 21 December 2021;[18] and
- mandatory vaccination for workers in early childhood education and care (ECEC) settings from 8 January 2022.[19]

PHSM had been adjusted at various stages throughout the pandemic in line with national advice and guidance (whilst also considering the local context) as Australia moved from the early virus suppression stage of the national COVID-19 response, through to the post-vaccination 'living with COVID-19' stage, where the focus is on protecting vulnerable populations and preventing serious illness, hospitalisation and fatalities.

Communication with the Health sector[20]

The Committee was informed DoH liaised with health sector stakeholders when implementing the Direction, to identify and address implementation issues. The health sector stakeholders included:

- Health and Community Services Union;
- Australian Nursing and Midwifery Federation;
- Community and Public Sector Union;
- Australian Medical Association;
- Primary Health Tasmania (PHT);

[17] Public Health Direction Additional requirements for certain venues – No. 1
[18] Public Health Direction Mask wearing requirements No. 1.
[19] Public Health Direction Vaccination requirements in relation to Early Childhood Facilities - No. 1
[20] See Tasmanian Government – Follow-up Inquiry, p.44

- Pharmacy Guild; and
- Pharmacy Society of Tasmania.

DoH worked closely with PHT, which surveyed Tasmanian GPs to scope anticipated issues or need for additional support to comply with the requirements. No significant issues or need for additional support was identified through this survey process.

More broadly, DoH provided regular updates on the scope and implementation of the Direction to the primary care sector via the Coronavirus Tasmania website and forwarded to GPs by PHT on behalf of DoH.

For other organisations (such as those providing community health and mental health supports), DoH's Emergency Coordination Centre (ECC) communicated regularly with stakeholders via email updates to provide information on the scope and implementation of the Direction. In addition to this, the ECC met with key stakeholders and peak bodies including Mental Health Council of Tasmania, Tasmanian Council of Social Service (TasCOSS), Neighbourhood Houses Tasmania and Shelter Tas to provide advice on the application of the Direction.

At the public hearings, the Committee heard from Dr Annette Barratt (Vice President, AMA) in relation to the AMA's view of the level of communications between the DoH and other parts of the State health sector during the COVID-19 period:

> *CHAIR - Looking at the communication during that period, where the Government was deciding the date and the planning that went into it. How was the communication between the AMA and other parts of the health sector during that time, and could it have been improved?*
>
> *Dr BARRATT - We've had really good communication with the Department of Health, with the Premier, with people like Mark Veitch and his whole department. We've had good communication, so we're not going to say they weren't listening to us. They can't necessarily act on what we have to say, and we well understand that they had to do a balancing act. But we had very good communication.*
>
> *Certainly, all through the COVID-19 period, initially we were having weekly meetings with stakeholders, of which the AMA was one. It then went to fortnightly, and then monthly. From our point of view, they were [there was] unprecedented access to Mark Veitch and the Premier and the health minister, which we would love to see continue into the future.*
>
> *Those stakeholder meetings were brilliant. They were an asset to everyone, and we have to fully congratulate the Premier and the Health Department for setting them up. They were listening …*
>
> *CHAIR - … Since the border re-opening, what's happened to those sorts of engagements?*
>
> *Dr BARRATT - The regular stakeholder meetings that were taking place have now ceased. Certainly, the AMA meets regularly, quarterly, with the Health Minister, which*

is a very useful thing and we value those meetings. We have regular meetings with the Health Department separately to the ones with the Premier, or the Health Minister I should say, depending which hat he's wearing at the time. They're very useful and we know we have very free access to Mark Veitch and his Department. If we ring up he will listen and he will give us access -

CHAIR - So, you still have access, it's just not formalised?

Dr BARRATT - We still have access, we just don't have these lovely, regular stakeholder meetings, because that wasn't just the AMA meeting. It was the AMA, the College of GPs, it was RDAT, the rural doctors, all in one venue. It was actually quite a good way of cross-fertilising. There was also Pharmacy and the Nursing Federation and HACSU.[21] *They were all in these stakeholder meetings and there was a lot of cross-fertilisation, which is a useful thing. We could hear their points of view, which were obviously different. Doctors have different viewpoints to pharmacists, who have different viewpoints to nursing.*

CHAIR - So, that multidisciplinary approach, has that stopped?

Dr BARRATT - That has stopped, yes.

CHAIR - Do you think even if it was only quarterly, that would be of benefit?

Dr BARRATT - I certainly think it would be of benefit. I think it would be a useful way of people not going down their own agenda without listening to other people.[22]

The Committee also heard from Dr Barratt about the value of information exchange at those COVID-19 stakeholder meetings:

Dr BROAD - That multidisciplinary meeting, can you give us an example of just how that benefited, where there was a shared understanding that wasn't there before, so we can get a bit more teeth around how that worked?

Dr BARRATT - Things like GPs, from the AMA point of view, talking to the GPs from the college and from the rural, all realising that no-one had PPE provided to them and then the nurses and pharmacists being able to say, 'we've got PPE coming from this source'. And somebody else saying, 'we didn't even know we could get some'. So, there was a combined discussion as to who needed PPE, how we could get it and the Health Department reacted by saying, 'okay, we didn't realise you all needed it, this is how you get it'. It is practical things like that and everyone then being on the same page and therefore not resentment that the AMA was getting PPE for their patients but the RDAT wasn't, so it's a nice equal, even playing field.

CHAIR - Everyone had access to the same information.

[21] Health and Community Services Union
[22] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.35-36

Dr BARRATT - The same information and the same resources.[23]

Public Health Advice in Support of Re-opening[24]

The Committee noted the constantly evolving information on the epidemiology of the COVID-19 virus, including new and emerging strains of the virus, had presented a significant challenge worldwide in planning, management and response efforts. Throughout the pandemic response, the DoH COVID-19 preparedness planning and strategies were focused on protecting Tasmanians and ensuring that the health system was as prepared as possible to meet any challenges posed by the virus. This approach had remained the key focus of Tasmania's ongoing COVID-19 response including in the lead up to and following the re-opening of Tasmania's borders on 15 December 2021.

The Committee was informed that in developing a re-opening plan for Tasmania guided by Public Health advice, the Government sought to carefully consider and seek to balance health and wellbeing outcomes against economic considerations for the State. In developing this plan, a date of 15 December 2021 was set to allow the opportunity for all Tasmanians eligible to be vaccinated prior to the border re-opening.[25]

Within the Tasmanian Government there were several forums to discuss and review advice and information relating to COVID-19:

- a Heads of Agency COVID-19 Co-ordination Group met weekly to facilitate a whole of government approach to implementing the Reconnecting Tasmania Plan; and
- the Ministerial Committee for Emergency Management also met weekly to consider information relating to COVID-19 at the ministerial level.[26]

The Kirby Institute prepared Tasmania-specific modelling, based on the Delta variant, to inform the Reconnecting Tasmania Plan that was announced on 22 October 2021.[27] The Reconnecting Tasmania Plan was developed in alignment with National Cabinet processes and leveraging of the experiences of other jurisdictions (included for reference is the Doherty Institute modelling which supported the National Plan).[28] [29]

Planning and measures undertaken by DoH ahead of the re-opening had been guided by public health advice and decision making at both the state and national levels. Throughout the pandemic DoH had engaged closely with the chief executives and clinical and public health leads of the Australian Government Department of Health (AGDH) and all state and territory health departments.

In addition to officer and senior departmental official level engagement, Tasmania's Minister for Health participated in regular meetings with other state health ministers and the

[23] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.36
[24] See Tasmanian Government – Follow-up Inquiry, p.6
[25] See Tasmanian Government – Follow-up Inquiry, p.6
[26] See Tasmanian Government – Follow-up Inquiry, p.6
[27] See Attachment C – Kirby Institute Tasmania Modelling
[28] See Attachment D – Doherty Modelling Report
[29] The Peter Doherty Institute for Infection and Immunity is a joint venture between the University of Melbourne and The Royal Melbourne Hospital (see https://www.doherty.edu.au/about/overview) [Accessed 16 March 2023]

Australian Government Minister for Health, as well as the Australian Government Chief Medical Officer. AGDH also provided advice to Department of Premier and Cabinet (DPAC) to support first ministers' consideration and decision-making regarding health aspects of the national COVID-19 response by National Cabinet. The Government suggested this engagement ensured Tasmania's health system response had aligned (where possible and appropriate) with current agreed national approaches and guidance.

Modelling had been undertaken at both the state and national levels to help inform decision making regarding the ongoing COVID-19 response, including to help inform arrangements for re-opening of state and national borders. At the national level, the Doherty Institute was commissioned by the Australian Government to undertake modelling to help inform the National Plan to Transition Australia's National COVID-19 Response. Tasmania contributed to this process through the National Cabinet framework and associated committees.

In preparation for the initial easing of border restrictions in Tasmania on 15 December 2021, the Tasmanian Government (through DPAC) commissioned modelling from the Kirby Institute at the University of New South Wales (the Kirby modelling) which took into account Tasmania's unique demographic features. This modelling, which was based on the Delta variant (as the dominant variant at the time), projected a rise in rates of hospitalisation after re-opening, with the peak in hospitalisations occurring from March 2022.[30]

The first case of community transmission of the Omicron variant occurred in New South Wales (NSW) in early December 2021. Omicron then became the dominant COVID-19 variant in Australia. The different epidemiology of Omicron (highly transmissible but usually causing less severe illness) resulted in a much faster increase in case numbers than projected by the modelling.[31]

At the public hearings, the Premier and Dr Mark Veitch (Director of Public Health) responded to questions as to whether the Omicron variant was considered in the Kirby modelling at the time of the Tasmanian border re-opening:

> *CHAIR - … I would like to go back to the decision on opening the border and the modelling that was done - the Kirby modelling and some Doherty modelling. As I understand it, they were both undertaken with Delta being the predominant strain of the coronavirus at the time. We know that immediately upon re-opening, and even slightly before, Omicron was the most likely variant to enter the State - and it was.*
>
> *I want to understand what re-evaluation assessments were done on the basis that a much more infectious … strain was going to enter the State. The modelling relating to impact on ICUs[32] and hospitals generally was on the basis of a less infectious strain. I would like to understand how it was reconsidered in light of a new variant.*
>
> *Mr ROCKLIFF - … You are right, the Kirby Institute modelling reflected the Delta strain which, at that time, if memory serves me correctly, was more transmissible than previous ones, but also more concerningly, a much more serious illness. Omicron hit around the*

[30] See Tasmanian Government – Follow-up Inquiry, p.6-7
[31] See Appendix 2 – Tasmanian COVID-19 Statistics (to 30 June 2022) for Hospitalisation rates
[32] Intensive care unit

time the border re-opened, and we had to be very flexible in our approach to dealing with those matters. A lot of decisions were made quickly at a national level, which we adapted to a State level as well.

... our modelling did not take into account the variability presented by new strains that have emerged, such as Omicron. It also does not account for the inclusion of a vaccine for 5- to-11-years old which was being discussed and planned at the same as the modelling was being developed. We knew that we might see a different result than what the modelling told us.

Modelling is a hypothetical exploration of different outcomes based on what we know at the time. It was a rapidly changing environment at the time. Models do not predict the future, but they do help us inform plans based on different scenarios.

We were very clear in our approach at the time to get to that 90 per cent vaccination rate. Other states led a little earlier to that 80 percent mark. I believe that waiting and all the work that was done to get our vaccination rate up to 90 per cent has helped us since that re-opening stage commenced.

Dr VEITCH - ... The initial modelling was based on the transmissibility of the Delta strain. We knew that the first Omicron strain that came along was substantially more transmissible than the Delta strain. The subsequent Omicron strains are incrementally more transmissible than the original Omicron strain. The modelling that we considered looked at a range of inputs that were estimates based on the available information at the time. It gave us a range of outputs. We received dozens of different outputs from the modelling, so there was no single model answer.

CHAIR - My question was more about, was any modelling redone in light of a more transmissible variant? I understand what you are saying about how it was developed. My question is, was it updated?

Dr VEITCH - We had further discussions with the Kirby Group. I think they did some modelling in the early months of the year, but we were informed by the understanding that if you have a more transmissible virus you are going to see more cases. The measures you need to have in place would need to be more vigorous to contain a virus. Even without extensive formal further modelling, we were in a position to understand what the implications of the new strain were based to some extent on the Delta modelling. We knew the situation would be more problematic and more difficult to manage.

There were many people doing modelling around the nation. There was modelling shared with the Australian Health Protection Principal Committee and National Cabinet that was conducted by the Doherty Institute. In many ways that has been the most useful modelling that we have had to guide us, because it was a form of forecasting or nearcasting that looks at what's been happening in the very recent past and projects moderately into the future.

It doesn't try to do what the Kirby Institute modelling did, which was to try to project the whole experience over a number of months of the new strain. The Doherty Institute gave

us a fairly realistic projection of what case numbers would look like over the early months of the Omicron wave.

They continue to produce forecasts that tell us how many cases we can expect in the coming weeks and how that will translate into pressure on hospital and intensive care beds.[33]

At the public hearings, the Committee heard from Michael Bailey (Chief Executive Officer, Tasmanian Chamber of Commerce and Industry (TCCI)) about the general support from the business community for a hard opening date for the State and associated planning:

CHAIR - ...With the planning for the re-opening of the border, ... it was predominantly focused around the Delta variant. ... In terms of the communication with business and industry about the plans to manage that and then subsequently when there was a significant outbreak [of Omicron variant]*, can you talk us through that from your perspective?*

Mr BAILEY - ...With the opening we were very keen for Government to set a hard opening date so that business could prepare itself for that opening. We felt, too, that coming out of COVID-19 restrictions was also going to be more difficult than going in and that unless Government did set a hard date it was going to become increasingly difficult for Government to open at any time.

What [we] said at the time that we believed that people should be RAT-tested as they were coming into the State. You might remember at the time there was quite a bit of push-back from Health, about the use of RAT tests, about their validity and their view was that someone should have a test in the own state before they should come to the State and they should tick the box to say that. We said that they should be RAT-tested as they came into the State. They should be RAT-tested and if they tested positive they're put back on a plane and sent back home again. Two weeks later, the Health Department realised that RAT-testing firstly, was valid and secondly, was going to be a much more cost-effective way of proceeding. So, I think that was a mistake.

I don't think it was a mistake for Government to set a hard opening. We were unlucky with that variant, but there have been consecutive variants following. So, there would have always been - we knew COVID-19 was going to come into the State. We knew we had to be prepared. If you look, again, at the numbers of people who ended up in emergency care, they were - I mean, everyone is horrible, don't get me wrong, but they were quite low as a percentage compared to what they could have been. Our vaccination rates were really high, ... but I do think that was a miss. I think governments should have adopted those RAT tests earlier and if we had tested people as they were coming into the State that might have managed that a little bit better.

CHAIR - Just to challenge that view, Michael, once Omicron was in the State we knew that it was highly virulent, which means it's much easier to catch and we saw that rapid spike. So, once it's in the State stopping others coming in with it would that not have

[33] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.3-4

been a bit of a moot point? Don't you want people who have it to isolate and not affect others, ideally?

Mr BAILEY - Our point at the time was that we had the system in place; we had the rules in place for people to follow. Unfortunately, we couldn't keep Tasmania COVID-19 free forever. COVID-19 was always going to come into the State and when it did come into the State we managed it as a community as best we could. Compared to other places in the world and certainly even other states in Australia, I don't think we did a bad job with that. I thought we did a pretty good job if you look at it overall.

CHAIR - Some would argue that since the borders opened - national as well as state borders and the borders between states, albeit Western Australia was a bit later - the infection rate and death rate did go up significantly higher than some other countries.

Mr BAILEY - Our view was always that opening was always going to be more difficult than closing and we couldn't stay closed forever. We know that across that time there were very high suicide rates in Tasmania[34] too due to the closure of borders. Every death is horrible and again I'm not saying that the fact that we had that unlucky hit of a new variant was anything but terrible but as a community we handled it well.

Certainly, from a business community, we handled it very well. The uptake of the COVID-19 Check in TAS app was extraordinarily high across the State. We know that WorkCover did a terrific job in assessing businesses and found compliance was very strong across Tasmania. We also know that the use of masks and the like was really well utilised across the State too. We backed the Health Department and them holding extra restrictions in place for longer than we probably thought they should have been in play because, again, that was the advice from Health.

COVID-19 coming into Tasmania was always going to be awful. We have an older population; we have a sicker population but the reality is we couldn't keep our borders shut forever so there had to be a time to open them. That time was never going to be right. You could pick any date and it was never going to be right and when COVID-19 got to Tasmania, which was always going to happen; it was always going to be difficult for our community to manage, but, again overall, we did a really good job in that space.[35]

Conversely, at the public hearings, the Committee heard from Dr Annette Barratt (Vice-President, Australian Medical Association (AMA) Tasmania) who suggested a longer lead time with a later re-opening of the State border may have been beneficial:

CHAIR - ... Representing the business sector, you can expect [TCCI] *were keen for the borders to open, particularly to enable tourism and Christmas travel. In terms of that balance, the Government obviously had the responsibility of considering both the economic impact, and also the health and social impacts of both the border closure and then the re-opening.*

[34] This claim was not able to be verified.
[35] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.17-18

Do you think adequate consideration was given to the impact on the health sector, particularly as, when the plan was made, they were looking at the Delta variant, but as soon as the borders opened, the Omicron variant was well and truly established?

Dr BARRATT - Certainly, as a medical professional, I have concerns both ways. I could well and truly understand the mental health of my patients and the community who wanted to be with their family for Christmas. I have children living interstate, so I wanted to be able to visit my children for Christmas that year. I can understand why that decision was made leading up to Christmas.

However, from a medical point of view, without sufficient preparation, we had overwhelmed GPs, overwhelmed EDs, and patients unable to be fully supported in the COVID@home program, which kept them out of either place because these weren't fully staffed due to the lack of preparation and build-up.

Perhaps 15 January would have been a harder decision to sell to the public, but it may have been an easier decision to manage, certainly from my point of view.

Perhaps a longer build up to 15 December and having more things in place may have also helped. Having the COVID@home fully staffed. Having the publicity for it in place. Having things changed in ED so people weren't sitting in a waiting room with COVID-19, waiting for a single bed to be admitted to, and spreading COVID-19 all through the waiting room - which is one of the things that has been raised by our ED colleagues. ....

Dr BROAD - Including staff?

Dr BARRATT - Including staff. Well, staff wear PPE. Staff wear masks, staff are really good, and thankfully staff are very careful at not contracting it ...[36]

The peak demand modelling on hospital bed and Intensive Care Unit (ICU) bed occupancy, based on Tasmania's vaccination rates and public health and social measures, formed the basis for the hospital escalation level and capacity planning in advance of the border opening.[37] This modelling also informed the planning for the COVID@home service. Further detail related to the COVID@home service is provided under: Triaged models of care for positive cases, COVID@home and COVID@homeplus.

[36] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.34-35
[37] See Attachment E – Escalation Management Planning

Committee Findings

F1. The Delta variant of COVID-19 was overtaken as the predominant strain by the more transmissible Omicron variant on or about the time of the Tasmanian border re-opening.

F2. The Tasmanian-focussed Kirby Institute modelling was used initially for assessing possible outcomes based on the Delta variant. The nationally focussed Doherty Institute modelling was adopted for the Omicron variant.

F3. Planning around the border re-opening was based on modelling of the Delta variant. This was challenged by the arrival of the more transmissible Omicron variant.

F4. The Tasmanian Government's decision to re-open the State border on 15 December 2021 was not universally supported.

F5. The State led multidisciplinary COVID-19 stakeholder meetings were seen as valuable sources of information exchange between the parties.

Long COVID-19

The Committee sought information regarding the prevalence and severity of Long COVID in the Tasmanian community. The Committee heard from Premier Rockliff, Ms Morgan-Wicks (Secretary, DoH) and Dr Veitch (Director of Public Health):

> *Mr WILLIE - Premier, what do we understand about long COVID with re-infection?... I guess the concern here is, with different strains, is there a cumulative effect of COVID-19, and is that going to contribute to long COVID suffering in the community?*
>
> *Mr ROCKLIFF - ... The understanding internationally and nationally of long COVID is still evolving. It is a syndrome that may affect a variety of body systems to varying degrees, as I discussed briefly in the Budget Estimates hearings. The symptoms of long COVID, as you highlighted as well, are highly variable from individual to individual. The dominant strain of COVID-19, as we have been speaking about, is the Omicron variant, and the current view is that the presence of long COVID associated with the Omicron variant is less severe.*
>
> *To date, there has been no definitive diagnosis of long COVID in Tasmanian hospitals, but that is not to say it is not prevalent within our community. The Department of Health is aware of the potential for long COVID, and of course we will monitor its prevalence.*
>
> *On 6 June we announced an investment of $400,000 to establish a statewide navigation and referral service specialising in long COVID. That service is expected to be operational in September this year* [2022]. *I met some people on the North West coast, particularly with that first experience of COVID-19 when it was only in the North West, and talked to them about their experience, and the long COVID implications as well for them. So, it is evolving. We are hoping our announcement will give us some more data to*

support people with long COVID. We are also working with Primary Health Tasmania (PHT) as well, which is assisting us with this.

Ms MORGAN-WICKS - ... a long COVID clinic is being established, and we hope to launch that in September. I know that meetings are ongoing to make sure the referral pathways are all set up. PHT has also been working through a long COVID referral pathway to make sure GPs are cognisant of the potential to monitor for symptoms following, or sometimes occurring weeks after, COVID-19 infection, and to determine the specialist they could refer to in the THS.

Establishing a long COVID outpatient service then brings all of those specialist pathways together into one clinic. That avoids one-hundred-and-something GPs across the state referring to different types of specialists that may provide different types of treatment to the patients.

We are hoping to get it all into one out-patients clinic so we can assist the patients, collect the data and determine if any other actions are required. We will also tap in through our chief medical officers and directors of public health international networks to see if there's any further learnings that can be applied in Tasmania.

Mr ROCKLIFF - The World Health Organization has activated two emergency diagnosis codes to use when a condition is directly attributable to COVID-19. That's the diagnosis of long COVID-19 requires that the person no longer has COVID-19 and that the presenting symptoms are causally related to COVID-19. Some of those symptoms of long COVID-19 are extreme tiredness, shortness of breath, chest pain or tightness, problems with memory or concentration, difficulty sleeping, dizziness, pins and needles, joint pain, depression and anxiety. There are others: feeling sick, stomach ache, loss of appetite.

Ms MORGAN-WICKS - We still have patients accessing COVID@home. So, if you're still continuing to experience symptoms or are concerned or unable to get into a GP to discuss that, our COVID@home service is still available for those patients. They have the number if they've opted in for the service during their infection. Otherwise they're entitled to speak to the nursing team and doctors that are available in the COVID@home service.[38]

At the public hearings, the Committee heard from Dr Barratt (Vice President, AMA) about the need for long COVID-19 clinics in the State:

Dr BARRATT - The only other thing we want to bring up is long COVID-19. It is not mentioned in the submission, but we strongly believe we need long COVID-19 clinics. We need long COVID-19 resources. We need GPs to be able to refer to long COVID-19 clinics, not just a navigation service that is happening at the moment, but an actual treatment service, and having experts in that area. We know long COVID-19 is a major issue and it is going to get worse over time.

[38] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.7-9

Ms WEBB - You say not just a navigation service, which is the current model that is in place, but clinics. Exactly what would that look like, and is it something we would need to replicate statewide? What are we talking about in terms of scope?

Dr BARRATT - We need someone who will be able to do a holistic assessment on a patient a GP has done the basics on. With the navigation service at the moment, most of the care gets reflected back to the GP. In most cases the GP has worked out what they don't know already. They have done the assessment; they feel it is long COVID-19. They want somebody else to do an assessment - which is why we make referrals to specialist clinics, always. We have done what we can do. We have worked out what we do and don't know, and we want someone to assess them.

Being told by a navigation service that the next step would be to assess this, assess that, doesn't really help an experienced GP. We actually need someone to do it. Whether it needs to be regional, I suspect in most cases it will be. They'll need to be in all the regions, because everything in Tasmania needs to be in at least in three areas.

Ms WEBB - What is the barrier to that then, other than the Government would have to decide to put that in place? Do we have, for example, appropriately qualified and experienced medical professionals to be staffing that? Would there be cost issues? What would be the things in the way?

Dr BARRATT - There would certainly be cost issues. Those clinics have been established in other states. Victoria and New South Wales have those clinics. Tasmania could follow the example of what has happened elsewhere - but unfortunately, yes, there will be a cost.

Ms WEBB - Would we have the appropriately experienced medical professionals to do it, or is that something we would also have to invest in?

Dr BARRATT - On that, I don't know exactly who is available, or where. In other places they use exercise physiologists. They use respiratory physicians. There is neurology. There are all different parts of the body that are affected by COVID-19. We know a cardiologist assessment is needed, so the balance of what would be needed they could take guidance from interstate.

Ms WEBB - Presumably, the AMA has communicated this recommendation to Government quite clearly -

Dr BARRATT - Yes, we have.

Ms WEBB - Is it your understanding that it's something that the Government is contemplating, or has there been a firm decision not to do it?

Dr BARRATT - We have been told that it's under consideration. We would definitely like it to be firmed up.[39]

[39] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.43-44

The Committee note the DoH website indicates the ongoing provision of the post COVID-19 navigation service.[40] Long COVID-19 clinics have not been established.

At the public hearings, Dr Veitch (Director of Public Health) spoke to the Committee on the cumulative impact of COVID-19 reinfection:

> *Mr WILLIE - ... is any work being done on the cumulative impact of reinfection? If you have COVID-19 multiple times is that going to contribute to a greater chance of long COVID-19, or are we leaving that to international experts to do that work?*
> *...*
> *Dr VEITCH - Not in detail ... The information about the consequences of second infections is that it's going to come from bigger places than Tasmania that are going to have more experience to see more of those cases. That will come out in the literature.*
>
> *There's never been a disease in human history that's been as investigated as intensely over a short period of time as COVID-19. That is good on one hand but it's also problematic because every day you can probably find papers that contradict each other.*
>
> *It's important that we look for that information but probably the critical appraisal of the various pieces of information that come out internationally and elsewhere in Australia is going to be the thing that gives us the best intelligence about the consequences of multiple infections and long COVID-19 in general.*[41]

Dr Barratt (Vice President, AMA) also commented on the prevalence of the lingering effects of COVID-19 in some individuals in the community:

> *Dr BROAD - COVID-19 has been very widespread, so I would imagine it's about half the State has had COVID-19 at some stage. Given the widespread prevalence of COVID-19, what are the signs that long-COVID-19 might be a problem, as opposed to something else?*
>
> *Dr BARRATT - Looking at interstate and overseas data, the percentage of population that remains unwell, following COVID-19, is higher than other viral illnesses. Some people get a long-COVID-19 style thing after influenza. Some people will get it after other illnesses. The percentage is higher with COVID-19. I don't have the figures off the top of my head, but certainly the percentage of people who remain unwell following COVID-19 is much higher than other viral illnesses.*
>
> *Dr BROAD - You're saying that the effects of COVID-19 are lingering -*
>
> *Dr BARRATT - Yes.*
>
> *Dr BROAD - but you're not seeing people have a break where they are well and then exhibit?*

[40] See Department of Health website PostCOVID-19 condition (Long COVID), https://www.health.tas.gov.au/health-topics/coronavirus-covid-19/what-do-if-you-test-positive/post-covid-19-condition-long-covid, [Accessed 25 September 2023]
[41] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.7-9

Dr BARRATT - No.

Dr BROAD - So, you get COVID-19 and you don't recover?

Dr BARRATT - You don't recover. You stay unwell. People don't regain their energy. Some people remain short of breath. Yes, 5-10 per cent of the population of COVID-19 infections lead to long-COVID-19, according to the latest statistics. ... That's a huge percentage.

Ms WEBB - Thousands of Tasmanians.

Dr BARRATT - That's a lot of people. Some people will naturally get well over time, but others will not. So, we're looking at a large number of people. ... That's 50,000 people who don't return to work.

Dr BROAD - As the emergency stage of the pandemic, hopefully, is behind us is there any indication as the data builds up of long-term impacts on population health? Are we seeing more specific illnesses?

Dr BARRATT - Again, it's going to be information that we're going to be able to tell you in 10 years' time and look back. We're going through it at the moment. We know people are not going back to work. We know that people are tired. We know people have a prolonged cough. We think there is an increase in heart disease - as in heart failure - but we don't know; because how much of it is people not exercising because they were frightened of going out because of COVID-19, or their diet changed because they were stuck at home? We can't really say what is the population health, because unfortunately most population health data are in retrospect when we look back.[42]

The Committee was informed by Premier Rockliff and Ms Morgan-Wicks (Secretary, DoH) about the status of the North West Regional Hospital workers who contracted earlier variants stemming from Ruby Princess cruise ship passengers returning to Tasmania in April 2020 including those experiencing long COVID-19:

Mr WILLIE - Following the North West Regional Hospital situation, when health workers were infected ..., my understanding is that some of them suffered from long COVID-19. Are they still being supported and are they still suffering from those conditions?
...
Ms MORGAN-WICKS - ... A few months ago we were still supporting staff members who had long COVID-19 and they were still part of our workers compensation as a long-term support. ...[43]
...
Mr ROCKLIFF - ... The Department received 49 workers compensation claims relating to positive COVID- 19 results from the North West outbreak in 2020. Of these, 48 employees are located in the North West and one is located in the North. Of the

[42] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.44-45
[43] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.9

49 workers compensation claims, 16 remain active. All of those are based on the North West Coast, as of 3 June [2022].[44]

In replying to a question taken on notice, Premier Rockliff provided the Committee with an update related to the impacts of Long COVID particularly for staff at the North West Regional and Mersey Community Hospitals:[45]

It is important that those impacted by Long COVID know that care is available and that the health response matches the individual needs of the person suffering from Long COVID.

On 6 June 2022, the State Government announced an investment of $400,000 to establish a statewide navigation and referral service specialising in Long COVID.

All patients will be managed by their GP in the first instance who will then refer the patient to the service where the patient will be assisted in navigating the health services they need.

It is important that patients see their GP in the first instance so that other illnesses are not missed and so that GPs can determine if their patients require referral to the new service where input may be sourced from specialists in fields including infectious diseases, respiratory medicine, psychology, and neurology.

The service is expected to be fully developed and launched in September 2022 and will be available state-wide. The timing is to allow for the recruitment of clinicians and education of GPs on how to engage with the service.

As per the Independent Review into the North West COVID Outbreak, a support plan for COVID outbreaks including supports for those with Long COVID has been agreed to by Department of Health Executive.

The support plan includes supports to help manage the longer-term economic, medical and psychosocial impacts. The plan comprises the following components:

- *Psychological First Aid training*
- *Employee wellbeing sessions*
- *Facilitated peer support program*
- *Workers Compensation*
- *Employee Assistance Program*
- *De-briefing sessions*
- *Career practitioner support*
- *Financial advice*
- *Keeping in Touch sessions*
- *Manager Toolbox*

The support plan is designed to be adapted to suit the scale of response required and with supports that can be tailored to suit individual needs. The plan focuses on better preparing managers and staff for these types of events, as well as supports for those who have contracted COVID and those with Long COVID.

[44] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.15
[45] Letter to Hon Ruth Forrest MLC Chair – COVID-19 Public Hearing - Responses to Questions taken on Notice, 24 June 2022

A Long COVID Monitoring Group has been established to ensure those with Long COVID are receiving the supports they require in a timely manner. The Long COVID Monitoring Group comprises the Chief People Officer, Chief Medical Officer, Deputy Secretary Community Mental Health and Wellbeing, and Chief Executive of Hospitals North/North West. This group first met in January 2022 to monitor support to Department of Health employees who contracted Long COVID as part of the North West outbreak. The health and wellbeing supports provided to employees is being monitored and adjusted as necessary.

Committee Findings

F6. The Department of Health website indicates a post COVID-19 navigation service is available.

F7. Other jurisdictions have established clinics that specialise in the diagnosis and treatment of long COVID-19.

F8. Long COVID-19 clinics have not been established in Tasmania.

Committee Recommendations

R6. The State Government continue to monitor the incidence and impact of long COVID-19 and whether long COVID-19 clinics or other services are required.

Mask Wearing and Removal of COVID-19 Isolation Period

At the public hearings, the Committee heard from Ms Cassy O'Connor (Leader of the Tasmanian Greens) and Dr Rosalie Woodruff (Tasmanian Greens Health Spokesperson) about their concerns around the removal of mandatory mask wearing and the removal of the five-day COVID-19 isolation period in the Tasmanian community:

Ms O'CONNOR - ... We are very worried about the Government's approach to COVID-19. We see the removal of mitigations and protections as a betrayal of the health of the people of Tasmania. The consequence of this failing on the part of the Government and, sadly, Public Health has been mass infection of the Tasmanian people. Now we are seeing very significant reinfections. On the last data report, 27 per cent of all infections are reinfections, and we know this virus has long-term health consequences, which are consistently being down-played by government. We are seeing at a national level and also at a state level, the minimising of this virus, its long-term health consequences and the dangers to people.

We hear words like 'mild', 'flu-like' and 'not particularly contagious in children'. This is in contrast with the way it was at the beginning of the pandemic when then Premier, Peter Gutwein, embarked on a really collaborative approach to pandemic management,

where we all knew that the overriding objective was to keep the people of Tasmania as safe as it was possible to do so.

That all was abandoned towards the end of last year. Once the border was prematurely opened to Omicron, based on modelling that government had commissioned on Delta, which was completely inappropriate in the context of the action that was taken, communication between the Premier and the political leaders and indeed Parliament certainly diminished and has all but evaporated.

When the border was opened on 15 December, no child under 12 was vaccinated, and very few people were able to access boosters. A significant proportion of the population had had two AstraZeneca shots and that was found to be not as efficacious a vaccine as we had hoped.

Shortly after the opening, public health basically gave the tick to mass events like Party in the Apocalypse, where we saw very significant numbers of young adults infected with COVID-19.

Masks were quickly removed from indoor settings. We never saw the Public Health advice as to why that was considered appropriate and, as a consequence, cases soared. At present, the reported number of infections is more than 250,000 Tasmanian people; according to Public Health, that will be a significant undercount, and 176 people have died since 15 December [2021] *last year. On behalf of the Greens, I express my great sadness about that and my sincere condolences to the families of the people left behind.*

Then a decision was made - despite the fact no child under 12 was vaccinated - to open schools. Unmasked, unvaccinated under 12s were sent into schools. Not long after, masks were removed completely from schools and that was while community transmission was still high.

The latest data tells us the total number of five- to 19-year olds who have been infected - these are recorded infections, because not all of them have been recorded - is close to 54,000. That represents over half of the population of five- to 19-year olds. Many were either unvaccinated or under vaccinated and most, as far as we know, have not been boosted.

...

Tasmanians are being told to take personal responsibility. Yet, Government is not giving people the information they need to do that. We have had public health messaging that is anti-mask. I have here an example of the material that is put up outside businesses in Tasmania, Public Health advice from coronavirus.tas.gov.au: 'wash your hands, keep your distance, stay home if you're sick, get tested if you've got symptoms, and follow current restrictions'. Nowhere in there are masks mentioned and, as we know, they are very effective.

We continue to have minimising language from Public Health and from the Health minister: 'mild', 'flu-like', 'not harmful to children', and perhaps most damningly, we have not yet had the Premier and Health minister and indeed the Director of Public Health confirm unequivocally that COVID-19 is airborne. We asked that question twice in

question time, and the Premier and Health minister could not, would not give an honest answer. You have to ask yourself why.

I do not know if members have seen the media release from Disability Voices Tasmania. I will read you some of the most pertinent and distressing parts. The peak body for people with disabilities said on 14 October, the Friday the decision came into effect.

'We assert this decision puts the Tasmanian disability community at great risk, not only of infection with COVID, but for many of long term and potentially fatal health consequences. This had led to feelings of exclusion, feelings of isolation and alienation within our local community.

We maintain that the risk to people in-group housing or who require direct support has not been sufficiently understood, and that the decision taken to remove the requirement for infected individuals to isolate is premature and potentially dangerous. This puts people who are immuno-compromised at severe and unacceptable risk.'

So, the take home message, I think, to vulnerable Tasmanians is that this Government prioritises business over their health. When I talk about vulnerable Tasmanians, I am talking about people who are elderly, people who live with a disability or are clinically vulnerable, and people who have already have a COVID-19 infection. The science tells us that with each reinfection, the risk to your health increases.

Dr WOODRUFF - … As well as being an elected member for Franklin, and a member for Parliament, my history was as an epidemiologist at the National Centre for Epidemiology and Population Health. I did my PhD on infectious diseases. I have no specialist knowledge in COVID-19 but I understand how to read research and I understand how to read data. I also have a particular connection with the medical and the public health community around Australia. That has given me an insight and a particular connection to people to hear their views and their concerns. That is where I am coming from on behalf of the Greens.

Cassy has given an overview of how things have changed since the borders opened and we certainly had an excellent public health response to the pandemic before then. There is no doubt about that. Since then, we have seen a change in narrative and a change in response. This was very palpable to us.

I got briefings from the Health Department and Public Health director Mark Veitch, before the borders opened, and we were assured of a number of things about what the response would look like. As the weeks, and then months have unfolded since then, it is very clear that none of what was promised has been followed up.

Since 15 December [2021]*, we know 250,000 Tasmanians - half of all Tasmanians - have been infected or reinfected. One of the problems with the data that the Government doesn't provide to Tasmanians is we don't know who is being reinfected on those numbers. We also don't have the openness about data and accountability that we used to have.*

Prior to the borders opening, we had a regular correspondence and just after the borders opened, we were having daily media press conferences where the Director of Public Health was available and questions could be asked. That finished at the end of March [2022].

We have just had one day, on 6 July, when there was a COVID-19 press conference where Mark Veitch was available. To put that in context, 13 people died and there were 240 cases before 15 December; after there were 250,783 cases and 189 Tasmanians have died since then. In the past six months, we have had one press conference on COVID-19. As a scientist, this says to me that there is a lack of transparency about what is going on.
...
One of the things I really want the Committee to understand is the response that has been taken by the Federal Government and our state premiers - each state obviously being responsible for the health of their own population - has first and foremost been about putting the interests of the business community first. It is not supported by the scientific and medical data, and it is not supported by the medical and professional health independent communities around the country.[46]

The Committee was informed that thorough planning and preparation had meant that the State's health system had been able to rapidly adapt and respond effectively to increasing case numbers following the re-opening of the State's border (and throughout the COVID-19 response more broadly). The impact on Tasmanian hospitals was significantly less than what the Government modelling had projected. The strong effort on vaccinations, with one of the highest vaccination rates in the country, had helped to reduce the impact of COVID-19 in Tasmania.[47]

The Committee was advised the removal and reduction of restrictions in Tasmania was not a decision that was made lightly. The Government was aware, once the restrictions were eased, it was inevitable COVID-19 would enter the Tasmanian community. Such was the case for other Australian jurisdictions when they opened their borders.[48]

There had inevitably been an impact on Tasmanians as a result of the decision to re-open the borders.

Use and Availability of Anti-Virals in Treating COVID-19

At the public hearing, the Committee asked about the use of anti-virals in treating COVID-19. The following was shared by Premier Rockliff, Dr Veitch (Director of Public Health) and Ms Morgan-Wicks (Secretary, DoH):

CHAIR - ... I am interested in the use of antivirals and when they're used in treating COVID-19. Is there any evidence the use of them would help prevent long COVID-19 or serious infection and when is it used?

[46] See Transcript of Evidence Public Hearings (21 October 2022) - (Various), p.26-30 (Tasmanian Greens)
[47] See Tasmanian Government – Follow-up Inquiry, p.19
[48] See Tasmanian Government – Follow-up Inquiry, p.19

Dr VEITCH - Antivirals are a very important part of our armamentarium to deal with COVID-19. The focus of the use of antivirals is on people who are at risk of more severe illness. It is typically people aged over 65 with a couple of chronic medical conditions, or people with significant immune-suppression, particularly people who may not be completely vaccinated and boosted. The benefits we are looking to and which the efficacy of antivirals is measured against is not getting sick enough to require hospitalisation, intensive care or death.

The use is fairly targeted but it is quite a wide target. There are a lot of people who can benefit from antivirals. I am unaware of any data that looks at their use for preventing long COVID-19. In a sense, there are a number of long-term sequelae of COVID-19. The Premier has outlined the cluster of symptoms that's beginning to become recognised as a feature of some people in the aftermath of COVID-19. We have experienced similar sequelae after a range of other infections historically, things like Epstein-Barr virus or glandular fever, CMV[49] and bacterial Q fever. There is substantial knowledge about how to manage people with those post-viral or post-bacterial sequelae. It is going to be important to build on that intelligence when addressing people with those forms of long COVID-19.

The other thing that can happen with people who have severe illness is they can have chronic sequelae of a severe bout and disruption of their lungs or heart. People may have chronic coughs because of slowly resolving of inflammatory processes in their lungs. Some people can even have permanent damage to their lungs, for example, after intensive care spells.

We can reduce long-term outcomes from COVID-19 with antivirals. That is probably where the greatest gains are going to be. Stopping those more significant pathophysiological harms as a result of COVID-19 is probably the main benefit of antiviral treatment. The extent to which it influences the other, mostly milder, but in times disabling symptoms, is not clear.[50]

The Committee also sought further detail regarding the availability of antivirals in the Tasmanian Community:

Mr ROCKLIFF - My information is that antivirals are the most effective when taken early after symptom onset.
...
Mr ROCKLIFF - They are available in pharmacies as well.

CHAIR - Is there a cost to patients in pharmacies?
...
CHAIR - The reason I ask is that if we are trying to encourage people not to access our acute health services unless there is a real need, even though they may be in the category that may make them more vulnerable, they go to the pharmacy and it is quite an expensive medication. ....

[49] Cytomegalovirus
[50] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.9-10

Mr ROCKLIFF - I understand they are PBS listed. Some are available on prescription through participating community pharmacies. They are on the PBS as of May…

Ms MORGAN-WICKS - … Paxlovid and Molnupiravir have recently been PBS-listed, I believe in May 2022, and are now in community pharmacies. We have also established a COVID@home pharmacy service, so if you test positive for COVID and opt into our COVID@home service, we have a pharmacy service to deliver appropriate antivirals to you at home.

I think early on in the outbreak we were delivering treatments - … We were identifying patients through our COVID@home triaging and bringing them into hospital, for example for day treatment, or sometimes overnight admission if their symptoms worsened. Now we are seeing more widespread availability of the antivirals, but still prescribed either via a doctor in COVID@home to a particular patient, or if a patient is attending their own GP.

CHAIR - In the course of the illness, what is the optimal time for administration of the antivirals?

Mr ROCKLIFF - Very early after symptom onset, is the information I have.

Dr VEITCH - The use of antivirals has evolved over time, as we have heard. We started off with some drugs that had to be provided in hospital, which was a bit complex because you had to get the person to hospital and manage them. Over the last six months or so, clinical practice in relation to antivirals has changed, as has their regulation and availability. It has been a bit of a balancing act, balancing the risk of side effects from some of the early treatments against establishing the safety of the agents that we are using now, when used in the right context.

The recommendation is that people who are most likely to benefit from antivirals - people who are over 65, have a couple of chronic diseases or are immunocompromised - get a diagnosis as soon as possible, preferably a PCR with a quick turnaround or, failing that, a RAT test, and then expect to be assessed by their general practitioner or whoever they are dealing with for their care to contemplate the use of an antiviral agent and either decided for or against. The sooner, the better.
…
Mr ROCKLIFF -… I am advised that as of 23 May [2022]*, we have 1,333 courses of Paxlovid in Tasmanian hospitals. On average, our hospitals are providing courses to 11 Tasmanian patients per week. We have done a bit of research on the Commonwealth website as to the cost, which comes to $6.80 with a concession card, or $42.50 without. Aged care have been pre-positioned as well, so it is available in our residential aged care facilities.*

CHAIR - I do not know if this is available publicly, but are we able to know which pharmacies actually stock it - is it all pharmacies?

Mr ROCKLIFF - All pharmacies, as I indicated earlier.

CHAIR - So, all community pharmacies would have this available?

Ms MORGAN-WICKS - We have had feedback from the (Pharmacy) Guild and Society early on in relation to the cost of the stockholding, and their ability to actually get it and then get it back out the door. It was a significant cost, so I believe that a buy-back or guarantee scheme was provided to pharmacies to take that risk.

CHAIR - Through the Commonwealth?

Ms MORGAN-WICKS - Yes, that is my understanding, but assisted from the State, so we are making sure the antiviral stock can move around the State as required.

CHAIR - I am not sure if you know whether all pharmacies have it, such as the pharmacy in Queenstown, the one that is occasionally open in Rosebery and Stanley, places like that, and down the east coast where it is more difficult for people to get to GPs.

Mr ROCKLIFF - Yes, I understand the reason for your questioning its accessibility in rural and regional areas. I do not have that information with me, but we can ask the Pharmacy Guild.[51]

At the public hearings, Dr Jackson (National Vice President, Pharmacy Guild of Australia (PGA)) informed the Committee about their view that pharmacists should be able to provide COVID-19 antivirals:

CHAIR - ... do you have a particular comment on antivirals?

Dr JACKSON - It is a good question. I will give you a recent example. I was working Sunday morning, 10 am to 1 pm, because one of my pharmacists rang up sick. At about 9:45 am a regular patient of ours rang saying he had tested positive to COVID-19. This was on a Sunday.

CHAIR - An at-risk patient, we are talking about?

Dr JACKSON - Absolutely. He is in his 90s. His wife tested positive three days prior. We helped to facilitate antivirals, so fortunately I had the contact details of the principal of the local general practice this person attended. I texted them and asked if they could authorise supply of a COVID-19 antiviral. I did a risk assessment and said his kidneys were a bit shot, and this is probably the best antiviral. She authorised that and said she'd provide a script tomorrow. We provided that within an hour. He had the antivirals, but that is not going to be available to every pharmacist.

I am lucky I've developed contacts with GPs over the years and I'm able to facilitate that, but in terms of timeliness, from a Commonwealth and a state level, we could have facilitated pharmacy access to the COVID-19 antivirals. I do a risk assessment every time. I have phoned GPs with recommendations. There is a local general practice I

[51] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.10-12

work with where if a person rings up, we do the risk assessment, and we provide advice around which antiviral to use.

Pharmacists are well equipped. It would have increased timely access. It is unfortunate there wasn't an agreement at the Commonwealth and state level for pharmacists to provide timely antivirals.

Having said that, the COVID@home service did do a very good job. They did struggle with timeliness. I am not talking five days; it might have taken them an extra day or two longer than it could have.

...

Dr JACKSON - They are time critical medications. They did a pretty good job with some of those surges, and a very good job when there weren't surges.[52]

The Committee heard from Dr Barratt (Vice President, AMA Tasmania) about the access to, availability and impact of antivirals on COVID-19 in Tasmania:

Dr BARRATT - ... the increased access to antivirals has been very useful, and being able to have places like nursing homes being able to stock antivirals on their imprest has been a godsend for general practice. I do a lot of after-hours work and I'm able to take a phone call and say to someone, 'yes, Mrs Jones has COVID-19, please start her on the anti-viral you have in the cupboard,' and that has been brilliant, and for keeping people out of hospital.

... The access to antivirals has been fantastic and Tasmania has done well from there.

...

Dr BROAD - They still provide antivirals from a phone consult?

Dr BARRATT - Yes, that phone consult is still half an hour for which you don't get paid terribly well. I do them quite regularly.[53]

Committee Findings

F9. Timely access to and availability of suitable antivirals for COVID-19 treatment in Tasmania is considered vital.

F10. The roll-out of antivirals as part of the COVID@home program was effective.

F11. Inclusion of COVID-19 antivirals on the Pharmaceutical Benefit Scheme increased accessibility and affordability for patients through pharmacies.

[52] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.14
[53] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.45

Measures to Respond to Increasing COVID-19 Case Numbers

The Committee was informed that further key measures were undertaken by the Government to assist in the preparedness and equipping of the Tasmanian health system to quickly adapt and respond effectively to increasing COVID-19 case numbers. These measures, described further below, included:[54]

- high vaccination coverage
- effective testing, tracing, isolation and quarantine (TTIQ) measures
- triaged models of care for positive cases
- COVID@home
- Community Case Management Facilities
- Hospital Capacity
- Personal Protective Equipment (PPE) Supply
- Ambulance Tasmania preparedness, and
- public and key stakeholder communications.

High Vaccination Coverage[55]

The Committee was informed that a key factor in supporting Tasmania's border re-opening was achieving high levels of COVID-19 vaccination coverage rates across the Tasmanian community. Since the national COVID-19 vaccine roll-out commenced in early 2021, Tasmania has consistently outperformed other Australian states, with Tasmanian state clinics delivering a large proportion of the COVID-19 vaccinations both prior to, and following, the re-opening.

Effective Testing, Tracing, Isolation and Quarantine (TTIQ) measures[56]

The Committee was informed that TTIQ measures in Tasmania had been guided by national advice and recommendations, including those provided in the Coronavirus Disease 2019 Communicable Diseases Network Australia (CDNA) Series of National Guidelines (SoNG), and via AHPPC. The SoNG, which is developed and updated by CDNA, outlines Australia's national minimum standard for surveillance, laboratory testing, case management and contact management for COVID-19.

The national guidance contained in the various iterations of the SoNG has evolved in response to new information on the epidemiological characteristics of the virus (including the prevalence and potential for spread), clinical case definition, and testing capacity. Guidance in the SoNG was also updated where required in response to relevant decisions of National Cabinet and progress through the National Plan to Transition Australia's National COVID-19 Response. Tasmania's COVID-19 policies, processes, and measures have in turn evolved throughout the pandemic response in line with the national guidance.

As with PHSM, TTIQ measures have been adjusted throughout the pandemic in line with national advice and guidance, and consideration of local context. With the emergence of

[54] See Tasmanian Government – Follow-up Inquiry, p.7
[55] See Tasmanian Government – Follow-up Inquiry, p.7
[56] See Tasmanian Government – Follow-up Inquiry, p.7

Omicron as the dominant COVID-19 variant, AHPPC released advice[57] regarding public health implications of Omicron in December 2021, which acknowledged:

While TTIQ has been very effective in controlling transmission, its effectiveness is limited by operational factors and the community's willingness to test and comply with public health recommendations. Therefore, the overall contribution of TTIQ to limiting transmission is likely to decrease with higher case numbers.

The information below sets out key TTIQ measures implemented ahead of the re-opening of Tasmania's borders (and prior to that as part of the broader COVID-19 response).

Testing[58]

The Committee was informed that detecting cases of COVID-19 remained critical to controlling the spread of the disease and thus helping to keep Tasmanians safe. A key message throughout the COVID-19 pandemic response, both at the state and national level (including pre-and post-re-opening), has been, and continues to be, 'if you have symptoms, get tested.'

The Tasmanian COVID-19 Testing Strategy (the Testing Strategy)[59] was designed to detect cases of COVID-19 rapidly for the benefit of:

- the individual, in order to receive early and appropriate clinical care; and
- the community, in order to enable early identification of cases to reduce time spent infectious in the community and to identify and control chains of transmission promptly.

The Testing Strategy had evolved throughout the pandemic response, guided by the SoNG, the Public Health Laboratory Network, and AHPPC advice. The Testing Strategy will continue to evolve in the ongoing COVID-19 response, to reflect ongoing advances in both knowledge of COVID-19 and testing technologies and local epidemiology.

Throughout the pandemic response (including before and after the re-opening of the state border), community awareness of testing had been, and continues to be, promoted and maintained through increased messaging utilising a variety of media channels (including website, print, television, radio, and social media). DoH also works with organisations such as Primary Health Tasmania to increase testing and/or referral through general practices and supports workplaces to encourage testing of symptomatic workers (and workers' symptomatic family members) as part of workplace COVID-19 Safety Plans.

Testing Capacity[60]

The Committee was informed that prior to the re-opening, as part of the Tasmanian Government's Delta Shield Program (announced on 11 August 2021), significant work was

[57] See Attachment F – APHCC Statement on Omicron Public Health Implications
[58] See Tasmanian Government – Follow-up Inquiry, p.8
[59] See Tasmanian Government – Follow-up Inquiry, p.8
[60] See Tasmanian Government – Follow-up Inquiry, p.9

undertaken to strengthen Tasmania's COVID-19 testing and laboratory capacity. This included measures such as:

- introduction of an on-line request system for bookings;
- development of an alternative workforce model to enable the COVID-19 testing clinics to respond to surges in demand;
- increased laboratory staffing levels; and
- procurement of additional laboratory equipment.

Primary laboratory capacity to process COVID-19 tests was provided through the Royal Hobart Hospital (RHH). Tasmania's testing capacity has been expanded significantly over the prior 18 months. This has included a tripling of processing capacity at the RHH from 1,000 tests per day to between 3,000 and 5,000 tests per day ahead of the re-opening (as part of the broader COVID-19 response planning). In addition, there is further surge capacity supported by the Launceston General Hospital (LGH) and private providers.

Ahead of the re-opening (and prior as part of broader COVID-19 preparation and response planning), testing clinics were located in Hobart, Launceston, East Devonport, and Burnie. DoH also had four buses fitted out to provide the administrative base for mobile testing clinics to support surge testing and/or to target testing capacity in rural and regional areas as required.

As part of preparedness planning, in mid to late 2021, DoH developed and implemented a revised staffing approach for COVID-19 testing clinics. This introduced an alternative workforce to undertake COVID-19 expanded specimen collection, under the supervision of clinical staff. This revised model enabled both expanded testing capacity and supported clinical workforce capacity in other areas of the health system by enabling distribution of nursing staff into areas of clinical need (including the COVID-19 vaccination program, hospitals and other health services).

DoH also developed arrangements (including contracting) with private providers to facilitate the delivery of testing in DoH established pop-up clinics, at the DoH fixed clinic in Burnie, and on Flinders and King Islands. Under the contracting arrangements, the private providers were funded to deliver testing at their sites that was precluded from funding under Medicare (e.g., travel related tests and testing for asymptomatic people such as close contacts).

Following the re-opening of Tasmania's borders on 15 December 2021, and the rapid emergence of the Omicron variant, DoH acknowledged the extreme pressure that PCR testing clinics and booking lines were placed under in the last week of December and early January 2022.

This sudden peak in testing demand also occurred during Christmas/New Year, which is normally a very challenging staffing period, despite the increased capacity and plans in place for re-opening. This pressure was experienced across all Australian states and territories with open borders (excluding Western Australia, which remained closed at that time). Following an emergency meeting of National Cabinet on 5 January 2022, as numbers of cases in the community continued to increase, Tasmania introduced the use of RATs to enable easy

access to testing and rapid turnaround times to results. This was in-line with AHPPC advice and a national move towards increasing use of RATs as a diagnostic test, reducing pressure on PCR testing capacity resulting from the rapid increase in case numbers due to the spread of Omicron variant.

In order to ensure that eligible people throughout Tasmania had timely access to RATs, particularly when there was a national and international shortage of these tests, a supply and distribution strategy was introduced. The Tasmanian Government supply of RATs was supplied free of charge to:

- people who were symptomatic;
- close contacts;
- those directed by Public Health Services (PHS) to test;
- those in high-risk settings approved by the Deputy State Health Commander on advice from PHS; and
- exempt critical workers.

In early January 2022, RAT collection sites were stood up at the following locations:

- in the south at MyState Bank Arena, Glenorchy, and the Tasmania Police Academy at Rokeby;
- in the north at the Launceston Silverdome; and
- in the North West at the Ulverstone Sports and Leisure Centre, and the Dial Sports Complex in Penguin.

Following the initial peak, the RAT distribution activity was relocated to the existing testing clinics located at Hobart, Launceston, East Devonport and South Burnie.

Australia Post was engaged to implement home RAT delivery to residents of more regional and remote areas. Home RAT delivery was also available to all eligible Tasmanians who are unable to collect their RAT kit from a testing clinic, or do not have someone who can collect it on their behalf, including people with disability.

At the public hearings the Premier Rockliff, Ms Morgan-Wicks (Secretary, DoH), Mr Craig Jeffrey (Chief Financial Officer, DoH) and Ms Jenny Gale (Secretary, DPAC) provided information regarding the State's COVID-19 testing capacity and costs:

> *CHAIR - We still have testing stations, like the one in Burnie - that one is outsourced to the private sector - that did have a number of challenges at the outset and failed to deliver according to their contract. What happened there, Premier, and how are things going now? What is the future of the offsite or standalone testing centres, and the cost to date of the North West one and the other standalone ones that aren't inside our acute care system?*
>
> *Mr ROCKLIFF - You mentioned the testing clinic at Burnie. It is not outsourced any further; it is our responsibility.*

CHAIR - It's back in now?

Mr ROCKLIFF - Yes, it has been for several months.

CHAIR - Where is that geographically located?

Ms MORGAN-WICKS - Still the same site.

CHAIR - But it was always funded by the State, and now it's completely operated by the THS staff?

Ms MORGAN-WICKS - Yes. We're managing that outsourcing contract. Some difficulties were experienced and that contract was brought back into the State, so it is part of our State testing network.

CHAIR - … with these standalone clinics, we know that testing is done when a patient comes into an acute setting, if they haven't already had a test. Can you explain the cost of those centres and the future of them?

…

Mr JEFFERY - Total cost estimated for 2021-22 is $20.297 million. That comprises $10.417 million relating to the Department of Health and $9.88 million relating to other agencies, which is the Department of State Growth for message boarding and things like that. The State Government component of that is $10.173 million. The Australian Government component of that is $10.134 million…

…

Mr ROCKLIFF - We are moderating and adjusting the demand of the testing clinics, in terms of the hours of operation. I am advised they will continue for the foreseeable future.

Mr JEFFERY - Those numbers are as of 8 June, including actuals to 31 May and forecasts for June. The actuals to May still could change as costs may be journalled backwards and forwards. The component relating to the Department of State Growth, the message boarding, and traffic control, is $9.88 million, testing clinics salaries and wages are $6.732 million, testing clinics cleaning and waste removal are $427 000, testing clinics communications $523 000, testing clinics external contractors, some of the outsourcing, $878 000, testing clinics freight $358 000, operational costs at the testing clinics $544 000, testing clinics rent and property-related costs $772 000, security at testing clinics $133 000. That's it.

CHAIR - Do we have a cost of posting out RATs? There was demand in the North West, and probably other parts of the state that are quite remote.

…

Ms MORGAN-WICKS - … in the past week we have seen our RAT distribution move from around 1,000 a day, and that had been pretty constant over several months, to 2,000 a day. There is still continued demand for RATs. I understand we have about 2.5 million rapid antigen tests still within our stockholding. We have daily monitoring right across all of our sites, we have collection and we have the Australia Post contract to distribute those.

CHAIR - There are still some being picked up at clinics. You can register to pick up a free RAT. Do the figures include them?

Ms MORGAN-WICKS - That is correct. The cost our CFO, Craig Jeffery, just read out for testing clinics does not include the cost of running the laboratories to do the second pass.

CHAIR - It is just the clinics?

Ms MORGAN-WICKS - Yes, in terms of our Royal Hobart Hospital laboratory.

Mr WILLIE - Other agencies would have stock holdings too, wouldn't they? The Department of Education distributing RATs. The 2.5 million is just the Health Department.

Ms MORGAN-WICKS - I am not aware of the Department of Education's stockholding, just the ones available for Health distribution.

...

Ms GALE - We would need to get the current information but previously the Department of Education RATs were being distributed through the Health distribution mechanism.

CHAIR - They are not still?

Ms GALE - We would need to confirm whether that is still happening or not.

Mr WILLIE - It is probably a question for State Growth, but $9.8 million for traffic control and signage seems like an extraordinary cost.

Mr ROCKLIFF - Including personnel. That is my advice, yes.

Mr WILLIE - There was a separate figure for wages.

Ms MORGAN-WICKS - The separate figure for wages are wages paid by the State Government. The outsourced traffic controllers are quite a significant presence, as probably anyone who has turned up to a PCR and been guided through by the meeting personnel will know. They are often the unthanked component of our staff but they have been integral to the smooth operation of our testing clinics.

CHAIR - .... Do we have the postage costs from Mr Jeffery?

Mr JEFFERY - Rapid antigen tests freight was $149,000 and external contractors rapid antigen test distribution $27,000.

...

Mr ROCKLIFF - I'm not aware of any other state that is posting rapid antigen tests out to individuals.

...

Mr ROCKLIFF - ... For school term two, one bulk distribution of RATs was made to all sites during week one to cover the first four weeks of term. Schools will continue to

distribute to families as requested and are able to contact the central facility services within the Department of Education should additional RATs be required. Supply and demand will continue to be monitored throughout the term and the Department of Education will continue to support the supply of RATs to independent schools. Catholic Education will manage this directly with the Department of Health, I am advised.

CHAIR - Early education and care centres? Are you sending them there?

Ms GALE - Our understanding is they are included in the school distribution.

Mr WILLIE - Is there an expectation that the demand for RATs will increase? A lot of people are coming out of that 12-week window from the first wave and they will be testing again.

Mr ROCKLIFF - If demand increases, we have ample RATs in stock for the winter period.

CHAIR - Are there supply issues? You need to maintain the stockpile too.

Mr ROCKLIFF - I'm advised the supply chain has stabilised so there are no immediate concerns with supply.[61]

Testing requirements to support safe re-opening[62]

The Committee was informed under the re-opening arrangements, travellers coming to Tasmania from high-risk areas were required to return a negative COVID-19 PCR test within 72 hours before departure to Tasmania. This requirement did not apply to children aged under five years or people recently recovered from COVID-19.[63] Vaccinated travellers from low-risk areas were not required to undertake pre-departure testing.

Other additional and/or amended testing requirements implemented in preparation for the re-opening of Tasmania's borders through Public Health Directions included:

- a modified testing regime for transport, freight and logistics workers and international aircrew arriving in Tasmania after recently spending time in high-risk areas and for non-vaccinated workers (including a requirement to provide evidence of a negative COVID-19 test undertaken in the 7 days prior to arrival in Tasmania); and
- requirement for full COVID-19 vaccination, and pre-embarkment testing for passengers and regular testing for crew, of cruise ships.

Approximately three weeks after the border re-opening, Tasmania began (on 6 January 2022) using RAT tests as a primary diagnostic tool. This change followed confirmation by National Cabinet on 5 January 2022 that PCR testing was not required following a positive RAT.

[61] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.18-20
[62] See Tasmanian Government – Follow-up Inquiry, p.10
[63] The requirement was mandated under Public Health Direction Arrival requirements for certain travellers into Tasmania – No. 12 (14 December 2021)

On 19 January 2022, requirements for pre-departure testing for vaccinated travellers to Tasmania were removed, while testing requirements for unvaccinated travellers remained in place until 26 February 2022. This was also in line with a national move away from requiring testing for interstate travel.

Tracing[64]

The Committee was informed that as part of Tasmania's broader COVID-19 response, a number of measures have been implemented to support and enhance Tasmania's contact tracing capability and capacity. Such measures included:

- working with the University of Tasmania to develop an online contact tracing training package, designed to support the rapid upskilling of health professionals in contact tracing;
- configuration of a scalable and flexible workforce to support surge capacity (including members from PHS, Ambulance Tasmania (AT), the Aged Care Emergency Operations Centre (ACEOC), Disability Emergency Operations Centre (DEOC) and the Tasmanian Health Service (THS));
- move from paper to electronic forms for use in case and contact management;
- introduction of Check in TAS QR codes and app to facilitate the collection of contact tracing information in settings defined in the Contact Tracing Public Health Direction;
- use of an SMS system to provide advice and rapidly survey potential cases to inform risk assessments; and
- implementation of the new Tasmanian Notifiable Diseases Surveillance System.

As part of Tasmania's re-opening planning, it was recognised that as community transmission increased, modified contact tracing processes in line with the CDNA SoNG would need to be employed. As such, with the rapid increase in case numbers due to the spread of Omicron variant following the border re-opening, PHS adapted its processes in line with national recommendations for a more automated process.

Under these more automated processes, case surveys and information were sent electronically, advising cases to identify their own close contacts and inform workplaces or schools they may have attended while infectious. The more automated process of contact tracing was similar across Australian jurisdictions.

PHS was focused on managing and undertaking contact tracing in areas of high priority and where outbreaks were occurring. Clinical nurse consultants worked with priority settings to manage outbreaks where there was risk of rapid transmission of COVID-19 and the consequences of cases may have been severe.

At the public hearings the Committee heard from Dr Veitch (Director of Public Health) and Ms Morgan-Wicks (Secretary, DoH) in relation to contact tracing in the State:

> *Dr VEITCH - In the community when a case is notified, they are asked to advise their contacts to find and advise the people who live in the household with them that they are*

[64] See Tasmanian Government – Follow-up Inquiry, p.11

close contacts, and the implications; where they can get information that will explain their obligations. I think most of the public is now aware of the obligations and what you have to do -

...

Dr VEITCH - Once people broadcast that it sometimes can cause more disruption than is actually necessary. But where there are cases in vulnerable settings, such as residential aged care, hospitals and the like, there will be support. Usually it is for the organisation themselves to work out who is at risk and to manage those contacts.

Mr WILLIE - In terms of the data you have there, Dr Veitch, is there an average mixing figure that was used? Are we able to understand what the drop was in that December period?

Dr VEITCH - Tasmanians were reporting on average 12 or so contacts per person outside the household per day. At the time we opened the borders it dropped briefly down to about eight. Then it picked up quite quickly again.

Mr WILLIE - In January?

Dr VEITCH - It would be in January to a similar level. It's very hard to maintain sustained behavioural change in people. The thing that may do it is not necessarily concern about COVID-19, but because it was Christmas. The shops were shut, less sport, and so on.

...

CHAIR - Going back to when you get a positive test, you're required to notify your close contacts yourself. Is there any monitoring of that done to see whether people do that? Do you just take people at their word?

Dr VEITCH - We have taken people at their word throughout the pandemic. We have tried to communicate why people should limit their movements, support them to do so, for example with the provision of RATs and social supports if necessary. There hasn't been an interrogation or check-up. There was last year when we were more actively managing cases, but with a shift towards self-regulated management of one's behaviour as a contact, we haven't intruded to either monitor or enforce in most instances.

Ms MORGAN-WICKS - In vulnerable settings we have been checking. For example, in hospitals where a positive case is detected on a ward, we then check all of our screenings. That's why we maintain screening to see who has come into the hospital, who has nominated that ward as a visitation point, we go to staff logs and work out every single staff member who has worked on that particular ward, and then we do sweep testing through a ward for all of the patients, including discharged patients, visitors and staff. In vulnerable settings such as aged care, disability or hospital where we are closely managing outbreaks, that does continue.

CHAIR - Regarding the requirement to isolate if you're a positive case, ... Is that monitored at all, or are we just relying on people to do the right thing?

Dr VEITCH - For the most part we are relying on people to do the right thing. The period of isolation has diminished, the requirements of people in isolation has eased a little bit in terms of testing. We still think that the appropriate strategy is to require people to isolate for a week, but as we progress through the coming months the national expert committee, CDNA, AHPPC, will look at whether the approach we're taking to isolation remains proportionate.

CHAIR - How often is that reviewed?

Dr VEITCH - These various committees meet once or twice a week. There's constant monitoring. The pace of change of guidelines has slowed a little bit. There were about 30 or 40 different national guideline revisions that occurred up until late last year. We've probably only had three or four revisions of the guidelines this year. It means that substantial changes are not likely to occur more often than every couple of months.[65]

Isolation and Quarantine[66]

Ahead of the border re-opening, the Committee was informed of the range of mandatory TTIQ requirements in place under both the *Public Health Act 1997* and the *Emergency Management Act 2006*. Key requirements in place (or amended) at the time of or just after the re-opening under Public Health Directions included:

- 10 days isolation for positive cases;
- a change from 14 day to seven-day quarantine for close contacts, followed by a seven day period of mask wearing when outside of primary residence, and a requirement not to enter high risk settings except in certain circumstances; and
- risk assessments for businesses and high-risk settings to assist in identification of contacts.

An adjustment to quarantine requirements was implemented from 14 January 2022, permitting certain critical workers in critical industries, who would otherwise be in quarantine as close contacts, to attend the workplace subject to certain strict conditions. This adjustment was in line with a decision by National Cabinet on 13 January 2022 regarding implementing changes to furlough arrangements for essential workers. This measure was targeted at addressing supply chain and workforce shortages in critical industries caused by close contact quarantine requirements.

At the public hearings, the Committee heard from Dr Veitch (Director of Public Health) related to the State Government's understanding of the prevalence of non-testing in the Tasmanian community:

Mr WILLIE - Does the Government have any understanding of the prevalence of people not testing so they don't have to quarantine? ....

[65] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.36-38
[66] See Tasmanian Government – Follow-up Inquiry, p.12

Mr WILLIE - … it might be economic security too. They might be a casual worker and think they're going to miss out on employment. Do you have any understanding of how prevalent that is?

Dr VEITCH - We know that as of recently about one-third of Tasmanians have been diagnosed with COVID-19 in the first few months of this year. That many people have definitely fessed up. Tested and fessed up.

There was a period when people doing the modelling estimated that we missed about half the cases. I think we probably do better than that. We will inevitably miss some illnesses that are really mild. People don't realise that they've been infected. I think it is probably useful to conceptualise it, knowing about one-third of the population's been infected but probably a bit over half of the population actually has been infected. What does that mean? You might be missing 20 per cent or even 30 per cent of cases as a consequence of either mild illness or people not proceeding down the pathway of testing. We're hearing about the majority of cases.

We will eventually move to a set of circumstances where we are less actively diagnosing every case.

Mr WILLIE - Compared with flu?

Dr VEITCH - Compared with flu, for example, we would be diagnosing in a typical year, probably under 10 per cent of cases.
…
Dr VEITCH - This year we are trying to do better with diagnosing influenza. We are trying to understand better how much influenza's out there and manage it more actively. We want to reduce the pressure on the health system. We don't want people who could have severe illness from influenza averted. We don't want them to miss that opportunity.

Not necessarily this year, but not too far off, we will probably move to a situation where our testing practices are largely focused on the people who are most likely to have severe symptoms from their illness. Other people we will ask to be responsible with a respiratory illness, to stay at home until symptoms resolve. Don't go to work while they're sick. We will want to keep the focus on diagnosing people who are more at risk. That's a testing surveillance swerve, but I don't think we're likely to do that in the short term. It is on the horizon.[67]

[67] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.38-39

Committee Findings

F12. The Series of National Guidelines was developed and updated by the Communicable Diseases Network Australia. These guidelines outlined Australia's national minimum standard for surveillance, laboratory testing, case management and contact management for COVID-19.

F13. Testing, tracing, isolation and quarantine measures in Tasmania were guided by national advice and recommendations, as provided in the Coronavirus Disease 2019 Communicable Diseases Network Australia, the Series of National Guidelines, and the Australian Health Protection Principal Committee.

F14. Significant work was undertaken to strengthen Tasmania's COVID-19 testing and laboratory capacity prior to opening of the Tasmanian border, based on modelling of demand related to the Delta variant.

F15. The emergence of the Omicron variant on the re-opening of the Tasmanian border placed extreme pressure on PCR testing clinics particularly in the last week of December and early January 2022.

F16. The decision to introduce the use of Rapid Antigen Tests on 6 January 2022 enabled greater access to timely testing and results.

F17. The supply and distribution of Rapid Antigen Tests was effective and generally timely, including through the use of Australia Post for those unable to access a distribution centre.

F18. The cost of establishing and operating the state's COVID-19 testing facilities, including staffing and security, and the purchase and distribution of Rapid Antigen Tests was considerable. These costs were shared between the State and Australian Governments.

F19. When the Tasmanian border re-opened on 15 December 2021, contact tracing was to play an important role in managing the spread of the virus.

F20. The Omicron variant entered the State with the first airline passenger arrivals on 15 December 2021.

F21. With the emergence of the Omicron variant contact tracing processes were significantly and rapidly modified to respond to the higher transmissibility.

F22. Isolation for positive cases and quarantine for close contacts were in place when the Tasmanian border re-opened and timeframes were adjusted as circumstances changed.

F23. To address critical workforce shortages and supply chain challenges, quarantine requirements were changed for certain workers on 14 January 2022.

Triaged models of care for positive cases,[68] COVID@home and COVID@homeplus[69]

The Committee was informed that the triaged models of care for COVID-19 cases in Tasmania were developed to ensure people had access to the most appropriate level of care in the most appropriate setting based on risk assessment. These models included:

- COVID@home, for those with mild to moderate illness who have a suitable place to isolate and recover and were able to cope well at home;
- Community Case Management Facilities (CCMF), for those with moderate illness requiring a higher level of monitoring than that available in COVID@home, or those with mild to moderate illness with no suitable place to isolate and recover, or no social support available (for example elderly living at home alone without family or social supports, a traveller without suitable accommodation to isolate in, or a person without a home); and
- hospital treatment for those with severe/critical illness and very unwell.

People with COVID-19 who had few or no symptoms were able to isolate in a suitable premises, with or without support from their own general practitioner (GP). Some people with COVID-19 who have few or no symptoms but did not have a suitable premise to isolate, were able to isolate at one of the designated Tasmanian Government COVID-19 hotels, with or without support from their own GP, or COVID@home. The Tasmanian Government COVID-19 quarantine hotels had been managed by the Department of Communities, with DoH taking over the responsibility of these from 1 April 2022.

In addition to the measures outlined above, there were a range of other existing TTIQ requirements in place under Public Health Directions (and directions made under the *Emergency Management Act 2006*) that continued to apply at the time of border re-opening. These include (but were not limited to) requirements regarding testing, isolation and quarantine that had been implemented and updated as required throughout Tasmania's pandemic response, in line with the national guidance in the SoNG.

The Committee was informed the COVID@home service was established and commenced operation on 15 December 2021 in the lead up to the re-opening of Tasmania's borders as a hospital avoidance strategy. COVID@home was targeted at providing safe care for people who tested positive to COVID-19 and were suitable for receiving care within their home.

Caring for individuals with COVID-19 in their homes allowed for the provision of appropriate care, minimised the impact on the healthcare system and freed up hospital beds for patients with moderate or severe illness.

COVID@home was a virtual service that enabled COVID-19 positive individuals enrolled in the program to access safe and supportive remote healthcare in the home 24 hours a day, seven days a week. Care was provided by a team of qualified DoH staff including doctors, nurses and allied health professionals. The service utilised health monitoring devices to check on people's health daily whilst they were at home.

[68] See Tasmanian Government – Follow-up Inquiry, p.12
[69] See Tasmanian Government – Follow-up Inquiry, p.13

The COVID@home service was available statewide, including in regional and rural areas of Tasmania. It was an 'opt in' service, with COVID-19 positive individuals able to opt in and out of the program at any time. Patients could self-refer into the service if they wish, or they could be referred by their healthcare provider. Healthcare professionals such as GPs were also able to access the service if they had concerns about any of their own patients diagnosed with COVID-19.

Planning for COVID@home was informed by the Kirby modelling, which was based upon the Delta variant. However, with the emergence of Omicron as the dominant strain in late 2021, Tasmania experienced higher than anticipated case numbers following the re-opening due to the increased transmissibility of this strain, which in turn placed significant pressure on the COVID@home service. Due to the higher than anticipated case numbers, in the first three days of January 2022, call-back times were longer than intended (exceeding three hours).

In response, DoH undertook rapid staffing adjustments to cope with the demand, including the employment of an additional 4.5 full time equivalent (FTE) staff. As a result, the average call back times have reduced to within 30 minutes (noting there were some fluctuation in this average with a further spike in demand in later January 2022). The nursing staffing level for the COVID@home program was approximately 30 FTE.

In the three-month period since the re-opening of Tasmania's borders on 15 December 2021 to 15 March 2022, 6 023 people had chosen to participate in the COVID@home program and to safely recover at home, with the regional breakdown of participants as follows:

- 1,221 (20.3 per cent) in the north;
- 1,372 (22.8 per cent) in the North West; and
- 3,430 (56.9 per cent) in the south.

At the public hearings, the Committee heard from the Premier, Ms Morgan-Wicks (Secretary, DoH) and Mr Jeffrey (Chief Financial Officer, DoH) around the COVID@home program:

> *Mr TUCKER - ... regarding COVID@home, how successful has that been at keeping people out of hospital?*
>
> *Mr ROCKLIFF - I would say, very successful ... We are moving in to COVID@homeplus through the winter for all respiratory illnesses. COVID@home coincided with a policy in our health system of seeing where we can support people in the community, outside the acute care system - particularly with innovations such as the Community Rapid Response Service (ComRRS), Hospital in the Home, Hospital in the Home Mental Health. A mental health example would be the Police, Ambulance and Clinician Early Response (PACER) initiative, and the secondary triage in our ambulance service.*
>
> *COVID@home brings together that acute community and primary care support to provide a safe and effective in-home healthcare setting for those diagnosed with COVID-19, to ensure people diagnosed with COVID-19 are clinically safe and cared for at home. In our view, the program has been a significant contributor to Tasmania having the lowest rate of hospital admission - just a proportion of active cases compared to other*

states that have opened their borders. COVID@home has contributed to less people turning up to our emergency department as well, with lower numbers of emergency department presentations for COVID@home-enrolled patients.

… As of 17 June [2022], 18,244 people have participated in a COVID@home program - with 499 yesterday currently enrolled in the service as well. So, it has been very successful. We are pleased to see how COVID@homeplus rolls out and supports people.

Ms WEBB - With the two pathways that people can come into the COVID@home program - through self-referral, or being referred by their healthcare provider - what was the mix generally?
…
Ms MORGAN-WICKS - I do not have the exact number, but from anecdotal conversations, for example with the nurse unit manager of COVID@home, a significant proportion are coming through just the individual opt-in-service.

Every single person receiving a positive test result from PCR, or who reported a positive RAT test, was sent a text message asking if they would like to opt in. We have also had a support line for GPs run by COVID@home. I estimate around 10 per cent is probably the likelihood, but we can check the number of calls coming in from GPs referring.

The COVID@homeplus program is going to be through GP referral, but also through emergency department and Ambulance Tasmania referrals. Our paramedics, for example, are in secondary triage. If they visit a home and do not think a patient needs to be brought in to hospital or for admission, they may offer the COVID@home program, and they actually carry the kits in the ambulance vehicles. If our EDs do not believe a patient needs admission, they may offer the virtual monitoring service in case there is a deterioration in their respiratory symptoms. They will also offer a kit, so patients can leave the ED with that and be enrolled in the COVID@homeplus.

We are going to monitor the numbers that are coming through from GPs, EDs and also Ambulance Tasmania.

Ms WEBB - Do we have an average or typical length of time that people are being supported within the program?

Ms MORGAN-WICKS - We have the seven days isolation period, where people are asked by COVID@home every single day to answer questions as to their symptoms. If there are continuing symptoms, they remain enrolled in the COVID@home service. There is no time line.

Ms WEBB - … from the data so far, what is the average time that people are staying supported in the program?

Ms MORGAN-WICKS - We are currently undertaking a program review of the first 150 days of COVID@home. I think we will be able to publish the outcomes of that review and include data as to the length of stay in COVID@home.

CHAIR - Do you have any numbers about people who have been diverted from our acute service, who don't end up going to ED because they're supported through COVID@home,…

Ms MORGAN-WICKS - Not all people who register for COVID@home need hospital level care, that is absolutely correct. I don't know when this number was collected, but of 381 people enrolled in COVID@home, 2.8 per cent were escalated to hospital: that might have been for a day treatment for an antiviral intravenous as it was during the first period of this year. I'd prefer to wait until we've undertaken a full program review and can get that data, if the Premier is happy to share that information.

…

Mr WILLIE - Can we get some figures on COVID@home too? Costs for the kits and the monitoring and everything else that went into it.

…

Mr JEFFREY - The estimated cost of the COVID@home program is $6.981 million…

…

Mr JEFFREY - Salaries and wages, $1.096 million. Licensing, $214 000. Communications, $3.384 million. External contractors, $208 000. Freight, $124 000. Operational costs, $390 000.

…

Mr WILLIE - … Potentially there'd be tens of millions of dollars in hospital admissions saved through the COVID@home program. Is there some sort of understanding of that?

Mr ROCKLIFF - I am not sure of the data, but it would indicate savings, but more importantly saving the congestion in our hospital system and the positive impact on access and flow through the hospital, avoiding bed-block and ensuring that people who need to access our acute care system for other reasons are able to do so in a timely manner.

I am advised that for the first 150 days of operation, people who were enrolled in the COVID@home program had a 49 per cent reduced chance of attending the ED, than the general population of Tasmania.[70]

…

Mr JEFFERY - The COVID@home program is supported by an ICT platform called MyCareManager. The estimated costs of the related hardware for 2021-22 is $1.517 million.

Mr ROCKLIFF - You might recall leading up to the border opening we detailed how many bed numbers, surge capacity, testing, and our COVID@home kits. That figure was 2,500. I can advise the Committee that we have 4,500 COVID@home Plus kits, 4,200 for adults and 300 paediatric, totalling 4,500.[71]

At the public hearings, the Committee heard from Dr John Saul (President, AMA Tasmania) with respect is views of the COVID@home deployment over the period:

[70] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.20-23
[71] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.26

Dr SAUL - … COVID@home - exceptional to begin with, struggling to staff once things really ramped up after the opening and then, of course, managed to get things rolling and provided good levels of support for Primary Health Tasmania from my position as a GP.

COVID@home really struggled with that significant spike in COVID-19 cases after the opening of the borders. Here's where we really struggled, I felt. As much as I've been complimentary with the good that occurred throughout our 2020 and 2021 time frames, the opening of the borders at that time frame I must confess we really struggled. I can see the benefit for families in opening two weeks before Christmas but on the first plane we had our first COVID-19 case arrive. …

At our most vulnerable time as staffing levels were under pressure with holidays at Christmas, we found ourselves opening two weeks before Christmas and those spikes put significant pressure on COVID@home. The struggles that COVID@home had in those first three months were then pushed back onto primary health and as a result, their struggles became our struggles. To me, it would have been much better if we had delayed the border opening, and that is in our submission. Even at mid-January, it might have been unpopular but it would have given us that little bit more time to be prepared. It might have even resulted in the staggering of the arrival of mainland and overseas visitors, which would have helped us.[72]

Committee Findings

F24. The COVID@home and COVID@homeplus interventions were of value in reducing potential hospital admissions during the COVID-19 period.

F25. The COVID@home and COVID@homeplus interventions was cost effective due to reducing demand on the acute hospital system.

Committee Recommendations

R7. The COVID@homeplus program be reviewed to inform service delivery planning for future pandemics.

R8. The COVID@homeplus program be maintained and adapted to respond to other communicable diseases.

Community Case Management Facilities[73]

The Committee was informed that Community Case Management Facilities (CCMFs) were used to accommodate COVID-19 positive patients, who were unable to be managed at home but did not require hospital-level care. The CCMFs were managed by the THS. Services provided through CCMFs included:

[72] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.34-35
[73] See Tasmanian Government – Follow-up Inquiry, p.13

- daily health screening;
- social and mental health supports;
- processes to support escalation and proactive management of any clinical, mental health or social concerns; and
- written and verbal information on the processes to escalate health needs.

Ahead of the re-opening, Tasmania had two operational CCMFs: Fountainside in Hobart with 50 beds and the Coach House in Launceston with 25 beds. Over the three-month period following the re-opening from 15 December 2021 to 15 March 2022:

- 214 patients were admitted to the Fountainside; and
- 168 patients were admitted to the Coach House.

Planning for a third CCMF at Wellers Inn in Burnie with 25 beds was also underway prior to the re-opening, with this facility intended to commence operation shortly after the re-opening. However, a rain event in January 2022 caused water damage resulting in significant delays to works to prepare this facility. As a result, an alternate suitable venue for a North West CCMF had been identified at the Sunrise Motel in Devonport, which has a minimum of 12 beds.

As a further preparedness measure in November 2021, DoH entered into an arrangement with the Hobart City Council to establish a pop-up clinic at the Hobart City Hall if required. This arrangement was put in place so the clinic could be stood up if required to enable people who have tested positive for COVID-19 to have face-to-face appointments in the facility without having to attend the RHH.

At the public hearings, the Committee heard from Premier Rockliff, Ms Morgan-Wicks (Secretary, DoH) and Mr Jeffrey (Chief Financial Officer, DoH) with respect to the model of care, cost and usage of CCMFs:

> *Mr ROCKLIFF - … They adopted a model of care supported by medical governance and facility management provided by local hospitals. The nurse-lead model of care is on-site, operational service 24 hours, 7 days a week. Staffing includes a nurse unit manager who reports to the regional THS nursing director pandemic response. The nurse-led model of care includes the health screening assessment management, early intervention, client advocacy and infection prevention and control oversight. People are referred to the community case management facilities by Public Health, COVID@home or a THS hospital.*
>
> *Ms MORGAN-WICKS - We have been closely monitoring the volumes that are currently being managed through our community case management facilities and our government-managed accommodation facilities. We have currently three COVID-19-positive people in the CCMFs. We have had very low volumes over recent times in those facilities. In January, they were full. We were looking for capacity in all the regions, but with the success, I think, of COVID@home and the ability to manage people within their own residences and take appropriate isolation precautions, the need for the CCMFs has lessened.*

We are reviewing our CCMF strategy and our government-managed accommodation facilities, noting that the government-managed accommodation facility function has moved from Communities to Health in the last two months. That has been consolidated. We will have more to say about that future management. I note the lower volumes that are currently being managed in those facilities.

Ms WEBB - Do you have a profile of the costs of the community case management facilities?

Mr ROCKLIFF - ... I'm advised that the ongoing management cost of the three government-managed hotels from 21 March 2022 until 30 September this year, so six months, will be $8.9 million.

Mr JEFFERY - The estimated cost for community case management facilities is $2.479 million. ... Estimated rent $1.479 million, security $508,000, contract staff $216,000, operational costs $153,000. They're the main components.[74]

Committee Findings

F26. The Community Case Management Facilities were important in accommodating COVID-19 positive patients, who were unable to be managed at home but did not require hospital-level care.

Hospital Capacity[75]

The Committee was informed that comprehensive escalation and surge planning had been put in place by DoH as part of the broader COVID-19 response to ensure the Tasmanian health system could continue to safely and effectively care for both COVID-19 positive and non-COVID-19 patients.

The Government submission[76] noted the preparedness of the Tasmanian health system, and its ability to rapidly adapt, had been tested by the highly transmissible Omicron variant. The extensive planning and investment in hospital capacity, along with the extraordinary dedication and resilience of health staff, had ensured the health system was able to cope with the surge in COVID-19 cases in Tasmania when the borders re-opened. As at 24 March 2022, Tasmania has the equal lowest rate per capita of COVID-19 hospitalisations in Australia.

Key measures taken by DoH to help prepare the health system for COVID-19 had included increasing Tasmania's public bed capacity by 152 new beds since July 2021. These additional beds include 35 beds that DoH has negotiated with private hospitals as part of the $20 million Tasmanian Government commitment to help ease the load on Tasmania's public hospitals.

Hospital escalation plans at their highest level, provided for a surge capacity of 211 non-ICU COVID-19 beds across the state and up to114 ICU surge beds. Comprehensive escalation and

[74] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.23-24
[75] See Tasmanian Government – Follow-up Inquiry, p.14
[76] See Tasmanian Government – Follow-up Inquiry, p.14

surge plans were put in place for the health system to ensure safe and effective care could continue to be provided for those with COVID-19.

Tasmania had also actively engaged with monitoring of hospital capacity (including ICU capacity) at the national level. This included provision of data for publication in the COVID-19 Common Operating Picture (a weekly infographic published by the Australian Government to provide a traffic light report of the COVID-19 situation in Australia).

The Tasmanian Government submission provided further detailed information on the extensive planning work undertaken, including escalation management planning across all regions, specific health screening measures, elective surgery arrangements, ICU capacity planning and workforce planning measures.[77]

At the public hearings, the Committee heard from Premier Rockliff and Ms Morgan-Wicks (Secretary, DoH) in respect to Tasmanian hospital capacity during the COVID-19 period:

> *CHAIR - Regarding hospital capacity, the Secretary said earlier that the numbers of people being hospitalised for COVID-19, as opposed to with COVID-19 has remained pretty stable. We are still seeing significant wait times for things like elective surgery and access to outpatients. I assume the capacity that has been put in place has not just been held there in case we need it and has been utilised. How has this worked? ….*
>
> *Mr ROCKLIFF - Yes. Estimates covered decreasing waiting lists. We recognise the outpatient waiting list, while it has decreased marginally, is still way too high. We have the outpatients program addressing that very complex issue. We brought forward the opening of a number of beds to prepare for the borders re-opening. You would have seen in the forward Estimates that will continue. Ward 3D at the LGH is an example of that. Even though it was a preparation for the borders opening and the impact of the pandemic and those with COVID-19, those beds have been well-utilised.*
>
> *Work to prepare for COVID-19 has included increasing bed capacity across the system, with 146 additional beds opening since July 2021. This comprises 66 beds at the Royal Hobart Hospital, 33 beds at the LGH, and six beds at the North West Regional Hospital, but also up to 41 beds in private hospitals as part of that private-public partnership arrangement.*
>
> *CHAIR - Regarding beds, you need staff to staff them. There is the challenge of COVID-19 but also influenza and other illnesses keep staff home from work. How often are those beds fully staffed, acknowledging the challenges of sick leave?*
>
> *Mr ROCKLIFF - My understanding is that we have opened the beds in alignment with when we can safely staff the beds and not before. That has been a key factor in that.*
>
> *Ms MORGAN-WICKS - The Premier has noted the opening of the beds, and Ms Forrest has also rightly noted that keeping them open means the safe staffing. This is evaluated*

[77] See Attachment E – Escalation Management Planning

every single day across all of our wards in the hospitals, according to staff who are themselves calling in sick or on carers leave et cetera, to manage that on the wards.

We have had the significant impact of COVID-19 illness and infection, but also the rules relating to close contact management, particularly in the first three months of this calendar year with COVID-19 cases coming in and widespread community transmission. That will have an impact on the availability of beds across our hospitals, which is why it was so important to maintain that virtual COVID-19@home service.

We have managed, and I believe all hospitals at the moment are at level two COVID escalation, in terms of their configuration, the way we're managing COVID-19 cases in particular wards, and whether that's affecting the availability of surgical beds - for example, for elective surgery - on any one day and also the flow of patients coming from the ED.

CHAIR - So it does have an effect on that when you're at level two?

Ms MORGAN-WICKS - Yes, the different levels of the hospitals will affect availability, depending on whether we are going to cohort all of our COVID-19 patients together. Now, for example, it's influenza - are we cohorting all of our respiratory patients together, and does that affect the availability of other beds for surgery?

We are very pleased that we haven't had a significant impact on our ICUs. We have maintained a very low rate of between one to four patients in our ICUs, which has then meant that general surgery can also continue, noting that we need to have that availability of ICU beds post-surgery should a complication occur, or just for the first few days of recovery.

Elective surgeries have maintained very strong throughput, according to the first year of the four-year plan for elective surgery, despite COVID-19. They are absolutely to be commended for their efforts, noting that they've had to manage their own teams of surgeons, anaesthetists, theatre nurses and support staff through COVID-19 infection and close contact management.

CHAIR - Premier, do you have any indication of how often full bed capacity has not been available? ...
...
Ms MORGAN-WICKS - The number of beds that are open and available every day across all of our health services is an incredibly complex data issue. We do measure through the bed census, but that is a manual process that involves effort right across the hospital system, which consolidates at the same time across all services and then provides that information through to RoGS, so we can do state and territory comparisons, for example.

Through the digital health investment, we are absolutely hoping to increase the level of daily available real-time data on bed numbers. We do have a bed dashboard where we can see the number of beds opening, closing, dirty, cleaning, et cetera, but there's not necessarily a report that says at this hour this is the exact number that are open right

across our services. It is monitored through our integrated operation centres who are moving patients not only within a hospital, but between hospitals and out to regions.

CHAIR - .... Are we normally able to operate close to full capacity with all beds open? ... I am just trying to get a picture of how often we are fully staffed.

Ms MORGAN-WICKS - If I can rely on anecdotal data, the chief executives text me about their quotas on a nearly daily basis. For example, this week I was informed of six beds being unavailable at the Royal Hobart Hospital. In those text exchanges or checks through our executive, which also monitor it on a weekly basis, I have never heard anything above 10. With the large number of beds that were brought on in preparation for COVID-19, we had minor reports of bed closures for the safe management of those wards, as directed by the nurse unit manager, that they have this amount of staff available for the day and can safely operate this number of beds.

If we fall below a particular level, we do put the call out to our private hospitals to make sure the beds we have contracted there are full and are flying through.[78]

ICU admission rate data was provided to the Committee.[79]

Committee Findings

F27. Tasmania was fortunate to have manageable levels of intensive care unit utilisation by COVID-19 patients.

F28. Additional beds were brought on-line across the Tasmanian Health Service and through private-public partnerships, enabling elective surgery to continue after the re-opening of the border.

Personal Protective Equipment (PPE) Supply[80]

The Committee was informed that PPE (including masks, gowns, goggles, and gloves) was essential for health care workers to protect themselves, their patients, and prevent disease transmission in healthcare settings. In Tasmania, recommendations for the use of PPE were in accordance with the CDNA SoNG. As the SoNG was updated and/or the risk profile changed, local protocols for the use of PPE and contact tracing were reviewed and adjusted accordingly. It should be noted that, in addition to undertaking a range of other activities, (including activities to support correct use of PPE), infection control teams within Tasmania's health services also played a key role in managing contact tracing related to those services.

All THS medical, nursing and allied health professionals were required to participate in mandatory infection prevention and control training held annually, which included PPE use.

[78] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.24-26
[79] See Appendix 2 - ICU Admissions for further details
[80] See Tasmanian Government – Follow-up Inquiry, p.15

Further measures implemented across the THS to support correct use of PPE during the pandemic included (but were not limited to):

- COVID-19 specific guidance on which types of PPE are required in different settings and circumstances;
- information and refresher training on correct donning and doffing of PPE;
- PPE fit testing for staff working in high-risk areas; and
- allocation of nursing staff to watch donning and doffing in high-risk areas and assess for breaches.

PPE supply for Tasmanian public hospitals was managed by DoH, through the THS. In addition to public hospitals, other public healthcare services provided with PPE through the THS included Ambulance Tasmania, Oral Health Services Tasmania, and Child Health and Parent Services. The THS used warehouses in the three regions to store and rotate PPE using normal stock access and inventory management processes.

PPE usage was closely monitored and statewide stock levels were reported weekly. DoH remained in regular contact with suppliers and continued to monitor PPE supply nationally and internationally.

With global demand for PPE remaining at an all-time high, the Tasmanian Government had also established a strategic reserve of PPE, to ensure sufficient supply of PPE to public healthcare services were maintained statewide. The State Emergency Medical Stockpile contained over six-months supply of PPE based on peak pandemic usage.

Ahead of the re-opening of the borders, DoH held the following PPE in stockpile and as stock-on-hand as part of hospital preparedness planning:

- N95/P2masks - 3.7 million;
- Surgical masks - 6.3 million;
- Hand sanitiser – 54,000 litres;
- Gowns – 2 million;
- Gloves – 20 million; and
- Face shields – 82,000.

Since the start of the pandemic response to 31 December 2021, DoH had spent $69.46 million on COVID-19 related PPE. The total forecast expenditure on PPE since the start of the pandemic response to 30 June 2022 was $77.58 million. Under the National Partnership on COVID-19 Response, the Australian Government will fund 50 per cent of the PPE costs incurred by DoH in responding to the COVID-19 pandemic.

DoH through its ACEOC had also pre-supplied PPE and RATs to Residential Aged Care Facilities in Tasmania, to quickly respond to the management of outbreaks, to support the Commonwealth.

At the public hearings, the Committee heard from Premier Rockliff regarding the State's current PPE levels:

CHAIR … You have provided some information on the PPE availability. … access, stockpiles …

Mr ROCKLIFF - As at 31 May 2022, the department has spent $17.94 million for the 2021-22 financial year to date, with a full-year forecast of $22.21 million.

For the 2020-21 financial year, the department spent $24.5 million. The previous financial year, we spent $43.2 million. Since the start of the pandemic to 31 May this year, the Department spent $85.7 million on PPE. The total forecast expenditure to 30 June this year is $89.9 million. Under the national partnership for COVID-19 response, the Australian Government will fund 50 per cent of the PPE costs incurred by the Department in response to the pandemic.

…

Mr ROCKLIFF - … Surgical masks, 4.08 million, on order above normal supply 837,000. Respirators, that is the P2/N95, 3.2 million, on order above normal supply 2.6 million, gowns 2.25 million, on order above normal supply 500,000, eye protection and goggles 968,079, on order above normal supply 260,400, and face shields 2.19 million, on order above normal supply 762,300.[81]

Committee Findings

F29. The State Government made a significant investment in the provision and stock piling of PPE for the State.

F30. Under the National Partnership on COVID-19, 50 per cent of PPE costs incurred were funded by the Australian Government.

Ambulance Tasmania Preparedness[82]

The Committee was informed that since the commencement of the COVID-19 pandemic, Ambulance Tasmania (AT) had increased its paramedic workforce and other resourcing to meet potential increased demand due to COVID-19 and to better service rural and remote areas of the state.

AT had developed strategic emergency plans to strengthen organisational preparedness in direct response to the COVID-19 pandemic. AT also had in place infection control processes and procedures, which successfully prevented transmission of COVID-19 from patient to paramedic. This preparedness helped ensure AT were able to respond effectively to increasing COVID-19 case numbers following the re-opening of the borders.

Due to the lower severity of the Omicron variant there were fewer COVID-19 cases requiring hospitalisation for COVID-19 related illness than expected (based on the modelling on the Delta variant). However, the increased transmissibility of the Omicron variant meant AT

[81] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.25-26
[82] See Tasmanian Government – Follow-up Inquiry, p.16

responded to and transported a number of COVID-19 positive patients, requiring emergency care for unrelated conditions.

Infection control[83]

The Committee was informed that AT rapidly incorporated current national COVID-19 infection prevention and control advice into all operational areas within AT. The AT Emergency Operation Centre led a continual review of AT PPE to ensure suitability and appropriateness. Operational exercises were also conducted to test and improve COVID-19 procedures and policies at state and regional levels. Due to the infection control procedures in place throughout AT, there were no confirmed patient to paramedic transmission of COVID-19 throughout the pandemic response.

Premier Rockliff and Ms Morgan-Wicks (Secretary, DoH) responded to further questions related AT workers and ambulances regarding workforce and COVID-19 infections within AT staff:

> *Mr WILLIE - In your submission, Premier, I note there hasn't been a confirmed case of a case of COVID-19 being transferred from patient to paramedic because of the infection controls. However, paramedics would have been catching COVID-19 through that time. You talked about an increase in some positions. Was there any increase in overtime payments through that time, or staff having to work extra shifts?*
>
> *Ms MORGAN-WICKS - I can comment in my role as Commissioner of Ambulance Tasmania, our AT crews and workforce are to be commended in their infection prevention and control. I think out of all of our workforces, we were probably seeing lower rates of reported COVID-19 infection in paramedics than perhaps generally across hospital staff.*
>
> *For example, as part of the ending of Public Health directions in relation to masks we are looking at what masks are to be applied in health settings, and the feedback from AT is that their preference is for N95 masks to continue to be utilised when there is a patient within an ambulance vehicle or they're involved in any direct patient care within the home or transferring a patient. They have certainly maintained the highest rigour, not criticising my hospital staff but certainly the paramedics have been right on top of it. Our AT EOC has been managing that. That meant that we had that lower need for replacement staff due to significant levels of infection.*
>
> *I am not saying that there wasn't any overtime in that period, I would need to check the numbers on overtime for AT. We made the decision in the approach to 15 December* [2021] *border re-opening to bring forward all recruitment that we had in the wings for AT, even where commitments had been made for various numbers of paramedics to be brought on over years, that was all brought forward prior to 15 December. We did that in the knowledge that we had very good fields of paramedics or graduate paramedics applying for those positions. That's why we made the decisions to put them in the regions,*

[83] See Tasmanian Government – Follow-up Inquiry, p.17

as the Premier has just outlined, and to bring on additional roles such as the community paramedic to try to support.[84]

Workforce

Since the commencement of the COVID-19 pandemic there had been significant growth in the AT operational workforce. This included staffing measures to support the triage of COVID-19 patients and management of regional COVID-19 impacts. The growth in the AT workforce included:

- an additional 12 Intensive Care Paramedics forming a Critical Response Unit in the North West region;
- 24 paramedic positions increasing 24-hour crew coverage in Burnie and Devonport;
- a more scalable workforce capacity with the employment of casual paramedic and Non-Emergency Patient Transport officers;
- 12 additional paramedics employed in both Launceston and Hobart in 2021-22;
- 24 paramedic positions established in rural and remote areas across the state;
- development of a Community Paramedic role with an increased primary health focus, to direct lower acuity patient to alternate service providers, to meet their medical needs;
- establishment of a Secondary Triage service in February 2021, which had been able to meet the medical care needs of many lower acuity patients with COVID-19 symptoms by directing them to primary health care providers; and
- increased operational support for regional operations with the introduction of Operational Support Officer positions, focusing on regional COVID-19 impacts.

AT had also increased its Aero-Medical Retrieval capability with the inclusion of the Bell 412 Helicopter, providing for longer range missions, to better service the emergency medical and patient transfer requirements of the North West region and the Bass Strait Islands.

AT had developed and implemented return to work procedures for staff identified as cases or close contacts.

At the public hearings, the Committee heard from Premier a Rockliff about how AT operated during the period:

Mr WILLIE - I am interested in the impact on the ambulance service… in transporting COVID-19 positive patients, but also, managing the ambulance service workforce. …. What impact has COVID-19 had on the ambulance service?

Mr ROCKLIFF - The Ambulance Tasmania Emergency Operation Centre liaises with the Department of Health Emergency Co-ordination Centre to provide that operational interface, as you could appreciate. AT has developed a whole-of-service plan to strengthen organisational preparedness in direct response to the COVID-19 pandemic, with the Ambulance Tasmania Emergency Operation Centre maintaining and implementing these plans.

[84] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.47-48

The ATEOC is committed to providing an ongoing safe working environment for the staff of Ambulance Tasmania, while responding to the COVID-19 community transmission. Maintaining sufficient personal protective equipment and training remains a critical focus of AT for the safety of staff, patients and the wider community. Since the commencement of the COVID-19 pandemic, AT has increased its paramedic workforce and other support resourcing to meet potential increased demand to COVID-19 and better service in rural and remote areas of the State.

It has continued to recruit volunteers to areas of the state where volunteer numbers were impacted by the COVID-19 pandemic. ....

AT has established additional single and double branch stations to better service rural and remote areas. In April [2022] this year, we announced funding to Huonville and Sorell, which is a broader need, and contemporary national COVID-19 infection prevention and control advice is rapidly incorporated into all operational areas within AT.

Ambulance Tasmania paramedics conduct rapid antigen tests on all patients being transported to Tasmania Health Service facilities and emergency departments to facilitate more rapid triage and to reduce the risk of disease transmission.

EOC is developing protocols around the provision of MyCare devices to be provided to COVID-19 positive patients, for both paramedics in rural settings to in-home care of patients with COVID@homeplus assistance as well.[85]

...

Ms MORGAN-WICKS - My team has just pulled up a budget Estimates brief on overtime in relation to ambulance, which has actually decreased. At 2021-22 as at 31 March, overtime FTE as a percentage of paid FTE for ambulance is 7.79 per cent, compared to previous years, for example 2018-19 9.61 per cent, 2019-20 9.8 per cent, 2020-21 7.99 per cent.

CHAIR - That may be attributable to the additional staff being brought on. Have all the positions that you brought forward been filled or are there vacancies around the state still?

Ms MORGAN-WICKS - Yes, it is my understanding that we were very successful in filling those positions. I note in things like advertising new roles like a community paramedic, for example, or where we have introduced additional management positions, it might have been a backfill process where someone has been successful in applying for another role or in another post or region and that we continue to backfill. Recruitment remains ongoing in Ambulance Tasmania, every day.

Mr ROCKLIFF - Since 2019-20, there has been a 17 per cent increase in Ambulance Tasmania staff.

[85] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.47-48

CHAIR - … where there is additional staff the fall in overtime may well indicate that you are actually getting on top of it now. … If demand grows, more staff will be needed…?

Mr ROCKLIFF - We are doing our clinical services planning in each region of Tasmania, which will include Ambulance Tasmania statewide. This will inform us further with respect to that. From memory, when we committed to the 48 additional paramedics in the 2021 election, which have almost all been filled now, at the time where we would also do another workforce scan as well to see what is required to cater for that increasing demand, as you have said.

Ms MORGAN-WICKS - The clinical services planning will look at all of the call data to also determine levels of geographic demand in different regions. It will inform us as to the necessity to either upgrade existing stations, so from single-branch to double-branch, or whether new stations are required, for example, like the Bridport presence that we have recently announced. That work is currently underway and we are hoping to have that information by the end of the year.[86]

Ambulance Tasmania Fleet

At the public hearings, the Committee sought further information in respect to Ambulance Tasmania fleet:

Ms MORGAN-WICKS - … We also retained vehicles. We've replaced up to 30 vehicles with 30 brand new ambulance vehicles in the last financial year but we kept the old on standby and fully stocked. I've seen those in our stock depots in Devonport, ready and on standby if needed in the regions for COVID-19 transfer.

Mr WILLIE - There is a variety of vehicles now too, isn't there? My understanding is they might dispatch one paramedic and then the other one will catch up, for different specialisations and things.

…

Ms MORGAN-WICKS - … the vehicle that we actually saw in the North West region when the Premier and I last toured there. In terms of its additional capacity and technology for Ambulance Tasmania, we referred to it as being like a Barbie bus because it was very high and large, so a paramedic has the ability to stand, treat a patient and to maintain social distancing. That larger space within a vehicle enables them to safely attend to patients, particularly in relation to COVID-19 transfers.

In addition to that type of vehicle, we are also aided by the Bell 412 helicopter, which was a contract that the Premier mentioned. I recall we brought it on in April 2020. It can transport more than one patient, so two patients at a time in that larger helicopter and for longer distances without refuelling, for example, if a patient with COVID-19 required transfer from the North West Regional Hospital to an ICU at the Royal.

Mr ROCKLIFF - We should have our 30 new vehicles - which we have committed to at a cost of about $9 million - mostly or all on the road very soon.

[86] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.48-51

CHAIR - How many of those qualify as 'Barbie buses'?

Mr ROCKLIFF - Only one, nation-leading design, I understand. They are North West supply as well.

Ms MORGAN-WICKS - We have only witnessed one. They are very keen to get more through the North West.

CHAIR - Are they fitted out in the North West as well? The same as the other ones are in Penguin?

Mr ROCKLIFF - Yes.

CHAIR - .... If COVID-19 is going to be with us for a long time, wouldn't it be appropriate to prioritise some of those larger buses or trucks so that patients and the paramedics can be more distanced. ... Or is it just like a prototype?

Ms MORGAN-WICKS - We have been in recent possession of that new addition to the fleet. We will evaluate the success of that, or not, in reliability, speed, ease of use, social distancing et cetera and comfort for the paramedics. We will get that feedback directly from the users.

....

Mr WILLIE - The question there is, if you have had excellent success with infection control, is there a need for these buses if you have not had any COVID-19 transfer from a patient to a paramedic?

Mr ROCKLIFF - I imagine that would be part of the evaluation.

Ms MORGAN-WICKS - To be fair, although we can be quite light-hearted about it now, in the preparations for 15 December we were witnessing, for example, the outbreaks in India in particular and the numbers of our fleet. We were quite concerned as to the number of ambulance vehicles that would be required to conduct inter-hospital transfers or patient home to hospital transfers.

Certainly, every step was taken to try to get available fleet, noting that we were also competing with every other state and territory in relation to this resource. That is why we brought on the 30 new vehicles as quickly as we could but also retained all vehicles that had been assessed as safe to retain in the fleet.

We leased large warehouse facilities to house those vehicles and also all of the stock, electronic Stryker stretchers, for example, that would also have to be installed. Our thanks to our suppliers in Penguin, I think it is Mader, for their work because I know they were working around the clock in supplying those vehicles to us.[87]

[87] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.48-51

Committee Findings

F31. In response to COVID-19 pandemic, Ambulance Tasmania increased its paramedic workforce, including the development of the community paramedic role and secondary triage service.

F32. COVID-19 infection control measures implemented by Ambulance Tasmania successfully prevented transmission during ambulance transfers.

F33. The Ambulance Tasmania fleet was expanded to manage the potential impact of COVID-19 on the Tasmanian community.

F34. To provide additional capacity, older vehicles that were assessed as safe were retained in the Ambulance Tasmania fleet.

Public and key stakeholder communications[88]

The Committee was informed that clear, transparent and timely communication had been a key component of Tasmania's ongoing response to the COVID-19 pandemic. This had included (but was not limited to) advice on issues such as case numbers, high risk locations, restrictions and measures to prevent further transmission of COVID-19. Effective internal communication mechanisms, and engagement with key stakeholders had also been a vital element of the COVID-19 response, helping to ensure timely distribution of key messages and supporting informed decision making.

Examples of some of the key mechanisms used to communicate effectively with the public and key stakeholders in the lead up to, and following, the re-opening of the State's borders included:

- the Public Health Hotline - with a call centre of operators educated in the state's response to COVID-19 established early in the pandemic. The Public Health Hotline gave the public the option to speak with someone over the phone to get advice and information or organise testing, vaccination or reporting;
- the Tasmanian Government's COVID-19 website (www.coronavirus.tas.gov.au) which provided a central online repository for all current public information regarding the state's COVID-19 response. The website also allowed people to request bookings for tests and to report test results;
- regular key health stakeholder forums - used as a mechanism for provision of COVID-19 information to relevant areas, and for consultation on strategies with relevant sectors (for example, this had included consultation with the aged care and disability sectors);
- regular employee representative meetings - used as a mechanism for provision of COVID-19 information and/or for consultation on strategies with staff and/or representative bodies (e.g., the Australian Medical Association, the Australian Nursing and Midwifery Federation, the Health and Community Services Union, and the Community and Public Sector Union);

[88] See Tasmanian Government – Follow-up Inquiry, p.17

- Primary Health Tasmania/GP Liaison via GP Fax stream communications – a regular update delivered directly to the primary health sector via email and/or fax providing an update on any information applicable for practitioners or patients;
- key broad messages were relayed by government spokespeople each week via a range of media (including television, newspaper, social media, radio interviews, advertising and editorial);
- DoH social media - the DoH Facebook profile had 80,000 followers and was a key channel for distributing public facing, broad messaging that DoH wanted people to know and share; and
- DoH internal 'Reach' platform – through which regular updates were provided to the DoH workforce including advice and reminders for staff regarding COVID-19 related measures and restrictions in place under relevant policies and/or Public Health Directions.

At the public hearings, the Committee heard from Ms Morgan-Wicks (Secretary, DoH) about the DoH Reach app for staff communications:

> *CHAIR - ... During our previous inquiry there were concerns regarding communication with staff in the North West during the outbreak, with some staff not hearing in a timely manner about changes. It is a much different situation now. I'm interested in the Department of Health internal reach platform you've referred to, through which updates are provided to the DoH workforce. How is that working? Are staff able to have input?*
>
> *Ms MORGAN-WICKS - It is an app on a mobile phone. It's the Reach app and it sends notifications. I have had significant volumes of staff signing up for Reach. We continue to promote it to them. Prior to having this app, it was difficult to get a message out to all staff within a health service, whether they're on in a hospital, off on nightshift, dayshift, et cetera.*
>
> *We had all-staff email we had to send to nurse unit managers for wards to print out messages to place on staff notice boards, we would do walkarounds, we would do road shows to try to get messages out to staff. In a COVID pandemic where people are not being brought into rooms, with social distancing issues, we had to look at communications to notify staff instantaneously.*
>
> *In August 2021 we launched Reach, which is, I understand, connected to the Microsoft platform we use within the Department. A range of staff are able to publish articles on there. Any staff member can publish comments on each of the articles or ask questions of the author. We have had just over 1,400 articles published since the launch. We have the ability to put something right at the front so that the first thing you open and see is one of the high strategic operational alerts. Then you can just sign in and say you would like all of the news of the North West Regional Hospital or your particular hospital, or Oral Health Tasmania, for example. Like Facebook or Instagram, it can channel the news to you as a recipient.*
>
> *We've had fantastic feedback from staff. It's a huge improvement compared to April 2020, when we basically had to send a geographic bomb text to make sure that we could get to all of our 1,700 staff, so via SMS, but a geographic one for the region of Burnie.*

CHAIR - .... Who actually manages it? Is there an opportunity to have something taken down if it was not an appropriate article, for example?

Ms MORGAN-WICKS - In terms of the social medium itself, we trust staff to use it in a proper way. We do not attempt to moderate all articles being published on Reach. People are trained in its use. They're advised in the proper way in which to communicate with staff. People are able to freely comment. In relation to an Easter message I sent out to staff that might have referred to chocolate, I got an interesting response from some who do not necessarily support the eating of Easter eggs. We'd look for any inflammatory or defamatory content and apply our social media policy to that moderation. If there was bullying or harassment in a comment, for example, we'd keep an eye on that.

CHAIR - Do you have someone dedicated to that task? Is there someone that monitors that?

Ms MORGAN-WICKS - Yes, the comments are watched. If there are any concerns being reported, we immediately take the messages down, or otherwise speak to the author of the comments. It is one thing to be constantly monitoring and removing messages, but if there is a particular issue playing out in the comments, there may be something greater at play, so arranging to have a chat to the staff member to see if they have a problem and find out why they are raising it in that open forum.

...

Ms MORGAN-WICKS - We have had no significant issues raised to date through Reach. Staff are really embracing it. For example, last night when I hopped on to check the news of the day there was the news of the launch of the Women in Ambulance Tasmania steering committee. You could see the really positive comments that were flying through, particularly for women in AT commenting on that Reach article. It is increasing the morale and the general communication between groups. Often people in health work in very dedicated silos. They are now able to see some of the great work that is happening in different areas of the Department.[89]

With respect to the State Government's approach to interacting with its key stakeholders during the period, the Committee heard from Premier Rockliff and Ms Morgan-Wicks (Secretary, DoH):

Ms WEBB - I am interested in hearing more about the interactions with key external stakeholders about planning the re-opening, and since the re-opening time what that has looked like in a structured way.

Mr ROCKLIFF - ... I can give a view on how I have interacted with stakeholders. There would also be an internal view leading up to those meetings.

I became Health Minister in May 2021. I had been Minister for Mental Health and Wellbeing for a couple of years. Before then, we started our regular meetings with

[89] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.27-28

COVID-19 stakeholders. They were on-line meetings with between 15 and 25 stakeholders.

Every couple of weeks, but then leading up to the opening every week until February. Then it went to a couple of weeks and now three-weekly. It would [go] back to weekly if that was ever required. The stakeholders included people from the Australian Medical Association, the Pharmacy Guild, the Pharmacy Society, the Community and Public Service Union, HACSU, the ANMF, the Antarctic Division and GP colleges. It was quite a number of people who could raise issues surrounding the borders re-opening, or particular issues at any particular time. It was chaired by the Health Commander, and questions could be put to either myself, Ms Morgan-Wicks, Dr Veitch, Professor Tony Lawler, and others who were able to provide some good information to questions.

That was the stakeholder interaction I had. There were outside meetings I would have with individual organisations and often COVID-19 was raised. Internally, there was at some point almost daily meetings with key stakeholders leading up to the border re-opening. ...

Ms MORGAN-WICKS - At the highest level the Premier's described the health stakeholders' teleconference. This included Primary Health Tasmania. Regarding the management of staff infection and close contact management through the hospitals, we did for a period hold daily meetings with the key health unions: AMA, ANMF, HACSU, and CPSU. Each change, for example, the escalation level of the hospital, or a new protocol that was being introduced, was consulted through those meetings with the union groups.

Ms WEBB - Has there been any review or assessment of how well those communication channels with external key stakeholders functioned? Were lessons learnt from that?

Mr ROCKLIFF - From my point of view, we do, as a group decide the frequency of meetings depending on matters that need attention at the time. We are still meeting once every three weeks. I think our next meeting is scheduled in July. Had the last one this week.

We will gauge it from there. It is a very good information session when you here about from, say, the Pharmacy Guild or the Pharmacy Society and their particular challenges or comments that may be relevant to other areas of primary health care. They are very productive and informative meetings. They will continue, even though the health emergency finishes on 30 June. It is important to continue to monitor and to see what is happening....

Ms MORGAN-WICKS - Regarding that external stakeholder conference, we regularly check in with them to determine how often they want to have it. We had comments back from the Pharmacy Guild and the Pharmacy Society that they feel very lucky because they also attend national meetings on their own organisations and had reported that no other state has been holding such regular and all-encompassing stakeholder view on

COVID-19. They have been providing information we were sharing back to their national colleagues.
In addition to meeting and discussing with stakeholders, a lot of information is contained on our external website - coronavirus.tas.gov.au. There is our public health hotline, which we're constantly mining for information on calls that are coming in and information that needs to be pushed out for stakeholders. Regular media conference or COVID conference updates have also been provided to the public. We probably receive COVID media enquiries on a daily basis, and we're pushing out information that way as well.

If I could just finish by saying that in our emergency management structures, we have a dedicated stakeholder emergency operations centre (EOC) - for example for aged care, for disability, and also for vaccination. They have been meeting with their key stakeholders, together with Premier and Cabinet, about managing the RACF[90] peaks, and making sure we have that flow of information and that needs are met. For example, every single day the aged care EOC is reaching out to the RACFs that are reporting a first positive case, or an outbreak, and managing that, and then sharing the information to the other RACFs.

We really do regard the aged care EOC in particular as a tremendous success in preparing the RACFs for the opening on 15 December [2021], but also stepping into the shoes of the Commonwealth in the early days between Christmas and New Year's Day when we just couldn't get supply. We were then able to get state supplies through to the RACFs for critical PPE, helping them with staffing and also antivirals. In a small state like Tasmania, having that close connection to the stakeholders meant we knew on the day if there was a problem.

Mr ROCKLIFF - I understand our Department of Premier and Cabinet secretary had meetings with a couple of business enterprises, their own companies and other state authorities, and DPAC also. She also had meetings with various stakeholders, which fed into the regional recovery committee conversation as well. Just by way of interest, probably from July to January or February or further, I would have had weekly meetings with all the state and territory health ministers, as well as the federal health minister.[91]

Questions related to how the State Government had engaged with Tasmanian vulnerable stakeholder groups was responded to by Premier Rockliff and Ms Morgan-Wicks (Secretary, DoH):

Ms WEBB - I am interested to hear how vulnerable stakeholder groups in our community and their representatives were engaged in regular interaction leading into our border opening, and then since opening. I'd like to hear if there was a structured approach taken and what that looked like, as well as hearing about individual instances.

Ms MORGAN-WICKS - It was structured through each of our emergency operations centres, because they had a particular portfolio in terms of the health preparedness. For

[90] Residential Aged Care Facilities
[91] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.29-30

example, our vaccination EOC certainly had significant interaction to drive up vaccination rates in vulnerable groups. Their interaction with disability groups was also assisted by Communities Tasmania, for example with MCOT[92] *reaching out groups in the community who did not have English as their first language, and with their assistance we ran a 'train the trainer' vaccination promotion to try to get members of those particular community groups to go out and promote vaccination, or to run and be there at hosted vaccination clinics, where those groups might not have interacted with a state-run clinic at PW1, for example.*

Because we were monitoring and trying to lift Tasmania up to as high as possible, we were looking at individual areas or groups where we saw lower vaccination rates, and we employed strategies through direct stakeholder interaction to encourage those parts of the community to vaccinate.[93]

The Committee also heard from Premier Rockliff and Ms Gale (Secretary, DPAC) about the State Government's engagement with other vulnerable cohort groups:

Ms WEBB - ... Was there a program of engagement with various vulnerable cohort groups or representatives on other aspects of the re-opening, leading into and then afterwards?

Mr ROCKLIFF - I'm advised TasCOSS met with Public Health in November last year and held a monthly forum with the community support industry. Communities Tasmania are also engaged with TasCOSS through membership of the Community Services COVID-response project steering committee. Communities Tasmania engaged in regular discussions with funded organisations through regular scheduled meetings to monitor progress against agreed grant outcomes, as well as unscheduled meetings and informal discussions.

Forums were held with business peaks and State Growth, Public Health and WorkSafe to discuss settings during the transition. A series of guidelines and other communications have been prepared to clarify applications on specific work contexts, including not-for-profit community service organisations, et cetera.

I also have some information that looks at impacts on community wellbeing.

Ms GALE - TasCOSS is still holding those forums for their member groups online. They're held monthly, I believe. Government representatives are still attending those, depending on the nature of the discussions.

Ms WEBB - In terms of engagement with Aboriginal Tasmanians, as a vulnerable cohort group?
...

[92] Multicultural Council of Tasmania
[93] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.30-31

Ms WEBB - ... I would like to hear about engagement with the community leading into and going out of the re-opening, if there was any, for that more holistic preparation, not just vaccination rates?[94]

...

Ms GALE - ... The Office of Aboriginal Affairs, including Mel Gray, who leads that team, was in constant contact with Flinders and Cape Barren islands. They were leveraging contacts in other agencies, for example, State Growth, in relation to business support. Leadership and liaison through the pandemic was led by the Tasmanian Aboriginal Health Reference Group. Aboriginal organisations were members of that group.

Ms WEBB - Did that continue into the re-opening time and then after re-opening?

Ms GALE - I was only asked the question in relation to the lead up to re-opening. I assume so, but we would need to get the information for you.[95]

In replying to a question taken on notice, Premier Rockliff provided the Committee with the following with respect to the State Government's engagement and communication with the Tasmanian Aboriginal Community:[96]

Public Health Emergency Operations Centre (PHEOC) planned and organised an Outbreak Management Session in early December 2021 with the Tasmanian Aboriginal Health Reference Group (TAHRG) CEOs, Public Heath Tasmania, Tazreach, Office of Aboriginal Affairs and Priority Populations Public Health invited.

PHEOC participated in a session coordinated by the COVID Coordination Centre (CCC) on 13 December 2021 with a representative from King and Flinders Island on the plans for border arrangements following the changes on 15 December 2021.

PHEOC identified a Public Health medical officer and clinical nurse consultant to work with Aboriginal Community-Controlled Organisations to update the Aboriginal annex to the Public Health Emergency Operations Centre Standard Operating Procedure for Outbreak Management, and a Bass Strait islands annex, covering Flinders, Cape Barren and King Island.

Tasmanian Vaccination Emergency Operations Centre (TVEOC) organised and attended regular meetings with Aboriginal community representatives and peak bodies, commencing early on in the vaccine rollout and becoming more frequent as the state shifted towards re-opening.

The Tasmanian Vaccination Emergency Operations Centre (TVEOC) and PHEOC facilitated the 'Lifting COVID vaccination rates among Aboriginal people' discussions with Aboriginal organisations fortnightly from September to late November 2021 to address vaccination rates, discuss concerns about access, and at later meetings, to address and support communities with concerns leading to the re-opening of the State in December 2021.

[94] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.31-32
[95] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.39
[96] Letter to Hon Ruth Forrest MLC Chair – COVID-19 Public Hearing - Responses to Questions taken on Notice, 24 June 2022

The TVEOC distributed weekly vaccination coverage emails to the Aboriginal Community representatives including Tasmanian Aboriginal Centre, Tasmanian Aboriginal Health Reference Group, and No 34 Aboriginal Health Service as well as the Office of Aboriginal Affairs to inform and support vaccination planning. In particular, this aimed to support the Government's announcement of a target vaccination goal of 80% of the Tasmanian population being fully vaccinated by the end of October 2021. To achieve that equitably, approximately 2,600 Aboriginal people per week needed to be vaccinated to meet that goal, and TVEOC engaged with Tasmanian Aboriginal Centre, TAHRG, and other organisations to offer support and weekly epidemiological reports on how the community was tracking in meeting that target in October 2021. These weekly epidemiological reports continued in the months after the re-opening.

TVEOC organised in-reach vaccination and flew immunisers over to Cape Barron Island and Flinders Island to facilitate vaccination among the Aboriginal communities.

TVEOC regularly checked in with Aboriginal organisations before and after the re-opening to offer support, recognising the importance of community-based and community-driven initiatives.

Committee Findings

F35. The Tasmanian Government conducted a range of regular communications with key stakeholder groups, including vulnerable cohorts, in preparation for and following the border re-opening.

F36. The Reach App was well received by health staff and assisted effective and timely communication.

Committee Recommendation

R9. The Reach App, or similar, be considered for adoption across other Government departments as a general communication tool.

Social Impacts

The Committee was informed the suite of measures outlined were designed to ensure Tasmania's health system had been able to support patients, health professionals and the broader Tasmanian community throughout the pandemic. This had included a range of measures aimed at protecting the public and ensuring appropriate access to health services to support positive patient outcomes throughout the pandemic, including in the lead up to, and following, the re-opening of the State's borders.[97]

[97] See Tasmanian Government – Follow-up Inquiry , p.18

Some key examples of how these measures had helped support and protect patients, health professionals and the broader community included (but were not limited to):

- high vaccination coverage ahead of the re-opening by ensuring access to vaccinations across the state, with Tasmania delivering a larger portion of vaccinations via state clinics than most other states and territories in the months prior to the re-opening to help minimise the rate and severity of infections;
- ensuring hospitals had in place comprehensive escalation and surge plans, to enable Tasmania's health system to continue to care for COVID-19 positive, and non-COVID-19 patients safely and effectively, whilst also ensuring appropriate support and protections for staff;
- establishing triaged models of care, including implementation of the COVID@home program and CCMFs to ensure people had access to the most appropriate level of care, in the most appropriate setting based on risk assessment;
- developing and implementing flexible workforce models to ensure Tasmanians had access to testing, vaccination, and appropriate hospital and health services to meet their needs (for example through upskilling and expansion of workforces to enable clinical workforces to be allocated to areas with the highest need);
- regular and ongoing public, staff and key stakeholder communications and advice to ensure Tasmanians had access to up-to-date information on issues such as:
    - case numbers;
    - current Public Health and social measures and testing, tracing, isolation and quarantine advice and requirements;
    - availability and locations of testing and vaccination clinics;
    - high risk exposure sites;
    - a range of other issues to support Tasmanians to make informed decisions to help protect themselves, their families and the broader community; and
    - ensuring DoH staff had ongoing access to a broad range of information and support resources (e.g. access to appropriate PPE, regular whole of staff communications on key issues; access to wellbeing programs and support; COVID-19 Safety Plans; and flexible working arrangements - including arrangements to protect vulnerable staff).

The Omicron variant had resulted in significant numbers of positive cases and close contacts needing to isolate. A number of supports were available to assist Tasmanians, including income supports from the Federal and State governments for those who had lost work due to the requirement to isolate.[98]

Delivery of COVID-19 Care Packages had provided assistance to vulnerable Tasmanians and community service organisations. These packages provided groceries, medicines and other essential items to people who were required to isolate or quarantine.

A contingency framework was put in place to enable workplaces, identified as essential for the supply of critical goods and services to the community, to register for essential staff to be exempt from the quarantine requirement for close contacts if they were identified as a critical worker. This move ensured that Tasmanians could continue to access essential goods and services and enabled critical businesses and supply chains to continue operating.

[98] See Tasmanian Government – Follow-up Inquiry, p.19

At the public hearings, the Committee heard from Premier Rockliff, Dr Veitch (Director of Public Health) and Ms Morgan-Wicks (Secretary, DoH) in respect to the rapid changes to the State's plan for the re-opening of the border in December 2021:

Mr WILLIE - Premier, I'm trying to get an understanding of what happened with the re-opening plan. Once the borders opened we saw a number of changes happen quite quickly. … There were business hotspots and businesses were listed on a Government website as being a place where the infection had been detected. That was quickly abandoned. What was the reason for that? Was it unworkable? Was it impacting the business trade? What were some of the reasons that plan changed so quickly?

Mr ROCKLIFF - A number of discussions would have been handled at National Cabinet level of which I was not involved. Dr Veitch was part of AHPPC discussions. You have raised some matters regarding changes. The Omicron variant's high transmissibility no doubt had implications for contact tracing, where it became impractical in many respects. …

Dr VEITCH - Most of the planning we did was built around the prospects of a strain that had more or less the transmission dynamics of the Delta strain. We had seen our colleagues on the mainland managing outbreaks of Delta with extensive use of check-in apps and alerts about hotspots. This is really a scaled-up way of doing traditional contact tracing and case management with some additional technological supports. That worked reasonably well for the most part on the mainland.

Tasmania was fortunate during 2020-21 that we had almost no incursions so we never got to practice that response to cases in an environment with Delta as the predominant strain. Nevertheless, as we just heard, we were doing a lot of things to be ready for whatever strain emerged. As it turned out it was Omicron almost from the start. We had a few Delta cases but it was effectively the highly transmissible Omicron strain. We were in an okay position to face a reasonably large case load because we had deferred border opening until we had as high a possible level of vaccination and everyone had a chance to get vaccinated if they were eligible. That is important in protecting us from severe outcomes.

As the case numbers mounted very quickly with Omicron it became clear that to ask people where they had been when they were potentially infectious turned out to be Tasmania as a whole. There were very few places where you could confidently say no one was at risk. It would have been misleading to the public to be overly specific when we needed a really general precautionary approach and awareness that you could get crook with COVID-19 any day. With that rapid transition to a widespread infection, it wasn't feasible to be listing specific sites.

What we did do at that stage was focus our public health management on most 'at risk' settings. Where there were more vulnerable people where there were outbreaks. … One of the really important bits of work that public health and our colleagues across government did in the middle months of 2020 was to identify a whole group of settings

where there were higher risks. It was things like aged care, disability care, corrections, industry, education, homeless people, Aboriginal Tasmanians, remote islands. We established relationships with those people. We built a lot of our discussions around outbreak planning with those groups of people, so that these people had an outbreak plan, they knew what they could face when COVID-19 arrived. Some of this work then evolved into separate, semi-independent but related emergency operation centres such as aged care and disability. Those relationships are being maintained until now, so people who are in those sectors always know who to call up and talk with. Various bits of tailored advice has been developed for those people.

When we moved from a situation where we could almost manage case and contact groups one after the other because that was not possible, we focused on working in those settings where there were higher risks. We established relationships with those people because we knew it was a higher risk and ensured they were confident in managing the consequences of COVID-19 in their circumstances.

Mr WILLIE - What date did the Government abandon that intensive contact tracing approach?

Dr VEITCH - Close contact rules evolved throughout the pandemic. We moved away from declaring, for example, a hospitality site as a close contact site, and then subsequently confined it to the family and the household.

Mr WILLIE - ... if we could get a timeline of the contact tracing changes, the close contact protocols.

Dr VEITCH - .... The restriction of the close contact definition to people who lived in the same premises occurred on 30 December 2021, a couple of weeks after we opened our borders. The changes that came through nationally were only partly influenced by the Tasmanian circumstances because they were national changes that we were looking at. We also applied our Tasmanian lens to national advice to make sure that what we were doing was okay for Tasmania.

Mr ROCKLIFF - We have a timeline that we could build on, Mr Willie, if you were wanting to take that on notice in terms of particular changes that were made at particular times. Some of that aligned with national decisions, some would have been made within a state context.

Mr WILLIE - It would be useful for the Committee in our reporting to have that timeline, and any check-in app changes too. ....

Mr ROCKLIFF - The check-in app was introduced 1 December 2020. It was a key resource in pursuing the elimination containment strategy for COVID-19. It ceased being used in all settings on Monday 2 May [2022] *this year.*

Mr WILLIE - If the data was used up until that point, was that for those higher risk settings and not identifying close contacts in those settings and trying to trace the sequence?

Dr VEITCH - We kept it in place in certain high-risk settings and events. It was a just-in-case mechanism in case we needed to deal with a large outbreak in those settings. Its use, as the Premier just mentioned, as an aggressive containment strategy to identify anyone in the setting where a case could have been, became futile once Omicron became widespread.

Mr WILLIE - We saw long queues for testing. With the Omicron variant, obviously the Government did not anticipate the large numbers. What was the response to increase services for that demand? I heard stories of people waiting for four or five hours in their car.

Mr ROCKLIFF - If you watched television screens at that time, there were pictures of long queues in every state of Australia, from memory, for a long time.

Ms MORGAN-WICKS - From a Tasmanian perspective, unfortunately the brunt was really felt in the hardest week of the year to staff any service, which was between Christmas Day and New Year's Day. We had certainly prepared to be able to conduct thousands of tests in that time, and we threw in every available staff member, including bringing staff back from leave, to operate the polymerase chain reaction (PCR) tests, as it then was.

What we did experience was being experienced in every single state and territory in Australia - and to a worse extent, I think, in New South Wales and Victoria, with people reporting waiting for days, or not getting a PCR test result back for weeks, given that their laboratories were also overwhelmed. Some states had a significant reliance on private pathology to also support their testing, which we had to a more limited extent.

Talking to the public and getting feedback, what we probably experienced was some confusion between the state testing clinics and private pathology services that also popped up and opened in that period - where, for example, private pathology might open only for three hours, nine to 12 at the showgrounds, and be quickly overwhelmed in that time.

What we focused on was bringing forward the rapid antigen testing, which was a much more widely available test for the public. My understanding is that both the Australian Health Protection Principal Committee (AHPPC) and National Cabinet considered that it could basically replace the PCR test as the more readily available testing mechanism.

In that time, [Department of] Premier and Cabinet worked incredibly hard to source large volumes of rapid antigen tests for Tasmania. We then set up distribution mechanisms to make RATs available statewide. I think that was brought on prior to the Commonwealth also making them available to concession-card holders in pharmacies.[99]

The Committee also heard from the Premier Rockliff what the State Government's position with respect to a variant of concern entering Tasmania at a future date:

[99] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.33-35

Mr WILLIE - Premier, if we do see a variant of concern, are we likely to see the return of any measures such as the check-in app, or going back to old contact-tracing methods - or will it be a continuation of the status quo?

Mr ROCKLIFF - We will be always guided by Dr Veitch and the team at Public Health, which have carried us in very good stead to this point. All the matters and measures we have had in place previously, such as Check in TAS, can be reinstated if necessary.
...
Mr ROCKLIFF - ... I think the decision-makers at the time - people within and across departments, people on the ground - were incredibly adaptable to what was - as I recall as Health minister over that Christmas - clearly a very challenging time.

As Ms Morgan-Wicks has said, that real challenge peaked at a time when people were on holiday, between Christmas and New Year. We managed as best as we possibly could at the time, and it was supported by some very dedicated people across our whole of government.[100]

In replying to a question taken on notice, Premier Rockliff provided the Committee with a timeline of the changes to the Tasmanian COVID-19 Protocols since the re-opening of the Tasmanian border:[101]. Appendix 3 outlines the key dates, decisions and instruments under the *Emergency Management Act 2006*, *Public Health Act 1997* and *COVID-19 Disease Emergency (Miscellaneous Provisions) Act 2020*.

The Committee heard from Premier Rockliff and Dr Veitch (Director of Public Health) as to whether any monitoring had been undertaken by Government of the Tasmanian community's behavioural responses over the period:

Mr WILLIE - Through that two or three-week period from the borders re-opening, did the Government notice any change in the population's behaviour? There was talk of a shadow lockdown where people were staying at home through that time. We know businesses were impacted. We saw stories where trade dried up. Were you monitoring the behaviour of the population? Were there any key data that showed a change in behaviour? Potentially, did it help with the case numbers and transmission if people were being overly cautious?

Mr ROCKLIFF - Probably, anecdotally, naturally cautious. At the time, the severity of the Omicron variant was probably still a little unclear in many people's minds and so there was some self-isolation, if I can put it that way, through those times.

Obviously, the Department of Health was monitoring positive cases and the like at that time. I made the point earlier about the adaptability through that period, and the flexibility of people as result of very sudden and quick policy changes at a national level. In many respects, that adaptability and flexibility has been a case in point ever since the

[100] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.35
[101] Letter to Hon Ruth Forrest MLC Chair – COVID-19 Public Hearing - Responses to Questions taken on Notice, 24 June 2022

pandemic started, the whole way through. The re-opening was no exception in terms of that need to be flexible.
Mr WILLIE - The question was whether the Government was collecting any sort of data on population movement and behaviour change through that time.

Mr ROCKLIFF - We only have anecdotal information. We were not collecting anything in particular, I am advised.

Dr VEITCH - Throughout the pandemic, national surveys were conducted asking people two questions: how many contacts they have inside and outside the household, and how well they think they are doing keeping their distance from other people.

The first question is about macro-distancing, so it is about how much mixing you have: the other one is really about the distance you keep from people. This data is not in the public domain, but it is shared with the AHPPC in confidence, and is done at a statewide level. What it showed in Tasmania around December was a drop in macro-distancing - the number of interactions that people reported they had every day.

You often see that around public holidays, because people tend to stay at home and confine their interactions with people. So, in December there was a drop in the number of reported interactions people had with each other, but they did not report that they were keeping the distance much more.
...
Dr VEITCH - .... These data go into the forecasting methodology institute models about where the pandemic is tracking over the short term.[102]
...
Mr WILLIE - In terms of the data you have there, Dr Veitch, is there an average mixing figure that was used? Are we able to understand what the drop was in that December [2021] *period?*

Dr VEITCH - Tasmanians were reporting on average 12 or so contacts per person outside the household per day. At the time we opened the borders it dropped briefly down to about eight. Then it picked up quite quickly again.

Mr WILLIE - In January [2022]*?*

Dr VEITCH - It would be in January to a similar level. It's very hard to maintain sustained behavioural change in people. The thing that may do it is not necessarily concern about COVID-19, but because it was Christmas. The shops were shut, less sport, and so on ...[103]

In replying to a question taken on notice, Premier Rockliff informed the Committee, data modelling in respect to people distancing themselves during COVID-19 could not be provided without the approval all states, territories, and the Commonwealth:[104]

[102] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.36
[103] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.39
[104] Letter to Hon Ruth Forrest MLC Chair – COVID-19 Public Hearing - Responses to Questions taken on Notice, 24 June 2022

Vaccination Uptake and Rollout[105]

The Committee was informed that encouraging the Tasmanian community to get vaccinated had been one of the most crucial measures to help reduce the impacts of COVID-19 on the population, particularly in the context of Tasmania's border re-opening and transitioning to a living with COVID-19 environment. A key priority for DoH had been to ensure the most vulnerable and at-risk members of the population were vaccinated first, while ensuring equitable access to vaccines. In line with the phasing and prioritisation arrangements specified by the Commonwealth Government, Tasmania's vaccination rollout had been underpinned by a number of key public health measures.

Financial and Public Health Measures to Support Vaccination Uptake

Commonwealth, State and Territory Government Responsibilities in the Vaccination Rollout

The Committee was informed that the rollout of safe and effective COVID-19 vaccines in Tasmania had required close cooperation and coordination between the Commonwealth and Tasmanian Governments.[106]

Under the National Partnership (on COVID-19 Response) Agreement (NPA), the Commonwealth, state and territory governments recognised that they had a joint responsibility for ensuring the health system could respond effectively to the outbreak of COVID-19 and minimising risk to the community. The NPA also provided funding to states and territories to help manage the COVID-19 response.

In March 2020, the NPA commenced and, in accordance with National Cabinet's decision of 11 March 2022, was extended to 30 September 2022. Under the NPA, the Commonwealth, state and territory governments contributed an equal cost share basis for activities including:

- testing clinics;
- additional paramedic and ambulance costs;
- hospital costs for COVID-19 positive or suspected COVID-19 positive patients;
- minor capital upgrades;
- Medicare ineligible patients;
- non-clinical costs (such as security and cleaning); and
- vaccine costs.

Under these arrangements, the Commonwealth Government was responsible for key activities including:

- selecting and purchasing vaccines and establishing overarching principles

[105] See Tasmanian Government – Follow-up Inquiry, p.30
[106] See Tasmanian Government – Follow-up Inquiry, p.31

- specifying priority populations for vaccinations, drawing advice from the Australian Technical Advisory Group on Immunisation (ATAGI); and
- vaccinating aged care residents, and residents and staff in disability residential facilities.

Responsibilities and Funding Arrangements for delivering COVID-19 vaccines[107]

The Committee was informed that Schedule C of the NPA outlined key Commonwealth and state and territory government responsibilities to coordinate and deliver a safe and effective COVID-19 vaccine. The Schedule was guided by the key principles of facilitating free-of-charge vaccination for all people living in Australia and rolling out vaccination on the basis of Commonwealth-specified priority populations, with scope to flexibly respond to outbreaks.

The Tasmanian Government (along with all other state and territory governments) had responsibility for developing and implementing jurisdictional implementation plans, ensuring workforce was appropriately trained and authorised to administer COVID-19 vaccines and ensuring vaccination sites and immunisation providers were compliant with requirements.

Under the NPA, all parties had joint responsibility to work together to ensure COVID-19 vaccines were distributed where they were most needed and to ensure the needs of priority populations (such as Aboriginal and Torres Strait Islander people, residential aged care and disability settings, culturally and linguistically diverse communities and other hard to reach or at-risk groups) were met in consultation with relevant stakeholders.

Schedule C also set out the respective funding responsibilities of the Commonwealth Government and the states and territories. Under the Schedule, the Commonwealth Government provided an Upfront Payment and continued to provide a Vaccination Dose Delivery Payment.

The Upfront Payment comprised $100 million to support the establishment of state-run vaccination clinics. Each state and territory received a share based on population. Tasmania received $2 million.

Under the Vaccination Dose Delivery Payment, the Commonwealth provided a 50 per cent contribution to the agreed price per vaccination dose delivered for all persons living in Tasmania (under Modified Monash 2 -7): the agreed price per vaccination was $32.45.

Over time, these payment arrangements evolved. In March 2022, Schedule C was updated to include a Vaccine Rollout Support Payment. This new payment was in addition to the Upfront Payment and the Vaccination Dose Delivery Payment. Under the new Vaccine Rollout Support Payment, the Commonwealth contributed 50 per cent of the genuine net additional costs incurred by states to set up additional COVID-19 clinics after 21 April 2021.

Since the commencement of national vaccine arrangements in 2020, the Tasmanian Government had invested to deliver the COVID-19 vaccination program in Tasmania. Over 2020-21, vaccination program costs were approximately $4.6 million. As the vaccination rollout progressed, Tasmania's investment in the program grew accordingly. Over 2021 to

[107] See Tasmanian Government – Follow-up Inquiry, p.31

2022, Tasmania's vaccination program was expected to total $27.8 million, comprising $10.9 million in Commonwealth Government funding, with State funding to cover the remaining $16.9 million.

COVID-19 Vaccination Rollout[108]

The Committee was informed the COVID-19 pandemic had been a unique and fast-moving public health emergency for all levels of governments to manage. At all times, Tasmania's operationalisation of its vaccination rollout had been underpinned by the national principles set by the Commonwealth Government, the processes and requirements as agreed by the National Cabinet, and medical and public health advice.

Under the NPA, the Commonwealth Government had responsibility for procuring vaccines and led decision-making on vaccine distribution to respective states and territories, including prioritisation of vaccine access. Through the 'Australian COVID-19 Vaccination Policy'[109] and 'Australia's COVID-19 Vaccine National Roll-out Strategy'[110], the Commonwealth Government articulated a phased approach for vaccinating Australians against COVID-19, as doses became available per vaccine delivery schedules.

Based on public health advice, the phasing arrangements were initially aimed at ensuring the most vulnerable and at-risk members of the community were vaccinated first, including people in areas of work where there was a high likelihood of exposure to COVID-19. The phases in which vaccines would be provided in Australia were as follows:

- Phase 1a – quarantine and border workers, frontline health care workers, aged care and disability care staff and residents;
- Phase 1b – elderly adults aged 80 years and older, elderly adults aged 70-79 years, Aboriginal and Torres Strait Islander people aged over 55 years, younger adults with underlying medical conditions (including with disability) and critical and high-risk workers including defence, police, fire and emergency services and meat processing;
- Phase 2a – adults aged 60 – 69 years, Adults aged 50 – 59 years, Aboriginal and Torres Strait Islander people 18 – 54 years, other critical and high-risk workers;
- Phase 2b – balance of adult population (including catch up for any unvaccinated persons from previous phases); and
- Phase 3 – balance of population as described above and people under 18, if recommended.

On 22 February 2021, Australia's national COVID-19 vaccination rollout commenced with initial limited supply of vaccinations provided to populations and workforce groups most at risk, as identified above. The Commonwealth Government retained responsibility for vaccinating residents and workers in aged care and disability facilities via in-reach vaccination clinics.

[108] See Tasmanian Government – Follow-up Inquiry, p.33
[109] See https://www.health.gov.au/sites/default/files/documents/2020/12/covid-19-vaccination-australian-covid-19-vaccination-policy.pdf
[110] See https://www.health.gov.au/sites/default/files/documents/2021/01/covid-19-vaccination-australia-s-covid-19-vaccine-national-roll-out-strategy.pdf

In addition to undertaking a phased approach to vaccinating the Australian population, the types of COVID-19 vaccines approved for use in Australia expanded throughout the rollout, requiring governments to adapt planning and distribution approaches.

As per the Therapeutic Goods Administration's (TGA) provisional approval, two COVID-19 vaccines were initially approved for use in Australia: the Pfizer/BioNTech COVID-19 vaccine (Pfizer) for people aged 16 years and older, and the AstraZeneca (Vaxzervria) COVID-19 vaccine (AstraZeneca) for people aged 18 years and older. Further vaccines were provisionally approved by the TGA as follows:

- Moderna (Spikevax) COVID-19 vaccine (Moderna) in adults 18 years and older, with further age cohorts receiving provisional approval over 2021 and 2022 (provisionally approved 9 August 2021); and
- Nuvaxovid (Novavax) for use in people aged 18 years and over (provisionally approved 20 January 2022).

Tasmania's Vaccination Rollout[111]

The Committee was informed the fast pace and ever-changing nature of the COVID-19 pandemic had meant delivery mechanisms for Tasmania's vaccinations needed to evolve throughout the rollout. DoH had rapidly responded to support key community and health sector stakeholders to deliver vaccines and facilitate vaccination uptake. Similarly, reporting processes had also evolved to enable the identification of vaccination uptake in regions and particular populations and compare Tasmania's progress to the rest of the country.

Tasmania's vaccination rollout had mirrored the phased approach outlined by the Commonwealth Government and had been operationalised through the 'Tasmania COVID-19 Vaccination Program Implementation Plan'[112]. This Implementation Plan outlined the indicative timelines for each phase of the rollout, along with vaccination locations and workforce and training requirements, whilst noting the need for flexible approaches in delivery and prioritisation. DoH's approach to rolling out COVID- 19 vaccinations had built on existing immunisation arrangements and its experience in delivering vaccinations.

On 23 February 2021, Tasmania's vaccination rollout commenced. In accordance with national rollout arrangements for Phase 1a, an initial limited supply of Pfizer was prioritised for vulnerable Tasmanians and key frontline staff considered to be at highest risk of exposure, including:

- hotel quarantine staff;
- frontline at-risk healthcare workers (including key ambulance staff);
- hospital emergency department and ICU staff; and
- COVID-19 testing staff.

In the initial phase of the rollout, Tasmania's COVID-19 vaccine allocation was equally split between Tasmania's priority populations (delivered by the Tasmanian Government) and

[111] See Tasmanian Government – Follow-up Inquiry, p.34-35
[112] See https://federalfinancialrelations.gov.au/sites/federalfinancialrelations.gov.au/files/2021-04/tas_vaccine_plan.pdf

residential aged care and disability care residents and workers (delivered by the Commonwealth Government), with allocation arrangements evolving as the rollout progressed and vaccination cohorts broadened.

A vaccination hub providing the Pfizer vaccine was initially established at the RHH, with other vaccination hospital hubs activated shortly after at the LGH and the North West Regional Hospital (from 15 March 2021), and at the Mersey Community Hospital (from 19 March 2021). To encourage vaccination uptake in workforce cohorts specified for prioritisation by the Commonwealth Government, eligible staff in Tasmania were contacted directly (via their respective Tasmanian Government agencies) to make an appointment to receive the vaccine and supported with paid time to attend their appointment (if scheduled during working hours).

As the rollout progressed and vaccination cohorts were expanded to include more priority workforce and vulnerable groups, DoH established State-run Community Clinics (State Community Clinics) across Tasmania to provide Pfizer to eligible Tasmanians. Initial State Community Clinic locations included Kingston, Mowbray, Brighton and New Norfolk, with additional pop-up clinics established in identified priority areas.

Similarly, throughout the rollout, authorised GP clinics began providing vaccinations in March 2021 under Phase 1B of the vaccination rollout[113]. In September 2021, community pharmacies[114] were progressively activated to provide COVID-19 vaccinations to eligible people:

COVID-19 Vaccine	Availability
Pfizer (for children aged 5 to 11 years)	State Community Clinics and authorised GPs
Pfizer (for 12 years and over)	State Community Clinics, authorised GPs and pharmacies
Moderna	authorised pharmacies
AstraZeneca	nominated GPs and pharmacies
Novavax	nominated GPs and pharmacies

Bookings with State Community Clinics could be made through coronavirus.tas.gov.au or the Public Health Hotline. Vaccinations could also be booked directly with participating GPs and pharmacies.

Since the commencement of the Tasmanian vaccine rollout, Tasmania had achieved consistently high vaccination rates and had, at particular times, led the nation in vaccinations administered per capita. Tasmania had also consistently tracked on, or ahead of, schedule against planned rollout timelines. Throughout the rollout, DoH had also responded flexibly to maximise the uptake of vaccinations. Some key examples of this included:

[113] Minister for Health Media Release - https://www.premier.tas.gov.au/site_resources_2015/additional_releases/next_phase_of_the_covid-19_vaccine_begins_in_tasmania accessed 6 October 2023

[114] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.-3

- setting up additional AstraZeneca clinics at the RHH and in residential settings (such as the Roy Fagan Centre) to administer an additional delivery of AstraZeneca to Tasmania in the initial phase of the rollout;
- identifying additional operational capacity to support the vaccination of staff in aged care and disability service facilities (for which the Commonwealth Government was responsible) via the State Community Clinics;
- responsive partnership arrangements between DoH and key stakeholders, such as Tasmanian Colleges (for encouraging vaccine uptake in 16 – 18 year old students) and the Royal Flying Doctor Service delivering regional and rural mobile vaccinations; and
- public and targeted communications campaigns to encourage vaccination uptake at particular periods of time (for example, prior to the summer season commencing and prior to the 2022 primary school term commencing).

On 8 November 2021, the provision of booster doses commenced in Tasmania made available through State Community Clinics, GPs and pharmacies. On 1 March 2022, ATAGI issued recommendations on the use of a booster dose of COVID-19 vaccine outlining that people aged 16 years and over should have a booster three months after their second dose; or those who are immunocompromised, should have a booster three months after their third dose. Tasmania, along with all other states and territories accepted this advice and the new definition commenced from the end of March 2022.

At the public hearings, Premier Rockliff noted the cost associated with the Tasmanian vaccination rollout:

> *Mr ROCKLIFF - … The total cost for the 2021-22 State clinic vaccination rollout forecast is $28.6 million. This comprises a forecast $15.7 million for salaries and wages and $12.9 million of other costs. It is estimated that the Commonwealth will contribute $11 million to the total cost based on the number of doses delivered in the last financial year. This leaves $17.6 million as the state-funded component. These are early numbers and subject to the National Health Funding Body reconciliation process. That gives an indication of the costs associated with the rollout.*[115]

As at 23 March 2022, 97.48 per cent of Tasmanians aged 12 years and older had received their second vaccination dose. Booster uptake in Tasmania continued to increase with 80.20 per cent of Tasmanians aged 50 years and older and 63.91 per cent of Tasmanians 16 years and older having received their booster.

Noting vaccinations for children aged 5 to 11 years were approved later in the rollout, 62.84 per cent had received their first dose and 30.59 per cent were fully vaccinated (with a second dose).

At the public hearings, the Committee expressed concerns about the then vaccination double-dose rates for 5- to 11-year-olds in Tasmania and heard from Premier Rockliff and Dr Veitch (Director of Public Health):

[115] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.15

Mr WILLIE - … it's still very concerning that the vaccination double-dose rate in 5- to 11-year-olds - I've just looked it up - is 51.11 per cent. It seems to have stagnated for some time. Do you think there's a problem with the Government messaging? Some parents I speak to who haven't vaccinated their children often repeat the line that has been repeated by government: it's mild in children; I'm not going to worry about it. Shouldn't the message be that we need to prevent the spread in schools, because education is important, and we need to stop the virus coming home to vulnerable family members? Do you see a problem with the Government messaging contributing to that?

Mr ROCKLIFF - Not necessarily. I believe our Government messaging has always been encouraging parents to vaccinate their children between the ages of 5 and 11.

… The first dose in 5 to 11s is 63.23 per cent, and as you've identified, the second dose 51.11 per cent. We are consistently above the national average, and that has been consistent - around 10-12 per cent, I believe, for the whole of population. There is some resistance in parents, we accept that. We can only reinforce the message that the number one defence is vaccination.

We have said many times in our public commentary that we'd be open to suggestions to cut through further with our parents on that matter. ….

Dr VEITCH - … It is definitely a challenge to lift the vaccination rates in 5- to 11-year-olds above 60 per cent or so. Tasmania saw quite a quick uptake when we pushed it along, but the plateau seems to have been fairly common across a lot of states, at half or a bit over half of that cohort.

You're correct that the observation that the illness is relatively mild among those children is a bit of a discouragement for parents if they have any hesitancy about vaccination. There have been really excellent groups of researchers and practitioners on vaccination who had a couple of forums to see whether they could think of some messaging that would encourage parents to increase vaccination, and we've participated in those forums and seen the outputs, but it really suggested much of what we were doing.

One point I probably should make is that the message that it will reduce transmission in schools is probably not a message that we should promote, because it probably doesn't. The vaccination of young children will not have much effect on the rate of transmission in schools.

The very rare but awful experience of children getting seriously ill or dying is something that we've been fortunate not to experience. There has only been I think eight children of school age admitted to hospital because of COVID this year, so it's a very rare event. For example, in influenza season there are more children of that age admitted to hospital than there are from COVID, so it is a difficult message to sell, taking on the vaccine to prevent very rare but serious side effects.

Mr WILLIE - Is the Government surveying parents, trying to understand the core reasons for the vaccination rates not continuing?

Mr ROCKLIFF - No, I don't believe we're surveying parents. We have looked at other national campaigns and we're very mindful of any other ways that we can get that very important message through.

My advice here is that nationally, when it comes to second dose, it's 39.37 per cent as opposed to our 51.11 per cent. Notwithstanding that, I agree that we need to do more to lift those vaccination rates where possible. We can't rest on our laurels and say we're above the national average. It is important to get those figures up a lot higher.[116]

Committee Findings

F37. Tasmania achieved high rates of vaccination across eligible cohorts prior to the border re-opening on 15 December 2021.

F38. The Tasmanian Government expended a considerable amount of funding on the Tasmanian vaccination roll-out.

F39. As at 16 March 2023, the 5 to 11 year old cohort in Tasmania still lagged behind other age cohorts for COVID-19 vaccinations: 57.34 % for the first dose and 47.97 % for the second dose.[117]

With respect to the question about the continuing efficacy of COVID-19 vaccinations from the Premier and Dr Veitch (Director of Public Health):

CHAIR - On vaccinations more broadly, the evidence seems to suggest that after about four months from the vaccination, immunity wanes. For the majority of people who aren't over 65 or are not immuno-compromised they're getting into that period, health workers and others, where the last vaccine was more than four months ago. What is the current thinking around this? It is a concern for a lot of people, particularly health workers who are at the front line.

Mr ROCKLIFF - ... These matters have been discussed at ATAGI...

Dr VEITCH - When we think about vaccination, it's important to think about what we're expecting to achieve with vaccination. The two things that people want to achieve with vaccination are protecting people from getting severely ill, and reducing the transmission of disease.

The evidence is that the protection against the disease, particularly among people who are at a greater risk of severe disease, holds up pretty well. It's true that it probably does diminish as you get four or six months and beyond, but it still provides a substantial level of protection against severe illness in those people.

[116] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.12-13
[117] See DoH COVID-19 Weekly Statistics (https://www.health.tas.gov.au/health-topics/coronavirus-covid-19/current-risk-level-and-statistics/weekly-statistics) [Accessed 16 March 2023]

Some of the studies have looked at antibody levels. That is only part of our immune response. There are increasingly sophisticated ways of looking at our immune memory to see whether that kicks in many months after vaccination. There's increasing evidence that that holds up pretty well in people who are at risk of severe disease.

Unfortunately, by that time the protective level that you have against catching it in the first place, or spreading it, is long gone. That does not last more than a couple of months. We don't have the vaccines available to us that prevent infection, the way measles vaccine prevents infection.

There is increasing evidence that with multiple, multiple doses of largely the same vaccine you get diminishing returns. As we move to an era with increasingly diverse strains, we may end up having several strains of COVID-19 co-circulating in the community in the years to come. It is going to be important that vaccines cover the diversity of strains. It probably means there will be some diversity in the vaccines. They'll target a specific group of viruses, rather than the last one that came through.

CHAIR - A bit like the flu vaccine.

Dr VEITCH - It is. When I read about it, it did seem broadly analogous to how we approach flu each year, where we try to get the best match.

People are trying to develop a universal flu vaccine. That's a holy grail. I'm sure they're working on a similar idea for COVID-19. I'm not sure where that basic research is up to.[118]

The Committee also heard from Premier Rockliff and Ms Morgan-Wicks (Secretary, DoH) with respect to how the State was managing the impact of seasonal influenza and COVID-19 through the 2022 winter months:

Mr WILLIE - How is the State Government managing the impact of flu and COVID together through this winter? Are we seeing increased rates of hospitalisation? Are there people who are carrying both the flu virus and COVID virus?

Mr ROCKLIFF - Having visited the laboratory yesterday, I've asked a number of these questions, including whether people are carrying both the flu and the COVID virus. From my information, it is possible. Dr Veitch?

Dr VEITCH - Yes.

Mr ROCKLIFF - I can point you to our winter flu strategy, and once again the State Government's investment into free vaccinations for the community across the board. Some of those are part of the (national immunisation program) NIP program, and our own state investment as well. To date, that has been relatively successful in terms of uptake and vaccination status. That free vaccination program lasts until 6 July this year. We'll monitor that and see if it needs any extensions.

[118] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.13-14

Mr WILLIE - ... are you going to extend it?

Mr ROCKLIFF - I will come to that, absolutely. Currently, 227,803 Tasmanians - or 41.5 per cent - have had a flu vaccination: 44 per cent in the south, 40 per cent in the north, and almost 37 per cent in the North West.

CHAIR - Do you have the costs of those to the Government?

Mr ROCKLIFF - We could break those costs down. From memory, our commitment initially was $1.5 million, and then another $1.5 million. We will get the figures for you, Chair.

The 6 July question came up over forums every three weeks with key stakeholders across the health system, including the ANMF, AMA, HACSU and other key stakeholders. We used to meet weekly for a long period of time, and then fortnightly, and now every three weeks around these matters, and that was discussed. As you can appreciate, we had the monthly period from 6 June to 6 July for people to access free flu vaccinations. We'll evaluate its success and decide on that time. One reason we had that narrow period of a month is to encourage people to not wait for the flu vaccination.

Ms MORGAN-WICKS - In relation to hospitalisations for influenza, at the moment we have two hospitalised in the south, we have seven in the northwest - four at the North West Regional and three at the Mersey - and we have seven at the LGH, with one in the emergency department with suspected influenza. That adds up to the exact same numbers hospitalised with COVID at the moment. For our health system, both influenza and COVID in equal measure are of concern in our winter period, and we are prepared for both.

Mr ROCKLIFF - ... because it's winter, we have a heightened response to these matters. This will include increased COVID and influenza vaccination rates across the Tasmanian population; testing to detect influenza and COVID and ensure timely and accurate treatment; increased hospital avoidance and primary care support - for example, we now have COVID@homeplus for all respiratory illnesses; maintaining additional COVID bed capacity in our hospitals; continuing to build and maintain COVID/influenza treatment stockpiles, and increase their availability, including through pre-positioning.

The Tasmanian Government is providing free flu vaccines to the public through state-run community clinics, and is offering GPs and pharmacists a reimbursement payment of $21.50 for all flu vaccinations reported to the Australian Immunisation Register between 6 June and 6 July. This will assist access to flu vaccination for all Tasmanians, to reduce the risk of serious illness and the need for hospitalisation associated with influenza, which we know from 2019 is a very serious issue.

CHAIR - You can argue that the Commonwealth should be assisting the pharmacies and the GPs in covering the cost of vaccines?

Mr ROCKLIFF - I would always argue that the Commonwealth should do more.

CHAIR - Have you had an argument about that with them?

Mr ROCKLIFF - We've had an argument or discussion about funding more broadly, but all premiers have to stay united in these matters, and were very pleased to see a three-month extension in the National Partnership Agreement in sharing a 50 per cent cost. With COVID-19, that now extends to 31 December (2022).

CHAIR - Premier, isn't a fact that the Commonwealth is responsible for primary health care and vaccinations in their National Immunisation Program?

Mr ROCKLIFF - The NIP, yes.
...
Mr ROCKLIFF - I'll take up your question on the primary care part. There was a lot of discussion at National Cabinet about this very matter and, pleasingly, a willingness from the Commonwealth to engage with states, particularly on that intersect between primary health care and our acute care system, which we are responsible for, and a very willing and collaborative discussion around the need for national reform in this area. It was a pleasing first national cabinet meeting. My first, the Prime Minister's first. We can only hope that reform and voter support and investment in primary health care is not too far away from the Commonwealth.
...
Mr ROCKLIFF - Can I add that the Commonwealth is providing 205 000 NIP doses of the flu vaccination.

CHAIR - They are funding that, did you say?

Mr ROCKLIFF - Yes, under the NIP, as you highlighted.

CHAIR - They're the ones through pharmacies and GPs?

Mr ROCKLIFF - Yes.

CHAIR - Are you still topping it up, Premier? Am I correct in understanding that?

Mr ROCKLIFF - Correct.[119]

At the public hearings, Premier Rockliff provided evidence related to the State Hospital Pharmacy system:

Mr ELLIS - ... Could you outline the role of the statewide hospital pharmacy, particularly with preparation and management of the state's COVID-19 response over this period?

Mr ROCKLIFF - ... The statewide hospital pharmacy has been responsible for the distribution of COVID-19 vaccines by the Government. In total, around 99 734 vials of vaccine, representing a potential 640 644 doses of vaccine was held in inventory during

[119] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.15-17

the last financial year. To ensure that hospital outpatients can continue to receive their public hospital medications without needing to attend hospital premises, home medication delivery service has been provided free of charge to patients, and this service has provided up to 14 450 patients during the last financial year.

Our hospital pharmacies are responsible for the majority of our COVID-19 medications available in Tasmania from the national medicines stockpile. These medications have only become available in the last nine months and reduce hospitalisation and death from COVID-19. Last financial year, 912 courses of treatment were provided and some medications are now listed on the PBS and are available from community pharmacies - as we've discussed already.

Hospital pharmacies are providing support for COVID@home, ensuring our patients can continue to access their ongoing medications as well as COVID-19 treatments during their isolation. To buffer against the disrupted global pharmaceutical supply chain, our Government hospitals now hold over $15.2 million in pharmaceuticals, nearly triple the value of pre-pandemic stock holdings - for your interest. As a Government, we've established a secure, ring-fenced stockholding of medications specifically to treat and ventilate patients with acute COVID-19 illness. That stock is valued at $1.25 million, I'm advised.[120]

Tasmanian Vaccination Emergency Operations Centre (TVEOC)[121]

The Committee was informed of the establishment of a number of coordinated operational arrangements for a seamless health response to COVID-19 in Tasmania.

The DOH Emergency Co-ordination Centre (ECC) co-ordinated and supported the overall health response, focusing on strategic co-ordination and oversight of operational response structures and activities. Under the ECC, a number of EOCs have been established as dedicated resources to lead and coordinate operational responses across the health services, one of which was the Tasmanian Vaccination Emergency Operations Centre (TVEOC). The TVEOC commenced operations in March 2021 to deliver the safe and effective rollout of COVID-19 vaccines to Tasmanians, working closely with the Commonwealth Government and the other states and territories.

At a state-level, TVEOC worked closely with the PHEOC and the DEOC to deliver COVID-19 vaccinations to individuals and groups as identified within the National Roll-out Strategy within a Tasmanian context.

In order to promote messaging around the importance of vaccination and the availability of vaccination clinics across the state, the TVEOC also undertook stakeholder engagement at all levels, including from governmental, departmental to grassroots. This occurred through the distribution of a regular newsletter to key stakeholder organisations and individuals. Direct engagement was undertaken by pertinent clinics, age groups and priority demographics (including aged care, disability, culturally and linguistically diverse (CALD) communities,

[120] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.44-45
[121] See Tasmanian Government – Follow-up Inquiry, p.35-36

and Aboriginal and Torres Strait Islander peoples). The stakeholder engagement undertaken by the TVEOC complemented the paid advertising and media campaigns, extensive social media and earned media as well as on-site promotion activities undertaken by DoH and the Tasmanian Government to boost vaccination uptake.

In an effort to continue to maximise Tasmania's uptake of vaccinations, the TVEOC continued to work closely with the Public Health Hotline to follow up with individuals who had booked an appointment but did not attend to re-book their vaccination appointment.

State Community Clinics[122]

The Committee was informed a key national principle of the vaccine rollout was to facilitate free access to COVID-19 vaccines. To support equitable access to COVID-19 vaccinations in Tasmania, and encourage uptake across the community, DoH established State Community Clinic sites to deliver a high volume of vaccinations across the state, including access to vaccinations in regional and rural areas. State Community Clinics were also in place for a limited time or continued to operate in more permanent locations.
Specialised clinics were also established to facilitate the vaccination of particular cohorts, including Tasmanians aged 5 to 11 years and via mobile and other on-site methods to encourage vaccination uptake in older students and Tasmanians living in regional and rural areas.

In line with initial roll-out arrangements as specified by the Commonwealth Government, Tasmania's State Community Clinics initially provided the Pfizer vaccine, with capacity later temporally expanded to administer the AstraZeneca (Vaxzervria) vaccine to eligible workforces and older Tasmanians.

As at the date of the Government's submission, State Community Clinics have been established in:

- Kingston;
- Huonville;
- Rosny;
- Hobart;
- Moonah;
- Brighton;
- New Norfolk;
- Smithton;
- Wynyard;
- Burnie;
- Ulverstone;
- Devonport;
- Latrobe;
- Deloraine;
- Launceston;
- Scottsdale;
- Triabunna;
- Flinders Island;
- Cape Barren Island;
- King Island.

At various times, these clinics offered walk-in appointments to maximise opportunity for Tasmanians to receive a vaccination. Using national and local epidemiological data, the TVEOC continued to work closely with local communities to support priority access for areas with low numbers of participating GPs and significant vulnerable populations.

In line with national phasing arrangements, Tasmania's State Community Clinics administered the bulk of COVID-19 vaccines to Tasmanians in the initial stages of the

[122] See Tasmanian Government – Follow-up Inquiry, p.36-37

rollout. For example, as at 17 September 2021, State Community Clinics had provided more than 50 per cent of doses to eligible Tasmanians.

However, throughout the later stages of the rollout and as vaccine delivery modes have expanded in Tasmania, there had been an evening out of vaccine distribution between State Community Clinics, GP clinics and pharmacies. Over the seven days to 20 March 2022, approximately 7,800 vaccines were administered through State Community Clinics and approximately 8,300 vaccines were administered through primary care.

Tasmania's State Community Clinics were regularly promoted through social media, press (daily and community newspaper advertising) printed materials (such as posters and postcards) and live reads through local radio stations. To encourage further uptake of vaccinations, all State Community Clinics have extended opening hours with some State Community Clinics also opening for extra days.

Tasmania's vaccination workforce[123]

The Committee was informed the DoH responded quickly to the evolving nature of the phased approach of the national vaccine rollout by flexibly utilising its available immuniser workforce. While workforce numbers had fluctuated over time in response to the differing phases of the rollout, DoH's vaccination workforce comprised almost 800 staff (including Registered Nurse Immunisers, Enrolled Nurse Immunisers, Pharmacists, post-vaccination staff and administration staff) in April 2022.

To quickly expand its immuniser workforce, DoH had implemented a number of strategies while continuing to maintain essential services, including recruiting authorised pharmacist immunisers to work in State Community Clinics and adding paramedics and enrolled nurses (working under supervision) to the immuniser workforce. At the peak of the vaccine rollout, over 620 DoH nursing staff were deployed to deliver vaccinations.

Between January and early February 2022, to address specific considerations and requirements for vaccinating younger children, 29 FTE Child Health and Parenting Service (CHaPS) nurses were temporarily reassigned to assist with rolling out COVID-19 vaccinations to eligible children aged 5 to 11 years. During this period, CHaPS core services were maintained, with appointments prioritised for 0 to 8-week-old babies, and vulnerable breastfeeding and perinatal mental health clients. From 7 February 2022, a stepped approach was implemented to return to full-service offerings, with the implementation of new triage and Telehealth approaches to ensure CHaPS could meet new demand and schedule missed or overdue appointments.

Encouraging vaccination uptake in Tasmania's priority populations[124]

The Committee was informed protecting Tasmania's most vulnerable communities had been a key priority for DoH throughout the vaccination rollout. DoH had undertaken a number of activities to encourage vaccination uptake in priority groups including:

[123] See Tasmanian Government – Follow-up Inquiry, p.37
[124] See Tasmanian Government – Follow-up Inquiry, p.37

- Aboriginal and Torres Strait Islander people living in Tasmania;
- people with disability and their carers;
- culturally and linguistically diverse communities;
- people living in regional and remote areas, and
- other vulnerable groups (including forensic cohorts and people experiencing homelessness).

Aboriginal and Torres Strait Islander people[125]

The Committee was informed Aboriginal and Torres Strait Islander people had been identified as a priority group for vaccination and were among some of the earliest groups able to access COVD-19 vaccines in the rollout arrangements. Vaccinations for Aboriginal people living in Tasmania had been primarily coordinated and delivered through Tasmanian Aboriginal Community Controlled Health Services (ACCHS), State Community Clinics and primary healthcare providers. DoH had also delivered clinics on Flinders and Cape Barren Islands to facilitate vaccination uptake in these areas.

TVEOC had worked closely with Tasmanian ACCHS across regions to support processes to deliver vaccinations and to develop strategies to boost the number of Aboriginal people being vaccinated in Tasmania.

As at 23 March 2022, approximately 85 per cent of Aboriginal people in Tasmania were fully vaccinated (based on available information from the Commonwealth Government via the Australian Immunisation Register).

People with disability and the people who support them[126]

Under the phased arrangements of the vaccine rollout, the Committee was informed the Commonwealth Government was responsible for vaccinating residents and staff in disability residential care facilities and the Tasmanian Government was responsible for making vaccination available to all other Tasmanians with disability and their carers who do not live in a residential facility. However, Tasmania had supported the Commonwealth Government's vaccination rollout by providing additional access to vaccinations for staff in disability residential settings through its State Community Clinics.

To plan the implementation of vaccine delivery for Tasmanian people with disability, the TVEOC worked closely with Tasmania's DEOC. The DEOC liaised directly with Tasmania's disability sector to inform TVEOC's planning and implementation activities to deliver vaccinations to Tasmanians with disability and the people who support them.

In the initial stages of Tasmania's vaccine rollout, TVEOC worked with Tasmania's peak disability services bodies (such as National Disability Services) and offered tailored information sessions to people with disability and those who support them.

[125] See Tasmanian Government – Follow-up Inquiry, p.37
[126] See Tasmanian Government – Follow-up Inquiry, p.38

In rolling out vaccines to people with disability who were not living in a residential facility and their support workers or carers, the TVEOC partnered with the Commonwealth Government and Aspen Medical to run dedicated Additional Support Clinics and Quiet Clinics. These clinics offered low-sensory or private spaces away from general vaccination areas, longer appointment times and immuniser staff who had received training by Autism Tasmania or were familiar with how to care for people with a disability.

Throughout Tasmania's vaccine rollout, DoH immuniser teams had also provided in-reach opportunities across the state for National Disability Insurance Scheme (NDIS) participants who may need additional support in receiving a vaccination. Similarly, NDIS participants in Tasmania living in supported living accommodation had been offered in-reach and at-home vaccination opportunities.

Tasmania established an active vaccination assistance program where NDIS participants were contacted by clinical staff to further understand individual needs to inform vaccination clinic planning. Consultation and planning for this multi-stage program was underway between TVEOC and DEOC. Under this program, clinic staff also provided information and/or vaccination opportunities based on individual requirements (such as advice on their nearest clinic and assistance to clinics).

Additionally, information on planning and preparing to receive an immunisation was available via the coronavirus.tas.gov.au website, including suggestions on wearing accessible clothes and bringing items (such as headphones or sunglasses) for additional comfort, if needed.

The Committee heard from the Premier about the vaccination rates attributed to Tasmania's vulnerable cohort groups:

> *Ms WEBB - ... Within our vulnerable cohort groups, how do our vaccination rates compare, after the effort that was put in to make those connections?*
>
> *Mr ROCKLIFF - I'm advised that from 9 June this year, NDIS registered providers reported that 99.5 per cent of disability workers required to be vaccinated had received their first dose, and 97.3 per cent have had two doses. At 26 May this year, over 87.1 per cent of NDIS participants aged 16 and over had received one dose, and over 85.1 per cent have had two doses.*
>
> *Ms WEBB - Do we know how that compares to other jurisdictions?*
>
> *Mr ROCKLIFF - I have some figures on a percentage of NDIS participants aged 16 and above who are fully vaccinated:*
> - *the ACT, 87.9 per cent;*
> - *New South Wales, 86.1 per cent;*
> - *Northern Territory, 75.8 per cent;*
> - *Queensland, 83.7 per cent;*
> - *South Australia, 82.8 per cent;*
> - *Tasmania, 85.2 per cent;*
> - *Victoria, 86.7 per cent; (and)*

- *Western Australia, 86.5 per cent.*

The national average is 85.4 per cent. This is data as at 16 June [2022].[127]

Culturally and Linguistically Diverse (CALD) communities[128]

The Committee was informed DoH, via the TVEOC, had engaged with Tasmanian community networks, CALD support services and cultural community hubs to provide information on vaccination, including how to access a vaccination.

Key stakeholders included Tasmania's Migrant Resource Centre, the Multicultural Council of Tasmania and the Adult Migrant English Program. The TVEOC also partnered with multicultural organisations in Tasmania (such as the Greek Orthodox Church) to provide information sessions for community members and have their questions on vaccinations answered.

In broad communications and updates, DoH also provided links to the Commonwealth Government COVID-19 website, which contained a large number of translated materials.

People living in regional and rural areas[129]

The Committee was informed of the use of national and local epidemiological data (by postcode and local government area) (LGA) to inform DoH. DoH continued to operate pop-up State Community Clinics in regional areas and prioritised locations where there was low vaccination uptake or limited vaccine delivery via primary health.

Throughout the rollout, the TVEOC had worked closely with community groups and key stakeholders in regional and rural Tasmania, including:

- Local Government Association of Tasmania (reaching all municipal councils in Tasmania);
- Country Women's Association;
- Neighbourhood Houses of Tasmania;
- Rural Aid Ltd;
- Rural Health Tasmania; and
- Tasmanian Farmers and Graziers Association.

In October 2021, in addition to direct stakeholder engagement and expanding regional and rural clinic offerings, a mobile vaccination service was established to provide vaccinations to Tasmania's regional and rural communities. DoH partnered with the Royal Flying Doctor Service to run two buses to provide two doses of Pfizer vaccinations for people aged 12 years and above living in townships across Tasmania's north, north-east, north-west, west, Southern Midlands and Central Highlands.

---

[127] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.31
[128] See Tasmanian Government – Follow-up Inquiry (https://www.parliament.tas.gov.au/ctee/joint/PAC/20220421%20Tasmanian%20Government%20Submission%20to%20COVID-19%20Follow-up%20Inquiry.pdf), p.39
[129] See above n96

Other vulnerable groups[130]

The Committee was informed that via the TVEOC, DoH worked with Tasmania's prison and mental health facilities to vaccinate prison staff and inmates, and residents and staff at specialist mental health facilities. The DoH also engaged with Moreton Medical Group, who provided existing services to the Specialist Homelessness Services (including shelters), as the provider for vaccine administration for those services across Tasmania.

Vaccination Communications and Campaigns[131]

The Committee was informed of the communication strategy used throughout the vaccination rollout. DoH, via the TVEOC, had communicated directly and regularly with health sector stakeholders, local councils and community organisations by telephone and/or email to plan the implementation of the vaccination rollout in Tasmania, and provide information aimed at encouraging vaccination uptake in Tasmanian communities.

Communications on vaccination to the broader Tasmanian community included public messaging (including website updates, TV, radio and social media), daily vaccination reporting and regular press conferences by the Tasmanian Government.

Tasmania's State Community Clinics were regularly promoted through social media, press (including community and daily newspaper advertising), printed materials (posters and postcards) as well as live radio reads on local stations.

In the lead up to, and throughout, the national vaccination rollout, the Commonwealth Government undertook a number of federal communications campaigns to broadly inform Australian communities on the safety and development of COVID-19 vaccines, with messages outlining the reasons to receive a vaccination. Commonwealth campaigns had featured prominent health professionals and had also provided specific communications and information for Aboriginal and Torres Strait Islander people and CALD communities across Australia.

As the vaccine rollout progressed, Tasmania's communications and campaign approaches evolved to include specific guidance on eligibility and clinic locations and included the establishment of periodic pop-up booths in populated areas manned by DoH staff to answer questions about vaccinations and provide support to Tasmanians to book an appointment at State Community Clinics.

DoH had worked closely with relevant Tasmanian Government agencies, including the Premier's Information Unit, to deliver a number of campaigns to encourage uptake of vaccinations across age cohorts and providing educational and factual information about the COVID-19 vaccines.[132]

[130] See Tasmanian Government – Follow-up Inquiry, p.39
[131] See Tasmanian Government – Follow-up Inquiry, p.39-40
[132] See Attachment G – Vaccination Rollout Campaigns

Public Health Advice[133]

The Committee was informed DoH had closely monitored and adjusted its vaccination rollout in accordance with expert medical advice and decisions from the TGA, ATAGI and the AHPPC to ensure safe and responsive vaccination measures.

Tasmania was actively involved in national COVID-19 vaccine planning and oversight and had representatives on key national committees including AHPPC, ATAGI, the Communicable Diseases Network of Australia, TGA and the Jurisdictional Immunisation Committee.

DoH had also reviewed advice alongside available clinical evidence and had closely coordinated with the Commonwealth Government to ensure key logistics including priority planning and vaccine supply were understood and incorporated into planning.

Throughout all stages of the vaccine rollout, DoH had responded rapidly to changes informed by medical and public health advice. Key examples of this include Tasmania's ability to quickly recalibrate its vaccination program following ATAGI's advice on recommended age groups to receive the Pfizer COVID-19 vaccine over time.

Recalibration of Tasmania's vaccination program in line with ATAGI advice[134]

The Committee was informed ATAGI issued advice on 8 April 2021 regarding the preferred use of Pfizer in adults aged under 50 years and the continued recommendation of AstraZeneca for people over 50 years of age. Immediately following the provision of this advice, DoH briefed immunisers working in vaccination clinics and directly contacted and rescheduled appointments of individuals in the relevant age group who were booked in for an AstraZeneca vaccination.

Direct communications were also provided to Tasmanian GP clinics to ensure ATAGI's advice was shared at the provider level, with the advice also uploaded to the coronavirus.tas.gov.au website. Throughout this period, DoH also contacted those in the affected age group who had already received a vaccine, providing advice to watch for specific symptoms.

On 17 June 2021, revised medical advice was issued by ATAGI in relation to Pfizer being the preferred vaccine for people aged 50 to 59 years, with those who had already received their first dose of AstraZeneca (without contraindications) advised to receive a second dose of the vaccine.

Following the provision of this medical advice, state-based communications complemented those provided through the Commonwealth Government and included updates to the coronavirus.tas.gov.au website, direct communications to State Community Clinic staff and primary health providers.

[133] See Tasmanian Government – Follow-up Inquiry, p.40
[134] See Tasmanian Government – Follow-up Inquiry, p.40

Monitoring and Evaluation[135]

Throughout the vaccine rollout, public health advice informed the development and interpretation of the weekly COVID-19 vaccine coverage report for Tasmania, which enabled the vaccine program to respond to population groups and areas of low coverage.

DoH also established an Adverse Event Following Immunisation (AEFI) surveillance system that enables close oversight of adverse events, including vaccine administration errors occurring in Tasmania. This work enables providers and members of the public to be linked into appropriate clinical care pathways following AEFI, supporting confidence in the safety profile of the Tasmanian vaccine roll-out and maintaining close liaison with the TGA.

With respect to the AEFI surveillance system, the Committee heard from Premier Rockliff and Dr Veitch (Director of Public Health):

> *CHAIR - … What data about adverse events was collected through that system?*
> *…*
> *Dr VEITCH - Monitoring adverse events after vaccination is tremendously important in terms of identifying signals of potential harm from vaccines, but also in providing public confidence about the safety of vaccination roll out. In a campaign as extensive as the COVID-19 vaccine campaign with a new vaccine, it was very important. We established a register which received reports from the general public, from vaccination providers across the range - particularly from people who reported back through to vaccination clinics - and compiled those data. We also report them into the national data set for adverse events surveillance.*
>
> *Reports are regularly produced that give us a profile of the occurrence of side effects. In most instances they are mild and local, but we have also captured those occasional rare - and very rare, but tragically fatal - side effects due to clotting disorders that were particularly associated with the AstraZeneca vaccine earlier on. That mechanism is also linked to clinical providers now, who can provide guidance to people who had an adverse event in the past about whether it is safe to proceed with further doses or how to switch vaccines, if necessary, to try to avoid a side effect that might have been previously experienced. It is a real asset for Tasmania to have that established. It will gradually morph into a system that provides enhanced adverse event surveillance for vaccines across the spectrum.*
>
> *CHAIR - From Dr Veitch's last comment, I think he was saying was that the surveillance system now is more robust, because of the scale of that. … We still have a degree of vaccine hesitancy, particularly with the parents of younger children, as we talked about earlier. Is this data that could be used to encourage those who remain concerned or hesitant?*
>
> *Dr VEITCH - There is always more reporting of side effects soon after you establish an adverse events program or when a new vaccine comes out, and then enthusiasm for reporting side effects - particularly the mild ones - tends to dwindle. There can be additional mechanisms such as you described, Ms Forrest, where people have been*

[135] See Tasmanian Government – Follow-up Inquiry, p.41

prompted to provide response, a more active elicitation of adverse events. Our Communicable Disease Unit, which is responsible for community vaccination, as I mentioned, has always had a vaccination adverse events reporting mechanism; but this offers morphing into a more comprehensive one which could provide that advice out to the public.

Again, a little bit like the research, with the information about adverse events it is probably best to look at the national picture to get a more comprehensive overview of what the risks and the occasional adverse events of vaccines are like. That is probably where we would turn to for communication for the public, because it is a bigger data set.

CHAIR - Minister, particularly with the new vaccine, people will likely report every possible impact, including a sore arm or feeling a bit tired. You can feel tired. As we become more accustomed to those less serious side effects, are we likely just to see more reported serious side effects or adverse events as a result of vaccines that may skew the picture?

Dr VEITCH - A short answer would be 'yes.' We do want to know about the more serious side effects. When more serious side-effects are reported, there is a mechanism for considering them locally or reporting them nationally. If necessary, an expert panel can be convened. It involves both national and local experts to look at perhaps a new, serious side-effect and decide if that is related to the vaccine; is it a coincidence; what is the causal mechanism?

So, there is a process in place to tease those sorts of things out. That's really important, so that if you have a very rare event, you do not get into a question about is it truly related to the vaccine? We really need to be able to thoroughly interrogate the data on those things so we don't give false impressions of risk; or if there is risk, to work out what the scale is and how we manage it.

CHAIR - ... have you seen a reduction in that anxiety about vaccines? We go back to the point that we have better than other states, but still quite low overall rates of vaccination rates for young children aged five to 12 years old.

Mr ROCKLIFF - I can only go on what I can pick up in the community. Anecdotally, there is less vaccine hesitancy than my impression earlier on. People are becoming more confident in the information, and know where to access correct information as well. However, if you look at social media - and I don't tend to - there is a lot of information on social media that is complete and utter rubbish, as you know.
...
Dr VEITCH - Being honest with people: you might get a sore arm after you've had the vaccine. Then, the people who don't are happy about it - they probably don't talk about it. It's really important to be frank that this could happen, and then, when it does happen, people don't talk about it so much. I think that frankness about even mild side-effects is beneficial in terms of setting expectations and not having people kick up a social media storm over an unexpected - for them - but perhaps predictable, minor side effect.[136]

[136] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.43-44

Local clinical guidance and support[137]

The Committee was informed public health advice had informed the development of local clinical guidance to support vaccination activities in Tasmania. This had included DoH overseeing community pharmacy provision of COVID-19 vaccines, through authorisation of its program approvals as the roll-out progressed. This included developing clinical resources to support the provision of COVID-19 vaccine in community pharmacies.

DoH also oversaw the authorisation of the authorised immuniser workforce, as well as a new initiative of authorising registered nurses, enrolled nurses and paramedics to vaccinate under supervision under a legislative instrument (relevant Poisons Regulations). This enabled a surge workforce to meet the demand of the vaccine program.

Vaccination of children and the provision of booster doses in Tasmania[138]

The Committee was informed on 5 December 2021, the TGA provisionally approved Pfizer for children aged 5 to 11 years. The dose, one-third of the size approved for people aged 12 years and over, recommended a time period of eight weeks between first and second doses. Given the variation in dose requirements, exclusive children's clinics were established across Tasmania, operating from 10 January 2022.

Similarly, Tasmania's approach to rolling out third vaccination doses and booster doses had followed ATAGI's recommendations, with supporting advice from AHPPC to National Cabinet. On 24 December 2021, (following the publication of ATAGI's advice) eligibility of boosters were expanded to adults aged 18 years and older and the minimum period was shortened to receive a booster dose. DoH expanded State Community Clinic offerings and provided communications on availability of boosters at participating GPs and pharmacy clinics.

At the public hearings, the Committee hear from Ms Monique Mackrill (Branch Director, Pharmacy Guild of Australia (PGA) – Tasmania Branch) and Mr Caleb Stuetz (Branch Member, PGA) with respect to their member community pharmacies' experience of supporting the State's COVID-19 pandemic response:

> *Ms MACKRILL - ... I think that for pharmacies during COVID-19, it has to be recognised that pharmacies were really one of the only open and accessible health care practitioners in this state. Where many other practitioners closed their doors and operated telehealth models and so on, pharmacists remained opened for the important and continued supply of PBS medications.*
>
> *Pharmacists are basically delegates of the Commonwealth to undertake that medication dispensing. We obviously saw that if pharmacies closed or were closed, that many people would end up in the hospital system at a time when we obviously didn't want people going into the hospital system. The preparation was firstly, preparing the public was definitely around vaccinations. As soon as the Commonwealth had announced that pharmacies and pharmacists could administer the COVID-19 vaccines, remembering that*

[137] See Tasmanian Government – Follow-up Inquiry, p.41
[138] See Tasmanian Government – Follow-up Inquiry, P.41

these vaccines were novel to all practitioners delivering vaccines, other states pretty much came on straight away as those vaccines were made available. Queensland probably led.

But in Tasmania we were consistently the laggards in being able to provision the vaccines for our communities, particularly when we saw the state running larger-scale state-run clinics where community pharmacies were aptly and ably, with the same level as training as general practitioners, to provision those vaccines in the state. Caleb might be able to speak, in terms of his personal experience of how frustrating that may have been.

Mr STUETZ - In our little store … there were a couple of us vaccinators. We did some 2,500 vaccinations over the last couple of years. Probably the biggest thing for us was the misinformation. There were only a few of us there working. The information that was coming through on a national level was not able to be implemented on a state level because the ATAGI guidelines hadn't been adopted. If we could have had that adopted straight away we would have rejoiced along with New South Wales and Queensland. In the end we adopted them.

We found that really frustrating. It wasn't just that. It was the fact that the media were involved. Social media and the news broadcasters were saying that you can go in and get your fourth vaccine and we are all standing there taking the phone calls and the emails and generally already being overrun and frustrated and quite tired at that stage. We were waiting for our own guidelines to be implemented here. That would have streamlined the whole process considering we adopted them anyway.

CHAIR - Do you know what the barrier was to that? Why it wasn't adopted as quickly as other states?

Mr STUETZ - Different states have different policies ... For us, because we were opening up a little bit later than the other states, I think that had something to do with the last fourth dose booster, for instance. We knew that we were going to open up. We knew that Omicron was a lot more virulent and a lot more contagious so we should have been vaccinating like crazy at that point anyway before we opened up but we couldn't.

There were constraints on all the pharmacies with booking numbers because under the federal, and for health and safety reasons, we had to adhere to that guideline. It wasn't like we could just take a vaccine clinic out to a Bunnings car park like they did in Victoria so we could run mass vaccination clinics. That was a whole other measure, but we couldn't do that. In Tasmania it would have been great to have adopted the same rules that ATAGI had so we could move forward with that. It became really murky with the information that we were getting from social media, or from the news, and what the customers and patients were getting.

Ms MACKRILL - What happens in the state around the vaccination procedure and guidelines was that ATAGI would say, 'Okay, the TGA has approved it and now ATAGI guidelines enable that vaccine to be delivered'. Every state and territory has its own rules under the Poisons Act. In Tasmania, as part of the Poisons Act and then as part of the

guidelines we had to wait until our Department [of Health] decided that pharmacists in Tasmania could provide those vaccines. We had to wait for a letter to go to every pharmacist. Then every site that was giving vaccines had to be ticked off and then every pharmacist that was going to give those vaccines had to either apply and be approved, or be ticked off that, 'Yes, you're able to do it'. It wasn't until the last tranche of vaccinations that we moved in line with ATAGI guidelines, when it was announced that ATAGI had agreed that these vaccines could now be administered by practitioners - whether you be pharmacist or doctor or whoever - that you could freely vaccinate.

CHAIR - That was only between the third and fourth dose. From the first dose, which was two doses, you had to apply just the first time, and then for the second dose?

Ms MACKRILL - Yes. It was more about the vaccines that were coming and the agent. So, pharmacists couldn't have access to Pfizer; we could do over-sixties. Then the next vaccine came along, and it was, 'Now we'll approve you to do those vaccines'. When they announced that children from 5 to 11 years could be done, there was a real opportunity for pharmacists to be able to do that whilst it was in school holidays. However, instead of the Government giving us the approval, they waited until school went back - when we could have been vaccinating children that parents wanted to be vaccinated while they were still on school holidays, while their parents were probably getting their boosters. I go in with little Johnny, I'm getting my vaccine so little Johnny's not scared out of his mind to get his vaccine at the same time. But, there had to be a separate trip for people to get kids vaccinated, whether they initially did them in state clinics or GPs, or finally with pharmacists.

CHAIR - To clarify, with vaccination of children, was there an additional training component?

Ms MACKRILL - Federally, the Commonwealth provided training at every step about the different vaccine. Pharmacists had to do that Commonwealth module of training with all COVID-19 vaccines. They'd say, 'Make sure you've done X training', and so on. Then we had the 5 to 11 years old. With our core level training, most pharmacists that do their vaccination training now will do that. Some pharmacists had to do the specific childhood vaccine modules; but they also had to apply again with the Department and provide the evidence that they'd done the training.

CHAIR - With the State department?

Ms MACKRILL - With the State department; and the site also had to apply. We didn't have a lot of uptake on sites; we had about 10 pharmacies apply. Then, because the pharmacy hadn't applied, the workforce hadn't applied. The pharmacy said, 'I just don't want to do this because it's all too difficult', so it's no good the pharmacist applying because they couldn't practice.

CHAIR - Weren't a lot of pharmacies using nurse immunisers as well though, not just the pharmacist?

Ms MACKRILL - No.

Mr STUETZ - No. A lot of nurse immunisers and pharmacists were sucked up into the state-run clinic, so you had a drastic health workforce shortage. My local GP practice was using their own nurses and then set up to run COVID-19 vaccination clinics, and their staff left to go work at the state health clinic because the pay is so good. Which is great on a mass vaccination level, but it shows there was a gap between Federal funding and what was happening on the ground. Where I was running my vaccination clinic, it was only possible because I was the one that is there in the shop, and it's my shop, so I can run it at a cost-neutral position, and it becomes a community service. A lot of pharmacies were like that.

Ms MACKRILL - Residential aged care facilities too - and we probably should have put that into this submission - were taken care of by the Commonwealth. To this day, there's gaps about who did what, which companies were doing what. They used providers; they were using Aspen Medical, and Aspen Medical wasn't keeping records. Community pharmacies could have expedited that process, because we have such close relationships with residential aged care facilities due to the medication supply for residents in residential aged care facilities. It was crazy that the Commonwealth Government did that initial rollout, instead of reaching back into the states and finding out who could do it on the ground.

Mr STUETZ - Again, that comes back to the site having to be registered. For example, if I wanted to go up to Bothwell and run a vaccine clinic, I would have to get the site registered, rather than using my professional expertise to go up there and run a clinic in my own right, or to go to a community centre and run a clinic in my own right. I would have to go through extra steps, and that put a big barrier in it for us to say,' Okay, we will get a few of us together and go to the regional areas and run a vaccine clinic' and then bring all the information back to the pharmacy and process it on to the relevant registers. It was a real hurdle for us.

CHAIR - There were some nurse immunisers working up in the North West in pharmacies.

Mr STUETZ - There were heaps of nurse immunisers.

CHAIR - In the pharmacies though.

Mr STUETZ - Yes, in the pharmacies. You can employ them. The problem, as I see it, was this double layer of bureaucracy. We had to go from federally filling a bunch of paperwork, then do the same thing for the states; and that was on top of everything else that was happening.

Ms MACKRILL - If the nurse immunisers are working in a pharmacy site they can't practice at their full scope. Even though they might be nurse immunisers and can provide a childhood vaccine, they can't do that in a pharmacy setting, because pharmacies aren't allowed to administer childhood vaccines.

CHAIR - They can only do the adult vaccines that the pharmacy was approved for.

Ms MACKRILL - Yes.[139]

At the public hearings, the Committee heard from Dr Shane Jackson (National Vice President, Pharmaceutical Society of Australia (PSA)) and Dr Ella Van Tienen (State Manager, PSA) about the apparent lateness in the State Government utilising pharmacies to administer COVID-19 vaccinations:

Dr JACKSON - … Overall, we would have to characterise the Government's response to COVID-19 as commendable in terms of the challenges that we all had - whether it be practitioners or people working in the Department of Health or the Government. It was a very challenging time, and the Government endeavoured to do the best that they could.… I think that one of the biggest challenges we had was the COVID-19 vaccine rollout. I suppose to be frank here, the Government was quite late to the party in terms of bringing on pharmacists -

…

The State Governments were responsible for authorisation for pharmacists to administer COVID-19 vaccines. We were the last state to come on board in terms of pharmacists participating. That put a huge strain on general practice and we know that general practice was overloaded at that time. They were doing a lot of telehealth appointments and I know general practitioners are very good but you can't administer a vaccine by telehealth and I think that was a significant challenge.

Patients were coming into pharmacies all the time. Patients were coming into pharmacies sometimes every second or third day because that's what they were allowed to do. They might have had six or seven medications that they were getting on a monthly basis. They would get one medication every third or fourth day because of what they were able to do in accessing essential services. They were allowed out of their house and they would come to the pharmacy regularly. So, with pharmacies being open and one of those only essential services that our patients were perceiving they were allowed to access we had a lot of contact with patients. That was an opportunity for us to be able to do more.

In terms of the COVID-19 vaccine rollout, we were late. Other states were involving pharmacies in May 2021 and we were not involved until September 2021. The other complicating measure in the COVID-19 vaccine rollout was not just our lateness to being brought on board, it was also that we needed approval. For each new vaccine that came on board the State Government needed to approve pharmacies to do that instead of saying we will refer to the ATAGI guidelines as our base. So, as soon as ATAGI said there's a change, pharmacists would have been able to incorporate that.

CHAIR - So, when Moderna became available, for example, you had to reapply?

Dr VAN TIENEN - When our guidelines were updated, so our guidelines are very specific as to -

CHAIR - So, they name the particular brand of vaccine?

[139] See Transcript of Evidence Public Hearings (2 November 2022) - (Various), pp.1-4 (PGA)

Dr VAN TIENEN - They finally now have changed, but through the whole process every time there was an update we would have to wait for the Department to update the guidelines which would take a week, or two weeks before we could then do in Tasmania what was nationally recommended.

CHAIR - What is the situation now with regard to that?

Dr JACKSON - The situation now is that they refer to the ATAGI guidelines and we were giving that advice continually over that time, because it was causing immense frustration from health practitioners. Pharmacists were saying, 'okay, well we know what the ATAGI guidelines are, why can't we just move on this now?' The second thing that creates angst is that in the mainstream media patients were expecting, 'I can get this vaccine now'. Therefore, we have to say, 'no, we are not authorised to do that by the State Government yet'.

Mr WILLIE - What do you think led to the delays? You're saying that we were the last state to allow vaccinations in community pharmacies. Why?

Dr JACKSON - I think there was a sense of perhaps - there have been challenges, I suppose, in the pharmacy profession having a broader role in health care delivery. In terms of vaccinations, we are the state that has the most restrictive Departmental approval for vaccinations. The vaccines that we are able to administer in a pharmacy are influenza for 10 and above, COVID-19 vaccines, whooping cough, and measles, mumps and rubella. In every other state it's broader. So, there is, I suppose, a risk-adversity that's ill-founded in terms of what pharmacists can do.

The vaccines that we have administered in terms of COVID-19 are the most complex vaccines, in draw-up, namely those vials. You can get all the others, proprietary preparations, you put a needle on and you can administer the vaccine. There's a sense of perhaps, almost over-engineering, in terms of control of the vaccine process and involving pharmacies.

We've continually said pharmacists are able to do this. Pharmacists are trained to do this. There is now a huge expectation from the public that they can access more from their pharmacy, and all we are saying with COVID-19, moving forward, is that we need a way of utilising pharmacists better. We've seen how they've performed with COVID-19 vaccines.

Pharmacy is now doing more than 50 per cent of the vaccines for COVID-19. That is testament to its performance, and also the need to ask, why do we need to micromanage or over-engineer a process? We've seen the Department move, which has been good, to now referring to the Australian Technical Advisory Group (ATAGI) guidelines, but we need to move further in terms of that response and utilising pharmacists better.

Mr WILLIE - The risk aversion is more in the bureaucracy, rather than the Health Minister and the Government?

Dr JACKSON - That is absolutely my belief.[140]

With regard to COVID-19 vaccination in pharmacies for children, Dr Van Tienen provided the following advice:

Dr VAN TIENEN - That would depend on whether or not there is a pharmacy in their area. A few pharmacies around the State are doing childhood vaccines, but it's far more restrictive here than interstate.

As soon as the COVID-19 vaccine for children was available in many other states, pharmacists were able to administer that as part of their practice. Most pharmacists who have had training since 2019 have had a childhood module included in their training.

Even though we haven't been authorised to give vaccines to children, it has been part of our training. Interstate, they just follow the ATAGI guidelines, so as soon as it was available, pharmacies came on board, whereas in Tasmania we didn't come on board until well after school had resumed for the year.

This meant there were a lot of kids who could have been vaccinated before the school year started who couldn't get appointments in the State clinics because they were, understandably, quite full - so lots of kids went back to school not having had that vaccine. It has also made it more of a barrier to pharmacies coming on board, because they weren't included in that initial chunk.

Then there's additional paperwork that we as practitioners have to submit to gain approval to do the childhood vaccines, so it hasn't been as appealing to a broad range of pharmacists as it could have been.[141]

The Committee sought further information related to the supply of vaccines to pharmacies. Dr Van Tienen and Dr Jackson provided the following:

Dr VAN TIENEN - No, it's the logistics. With other vaccines, the wholesalers hold them in the State, so most pharmacies would order today and receive their stock tomorrow - whereas these are centrally coordinated on the mainland. We order today, we get our vaccines in two weeks, and then we can't place another order for two weeks, either - which created an issue with the change in eligibility that happened on Monday. That announcement came less than two weeks before Monday, so pharmacies couldn't order at that point and have their stock in by Monday; it just wasn't possible.

Dr JACKSON - Up until last week, with the Commonwealth ordering process, the maximum amount of vaccines you could get on a fortnightly basis was 200. Just to give you some insight, on Monday we administered 81 vaccines in Lindisfarne; the day before yesterday was 69, and yesterday was 40 - so in three days they're all gone.

...

CHAIR - And you have to wait two weeks.

[140] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), pp.1-3

[141] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), pp.4-5

Dr JACKSON - Yes.

CHAIR - Why is this? It's a Commonwealth thing, obviously.

Dr JACKSON - To be frank, the Commonwealth logistics for vaccine rollout is fraught with challenges. We have advocated for using the pharmaceutical wholesalers because they have cold chain processes in place, but for some reasons beyond us the Commonwealth has a process around using other suppliers. There is certainty now and we are able to order 600 a fortnight but up until a week or so ago it was 200 a fortnight and I just gave you the numbers there.
...
Dr JACKSON - It has been a Commonwealth decision in terms of logistics. Vaccine supply was an issue for the last 18 months, especially around booster times. Fortunately - and I said this is commendable - high volume vaccine sites were well supported by the Tasmanian Health Service in terms of the pharmacy supply of vaccines in each of the regions that needed vaccines. They did very well, they provided a stopgap measure in terms of Commonwealth under-performance and they did fill an important gap. In Lindisfarne, we were providing vaccines a month in December 2021, January 2022 and February 2023. You can see the shortfall, and so the Tasmanian Health Service was very good in providing us with additional vaccines.

CHAIR - They were doing that around the State to pharmacies.

Dr JACKSON - Yes, they did that very well and they were commendable in that aspect but the Commonwealth logistics are a real challenge.[142]

With regard to the supply of vaccines, Mr Stuetz and Ms Mackrill provided the following advice:

Dr BROAD - What about supply of vaccines? How did that go?

Mr STUETZ - Do you want the right answer now?

Dr BROAD - We need to learn lessons.

Mr STUETZ - The way that the Commonwealth do it, under the community service obligation, is through mainline wholesalers. You have three of them - Symbion, API and Sigma.

Ms MACKRILL - And CH2.

Mr STUETZ - And CH2; but CH2 aren't a part of that. The Commonwealth decided to go outside of our traditional wholesalers, which are those three wholesalers, and have a direct-to-pharmacy rollout of the vaccines.

Ms MACKRILL - Through DHL.

[142] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), pp. 6-7

Mr STUETZ - Through DHL. You place an order and it is about two weeks' later that you receive your stock. The problem was that we didn't have enough lead time when any announcement was going to be made on a federal level about who had eligibility for vaccination, in order to stock up to meet demand. You would be standing there at day 14 thinking, 'Okay, is my order going to arrive?'. At this stage, people are quite terrified and they want their booster and they want their second dose, and you can't give them that. You are trying to say to them, 'It will be in in two weeks. We will try to get you into the State health clinic', that may or may not have stock as well. That isn't a State-based issue; it was a Federal issue, but it could have been handled better.

Ms MACKRILL - If it was done through the normal channels and pharmacies were asked to provide, based on how big you were, you would get an allocated stock. The way that things usually work is that you order 20 of something from your wholesaler and you go through that, and then you order again and you get that again. That's how pharmacies manage it. You have 200 vaccines coming into your pharmacy. It was all a bit scarce and people were worried about wastage and so on. They have to be put in your fridge and accounted for. I have a WhatsApp chat group and they are like, 'Has anyone six doses of Moderna? I have run out and I have these patients booked in'. They were doing a lot of moving stock around themselves; and to be paid half of what the GPs were paid and doing more work was pretty galling.

The relationship at the ground with the Government was positive, on a lot of things. We did have some good people in Brad Wheeler. I have to do a shout out to Brad and people like Dale Webster. There were occasions where they helped raise the issues of Tasmania to be able to get more stock into the state from the Commonwealth. So, we did go through those channels and we did get assistance to say, 'We need a bit more help'. I think that the Commonwealth were basically saying, 'This is your stock and that is it'. There was a lot of stuff happening at ground level - pharmacies organising stock amongst themselves and getting the cold chain sorted. I brought stock back from the North West coast for pharmacies that had people booked in and having all the cold chain set up appropriately to be able to do that. So, there was a lot of overwork.

Mr STUETZ - Lot of staff running work.

Ms MACKRILL - Yes. The hospital had Pfizer, of course, and there were a couple of occasions when, through the Department, we were able to get excess Pfizer doses to be able to help with what we needed in pharmacy land to able to do that. There were obviously positives in a lot of the stuff that we did.

CHAIR - What I am hearing you say, Monique, is there was a degree of cooperation with the State in order to make sure that vaccines could be provided as and when they were needed. It was the duplication of the processes that was the issue.

Ms MACKRILL - Yes. The duplication and having to be given the tick-off every time a vaccine was announced that pharmacies could provision it and having to wait - as Caleb said, the news is national.

CHAIR - So people turn up wanting an appointment.

Ms MACKRILL - 'I want to get my whatever'. It is like, 'Sorry, you are going to have to wait. We have not been given our approval yet'.[143]

The Committee sought information regarding the stockpiling of medicines that anecdotally occurred during the pandemic, the limitations placed on medicine dispensing and options for the supply of medicines to people who were in isolation or quarantine during the period prior to and after the re-opening if the border. Ms Mackrill and Mr Stuetz provided the following:

Mr TUCKER - My question probably follows on.
...
MR TUCKER ... we already had the issue, of people stocking up on medications ...

Ms MACKRILL - That information was supplied from the Commonwealth, through Medicare, around medication stockpiling. Pharmacies were given the express information that you need to have limits on these particular items, and also that that information was more broadly circulated in the community about what limits would be imposed. Pharmacies were very quick to take the information that was made available and make sure that their patients understood that there would be limits placed on specific medications. Also, for a while there we had doctors doing section 24, six-month supply scripts.

Mr TUCKER - Some pharmacies came under enormous pressure.
...
Mr TUCKER - ... It seemed to create a lot of pressure. I remember with St Helens I got a number of phone calls about it - the issue that it created it around that.

Mr STUETZ - There was a supply constraint, as well. So, for instance, salbutamol inhalers, we could not get the stock. We were trying to safeguard patients who needed it ongoing, but we could not physically get the stock anyway. You were waiting, sometimes, it was six weeks, for stock. What you had on hand was it.

CHAIR - You were limited in how many you could dispense.

Mr STUETZ - Yes, you could give one, sometimes only on prescription, or only if you had a past history. We were looking at MyHealth records and trying to ascertain that for people who had travelled, because they do not have a GP in the state. That brings us back to the crisis where we have a GP shortage and health practitioner shortage overall anyway. We were trying to limit the amount of the stock and eke it out, essentially, so that the patients had access to it.

Mrs ALEXANDER - ...When we had people in isolation and the system was introduced that delivery of medication could happen to those people, how was that process undertaken and how complicated or how well explained was it? Did it work or not?
...
Mr STUETZ - There really is a two-tier pharmacy system around that. For the small community pharmacies where we already had a delivery-to-patient option available, we

[143] See Transcript of Evidence Public Hearings (2 November 2022) - (Various), pp. 4-5 (PGA)

made that one of our primary options, so that the patient could phone us and have it delivered, which we were doing anyway because we didn't want to see people, especially through that initial phase. As much as we like our patients, we wanted them to stay away from us in case they gave us COVID-19. All the staff were terrified as well. We had all of our staff in split teams.

So, the smaller pharmacies like us, we went out and got a delivery car and put it into place, without really knowing if the funding model was going to occur. But, at a Commonwealth level, we were then given funding per delivery, which you then had to write up and submit to the Pharmacy Program Administrator. So, it worked quite well.

The larger pharmacies used Kings Transport. They used a courier service or the pharmacists were doing after hours. We went from two deliveries a day to doing over 60 a day. It was quite the dominoes effect, where you would phone up and get your medicines delivered. We just had somebody on the road the whole time.

Mrs ALEXANDER - So, basically, in that respect, there wasn't much intervention in this process between the State Government and the pharmacies.

Mr STUETZ - Not at all. We weren't relying on the State Government to provide that service at all. We did that in our store because it was a community service and that's what the community needed. We have been there for 100 years and that's what we'll do.[144]

The Committee was informed by Ms Mackrill and Mr Stuetz of challenges faced by pharmacies in the delivery of influenza vaccinations after the border re-opening, particularly when the Government concurrently offered influenza vaccination through the COVID-19 vaccination hubs:

Mrs ALEXANDER - ... Reading through your submission and from what you have just said before, it appeared to me that at least in two instances, the State almost entered into competition with the pharmacies. A couple of times I noticed were around the RATs and the vaccination. That obviously had an impact on pharmacies as well because you invested money and how the communication occurred. That sort of dual process and quasi-competition, was this indicative of a lack of communication, do you think? How did that occur? ...

Ms MACKRILL - I think if we talk about flu vaccine as part of the COVID-19 response in making sure that we didn't end up with a lot of people in hospital with potential flu/influenza while the pandemic was still going on, all governments were wary of influenza and what could happen. They all were looking at providing flu vaccinations through their state-run clinics to people around the State.

Pharmacies were already ensuring that they had a lot of flu stock for the year because we had been told to make sure we had a lot of flu stock, because we are going to be pushing the messaging. We hadn't had flu, so we knew it was going to be potentially serious. But,

[144] See Transcript of Evidence Public Hearings (2 November 2022) - (Various), pp. 5-7 (PGA)

pharmacies have to buy their flu stock. They buy it six months ahead of time in terms of provisioning.

When the Government decided that, 'We'll do flu shots for vulnerable people', what does that mean? We've got our flu stock. Instead of being utilised, and saying, 'Pharmacy, we want you to provide flu shots to this cohort of people and we will pay you to do that', they were setting up in competition but using COVID clinics and then providing influenza vaccines as well.

What was frustrating is that pharmacies were already there. The infrastructure exists, they are proficient at it. We have done over 70,000 flu shots this year in community pharmacy and the Government is putting out messaging to go and have a free flu vaccine at these particular clinics around the state, which are not everywhere, not like pharmacies. Over 105 pharmacies now give vaccinations in the State so it is quite a reasonable spread. Walking up in the city at lunchtime, we saw that the clinic that is supposed to provide the flu shots is closed for lunch.

We could have used pharmacies a lot earlier to provision those flu vaccines. When the Government finally did decide, 'Okay, we will let you do flu shots for free, through pharmacies for everybody, so everybody got a free flu shot-

CHAIR - Except for those who had already paid for it.

Ms MACKRILL - We had already paid for it.

CHAIR - No, the patients had already paid for it.

Ms MACKRILL - Yes, patients had already paid for it. Then they came out in early June - I think it was 1 June or 3 June - when we could finally could do that. We had a very good system in place through our corporate flu vaccination program, which we had run for a few years, where corporates would sign up. They would say to their staff, you can have a flu vaccination, book online. There is a payment portal where the patient does not pay, we process that vaccine, the pharmacy gets paid the next day and then we would invoice that corporate at the end of every month for any vaccines that has been done.

The Government just said, 'No, we don't want to do anything like that. Just send us in how many vaccines you have done in that time. I am like, 'Do you want a report or…?' It was like, no, if you have done 200, just put 200 times the amount'.

Mrs ALEXANDER - Basically, it was a missed opportunity also to collect very vital information because it was not required to be reported?

Ms MACKRILL - The system that we had, which we could have rolled out to all pharmacies, we could have done that, would have given postcode data, male or female - a de-identified, really good system because we provide it for corporates. That was really good data collection, which would have shown some usefulness in the future. But one of the issues we had was that pharmacies were sending off an invoice to a central email address. Some pharmacies waited months to get paid and some pharmacies got paid

twice. Because every invoice is slightly different - there was no, 'This is how we want the format'. I was still chasing invoices for people as of last week to say, 'This person hasn't been paid yet, where is this at?'

That was a bit frustrating. They wanted it easy and I get that they just wanted something that they could roll out but I think that they wanted that because we were behind in making the decision to use pharmacies to do this. We could have done it a lot more strategically and it would have been opportune. We were able to provide flu and COVID-19 vaccines at the same time, so the way that was done was a bit frustrating.

Mrs ALEXANDER - ...If you would have had the opportunity to explain it to those who made the decision in the Health Department it should have made sense to them. Did you have the opportunity to sit down on a regular basis and have input into various processes?

Ms MACKRILL - We did discuss - Often there was, initially, it was a weekly tele-conference that we had with, usually, the Health Minister, the Secretary and all the different stakeholders - the RACGP, AMA, the hospitals, the Guild, the PSA, people from residential aged care, disability care, there was a whole gamut of discussions. We would, from time to time, have discussions specific to pharmacy about things that pharmacies could do or specific questions we had. We did have a reasonable amount of dialogue. We did go to Government around the opportunity for the Government to do a free flu vaccination program through community pharmacy. It was raised. We have since raised it again for the coming season because again we want to ensure we have stock. At the moment they don't feel there will be as big an issue with flu.

In all fairness, it was a bit of a crazy time. I suppose that some decisions were made on the hop. That is the nature of what was going on and I understand that. I was able to have some very good discussions when needed, understanding that the people you were able to get the decisions from, at the top level, were dealing with multiple issues. You had to go to the top to get what you needed, people underneath didn't have any decision-making capability or delegation.

Mrs ALEXANDER - Do you feel that this lack of understanding of how important the pharmacies are in the fabric of the community and how you have this infrastructure and you can deliver directly some vital services… do you feel that it compares in terms of recognising the advantage of having the pharmacy role in the process?

Ms MACKRILL - COVID-19 has elevated the opportunity of community pharmacy and pharmacists to be able to provision more health care services more broadly. Every state looks at what they need in their own state. We know there is a health worker shortage everywhere and hospitals have a lot of demands. If you were to look at a state as being the standout lead on any of this, it would be Queensland. Caleb originally worked in Queensland. Historically Tasmania has always been super conservative in the use of pharmacy. If you go back to when pharmacy was first able to implement flu vaccines, from a community pharmacy level we were the last state to come on line with that. So, there is a level of conservatism and also, they lean heavily on the state system.

The State Service is the biggest employer in the State and the Health part of that service is the biggest part of that. We have this big system employing a lot of people. For some reason, even though we say we don't want people to go into hospital for whatever it needs to be, it still seems to be that when it comes to bureaucracy they like that centralised model rather than using the infrastructure that's available. Whether it be pharmacists working at their scope of practice or whatever it may be, it does feel like we are behind the eight ball. We are often told that Tasmania is different and not everything applies like it does on the mainland because of x, y and z.[145]

...

Ms WEBB - ... You did mention those earlier weekly then fortnightly regular fairly broad meetings.

Ms MACKRILL - Yes.

Ms WEBB - In an ongoing way, was there formal channels of regular communication to your sector? I do note in here that you talk about the fact that 'pharmacy owners struggled to keep up with the flow of information'. Were there things put in place to deliver information in a reliable way, in a way that gave confidence to people at the coal face?

...

Ms WEBB - Was that in place or not in place?

Ms MACKRILL - Not really. Primary Health would get a lot of information from the Department, and then they would feed it through. Primary Health send out a newsletter. Some pharmacies subscribe to that, not all of them, because you don't have to. I guess it was left to the Guild as a peak body to make sure we got stuff out to our members and we would also use a WhatsApp chat group to kind of get information out. I'm sure the PSA got information out. It was a bit ad hoc.

Ms WEBB - People cobbled together something.

Ms MACKRILL - Yes.

Ms WEBB - Looking ahead at opportunities for future, what could work well in terms of communication for your sector if we were to face something similar?

Ms MACKRILL - It is really hard, I think, because people get information from so many varied sources. The information that you would see about an announcement on a Friday afternoon traditionally would come through Facebook on the ABC feed. I would watch for that, and go, 'Right, this thing's happened'. Then we might have got a phone call from the Minister's advisor to give us a heads up, but it would be pretty much an hour before it was going to happen. So, then you would be trying to get information out to your members on a Friday afternoon. The best way of getting info out, is to think about the audience and what their needs are and how they need to be prepared.

[145] See Transcript of Evidence Public Hearings (2 November 2022) - (Various), pp. 7-9 (PGA)

Ms WEBB - One of the things I wonder about is whether key sectors have a key liaison in a senior decision-making role, in that cohort in the department. In the absence of that, whether then the cobbled-together nature of the way communication happens is what we are left with.

...

Ms WEBB - For example, when I am thinking about it, did you have a senior go-to person who could be the one who made sure information went to your sector and was disseminated accurately?

Ms MACKRILL - I do not think formally. I think we worked out who we would go to as we needed to. As I said, Dale Webster was really good, and Brad Wheeler was great. But even when there were discussions around the use of RATs or how we ensured that our pharmacists were not under the same isolation requirements and how our sector was viewed -are we essential workers or not? - it was work health and safety, and then it was PHEOC [Public Health Emergency Operation Centre] - *and all these kinds of internal acronyms of who you need to go.*

It was not like there was sectorial information that was pushed out to say, if you are in health you will get this. It was a bit difficult of navigate. If you do not work in public service and you have to navigate it, it can be a bit tricky, because you have to try to work who you go to?[146]

Mr Stuetz and Ms Mackrill informed the Committee of barriers created by a lack of consistency related to regulatory frameworks under which pharmacists work throughout Australia:

Mr STUETZ - If the states could somehow come together and have the acts and regulation common between the states, we would have far less of a workforce issue than we have now. We would have the ease of pharmacists being able to move between states. It is not just Tasmania. It is all states.

CHAIR - Is this the Poisons Act we are talking about or other legislation as well?

Mr STUETZ - Yes, the Poisons Act. Every pharmacist across the country would throw a party if that was to happen. It would be a real celebration if we could somehow bring that together. It impedes people moving between states. What we have just seen with the pandemic, the pharmacists we have here was, when you couldn't travel between states, there was a workforce shortage.

Dr BROAD - Can you flesh that out a bit? What is the barrier? Is it regulations?

Mr STUETZ - Yes, state-based regulations.

Dr BROAD - You have to reapply?

[146] See Transcript of Evidence Public Hearings (2 November 2022) - (Various), pp. 11-12 (PGA)

Mr STUETZ - No, you don't. There is a national pharmacy board. We're all under the board, but when you're practising, the legislation in each state that applies to you is slightly different. A lot of pharmacists won't move outside of their state of practice because of that.

...

Ms MACKRILL - If you wanted to use one example of state legislation in the Poisons Act, during COVID-19, people were using telehealth. They might have needed a narcotic script, so they ring up a telehealth doctor who's in Victoria who writes a prescription for something that they've been on that's an S8 or an S4D, as a restricted medication. That particular medication then can't be dispensed in this state because it wasn't written by a Tasmanian doctor who is actually in the state.

We also saw people who were under psychiatric care who needed specific drugs for severe mental health conditions, which are Schedule 8, who couldn't get access to a psychiatrist in the state, but then had to go interstate, through telehealth, were written a script, and then couldn't get it dispensed. That is an irregularity.

Every state in Australia now has - there are still checks and balances; you still want pharmacists ensuring that there's a judicious use of medication, particularly those items. There's Safe Script and DORA[147]*. Every state has real-time prescription monitoring. Even for people who are travelling now, they come from another state, they're on a painkiller because they're older. They're in their caravans. They get here and they want get their script filled and they can't do it. They have to try to go see a local doctor, which isn't easy.*

Mr STUETZ - Impossible sometimes. Sometimes we're saying to them, 'I'm sorry, you'll have to go to the emergency department'. It places more of a burden on the state health system. It is upsetting.[148]

Vaccination related public communications [149]

The Committee was informed DoH had continued to outline the importance of vaccinations throughout Tasmania's vaccination rollout. Public messaging related to vaccination occurred in the context of continued messaging to undertake other public health and social measures recommended at the time: e.g., hand hygiene, social distancing, mask wearing and the isolation of positive cases.

The Committee heard from Dr Jackson some of the challenges faced by pharmacies across the State in communicating DoH information to their customers:

Dr JACKSON - ... It was a very challenging time, and the Government endeavoured to do the best that they could. In terms of communication, they endeavoured to do the things that they thought were right in terms of communicating to health practitioners and communicating to the public around measures.

...

[147] Drugs (and poisons information system) Online Remote Access

[148] See Transcript of Evidence Public Hearings (2 November 2022) - (Various), p. 10 (PGA)

[149] See Tasmanian Government – Follow-up Inquiry, p.42

There certainly were challenges in terms of issues like communication. Often pharmacists were required to translate health information that was put out by the Department of Health in terms of patient friendly language. That was difficult at times and was time consuming in terms of information overload and trying to make sure that people had the right information.

In terms of supports, Pharmacy did quite well in trying to change some of their practices regarding COVID-19-safe behaviours, guards in the pharmacies, masks et cetera and overall did a very good job. But there were challenges, and our evidence portrays that lack of hard information in terms of mask wearing in pharmacies so it created quite a lot of uncertainty. People could go across to a supermarket but were then expected to wear a mask in a pharmacy and patients - some people might sometimes have taken offence to that and it created some confusion at times.[150]

[150] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.2

Committee Findings

F40. The Tasmanian Vaccination Emergency Operations Centre was established and commenced operations in March 2021 to support the rollout of COVID-19 vaccines.

F41. The Tasmanian Vaccination Emergency Operations Centre liaised with other relevant Emergency Operations Centres to prioritise and support access to vaccination for vulnerable groups.

F42. The Tasmanian Vaccination Emergency Operations Centre worked closely with community groups and key stakeholders to support equitable access to vaccination in regional and rural Tasmania.

F43. Tasmania's communications and campaign approaches were informed by expert medical advice and decisions from the Therapeutic Goods Administration (TGA), the Australian Technical Advisory Group on Immunisation (ATAGI) and the Australian Health Protection Principal Committee (AHPPC). Communications evolved during the vaccination rollout to include specific guidance on eligibility and clinic locations.

F44. The Department of Health established State Community Clinic sites to deliver a high volume of vaccinations across the state to support equitable access and encourage vaccination uptake.

F45. The Therapeutic Goods Administration provisionally approved the Pfizer vaccination for children aged 5 to 11 years on 5 December 2021. Due to the variation in dose requirements, exclusive children's clinics were established across Tasmania, operating from 10 January 2022.

F46. The Department of Health established an Adverse Event Following Immunisation (AEFI) surveillance system to enable close oversight of adverse events, including vaccine administration errors.

F47. Tasmanian pharmacists could not deliver COVID-19 vaccinations as soon as those in New South Wales and Queensland as the Australian Technical Advisory Group on Immunisation (ATAGI) guidelines hadn't been adopted at that time in Tasmania.

F48. Pharmacists and access to a local pharmacy played an important role in the delivery of health care and vaccinations during the COVID-19 vaccination rollout when approved to do so.

F49. The State Government assisted pharmacies with the provision of vaccinations in times of inconsistent supply from the Australian Government channels.

Committee Recommendation

R10. In any future pandemic the State Government act promptly to adopt (ATAGI) guidelines when updated with regard to the provision of relevant vaccinations in pharmacies.

Financial Implications of Vaccination Rollout[151]

The Committee was informed Schedule C of the National Partnership Agreement (NPA) supported the delivery of free COVID-19 vaccinations to all eligible people living in Australia. It set out the respective responsibilities of the Commonwealth and the States and Territories. Under the Schedule, the Commonwealth Government provided an Upfront Payment and continued to provide a Vaccination Dose Delivery Payment.

The Upfront Payment comprised $100 million to support the establishment of state-run vaccination clinics. Each state and territory received a share based on population. Tasmania received $2 million.

Under the Vaccination Dose Delivery Payment, the Commonwealth provided a 50 per cent contribution to the agreed price per vaccination dose delivered for all persons living in Tasmania (under Modified Monash 2 -7), the agreed price per vaccination was $32.45.

In March 2022, Schedule C was updated to include a Vaccine Rollout Support Payment. This new payment was in addition to the Upfront Payment and the Vaccination Dose Delivery Payment. Under the new Vaccine Rollout Support Payment, the Commonwealth contributed 50 per cent of the genuine net additional costs incurred by states to set up additional COVID-19 clinics after 21 April 2021. Given the recent timeframe, the government submission was provided in relation to the amended schedule, at April 2022, Tasmania was yet to submit any claims under the Vaccine Rollout Support Payment.

Since the commencement of national vaccine arrangements in 2020, the Tasmanian Government had invested significantly to deliver the COVID-19 vaccination program in Tasmania. Over 2020-21, Tasmania's vaccination program costs were approximately $4.6 million, comprising $3.2 million in salaries and wages and $1.4 million in other costs such as equipment, consumables and premises costs. Based on the number of vaccine doses delivered in Tasmania in 2020–21, the Commonwealth Government contributed $1.8 million, leaving the remaining $2.8 million funded by the Tasmanian Government.

As the vaccination rollout progressed, Tasmania's investment in the program had grown significantly. Over 2021 and into 2022, Tasmania's vaccination program was expected to total approximately $27.8 million, with a significant portion dedicated to salaries and wages and operational costs. It was expected $10.9 million in Commonwealth Government funding would be received for 2021-22, with state funding to cover the remaining $16.9 million.

[151] See Transcript of Evidence Public Hearings (23 February 2023) - (Various), p.2

Impacts of Vaccination Mandates[152]

The Committee was informed when the government, under public health advice, considered the risk of transmission of COVID-19 and the risk posed by disruption to essential services, certain categories of workers in Tasmania were required to be vaccinated against COVID-19.

The Tasmanian requirements for vaccination had at all times, been based on the guidance of AHPPC to National Cabinet. This advice had been implemented on the basis of the risk of transmission of COVID-19 and consequences for workers, vulnerable clients and patients within certain settings (e.g. hotel quarantine and health services), the risk of disruption to essential services, and the risk to the broader community.

Vaccination requirements were made mandatory by the Director of Public Health through two Directions under section 16 of the Public Health Act 1997. The Vaccination Requirements for Certain Workers Direction applied to:

- workers engaged or employed at residential aged care facilities (effective 17 September 2021);
- workers employed or engaged by or on behalf of quarantine sites or providing quarantine transport services (effective 17 September 2021);
- health and medical workers, workers at a health and medical facility, and students undertaking a clinical placement at a health or medical facility (effective 31 October 2021);
- disability support workers (two doses effective 21 November 2021); and
- in-home and community aged care workers were included in the direction (two doses effective 30 November 2021).[153]

The Directions required relevant individuals to produce evidence of vaccination or produce evidence of a medical exemption.

From 8 January 2022, a second direction (Vaccination Requirements in Relation to Early Childhood Facilities) applied to workers in Tasmanian Early Childhood Education and Care (ECEC). In implementing this Direction, the DoH, via Public Health Services, consulted with the Tasmanian Department of Education (DoE) and engaged directly with over 100 sector stakeholders (via a webinar) to ensure the sector had an opportunity to ask questions on the vaccination requirement and other infection prevention control measures.

Requiring certain workers to be vaccinated had been an important step in both ensuring some of the most vulnerable Tasmanians were protected in the provision of ongoing support and preventing transmission in high-risk settings. These requirements had been in line with what was being implemented in other states and territories.

Vaccinating the Tasmanian health workforce had been a critical step in protecting staff and vulnerable Tasmanians and ensuring the continuity of critical health services.

[152] See Tasmanian Government – Follow-up Inquiry, p.43
[153] See Appendix 1

Vaccination requirements for healthcare workers[154]

The Committee was informed the Vaccination Requirements for Certain Workers Direction applied to, among others, all workers employed or engaged by public and private health care facilities (including non-clinical staff such as security personnel, cleaners, maintenance, catering and administration staff) and included all DoH employees.
The Direction applied to:

- medical and health facilities including hospitals (public and private, as well as day-procedure centres);
- premises owned or operated by DoH;
- commercial premises where health and medical services or treatments were provided on a regular basis;
- pharmacies;
- blood donation centres; and
- pathology collection centres.

Under the Direction, people who provided health and medical services and treatments, whether in these settings or outside of them, were also required to be vaccinated.
By 31 October 2021, the Direction required individuals to provide evidence of vaccination, or a medical exemption. Following this date, any prospective DoH employee was required to provide evidence of vaccination, or medical exemption, as a condition of their employment.

Impact of the Direction on the DoH workforce[155]

The Committee was informed as at the deadline of 31 October 2021, 99 per cent of the DoH workforce had complied with the Direction. Health professional staff comprised a small proportion of the staff who did not provide evidence of vaccination.

On 7 November 2021, permanent employees who were non-compliant with the Direction were issued a lawful and reasonable direction to comply by 5pm. Fixed term and casual employees who were non-compliant with the Direction were issued with a notice of termination (with a notice period of 14 calendar days). DoH worked with individual staff members to ensure they received their first vaccination in a timely manner. Letters were sent to staff who had booked vaccination appointments after the cut-off, outlining the requirement for these staff to book a vaccination appointment by the end of day 14 November 2021.

As at 15 November 2021, the number of non-compliant DoH staff had reduced further. As the spread of this small proportion of workers was fairly even across the state, with no large groups in particular speciality areas or hospital wards, the immediate impact of non-compliance with this Direction was minimal for DoH and was managed within existing workforce capacity processes.

On 26 November 2021, the Direction was updated to reflect the revised Direction whereby from 8 January 2022, those covered by the Direction must have received all doses of the vaccine. As a result, employees who had previously only reported they had an appointment

[154] See Tasmanian Government – Follow-up Inquiry, p.41-42
[155] See Tasmanian Government – Follow-up Inquiry, p.44

for a vaccine or had only received one dose became non-compliant from 8 January 2022. DoH wrote to individuals who would not meet the new requirement to advise them of the change and allow them adequate time to comply.

As of 21 March 2022, a very small proportion of health professional staff remained non-compliant with the Direction. DoH continued to work with employees who were non-compliant with the Direction through the use of long term leave arrangements to support them to meet the requirements of the Direction.

Given the ultimately very small proportion of non-compliant staff, and the even spread of health professional staff across the state, there were no notable impacts on health service delivery for DoH as a result of the Direction.

At the public hearings, the Committee heard from Ms Morgan-Wicks (Secretary, DoH) regarding the impact of non-compliance with the vaccination mandate in the State hospital system:

> *CHAIR - ... I'd like to get the information on the record for this Committee about the impact of the vaccine mandate for healthcare workers. How many staff were stood down as a result of that?*
>
> *That's the first part of the question. I understand from talking to some of these people that the concern was particularly about the mRNA vaccines. Since the Novavax vaccines have become available, have some of these people been able to be vaccinated and either re-employed, or come off extended leave or some other arrangement, through that process?*
>
> *Ms MORGAN-WICKS - As at 21 June 2022, a total of 120 employees have had their employment terminated, which equates to less than 1 per cent of the Department's workforce. In terms of the availability of different types of vaccine, certainly, for each employee that we were working with who had yet to provide evidence of their vaccination - noting that this is a day-to-day process as employees return from long leave, such as maternity leave - we have talked to them about the availability of different types of vaccines, and particularly, where they expressed their concern in relation to mRNA vaccines.*
>
> *Regarding Novavax, we did put employees in contact with a GP or pharmacist that were supplying that type of vaccination. I am aware of at least one employee that did go and was vaccinated with Novavax. I don't have the numbers of exactly how many were vaccinated with Novavax; given that I don't believe we ask the actual vaccine that people received, just evidence that they have received it.*
>
> *Mr WILLIE - In the private system, is there a mandate for vaccines? It's not like the school system?*
>
> *Ms MORGAN-WICKS - Yes, there was a public health direction that applied to age care, disability workers and health workers.*

CHAIR - Acknowledging that some people would have medical exemption, what's the current rate of vaccination among the health workforce?

Ms MORGAN-WICKS - In terms of the State Health workforce, we currently have 100 per cent vaccination rate for first and second dose of COVID-19 vaccine in our workplaces. In terms of workers that are outside of our workplaces, I don't have that current rate, but we are monitoring them.

CHAIR - In terms of private hospitals?

Ms MORGAN-WICKS - This is State, public; I don't have the numbers in relation to private hospitals.

Mr ROCKLIFF - Novavax figures, you might be interested in. As of early June, I'm advised that approximately 1,432 doses of Novavax have already been administered in Tasmania.

CHAIR - That is a two-dose vaccine too, isn't it?

Dr VEITCH - That's my impression, but I'd have to check.

Mr ROCKLIFF - Novavax is two doses as well.

CHAIR - How far apart? Do we know?

Mr ROCKLIFF - I'm advised that it's at least three weeks apart.

CHAIR - Most people who might have had it, would have had the opportunity for both by now, you'd think.

Ms MORGAN-WICKS - Yes.[156]

Vaccination requirements for education workers[157]

The Committee was informed all DoE employees were required to be fully vaccinated under the DoE Vaccination Policy. As at 29 March 2022, less than one per cent of permanent and fixed term staff were not fully vaccinated. This high rate of compliance had served to not only protect education staff and school students, but ensure the impact on the Education workforce was minimal:

[156] See Transcript of Evidence Public Hearings (24 June 2022) - (Premier Rockliff), p.45-46
[157] See Tasmanian Government – Follow-up Inquiry, p.45

Vaccination Status	Permanent/Fixed-term		Casual/Relief	
	No.	%	No.	%
Booster/Booster Scheduled	1,680	14.9	97	13.2
Vaccinated or Exemption Approved	9,420	83.5	546	74.1
On Long Leave	115	1.0	0	0.0
Not Fully Vaccinated (First Dose/No Evidence)	21	0.2	94	12.8
ED5 Process (Not Fully Vaccinated)	39	0.3	0	0
Total	**11,275**	**100**	**737**	**100**

More information regarding the planning and preparedness for the return to school for the 2022 school year, following the re-opening of the border, see the Joint Standing Committee on Public Accounts Committee Report of the *Inquiry into the Tasmanian Government's Continuing Response to the COVID-19 Pandemic: Preparation for the Return to School in February 2022.*[158]

[158] https://www.parliament.tas.gov.au/__data/assets/pdf_file/0034/73879/FINAL-PAC-Report-8-September-2023-Inquiry-into-the-Tasmanian-Governments-Continuing-Response-to-the-COVID-19-Pandemic-Preparation-for-the-Return-to-School-in-February-2022.pdf accessed 25 September 2023

Committee Findings

F50. Vaccinations were made available to all Tasmanians free of charge.

F51. At February 2023, Tasmania's vaccination program was expected to total approximately $27.8 million, with a significant portion dedicated to salaries and wages and operational costs.

F52. Cost of the vaccination rollout was shared between the State and Australian Governments with $10.9 million expected in Commonwealth Government funding for 2021-22 and state funding of $16.9 million.

F53. The *Vaccination Requirements for Certain Workers Direction* applied to, among others, all workers employed, or engaged by, public and private health care facilities and included all Department of Health employees.

F54. Workers subject to the *Vaccination Requirements for Certain Workers Direction* were given the opportunity to comply with the mandate or provide a medical exemption.

F55. Less than one percent of the State Department of Health's employees had their employment terminated as a result of non-compliance with the vaccination mandate.

Summary of Attachments

Attachment A	Reconnecting Tasmania
Attachment B	National Plan to transition Australia's National COVID-19 Response
Attachment C	Kirby Institute Tasmania Modelling
Attachment D	Doherty Modelling Report
Attachment E	Escalation Management Planning
Attachment F	APHCC Statement on Omicron Public Health Implications
Attachment G	Vaccination Rollout Campaigns

Appendix 1 – Brief chronology of relevant COVID-19 events (1 August 2021 to 30 March 2023)[159]

Date	Event
3 August 2021	• A new Pfizer vaccination clinic opens in Glen Dhu Street, South Launceston.
4 August 2021	• A number of premises in Western Australia are declared high risk.
5 August 2021	• The state of Victoria is declared high risk (Level 2). • Premier Gutwein announces that a man from NSW flew into Launceston on 2 August without a valid G2G ['Good to Go'] pass. The man was sent to hotel quarantine but left on 4 August and returned to NSW, later testing positive to the Delta variant of COVID-19. No cases are detected in Tasmania.
6 August 2021	• Directions commence stating that anyone (over 12 years of age) who enters a hospital or residential aged care facility – including staff – must wear a mask while on the premises. This requirement does not apply to patients or residents. Visitors to residential aged care facilities and hospitals will be restricted to two visitors per resident/patient per day. • National Cabinet agrees to the 'National Plan to Transition Australia's National COVID-19 response.'[160]
8 August 2021	• Cairns and Yarrabah regions of Queensland are declared high risk (Level 2).
9 August 2021	• ATAGI recommends that children aged 12-15 years who have specified medical conditions; are Aboriginal or Torres Strait Islander; or live in remote communities be eligible for the Pfizer vaccine. The recommendation takes effect immediately.
11 August 2021	• The border restrictions, due to outbreaks of the Delta variant, remain in place for 13 local government areas in Queensland and all of Victoria and NSW. • The Premier announces a '4 Point Delta Shield Plan to protect Tasmanians'[161] which focuses on: strong border controls; a vaccine blitz; strengthening our testing, tracking and tracing; and a business support package.
12 August 2021	• The Australian Capital Territory is declared a high-risk (Level 2) area.
13 August 2021	• All ubers and taxis in Tasmania are required to have a QR code check system in place. • People who transit through NSW to Tasmania will be subject to quarantine requirements according to the high-risk (Level 1) rating of NSW. The exception is transiting through Sydney airport by air.

[159] Extracted from COVID-19 Crisis: Part 2 (2021) and COVID-19 Crisis: Part 3 (2022), Tasmanian Parliamentary Research Service, 31 March 2023
[160] See https://www.australia.gov.au/national-plan [Accessed 10 March 2023]
[161] See http://premier-dev.dpac.tas.gov.au/documents/DeltaShield_factsheet.pdf [Accessed 10 March 2023]

Date	Event
16 August 2021	• Greater Darwin and Katherine in the NT are declared high-risk (Level 2) areas from 4:00 pm. • Health Minister Rockliff announces that the Tasmanian Government has secured an additional quarantine facility – the Travelodge Hotel in Hobart – that will increase the number of available rooms from 486 to 594.
17 August 2021	• A number of premises in New Zealand are declared high risk. • Premier Gutwein issues a media release titled 'Further protection for Tasmania against the Delta strain'. He says that 'Anyone who is approved to travel to Tasmania from a high risk – Level 1 location… will now be required to produce a negative COVID-19 test within 72 hours of their travel to Tasmania. • New Pfizer 'super clinics' are announced for Hobart and Burnie, to be held in August and September respectively.
18 August 2021	• All high risk (Level 2) LGAs in Queensland are downgraded to low risk. A number of premises in Queensland remain high risk. • New Zealand is declared a high-risk (Level 2) area from 3:00 pm. • A joint Australian and Tasmanian Government grant program (Business Hardship – Border Closure Critical Support) for businesses facing hardship as a result of COVID lockdowns and border restrictions in other states becomes available.
22 August 2021	• The Northern Territory is downgraded to a low risk area. • The Minister for Health announces that Tasmania's first Year 11 and 12 students aged 16 and above will receive the COVID-19 Pfizer vaccine on 23 August. Up to 800 students will be vaccinated in specially organised clinics. Teachers also able to get vaccinated if they have not already.
24 August 2021	• The Parliamentary Standing Committee of Public Accounts tables its final report for the Inquiry into the Government's economic response to the COVID-19 pandemic.[162]
27 August 2021	• The requirement for hospital staff and visitors (over 12) to wear face masks is extended. The requirement to wear face masks in residential aged care facilities has been removed. • Visitor restrictions for hospitals and aged care facilities are lifted.
28 August 2021	• A number of premises in South Australia and West Australia have been declared high risk.
29 August 2021	• Additional high-risk premises are declared in South Australia.
31 August 2021	• The Tasmanian Auditor-General releases its report on 'COVID-19: community support measures'.[163] The review assessed the Department of Communities' implementation of the Supporting or Veterans COVID-19 Grants Program and the Community Support

[162] See https://www.parliament.tas.gov.au/__data/assets/pdf_file/0022/68404/b476f6b7d596902ffc85bc0632a8b4572b75ebfb.pdf [Accessed 8 August 2023]
[163] See https://www.audit.tas.gov.au/publication/covid-19-support-measures-community-support/ [Accessed 10 March 2023]

Date	Event
	Fund, finding that the programs were 'generally effective'. The report includes three recommendations.
2 September 2021	• New high-risk premises are declared in Queensland.
3 September 2021	• The Tasmanian Government announces the requirement for all health care workers in Tasmanian health care settings, both public and private, to be vaccinated against COVID-19 by 31 October 2021. • Buses, ferries and passenger terminals including airports are required to have QR codes for the Check in TAS app.
5 September 2021	• A repatriation flight of Australian residents arrives in Hobart from the United Kingdom.
7 September 2021	• The Minister for Primary Industries and Water announces that Tasmania's seasonal worker agreement with Victoria will be extended. Tasmania will quarantine an additional 1,500 Pacific workers for Victoria, in exchange for Victoria quarantining around 350 returning Australians on Tasmania's behalf. The Minister said that the agreement has also ensured that workers for Tasmanian farms have been prioritised so that our fruit and vegetables are harvested.
10 September 2021	• A public health direction provides further details on the mandatory vaccination of health care workers. The requirement to be vaccinated will apply to people who work in health care settings which include public health settings, private health facilities, private provider facilities and specific education settings. It also applies to people who provide health and medical services and treatments outside of these settings, including persons registered under the Health Practitioner Regulation National Law and particular allied health professionals. All Department of Health employees and contractors are also required to be vaccinated. This means that people required to be vaccinated must have received a first dose of a COVID-19 vaccine or provide evidence of a booking or exemption by 31 October 2021.
11 September 2021	• New high-risk premises have been declared in Queensland.
14 September 2021	• Premier Gutwein and Federal Treasurer Frydenberg announce that the Tasmanian and Australian Governments are delivering an expanded Business Support Package.[164] It includes grants and the waiver of fees and charges, and payroll tax relief for eligible tourism and hospitality businesses.
15 September 2021	• The Tasmanian Government launches 'My Language Portal': a website providing COVID-19 information in different languages, including Auslan, and easy to read formats.
16 September 2021	• The Minister for Health announces that 50 per cent of Tasmanians aged 16 and over have now been fully vaccinated.

[164] See https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22media%2Fpressrel%2F8176274%22 [Accessed 10 March 2023]

Date	Event
17 September 2021	• Tasmanians aged 60 and over can access to Pfizer and Moderna vaccines.
18 September 2021	• Face masks become mandatory at public events with more than 1,000 people. The requirement applies regardless of whether the event is seated or unseated, indoors, or outdoors.
20 September 2021	• The Tasmanian Government announces the adoption of a nationally consistent approach to COVID-19 testing for transport, freight and logistics workers, following agreement at National Cabinet in August 2021.
24 September 2021	• A new home quarantine trial for travellers returning from regional NSW begins today and will run for one month. Under the trial, eligible Tasmanian residents returning as Essential Travellers under category 8 will be able to home quarantine for 14 days in suitable premises. • Spirit of Tasmania sailings from both Melbourne and Devonport are postponed after a TT-Line contractor in Melbourne tested positive for COVID-19. No positive cases are identified in Tasmania. • The Premier announces that 54.5% of Tasmanians aged over 16 years are now fully vaccinated and 73.1% have received their first dose.
2 October 2021	• Public Health Services declare the Hume LGA in Victoria to be high risk (Level 1) because of ongoing high levels of Delta transmission. • A case of COVID-19 is diagnosed in Tasmania, after a male teenager who travelled from Melbourne to Launceston on 1 October tests positive. It is announced on 4 October that the positive case has breached home quarantine. Contact tracing and testing increases to manage the incident.
5 October 2021	• The Victorian LGAs of Manningham, Maroondah and Stonnington are declared high risk (Level 1).
7 October 2021	• The Australian Technical Advisory Group on Immunisation (ATAGI) recommends a third dose of a COVID-19 vaccine for people who are 'severely' immunocompromised. People eligible for a third dose of vaccine includes people with active cancers, organ transplants, recent stem cell transplants, people on immunosuppressive medications or taking high doses of steroids, people born with immunodeficiencies, and people on long-term dialysis. • The Tasmanian Government Gazette gives notice of the making new statutory rule under the *Payroll Tax Act 2008* (Tas). The *Payroll Tax (Pandemic) Order 2021* 'waives the requirement, under the *Payroll Tax Act 2008*, to pay payroll tax for certain employees in the tourism or hospitality industry, or in connection with those industries, during the 6-month period commencing on 1 July 2021.'
11 October 2021	• The Director of Public Health states that the contacts of the Launceston teenager who tested positive for COVID-19 continue to return negative results.

Date	Event
13 October 2021	• A 31 year old, New South Wales man who arrived in Tasmania on Monday 11 October 2021 has tested positive to COVID-19. The man absconded from hotel quarantine and spent time in the community. Public health contact tracing is underway and exposure sites are being identified.
14 October 2021	• Victoria is declared high risk (Level 1). Further to this, travel to Tasmania will not be permitted for travellers who have been in the following Victorian local government areas in the 14 days before arriving in Tasmania: Brimbank, Casey, Greater Dandenong, Hume, Maribyrnong, Melton, Moreland, Whittlesea, and Wyndham. • NSW and the ACT are also declared high risk (Level 1).
15 October 2021	• The Director of Public Health announces a snap three-day lockdown for Southern Tasmania from 6:00 pm Friday 15 October to 6:00 pm Monday 18 October 2021. The lockdown is called following the discovery that the COVID-positive NSW man who absconded from the Travelodge had spent more time in the community than was initially disclosed. The restrictions, which apply to everyone regardless of vaccination status, include: ○ Stay at home unless: ▪ Shopping for urgent household items within 5km of home (one person per household) ▪ Attending medical or health care appointments (including COVID-19 testing or vaccinations) ▪ Exercising once per day outdoors within 5km of home for up to two hours ▪ Caring for a vulnerable person, or ▪ You are a permitted worker. ○ Wear facemasks outside you home (if aged 12 and older) ○ Indoor and outdoor gatherings are not allowed ○ No visitors to homes unless: ▪ supporting a vulnerable person ▪ visiting as part of a significant relationship, or ▪ visiting as part of a visitor bubble with someone who lives alone. ○ Non-essential businesses will be closed during the lockdown. ○ There can be no visits to aged care and hospitals, except for compassionate reasons such as end-of-life care or to support a birthing partner. Facemasks must be worn. ○ If you are out for approved reasons, comply with requirements by wearing a mask, physical distancing, respecting gathering limits in open businesses, using hand sanitisers or hand washing and always checking in with Check in TAS. • Vaccination and COVID-19 testing clinics remain open during the lockdown.

Date	Event
16 October 2021	• The State Government announces that grants are available to support low income, casual and self-employed workers who have lost income due to an inability to work caused by the lockdown in Southern Tasmania. • The State Health Commander announces an additional COVID-19 testing clinic (Glenorchy) to help meet demand during the lockdown period following a record day for tests. A mobile testing clinic continues to operate in Gagebrook.
17 October 2021	• The Assistant Commissioner of Tasmania Police states that police are enforcing the Southern Tasmanian lockdown restrictions to help keep the community safe.
18 October 2021	• The Australian Government confirms that eligible workers who have lost income due to an inability to work caused by the lockdown in Southern Tasmania, will be able to claim the COVID-19 Disaster Payment. This claims process will open on Friday 22 October. • The Tasmanian Government's COVID-19 vaccination bus service begins operation. It aims to bring an accessible vaccination option to Tasmania's rural and remote communities. • The Premier announces that with testing numbers high and no further cases of COVID-19 detected, the lockdown in Southern Tasmania will end as planned at 6:00 pm Monday 18 October. Masks are required to be worn until 6:00 pm Friday 22 October.
19 October 2021	• The Minister for the Arts announces that, following the lockdown in Southern Tasmania, the State Government is extending the $2 million Live Performance Support Program to support eligible arts activities occurring before 30 April 2022.
20 October 2021	• The Premier announces the Southern Tasmania Lockdown Business Support Program, which is available to eligible businesses in the 12 local government areas who were directly impacted by the stay-at-home orders. • Department of Health staff are reminded that they must be sufficiently vaccinated against COVID-19 on and from 31 October 2021. The Secretary of the Department of Health states that she has advised 'staff, volunteers and people currently engaged with the Department through placements, that should they fail to provide evidence of sufficient vaccination or exemption by 30 October, on 31 October they will no longer be paid and the Department will commence processes to terminate their employment, volunteer engagement or placement.[165] • The Minister for Health states that 70 per cent of Tasmanians aged 16 years or older are now fully vaccinated.
22 October 2021	• The Tasmanian Government launches a 'roadmap to re-opening' (also referred to as the Reconnecting Tasmania Plan). The Government states that the plan sets out the path to opening while also preserving the health system and ensuring Tasmanians

[165] K Morgan-Wicks (Secretary, Department of Health), Health employees' vaccination obligations, media release, 20 October 2021.

Date	Event
	can still get the healthcare they need. Developed based on modelling from the Kirby Institute, the roadmap is set against COVID-19 thresholds including hospitalisation rates, and the vaccination targets already identified in the National Plan to transition Australia's National COVID-19 Response. Under the re-opening plan, Tasmania's borders will re-open to all mainland jurisdictions on 15 December 2021, when it is projected that 90 per cent of Tasmanians over the age of 16 will have been vaccinated.
23 October 2021	• Travel to Tasmania will not be permitted for travellers who have spent time in Victoria's Darebin local government area in the 14 days prior to their arrival, due to high-levels of community transmission. • The South Island of New Zealand is down-graded to low risk.
25 October 2021	• The Launceston COVID-19 testing clinic re-opens at a larger site.
29 October 2021	• The Premier announces that ATAGI has approved the COVID-19 booster vaccination, with approval for the use of a single booster dose for those who completed their primary COVID-19 vaccine course more than 6 months ago. Booster shots will start in Tasmania on 8 November 2021, and will initially include - but not be limited to - the groups who were prioritised in the rollout of the vaccine program from early 2021, such as those at higher-risk of developing severe COVID-19, and at increased occupational risk of COVID. • Travel to Tasmania will not be permitted for travellers who have spent time in Victoria's Cardinia, Greater Shepparton and Latrobe local government areas in the 14 days prior to their arrival in Tasmania. These LGAs are in addition to ten other LGAs where travel is not permitted at this time. • The Tasmanian Government has announced its requirements for international travellers coming to Tasmania between 1 November and the opening of borders on 15 December 2021. Tasmania will continue to have border restrictions in place for international travellers, including those who are no longer required to quarantine on arrival in other states. Until 15 December, arrivals in Tasmania who have been overseas in the previous 14 days will be managed in line with the border restrictions that are already in place for travellers from high-risk domestic areas. Under these measures, only vaccinated Tasmanian residents and specialist workers will be approved to enter. If approved to enter, they will undertake quarantine at a suitable premises if they meet the required criteria, otherwise quarantine will be undertaken at government-managed accommodation. Unvaccinated residents or specialist workers will not be approved for entry within 14 days of arrival into Australia from overseas.
1 November 2021	• The Tasmanian Government's updated Events Framework comes into effect. The Framework has been updated due to the heightened

Date	Event
	risk of COVID-19 transmission across Australia as a result of the Delta variant.
2 November 2021	• The Tasmanian Government announces that the health care settings in which mandatory vaccination requirements apply can include facilities such as neighbourhood houses, and premises that provide homeless services and community services.
4 November 2021	• Disability support workers who participate in high-intensity support in the NDIS must be vaccinated by 21 November 2021.
9 November 2021	• The Tasmanian Auditor-General releases its report on COVID-19 – response to social impacts.[166] The review assessed the effectiveness of Tasmanian Government arrangements to identify and agree to high priority social impacts for targeted support measures. The overall finding is that the Government's approach 'resulted in very few significant gaps in the key social impacts identified'. However, there were some missed opportunities for regional and local involvement of stakeholders, and gaps in training of key role holders. The report includes six recommendations to be incorporated in the review of emergency management arrangements.
10 November 2021	• New entry conditions for domestic travellers are announced. Travellers who have been in high-risk areas in the 14 days before their arrival in Tasmania will also be required to have returned a negative COVID-19 test within the 72 hours before departure for Tasmania (unless exempt). This testing requirement will not apply to travellers who have been out of Tasmania for fewer than seven days. Proof of vaccination and a negative COVID-19 test (for travellers from high risk areas) may be required to be provided on arrival in Tasmania
12 November 2021	• In-home and community aged care workers who provide aged care services for individuals are required to be vaccinated by 30 November 2021. • Associate Professor David Wylie Dunn loses an appeal in the Full Court of the Supreme Court against vaccine mandates for healthcare workers.
14 November 2021	• A number of exposure sites are announced after a positive case arrives in Hobart on Virgin Flight VA702 from Brisbane at 12:15 pm.
16 November 2021	• The Check in TAS app can be linked with Medicare or myGov to display vaccination status, following the National Cabinet decision on the 16 September.
18 November 2021	• A 37-year-old Queensland man is charged after allegedly absconding from hotel quarantine in Launceston. • A 35-year-old man was charged after travelling from Melbourne to King Island without approval. He was directed to leave the State and did so the next morning.
19 November 2021	• The Government announces that the Safe Events and Activities Framework has been reviewed, and drinking while standing and

[166] See https://www.audit.tas.gov.au/publication/covid-19-response-to-social-impacts/ [Accessed 10 March 2023]

Date	Event
	dancing in venues will be allowed in certain venues from 6 December. • The Premier admits only spot checks of the vaccination status of interstate arrivals will be possible after the borders re-open. • The first dose vaccination rate for those aged over 12 reaches 90 per cent.
20 November 2021	• More biosecurity staff are hired to check all interstate arrivals. • A 5-day vaccination incentive blitz for 12 to 18-year-olds is announced.
21 November 2021	• An 18-month-old from Victoria tests positive and is placed in a Community Case Management Facility with his mother. His mother did not have a valid G2G pass when they entered the State. • Deadline for mandatory vaccination of disability support workers. • International day of protest at vaccine mandates and COVID-19 restrictions.
23 November 2021	• The Premier announces that every eligible Tasmanian over 12 has now had the opportunity to be vaccinated.
24 November 2021	• The Premier announces that PCR tests for travellers will be provided at no cost.
26 November 2021	• Premier Gutwein unveils the isolation and quarantine plan to be implemented on re-opening. Positive cases will be required to isolate for a minimum of 10 days and close contacts will have to quarantine for seven days. Restrictions will apply for a further week after re-entering the community. Unvaccinated persons will be required to quarantine for 14 days. Targeted area lockdowns in reaction to infection clusters are raised as a possibility. • The WHO declare Omicron B 1.1.529 a variant of concern.
27 November 2021	• In response to the Omicron strain, travellers who have visited South Africa, Lesotho, Eswatini, Zimbabwe, Namibia, Mozambique, Malawi or the Seychelles must complete 14 days quarantine interstate before applying to enter Tasmania.
29 November 2021	• The COVID@home care model is launched. This allows positive cases to recover at home while monitoring their symptoms in conjunction with clinicians. Packages including oxygen saturation monitors and thermometers will be provided for patients. If a patient's condition begins to deteriorate they will be able to bypass the emergency department. • Service Tasmania and Libraries Tasmania staff to provide in-person support to people needing assistance to download their digital vaccination certificates and attach them to the Check-in TAS app. • Omicron is detected in Sydney. • Seafood exports resume to Asia.
30 November 2021	• National Cabinet is briefed on Omicron responses.

Date	Event
	• Mandatory vaccinations for in-home and community aged care workers come into effect.
2 December 2021	• A traveller in hotel quarantine tests positive for Delta variant after returning from the United States.
5 December 2021	• The TGA provisionally approves the Pfizer vaccine for 5-11-year olds.
6 December 2021	• Patrons at venues where there is stand-up drinking must be vaccinated from this date. • Check-in TAS cards available for those unable or unwilling to use the app.
8 December 2021	• The Minister for Health announces that from the 13 December children aged 5 to 11 will be eligible to book a vaccination. These appointments will be open from the 10 January 2022.
9 December 2021	• Premier Gutwein announces that public servants will be required to be vaccinated by December 15. The Premier indicates that there will be few exemptions to this requirement, the Department of Treasury and Finance is identified as an exemption. • The University of Tasmania (UTAS) mandates vaccinations for anyone coming onto campus from January 15.
10 December 2021	• The Minister for Health announces that testing capacity across the State has been increased to 5,000 tests daily.
11 December 2021	• ATAGI approves Moderna as booster shots. • Vaccination rates for people over 16 who have received two doses reaches 90%.
12 December 2021	• ATAGI announce a change in the recommended booster interval from 6 months to 5 months in a bid to combat Omicron.
13 December 2021	• The Public Health Hotline call centre is overwhelmed by the volume of calls it receives. • Vaccination bookings for 5 to 11-year olds open. Appointments will be from January 10 onwards. • Tasmanians returning from interstate after trips of less than 7 days no longer have to isolate while awaiting test results.
14 December 2021	• Extra vaccine clinics are announced to deal with the demand for boosters resulting from the ATAGI booster interval advice. • A vaccination mandate is announced for workers in the ECEC sector. The first dose will be required by 8 January 2022. • Newcastle LGA is declared a high-risk area after a cluster of cases is detected.
15 December 2021	• Tasmanian borders re-open • A NSW man arrives in Hobart from Newcastle and tests positive to COVID-19. He had tested negative prior to departure. • LGAs in New South Wales and Victoria are declared high risk. These include all of metropolitan Sydney, all of metropolitan Melbourne and Geelong.

Date	Event
	• Anyone who has travelled to these areas must be tested within 72 hours of arrival in the state. Tasmanians returning from a high-risk area on a trip of 7 or fewer days must get tested within 24 hours of returning to the State.
16 December 2021	• Requirements for people entering residential aged care facilities change. Masks are now required and a negative test result must be produced if unvaccinated.
18 December 2021	• A positive case in Launceston is announced after arriving from NSW on 16 December. A number of exposure sites are listed and contact tracing is underway. • Vaccination rates for people over 12 who have received two doses reaches 90 per cent.
19 December 2021	• In response to increasing case numbers, the Premier announces that masks will be mandatory in indoor settings from December 21, 2021. They will be required when visiting: ○ indoor workplaces such as offices ○ educational settings (e.g., university buildings or schools) ○ indoor businesses and shops (i.e., supermarkets, restaurants or pubs) ○ indoor service settings (i.e., banks or pharmacies), and ○ public transport (i.e., bus, taxis or in a rideshare).
20 December 2021	• Tim Gunn, who sent Southern Tasmania into lockdown in October 2021 after absconding from hotel quarantine, is sentenced to five months in jail.
21 December 2021	• Face masks become mandatory in indoor settings. • Additional testing clinics are announced to deal with demand from an increasing number of exposure sites. These sites are at Youngtown Primary School and Riverside High School in Launceston and the Police Academy in Rokeby, Hobart. Additionally the opening hours at the Hobart Macquarie Point, Hobart Showgrounds, Launceston and South Launceston drive through clinics are extended. • Tasmanians who are returning from a high-risk area interstate after less than 7 days now have 72 hours in which to test after returning.
23 December 2021	• The RHH announces external triage areas are being tested for the emergency department in anticipation of additional patient screening becoming necessary. • GPs and Pharmacists are to receive a greater subsidy to administer COVID-19 vaccines in a bid to boost the vaccination rate.
24 December 2021	• ATAGI announces the decision to reduce the booster interval from five months to four months as of 4 January 2022, and to three months as of 31 January 2022. This is in response to the increased transmissibility of the Omicron variant. • The Sydney to Hobart yacht race is to go ahead with crew testing prior to departure and declaration measures on arrival in place.

Date	Event
	• Jetstar and Virgin cancel dozens of flights nationwide due to close contact rules affecting staff availability. • Salamanca Market and MONA are declared exposure sites. • Australian Nurses and Midwifery Federation (ANMF) calls for extra pay to compensate staff for the COVID-19 risk.
25 December 2021	• An RHH oncology nurse tests positive. An Incident Management Team is established to respond. All close contacts subsequently return negative tests.
27 December 2021	• Low-risk and casual-contact exposure sites to no longer be publicly listed. • The ANMF's request for a COVID-19 allowance is denied.
28 December 2021	• An aged care worker at St Ann's aged care facility in Hobart returns a positive test, leading to the facility being locked-down. • The Taste of Summer festival begins. It runs from 28 December 2021 to 3 January 2022.
29 December 2021	• Severe delays at PCR testing sites are reported. • Contact tracing capability is reportedly under pressure, with exposure sites taking up to a week to be published on the Check-in Tas contact tracing app. • Unions Tasmania call for RATs to be made free.
30 December 2021	• National Cabinet meets and agrees to change the definition of a close contact to a person who is a contact in a household, or household like setting for a period of 4 hours or more. • The Premier announces that PCR testing will prioritise those who are symptomatic or have returned a positive RAT result.
31 December 2021	• Positive cases are identified on King and Flinders Islands. • RAT test collection sites open in Glenorchy and Rokeby to ease the pressure on PCR testing sites. PCR testing is recommended to continue in the North and North West of the state. • 500,000 RAT tests have been secured for immediate use.
1 January 2022	• The definition of a close contact changes. It changes from someone who has had 15 minutes of face-to-face contact with a positive case to someone who has spent 4 hours or more in a household or household like setting with a positive case. This is in line with the National Cabinet decision on 30 December 2021. • Changes to testing comes into effect at midnight. Travellers entering the state are no longer required to provide a negative PCR test result 72 hours prior to entry. Travellers are now required to provide a negative RAT result 24 hours prior to entry. • The Tasmanian DoH ceases reporting exposure sites on the coronavirus website. • The Deputy Director of Public Health states that positive cases are now being notified by text message rather than being contacted by phone. This severely limits contact tracing.

Date	Event
	• The Premier announces that there has been a 50% reduction in travel into the State and that 'the border is self-regulating to some degree.' • The Tasmanian Government is in negotiations with Australia Post to become collection points for RAT tests. • The Pharmacy Guild of Tasmania President alleges that people are stockpiling RAT tests, exacerbating shortages. • The Australian Government cuts the Medicare rebate for PCR tests.
3 January 2022	• The Acting Director of Public Health announces that a cluster of cases has been identified as a result of the Party at the Apocalypse music festival in Launceston on 26-27 December. • PCR testing is becoming increasingly difficult to access. The Hobart Showgrounds testing site reports being at capacity within 10 minutes of opening. • A number of hospitality venues close due to staffing concerns.
4 January 2022	• The Director of Public Health announces that a testing team is being sent to King Island to determine the extent of the outbreak. • The State Health Commander announces that the RHH will reduce some outpatient services and elective surgeries to maintain core functions. • Passengers of the cruise ship Coral Discoverer berthed in Hobart deemed close contacts and required to quarantine. • The booster interval goes from five to four months following ATAGI advice.
5 January 2022	• The Director of Public Health states that the number of COVID-19 cases in Tasmania would be 'probably more than twice as many as have been diagnosed'. • The Health Secretary announces an increase in testing capacity at Macquarie Point from 1,000 to 2,000 daily. • A PCR testing facility in Kingston opens to deal with increased demand. • It is reported that RATs are increasingly difficult to obtain. Following a meeting of the National Cabinet a scheme for concession holders to be able to access free RATs is announced. Anti-hoarding measures for RATs are also announced.
6 January 2022	• The Premier announces that RATs will become the primary diagnostic tool for detecting the disease. • The Director of Public Health urges people to reconsider their need to travel to King Island as a strain on health services is anticipated due to increasing case numbers. • Tasmanian Labor announces its COVID-19 Response Framework for Tasmania.[167]

[167] See https://taslabor.com/wp-content/uploads/2022/01/Labors-COVID-19-Response-Framework-for-Tasmania.pdf [Accessed 10 March 2023]

Date	Event
	• The Kingston testing facility announces it has reached capacity and is closed at 7:30 am, 2.5 hours before its opening time at 10:00 am. • The postal workers' union announces that negotiations over the distribution of RAT tests had been abandoned. • The ANMF renews its calls for a COVID-19 supplement to be paid to health care workers. • The Supreme Court of Tasmania suspends jury trials until 15 March 2022 due to the risk of COVID-19 to jurors and court attendants.
7 January 2022	• The Premier attempts to calm the community in the face of rising cases and testing constraints. He states that 5 million RAT tests are on order, the health system is well prepared and rising case numbers were expected. • The State Health Commander announces that the LGH is being forced to review some of its services due to staffing constraints related to infection and close-contact designation.

8 January 2022	• New case numbers reach 2,223.
	• RAT tests are now available for collection for symptomatic cases and close contacts at:
	  ○ MyState Bank Arena, Hobart
	  ○ Rokeby Police Academy, Hobart
	  ○ Silverdrome, Launceston
	  ○ Ulverstone Sports Centre
	• Minister Guy Barnett tests positive to COVID-19.
	• Deadline for mandatory vaccination of ECEC workers.

9 January 2022	• It is reported that essential healthcare workers are being given quarantine exemptions if they have been deemed close contacts. • RAT tests become available on King Island.
10 January 2022	• Vaccine clinics for 5-11-year olds open in the North West in an attempt to increase the vaccination rate in the region.
11 January 2022	• Secretary of the DoH, Kathrine Morgan-Wicks tests positive to COVID-19.
12 January 2022	• The Director of Public Health no longer recommends limiting travel to King Island. • The Minister for Tourism, Hospitality and Events announces the State Government's Event Ready grants program has been extended. • The Minister for Health announces that 23 of the states 72 aged care facilities had positive cases.
13 January 2022	• Regional access to RAT tests is announced. This involves a delivery service in remote and rural areas for those that register for tests. • Access to tests in urban areas changes. Registration on the coronavirus website must be completed before a test can be collected. This is in response to long queuing and wait times at collection centres.

Date	Event
	• The National Cabinet meets and announces that essential workers will be granted exemptions from quarantine requirements. This will allow emergency and critical services to remain open and supply chains to continue to operate. • National Cabinet agrees to a National Framework for Managing COVID-19 in Schools and Early Childhood Education and Care.[168]
14 January 2022	• The State Health Commander announces that the North West Regional Hospital is reviewing some of its services due to impacts on staffing from COVID-19. Elective Surgery and outpatient services are to be scaled back. • Close contact quarantine exemptions for essential workers are introduced.
15 January 2022	• The first case of COVID-19 in ICU is reported since re-opening.
16 January 2022	• The Minister for Health announces the COVID-Care package of support for community sector organisations is to be bolstered with additional funding and materials.
18 January 2022	• Vaccinated travellers entering Tasmania are no longer required to register their travel or take a test prior to travelling. • A potential outbreak in the Mersey Community Hospital is under investigation.
19 January 2022	• An outbreak management team is established at the Mersey Community Hospital. • The Minister for Small Business announces that the COVID-19 Business Impact Support Program has opened for applications. The program is open for businesses that have seen a reduction in income due to the pandemic. Funding of between $1,000 and $5,000 is available.
21 January 2022	• The Premier releases the COVID-19 Safety in Schools Plan for the return of the school year. The plan includes the provision of RAT tests for staff and students, having outbreak management plans in place, improving ventilation in schools, mask mandates in secondary schools, the capacity for virtual learning for those in isolation and social distancing wherever possible. • The first death resulting from COVID-19 is reported since re-opening.
25 January 2022	• More critical industries are eligible for close contact quarantine exemptions. These industries include health, welfare, education, childcare services and media services. • The employment contracts of 41 biosecurity and border control staff hired to monitor arrivals at airports and ports end.
27 January 2022	• The Premier flags changes in the use of the Check-in Tas contact tracing app.
28 January 2022	• The DoE begins distributing COVID-19 care packages to schools, containing two RAT tests, a face mask and information.

[168] See https://www.education.gov.au/covid-19/resources/national-framework-managing-covid19 [Accessed 10 March 2023]

Date	Event
	• The TGA approves Pfizer booster doses for 16 to 17-year olds.
1 February 2022	• Booster interval for people aged over 18 cut from four to three months after their second dose, following ATAGI advice. • The Tasmanian Greens release their COVID-19 Emergency Response Plan.[169]
2 February 2022	• Education Minister Sarah Courtney contracts COVID-19 while holidaying in France. • The Federal Aged Care minister, Senator Colbeck, defends attending the Ashes cricket in Hobart instead of appearing at a senate inquiry into the COVID-19 crisis.
4 February 2022	• The DoH extends Pfizer booster availability to 16- and 17-year olds following ATAGI approval. • It is reported that 100 Metro Tasmania bus trips are cancelled due to staffing shortages. Metro Tasmania states that it is recruiting more drivers to address the shortfall.
6 February 2022	• The passengers of a cruise ship are placed in isolation following a positive test. The ship had not left Tasmanian waters during its 10-day journey.
7 February 2022	• The Minister for Arts announces that the Live Performance Support Program will be extended until 30 September 2022. • The Prime Minister announces that the Australian Defence Force will be deployed to assist in managing COVID-19 outbreaks in aged care facilities from 9 February 2022.
9 February 2022	• Public schools return. • The Minister for Education returns from France following a positive COVID-19 test that delayed her return from holiday.
10 February 2022	• Minister for Education, Sarah Courtney, resigns from Parliament. • The Deputy Director of Public Health states that cases of Omicron BA.2 are being detected in each of the regions in the state. • Independent schools begin receiving government-supplied RAT tests. • Deadline for mandatory vaccination for employees of the Department for Education. The Premier states that 87 teachers have failed to report their vaccination status and are unable to teach.
11 February 2022	• Tasmania adopts the ATAGI definition of 'up to date' vaccination status, which replaces fully vaccinated.
12 February 2022	• Tasmania reaches 99% first dose vaccination rate for those aged over 12. • The Minister for Tourism announces a travel voucher scheme for King Island.
15 February 2022	• The Minister for Health announces that the Australian Defence Force will be brought in to aid with managing COVID-19 outbreaks in three aged care facilities.

[169] See https://tasmps.greens.org.au/policy/greens-covid19-emergency-response-plan [Accessed 10 March 2023]

Date	Event
	• Round Two of the COVID-19 Business Impact Support Program opens. It is available for businesses that have lost revenue due to the pandemic for the period from 15 January to 14 February 2022. The maximum funding is doubled to $10,000 per business.
16 February 2022	• Outbreaks are detected in seven Tasmanian schools.
17 February 2022	• The Western Australian Premier, Mark McGowan, criticises Tasmania's re-opening. • Outbreaks detected in 12 Tasmanian schools.
18 February 2022	• The Premier announces that the Check-in Tas contact tracing app will no longer need to be used from 6pm February 18, except in high-risk settings such as bars, pubs and restaurants. • It is announced that the Travelodge Hobart City, Travelodge Hobart Airport, Rydges Hobart, Best Western Hobart and the Edgewater Hotel Devonport will no longer be used for hotel quarantine.
21 February 2022	• International travel resumes to Australia for double vaccinated travellers. • Tim Gunn loses his appeal against his sentence for absconding from hotel quarantine and sending Southern Tasmania into lockdown in October 2021.
22 February 2022	• The WHO releases advice stating that the Omicron sub-lineage BA.2 should remain classified as Omicron stating that the differences between the BA.2 and BA.1 are not distinctive enough to warrant a new designation.
23 February 2022	• The Premier announces that quarantine periods for household contacts will be seven days from the date of the first household case. This is in line with changes to national guidelines.
24 February 2022	• The Parliamentary Standing Committee of Public Accounts announces an inquiry into the Tasmanian Government's continuing response to the COVID-19 pandemic. Areas to be covered include measures taken by the Government, including relevant Public Health advice, to prepare for the State border re-opening on 15 December 2021, the return to school, the vaccination rollout, business support and the COVID-19 Tasmanian Check-in app. • The Tasmanian Government provides its submission to the inquiry on 21 April 2022.
25 February 2022	• The Premier states that outbreaks have been detected in 49 schools. • The Minister for Emergency Management announces a review of the Emergency Management Act. The terms of reference for the review are released.[170]
26 February 2022	• Vaccination requirements are no longer necessary for entry into the State.

[170] See https://www.dpfem.tas.gov.au/pdf/Terms%20of%20Reference%20Emergency%20Management%20Act%202006%20Targeted%20Review.pdf [Accessed 10 March 2023]

Date	Event
	• Patrons and staff are no longer required to be vaccinated to enter licenced premises. • Major events no longer require vaccination for attendance unless deemed necessary by the Director of Public Health. • Close contacts in a household setting are no longer required to quarantine longer than 7 days if they remain symptom free and return a negative test on day seven of isolation. • The DoE asks students attending the North West Support School in Burnie to remain at home due to a COVID-19 outbreak.
1 March 2022	• ATAGI recommends the use of Novavax if no other vaccines are suitable for the use of an individual. AstraZeneca is no longer recommended as a booster.
4 March 2022	• The Premier announces that mask mandates will progressively be relaxed, beginning at midnight.
5 March 2022	• Masks are no longer mandatory for customers in retail settings. • The Deputy Director of Public Health announces that 73 Tasmanian schools have classroom outbreaks.
7 March 2022	• The Minister for Education releases stage two of the COVID Safe Schools Plan. The plan emphasises the importance of face-to-face learning, while also stressing support for vulnerable students and the necessity of testing.
8 March 2022	• The RHH de-escalates from level two to level one of its COVID-19 management escalation plan.
10 March 2022	• Legislation allowing judge alone criminal trials in the Supreme Court passes parliament. The Supreme Court has previously deferred jury trials due to COVID-19.
11 March 2022	• Masks no longer mandatory in a range of settings. They are to be retained in high-risk settings including hospitals, health care facilities, aged-care facilities, correctional facilities, for educators in schools and on various modes of public and shared transport.
14 March 2022	• The Minister for Health announces that the Devonport COVID-19 community care centre is open for use.
16 March 2022	• Bookings for second vaccination dose open for 5 to 11-year olds. • The third round of COVID-19 Business Impact Support Program grants opens.
18 March 2022	• The DoH releases its Winter Strategy 2022.[171] It includes planning for increased vaccination rates, testing and maintaining COVID-19 hospital bed capacity. It also includes provision for expanding the COVID@home program to cover other respiratory illnesses in an effort to enable hospital avoidance. • The RHH escalates its COVID-19 management plan to Level 2.

[171] See https://www.health.tas.gov.au/about/what-we-do/strategic-programs-and-initiatives/winter-strategy [Accessed 10 March 2023]

Date	Event
19 March 2022	• The DoH releases the COVID-19 Surveillance Report[172] based on data from the Tasmanian Notifiable Diseases Database (TNDD). It is to be the first in a weekly series of data releases. • The Director of Public Health states that the increasing case numbers in the state are due to the greater transmissibility of BA.2.
22 March 2022	• Parliament sits and three members are absent due to COVID-19. Kristie Johnston and Ruth Forrest are infected with COVID-19, while Rosalie Woodruff is a close contact. There is no facility for absent members to participate in Parliamentary proceedings. • The DoH notifies 19 people that they have received incorrect COVID-19 test results.
24 March 2022	• The Premier, Peter Gutwein, is deemed a close contact and begins isolating for seven days. Members of Parliament John Tucker and Janie Finlay are also isolating.
25 March 2022	• The Tasmanian Government announces it will follow the ATAGI recommendation for further 'winter' boosters to be made available for vulnerable populations and those aged over 65.
28 March 2022	• The re-infection quarantine exclusion period is increased from 8 to 12 weeks based on advice from the CDNA. • The DoH discloses that 540 people received incorrect COVID-19 notifications on 26 March 2022.
30 March 2022	• The Tasmanian Greens call for the reintroduction of mask mandates due to the high level of community transmission. • Premier Gutwein emerges from isolation.
31 March 2022	• The Deputy Director of Public Health states that outbreaks have been recorded in 124 schools.
2 April 2022	• The Department of Health announces that it has dismissed more than 100 workers as a result of non-compliance with public health orders.
4 April 2022	• The Premier, Peter Gutwein, resigns from Parliament. • The Public Health Emergency Declaration is extended by eight weeks. • The Minister for Education releases the COVID-safe Schools Plan for Term 2.
7 April 2022	• The King Island Travel Voucher scheme opens. • The Senate Select Committee on COVID-19 completes its final report on the Australian Government's response to the COVID-19 pandemic.[173]
8 April 2022	• A new variant of COVID-19 is detected in Australia, a hybrid of the Delta and Omicron strains, dubbed 'Deltracron'.

[172] See https://www.health.tas.gov.au/health-topics/coronavirus-covid-19/current-risk-level-and-statistics/weekly-statistics [Accessed 10 March 2023]
[173] See https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/COVID-19/COVID19/Report [Accessed 10 March 2023]

Date	Event
12 April 2022	• It is reported that 26 inmates at Risdon Prison have tested positive to COVID-19. Premier Rockliff states that all prisoners will be tested in the next 24 hours in an attempt to manage the outbreak. • The AEC announces that voters in isolation due to COVID-19 will be able to vote over the phone in the upcoming federal election.
17 April 2022	• Australia's Biosecurity Emergency Determination relating to COVID-19 lapses. This means that from 18 April 2022, Australia's international borders fully re-open and travellers entering or leaving the country are no longer require a negative pre-departure test. Travellers may be requested to provide proof of vaccination. International cruise vessels are able to return to Australian waters.
19 April 2022	• The LGH convenes an Outbreak Management Team after four cases of COVID-19 are detected on non-COVID-19 wards.
20 April 2022	• The Federal Aged Care Services Minister, Richard Colbeck, states that hard lockdowns are no longer necessary in residential aged care facilities. Molnupiravir, an oral COVID-19 antiviral treatment is now being pre-placed in facilities.
21 April 2022	• The fourth round of the COVID-19 Business Impact Support Program opens.
24 April 2022	• An Incident Management Team is convened at the Royal Hobart Hospital after two cases of COVID-19 are detected on a non-COVID-19 ward.
25 April 2022	• ANZAC Day services are open to the general public for the first time since 2019.
27 April 2022	• The DoE launches a 'school attendance campaign' to address higher rates of student absences due to the impact of COVID-19.
2 May 2022	• Close contacts are no longer required to quarantine. Close contacts can now leave home if they: o test for COVID-19, daily if they plan to leave home o wear a face mask in all indoor settings when outside the home o not attend high-risk settings, unless as a critical worker and an exemption is in place o inform their workplace that they are a close contact. • Check-in requirements for businesses and events are removed. • It is announced that free RATs will be available for close contacts.
4 May 2022	• The Tasmanian Government announces 'pop up' clinics providing free flu vaccinations across the state for people aged five years and over, along with COVID-19 vaccinations. The initiative is expanded on 2 June 2022 to GP clinics and pharmacies, and to include children aged over six months from 4 June 2022. • Three new Omicron subvariants – BA.2.12.1, BA.4, and BA.5 – are detected in Australia.
9 May 2022	• The Premier, Jeremy Rockliff, tests positive to COVID-19.

Date	Event
21 May 2022	• Density and capacity restrictions are lifted for venues and events. Events with more than 5,000 patrons or music festivals with more than 2,000 patrons are still required to submit a COVID-19 Safety Plan to Public Health for approval prior to the event.
25 May 2022	• ATAGI announces that those at risk of severe illness resulting from COVID-19 are now eligible for a winter booster. The booster will be accessible from 30 May 2022. • The LGH has asked patients with non-life-threatening injuries to seek treatment elsewhere.
26 May 2022	• The State Budget is released.
27 May 2022	• ATAGI expands its recommendation for 'winter' booster vaccine eligibility, to include people aged 16 to 64 years with medical conditions that increase their risk of severe COVID-19 illness, and people with disability with significant or complex health needs.
29 May 2022	• The Public Health Emergency Declaration is extended until 30 June 2022.
30 May 2022	• A petition is presented to Parliament that questions the efficacy of mask and vaccine mandates, sponsored by the Member for Lyons, John Tucker.
31 May 2022	• Directions under the *Emergency Management Act 2006* cease.
1 June 2022	• Directions relating to cruise ships in Tasmania are revoked. The return of cruise ships is planned for October 2022. New protocols for operating cruise ships in Tasmania are released on 15 June 2022.
6 June 2022	• The Tasmanian Government announces the establishment of a 'statewide navigation and referral service' specialising in Long COVID, to be launched in September 2022.
14 June 2022	• People aged 12 to 15 years who are severely immunocompromised, have a disability with complex health needs, or have complex health conditions that increase the risk of severe COVID illness, become eligible for an additional booster vaccine (following updated advice from ATAGI). • The COVID@home program becomes 'COVID@homeplus' to provide care for vulnerable patients with COVID-19 and other serious respiratory illnesses. • The AHPPC advises that it is no longer necessary to mandate mask-wearing in airport terminals. The Tasmanian Government removes the mask requirement from 18 June 2022, but still 'strongly recommends' the wearing of masks in airport settings. Passengers are still required to wear face masks on board all aircraft.
17 June 2022	• The National Partnership on COVID-19 Response is extended to 31 December 2022.
23 June 2022	• The Tasmanian Government provides an online information session for small businesses on their responsibilities after the Public Health Emergency Declaration ends.

Date	Event

25 June 2022	• Face masks are no longer mandatory in most indoor settings, except for:
	  ○ health and medical facilities (including blood donation and pathology collection centres)
	  ○ supported accommodation
	  ○ correctional facilities.
	• Healthcare and disability support providers must continue to wear face masks while providing services indoors.
	• Close contacts must continue to wear face masks indoors during the close contact period.

29 June 2022	• The Tasmanian Auditor-General releases its report on 'COVID-19 – response to social impacts: mental health and digital inclusion assessment'.[174] The review assessed 'how effectively the Tasmanian Government allocated and monitored the use of resources in 2020 to address two high priority social impacts: mental health (with a focus on situational distress) and digital inclusion'. The Auditor-General makes four recommendations.
30 June 2022	• The public health emergency declaration ceases from 1 July (after being in place since March 2020). COVID-19 continues to be managed under the Public Health Act 1997 as a notifiable disease. Directions are replaced by orders and guidelines. All remaining mask mandates for premises are lifted from 1 July. The Tasmanian Government advises that: *From 1 July 2022, the requirement to wear face masks in all remaining settings, such as hospitals, residential aged care facilities, disability providers and correctional facilities, will be based on individual risk assessments for each of these settings.* *Close contacts will still be required to wear face masks when they are in indoor settings outside the home.* *Face masks, along with other COVID-safe behaviours, remain an important way to help reduce the risk of COVID-19. Although not mandatory, mask wearing is still strongly recommended in public places, especially where physical distancing is not possible.*[175] Passengers on board commercial aircraft are still required to wear masks. • The Australian Government's Pandemic Leave Disaster Payments end. The decision is later reversed, following widespread criticism (see 16 July 2022). • Tasmania's Wastewater Surveillance Program ceases. • The Department of Premier and Cabinet publishes a summary of implementation activity for the PESRAC Interim Report.[176]

[174] See https://www.audit.tas.gov.au/publication/covid-19-response-to-social-impacts-mental-health-and-digital-inclusion/ [Accessed 10 March 2023]
[175] Tasmanian Government, 'Face mask changes', 23 June 2022, www.coronavirus.tas.gov.au
[176] See https://www.pesrac.tas.gov.au/reports [Accessed 10 March 2023]

Date	Event
4 July 2022	• The Tasmanian Government extends its free flu vaccination program to 31 July 2022.
5 July 2022	• Stage three of the COVID-safe schools operation plan is released.
7 July 2022	• The death toll from COVID-19 in Tasmania reaches 100.
8 July 2022	• The reinfection period for COVID-19 is reduced from 12 weeks to 28 days, on advice from the AHPC. This is due to the more transmissible Omicron BA.4 and BA.5 subvariants becoming the dominant strain of COVID-19. • People who test positive to COVID-19 more than 28 days after ending isolation due to previous infection should be reported and managed as new cases. Isolation rules are changed accordingly.
11 July 2022	• The winter booster shot is recommended for all adults aged 50 to 64 years, and optional for adults aged 30 to 49, following updated advice from ATAGI to expand the eligibility criteria. The wait time between first and second boosters is shortened from four months to three months. • Access to antiviral treatments is expanded – all people aged over 70 years who test positive to COVID-19 are able to access antivirals on the Pharmaceutical Benefits Scheme (PBS). Access is also expanded to people aged over 50 with two or more risk factors for severe disease, and Aboriginal or Torres Strait Islander people aged over 30 with two or more risk factors for severe disease.
13 July 2022	• The LGH, North West Regional Hospital and RHH all reach level three of their COVID-19 management escalation plans. The Mersey Community Hospital follows suit on 14 July 2022.
14 July 2022	• Premier Rockliff writes to the Prime Minister 'outlining the Tasmanian Government's strong concerns about the recent decision to end the Federal Pandemic Leave Disaster Payment, COVID-19 Home Medicines Service and the provision of Rapid Antigen Testing to concession card holders'.[177] • The Tasmanian Government continues to offer Pandemic Isolation Assistance Grants and universal free RATs.
15 July 2022	• Visiting restrictions are put in place at Tasmania's four major hospitals, due to hospital demand and high levels of COVID-19 transmission in the community.
16 July 2022	• National Cabinet meets: ○ The Australian Government's Pandemic Leave Disaster Payments and Crisis Payment – National Health Emergency (COVID-19) are reinstated until 30 September 2022, 'in recognition of the risks associated with more infectious new variants through the winter period'. The Commonwealth and the states and territories agree to share the costs of the Pandemic Leave Disaster Payments 50:50. Claims will be backdated to 1 July.

[177] J Rockliff (Premier), *Commonwealth COVID assistance must be maintained*, media release, 14 July 2022.

Date	Event
	○ A new, temporary telehealth item is created so that GPs can assess patients' eligibility for COVID-19 antivirals. ○ First Ministers agree to provide 'consistent health messaging encouraging Australians to follow the Australian Health Protection Principal Committee's recommendations on health behaviours including wearing masks indoors, getting tested and practising good respiratory hygiene'.[178]
1 August 2022	• Pharmacies cease distribution of free RATs for concession card holders. Service Tasmania becomes the new distribution point.
3 August 2022	• Following industrial action by healthcare workers, the Tasmanian Government announces a range of measures under a 'workload management plan'[179]: ○ A COVID-19 allowance for hospital staff, to be paid when hospitals have spent 30 days at COVID Escalation Level 3. ○ A return-to-work bonus payment of $2,000 pro rata for registered health professionals returning to the workforce after resigning in the 12 months prior to 31 July 2022. ○ Simplified, standing job offers for UTAS nursing graduates. ○ A trial of Clinical Nurse Coaches on public hospital wards. ○ The establishment of a Strategic Nursing Recruitment and Retention Working Group to review workforce modelling and recruitment. ○ The commencement of early negotiations for a new wage agreement for nursing staff. • The Government also announces the following measures which aim to reduce pressure on hospitals: ○ Grant funding to enable GPs or practice nurses to 'pre-emptively prescribe anti-viral medications' to those who may need them. ○ Grants for community pharmacies in rural and regional areas to purchase antiviral medications. ○ The establishment of a Statewide Virtual Primary Care Service to treat more people at home. ○ Deployment of nine community paramedics to treat patients in the community as appropriate. ○ The purchase of additional beds from private hospitals, to transfer patients from the public system. • The Tasmanian Government further extends its free flu vaccination program to 31 August 2022.
7 August 2022	• Launceston's COVID community case management facility closes, after the Launceston General Hospital opens nine new negative pressure isolation rooms. The community case management facility had been operational since December 2021.

[178] A Albanese (Prime Minister), *Meeting of National Cabinet*, media release, 16 July 2022
[179] See https://www.premier.tas.gov.au/site_resources_2015/additional_releases/government-acting-to-bolster-our-health-workforce-and-reduce-workload-pressures [Accessed 10 March 2023]

Date	Event
9 August 2022	• PCR tests (through state-run clinics) now test for COVID-19, Influenza A, Influenza B and Respiratory Syncytial Virus (RSV).
15 August 2022	• The level of COVID-19 risk in Tasmania is classified as 'moderate'.[180] • Up to 20 public school teachers who chose not to disclose their vaccination status are able to return to work.
16 August 2022	• The Tasmanian Government provides an update on negotiations with frontline health workers. A proposed new Frontline Health COVID-19 Allowance will provide a one-off $2000 payment to eligible Health Service and Ambulance Tasmania staff. The new agreement applies to a higher number of staff than the initial COVID-19 Escalation Allowance Agreement.
30 August 2022	• Tasmania's community vaccination clinics close. Vaccinations continue to be available through participating GP clinics and pharmacies.
1 September 2022	• The Australian Government announces an inquiry into long COVID and repeated COVID infections.[181]
5 September 2022	• The Moderna vaccine becomes available for children aged six months to five years who are severely immunocompromised, live with disability, or have complex health conditions that put them at risk of developing severe illness from COVID-19.
7 September 2022	• The level of COVID-19 risk in Tasmania is classified as 'low to moderate'.
9 September 2022	• The mandatory isolation period for COVID-19 cases is reduced from seven days to five days for asymptomatic cases (except for workers and visitors in high-risk settings). • Face masks are no longer mandatory on domestic flights. • The frequency of reporting for Tasmania's COVID-19 statistics is reduced from daily to weekly (published each Friday).
12 September 2022	• The first bivalent COVID-19 vaccine is approved for use in Australia. The vaccine targets the original 2020 SARS-COV-2 virus strain and the Omicron variant BA.1.
14 September 2022	• National Cabinet meets and formally agrees that the Australian Government's Pandemic Leave Disaster Payment will be extended at current rates beyond 30 September 2022. The cost continues to be shared 50:50 between the Federal Government and the states and territories.
19 September 2022	• The Public Health Hotline ceases to operate on weekends and public holidays. • The Tasmanian Government announces a new service for people diagnosed with long COVID ('post COVID-19 condition'). The service

[180] See https://www.health.tas.gov.au/health-topics/coronavirus-covid-19/current-risk-level-and-statistics/current-risk-level [Accessed 10 March 2023]
[181] See https://www.aph.gov.au/Parliamentary_Business/Committees/House/Health_Aged_Care_and_Sport/LongandrepeatedCOVID [Accessed 10 March 2023]

Date	Event
	provides virtual care for patients to self-manage their symptoms, and referrals to allied health services if appropriate.
24 September 2022	• State-run testing clinics in Hobart, Launceston and Burnie no longer require bookings.
26 September 2022	• ATAGI recommends vaccination for children aged 6 months to 5 years who have an increased risk of severe illness from COVID-19.
9 October 2022	• The state-run testing clinic in Burnie closes.
14 October 2022	• People who test positive for COVID-19 are no longer required to isolate, following a decision by National Cabinet on 30 September 2022. Australia's Chief Medical Officer states that the decision marks the probable end of the 'emergency response' to the pandemic. The Australian Medical Association (AMA) strongly criticises the move. • Financial support for casual workers in aged care, disability care, Aboriginal health care and hospital care continues, but all other government-funded pandemic leave payments end. • Public Health directions for Tasmania cease, in accordance with the National Cabinet decision.
18 October 2022	• The Frontline Health Agreement (proposed in August 2022) is registered with the Tasmanian Industrial Commission. Approximately 11,500 eligible frontline health workers in the Department of Health and Ambulance Tasmania receive a one-off $2,000 payment.
20 October 2022	• A coalition of philanthropic organisations release 'Fault lines: an independent review into Australia's response to COVID-19'.[182] The review panel, chaired by Peter Shergold AC, found that Australia's management of the pandemic exacerbated existing inequalities, and cautions against 'overreach' in managing future health crises.
25 October 2022	• International cruise ships return to Tasmania.
26 October 2022	• The Department of State Growth annual report 2021-22[183] reveals that almost $3.5 million in immediate financial support was provided to affected businesses during the three-day snap lockdown for southern Tasmania in October 2021.
27 October 2022	• Annual reports for the Department of State Growth and the DoH[184] provide updates on the Tasmanian Government's implementation of the PESRAC recommendations.
29 October 2022	• The Victorian Government reports the emergence of new Omicron subvariants BQ.1 and XBB.[185]

[182] See https://apo.org.au/node/320067 [Accessed 10 March 2023]
[183] See https://www.stategrowth.tas.gov.au/__data/assets/pdf_file/0004/400639/DSG_Annual_Report_2021-22.pdf [Accessed 10 March 2023]
[184] See https://www.health.tas.gov.au/sites/default/files/2022-10/department_of_health_annual_report_2021-22.pdf [Accessed 10 March 2023]
[185] See https://www.who.int/news/item/27-10-2022-tag-ve-statement-on-omicron-sublineages-bq.1-and-xbb [Accessed 10 March 2023]

Date	Event
2 November 2022	• The National Centre for Immunisation Research and Surveillance releases results from two national antibody studies, which show that at least two thirds of Australians have had COVID-19.[186]
4 November 2022	• The Director of Public Health reports an increase in COVID-19 cases in Tasmania, likely to signify a 'wave of infections' over the coming one or two months. The rise is 'likely to be due to a combination of factors, including some decline in immunity after vaccination or infection, and the emergence of some new variants of the virus that causes COVID-19'.[187]
11 November 2022	• The Menzies Institute for Medical Research completes a report on Estimating the Current Scale and Impact of Long COVID in Australia.[188] The researchers suggest that as of early December 2022, over 4,000 Tasmanians will have long COVID symptoms, with more than 900 likely to be experiencing significant impact on daily activities.
21 November 2022	• The Health Department attempts to recover $2,000 COVID bonus payments from some staff after the payments were made in error.
23 November 2022	• The RHH escalates to Level 2 of their COVID-19 Management Escalation Plan. • The Tasmanian Greens move a condolence motion to honour the lives of the 201 Tasmanians who have lost their lives while infected with COVID-19. • The Director of Public Health writes to the Premier with the following advice about emergency cessation day: *As required by section 27 of the COVID-19 Disease Emergency (Miscellaneous Provisions) Act 2020, I am writing to notify you that I am of the opinion that the emergency circumstances as described under section 5(2) of that Act no longer exist.* *The Department of Premier and Cabinet has advised me that entities that will be affected by the end of the measures under the COVID- 19 Disease Emergency (Miscellaneous Provisions) Act 2020 have made adequate plans for transition.*
26 November 2022	• The LGH escalates to Level 2 of its COVID-19 Management Escalation Plan. • The level of COVID-19 risk in Tasmania is reclassified as 'moderate'. According to the Department of Health, this means that there will typically be between 400 and 2,000 new cases on average per day. Public Health recommends wearing a face mask in crowded indoor spaces, on public transport, and when visiting people who may be at risk of severe illness.
2 December 2022	• The Tasmanian Government announces that state-run testing clinics (located in Hobart, Launceston and Devonport) will close on

[186] See https://www.ncirs.org.au/least-two-thirds-australians-including-children-and-adolescents-have-had-covid-19-two-national [Accessed 10 March 2023]
[187] M Veitch (Director of Public Health), 'Increase in COVID-19 cases a reminder to stay vigilant', media release, 4 November 2022.
[188] See https://www.utas.edu.au/about/news-and-stories/articles/2022/new-modelling-shows-the-scale-and-impact-of-long-covid-across-australia [Accessed 8 August 2023]

Date	Event
	31 January 2023. The provision of free RATs will cease on the same date.
5 December 2022	• The operating hours for state-run testing clinics are reduced to 8:30 am to 3:30 pm, Monday to Saturday. The clinics remain open on public holidays but closed on Sundays. The clinics were previously open 7 days a week.
8 December 2022	• The Tasmanian Government retires its standalone coronavirus website. Information is moved to the Department of Health website.[189]
16 December 2022	• The RHH and LGH escalate to Level 3 of their COVID-19 Management Escalation Plans. • RHH opens additional beds for COVID-19 patients as demand increases.
22 December 2022	• The Tasmanian Health Service North West region escalates to Level 2 of its COVID-19 Management Plan (North West Regional Hospital, Mersey Community Hospital, North West district hospitals and community health centres).
23 December 2022	• The GP Respiratory Clinic in Hobart closes. All of the remaining federally funded clinics close on 31 December 2022.
7 January 2023	• A new SARS-CoV-2 sub variant, XBB.1.5 (known informally as 'Kraken') is detected in Australia.
20 January 2023	• The level of COVID-19 risk in Tasmania is reclassified as 'low'.
1 February 2023	• PCR testing is now only available at GP clinics or by GP referral at pathology services.
3 February 2023	• The Tasmanian Department of Health reduces the frequency of its COVID-19 Surveillance Reports from weekly to fortnightly.
5 February 2023	• The Premier signs the COVID-19 Disease Emergency (Miscellaneous Provisions) (Emergency Cessation Day) Notice 2023, declaring 30 April 2023 as the emergency cessation day under the Act.
20 February 2023	• Following ATAGI advice, a 2023 COVID-19 booster dose is recommended for the following adults, if their last COVID-19 vaccine dose or confirmed infection (whichever is the most recent) was 6 months ago or longer, and regardless of the number of previous doses: ○ All adults aged 65 years and older ○ Adults aged 18 to 64 years who have medical conditions that increase their risk of severe COVID-19, or are living with disability with significant or complex health needs. Other adults, and children and adolescents aged 5 to 17 years at increased risk from COVID-19, should consider a 2023 booster dose. The booster doses should be provided by June 2023.

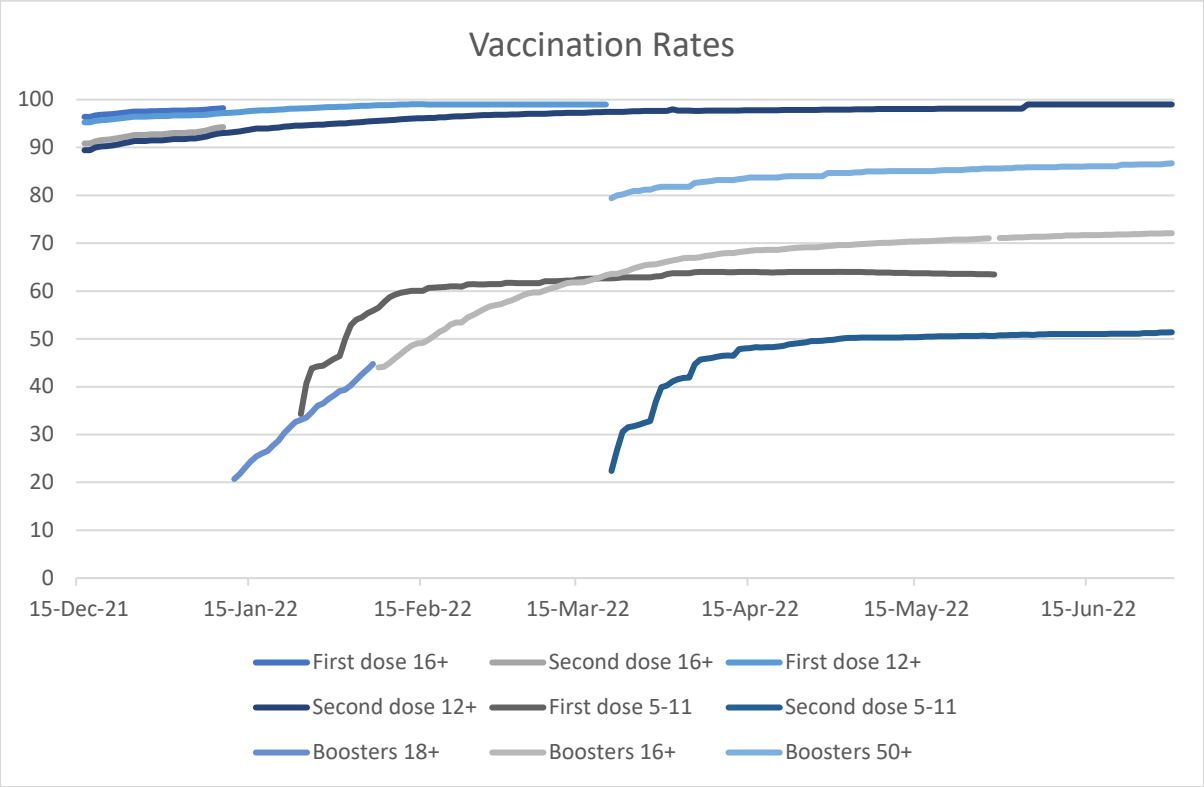
[189] See https://www.health.tas.gov.au/health-topics/coronavirus-covid-19

Date	Event
21 March 2023	• The Parliamentary Standing Committee of Public Accounts tables its report on Tasmanian Government's spending: unallocated COVID-19 funding.[190] • The Committee does not make any recommendations to the Government but notes 'that the extraordinary circumstances that led to the additional appropriation to the Treasurer's Reserve and such action should only occur in exceptional circumstances'.
30 March 2023	• The Tasmanian Government discloses that the Department of Health purchased $22.8 million dollars of personal protective equipment (PPE) during the pandemic that was deemed 'unusable'. The Government advises that: 'no funds have been recovered from suppliers of unusable PPE; however, the supply of unusable surgical masks is currently subject to legal proceedings.[191]

[190] See https://www.parliament.tas.gov.au/__data/assets/pdf_file/0022/68404/b476f6b7d596902ffc85bc0632a8b4572b75ebfb.pdf
[191] See Parliament of Tasmania Legislative Council, *Report of Debates*, 30 March 2023, https://search.parliament.tas.gov.au/search/isysquery/af802789-5c3e-4c9e-b435-bab2bc1b5213/2/doc/, p.28

Appendix 2 – Tasmanian COVID-19 Statistics (to 30 June 2022)[192]

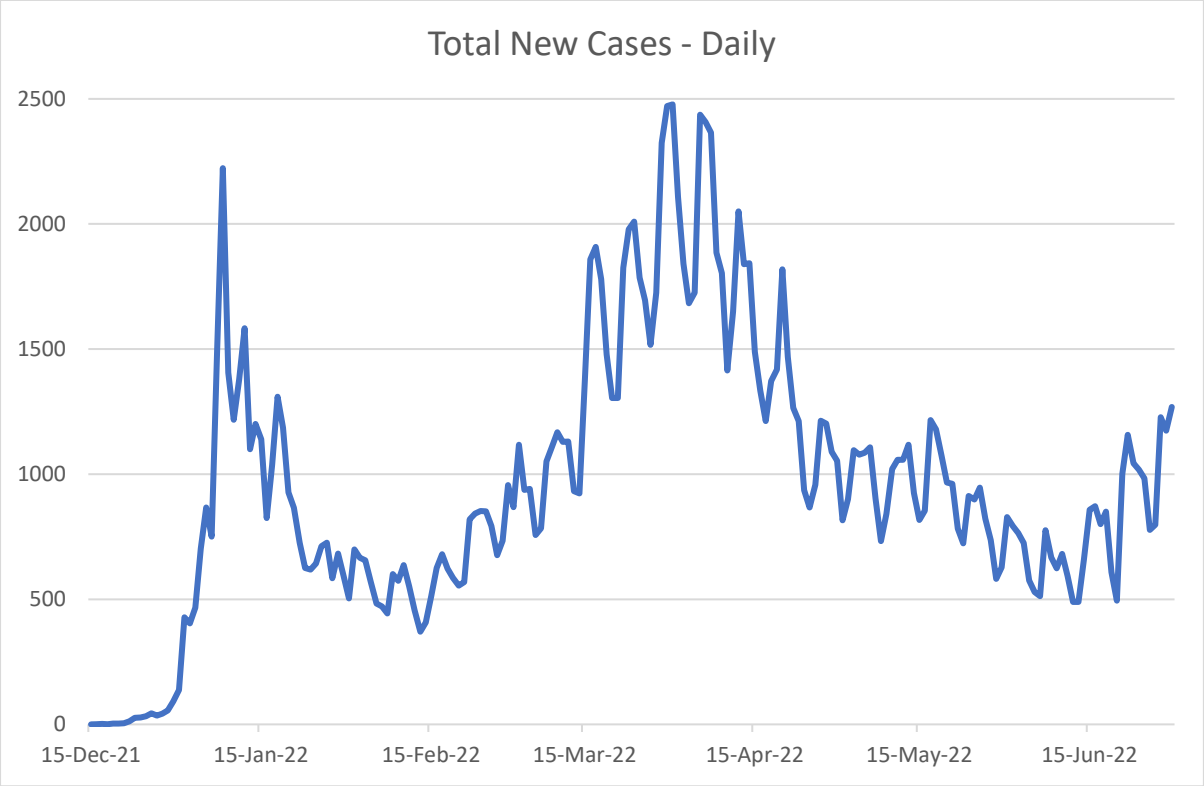
Vaccination Rates



As vaccination rates have increased the categories the data is presented in have changed. Reporting for 16+ was superseded by 12+. First dose 12+ was discontinued after it reached 99%. Booster rates for 18+ was changed to 16+. Numbers has been adjusted downward as data sets are reconciled and verified.

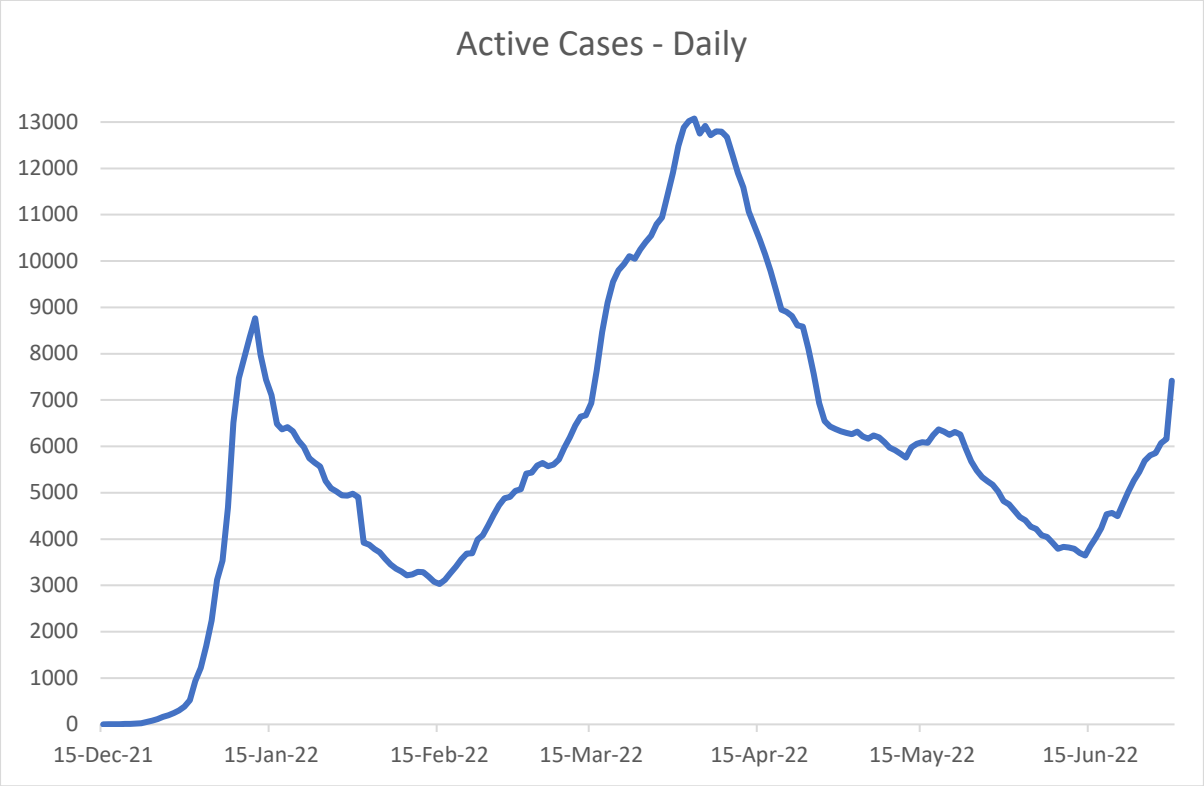
[192] Extracted from COVID-19 Crisis: Selected Statistical Data (to 30 June 2022), Tasmanian Parliamentary Research Service, 15 July 2022

Total New Cases - Daily



Total new cases refer to the number of cases that have been reported in the 24 hours to 8:00 pm on the previous day. There can be some variation in the number due to data cleansing. The numbers are for PCR only until 8 January 2022 and then for PCR and RAT after that date.

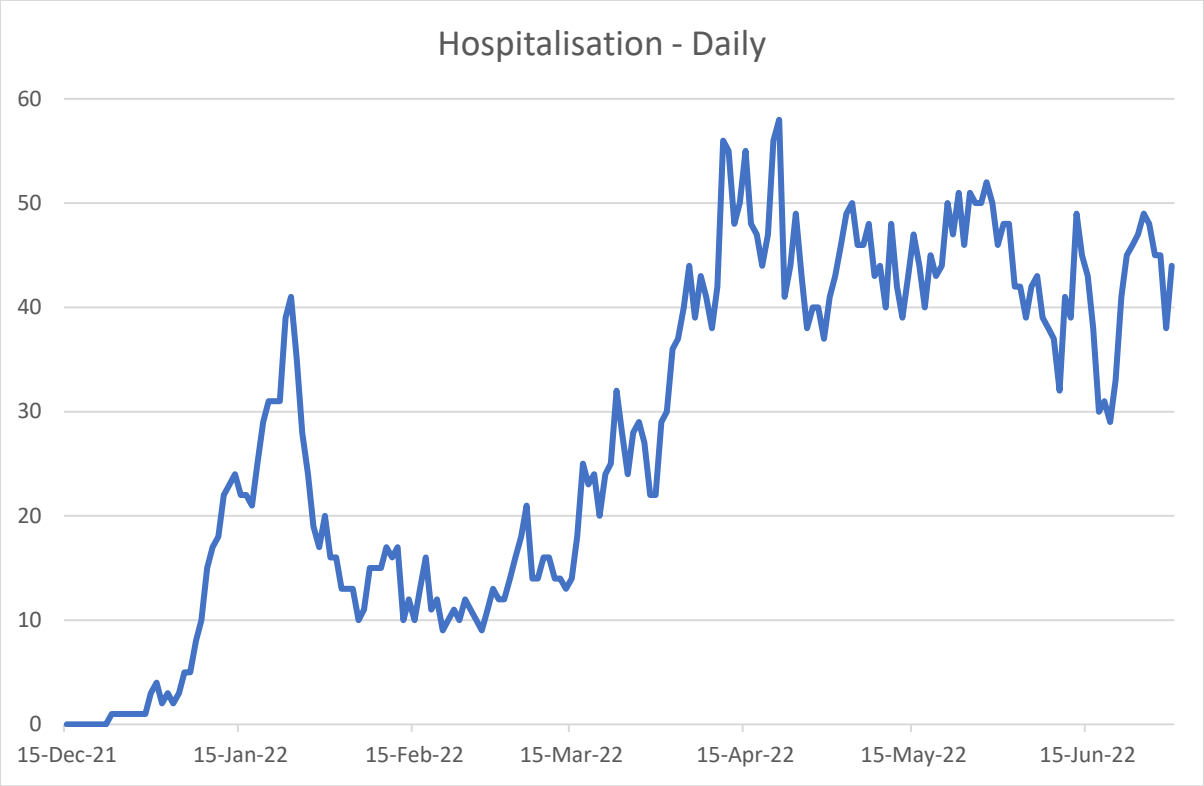
Active Cases



An active case is a person diagnosed with COVID-19 who has not completed their isolation period (seven to 10 days after their positive result) and as such, is considered infectious.[193]

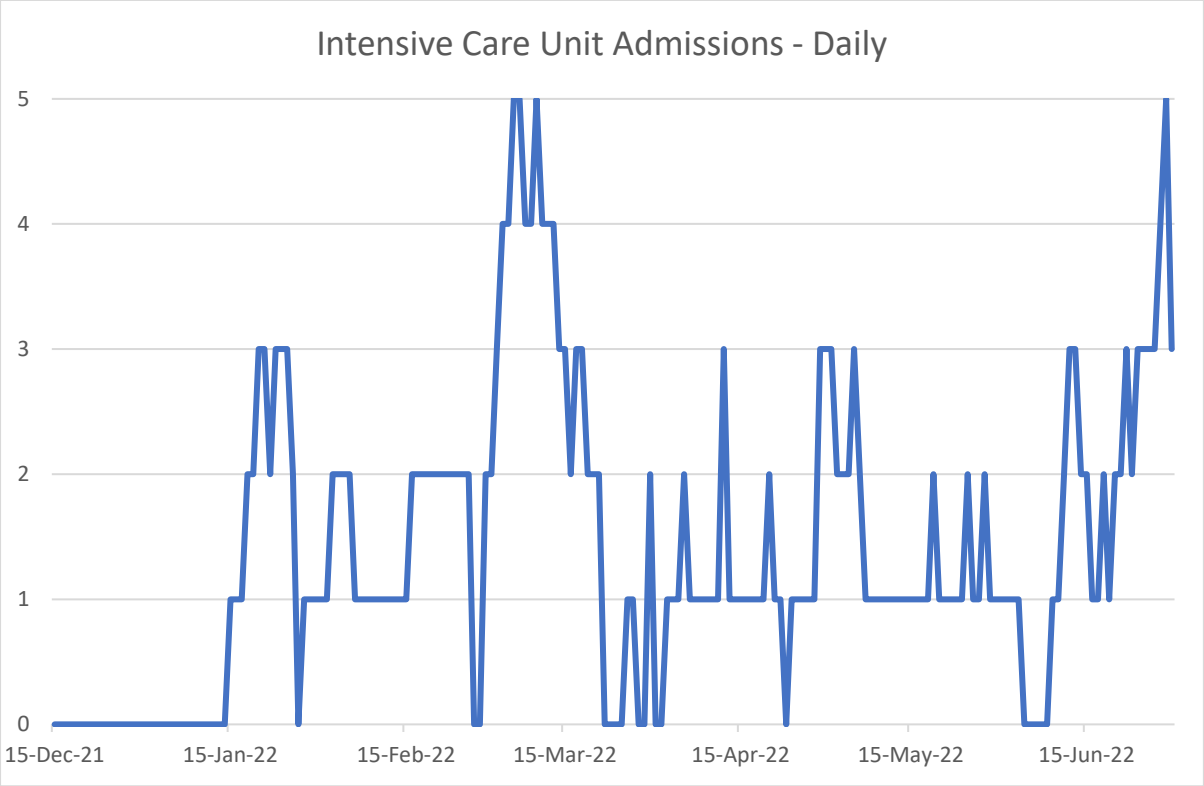
[193] Tasmanian Department of Health, Living in a COVID Vaccinated Community: Case and Outbreak Management Framework for Tasmanian Settings, 2022, p. 4.

Hospitalisation



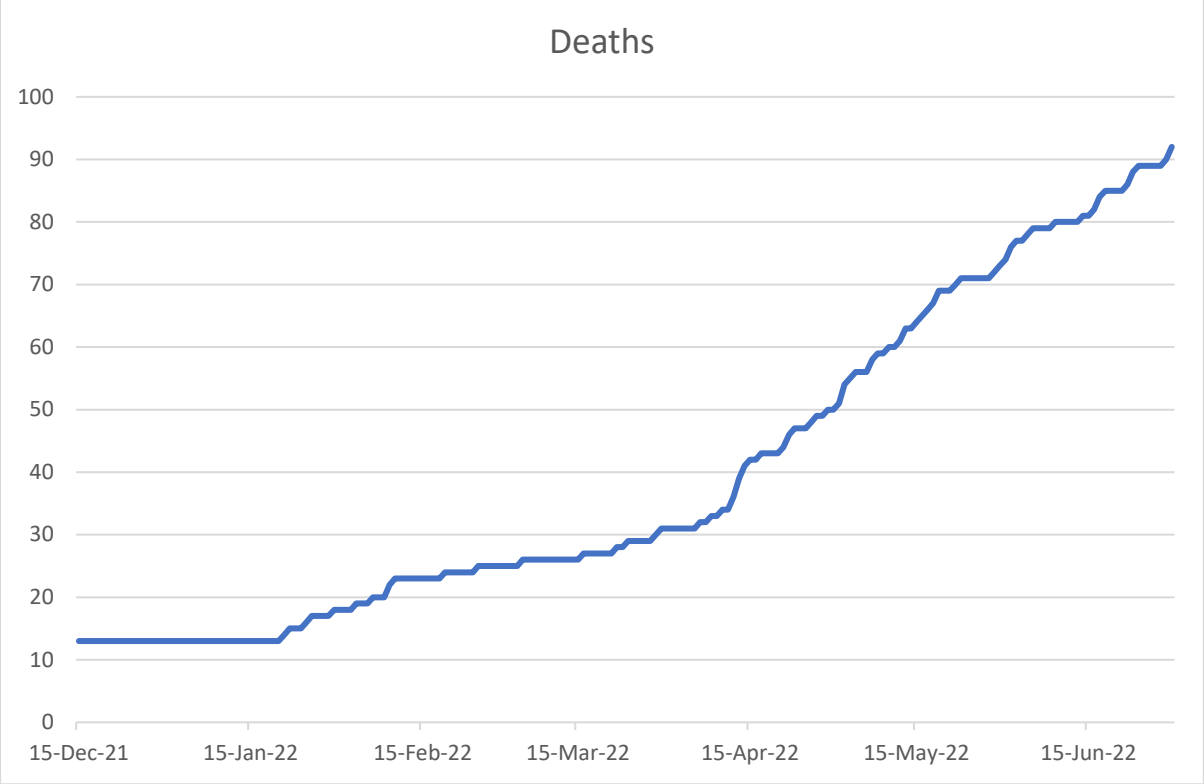
Hospitalisation data is for patients being treated in hospital with COVID-19. This differs from the number of patients that are being treated specifically for COVID-19 symptoms.

ICU Admissions



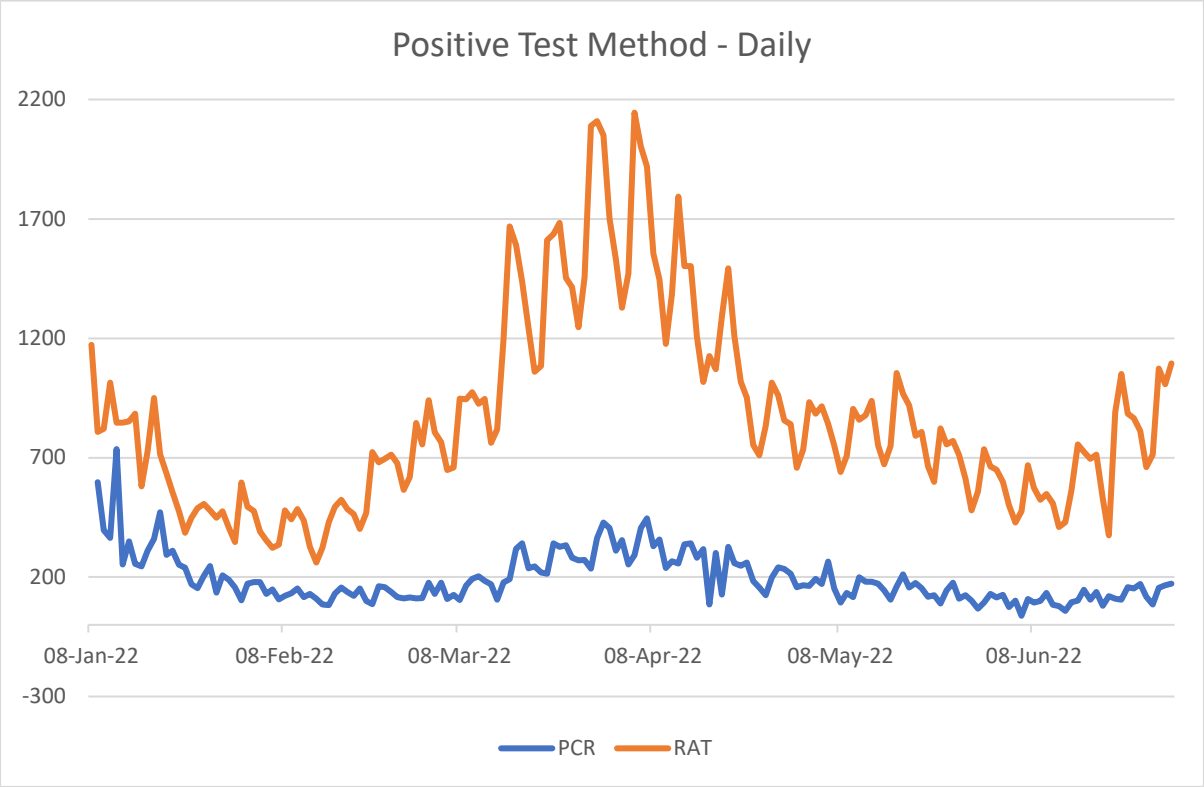
ICU admissions are patients being treated with or for COVID-19.

Deaths



There were 13 deaths from the first wave of COVID-19 in 2020. Deaths reported are those caused by or with COVID-19 as a contributing factor.

Positive Test Method (PCR and RAT)



All tests are PCR until 8 January 2022.

Notes

Data has been taken from the Tasmanian Department of Health Facebook page.[194] The DoH published a daily tile of statistics entitled *Tas COVID-19 Latest Stats*, based on data from the Tasmanian Notifiable Diseases database, from 16 December 2021 – the day after the Tasmanian border re-opened to mainland Australia. Since that time, the data categories presented have changed as the circumstances have altered. The statistics presented are for the 24 hours to 8:00 pm on the day prior to posting.

This Appendix presents a series of graphs relating to vaccination rates, case numbers, hospitalisation, mortality and testing method. The data these graphs are generated from follow as a series of tables relating to case numbers, vaccination rates and case management. The period of time that this appendix covers is from the re-opening of the borders until 30 June 2022, when the DoH ceased publication of the daily tile of statistics.

[194] See https://www.facebook.com/HealthTas

At the time of writing, a Tasmanian statistics webpage[195] continues to be updated on a weekly basis. Weekly statistics are available in COVID-19 Surveillance Reports[196] from March 2022 onwards.

[195] See https://www.health.tas.gov.au/health-topics/coronavirus-covid-19/current-risk-level-and-statistics/weekly-statistics
[196] See https://www.health.tas.gov.au/publications/covid-19-surveillance-report

Appendix 3 – Timeline of the Changes to the Tasmanian COVID-19 Protocols (19 Oct 21 – 1 Mar 23)

Key dates, decisions and instruments under the *Emergency Management Act 2006*, *Public Health Act 1997*[197] and *COVID-19 Disease Emergency (Miscellaneous Provisions) Act 2000*:

Effective Date	Title	Summary	Revoked
20 OCT 21	Section 15 Extension of Emergency Declaration	Extension of public health emergency for a further 12 weeks	12 JAN 22
20 OCT 21	Direction under Section 16 (Management of premises - No. 14)	Update to restrictions on capacity of premises and certain activities, including decreasing the maximum number of persons that can be in the outdoor space of a premises from 1,000 to 500	06 DEC 21
01 NOV 21	Direction under Section 16 (Mass Gatherings - No. 6)	Updated Events Framework due to heightened risk of Delta variant	
03 NOV 21	Direction under section 16 (Vaccination requirements for Certain Workers - No. 8)	Mandates vaccination requirements for NDIS support workers from 21 NOV 21	11 NOV 21
09 NOV 21	Direction under section 16 (Arrival requirements for certain travellers into Tasmania - No. 11)	Allows for seasonal agricultural workers to enter the state under the Pacific Australia Labour Mobility (PALM) Scheme	
11 NOV 21	Direction under section 16 (Vaccination requirements for Certain Workers - No. 9)	Mandates vaccination requirements for in-home and community aged care from 30 NOV 21	26 NOV 21
15 DEC 21	Direction under section 16 (Contact tracing - No. 11)	Update to contact tracing requirements - passengers on cruise service vessels exempted from checking in multiple times in 24-hour period	18 FEB 22
26 NOV 21	Direction under section 16 (Vaccination requirements for Certain Workers - No. 10)	Mandates vaccination requirements for state service employees if they work with, or provide services to, the Department of Health	25 FEB 22
06 DEC 21	Direction under section 16 (Management of premises - No. 15)	Relaxes restrictions on premises to allow dancing	09DEC 21
06 DEC 21	Direction under section 16 (Additional requirements for certain venues - No. 1)	Mandates that patrons entering relevant licenced venues must be vaccinated	14 DEC 21
15 DEC 21	Direction under section 16 (Cruise Chips - No. 1)	Sets out conditions under which cruise ships can operate in Tasmanian waters	14 DEC 21
15 DEC 21	Direction under section 16 (Testing of certain essential travellers - No. 1)	Sets out conditions under which transport, freight and logistics workers may enter Tasmania	
15 DEC 21	Direction under section 16 (Testing of workers at relevant locations - No. 5)	Broadens the definition of a quarantine site to include community case management facility site. Follows	

[197] See Appendix 4 for relevant extracts

Effective Date	Title	Summary	Revoked
		Testing of workers at quarantine sites - No. 4	
15 DEC 21	Direction under section 16 (Cruise Ships - No. 2)	Removes requirements for cruise ships to operate exclusively in Tasmanian waters and to not exceed 99 passengers	14 APR 22
15 DEC 21	Directions in relation to persons arriving in Tasmania *	Update to requirements for persons arriving in Tasmania	
06 DEC 21	Direction under section 16 (Management of premises - No. 16)	Widens the definition of premises to include any place where goods and services are for sale or displayed for sale	
16 DEC 21	Direction under section 16 (Quarantine - No. 6)	Update to quarantine requirements for identified contacts - close and casual contacts defined	01 JAN 22
06 DEC 21	Direction under section 16 (Additional requirements for certain venues - No. 2)	Broadens exemptions for some venues including those hosting private events	26 FEB 22
15 DEC 21	Direction under section 16 (Residential Aged Care Facilities - No. 17)	Face masks mandatory for visitors to aged care facilities	3 JAN 22
21 DEC 21	Direction under section 16 (Arrival requirements for certain travellers into Tasmania - No. 13)	Changes the testing requirements for entry to the state - test within 72 hours of entry	30 DEC 21
21 DEC 21	Direction under section 16 (Mask wearing requirements - No. 1)	Sets out mask wearing requirements	05 MAR 22
15 DEC 21	Direction under section 16 (Arrival requirements for certain travellers into Tasmania - No. 12)	Changes the testing requirements for entry to the state - test within 24 hours of entry	21 DEC 21
15 DEC 21	Direction under section 16 (Isolation - No. 5)	Inserts close contacts into exemption from isolation contact	07 JAN 22
01 JAN 22	Direction under section 16 (Requirements following Rapid Antigen Test - No. 1)	Sets out the requirements following a positive RAT test	06 JAN 22
01 JAN 22	Direction under section 16 (Quarantine - No. 7)	Update to quarantine requirements for identified contacts - RAT tests allowed and no differentiation between vaccinated and unvaccinated persons	14 JAN 22
01 JAN 22	Direction under section 16 (Arrival requirements for certain travellers into Tasmania - No. 14)	Removes test requirements for travellers arriving in the State if they are vaccinated and have not been in an extreme risk area	26 FEB 22
01 JAN 22	Direction under section 16 (Testing of certain essential travellers - No. 2)	Updates conditions under which transport, freight and logistics workers may enter Tasmania to include RAT tests	21 JAN 22
23 DEC 21	Direction under section 16 (Vaccination requirements in relation to Early Childhood Facilities - No. 1)	Mandates vaccination requirements for staff working the child care industry	01 JUL 22
31 DEC 21	Directions in relation to persons arriving in Tasmania *	Update to requirements for persons arriving in Tasmania	

Effective Date	Title	Summary	Revoked
03 JAN 22	Direction under section 16 (Residential Aged Care Facilities - No. 18)	Allows for both RAT and PCR tests to be used, changes test entry requirements from 72 hours to 24	21 JAN 22
07 JAN 22	Direction under section 16 (Isolation - No. 6)	DoH must be notified of a positive RAT test in an approved manner, isolation release criteria relaxed	14 APR 22
11 JAN 22	Extension of emergency declaration	Extension of public health emergency for a further 12 weeks	
14 JAN 22	Direction under section 16 (Quarantine - No. 8)	Update to quarantine requirements for identified contacts - critical worker exemptions defined	28 JAN 22
19 JAN 22	Directions in relation to persons arriving in Tasmania *	Update to requirements for persons arriving in Tasmania	26 FEB 22
21 JAN 22	Direction under section 16 (Residential Aged Care Facilities - No. 19)	Relaxes entry requirements for persons exposed to, but not positive for the virus from 14 to 7 days	01 JUL 22
28 JAN 22	Direction under section 16 (Quarantine - No. 9)	Update to quarantine requirements for identified contacts - critical worker exemptions expanded	26 FEB 22
18 FEB 22	Direction under section 16 (Contact tracing - No. 12)	Relaxes mandated usage of the Check-in Tas app	
26 FEB 22	Directions in relation to persons arriving in Tasmania *	Update to requirements for persons arriving in Tasmania	31 MAY 22
26 FEB 22	Direction under section 16 (Quarantine - No. 10)	Update to quarantine requirements for contacts - 7 days after diagnosis, not last contact	14 APR 22
25 FEB 22	Direction under section 16 (Vaccination requirements for Certain Workers - No. 11)	Shifts the record required to be kept by a supervisor from being vaccinated to reason for not being vaccinated	23 APR 22
02 MAR 22	Direction under section 16 (Mass gatherings - No. 7)	Allows the Director of Public Health to exercise discretion in increasing the number of participants allowed at a gathering	10 MAR 22
01 APR 22	Direction under section 16 (Additional vaccination requirements for workers in certain settings - No. 1)	Boosters required for residential aged care staff and NDIS providers	11 MAR 22
05 MAR 22	Direction under section 16 (Mask wearing requirements - No. 2)	Relaxes mask requirements in a variety of settings	11 MAR 22
10 MAR 22	Direction under section 16 (Mass gatherings - No. 8)	Removes the discretion of the Director of Public Health to increase the number of participants allowed at a gathering	
01 APR 22	Direction under section 16 (Additional vaccination requirements for workers in certain settings - No. 2)	Broadens the definition of a vaccinated person in line with ATAGI recommendations	29 MAR 22
11 MAR 22	Direction under section 16 (Mask wearing in certain locations - No. 1)	Outlines circumstances in which a mask is required	06 MAY 22
23 APR 22	Direction under section 16 (Additional vaccination requirements for workers in certain settings - No. 3)	Update for residential aged care facility worker requirements	
04 APR 22	Section 15 Extension of Emergency Declaration	Extension of public health emergency for a further 12 weeks	
30 MAR 22	Notice under sections 11 and 17 **	Authorisation to take actions electronically (local governments)	

Effective Date	Title	Summary	Revoked
30 MAR 22	Notice under sections 11, 18 and 19 **	Authorisation for council and planning authority meetings not to be held in person, and special provisions for public exhibition of documents	
14 APR 22	Direction under section 16 (Quarantine - No. 11)	Update to quarantine requirements for contacts	
14 APR 22	Direction under section 16 (Isolation - No. 7)		01 JUL 22
14 APR 22	Direction under section 16 (Cruise Ships - No. 3)		01 JUN 22
23 APR 22	Direction under section 16 (Vaccination requirements for Certain Workers - No. 12)		01 JUL 22
02 MAY 22	Direction under section 16 (Management of Close Contacts - No. 1)		
06 MAY 22	Direction under section 16 (Mask wearing in certain locations - No. 2)		
21 MAY 22	Direction under section 16 (Management of Events - No. 1)		01 JUL 22
21 MAY 22	Direction under section 16 (Workplace COVID Plan - No. 3)		01 JUL 22
26 MAY 22	Direction under section 16 (Airports and aircrafts - No. 3)	Removes requirement to wear a mask while outdoors at airports	01 JUL 22
28 MAY 22	Section 15 extension of emergency declaration	Extension of the public health emergency until 30 June 2022	
18 JUN 22	Direction under section 16 (Aircrafts - No. 1)	Requirements for wearing face masks while on aircrafts	01 JUL 22
25 JUN 22	Direction under section 16 (Mask wearing in certain locations - No. 3)	Update to mask requirements	30 JUN 22
01 JUL 22	Guidelines under section 184 - for COVID-19 safe events	Legal requirements to manage COVID-19 safety at large events and music events	12 OCT 22
01 JUL 22	Order under section 53 (Management of cases)	Order to limit the spread of COVID-19 as a notifiable disease (following the end of the public health emergency)	09 SEP 22
01 JUL 22	Order under section 53 (Management of close contacts)	Requirements for close contacts of COVID-19 cases - management as a notifiable Disease	20 JUL 22
01 JUL 22	Order under section 53 (Masks on aircraft)	Requirements for wearing masks on board aircraft	09 SEP 22
20 JUL 22	Order under section 53 (Management of close contacts No.2)	Update to requirements for close contacts of COVID-19 cases	14 OCT 22
09 SEP 22	Order under section 53 (Management of Cases No.2)	Update to requirements for close contacts of COVID-19 cases	14 OCT 22
15 FEB 23	COVID-19 Disease Emergency (Miscellaneous Provisions) (Emergency Cessation Day) Notice 2023	Declaration of the emergency cessation day as 30 April 2023	

* Directions made under the *Emergency Management Act 2006* by the Deputy State Controller or Acting Assistant Commissioner of Police

** Notices made under the *COVID-19 Disease Emergency (Miscellaneous Provisions) Act 2020* by the Premier

All other directions made under the *Public Health Act 1997* by the Director or Deputy Director of Public Health.

Appendix 4 - Relevant extracts from *Public Health Act 1997* (as at 19 July 2022)[198]

15. Duration of emergency declaration

(1) An emergency declaration comes into force on the date on which it is made and continues, unless it is sooner revoked under subsection (4) , for –

(a) the period, not exceeding 7 days, or, in relation to the COVID-19 disease, not exceeding 12 weeks, specified in the declaration; or

(b) any further period as provided under subsection (2) .

(2) The Director, by any means the Director considers appropriate, may declare that the period during which an emergency declaration is in force is extended by a period, of not more than 7 days, or, in relation to the COVID-19 disease, not exceeding 12 weeks, specified in the declaration under this subsection, if the Director is satisfied that the situation requires it.

(3) The Director may declare as many extensions under subsection (2) as he or she thinks the situation requires.

(4) The Director must revoke an emergency declaration as soon as practicable after he or she is satisfied that the situation no longer requires the emergency declaration to be in force.

(5) The Director is to notify the State Controller, within the meaning of the Emergency Management Act 2006 , if –

(a) the period of an emergency declaration is extended under subsection (2) ; or

(b) an emergency declaration is revoked under subsection (4) .

16. Directions of Director

(1) While an emergency declaration is in force, the Director may take any action or give any directions to –

(a) manage a threat to public health or a likely threat to public health; or

(b) quarantine or isolate persons in any area; or

(c) evacuate any persons from any area; or

(d) prevent or permit access to any area; or

(e) control the movement of any vehicle.

(2) The Director may give any one or more of the following directions while an emergency declaration is in force:

(a) that any specified person undergo –

(i) a clinical assessment specified in the direction; or

[198] See *Public Health Act 1997*, https://www.legislation.tas.gov.au/view/html/inforce/current/act-1997-086#GS184@EN [Accessed 19 July 2022]

(ii) a clinical assessment, specified in the direction, conducted by a person, or a member of a class of persons, specified in the direction;

(b) that any specified person move to, or stay in, a specified area;

(c) that any substance or thing be seized;

(d) that any substance or thing be destroyed;

(e) that any other action be taken the Director considers appropriate.

(2A) A direction given under this section may specify the manner in which the direction is to be complied with.

(3) A person must comply with a direction of the Director given under this section.

Penalty: Fine not exceeding 100 penalty units or imprisonment for a term not exceeding 6 months, or both.

(4) A person who carries out a clinical assessment for the purpose of a direction given under subsection (2)(a) must provide to the Director a written report in relation to the assessment as soon as practicable after the assessment is completed.

Penalty: Fine not exceeding 25 penalty units.

(5) A direction given under this section ceases to be in force when the requirements of the direction have been satisfied.

(6) The Director may revoke a direction given under this section.

(7) The Director must revoke under subsection (6) a direction as soon as practicable after he or she is satisfied that it is no longer necessary, for the purposes of managing a threat to public health or a likely threat to public health, for the direction to remain in force.

(8) If a direction given under this section, or an order under section 16C(1)(e) , requires a person to be quarantined or isolated or to stay in a specified area, the Director, at the required intervals, must –

(a) consider whether it is necessary for the person to continue to be subject to the direction or order; and

(b) if necessary in order to determine whether it is necessary for the person to continue to be subject to the direction or order, arrange for the clinical assessment of the person.

(9) The required intervals are intervals that the Director considers reasonable, but not less than once in every successive period of 7 days.

53. Orders to prevent spread of disease

(1) The Director, by order, may require any person or class of person, Agency or public authority to take any specified action to stop, limit or prevent the spread of any notifiable disease to humans.

(2) An order is to be carried out in accordance with any relevant guidelines.

(3) An Agency, a public authority or a person must comply with an order.

Penalty: Fine not exceeding 100 penalty units.

184. Guidelines

(1) The Director may issue guidelines relating to any matter under this Act and any matter in respect of which a regulation may be made.

(1A) The power of the Director under subsection (1) to issue guidelines is not limited to the power to make guidelines for the purposes of a provision that expressly refers to guidelines.

(2) The guidelines may adopt or incorporate the whole or part of any standard, rule, code, specification or guidelines, with or without modification, issued, prescribed, made or published by any person or body before or after the guidelines take effect.

(3) The Director may amend or revoke any guidelines.

(4) The Director, by public notice, must notify –

(a) the issue, amendment or revocation of any guidelines; and

(b) the subject matter of the guidelines; and

(c) the place at which a copy of the guidelines may be obtained; and

(d) the cost, if any, of obtaining the guidelines.

(5) Any Agency, public authority or person must comply with the guidelines.

Penalty: Fine not exceeding 50 penalty units.

(6) Guidelines are not statutory rules for the purpose of the Rules Publication Act 1953.

Attachment A - Reconnecting Tasmania

Tasmanian Government (http://www.tas.gov.au)

Search site Search

Peter Gutwein
Premier of Tasmania

Reconnecting Tasmania

1. Coming to Tasmania

I'M COMING TO TASMANIA. WHAT DO I NEED TO DO?

Travellers to Tasmania, including returning residents, need to provide their contact and travel details before entering the State, to help manage the risk of COVID-19 at Tasmania's borders.

All travellers must register through the Tas e-Travel system (https://register.tasetravel.tas.gov.au) and you will be required to scan your QR code on arrival in Tasmania. You must have evidence of your vaccination certificate and – if required - a negative result from your COVID-19 PCR pre-departure test.

VACCINATED TRAVELLER: You need to be able to provide proof of vaccination status

Arriving from a low-risk area: You do not need to be tested for COVID-19 or quarantine and just need to register your travel via the Tas E-Travel website.

Arriving from a high-risk area: You are required to return a negative COVID-19 PCR test within 72 hours before departure to Tasmania.

If you are Tasmanian and have been out of the state for less than 7 days, you do not need to receive a test prior to entering the State, but you are required to be tested within 24 hours of returning. You do not need to quarantine while you wait for the test result unless you have symptoms. If a positive result is returned you will be contacted by Public Health authorities.

If you cannot provide evidence of your vaccination status or negative test result on arrival, you will be required to quarantine for up to 14 days or until you can provide evidence of vaccination or a negative COVID-19 PCR test on or after day five.

UNVACCINATED TRAVELLER:

You must apply for approval to enter Tasmania regardless of where you have been before arrival. Visit www.coronavirus.tas.gov.au (http://www.coronavirus.tas.gov.au) for information on how to apply to enter the State.

If you cannot provide evidence of your vaccination status, you will be required to quarantine for up to 14 days or until you can provide evidence of vaccination.

WHAT ARE HIGH RISK AND LOW RISK AREAS? Areas within Australia and overseas are declared extreme, high and low-risk based on the number of COVID-19 cases in the area, the level of community transmission and/or the variant of COVID-19 in the area.

I DON'T HAVE A SMART PHONE. HOW DO I APPLY TO ENTER TASMANIA, PROVIDE PROOF OF VACCINATION OR MY NEGATIVE TEST RESULT?

Travellers will be able to complete a manual form on arrival and will also be required to demonstrate the necessary evidence. This information is available on the COVID-19 website, and can also be obtain by calling the Public Health Hotline on 1800 671 738

People without smart phones are able to present a hard copy of their COVID test result present on arrival.

Private pathology clinics in other jurisdictions will conduct pre-travel COVID-19 tests and will generally provide a COVID-19 testing and results certificate to the traveller.

If you can't access your COVID-19 vaccination certificate online, you can ask your GP to print your immunisation history statement.

INTERNATIONAL TRAVEL – EXTREME-RISK AREAS

VACCINATED: You need to be able to provide proof of vaccination status

If vaccinated you will be required to produce a negative COVID-19 test 72 hours prior to travel then quarantine for seven days in a suitable premises, which could be home-based, on arrival. You will be tested on day 1, 5 or 6 and on day 13.

UNVACCINATED:

You will be required to produce a negative COVID-19 test 72 hours prior to travel, then quarantine in a designated facility for 14 days at your place of arrival (which would not be in Tasmania) with testing in place on day 1-5 or 6-13.

The only international exceptions to the extreme risk classification are Singapore, Samoa, Vanuatu, Tonga and the South Island of New Zealand which fall under the same category as a high risk jurisdiction where requirements are to be fully vaccinated and produce a COVID-19 negative test 72 hours prior to travel. This also applies to Antarctica only for international expeditioners from Hobart to Christchurch who quarantine prior to their departure.

2. Vaccination Status & Testing

WHAT IS THE DEFINITION OF A VACCINATED TRAVELLER?You are considered to be fully vaccinated if:

- You have received two doses of a Therapeutic Goods Administration (TGA) approved COVID-19 vaccine and;
- At least 14 days have passed since the final dose of vaccine in a course of immunisation. Mixed doses count towards being fully vaccinated as long as all vaccines are approved or recognised by the TGA. If you have had two doses of an approved TGA vaccine but not a booster dose, you are still considered fully vaccinated.

You are also considered to be fully vaccinated, if you have acceptable proof you cannot be vaccinated for medical reasons or you under the age of 12.

I HAVE TO GET A TEST BEFORE ARRIVING IN TASMANIA – CAN I GET A RAPID ANTIGEN TEST?

No. A test must be a Polymerase Chain Reaction (PCR) test, which involves nasal and throat swabs. This type of test is highly accurate and considered the gold standard for detecting an active infection of COVID-19. You are exempt from the testing requirement if:

- You are under five years of age; or
- You have a current medical exemption from requiring undertaking a PCR COVID-19 test; or
- You are a transport, freight and logistics worker or international aircrew complying with the testing regime that applies to these workers.

DO MY CHILDREN NEED TO BE TESTED FOR ENTRY?

Under 5 years - you are exempt from the testing requirement if you are under five years of age.

Over 5 years – you are required to have a PCR COVID-19 test

I'M A FIFO WORKER IN A HIGH-RISK AREA. HOW DO I GET A COVID-19 TEST 72 HOURS IN ADVANCE WHEN I DO NOT HAVE ACCESS TO A TESTING SITE PRIOR TO DEPARTURE?

If you cannot provide evidence of your negative test result on arrival, you will be required to quarantine until you can provide evidence of a negative COVID-19 PCR test on or after day five. If a COVID-19 test is taken after arrival, you will be advised to stay home until you get a negative test result. You need to upload the result to the Tas e-Travel system (https://register.tasetravel.tas.gov.au).

MY DAUGHTER HAS JUST TURNED 12 AND HAS ONLY HAD ONE DOSE OF VACCINE. CAN SHE STILL ENTER TASMANIA?

You are considered a vaccinated traveller if you are under the age of 12 years and two months.

3. COVID-19 Case Management

I'VE VISITED A LOW-EXPOSURE SITE. WHAT DO I DO?

If you have visited a low-risk exposure site, you must monitor yourself for symptoms. You must get tested if you develop symptoms, even if they are mild. You are not required to quarantine.

I'VE BEEN TOLD I'M A CASUAL CONTACT. WHAT DOES THAT MEAN AND WHAT DO I NEED TO DO?

A casual contact is someone who has been in the same place as a confirmed case during their infectious period but does not meet the requirements for a close contact.

You must get tested between days 3 and 5.

You are not required to quarantine but you must wear a mask for 14 days from exposure to the COVID-19 case, when you can't physically distance from others.

If you develop symptoms before or after the required test, you should isolate and have a test immediately.

The requirements for casual contacts are the same for vaccinated or unvaccinated people.

I AM A CLOSE CONTACT OF SOMEONE WHO HAS TESTED POSITIVE. WHAT DO I NEED TO DO?

A close contact is someone who has had face-to-face contact with a confirmed COVID-19 case during their infectious period, creating a reasonable risk of transmission.

VACCINATED:

You must quarantine immediately and have a COVID-19 test. You must get tested again on day 5 or 6. If your test results are negative, you will be released from quarantine after 7 days. You must also be tested again on day 12 or 13. If you develop symptoms between the required tests, you should isolate and have a test immediately.

For days 8-14, you must:

- maintain physical distancing (1.5m) from other people
- wear mask where you can't keep your distance
- avoid non-essential activities
- not enter any high-risk settings, except for essential reasons.
- avoid contact with vulnerable people (eg elderly, pregnant, people with chronic health conditions).

UNVACCINATED:

You must quarantine immediately for 14 days from exposure to the COVID-19 case.

You must have a minimum of two COVID-19 tests. You will need to be tested immediately at the start of your quarantine, and again on day 12–13. If your test results are all negative, you will be released from quarantine after 14 days.

***Example:** If a case was one of eight people in a group who dined at a restaurant, the other people at the table would likely be close contacts. People at other tables, which had appropriate physical distance between tables, may be casual contacts. If the case has paid the bill at the counter and the person serving them wore a mask, that staff member would likely also be a casual contact.*

SOMEONE I LIVE WITH HAS TESTED POSITIVE. DO I HAVE TO QUARANTINE?

VACCINATED:

People who are **vaccinated** and in the same household as a close contact are not required to quarantine but should limit further exposure to the contact and avoid high-risk settings for 14 days. If you show symptoms, you should get tested.

UNVACCINATED:

People who are **unvaccinated** and in the same household as a close contact must also follow the quarantine requirements.

I'M A BUSINESS OWNER AND A COVID-19 POSITIVE CASE VISITED MY PREMISES. DO I HAVE TO SHUT?

If Public Health notifies you that a confirmed COVID-19 case is linked to your workplace, they will work with you to identify what you need to do to protect other people and continue normal activities within your business as soon and as safely as possible.

The initial steps Public Health may ask you to take are to:

1. **Review and activate your COVID-19 Safety Plan** (https://www.coronavirus.tas.gov.au/business-and-employees/covid-19-safe-workplaces-framework) **and**/or Outbreak Management Plan (https://www.coronavirus.tas.gov.au/business-and-employees/covid-19-case-and-outbreak-management/case-and-outbreak-management-plans).
2. **Instruct people in your setting to wear face masks.**
3. **Support Public Health contact tracing** by collecting and providing any additional staffing and visitor information that has not been collected via the Check in TAS app. This may include staffing rosters, manual check in/visitor log sheets or spreadsheets.
4. **Advise any contacts you may identify to quarantine at home** and follow the quarantine instructions (https://www.coronavirus.tas.gov.au/travellers-and-visitors/quarantine-isolation-and-stay-at-home-directions/quarantine).
5. **Liaise with Public Health to coordinate appropriate communications** about the case or outbreak to other people who are associated with your workplace, such as staff, visitors, contractors and customers.
6. **Organise cleaning and disinfection** of frequently touched areas, as outlined in your COVID-19 Safety Plan.
7. **Continue to encourage COVID-safe behaviours** including physical distancing, hand hygiene, advising staff and visitors to stay at home if unwell, and covering coughs and sneezes.
8. Importantly, if you have any questions, contact the public health hotline.

4. Vaccinations and Mandates

CAN I GET A BOOSTER SHOT?

All people aged 18 years and older are eligible for a booster vaccine from five months after the second dose of their primary course of COVID-19 vaccination.

The Pfizer vaccine has been approved for booster doses and is available at GP clinics and community vaccination clinics, as well as participating pharmacies.

MY CHILD IS 5 YEARS OLD. CAN THEY NOW GET VACCINATED?

The Pfizer vaccine has been provisionally approved for use in Australia for children aged 5 to 11 by the Therapeutic Goods Administration (TGA). The TGA has approved a special paediatric dose of the vaccine for children aged 5 to 11 that is one-third of the size approved for people aged 12 and over. Children will receive two doses, eight weeks apart. The choice to vaccinate children is strongly recommended but voluntary and will not be mandated.

I WORK IN THE EARLY CHILDHOOD EDUCATION AND CARE (ECEC) SECTOR. AM I REQUIRED TO BE VACCINATED?

Yes. You will be required to be vaccinated against COVID-19 by early next year. ECEC services include long day care, family day care, outside school hours care, occasional care and in-home care. Anyone working in the ECEC sector will need to have at least their first dose of a COVID-19 vaccine by 8 January to be able to work in the sector.

HAS MY WORKPLACE MANDATED VACCINATION?

Many workplaces now have mandatory vaccination directives in place. To see if you are required to be vaccinated, visit www.coronavirus.tas.gov.au (http://www.coronavirus.tas.gov.au).

I'M NOT VACCINATED. DOES THIS PROHIBIT ME FROM ENTERING CERTAIN PREMISES?

Unvaccinated patrons cannot enter pubs, nightclubs, bars and event (such as music festivals) where people are freely mixing and moving, including drinking standing up.

5. High-Risk Areas

WHAT AREAS ARE CONSIDERED HIGH-RISK?

The following areas are currently considered high-risk *as at 15 December 2021

NSW/ACT

Camden LGA

Campbelltown LGA

City of Canterbury-Bankstown

City of Liverpool

Cumberland City Council

Fairfield LGA

Woollondilly Shire LGA

Australian Capital Territory (entire territory)

VIC

City of Banyule

City of Bayside

City of Boroondara

City of Brimbank

City of Casey

City of Darebin

City of Frankston

City of Glan Eira

City of Greater Dandenong

City of Greater Geelong

City of Hobsons Bay

City of Hume

City of Kingston

City of Knox

City of Manningham

City of Maribyrnong

City of Melbourne

City of Melton

City of Monash

City of Moonee Valley

City of Moreland

City of Port Phillip

City of Stonnington

City of Whittlesea

City of Wyndham

City of Yarra

Shire of Cardinia

Shire of Mornington Peninsula

Shire of Yarra Ranges

Mask-Wearing

DO I NEED TO WEAR A MASK?

The wearing of masks are recommended where you cannot physically distance in indoor spaces. There are situations when wearing a mask is mandatory in Tasmania. The mask must cover your mouth and nose.

Airports & Spirit of Tasmania

Face masks must be worn by everyone aged 12 years and older who:

- Is in an indoor area of the airport that is open to passengers or a member of the public;
- Is boarding a commercial domestic aircraft, including when on the tarmac;
- Is on board a commercial domestic aircraft in Tasmanian airspace;
- In an indoor area of the Spirit of Tasmania terminal that is open to passengers or other members of the public;
- In a vehicle that is at the Spirit of Tasmania terminal, on board the vessel, or while proceeding through the Biosecurity screening and other check points;
- In a communal area on board the Spirit of Tasmania vessel while the vessel is at the terminal or in Tasmanian waters; and
- In other situations as required by the Spirit of Tasmania according to its conditions of travel or workplace policies.

Healthcare & Aged Care

- a public hospital;
- a private hospital;
- a day-procedure facility; and
- all persons visiting a residential aged care facility, except for the residents, must wear a surgical face mask while they remain on the premises (this requirement includes children under the age of 12 years, where practicable).

Events

Masks must be worn at any event that has more than 1000 people in attendance, regardless of whether the event is seated or unseated, indoors or outdoors. This includes while queuing, entering or exiting from the event.

Coronavirus Support

PUBLIC HEALTH HOTLINE:1800 671 738

BUSINESS SUPPORT: Business support | Coronavirus disease (COVID-19) (https://www.coronavirus.tas.gov.au/business-and-employees/business-support)

CORONAVIRUS TESTING SITES: Testing for COVID-19 | Coronavirus disease (COVID-19) (https://www.coronavirus.tas.gov.au/keeping-yourself-safe/testing-for-covid-19)

Latest releases

Supporting our farmers on the Harvest Trail (https://www.premier.tas.gov.au/releases/supporting_our_farmers_on_the_harvest_trail)

Skills for economic recovery (https://www.premier.tas.gov.au/releases/skills_for_economic_recovery)

Further support for Tasmania's screen industry during COVID-19 (https://www.premier.tas.gov.au/releases/putting_downward_pressure_on_fuel_prices_in_tasmania2)

Young Tasmanian Aboriginal Leaders Scholarships (https://www.premier.tas.gov.au/releases/young_tasmanian_aboriginal_leaders_scholarships)

Supporting our primary industries (https://www.premier.tas.gov.au/releases/supporting_our_primary_industries)

The page has been produced by The Department of Premier and Cabinet.

You are directed to information on how your personal information is protected (https://www.tas.gov.au/stds/pip.htm). You are directed to a disclaimer and copyright notice (https://www.tas.gov.au/stds/codi.htm) governing the information provided.

(https://www.tas.gov.au)

Australian Government

National Plan to transition Australia's National COVID-19 Response

National Cabinet agreed to a plan to transition Australia's National COVID-19 Response from its current pre vaccination settings, focussing on continued suppression of community transmission, to post vaccination settings focussed on prevention of serious illness, hospitalisation and fatality, and the public health management of other infectious diseases

Phases triggered in a jurisdiction when the average vaccination rates across the nation have reached the threshold and that rate is achieved in a jurisdiction expressed as a percentage of the eligible population (16+), based on the scientific modelling conducted for the COVID-19 Risk Analysis and Response Task Force

~70% vaccination (2 doses)

≥80% vaccination (2 doses)

A. Current Phase: Vaccinate, Prepare and Pilot*

Continue to strongly suppress the virus for the purpose of minimising community transmission

Measures may include:

- Accelerate vaccination rates;
- Close international borders to keep COVID-19 out;
- Early, stringent and short lockdowns if outbreaks occur;
- Minimise cases in the community through effective test, trace and isolate capabilities;
- Implement the national vaccination plan to offer every Australian an opportunity to be vaccinated with the necessary doses of the relevant vaccine as soon as possible;
- Inbound passenger caps temporarily reduced
- Domestic travel restrictions directly proportionate to lockdown requirements;
- Commonwealth to facilitate increased commercial flights to increase international repatriations to Darwin for quarantine at the Centre for National Resilience in Howard Springs;
- International Freight Assistance Mechanism extended;
- Trial and pilot the introduction of alternative quarantine options, including home quarantine for returning vaccinated travellers;
- Expand commercial trials for limited entry of student and economic visa holders;
- Recognise and adopt the existing digital Medicare Vaccination Certificate (automatically generated for every vaccination registered on AIR);
- Establish digital vaccination authentication at international borders;
- Prepare vaccine booster programme; and
- Undertake a further review of the national hotel quarantine network.

B. Vaccination Transition Phase

Seek to minimise serious illness, hospitalisation and fatality as a result of COVID-19 with low level restrictions

Measures may include:

- Maintain high vaccination rates, encouraging uptake through incentives and other measures;
- Minimise cases in the community through ongoing low-level restrictions and effective track and trace;
- Lockdowns less likely but possible;
- International border caps and low-level international arrivals, with safe and proportionate quarantine to minimise the risk of COVID entering;
- Ease restrictions on vaccinated residents (TBD);
- Restore inbound passenger caps at previous levels for unvaccinated returning travellers and larger caps for vaccinated returning travellers;
- Allow capped entry of student and economic visa holders subject to quarantine arrangements and availability;
- Introduce new reduced quarantine arrangements for vaccinated residents; and
- Prepare/implement vaccine booster programme (depending on timing).

C. Vaccination Consolidation Phase

Seek to minimise serious illness, hospitalisations and fatalities as a result of COVID-19 with baseline restrictions

Measures may include:

- Maximise vaccination coverage;
- Minimum ongoing baseline restrictions, adjusted to minimise cases without lockdowns;
- Highly targeted lockdowns only;
- Continue vaccine booster programme;
- Exempt vaccinated residents from all domestic restrictions;
- Abolish caps on returning vaccinated Australians;
- Allow increased capped entry of student, economic, and humanitarian visa holders;
- Lift all restrictions on outbound travel for vaccinated Australians; and
- Extend travel bubble for unrestricted travel to new candidate countries (Singapore, Pacific);
- Gradual reopening of inward and outward international travel, with safe countries and proportionate quarantine and reduced requirements for fully vaccinated inbound travellers.

D. Final Post-Vaccination Phase

Manage COVID-19 consistent with public health management of other infectious diseases

Measures may include:

- Open international borders;
- Quarantine for high-risk inbound travel;
- Minimise cases in the community without ongoing restrictions or lockdowns;
- Live with COVID-19: management consistent with influenza or other infectious diseases;
- Boosters as necessary;
- Allow uncapped inbound arrivals for all vaccinated persons, without quarantine; and
- Allow uncapped arrivals of non-vaccinated travellers subject to pre-flight and on arrival testing.

**No jurisdiction required to increase restrictions beyond current settings*
The Plan is based on the current situation and is subject to change if required
The COVID-19 Risk Analysis and Response Taskforce's report is available at: pmc.gov.au.

Modelling of hospital and intensive care unit (ICU) requirements for Tasmania

Aims: to understand the health system surge requirements for Tasmania, in the event of a COVID-19 epidemic, once restrictions are lifted.

Methods: We used a deterministic SEIR mathematical model of COVID-19 based on a published and peer-reviewed model, updated for the age specific population structure of Tasmania, hospital capacity of Tasmania and specific Tasmanian targets for vaccination. The COVID-19 model parameters reflect the Delta variant, including R0 of 6 and an incubation period of 5 days. The model incorporates age-specific vaccination and vaccine protection at current rates of uptake (based on data provided from Tasmania). Vaccine effectiveness against Delta is assumed to be 31% following one dose for both vaccines, and 88% and 67% for Pfizer and AZ respectively after two doses. The vaccine effectiveness against hospitalisation, ICU and death is assumed to be >90% for both vaccines. Assumptions for face masks effectiveness were taken from a published, peer reviewed study of mask effectiveness during the Victorian second wave. The implementation of mandatory masks use has been estimated to be 28% (22-33%) effective in reducing transmissions while 70% were wearing masks. If mask coverage (70%) * mask effectiveness is 28%, then masks are estimated to be 40% effective.

The eligible population for vaccination in Tasmania is considered to be people 12 years and older. The vaccination rate was obtained from the publicly available data on first and second dose coverage over time in Tasmania. We modelled the vaccine roll out based on data provided, which expected 90% of the 16+ age group to be fully vaccinated by December first 2021, and 90% of the age group 12-15 having a first dose by middle/late December and 90% fully vaccinated by 17 of January 2022. The gap between first and second dose is considered to be 6 weeks.

Data from NSW was used for some COVID estimates, given Tasmania has no COVID-19 cases currently. Hospitalization, ICU and deaths rates were taken from NSW data and assumed to be 12% hospitalisation rate and 2% ICU admission overall, however Table 1 shows age-specific rates. Due to small numbers in NSW, the proportion of cases requiring ICU in unvaccinated children 0-11 was estimated from a large study in the US. Age-specific deaths rates were calculated using age-specific case incidence data from NSW and adjusted for vaccination rates by age groups, with 90% protection against these outcomes for fully vaccinated people. Median length of hospital stay and ICU stay was taken from a systematic review, which estimated a mean length of stay in ICU of 7 days. This is an optimistic scenario, based on reports from NSW that intubated patients have a

considerably longer length of stay. The expected length of stay in Tasmania can be determined with discussion.

The contact matrix used is the one estimated for New Zealand rather than the average for Australia, to better reflect the lower population density in Tasmania. The model incorporates contacts tracing, testing and isolation of symptomatic people, while we model the necessity of masks and reduction in movements or mixing people.

We provide modelling of the requirements for ICU and hospital care for Tasmania under different vaccination scenarios (80-90%), different epidemic scenarios and different strategies for opening borders, to assist with planning for surge capacity and understanding the health system impact of policy decisions.

Initial conditions: The outbreak starts on December 1, and model runs from December 1, 2021, for 200 days, until June 2022. We start with 90% of the population 16 years old and over being fully vaccinated, while during the evolution of the outbreak, 90% coverage in 12-15 year olds is reached by mid January. We started with 10 initial infected cases at day 1 (December first), 2 symptomatic and 8 latent and untraced.

Scenario 1: No restrictions, varying contact tracing rates.

Scenario 2: Mandatory masks for people aged 10+, varying contact tracing rates.

Model description

We use a deterministic compartmental model for disease transmission, built using Matlab 2020. It is an expanded SEIR model based on a system of ordinary differential equations. The differential equations move the population through disease epidemiological stages and response stages. Once infected, the epidemiological stages in which people move through are being susceptible not vaccinated (S), vaccinated with one dose (V1) or two doses (V2), latent not infectious yet (E and Ev for vaccinated), latent infectious undiagnosed (E^u and E^{uv} for vaccinated), symptomatic infectious stages for undiagnosed (I1,I11 and I1v, I11v for vaccinated, where I1 and I1v last 1 day and is the first symptomatic day where an infectious person spreads more, while I11 and I11v represent the following 6 days of symptomatic period less infectious) and diagnosed (I2,I22 and I2v and I22v for vaccinated), recovered (R) or death (D), and public health response stages, as latent infectious diagnosed (E^t and E^{tv} for vaccinated) or isolated (Q and Qv for vaccinated), cases hospitalized (H) and requiring intensive care unit (ICU). We have two compartments for asymptomatic people who never

develop symptoms, (A1 and A2). We assume they can infect others - A1 represents the peak of their infectiousness and A2 the 6 following days of gradually decreasing infectivity (A1v and A2v for vaccinated). Finally, the model has a compartment for uninfected contacts traced (C), which will stay home quarantine for 12 days before moving back to the susceptible compartment. Vaccinated people with one dose have 31% reduction in risk of infection, while people fully vaccinated have 88% (Pfizer) or 67% (AZ) reduction in risk of infection per contact, however both vaccine recipients once fully vaccinated have 90% reduction in hospitalization, ICU requirement and risk of death compared to no vaccinated people. Each of those compartments are age-specific (i) for 16 age groups, 5 years wide 0-74 years old and a 75+ last age group.

Table 1: Data/parameters used

Symbol	Definition	Value
$R0$	Basic reproductive number	6
θ	Percentage of symptomatic people isolated	90%
ρ	Percentages of contacts traced and home quarantined	80%-50%
q_1	Duration of quarantine for contacts traced isolation for symptomatic	12
d_1	Latent duration not infectious	3.2 days
d_2	Pre symptomatic infectious duration	2 days
d_3	Symptomatic infectious duration	7 days
v_1	Vaccine effectiveness against infection following dose 1	31%
v_2	Vaccine effectiveness against infection following dose 2	88% Pfizer and 67% AZ (People over 60 are considered to have had mostly AZ)
N	Total population	542,000
g	Asymptomatic	35%
μ	Age-specific case fatality rate	0-9 0% 10-29 0.02% 30-49 0.08% 50-59 0.24% 60-69 1% 70+ 9.14%
μv	Age-specific case fatality rate for vaccinated people	90% reduction from **μ**
ICU	Hospitalization rates	0-4 4% 5-9 2% 10-19 3% 20-29 8% 30-49 12% 50-59 19% 60-69 26%

		70+ 50%
ICU	ICU rates	0-9 0.009% 10-19 0.0046% 20-49 1% 50-59 4% 60-69 7% 70+ 10%
HV and ICUV	Hospitalizations and ICU for vaccinated people	90% reduction of rates above
dh	Duration in hospital	5 days
dicu	Duration in ICU	7 days
ICU maximum capacity		114 beds
m	Masks effectiveness in infection reduction	20% (considered to be wear only indoor)
mr	Movement restriction	Varied from 0, 10, 30 and 60%.
adr	Asymptomatic detection rate	Those results are plotted for worse case of 0%

Differential equations

$$dS_i/dt = -\lambda * S_i - \rho * \lambda 2 * S_i + C_i/q_1 - doses$$

$$dE_i/dt = \lambda * S_i + (1 - v1) * \lambda * V1_i - E_i/d_0$$
$$dEv_i/dt = (1 - v2) * \lambda * V2_i - Ev_i/d_0$$

$$dE_i^u/dt = (1 - \rho) * E_i/d_0 - E_i^u/d_1$$
$$dE_i^t/dt = \rho * E_i/d_0 - E_i^t/d_1$$
$$dEv_i^u/dt = (1 - \rho) * Ev_i/d_0 - Ev_i^u/d_1$$
$$dEv_i^t/dt = \rho * Ev_i/d_0 - Ev_i^t/d_1$$

$$dC_i/dt = \rho * \lambda 2 * S_i - C_i/q_1$$

$$dI_i^1/dt = (1 - g) * E_i^u/d_1 - I_i^1/d$$
$$dI_i^2/dt = (1 - g) * E_i^t/d_1 - I_i^2/d$$
$$dIv_i^1/dt = (1 - g) * Ev_i^u/d_1 - Iv_i^1/d$$
$$dIv_i^2/dt = (1 - g) * E_i^t/d_1 - I_i^2/d$$
$$dA_i^1/dt = g * (E_i^u/d_1 + E_i^t/d_1) - A_i^1/d$$
$$dAv_i^1/dt = g * (Ev_i^u/d_1 + Ev_i^t/d_1) - Av_i^1/d$$

$$dI_i^{11}/dt = I_i^1/d - \theta * I_i^{11}/d_4 - (1 - \theta) * I_i^{11}/d_6$$
$$dI_i^{22}/dt = I_i^2/d - I_i^{22}/d$$
$$dIv_i^{11}/dt = Iv_i^1/d - \theta * Iv_i^{11}/d_4 - (1 - \theta) * Iv_i^{11}/d_6$$
$$dIv_i^{22}/dt = Iv_i^2/d - Iv_i^{22}/d$$
$$dA_i^2/dt = (1 - adr) * A_i^1/d - A_i^2/d_6$$

$$dAv_i^2/dt = (1 - adr) * Av_i^1/d - Av_i^2/d_6$$

$$dQ_i/dt = adr * A_i^1/d + I_i^{22}/d + \theta * I_i^{11}/d_4 - (1 - (h + icu + \mu)) * Q_i/q_1 - (h + icu + \mu) * Q_i/d_5$$

$$dQv_i/dt = adr * Av_i^1/d + Iv_i^{22}/d + \theta * Iv_i^{11}/d_4 - (1 - (hv + icuv + \mu v)) * Qv_i/q_1 - (hv + icuv + \mu v) * Qv_i/d_5$$

$$dH_i/dt = h * Q_i/d_5 + hv * Qv_i/d_5 - H_i/dh$$

$$dICU_i/dt = icu * Q_i/d_5 + icuv * Qv_i/d_5 - ICU_i/icu$$

$$dR_i/dt = (1 - \mu_i) * (1 - \theta) * I_i^{11}/d_6 + (1 - \mu v_i) * (1 - \theta) * Iv_i^{11}/d_6 + A_i^2/d_6 + Av_i^2/d_6 + (1 - (h + icu + \mu)) * Q_i/q_1 + (1 - (hv + icuv + \mu v)) * Qv_i/q_1 + H_i/dh + ICU_i/icu$$

$$dD_i/dt = \mu_i * (1 - \theta) * I_i^{11}/d_6 + \mu v_i * (1 - \theta) * Iv_i^{11}/d_6 + \mu_i * Q_i/d_5 + +\mu v_i * Qv_i/d_5$$

$$dV1_i/dt = doses - V1_i/d_7 - (1 - v1) * \lambda * V1_i$$

$$dV2_i/dt = V1_i/d_7 - (1 - v2) * \lambda * V2_i$$

The force of infection is described as

$$\lambda_i = \sum_{j=1}^{18} \frac{\beta_1 * c_{i,j} * (E_j^u + Ev_j^u)}{N} + \sum_{j=1}^{18} \frac{\beta_2 * c_{i,j} * (E_j^t + Ev_j^t)}{N} + \sum_{j=1}^{18} \frac{\beta_3 * c_{i,j} * (I_j^1 + I_j^2 + A_j^1 + Iv_j^1 + Iv_j^2 + Av_j^1)}{N} + \sum_{j=1}^{18} \frac{\beta_4 * c_{i,j} * (I_j^{11} + I_j^{22} + A_j^2 + Iv_j^{11} + Iv_j^{22} + Av_j^2)}{N}$$

Where $\beta_1 = 1.32$ for latent undiagnosed contacts, $\beta_2 = \frac{\beta_1}{2}$ for latent diagnosed and home quarantined (50% reduction in R0), $\beta_3 = 2.16$ for the first day of symptoms and $\beta_4 = 0.2$ for the following 6 days of symptoms, to reproduce an overall R0=6 without interventions. $c_{i,j}$ is the age-specific contact matrix adapted from NZ, and *N* is the total population. Then we added the reduction in transmission by mask use (multiplied λ_i by $1 - m_i$) where m_i is a combination of proportion of the population wearing it and mask effectiveness to reduce the force of infection.

Results

With the vaccine rollout and the expected 90% vaccination coverage in the 12+ years old just after 47 days from the start of the epidemic, we modelled two scenarios, without any restriction and with indoor masks use in people 12 years and older. For those scenarios, we started with the best case of 80% contacts traced and quarantined while in latency period and then decreased the proportion of contacts traced.

The results show that in the case of no restrictions, a minimum of 80% contacts need to be traced, while the use of masks indoors for the age group 10+ even if contact tracing is reduced to 50%, can mitigate the impact of lower contact tracing.

An important observation is that when looking at age specific results, cases are mostly in the unvaccinated age groups (including children). Cumulative results by age groups are showed after 50 days (January 19), when is assumed 90% 12+ are fully vaccinated. A limitation is that hospitalization and ICU data comes from NSW when the vaccination coverage was low at the start of the outbreak, and cases spreading over the older population, therefore when we calculated those rates in the youngest age groups the sample was small and icu and deaths rates in 0-9 years old are 0%. This highlights the need to update the data in the future. Figures to follow:

Scenario 1: No restrictions

Figure 1.1: Cumulative cases, no restrictions

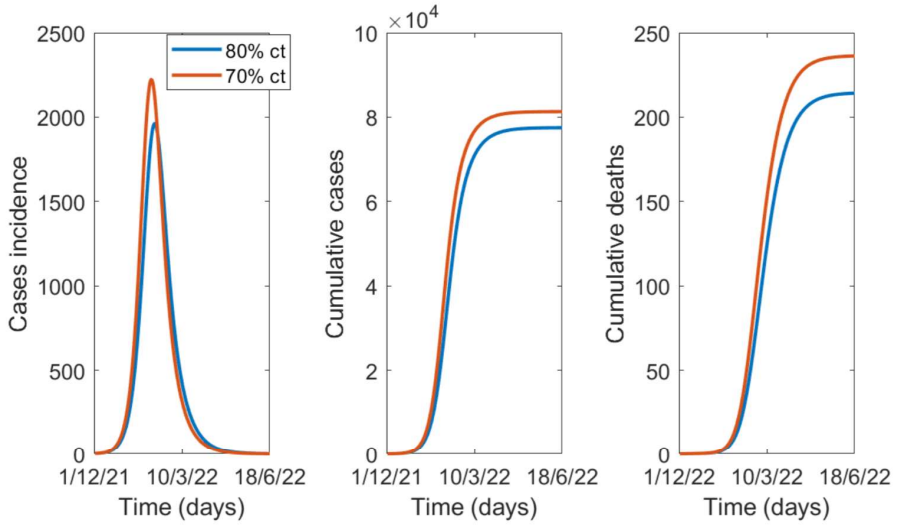


Table 1.1: Cumulative cases at 200 days with 70-80% contact tracing

CT	cases	deaths
80%	77492	214
70%	81305	236

Figure 1.2: Hospital and ICU bed requirements, no restrictions (line represents the code black threshold)

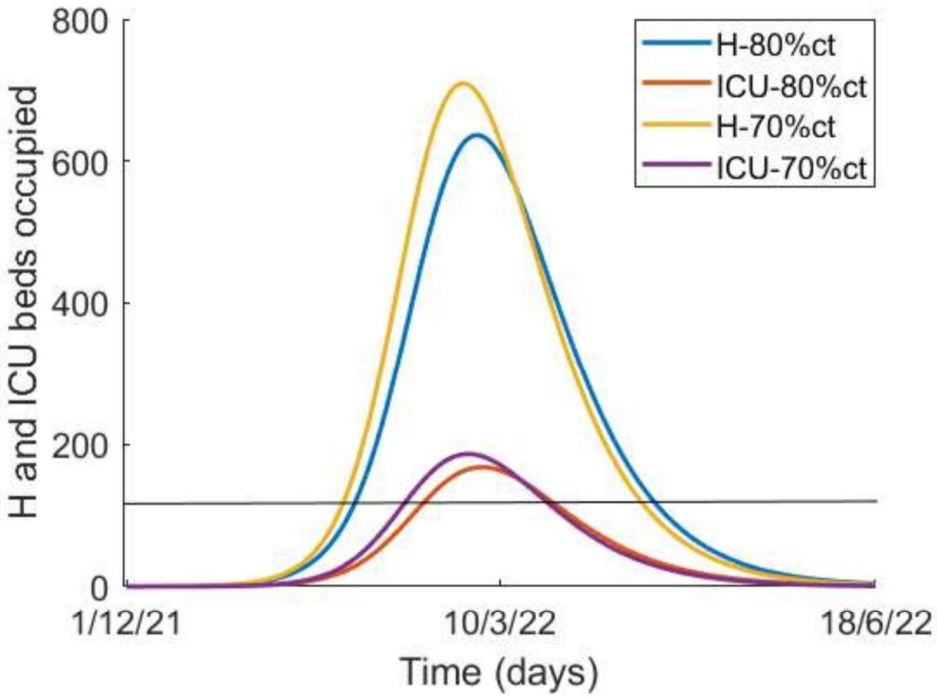


Table 1.2 Peak hospital and ICU beds required in a single day

	CT	Date	Peak daily usage
H	80%	March 4	636
	70%	February 28	709
ICU	80%	March 5	168
	70%	March 2	186

Scenario 2: Contact tracing fixed at 80%, everyone 10+ wearing masks indoors compared to 5+ wearing masks indoors

Figure 2.1: Cumulative cases, universal masking 10+ and 5+

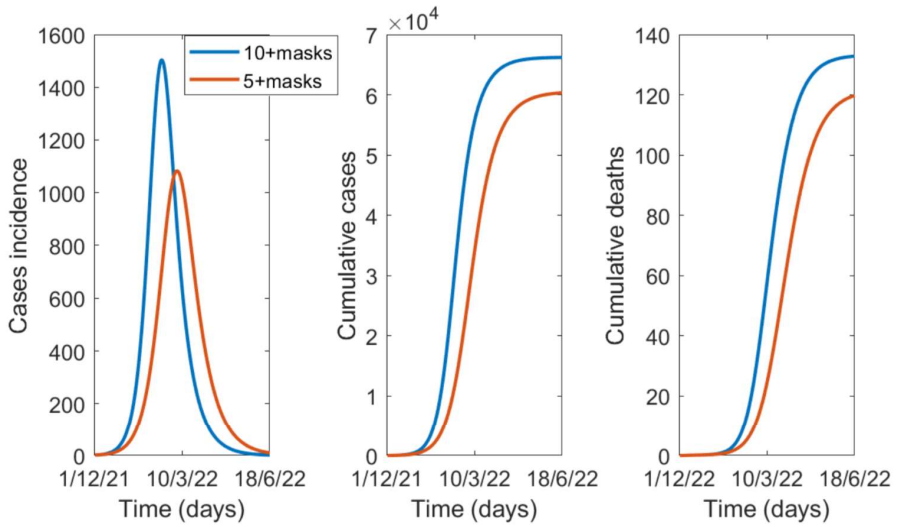


Table 2.1: Cumulative cases and deaths after 200 days

Universal masking	cases	deaths
10+	66196	132
5+	60333	120

Figure 2.2: Hospital and ICU bed requirements, mask guidelines for 10+ and 5+ (line represents the code black threshold)

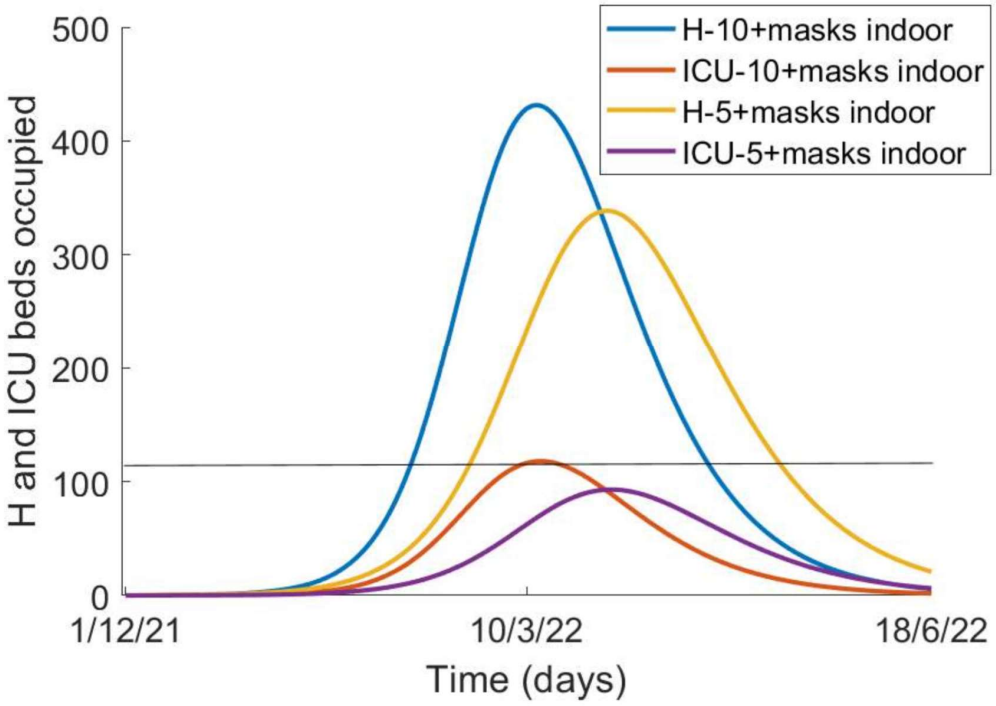


Table 2.2: Peak hospital and ICU beds required in a single day by age group by mask guidelines

	Masks	Date of peak	Max daily usage
H	10+	March 12	431
	5+	March 30	339
ICU	10+	March 14	118
	5+	April 1	93

SCENARIO 3: Fixed contact tracing 80%, mask use indoors for 12+ and varying movement restriction (mr) - 10%, 30% and 60%

Figure 3.1: Cumulative cases, varied movement restrictions

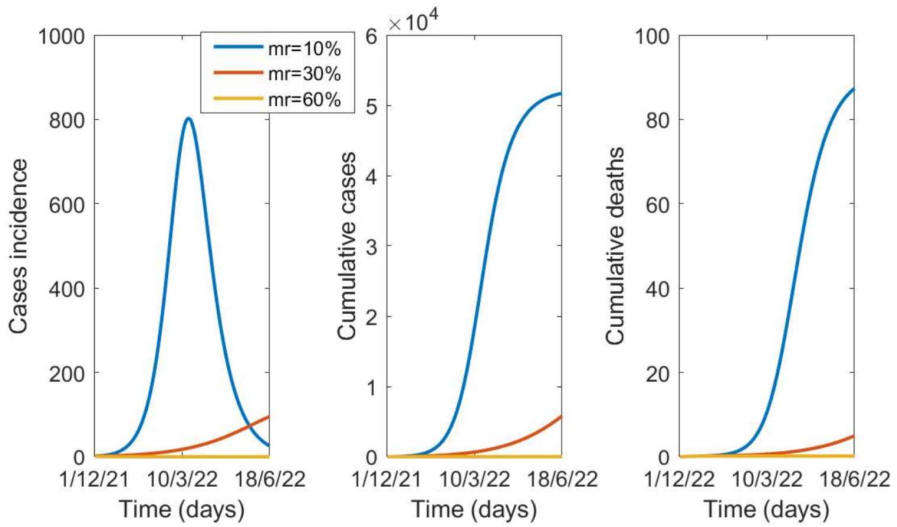


Table 3.1: Cumulative cases and deaths, varied movement restrictions

Movement restriction with masks for 12+ and 80% contact tracing	cases	deaths
10%	51699	87
30%	5804	5
60%	15	0

Figure 3.2: Hospital and ICU bed requirements, varying movement restrictions (line represents the code black threshold)

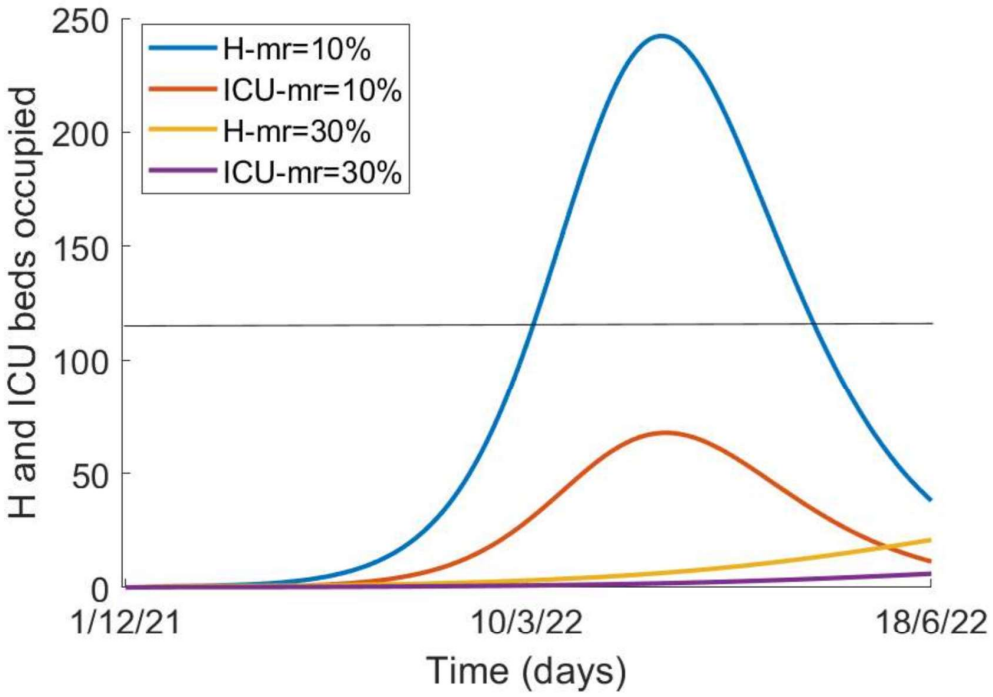


Table 3.2: Peak hospital and ICU beds required in a single day (masks plus movement restriction)

	Movement restriction	Date	Max usage
H	10%	April 12	242
	30%	June 18	20
ICU	10%	April 13	68
	30%	June 18	6

SCENARIO 4: Masks indoor for 12+ (80%), reduction of contacts tracing to 50% and varying movement restriction by 10%, 30% and 60%.

Figure 4.1: Cumulative cases, 80% masks, 50% contact tracing, varied movement restrictions

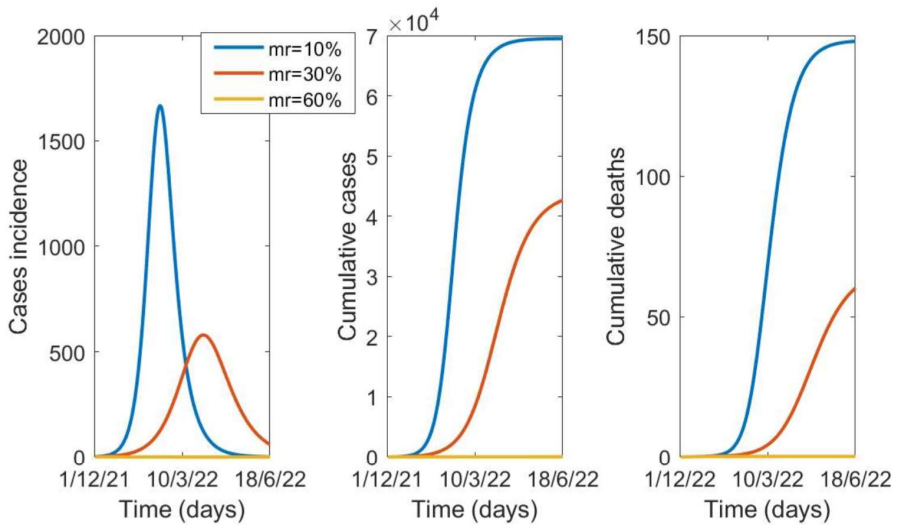


Table 4.1: Cumulative cases and deaths at 200 days, 80% masks, 50% contact tracing, varied movement restrictions

Movement restriction	cases	deaths
10%	69493	148
30%	42642	60
60%	30	0

Figure 4.2: Hospital and ICU bed requirements, 80% mask use, varying movement restrictions (line represents the code black threshold) and 50% contact tracing.

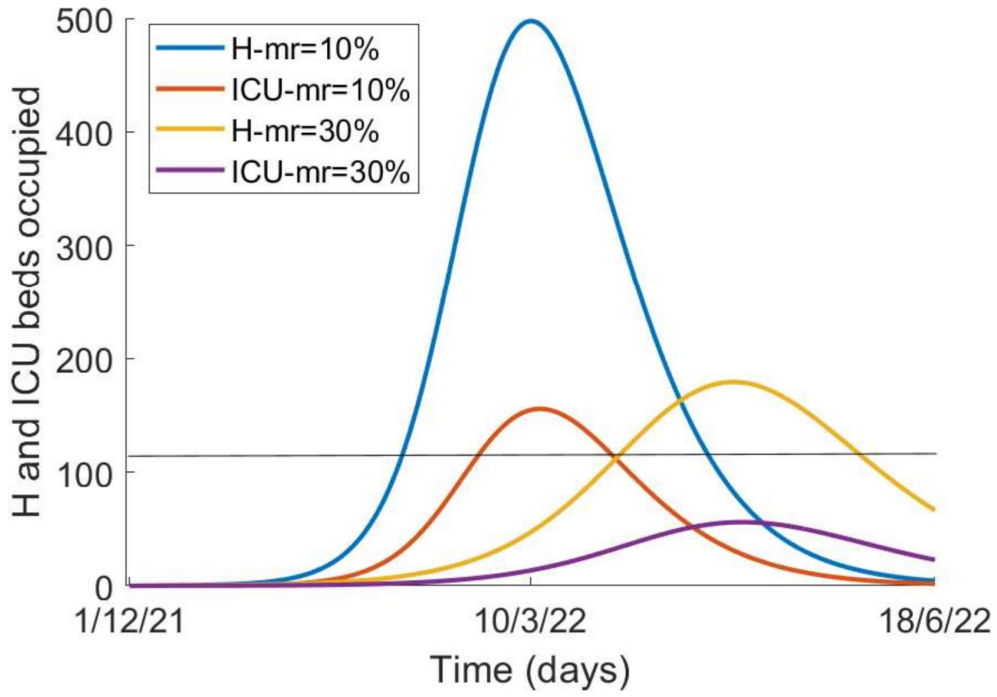


Table 4.2: Peak hospital and ICU beds required in a single day by age group, 80% mask use, varying movement restrictions and 50% contact tracing

	Movement restriction	Date of peak	Max daily usage
H	10%	March 10	397
	30%	April 29	179
ICU	10%	March 13	155
	30%	May 2	56

Attachment D - Doherty Modelling Report

Doherty Modelling Report for National Cabinet 30 July 2021

TABLE OF CONTENTS

TECHNICAL APPENDIX

Executive summary

- Models of COVID-19 infection and vaccination were used to define a target level of vaccine coverage for transition to Phase B of the National Plan. The model was based on the simplifying assumption of a single national epidemic, with COVID-19 transmission, severity and vaccine effectiveness as for the Delta variant.
    - Vaccine allocation scenarios were defined towards threshold coverage targets (16+ years) of 50/60/70/80%, noting achieved coverage to date has been largely concentrated in high-risk groups and elder populations in line with existing strategy;
    - We compared relative impacts on transmission and health outcomes of continuing the current risk focused strategy, with alternatives focused on reducing infection spread across the whole population. We included a scenario assessing the additional impact of increasing age eligibility for vaccination to 12+ years;
    - Recognising that additional social measures would likely be required to constrain epidemic growth under different achieved coverage assumptions, we estimated ability of the 'test, trace, isolate, quarantine' approach and different bundles of public health and social measures to reduce transmission across the population;
    - Clinical consequences of uncontrolled outbreaks were estimated by seeding infections at the time of reaching threshold levels of vaccine coverage, for the different allocation strategies.
- Stated objectives of the immunisation program enabling the transition to Phase B are to constrain severe outcomes within clinical capacity and reduce the intensity and length of requirement for socially and economically impactful public health and social measures.
    - For 'baseline' levels of social and behavioural restrictions, rapid epidemic growth is expected at 50 and 60% coverage, with more substantial transmission reduction by 70 and 80% targets. In these scenarios reduced effectiveness of the public health 'test, trace, isolate, quarantine' (TTIQ) response is anticipated due to high caseloads;
    - Accordingly, extended and stringent social measures would likely be required to control epidemic growth if the transition to Phase B is made at 50% or 60% coverage;
    - Supporting optimal public health TTIQ capacity by applying continuous low level social restrictions makes the requirement for stringent lockdowns unlikely at 70% population vaccine coverage, under transmission reducing allocation strategies;
    - At this stage of the national COVID-19 vaccine rollout, extending eligibility to key transmitting age groups offers greatest potential to reduce transmission even at lower coverage, reducing workplace absenteeism, clinical cases and deaths across the whole population;
    - Expanding the vaccine program to the 12-15 year age group has minimal impact on transmission and clinical outcomes for any achieved level of vaccine uptake;
    - These findings are conditional on public health workforce and response capacity which varies nationally, population compliance with public health recommendations and orders, and persistence of immunity following infection or vaccination over a 6 months timeframe;
    - Emergence of 'vaccine escape' variants will require re-evaluation of targets and associated requirements for public health measures.
- *This phase of reporting defines aspirational coverage targets to minimise the consequences of community transmission. Achievement of these targets at small area level will be critical to ensure equity of program impact, as ongoing outbreaks in undervaccinated populations are reasonably anticipated from international experience.*
- *Particular attention should be paid to groups in whom socioeconomic, cultural and other determinants are anticipated to result in higher transmission and/or disease outcomes.*
- *Ongoing situational assessment of measured transmission potential and circulating SARS-CoV-2 variants in the Australian population over coming months will allow benchmarking of these hypothetical scenarios to guide real time policy decision making about the transition to Phase B of the National Plan.*

Rationale

On 2nd July 2021, National Cabinet agreed to formulate a National Plan to transition Australia's COVID response. The plan consists of four phases defined by achievement of vaccination thresholds broadly expressed as a percentage of the eligible population (aged 16+ years). Modelling is to be used to define target levels of coverage sufficient to transition between:

A. Current Phase – Vaccinate, prepare and pilot, with a continuing focus on strongly suppressing the virus, including through the use of early and stringent short lockdowns, for the purpose of minimising community transmission;
B. Post vaccination phase – focused on minimisation of serious illness, hospitalisation and fatality as a result of COVID-19 through a combination of vaccination and some ongoing degree of light social restrictions, with lockdowns deemed unlikely;
C. Consolidation phase – public health management of COVID-19 consistent with other infections, but no lockdown requirement;
D. Final phase – removal of all border restrictions.

Background

Modelling prepared for National Cabinet on the 4th June 2021 considered the likely impact of Astra Zeneca vaccines on transmission potential of the Alpha strain of SARS-CoV-2, as well as a *more transmissible variant* with properties similar to the Delta strain of the virus. That work demonstrated that even at very high levels of vaccine uptake (80% or above), suppression of epidemic growth below the critical reproduction number of one required to attain 'herd immunity' was unlikely for such a strain. However, substantive reductions in transmission potential could be achieved which, together with intermittent application of social measures, would constrain the rate and extent of epidemic growth. In addition, the decrease in disease severity in vaccinated individuals would lead to lower rates of hospitalisation, intensive care utilisation and death.

This next phase of work focuses on the Delta variant as a 'base case' strain, using updated transmission, severity (Table S1) and vaccine effectiveness assumptions (Table S2.3, S2.5) against this strain.

- Should more transmissible variants emerge in future, transmission potential will be higher than anticipated here for any given level of completed vaccine coverage.
- Sensitivity analyses explore scenarios for a hypothetical future variant against which vaccines are only half as effective. In such a case, vaccine impacts on transmission potential will be less, due to a reduction in vaccine protection against infection *and* an increase in 'breakthrough' infections in immunised individuals (Table S2.4).

Ongoing situational assessment of measured transmission potential and circulating SARS-CoV-2 variants in the Australian population over coming months will allow benchmarking of these hypothetical scenarios to guide real time policy decision making about the transition to Phase B of the National Plan.

We extend on earlier methods to consider more realistic scenarios of vaccine distribution for the Australian population, incorporating both Astra Zeneca and Pfizer vaccines. Under the evidently coarse simplifying assumption that COVID-19 would spread uniformly across the Australian continent, we use an agent-based model of the total population to represent epidemic dynamics and the combined impacts of vaccination and public health and social measures to limit transmission and reduce the outcomes of interest. Hospital and ICU admissions are benchmarked against stated national capacity, based on the additional simplifying assumption that such resources are equally accessible to every Australian.

Objectives

Objectives of the immunisation strategy to enable a transition from Phases A to B are:

1. Minimisation of moderate and severe health outcomes, defined as all identified cases leading to workforce absenteeism as well as that subset resulting in hospitalisation, intensive care requirement and death (to be constrained within national capacity for hospital ward and ICU admissions);
   and
2. Reduction of the intensity and length of application of socially and economically disruptive public health and social measures, which are currently the primary means of reducing transmission. Ongoing 'light' restrictions will likely be needed to augment vaccine impacts, but lockdowns would be deemed unlikely.

Given the time horizon, transitions to later phases (C and D) will be associated with greater uncertainty because of:

- Likely emergence of new variants within Australia or internationally exhibiting one or more of heightened transmissibility, severity or immune escape;
- Changing global epidemiology of COVID-19 affecting the risk profile of travellers from different countries and regions;
- Waning of vaccine-derived and natural immunity over time;
- Development of new vaccine products (eg multivalent or specific VOC vaccines) and schedules including administration of booster doses to high risk subgroups or whole population;
- Population fatigue and the potential for declining compliance with restrictions;
- Potential for future development of readily bioavailable therapeutics that might be used for either or all of transmission reduction, prevention of disease progression and life-saving therapies.

Acknowledging Australia's vast geographical distances and the variable size, demography, rurality/remoteness and public health/health service capacity of states and territories our next phase of work will adapt the agent-based model framework to represent the key population characteristics and public health and clinical capacities of each. Working closely with the jurisdictions, we will consider the way in which state-based differences may require tailored adaptation of the national strategy, including definition of key subpopulation coverage targets, to achieve overarching program objectives.

Exploring vaccine thresholds for transition to Phase B of the National Plan

To define a 'manageable' level of vaccine coverage for transition to Phase B of the national plan, we explore the consequences of uncontrolled outbreaks that effectively seed ongoing community transmission of COVID-19, following completion of alternative target vaccine coverage/allocation scenarios.

When defining overall target coverage thresholds for the eligible population, it is vital to consider the distribution of doses received across all age categories, which will impact on population level outcomes of the program in different ways:

- Older individuals are more likely to experience severe disease outcomes, making them an early priority group for vaccine protection in Australia's COVID-19 vaccine rollout;
- Young and working age adults are peak transmitters of COVID-19. Increasing the proportional coverage in these groups will have a greater impact to reduce transmission.

We assume that case isolation, contact tracing and quarantine will continue, while recognising that the intensity and effectiveness of these public health responses must decline as caseloads increase. Likely requirements for overlaid 'bundles' of social measures to constrain epidemic growth are considered.

Defining vaccine allocation scenarios within supply/delivery constraints

From a starting point of achieved vaccine coverage in the Australian age eligible (16+ years) population as of 12th July 2021 based on Australian Immunisation Register (AIR) data (33% one-dose completion, 11.5% two-dose completion – Table S3.1), we have devised a series of vaccine delivery scenarios towards completed (2 dose) coverage targets of 50, 60, 70 and 80% in the age eligible (16+) population.

Within the constraints of available supply and achievable delivery, vaccines are allocated according to current routine indications as follows:

- Astra Zeneca – age eligible population 60+ years, dosing interval 12 weeks, delay from second dose completion to full efficacy 2 weeks;
- Pfizer/BioNTech – age eligible population 16+ years, dosing interval 3 weeks, delay from second dose completion to full efficacy 2 weeks.

Given these assumptions, we compare alternative theoretical approaches to delivery, to explicitly indicate the importance of allocation for impacts on transmission and disease:

Table 1.1 – Vaccine allocation strategies by age, assuming current recommendations for Astra Zeneca vaccine age eligibility (60+ years) and dosing interval (12 weeks)

Strategy	Allocation sequence
Oldest first	Vaccinations are prioritised from oldest to youngest. Specifically, prioritization occurs in the following order: 80+, 70-79, 60-69, 50-59, 40-49, 30-39, 20-29, 16-19
40+ years first	Vaccinations are prioritised from 40+ upwards, then 16+. Specifically, prioritization occurs in the following order: 40-49, 50-59, 60-69, 70-79, 80+, 16-19, 20-29, 30-39
All adults	Vaccinations are not prioritised in any particular order by age

Along with age-based allocation strategies, we compare the impact of approaches intended to hasten the timing of vaccine rollout within available supply, towards threshold coverage targets. Proposed changes in indications for the Astra Zeneca vaccine are aligned with the recent ATAGI advice on recommendations for outbreak settings, developed in the context of a surge in cases in

NSW (https://www.health.gov.au/news/atagi-statement-on-use-of-covid-19-vaccines-in-an-outbreak-setting).

Table 1.2 – Strategies to accelerate rollout, by reducing the Astra Zeneca (AZ) vaccine dosing interval from 12 weeks and/or lowering the age recommendation from 60+ years

Strategy	Allocation sequence	Impact on VE against infection (E_i)	Overall reduction in transmission*
AZ 40+ years	Recommend Astra Zeneca for 40+ year olds	Nil beyond dose interval	86% (assuming 12-week interval)
AZ 8 weeks	Reduce AZ dosing interval to 8 weeks	15% reduction	83%
AZ 4 weeks	Reduce AZ dosing interval to 4 weeks	25% reduction	81%

**Calculated overall reduction in transmission = $1-(1-E_i)*(1-E_t)$*

In the absence of robust evidence for the efficacy of 4- and 8-week interval dosing schedules for AZ against the Delta strain, we estimated vaccine efficacy for these scenarios by assuming 25% (4-week) and 15% (8-week) reductions in efficacy against infection following 2 dose completion relative to the 12-week schedule. This is broadly consistent with observed reductions in efficacy against both symptomatic infection and antibody titre from 2020 strains with <6-week versus ≥12 week schedule (Voysey et al. *Lancet* 2021, relating antibody responses to efficacy according to Khoury et al. *Nature Medicine* 2021). Assuming that the reduction in onward transmission from a vaccinated infected individual (E_t) is unchanged, these estimates result in an overall efficacy against disease transmission of 81% for a 4-week interval and 83% for an 8-week interval (Table 1.2).

Timeliness of achieving coverage targets by vaccine allocation scenario

The rate of vaccine delivery is shown in Figure S1 and the indicative date of completion of the rollout for different combinations of these strategies is reported in Table 1.3. Greatest potential benefits are observed early in the rollout, with achievable gains of almost a month to reaching 50% uptake by shortening the dosing interval to 4 weeks and making a positive recommendation for administration to 40+ year olds. Lesser temporal gains are observed for higher target thresholds. Completion dates are equivalent regardless of the age-based allocation (oldest, 40+ years first or all adults). The distribution of proportional coverage by age cohort for the different allocation strategies is shown in Table S3.2.

Table 1.3 – Date of achieving a given vaccine coverage threshold by any age-based allocation strategy (oldest, 40+ years first or all adults), assuming a start date and population completed doses (AIR) as of 12th July 2021

AZ recommendation		Date by which coverage target achieved			
Age	**Interval**	**50%**	**60%**	**70%**	**80%**
60+ years	**12-weeks**	4 October	18 October	1 November	22 November
	8 weeks	27 September	11 October	1 November	22 November
	4 weeks	27 September	11 October	1 November	22 November
40+ years	**12-weeks**	4 October	11 October	25 October	15 November
	8 weeks	20 September	4 October	18 October	8 November
	4 weeks	6 September	4 October	18 October	8 November

Transmission potential (TP) by vaccine coverage and allocation strategy

The rate of epidemic growth following loss of control is related to the population level *transmission potential (TP),* a measure routinely reported in the Common Operating Picture. TP is akin to the effective reproduction number (R_{eff}). If below 1, no public health actions are required to control disease and an outbreak will be self-limiting. The higher above 1 it moves the more rapidly case numbers will escalate and the harder the disease is to control with public health measures. Vaccination reduces population level susceptibility to infection, and ongoing spread from immunised infected individuals, thereby reducing TP.

Baseline TP will be influenced by spontaneous and imposed changes in physical distancing behaviours, the number of social contacts on average between individuals and the timeliness of test, trace, isolate, quarantine (TTIQ) measures. We use a starting TP of 3.6 for the Delta variant based on averaged observations from NSW in March 2021, a period with minimal social restrictions and no major outbreaks. TTIQ assumptions are based on the performance of the Victorian public health response at the height of the 'second wave' in 2020 as our best estimate of achievable effectiveness at high caseloads. Note that the TP in WA over the same period under similar levels of restrictions was 4.5.

Tables 2.1-2.3 report the TP achieved under alternative vaccine allocation and delivery strategies. Given greater proportional coverage of peak transmitting age groups (Table S3.2, Figures S2.2-2.5) the 'all adults' allocation strategy is slightly more effective at reducing TP earlier in the rollout, across all delivery approaches and vaccine eligibility assumptions. Improved early constraint of transmission can have substantive impacts on the timing and peak of epidemics, because of the nonlinear nature of epidemic growth. The marginal gain in timeliness of reaching the 50% coverage threshold under the accelerated AZ strategies is at some short-term cost of TP reduction, given the lower efficacy of reduced interval schedules. We will therefore constrain scenarios in this report to those assuming 'standard' AZ recommendations, noting that the potential benefits of accelerated delivery in short term response merit further exploration.

Table 2.1: Scaled values of Delta variant transmission potential (TP) for 50%, 60%, 70% and 80% population coverage by the 'Oldest first' vaccine allocation strategy, and exploring age recommendations and dosing intervals for AZ. We use a starting TP of 3.6.

AZ recommendation		Eligible population coverage (16+)			
Age	**Interval**	**50%**	**60%**	**70%**	**80%**
60+ years	**12-weeks**	2.1	1.7	1.5	1.3
	8 weeks	2.2	1.9	1.5	1.3
	4 weeks	2.2	1.9	1.5	1.3
40+ years	**12-weeks**	1.8	1.7	1.4	1.3
	8 weeks	2.1	1.8	1.5	1.3
	4 weeks	2.5	1.8	1.5	1.3

Table 2.2: As for Table 2.1 but by the '40+ years first' allocation strategy

AZ recommendation		Eligible population coverage (16+)			
Age	**Interval**	**50%**	**60%**	**70%**	**80%**
60+ years	**12-weeks**	2.1	1.9	1.6	1.3
	8 weeks	2.2	2	1.6	1.4
	4 weeks	2.2	2	1.6	1.4
40+ years	**12-weeks**	2	1.8	1.6	1.3
	8 weeks	2.2	1.9	1.7	1.4
	4 weeks	2.4	2	1.7	1.4

Table 2.3: As for Table 2.1 but by the 'All adults' allocation strategy

AZ recommendation		Eligible population coverage (16+)			
Age	**Interval**	**50%**	**60%**	**70%**	**80%**
60+ years	**12-weeks**	2	1.7	1.5	1.3
	8 weeks	2.1	1.8	1.5	1.3
	4 weeks	2.1	1.8	1.5	1.3
40+ years	**12-weeks**	1.8	1.7	1.5	1.3
	8 weeks	2	1.8	1.5	1.3
	4 weeks	2.3	1.8	1.5	1.3

Implications of 'vaccine escape' variants for impacts on transmission potential

The three age-based vaccine allocation scenarios were explored, assuming a future variant against which vaccines are less protective (Table 3.1). We model the impact of this 'vaccine escape' variant by assuming a reduction of 50% in vaccine efficacy for both infection (E_i) and onward transmission (E_t). This would result in reductions of 36% (Pfizer) and 39% (Astra Zeneca) in the efficacy of two vaccine doses against overall transmission, relative to Delta (Table S2.4). The 'all adults' allocation strategy remains marginally better than the other two scenarios, but even at 80% eligible population coverage, TP remains high at 2.0.

Table 3.1 Scaled values of transmission potential (TP) for a variant against which vaccines are only half as effective, for 50%, 60%, 70% and 80% population coverage achieved under the three age-based allocation strategies. Standard age (60+) and dosing interval (12 weeks) recommendations are assumed for the AZ vaccine. Comparators for each strategy are the top rows of each of Tables 2.1, 2.2 and 2.3.

Strategy	Eligible population coverage (16+)			
	50%	**60%**	**70%**	**80%**
Oldest first	2.7	2.4	2.2	2.0
40+ years first	2.6	2.4	2.2	2.0
All adults	2.5	2.3	2.1	2.0

Implications of extending vaccine eligibility to the population aged 12+ years

The potential benefit of immunising school children aged 12-15 years was also explored. The primary purpose of this 'thought experiment' was to assess the impact of extending the age of vaccine eligibility down to age 12 years.

To implement this hypothetical scenario, we assumed the rate of delivery to this group approximated that of the overall national program. For each date at which whole population two dose coverage targets were achieved, we assumed that the same proportion of this school aged cohort would have received at least one vaccine dose.

In reality, the achievable pace of rollout to this age cohort will depend on supply considerations determining whether and when additional doses might be allocated to this group. There will also be jurisdictional differences in the workforce available to deliver immunisation through school-based programs, which would be assumed the most efficient way to achieve high uptake. These supply, allocation and delivery issues need to be resolved before more realistic scenarios can be implemented in the model.

The impact achieved by expanding age eligibility was a reduction in TP of 0 or 0.1 across all allocation strategies and coverage thresholds. **Based on these minimal impacts, it is anticipated that inclusion of 12-15 year olds in the vaccine roll out as an early priority group would not materially change the expected overall health outcomes at each key vaccination threshold**. For a given level of vaccination, the total number of Australians who experience severe illness from COVID-19 will be similar regardless of whether the vaccination rate has been achieved across the 12+ or 16+ population.

Table 3.2: Scaled values of Delta variant transmission potential (TP) showing the *overall impact (difference in brackets)* on TP of additionally immunising school children aged 12-15 years, for 50%, 60%, 70% and 80% population coverage achieved under the three age-based allocation strategies. Standard age (60+) and dosing interval (12 weeks) recommendations are assumed for the AZ vaccine. Comparators for each strategy are the top rows of each of Tables 2.1, 2.2 and 2.3.

Strategy	Eligible population coverage (16+)			
	50%	60%	70%	80%
Oldest first	2 (-0.1)	1.7 (0)	1.4 (-0.1)	1.2 (-0.1)
40+ years first	2.1 (0)	1.9 (0)	1.6 (0)	1.3 (0)
All adults	1.9 (-0.1)	1.7 (0)	1.4 (-0.1)	1.2 (-0.1)

Impact of public health response and bundled social measures on TP

The ability to reduce TP to less than 1 is needed both to contain community transmission in the current suppression phase (A) and to prevent cases from exceeding health sector capacity in phase B. Personal risk reduction behaviours and constraints on social mixing known as Public Health and Social Measures (PHSM) are the levers currently employed to manage TP in response to incursions and outbreaks. Over time, behaviours change, either spontaneously because of heightened concern or complacency, or in response to public health orders invoking various elements of PHSMs.

We therefore investigated what level of PHSM would be required to bring TP below 1 under different scenarios of vaccination coverage. We considered four 'bundles' of PHSM restrictions: baseline, low, medium and high. Each bundle relates to a specific time and place in Australia's pandemic experience, thereby capturing both real-world behavioural responses and the proportional reduction in TP achievable by PHSMs in our context:

- Baseline PHSM - only minimal density/capacity restrictions, as in NSW March 2021 (baseline TP as used above)
- Low PHSM - more stringent capacity restrictions, as in NSW 23 August 2020
- Medium PHSM - stringent capacity restrictions, group size limits, stay-at-home orders (except work, study, essential purposes), as in NSW 1 July 2021
- High PHSM - no household visitors, curfew, stay-at-home orders (except essential purposes & permitted work), as in VIC 23 August 2020

As in the TP estimates above, each of these PHSM bundles includes a Test, Trace, Isolate, and Quarantine (TTIQ) capability. We assume that once community transmission becomes established leading to high caseloads, TTIQ is less efficacious than the optimal levels observed in Australia because public health response capacity is finite. We calibrate this partial TTIQ effect to its impact on TP as at Australia's daily peak of local cases in VIC 4 August 2020. By comparing optimally and partially effective responses, we assess the contribution of TTIQ to the overall level of achievable constraint on transmission.

Figures 1.1 and 1.2 illustrate that as vaccination coverage increases, less stringent PHSM will be required to bring TP below 1. Maintaining a rapid and highly effective TTIQ response capacity is critical for ongoing epidemic control. Should TTIQ responses become only partially effective due to high caseloads, high PHSM would be needed to curb transmission at the 50% and 60% coverage thresholds, whilst low PHSM *may* be sufficient for control at 80% coverage (Figure 1.1). More optimistically, the combination of 70% vaccine coverage and ongoing low PHSMs would likely be sufficient for control, *if optimal TTIQ can be maintained* (Figure 1.2). Note that compliance with imposed measures will vary their effectiveness between populations and timepoints. This uncertainty is conceptually represented by the upper and lower bounds of each 'box' for each set of restrictions in the Figures.

When interpreting the combined impacts of these measures it is important to reflect that:

- Weekly situational assessments provided to AHPPC reveal substantial variation in TP over time by jurisdiction in the absence of active cases affecting the 'starting TP' upon which measures act;
- The proportional reduction in TP achieved by imposition of public health orders differs nationally and within a given jurisdiction over time and at small area level, reflecting variable population co-operation with PHSMs that affect the degree of achievable ongoing or reactive suppression;
- TTIQ response capacity varies markedly by jurisdiction, based on the size of the public health workforce and related laboratory capacity, both of which are critical to rapid case identification for the purposes of case isolation and contact tracing.

Because of these differences, a precautionary approach is advised when defining a 'national' vaccine coverage threshold that would be applicable across small and large jurisdictions.

Figure 1.1: Combined effects of vaccination and PHSM scenarios on COVID-19 transmission potential under the 'All adults' vaccination scenario assuming only *partial TTIQ effectiveness*, due to high caseloads. Standard age (60+) and dosing interval (12 weeks) recommendations are assumed for the AZ vaccine.

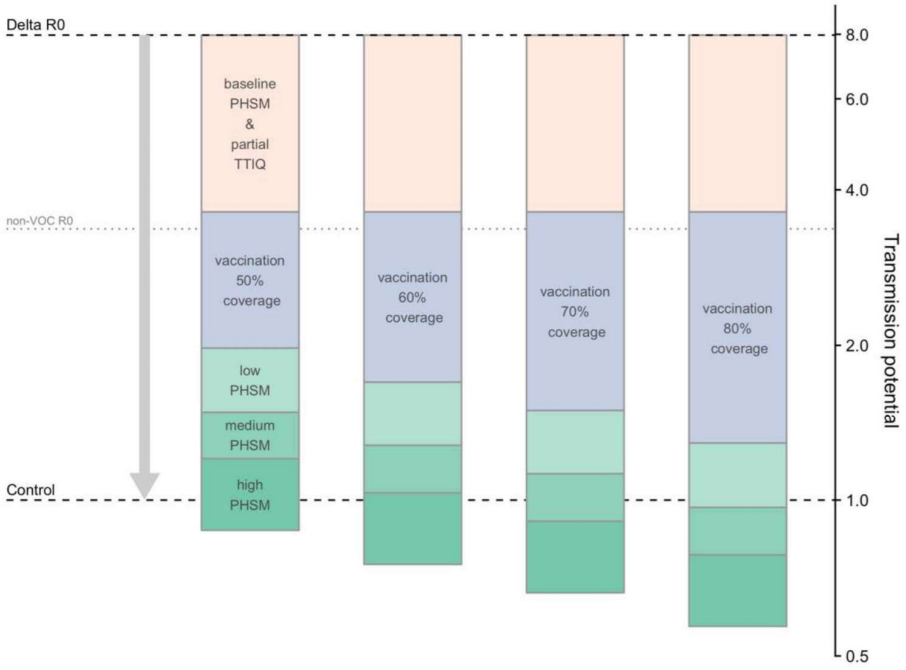
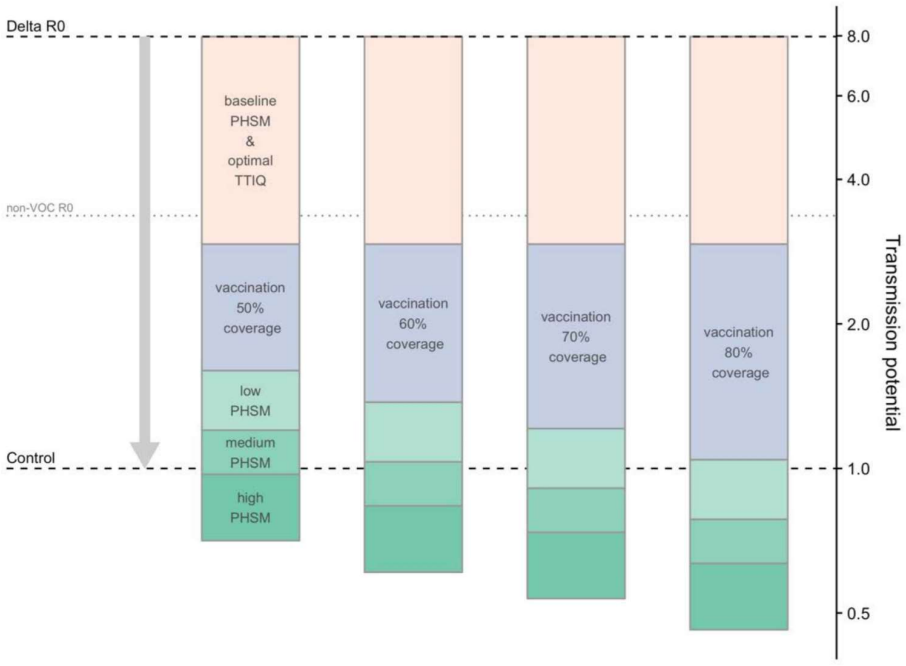


Figure 1.2: As for Figure 1.1 but assuming *optimal TTIQ effectiveness*



Anticipated requirements for social measures, by coverage scenario

During outbreak suppression (phase A) early stringent lockdowns are temporarily used to bring TP below 1 for the purposes of driving local cases from an outbreak to zero, in the context of an optimal TTIQ response. During phase B, stringent PHSM might need to be used *intermittently* to reduce caseloads to prevent overwhelming the health sector. Ongoing application of some degree of social measures through this phase reduces the likelihood for high restrictions and preserves TTIQ effectiveness by keeping case numbers low.

TP estimates with and without stringent PHSM can be used to calculate the approximate proportion of time those stringent measures would need to be in place to prevent exceedance of health sector capacity over a hypothetical long-term. This static analysis can indicate the plausible societal and economic impacts of the PHSM required to constrain transmission under each scenario and coverage over the long-term. The next section considers epidemic dynamics and clinical consequences of infections for 'baseline' social measures and partially effective TTIQ (assumed if caseloads escalate).

Tables 4.1 and 4.2 compare the proportion of time that would need to be spent with high PHSM on top of ongoing light restrictions to maintain case counts at some level, by vaccine coverage and allocation strategy. We assume periodic switching between low PHSM and high PHSM over a long period with the same vaccination coverage. With long-term coverage held at 50%, 60%, or 70%, high PHSM would be needed for significant fractions of time (18-89%) if caseloads escalate, leading to 'partial' TTIQ effectiveness. For the 'optimal' TTIQ scenario and an achieved adult population coverage of 70%, high PHSM would be needed rarely if at all.

Table 4.1: Percentage of time high PHSM would need to be in place for long-term control, with reversion to low PHSM at other times, for 50%, 60%, 70% and 80% population coverage achieved under the three age-based allocation strategies. These scenarios assume *partial* TTIQ effectiveness, under high caseloads. Standard age (60+) and dosing interval (12 weeks) recommendations are assumed for AZ vaccine.

Strategy	Eligible population coverage (16+)			
	50%	60%	70%	80%
Oldest first	82%	49%	18%	0%
Middle years first	89%	67%	39%	2%
All adults	75%	46%	22%	0%

Table 4.2: As for Table 4.1 but assuming *optimal* TTIQ effectiveness, given low caseloads

Strategy	Eligible population coverage (16+)			
	50%	60%	70%	80%
Oldest first	42%	9%	0%	0%
Middle years first	49%	27%	0%	0%
All adults	35%	6%	0%	0%

More detailed breakdowns of the level of time likely required under differing degrees of social restrictions for the various coverage thresholds and allocation strategies are shown in Tables S4.2 and 4.3 (assuming partial/optimal TTIQ), and S4.4 and 4.5 (in context of ongoing 'light' restrictions).

Dynamics and consequences given timing of transition to Phase B

Epidemic simulations assume a population size of 24 million. Infection outputs reflect the range of results observed across 20-30 separate model runs for each scenario. We assume that a single outbreak involving 30 individuals initiates community transmission at the time of transition to Phase B, once target vaccine coverage is achieved. Each simulation is run for 180 days after this initiating date. As immunisation rollout is ongoing, achievement of future vaccine targets is indicated as relevant, in relation to evolving epidemics.

Early epidemic growth given established transmission, for key scenarios

Exemplar epidemic curves are shown for the different coverage levels and allocation assumptions in Figures 2.1-2.3 below to demonstrate the relative rate and extent of epidemic growth for each. Given rapidly escalating caseloads in such scenarios, we assume only 'partial' TTIQ effectiveness. In the first instance we report the total number of incident infections, agnostic to their severity and including asymptomatic individuals. Note that these exemplar scenarios assume a starting transmission potential of 3.6, consistent with estimated levels of distancing behaviour in NSW during March 2021 (see Table 1.1). The speed and extent of epidemic growth would be greater for jurisdictions with higher transmission potential and/or if further relaxation of distancing behaviour occurred.

Figure 2.1: Epidemic growth to 180 days given transition to Phase B leading to established community transmission for the threshold coverage targets of 50, 60, 70 and 80%, with vaccine allocation according to the 'Oldest first' strategy (*note different y axes)

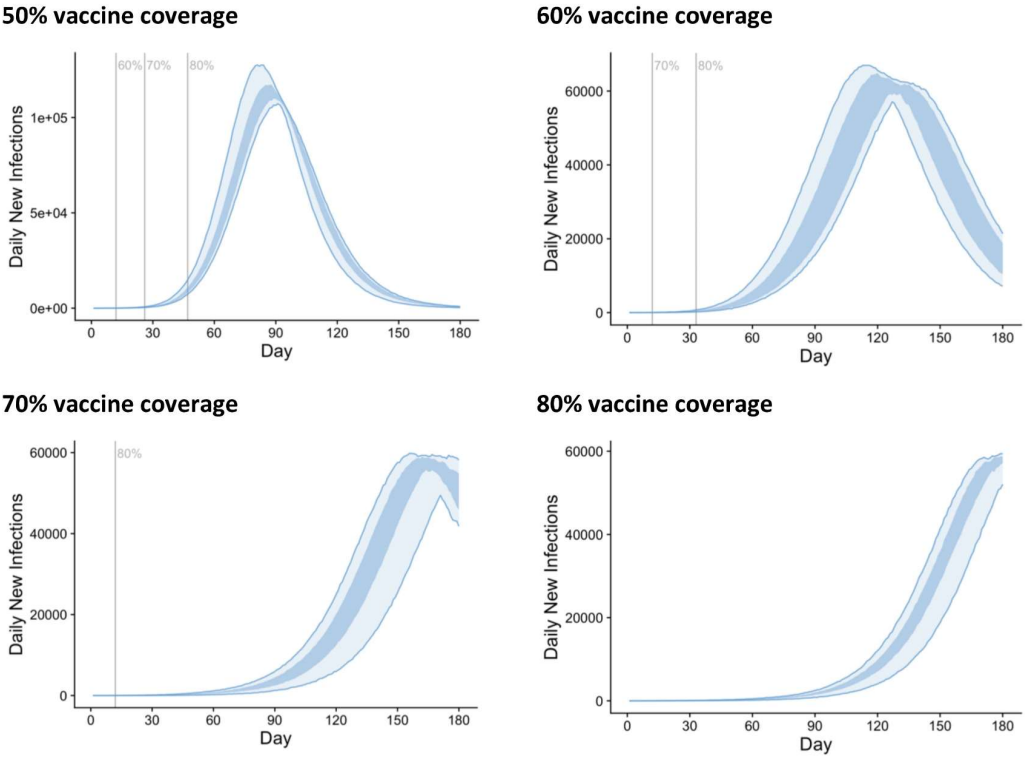
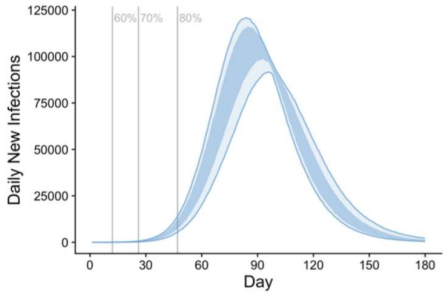
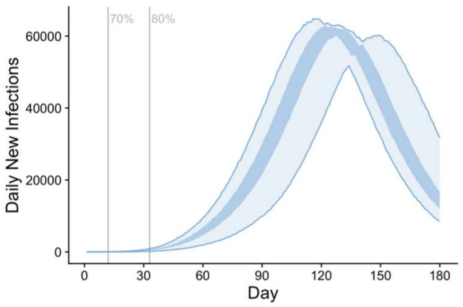


Figure 2.2: As for Figure 2.1 but for the '40+ years first' strategy (*note different y axes)

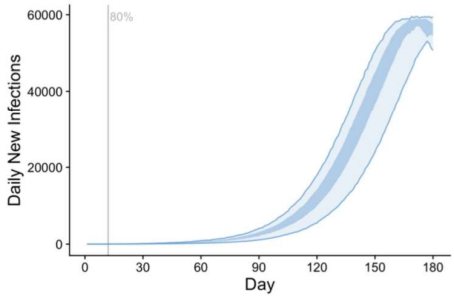
50% vaccine coverage



60% vaccine coverage



70% vaccine coverage



80% vaccine coverage

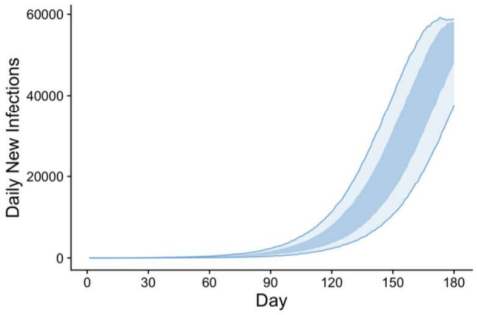
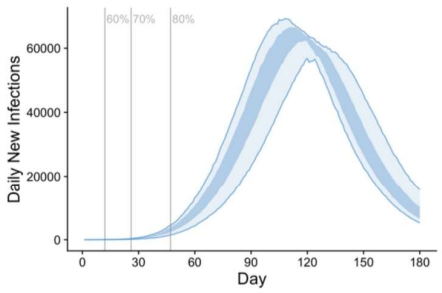
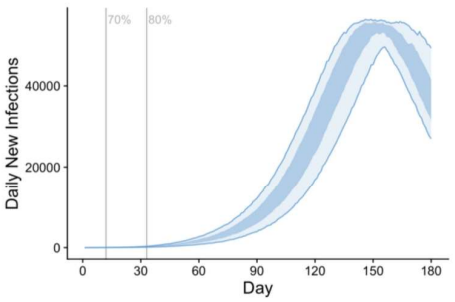


Figure 2.3: As for Figure 2.1 but for the 'All adults' strategy (*note different y axes)

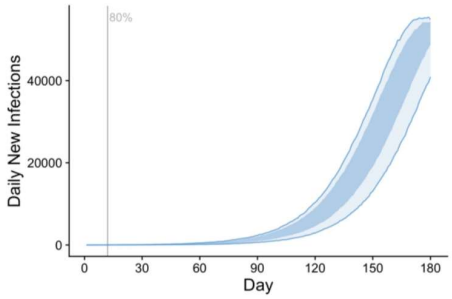
50% vaccine coverage



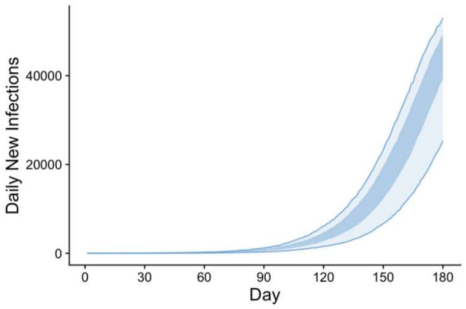
60% vaccine coverage



70% vaccine coverage

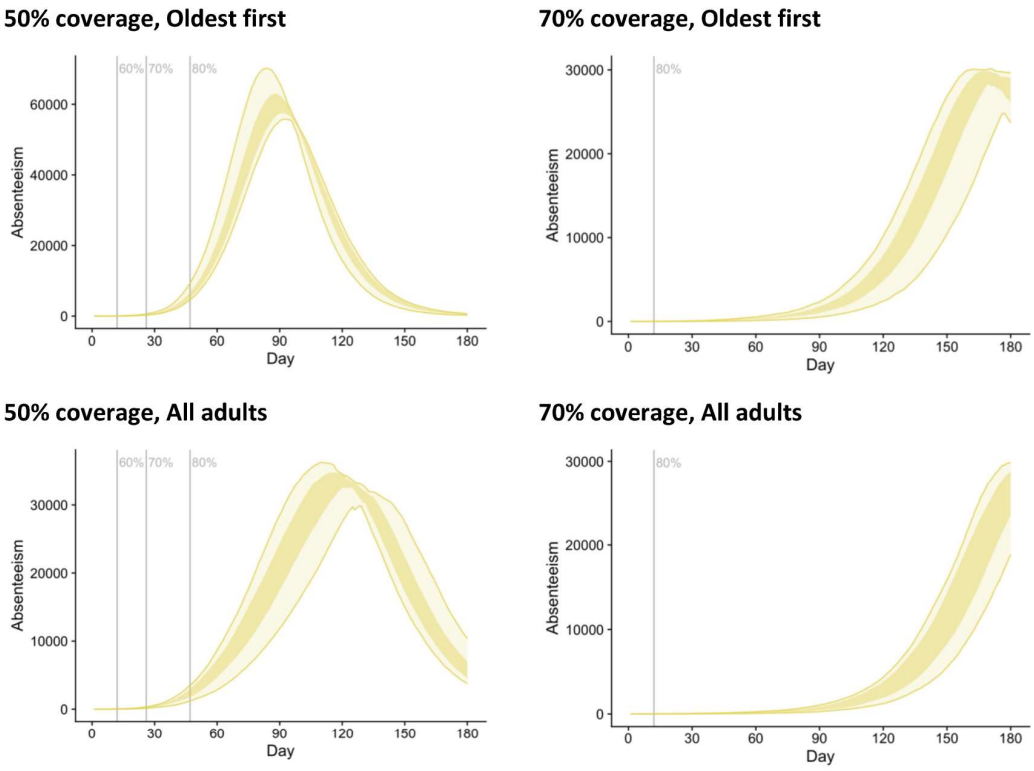


80% vaccine coverage



Figures 2.1-2.3 demonstrate marked differences in early epidemic dynamics with increasing vaccine coverage. Comparison of the y axis for the 50% coverage scenarios in Figures 2.1 and 2.3 shows the marked reduction in incident infections achieved by preferentially immunising younger age groups, for the same level of achieved population vaccine coverage. Figure 2.4 relates these infections to anticipated workforce absenteeism of symptomatic individuals identified as cases and isolated for the minimum period of 10 days, assuming that they would be fit to return to work thereafter (workforce participation rates based on Treasury statistics, by age – Table S5).

Figure 2.4: Prevalence of individuals absent from the workforce due to symptomatic infection and mandatory isolation (10 days) for the 50 and 70% coverage scenarios, assuming 'Oldest first' and 'All ages' allocation strategies (*note y axes differ)



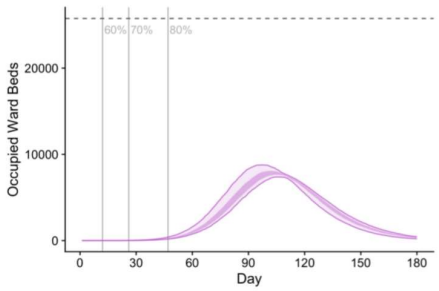
Associated health impacts of transmission, relative to health sector capacity

Outputs from the infection model provided inputs to the clinical pathways model. Each input is iterated over multiple runs so that the clinical pathways model is run 200 times for each scenario. Figures 3.1-3.3 report the range of corresponding health impacts across simulations for the epidemic growth scenarios shown above.Workforce absenteeism, occupied hospital beds, occupied ICU beds and deaths lag incident cases given time for progression of the clinical course towards more severe outcomes. Where relevant, these are related to estimated national clinical capacities (Table S6).

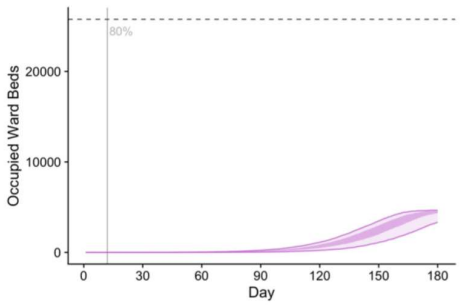
Note that even for high coverage, late epidemics are observed, with associated severe outcomes, reflecting the ability for circulation in unvaccinated population subgroups, which are likely to be concentrated within communities and geographical areas. Further improvements in vaccine uptake would be needed to prevent these outcomes.

Figure 3.1: Occupied hospital ward beds over the course of the epidemic, in relation to stated national capacity, which represents 50% of the total. Scenarios shown are for 50% achieved coverage at epidemic onset, with vaccines allocated to 'oldest first' or 'all adults'

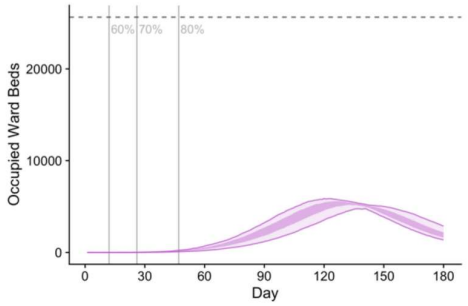
50% coverage, Oldest first



70% coverage, Oldest first



50% coverage, All adults



70% coverage, All adults

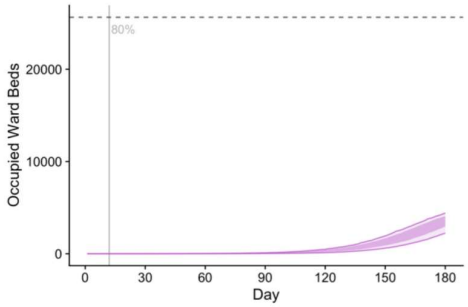
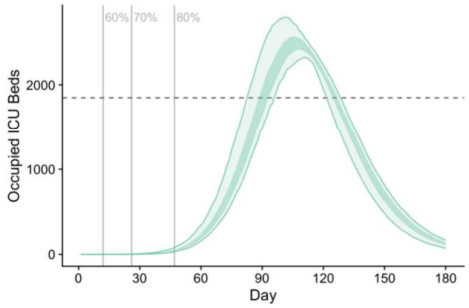
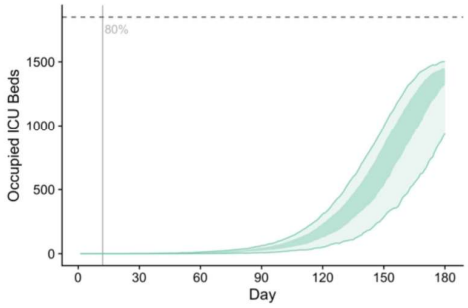


Figure 3.2: As for Figure 3.1 but for occupied ICU beds in relation to national capacity

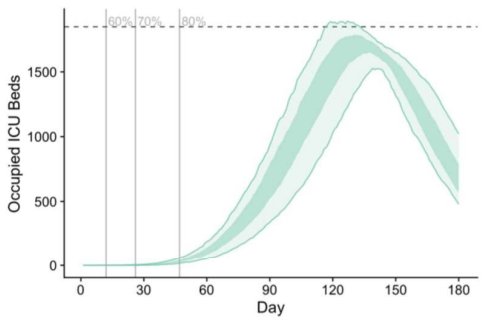
50% coverage, Oldest first



70% coverage, Oldest first



50% coverage, All adults



70% coverage, All adults

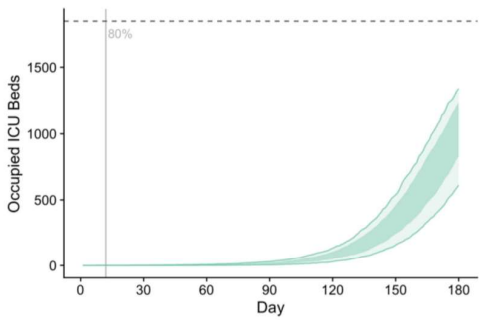
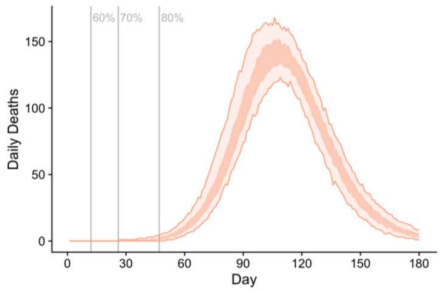
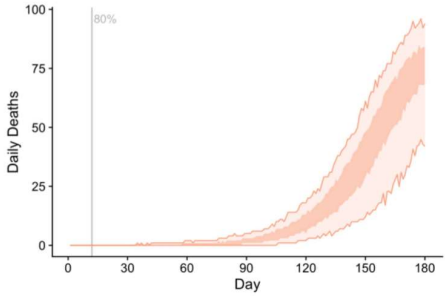


Figure 3.3: As for Figure 3.1 but reporting daily deaths (*note y axes differ)

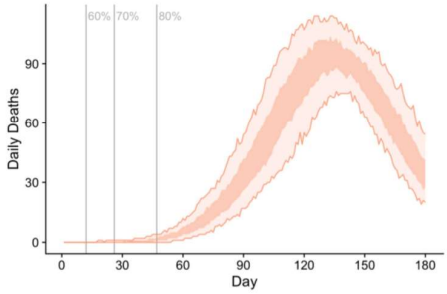
50% coverage, Oldest first



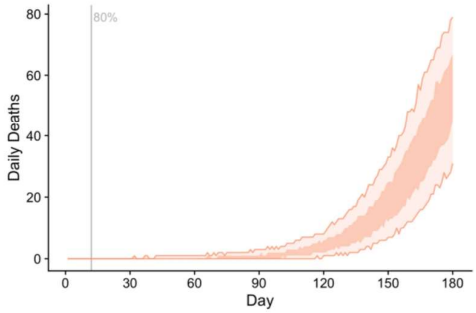
70% coverage, Oldest first



50% coverage, All adults



70% coverage, All adults



Health impacts by age group and vaccine status

Central estimates of these health impacts over the first 180 days following established community transmission are provided in the tables below, for ease of comparison across coverage thresholds, allocation strategies, vaccination status and age group. Note that given epidemic stochasticity and uncertainty, these estimates are drawn from a broader range of possible values as demonstrated by the Figures above. **All scenarios assume only baseline restrictions and 'partial' TTIQ effectiveness.**

Table 5.1 Cumulative outcomes of interest over the first 180 days by achieved coverage threshold prior to transmission, for the 'Oldest first' vaccine allocation strategy

	Vaccine Coverage			
	50%	**60%**	**70%**	**80%**
Symptomatic infections	1,174,450	900,431	617,291	471,107
Ward admissions	48,002	36,113	22,379	16,130
ICU admissions*	11,465	8,523	5,002	3,494
Deaths	10,311	7,276	3,563	2,309

**ICU admissions are reported here and below assuming unconstrained capacity, even when national thresholds are anticipated to be reached or exceeded, so reflect 'true' requirements*

Table 5.2 As for Table 5.1, for the 'All adults' allocation strategy

	Vaccine Coverage			
	50%	**60%**	**70%**	**80%**
Symptomatic infections	964,153	737,971	393,515	279,001
Ward admissions	42,567	29,960	14,130	9,669
ICU admissions	10,302	6,947	3,084	2,075
Deaths	8,894	5,294	1,984	1,281

Table 5.3: Cumulative symptomatic infections, ward admissions, ICU admissions and deaths over the first 180 days for coverage thresholds of 50%, 60%, 70% and 80% achieved by the 'Oldest first' and 'All adults' strategies, broken down by vaccination status[#]

	Oldest First		**All Adults**	
Achieved eligible population coverage	**Vaccinated**	**Unvaccinated**	**Vaccinated**	**Unvaccinated**
50%				
Symptomatic infections	222,193	952,257	171,467	792,686
Ward admissions	15,575	32,427	13,092	29,475
ICU admissions	4,082	7,384	3,446	6,856
Deaths	3,765	6,546	3,089	5,805
60%				
Symptomatic infections	148,992	751,440	120,173	617,798
Ward admissions	11,449	24,665	9,115	20,845
ICU admissions	2,978	5,545	2,313	4,634
Deaths	2,633	4,643	1,851	3,443

Table 5.3 (cont)

	Oldest First		All Adults	
Achieved eligible population coverage	**Vaccinated**	**Unvaccinated**	**Vaccinated**	**Unvaccinated**
70%				
Symptomatic infections	93,398	523,893	58,165	335,350
Ward admissions	6,870	15,509	4,144	9,986
ICU admissions	1,693	3,309	993	2,091
Deaths	1,278	2,285	685	1,298
80%				
Symptomatic infections	67,946	403,162	40,010	238,991
Ward admissions	4,860	11,270	2,817	6,852
ICU admissions	1,163	2,331	666	1,409
Deaths	819	1,490	439	842

 # Note that in the case of emergence of a 'vaccine escape' variant, both the total number of infections and the proportion of severe cases occurring in fully immunised individuals would increase dramatically.

As can be seen from Tables 5.4 and 5.5, the enhanced indirect protection achieved by the 'All adults' strategy results in a substantial reduction in symptomatic infections and severe outcomes across all age groups, including unvaccinated children.

Table 5.4: Cumulative symptomatic infections, ward admissions, ICU admissions and deaths over the first 180 days for the coverage threshold of 70% achieved by the 'Oldest first' strategy, broken down by vaccination status and age

	<16 yrs		16-39 yrs		40-59 yrs		60+ yrs		70+ yrs	
	Vacc'd	**Unvac**	**Vacc'd**	**Unvac**	**Vacc'd**	**Unvac**	**Vacc'd**	**Unvac**	**Vacc'd**	**Unvac**
Denominator population*	0	5,075,816	3,539,772	4,989,859	5,859,393	3,196,468	5,199,031	468,491	2,835,618	125,031
Symptomatic infections	0	355,505	34,390	103,350	33,166	54,710	20,283	8,626	5,559	1,703
Ward admissions	0	3,305	738	3,167	1,933	4,956	2,919	3,039	1,280	1,043
ICU admissions	0	286	133	563	581	1,474	748	808	231	178
Deaths	0	86	21	141	160	608	703	992	394	459

**Note that 'denominator population' refers to numbers of persons at the time the 70% threshold coverage is achieved – vaccination continues during the simulations to the 80% coverage threshold values*

Table 5.5: As for table 5.4, for the 'All adults' allocation strategy

	<16 yrs		16-39 yrs		40-59 yrs		60+ yrs		70+ yrs	
	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac
Denominator population*	0	5,075,816	5,062,890	3,466,741	4,606,867	3,354,501	4,887,948	779,933	2,613,873	346,776
Symptomatic infections	0	227,251	19,890	62,845	22,440	38,565	12,462	5,586	3,374	1,103
Ward admissions	0	1,993	468	2,099	1,202	3,343	1,726	1,897	748	654
ICU admissions	0	168	82	367	349	961	431	487	131	108
Deaths	0	45	13	84	92	361	373	552	207	257

**Note that 'denominator population' refers to numbers of persons at the time the 70% threshold coverage is achieved – vaccination continues during the simulations to the 80% coverage threshold values*

Table 5.6 Cumulative symptomatic infections, ward admissions, ICU admissions and deaths over the first 180 days for the coverage threshold of 80% achieved by the 'Oldest first' strategy, broken down by vaccination status and age

	<16 yrs		16-39 yrs		40-59 yrs		60+ yrs		70+ yrs	
	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac
Denominator population	0	5,075,816	5,709,467	2,820,164	5,862,689	3,193,172	5,320,048	347,833	2,837,516	123,133
Symptomatic infections	0	276,576	25,005	77,813	24,135	41,190	14,705	6,324	4,051	1,260
Ward admissions	0	2,420	523	2,327	1,362	3,601	2,066	2,170	910	752
ICU admissions	0	206	92	404	399	1,036	513	561	160	124
Deaths	0	57	13	92	101	396	451	644	254	302

Table 5.7: As for table 5.6, for the 'All adults' allocation strategy

	<16 yrs		16-39 yrs		40-59 yrs		60+ yrs		70+ yrs	
	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac
Denominator population	0	5,075,816	6,387,623	2,142,008	5,295,963	3,265,813	5,180,499	487,382	2,743,990	216,659
Symptomatic infections	0	163,282	13,695	44,046	15,467	27,074	8,523	3,833	2,326	757
Ward admissions	0	1,379	318	1,453	819	2,295	1,171	1,285	509	440
ICU admissions	0	113	55	252	235	648	288	325	88	71
Deaths	0	29	8	54	59	232	239	357	133	168

Ongoing work and next steps

Next steps are still under discussion but may include some or all of the following:

- Further exploration of dynamic scenarios showing the interplay between epidemic growth for different levels of achieved vaccine coverage, overlaid with social measures to limit transmission;
- Further reporting of outcomes for 'vaccine escape' variants;
- Extension of this work to state and territory level, focusing on key subpopulations including First Nations Australians and also more realistic delivery allocations given workforce constraints;
- Potential to consider reactive outbreak immunisation approaches, including in closed and special population settings;
- Potential to consider future allocation strategies including booster doses.

TECHNICAL APPENDIX

Virus assumptions

Given recent emergence of Delta variants, there is presently very limited evidence of their severity relevant to antecedent strains. While early reports from Scotland and Canada suggest clinical outcomes might be worse than for Alpha variants, it is important to note that infections in these settings are skewed towards unvaccinated population groups in whom other risk determinants may also differ, potentially confounding and inflating early estimates of severity.

On this basis we will assume that the severity of Delta strains approximates Alpha strains. Again, given the limited evidence of clinical outcomes for Alpha relative to the much more extensive literature on original 'wild-type' strains we draw our starting assumptions regarding disease progression from wild-type. We then apply age-based risk multipliers as indicated based on observations of the Alpha variant.

Table S1. Disease severity assumptions

Parameter	Description	Source		Value(s)
Wildtype severity parameters				
Pr(symptoms|wt)	Probability of symptomatic disease given wildtype infection	Davies et al. Nature Medicine (2020) [1] Clinical fractions estimated for 10-year age groups.	Age group 0-9 10-19 20-29 30-39 40-49 50-59 60-69 70+	Symptomatic fraction 0.28 0.20 0.26 0.33 0.40 0.49 0.63 0.69
Pr(hosp| symptoms)	Probability of hospital admission given symptomatic wildtype infection	Knock et al. Pre-print [2]. Prepared for UK roadmap modelling by Imperial group. UK data first wave.		Age-specific. See Tables S6 and S8 of Knock et al.
Pr(ICU|hosp)	Probability of ICU admission given hospital admission	Same as above.		Same as above.
Pr(death|ward)	Probability of death for ward patients (no ICU stay)	Same as above.		Same as above.

Pr(death|ICU)	Probability of death for ICU patients	Same as above.	Same as above.
Pr(death|post-ICU ward)	Probability of death for post-ICU patients	Same as above.	Same as above.
Alpha severity parameters			
Pr(symptoms|alpha)	Probability of symptomatic disease given Alpha infection	A number of studies using UK data suggest that the probability of reporting symptoms is consistent for wildtype and Alpha Walker et al. Pre-print [3]. Graham et al. Lancet Public Health (2021) [4].	RR=1
Pr(hosp|alpha)	Probability of hospitalisation given Alpha infection	Bager et al. Lancet Infect Dis (2021) [5]. Denmark data.	OR=1.42
Pr(ICU|alpha)	Probability of ICU admission given Alpha infection	Patone et al. Pre-print [6]. UK data.	HR=1.99
Pr(death|alpha)	Probability of death given Alpha infection	Davies et al. Nature (2021) [7]. UK data.	HR=1.61

Vaccine effectiveness assumptions

1. ATAGI advice on parameters to be used in the modelling

Table S2.1. Vaccine effectiveness estimates (%) against overall (asymptomatic and symptomatic) infection of SARS-CoV-2 Delta variant (based on Shiek et al 2021 [8])

Vaccine	Dose 1*			Dose 2†		
	Lower limit	**Point estimate**	Upper limit	Lower limit	**Point estimate**	Upper limit
AstraZeneca	9	**18**	25	53	**60**	66
Pfizer BNT	17	**30**	41	75	**79**	82

*estimates in study for ≥28days post dose 1 and pre dose 2
†estimates in study for ≥14days post dose 2

Table S2.2. Vaccine effectiveness estimates (%) reasonable to use as against onward transmission to household members in case of breakthrough infections in vaccine recipients for the Delta variant (Based on Harris et al 2021 [9])

Vaccine	Dose 1			Dose 2
	Lower limit	**Point estimate**	Upper limit	**Point estimate**
AstraZeneca	38	**48**	57	**65**
Pfizer BNT	38	**46**	53	**65**

Note: these estimates obtained from the published version of Harris et al study are marginally different to those in the May 2021 advice which were from the pre-print that was available at the time

Table S2.3. Combined vaccine effectiveness assumptions on transmission for the Delta variant

Vaccine	Reduction in infection *(E_i)*	Reduction in onward transmission *(E_t)*	Calculated overall reduction in transmission*
AstraZeneca Dose 1	18%	48%	57%
AstraZeneca Dose 2	60%	65%	86%
Pfizer BNT Dose 1	30%	46%	62%
Pfizer BNT Dose 2	79%	65%	93%

**Calculated overall reduction in transmission = $1-(1-E_i)*(1-E_t)$*

Table S2.4. Combined vaccine effectiveness assumptions on transmission for a hypothetical vaccine escape variant with 50% reduction in both E_i and E_t

Vaccine	Reduction in infection *(E_i)*	Reduction in onward transmission *(E_t)*	Calculated overall reduction in transmission*
AstraZeneca Dose 1	9%	24%	31%
AstraZeneca Dose 2	30%	33%	53%
Pfizer BNT Dose 1	15%	23%	35%
Pfizer BNT Dose 2	40%	33%	59%

Table S2.5. Vaccine effectiveness estimates (% reduction) against symptomatic disease, hospitalisation, ICU admission and death for the Delta variant.

Outcome	Vaccine effectiveness			
	Pfizer BNT		AstraZeneca	
	1 dose	2 doses	1 dose	2 doses
Symptomatic infection[a]	33%	83%	33%	61%
Hospitalisation[b]	71%	87%	69%	86%
ICU admission[c]	71%	87%	69%	86%
Mortality[b]	71%	92%	69%	90%

[a] Sheik et al [8]. Study cited in ATAGI advice informing VE against any infection. Estimates of VE against symptomatic infection from the Appendix table.

[b] LSHTM central estimates used for UK roadmap modelling on 9 June 2021 for Alpha [10]. Estimates are based on a range of studies and in line with Public Health England's COVID-19 vaccine surveillance report for pre-Alpha and Alpha (week 22) [11] except for mortality (informed by Dagan et al [12] and Lopez Bernal et al [13]). For Delta, VE for hospitalisation and mortality is reduced by half of the relative reductions by dose and product as estimated by Lopez Bernal et al. See LSHTM roadmap report from 9 June for details.

[c] Few studies report VE against ICU admission. ATAGI Appendix table refers to single study conducted in India (Victor et al [14]) which reports 95% and 94% reductions in ICU admission after dose 1 and dose 2 of AstraZeneca, respectively. The findings from this study are unlikely to be directly transferable to the Australian setting due to health system differences. As per previous work, we assume the same reductions in ICU admission given vaccination as for hospitalisation.

2. Model parameters incorporated in UK roadmap modelling

Table S2.6. Central scenarios used by UK SPI-M-O modelling groups on 9 June for Delta [10]. Imperial/LSHTM/Warwick.

Vaccine	**% Reduction in infection**	**% Reduction in onward transmission**
1 dose		
AstraZeneca	33/43/34	33/24/45
Comirnaty	33/47/34	33/33/45
2 doses		
AstraZeneca	55/62/71	33/45/45
Comirnaty	85/80/73	33/56/45

Table S2.7. Central vaccine effectiveness scenarios used for UK SPI-M-O modelling groups on 9 June 2021 [10], incorporating evidence from Public Health England and Public Health Scotland on vaccine effectiveness against Delta. Imperial/LSHTM/Warwick.

Outcome	Vaccine effectiveness (% reduction)			
	Pfizer BNT		AstraZeneca	
	1 dose	2 doses	1 dose	2 doses
Symptomatic disease	33/47/34	85/84/83	33/43/34	55/71/82
Hospitalisation	73/71/64	89/87/91	73/69/64	85/86/90
Mortality	73/71/60	89/92/96	73/69/60	85/90/96

References

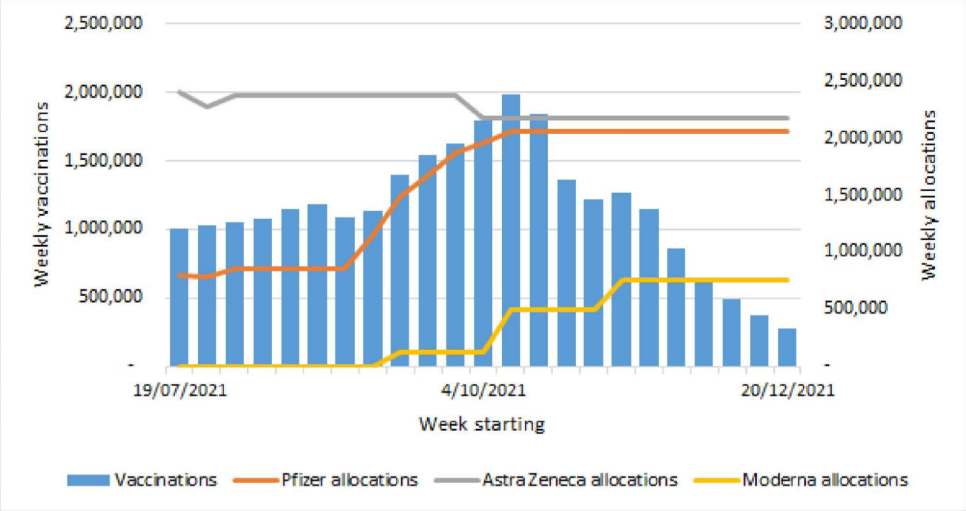
1. Davies NG et al. Age-dependent effects in the transmission and control of COVID-19 epidemics. *Nat Med*. 26, 1205–11 (2020). https://doi.org/10.1038/s41591-020-0962-9
2. Knock ES et al. The 2020 SARS-CoV-2 epidemic in England: key epidemiological drivers and impact of interventions. *medRxiv* (2021). https://doi.org/10.1101/2021.01.11.21249564
3. Walker AS et al. Increased infections, but not viral burden, with a new SARS-CoV-2 variant. *medRxiv* (2021). https://doi.org/10.1101/2021.01.13.21249721
4. Graham MS et al. Changes in symptomatology, reinfection, and transmissibility associated with the SARS-CoV-2 variant B.1.1.7: an ecological study. *Lancet Public Health* 2021; 6: e335–45. https://doi.org/10.1016/S2468-2667(21)00055-4
5. Bager P et al. Risk of hospitalisation associated with infection with SARS-CoV-2 lineage B.1.1.7 in Denmark: an observational cohort study. *Lancet Infect Dis* 2021. S1473-3099(21)00290-5. https://doi.org/10.1016/S1473-3099(21)00338-8
6. Patone M et al. Analysis of severe outcomes associated with the SARS-CoV-2 Variant of Concern 202012/01 in England using ICNARC Case Mix Programme and QResearch databases. *medRxiv* (2020). https://doi.org/10.1101/2021.03.11.21253364
7. Davies NG et al. Increased mortality in community-tested cases of SARS-CoV-2 lineage B.1.1.7. *Nature*. 2021. https://doi.org/10.1038/s41586-021-03426-1
8. Sheik A et al. SARS-CoV-2 Delta VOC in Scotland: demographics, risk of hospital admission, and vaccine effectiveness (Correspondence). *Lancet 2021*; 397: 10293, P2461-2. https://doi.org/10.1016/S0140-6736(21)01358-1
9. Harris RJ et al. Effect of Vaccination on Household Transmission of SARS-CoV-2 in England (Correspondence) NEJM June 2021.
10. SPI-M-O: Summary of further modelling of easing restrictions – roadmap Step 4: https://www.gov.uk/government/publications/spi-m-o-summary-of-further-modelling-of-easing-restrictions-roadmap-step-4-9-june-2021
11. Public Health England COVID-19 vaccine surveillance report week 22 (3 June 2021): https://www.gov.uk/government/publications/covid-19-vaccine-surveillance-report
12. Dagan N et al. BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Mass Vaccination Setting. N Engl J Med 2021; 384:1412-1423. http://dx.doi.org/10.1056/NEJMoa2101765
13. Lopez Bernal J et al. Effectiveness of the Pfizer-BioNTech and Oxford-AstraZeneca vaccines on covid-19 related symptoms, hospital admissions, and mortality in older adults in England: test negative case-control study. BMJ 2021; 373: n1088. http://dx.doi.org/10.1136/bmj.n1088
14. Victor PJ et al. Protective effect of COVID-19 vaccine among health care workers during the second wave of the pandemic in India. *Mayo Clin Proc*. 2021;96(x). http://dx.doi.org/10.1016/j.mayocp.2021.06.003

Vaccine allocation scenarios

Scenario vaccination rates are determined using an agent-based simulation model utilising location and allocation data on vaccination sites and location data for the Australian population. Each week, a subset of the population seeks vaccination at available sites within their respective area. Sites receive deliveries of vaccines and administer vaccinations to the seeking population up to their level of stock.

Site allocations to Primary Care channels and State and Territory channels are based on planned allocations approved by the Health Minister as of 15 July 2021, weighted by assumptions about maximum capacities and geographical coverage provided by the National COVID Vaccine Taskforce Planning Team. Figure S1 shows total weekly allocations by vaccine.

Figure S1: Weekly allocations and modelled vaccinations for oldest first, AZ 12 weeks dose interval and AZ 60+ years strategy.



Note: Weekly vaccination rates taper towards the end of the rollout due to potential allocation constraints by geography, which means some areas reach completion before others. Further, modelled vaccination rates in an area may taper before completion because not all individuals seek a vaccination every week.

Locations for known existing and known planned Primary Care sites are provided by the Department of Health Primary Care Response Team. Sites are assumed to order and have the capacity to fulfil 78% of their planned allocations based on recent calculated vaccine utilisation rates by vaccination sites, as of 15 July 2021. Sites are also assumed to prioritise second doses over first doses, and any unused doses are assumed to be able to be used for future weeks.

Australian population is based on 2016 ABS Census data, scaled to 2021 Estimated Resident Populations (ERPs). Individuals are assumed to be willing to drive up to 30, 60 or 120 minutes to sites depending on their remoteness. Individuals are also assumed to seek vaccination once every 4 weeks on average, with each seeking individual assumed to be willing to try up to 5 sites to receive vaccination. The vaccinations are modelled from a starting point of existing administrations up to and including 11 July 2021, with coverage of at least 1 or 2 vaccine doses at 33.2% and 11.4% respectively based on AIR data as of 15 July 2021 (Table S3). Note that dose 1 coverage includes individuals who go on to receive dose 2.

Table S3.1: Distribution of vaccination coverage within each age band up to and including 11 July 2021 based on Australian Immunisation Register (AIR) data as of 15 July 2021.

Age band	Pfizer dose 1	Pfizer dose 2	Astra Zeneca dose 1	Astra Zeneca dose 2	Total dose 1	Total dose 2
16-19	2.9%	1.6%	0.9%	0.5%	3.8%	2.1%
20-29	8.5%	6.0%	2.1%	1.5%	10.6%	7.5%
30-39	11.4%	8.1%	2.6%	1.8%	13.9%	9.9%
40-49	26.4%	20.2%	3.5%	2.4%	29.9%	22.6%
50-59	12.2%	7.3%	29.5%	5.0%	41.8%	12.3%
60-69	5.2%	4.2%	53.0%	8.0%	58.2%	12.2%
70-79	4.5%	3.0%	72.5%	27.2%	77.0%	30.2%
80+	16.2%	11.8%	65.3%	22.0%	81.5%	33.8%
Total	**11.4%**	**6.7%**	**21.8%**	**4.8%**	**33.2%**	**11.4%**

Figures represent vaccinations as a percentage of total eligible population (age 16+).

Scenario parameters are implemented in the model as follows:

- Vaccine age prioritisation: Age prioritisation occurs independently within each local region (mixture of non-overlapping ABS Mesh Blocks, Statistical Area Level 1 and Statistical Area Level 2). Individuals within the same region are vaccinated in the order of the respective prioritisation strategy. For example, under the 'oldest first' strategy, each region will vaccinate their 80+ age band first and can move on to their 70-79 age band as soon as they've completed their 80+ age band. This means vaccination timing for each age band differs for each region and is dependent on the region's age distribution. Note that timing is also dependent on the vaccination rate of each region (determined by nearby site allocations).
- Astra Zeneca dosing interval: Under the current dose interval of 12-weeks, individuals are only able to begin seeking their second dose 12-weeks after their first dose. Reducing the dosing interval to 8-weeks or 4-weeks allows individuals to seek their second dose earlier.
- Astra Zeneca age recommendation: Under the current age recommendation of 60+, we assume for simplicity half of the remaining 60+ population to be vaccinated will seek Astra Zeneca while the other half will seek Pfizer. Similar logic follows under a recommendation of 40+, resulting in an increased number of individuals seeking Astra Zeneca.

Under these implementation assumptions, the age distribution of achieved vaccine coverage varies by age cohort by achievement of the 80% coverage target (Table S3.2). Of particular note, the uptake for the 16-39 age bands is highest in the 'random' strategy (6.4m people) out of the three scenarios explored (5.7m people for either of the other two strategies).

**Note that these allocation scenarios are artificial by design, to demonstrate the impacts of alternative immunisation approaches. Further modelling is required to map observed benefits to deliverable allocation strategies given the current stage of the national COVID-19 vaccine rollout.*

Table S3.2: Distribution of vaccination coverage by age band by achievement of the 70% vaccination coverage threshold (1st November) for standard AZ dosing indications (60+, 12 week interval between doses) and the three age-based allocation strategies.

		Proportion of age band eligible pop fully vaccinated		
Age band	Eligible pop	Oldest first	40+ years first	All adults
16-19	1190616	4.2%	86.1%	57.1%
20-29	3577491	18.9%	52.6%	58.8%
30-39	3761524	74.8%	16.6%	60.6%
40-49	3295699	90.4%	90.6%	69.0%
50-59	3127124	92.1%	92.0%	74.6%
60-69	2707232	87.3%	93.8%	84.0%
70-79	1897838	96.1%	93.3%	89.4%
80+	1062811	95.2%	83.0%	86.3%

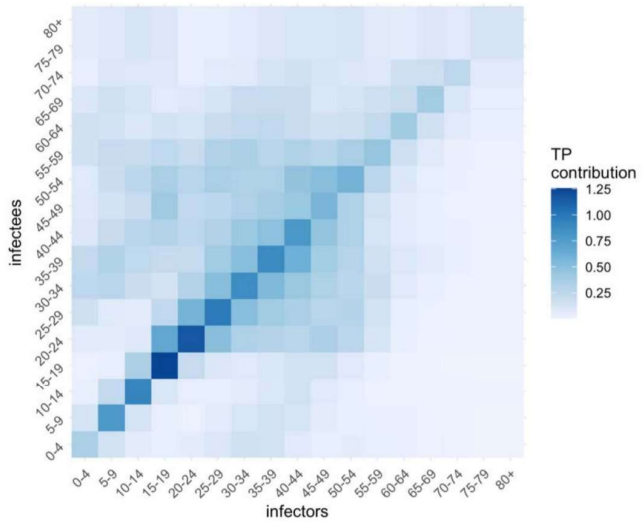
Table S3.3: Distribution of vaccination coverage by age band by achievement of the 80% vaccination coverage threshold (22nd November) for standard AZ dosing indications (60+, 12 week interval between doses) and the three age-based allocation strategies.

		Proportion of age band eligible pop fully vaccinated		
Age band	Eligible pop	Oldest first	40+ years first	All adults
16-19	1190616	8.6%	86.9%	73.5%
20-29	3577491	64.1%	87.1%	74.6%
30-39	3761524	88.1%	41.4%	75.6%
40-49	3295699	90.5%	90.6%	80.8%
50-59	3127124	92.1%	92.0%	84.2%
60-69	2707232	91.7%	94.2%	90.0%
70-79	1897838	96.2%	95.9%	93.4%
80+	1062811	95.2%	89.2%	91.4%

Population mixing assumptions

Population mixing within and between age groups is configured based on widely accepted social contact matrices published by Prem et al (PLoS Computational Biology 2017)(Figure S2.1). It has been expanded to include an 80+ age class (assumed to have the same mixing rates as 75-79 years). Age-specific susceptibility and transmissibility estimates from Davies et al. (Nature Medicine 2020) are used and transmission rates have been calibrated to our baseline population-wide TP (here denoted R) of 3.6. Of note, the greatest mixing intensities are anticipated between individuals aged from 15-24 years, remaining high through adults of working age. While intense school-based mixing is anticipated between children aged 5-14, the transmission matrix accounts for the relatively low observed infectiousness of this age group, associated with a high proportion of asymptomatic infections.

Figure S2.1: Age-based transmission matrix derived from Prem et al (2017)



The key message of Figure S2.1 is that in the absence of vaccination, individuals of different ages do not contribute equally to the spread of infection in the population.

The impact of vaccination on overall transmission will therefore be substantially influenced by the rate of vaccine uptake achieved **within distinct population age cohorts.** Table S3.2 shows the range of values for achieved coverage by age group underpinning 80% 'age eligible coverage' for our three hypothetical vaccine allocation strategies.

Figures S2.2-S2.5 provide a visual demonstration of the reduction in transmission achieved for each age band depending on the rollout scenario. Light grey bars show the contribution of each age group to transmission potential given different numbers of contacts and age differences in both susceptibility and infectiousness, in the absence of vaccination. Dark grey bars show the contribution of each age group to transmission potential for that vaccine allocation strategy and coverage. The 'all ages' strategy consistently produces the greatest proportional reductions in infectiousness across peak transmitting age groups.

Figure S2.2: Impact of the three different allocation strategies on TP by age category, resulting in the overall TP achieved by 50% age eligible population coverage

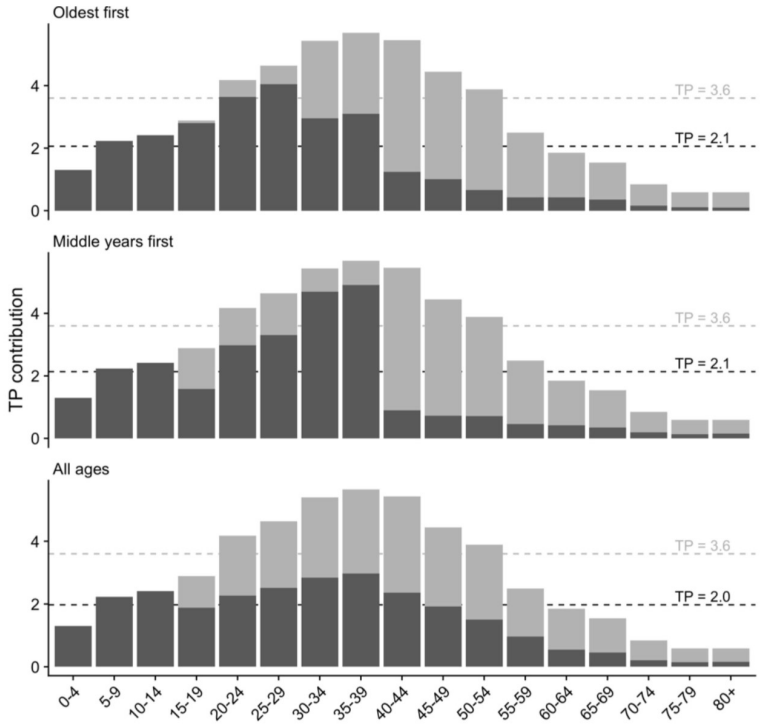


Figure S2.3: As for Figure S2.2, but for 60% age eligible population coverage

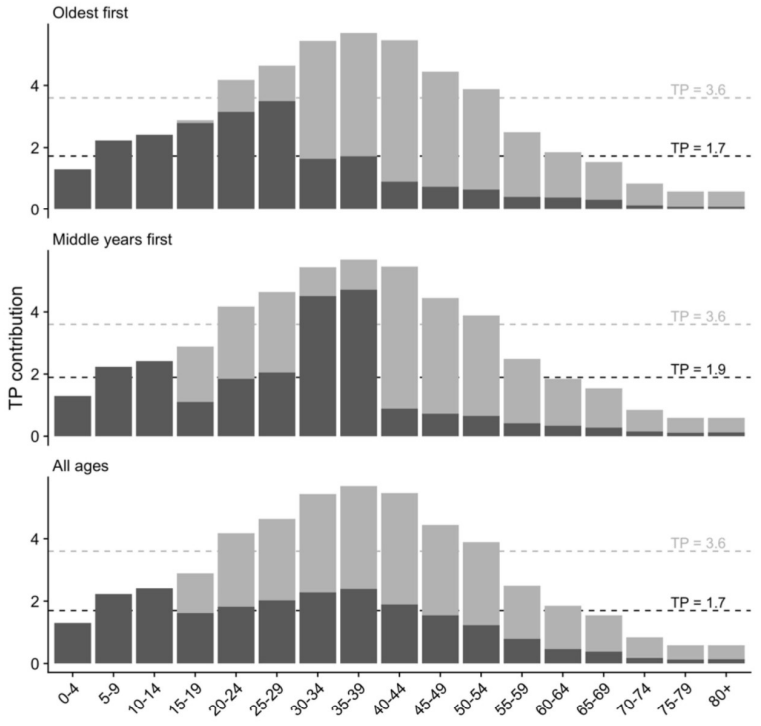


Figure S2.4: As for Figure S2.2, but for 70% age eligible population coverage

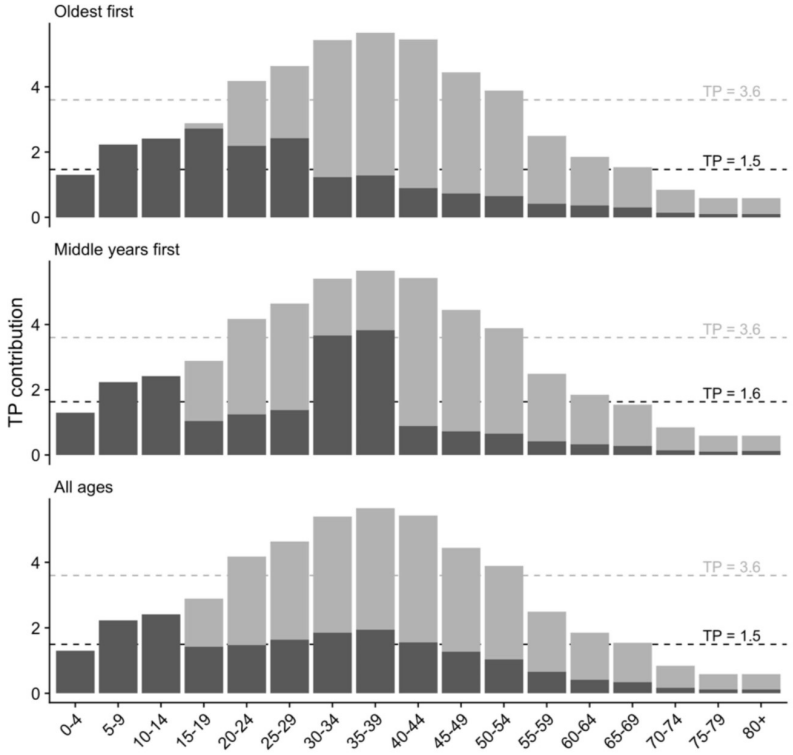
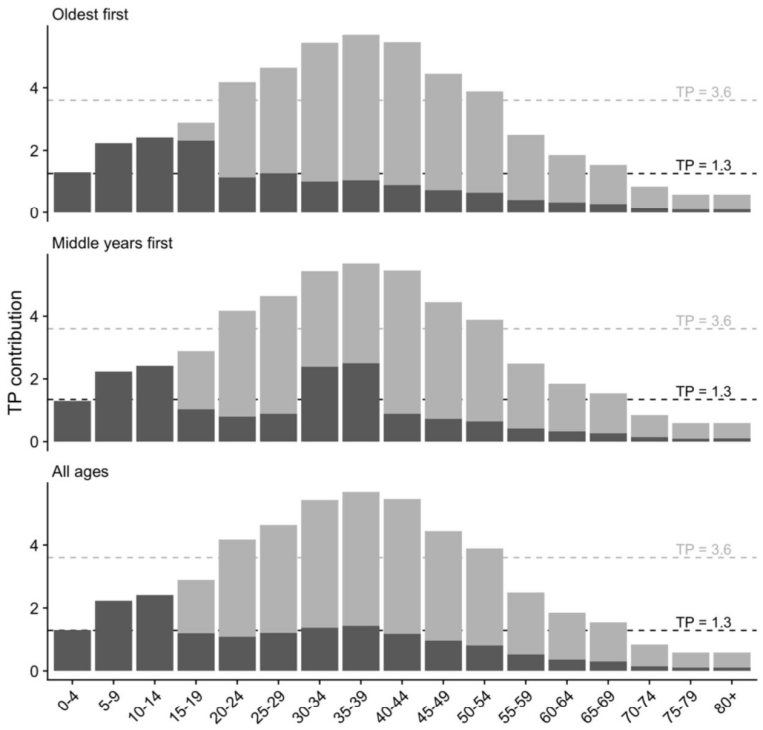


Figure S2.5: As for Figure S2.2, but for 80% age eligible population coverage



Impact of public health response and bundled social measures on TP

We estimated TP over time in each Australian state and territory using the same Bayesian semi-mechanistic model that has been used for situational awareness throughout the pandemic. This model incorporates data on case counts, mobility metrics, behavioural survey data, and delays between symptom onset and case detection to quantify the statewide averaged reproduction number that could be expected during widespread transmission. This model is described in technical detail elsewhere (https://www.doherty.edu.au/uploads/content_doc/Technical_Report_15_March_2021_RELEASED_VERSION.pdf). Subsequent to this description, the model has been updated to account for increased transmission probabilities associated with Delta (calculated via the same method as for previous variants of concern).

Impact of vaccination on TP

We estimated the percentage reduction in TP that could be expected under different vaccination coverages and distributions by age, vaccine type, and number of doses received via static analysis of the age-based transmission matrix shown in figure S2.1. For each vaccination scenario, the reduction in transmission by age group was calculated from the average vaccination efficacy against transmission (accounting for the fractions of each vaccine type and number of doses in that age group) and the age group coverage. The reductions in transmission were then applied to the columns of the transmission matrix, and the dominant eigenvalue (population-wide reproduction number) was compared between the vaccinated transmission matrix and the baseline matrix top compute a percentage reduction in TP.

PHSM bundles

PHSM bundles described in the main text represent periods when a variety of different restrictions were in place. Table S4.1 (provided by Treasury) lists restrictions corresponding to these periods. We emphasise that the TPs associated with these PHSM bundles reflect state wide population behaviours (numbers of household contacts and adherence to hygiene advice) estimated at these times, which differs substantially over time and between states, even within similar restrictions. These periods are therefore intended to reflect achievable levels of reduction in TP via PHSMs, rather than inference about the particular impacts of these sets of restrictions.

TTIQ assumptions

Recognising that the TTIQ public health response will be less effective at high caseloads, we adapted this model to include an explicit effect of reducing the time to case isolation that can be achieved through intensive contact tracing. This is in addition to the time to case detection effect already included. The empirical distribution of times to case isolation under recent, 'optimal' TTIQ capacity was estimated using a limited timeseries of case data from NSW between July 2020 and January 2021. This distribution was then calibrated to estimate the distribution of times to isolation in other times and states by assuming improvements in TTIQ are proportional to improvements in times to detection. This provided a distribution of times to case isolation under partially efficacious TTIQ (calibrated against VIC 4 August 2020 – the peak of daily locally-acquired COVID-19 cases in Australia) for use in the dynamic simulation model and estimates of the effect of partial TTIQ on transmission potential to estimate a baseline TP under community transmission.

Table S4.1: Description of measures implemented under PHSM 'bundles'

	High PHSM	Medium PHSM	Low PHSM	Baseline PHSM
Reference period	VIC 23 August 2020	NSW 1 July 2021	NSW 23 August 2020	NSW March 2021
Stay at home orders	• Stay-at-home except essential purposes	• Stay-at-home except for work, study and essential purposes	• No stay-at-home orders	• No stay-at-home orders
Density restrictions	• 4 sqm rule	• 2 sqm rule	• 2 sqm rule	• 2 sqm rule
Retail trade	• Non-essential retailers and venues closed to public. • Take away and home delivery only.	• Increased retail activity, subject to density restrictions • Seated dining for small groups at cafes/restaurants	• Social distancing rules apply • Larger groups allowed	• Social distancing rules apply •
Work	• Only workplaces categorised as permitted work allowed to operate on-site and subject to restrictions	• Work from home if possible, capacity limits and restrictions on office space apply	• Return to work, but social distancing and capacity restrictions on office space apply	• 1.5 sqm rule
Schools and childcare	• Closed – remote learning only	• Closed or graduated return	• Open	• Open
Capacity restrictions	• No gatherings - Non-essential venues etc closed.	• Indoor venues closed. • Capacity limits restricted to small groups outdoors	• Recreational activities allowed and venues open but social distancing and capacity limits apply	• Large sporting venues to operate at 70 per cent capacity
Travel restrictions	• Essential movements only within 5 or 10 km radius • No intra- or inter-state travel	• Non-essential travel limited – no intra or inter-state travel •	• No travel restrictions • Interstate travel allowed	• No travel restrictions • Interstate travel allowed
Other	• Curfew • No household visitors and 2-person limit on exercise	• 5 visitors to household and limited outdoor gatherings e.g., 10 people	• Requirements for record keeping, COVID-safe plans etc	•

Fraction of time under restrictions

Where a vaccination scenario leads to either a $TP_1 > 1$ with one PHSM bundle, or $TP_2 < 1$ with a more stringent bundle, the long-term average TP can be maintained at 1 (and therefore daily case counts neither growing nor shrinking over the long term) by alternating between the two PHSM bundle states. Whilst the first PHSM bundle is in place cases will grow, and whilst the more stringent bundle is in place cases will shrink, leading to an oscillation of case counts around some average level. This reflects a strategy that might be used to keep cases below a health sector capacity limit in the event that there is long-term community transmission and under the necessary simplifying assumption that vaccination coverage is static. The fraction can be computed as:

$$\text{fraction} = -\log(TP_1) / (\log(TP_2) - \log(TP_1))$$

where $TP_1 < 1$ the fraction is zero (TP_2 is not needed) and when $TP_2 > 1$ no fraction exists, because even the more stringent PHSM bundle could not control transmission.

Tables 4.2 and 4.3 demonstrate the importance of the TTIQ response to constrain transmission, by comparing requirements for PHSMs for the same vaccine coverage thresholds, under the alternative allocation scenarios and in the context of:

- 'Optimal' TTIQ response, deemed achievable when active case numbers can be contained in the order of 10s or 100s;
- 'Partial' TTIQ response, deemed more likely when established community transmission leads to rapid escalation of caseloads in the 1,000s or beyond.

Table 4.2 shows that light or moderate restrictions will likely be insufficient to regain control of epidemics even at 70% coverage for only a partially effective TTIQ response. Prolonged lockdowns would likely be needed to limit infection numbers and caseloads. The proportion of time during which the community would experience imposition of these stringent measures logically declines as vaccine coverage increases.

In contrast, Table S4.3 shows that if optimal TTIQ can be maintained the requirement for strict lockdowns as part of the incursion response diminishes with increasing vaccine coverage. In many instances, moderate or even light restrictions may be sufficient to curb epidemic growth. Note that the share of time under restrictions will be overestimated if there are sustained periods with no new outbreaks, due to effective border control.

As shown in Figure 1.2 in the main text, ongoing application of light social restrictions is anticipated to constrain epidemic growth over and above vaccination. Assuming population co-operation these restrictions will support maintenance of optimal TTIQ response capacity, which is critical to avoidance of stringent social measures.

Table S4.2: Proportion of time lockdowns are needed to constrain transmission when the TTIQ public health response is only *partially effective,* due to high caseloads

Vaccine coverage	Allocation scenario	Light restrictions only	Moderate lockdowns only	Strict lockdowns only
50%	Oldest first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	89%
	40+ years first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	93%
	All adults	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	84%
60%	Oldest first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	67%
	40+ years first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	78%
	All adults	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	65%
70%	Oldest first	Not possible to constrain outbreak with light restrictions	77%	47%
	40+ years first	Not possible to constrain outbreak with light restrictions	99%	60%
	All adults	Not possible to constrain outbreak with light restrictions	81%	49%
80%	Oldest first	82%	47%	29%
	40+ years first	Not possible to constrain outbreak with light restrictions	59%	36%
	All adults	89%	51%	31%

Table S4.3: As for Table S4.2, but for an *optimally effective* TTIQ response

Vaccine coverage	Allocation scenario	Light restrictions only	Moderate lockdowns only	Strict lockdowns only
50%	Oldest first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	63%
	40+ years first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	67%
	All adults	Not possible to constrain outbreak with light restrictions	94%	58%
60%	Oldest first	Not possible to constrain outbreak with light restrictions	67%	41%
	40+ years first	Not possible to constrain outbreak with light restrictions	86%	52%
	All adults	Not possible to constrain outbreak with light restrictions	64%	39%
70%	Oldest first	60%	34%	21%
	40+ years first	97%	56%	34%
	All adults	67%	38%	23%
80%	Oldest first	7%	4%	3%
	40+ years first	29%	17%	10%
	All adults	15%	8%	5%

Table S4.4: Proportion of time lockdowns are needed to constrain transmission when the TTIQ public health response is only *partially effective,* due to high caseloads, and where light restrictions are always in place.

Vaccine coverage	Allocation scenario	Moderate lockdowns only	Strict lockdowns only
50%	Oldest first	Not possible to constrain outbreak with moderate lockdown	82%
	40+ years first	Not possible to constrain outbreak with moderate lockdown	89%
	All adults	Not possible to constrain outbreak with moderate lockdown	75%
60%	Oldest first	Not possible to constrain outbreak with moderate lockdown	49%
	40+ years first	Not possible to constrain outbreak with moderate lockdown	67%
	All adults	Not possible to constrain outbreak with moderate lockdown	46%
70%	Oldest first	46%	18%
	40+ years first	97%	39%
	All adults	55%	22%
80%	Oldest first	0%	0%
	40+ years first	4%	2%
	All adults	0%	0%

Table S4.5: As for Table S4.4, but for an *optimally effective* TTIQ response

Vaccine coverage	Allocation scenario	Moderate lockdowns only	Strict lockdowns only
50%	Oldest first	Not possible to constrain outbreak with moderate lockdown	42%
	40+ years first	Not possible to constrain outbreak with moderate lockdown	49%
	All adults	87%	35%
60%	Oldest first	23%	9%
	40+ years first	66%	27%
	All adults	15%	6%
70%	Oldest first	0%	0%
	40+ years first	0%	0%
	All adults	0%	**0**%
80%	Oldest first	0%	0%
	40+ years first	0%	0%
	All adults	0%	0%

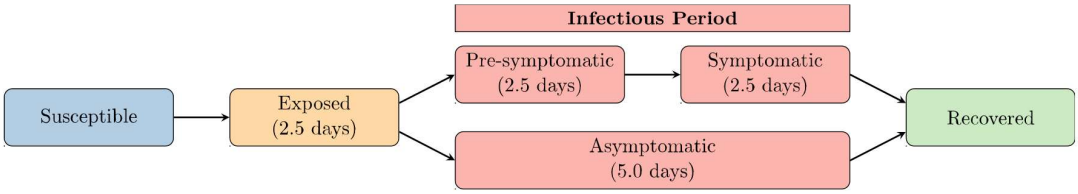
Transmission model description

We implement an individual-based model to estimate COVID-19 spread under various vaccination allocation and coverage scenarios. We use an individual-based framework because it allows us to specify arbitrary vaccine schedules and to efficiently implement case-finding, case isolation and contact quarantine in the model.

The model defines a population, where every individual has an age, corresponding to an input age-structure. Infected individuals contact others in the population at random, modified by an input age-structured contact matrix. based on 2016 ABS Census data, scaled to 2021 Estimated Resident Populations (ERPs) and we assume mixing between age groups as estimated by Prem et al. (PLoS Computational Biology 2017). When a susceptible individual contacts an infectious individual, there is a probability that they will contract the virus.

When infected, an individual transitions into an exposed class, before moving into an infectious class, where they can be either asymptomatic or symptomatic, and finally they move into a recovered class (Figure S3).

Figure S3: Transitions between states in the individual based model



The model incorporates age-specific susceptibilities to infection and probabilities of developing symptoms given infection (according to Davies et al Nature Medicine 2020).

Vaccine assumptions

COVID-19 vaccines act on multiple elements of transmission and disease. We assume that vaccination reduces susceptibility to infection (according to Table S2.1) and the probability of developing symptomatic disease given infection (according to Table S2.5). The latter impacts transmission since we assume that asymptomatic individuals are 50% less infectious. We further assume that infected vaccinated individuals are less infectious by a factor calculated to match combined vaccine effectiveness assumptions on transmission (Table S2.3).

Model initialisation and simulations

For the scenarios presented in the main report, we use a population of approximately 24 million individuals and an initial basic reproduction number (R_0) of 6.32 which corresponds to our baseline population-wide TP minus the effects of TTIQ or surveillance. We note that the effective reproduction number is below 6.32 due to the incorporation of TTIQ and vaccination in the simulation.

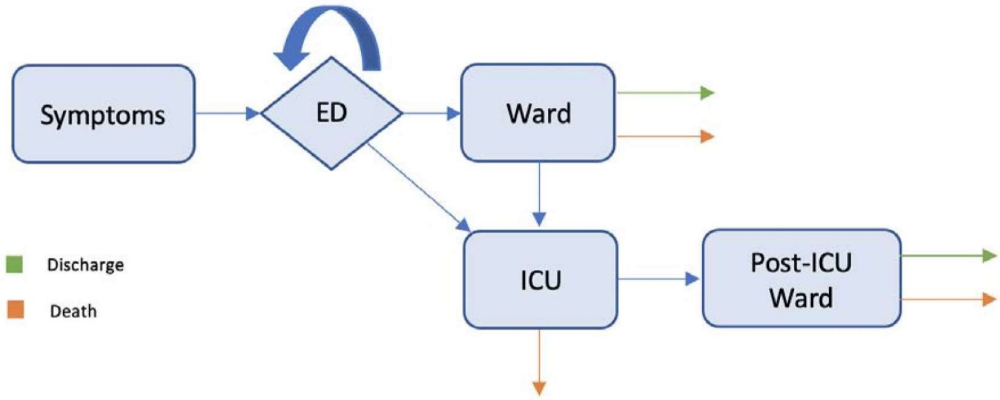
Individuals are vaccinated dynamically in the model, according to an age-specific schedule of doses per day (Figure S1). Second doses are given at a set time from the first dose, which is 3 weeks for mRNA Pfizer/Moderna and 12 weeks for AstraZeneca.

Once the predefined vaccination threshold is reached (50%, 60%, 70% or 80%), we expose 30 unvaccinated individuals, triggering the start of disease transmission. For all scenarios, we assume partial TTIQ effectiveness which isolates each individual according to a known distribution estimated from Victorian data at the height of the 'second wave' in 2020 as our best estimate of public health response performance under high caseloads. As the virus is spreading through the community, we continue the dynamic vaccination of individuals.

Each simulation outputs a line list of infections by age, vaccination status (dose number and product), and symptom status (symptomatic or asymptomatic), from which we can generate our daily case numbers.

Clinical pathways model

Figure S4: Schematic representation of states captured in the clinical pathways model



The clinical pathways model takes inputs of daily symptomatic individuals, stratified by age and vaccination status, from the epidemic model. There is a delay between the onset of symptoms and presentation to ED. Upon arrival to ED individuals are either admitted to ward immediately, admitted to ICU immediately, or if ED is at capacity, individuals are not admitted and may re-present the next day. For this phase of the work, we assume the only symptomatic cases requiring hospitalisation present to ED. Individuals who are admitted to ward will either die, be discharged from ward or eventually require ICU care. Individuals in ICU will either die in ICU or return to ward, from here they will either die or be discharged.

The lengths of stay in each compartment/clinical setting depends on the eventual clinical pathway of individuals. For example, lengths of stay in ward will typically be shorter for individuals who later require ICU care. The pathways of individuals through the health system are dependent on both their age and vaccination status. All length of stay distributions and age stratified probabilities of transitions between compartments are taken from [2], which are scaled for the Delta variant according to Table S1 and vaccination status according to Table S2.5. The model accounts for uncertainty by using stochastic inputs from the epidemic model, generating stochastic trajectories/pathways through the hospital system and sampling from the posterior length of stay distributions from [2].

Workforce participation assumptions

Table S5: Workforce participation proportions, by age. Source: Treasury

10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
0.27006	0.83684	0.862148	0.863779	0.799347	0.46397	0.115252	0.02064

Estimates of available clinical capacity for management of COVID-19 cases

National health care capacities were defined based on current operations and envisaged sustainable capacity under an ongoing community transmission scenario. It should be noted that these figures are substantially lower than peak surge estimates in early 2020 when a single epidemic wave was considered a likely scenario.

Appendix Table S6: Estimated national and per-jurisdiction healthcare capacities for ward beds, ED and GP consultations based on AIHW data, under the assumption that 50% of total capacity in each healthcare setting could possibly be devoted to COVID-19 patients*. Estimates of ICU capacity are taken directly from the National COVID-19 Common Operating Picture#.

Healthcare resource	National	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
COP ICU beds	1,964	37	737	24	298	197	39	515	117
Ward beds	25,756	448	8,832	276	5,099	1,915	557	6,158	2,471
ED consultations	10,935	202	3,945	172	2,071	694	222	2,456	1,173
GP consultations	202,999	2,607	66,616	1,582	43,627	14,005	3,935	51,338	19,289

*ED and GP capacities reflect maximum number of daily consultations.
https://www.health.gov.au/sites/default/files/documents/2021/07/coronavirus-covid-19-common-operating-picture-8-july-2021.pdf

Addendum to Doherty Modelling Report for National Cabinet 30 July 2021

TABLE OF CONTENTS

TECHNICAL APPENDIX

Executive summary

- Models of COVID-19 infection and vaccination were used to define a target level of vaccine coverage for transition to Phase B of the National Plan. The model was based on the simplifying assumption of a single national epidemic, with COVID-19 transmission, severity and vaccine effectiveness as for the Delta variant.
- Our report for 30th July 2021 National Cabinet considered hypothetical age-based vaccine allocation scenarios underpinning coverage targets of 50, 60, 70 and 80%, to explore the population level impacts of strategies focused either primarily on direct protection or transmission reduction.
- From the starting point of age-based coverage in Australia as of 12 July 2021, an 'All adults' allocation strategy that achieved high coverage in key transmitting populations (20-39 years) resulted in greatest reductions in harms across all age groups, regardless of vaccination status.
    - This hypothetical scenario was mapped to an *implementable strategy consistent with the national COVID-19 immunisation programme*, under which vaccines would be opened up to 30-39 year olds on 31 August 2021, and 16-29 years olds from 11 October, called 'Transmission reducing';
    - This strategy captured the benefits achieved under the previous preferred strategy, achieving a slightly lower TP by 70% coverage, and equivalence at 80%;
    - Epidemic dynamics assuming baseline restrictions and partial TTIQ were very similar to the 'all adults' strategy;
    - Corresponding clinical outcomes were similar or improved at coverage of 60% or above.

- Our main report highlighted the importance of maintaining optimal TTIQ responses in the context of ongoing 'low' public health and social measures to minimise rapid epidemic growth and escalation of severe disease outcomes, even in a highly immunised population;
    - This report compared epidemic dynamics and clinical outcomes for the 'Transmission reducing' strategy assuming either 'baseline measures with partial TTIQ' or 'low PHSMs with optimal TTIQ';
    - Infections and corresponding adverse consequences were reduced by several orders of magnitude, assuming ongoing light restrictions and sustained highly effective public health response capacity;
    - The ability to deliver this capacity is greatly assisted by the more even distribution of reported cases over the 6 months time window of reporting, given an absence of rapid epidemic escalation.

- *As in our previous report, the contingency of these outcomes on population behaviours including vaccine acceptance, co-operation with behavioural restrictions and active engagement and compliance with public health responses is critically important for achieving programmatic outcomes.*

- *Our models assume a point source outbreak as the key initiating event for transmission. Given the low caseloads achieved under the 'optimal TTIQ' scenario and considered desirable in Phase B, the influence of imported infections on local epidemic dynamics merits further exploration in the next phase of modelling.*

Exploring vaccine thresholds for transition to Phase B of the National Plan

Our report for 30th July 2021 National Cabinet considered hypothetical age-based vaccine allocation scenarios underpinning coverage targets of 50, 60, 70 and 80%, to explore the population level impacts of strategies focused either primarily on direct protection or transmission reduction. From the starting point of age-based coverage in Australia as of 12 July 2021, an 'All adults' allocation strategy that achieved high coverage in key transmitting populations (20-39 years) resulted in greatest reductions in harms across all age groups, regardless of vaccination status. This hypothetical scenario was mapped to an *implementable strategy consistent with the national COVID-19 immunisation programme*, under which vaccines would be opened up to 30-39 year olds on 31 August 2021, and 16-29 years olds from 11 October, called 'Transmission reducing'.

Defining the transmission reducing strategy

The 'transmission reducing' strategy is defined in relation to previously modelled vaccination allocation scenarios in Table 1.1.

Table 1.1: Vaccine allocation strategies by age, assuming current recommendations for Astra Zeneca vaccine age eligibility (60+ years) and dosing interval (12 weeks)

Strategy	Allocation sequence
Oldest first	Vaccinations are prioritised from oldest to youngest. Specifically, prioritization occurs in the following order: 80+, 70-79, 60-69, 50-59, 40-49, 30-39, 20-29, 16-19
40+ years first	Vaccinations are prioritised from 40+ upwards, then 16+. Specifically, prioritization occurs in the following order: 40-49, 50-59, 60-69, 70-79, 80+, 16-19, 20-29, 30-39
All adults	Vaccinations are not prioritised in any particular order by age
Transmission reducing	As for national program, under which all individuals 40+ are currently eligible. Within the simulation timeframe, the 30-39 years cohort becomes eligible from 30 August, and 16-29 year olds on 11 October.

Timeliness of achieving coverage targets by vaccine allocation scenario

The indicative dates of achieving differing coverage thresholds for the 'transmission reducing' strategy are shown relative to the previously explored scenarios in Table 1.2. Under the revised scenario, there is an anticipated one week delay to achieving the 70% coverage threshold, but all other target dates are unchanged. Not that achievement of any of these thresholds by the given date is contingent on population acceptance.

Table 1.2: Date of achieving a given vaccine coverage threshold by allocation strategy, assuming a start date and population completed doses (AIR) as of 12th July 2021, assuming Astra Zeneca is recommended only for 60+ years and delivered at a 12 week interval

	Coverage threshold			
Strategy	**50%**	**60%**	**70%**	**80%**
Oldest/40+ first and All ages	4 October	18 October	1 November	22 November
Transmission reducing	4 October	18 October	**8 November**	22 November

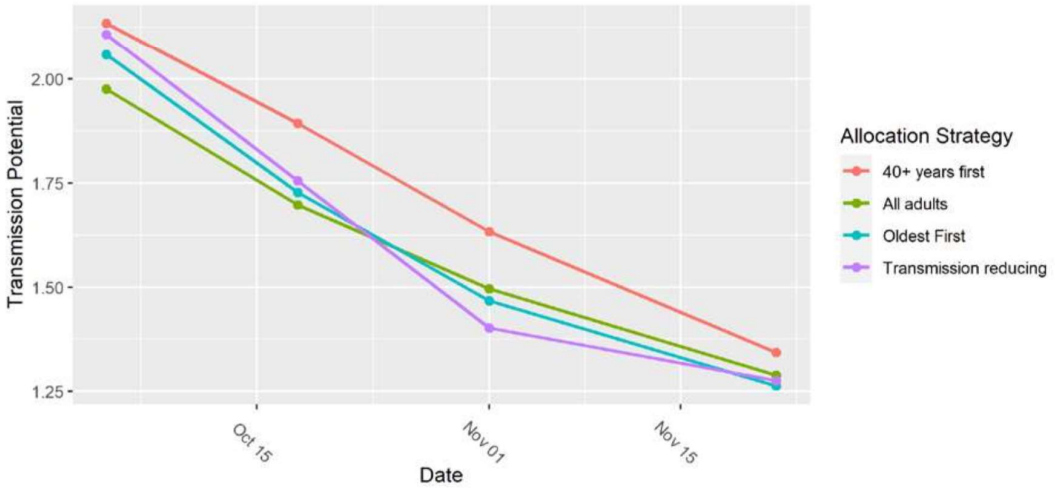
Transmission potential (TP) by vaccine coverage and allocation strategy

The reduction in TP achieved for each strategy by the coverage threshold is shown in Table 2.1 and Figure 1. As shown in the static table, the greatest gains of the transmission reducing strategy relative to others is demonstrable at the 70% coverage threshold, by which point it outperforms the 'all adults' strategy.

Table 2.1: Scaled values of Delta variant transmission potential (TP) for 50%, 60%, 70% and 80% population coverage for each allocation strategy, assuming AZ is delivered to individuals aged 60+ years, with a 12-week dosing interval. We use a starting TP of 3.6.

	Eligible population coverage (16+)			
Allocation Strategy	**50%**	**60%**	**70%**	**80%**
Oldest first	2.1	1.7	1.5	1.3
40+ years first	2.1	1.9	1.6	1.3
All adults	2	1.7	1.5	1.3
Transmission reducing	2.1	1.8	1.4	1.3

Figure 1: Rate of change in TP over time, by vaccine allocation strategy



Impact of public health response and bundled social measures on TP

Figure 2.1: Combined effects of vaccination and PHSM scenarios on COVID-19 transmission potential under the 'Transmission reducing' vaccination scenario assuming only *partial TTIQ effectiveness*, due to high caseloads. Standard age (60+) and dosing interval (12 weeks) recommendations are assumed for the AZ vaccine.

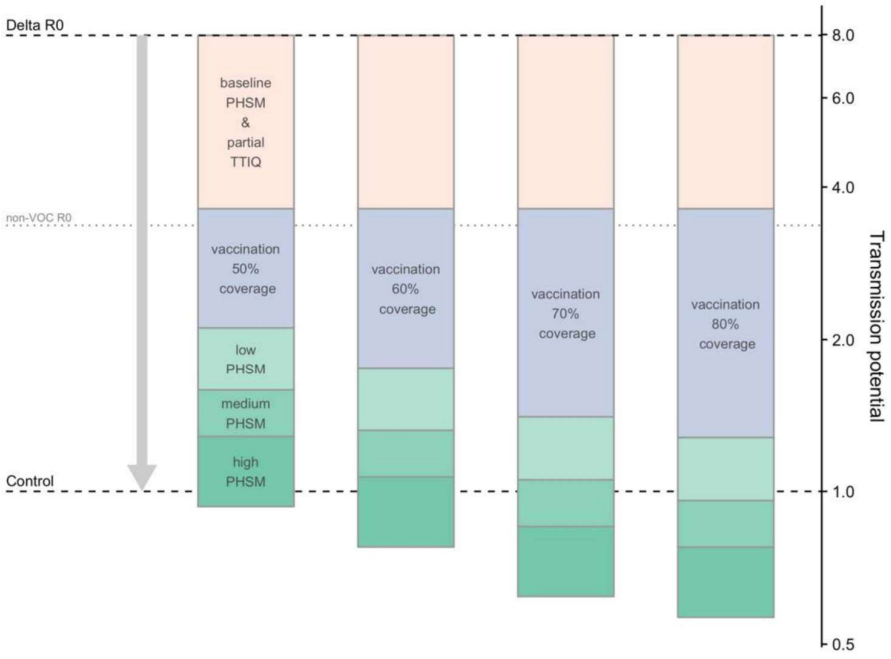
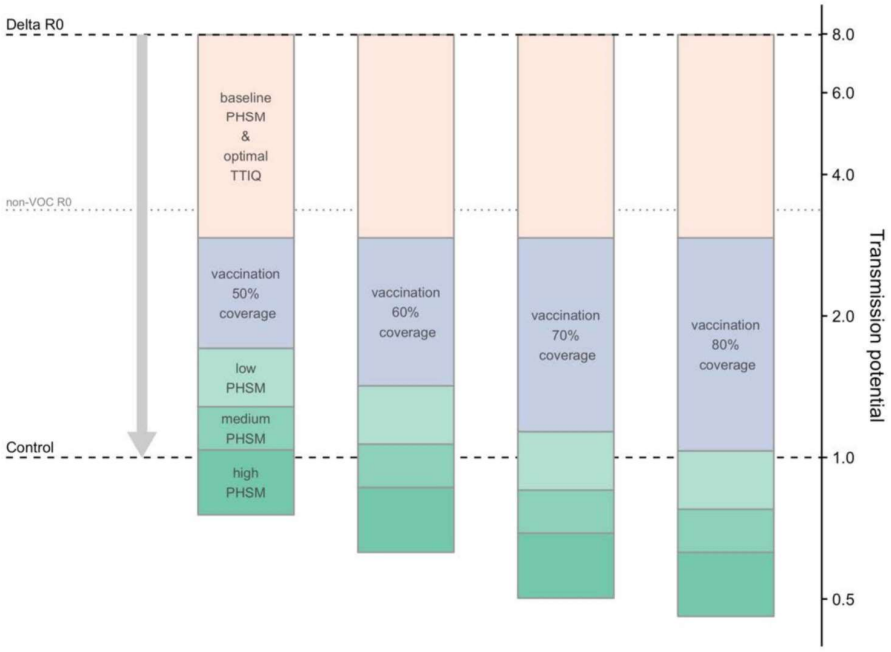


Figure 2.2: As for Figure 2.1 but assuming *optimal TTIQ effectiveness*



Anticipated requirements for social measures, by coverage scenario

Table 3.1: Percentage of time high PHSM would need to be in place for long-term control, with reversion to low PHSM at other times, for 50%, 60%, 70% and 80% population coverage achieved under the three age-based allocation strategies. These scenarios assume *partial* TTIQ effectiveness, under high caseloads. Standard age (60+) and dosing interval (12 weeks) recommendations are assumed for AZ vaccine.

Strategy	Eligible population coverage (16+)			
	50%	60%	70%	80%
Oldest first	82%	49%	18%	0%
Middle years first	89%	67%	39%	2%
All adults	75%	46%	22%	0%
Transmission reducing	87%	52%	10%	0%

Table 3.2: As for Table 4.1 but assuming *optimal* TTIQ effectiveness, given low caseloads

Strategy	Eligible population coverage (16+)			
	50%	60%	70%	80%
Oldest first	42%	9%	0%	0%
Middle years first	49%	27%	0%	0%
All adults	35%	6%	0%	0%
Transmission reducing	47%	12%	0%	0%

More detailed breakdowns of the level of time likely required under differing degrees of social restrictions for the various coverage thresholds and allocation strategies are shown in Tables S2.2 and 2.3 (assuming partial/optimal TTIQ), and S2.4 and 2.5 (for both levels of TTIQ in the context of ongoing 'light' restrictions).

Dynamics and consequences given timing of transition to Phase B

Epidemic simulations assume a population size of 24 million. Infection outputs reflect the range of results observed across 20 separate model runs for each scenario. We assume that a single outbreak involving 30 individuals initiates community transmission at the time of transition to Phase B once target vaccine coverage is achieved. Each simulation is run for 180 days after this initiating date. As immunisation rollout is ongoing, achievement of future vaccine targets is indicated as relevant, in relation to evolving epidemics. Outputs are compared for partial and optimal TTIQ.

Early epidemic growth given established transmission, for Transmission reducing strategy

Figures 3.1-3.2 demonstrate the rate of increase in all infections over time, including those which are asymptomatic and regardless of subsequent clinical severity for the symptomatic proportion.

Figure 3.1: Epidemic growth to 180 days given transition to Phase B leading to established community transmission for the threshold coverage targets of 50, 60, 70 and 80%, assuming partial TTIQ (*note different y axes)

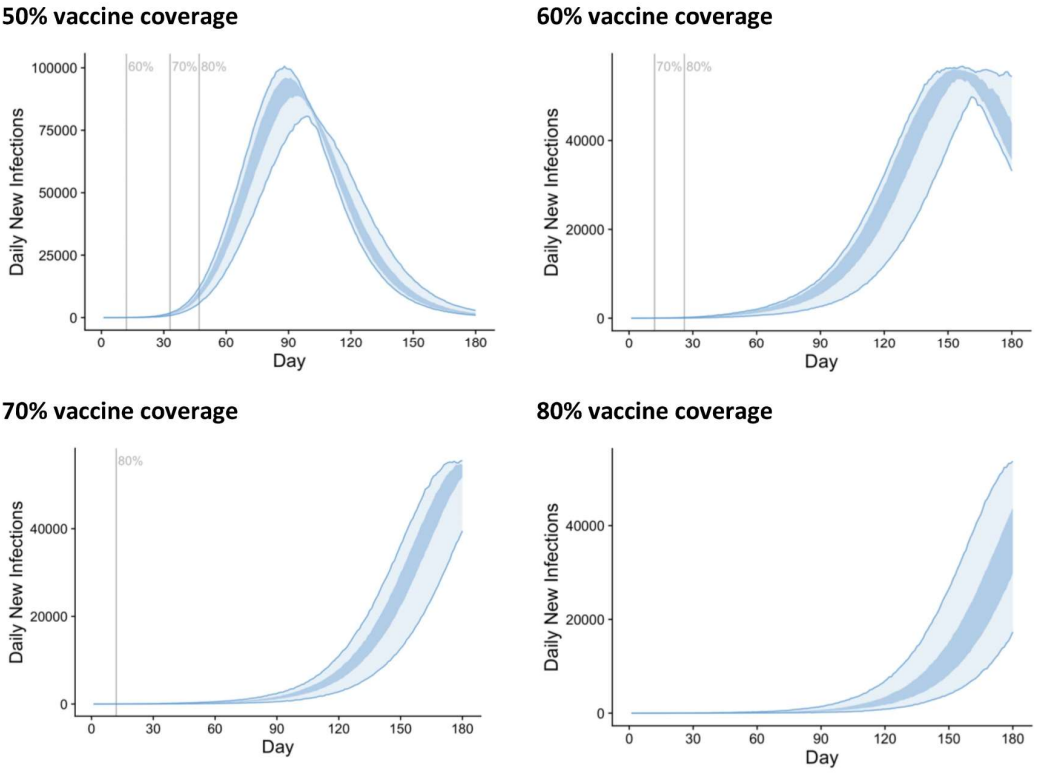
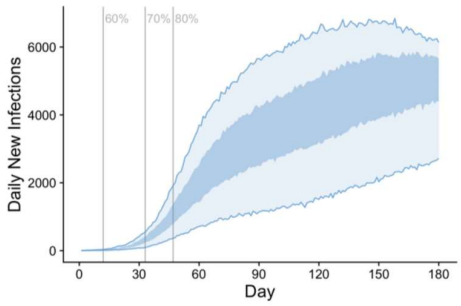
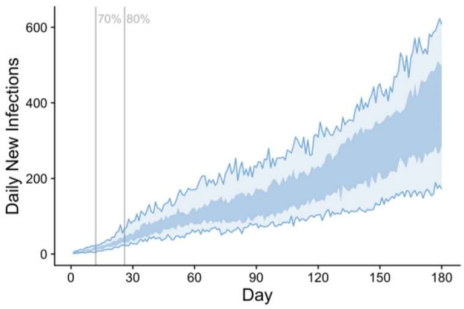


Figure 3.2: As for Figure 3.1, but for optimal TTIQ

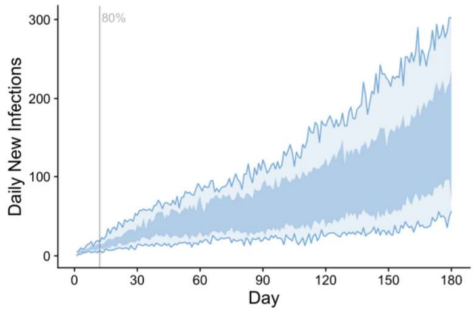
50% vaccine coverage



60% vaccine coverage



70% vaccine coverage



80% vaccine coverage

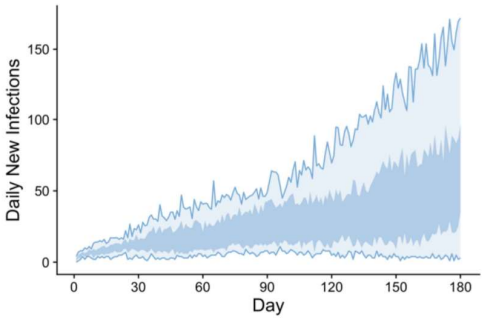
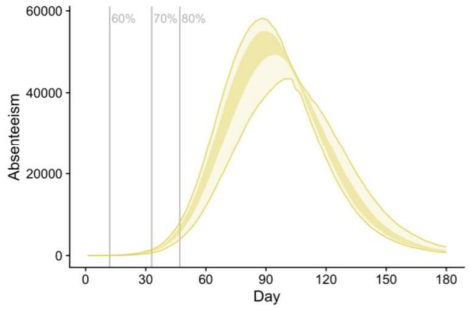
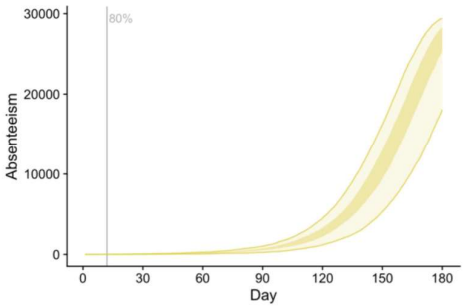


Figure 3.3: Prevalence of individuals absent from the workforce due to symptomatic infection and mandatory isolation (10 days) for the 50 and 70% coverage scenarios (*note y axes differ)

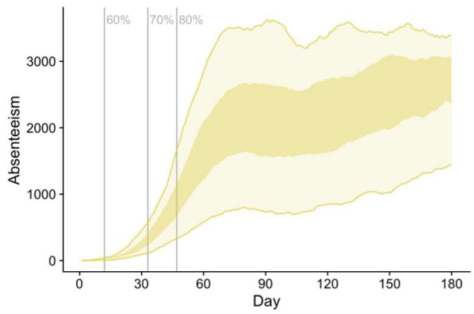
50% coverage, partial TTIQ



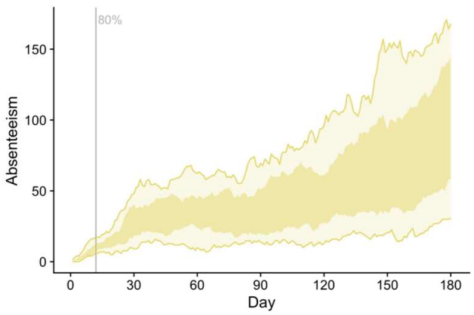
70% coverage, partial TTIQ



50% coverage, optimal TTIQ



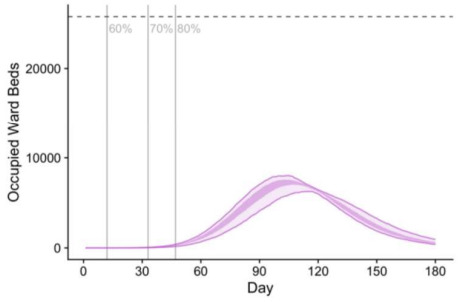
70% coverage, optimal TTIQ



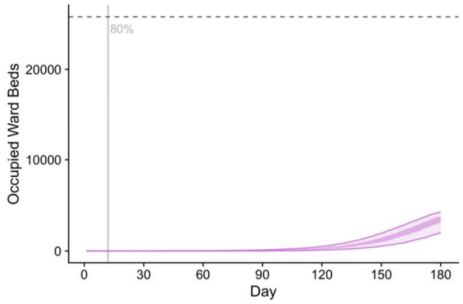
Associated health impacts of transmission, relative to health sector capacity

Figure 4.1: Occupied hospital ward beds over the course of the epidemic, in relation to stated national capacity, which represents 50% of the total. Scenarios shown are for 50% achieved coverage at epidemic onset

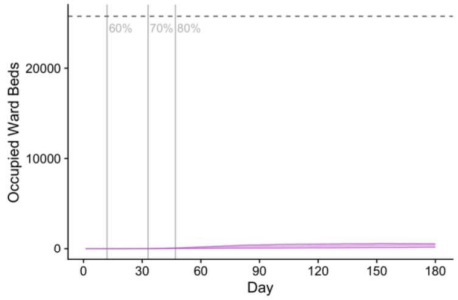
50% coverage, partial TTIQ



70% coverage, partial TTIQ



50% coverage, optimal TTIQ



70% coverage, optimal TTIQ

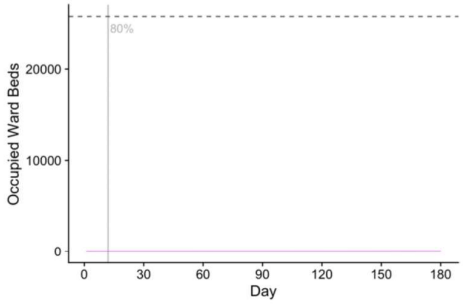
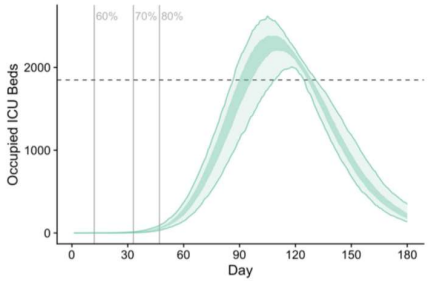
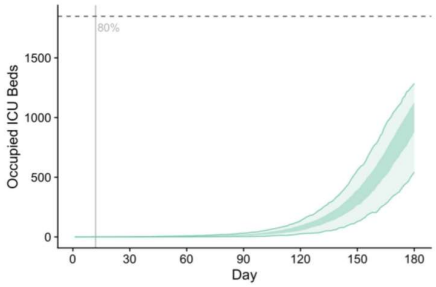


Figure 4.2: As for Figure 3.1 but for occupied ICU beds in relation to national capacity

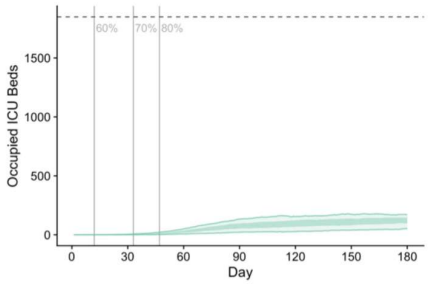
50% coverage, partial TTIQ



70% coverage, partial TTIQ



50% coverage, optimal TTIQ



70% coverage, optimal TTIQ

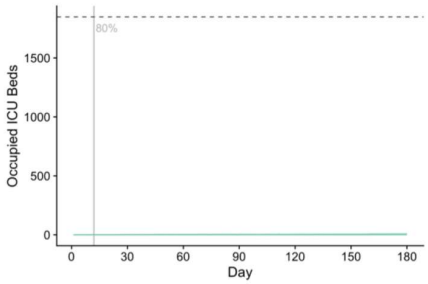
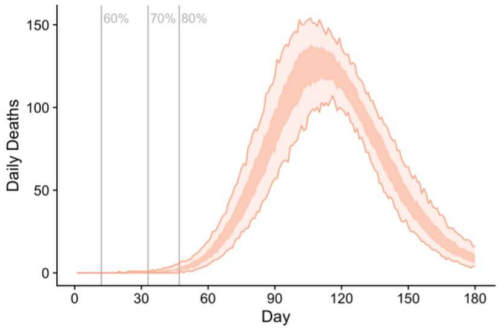
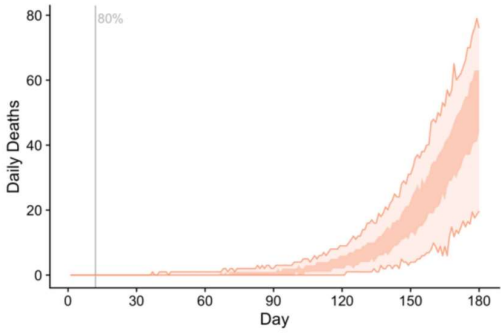


Figure 4.3: As for Figure 3.1 but reporting daily deaths (*note y axes differ)

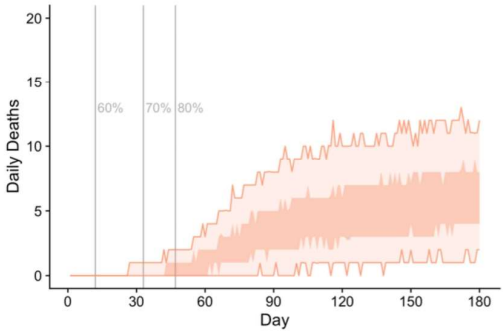
50% coverage, partial TTIQ



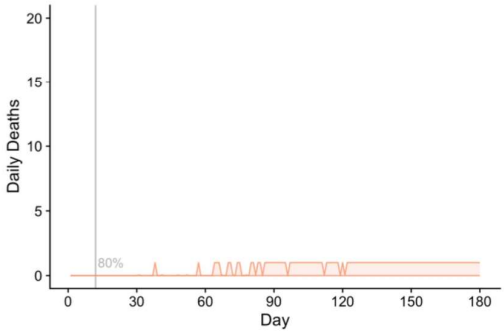
70% coverage, partial TTIQ



50% coverage, optimal TTIQ



70% coverage, optimal TTIQ



Health impacts by age group and vaccine status

Central estimates of these health impacts over the first 180 days following established community transmission are provided in the tables below, for ease of comparison across coverage thresholds, vaccination status and age group. Note that given epidemic stochasticity and uncertainty, these estimates are drawn from a broader range of possible values as demonstrated by the Figures above. **All scenarios assume only baseline restrictions and 'partial' TTIQ effectiveness.**

Table 4.1 Cumulative outcomes of interest over the first 180 days by achieved coverage threshold prior to transmission, for the 'Transmission reducing vaccine allocation strategy with partial TTIQ

	Vaccine Coverage			
	50%	**60%**	**70%**	**80%**
Symptomatic infections	1,124,136	703,688	309,362	230,164
Ward admissions	49,242	27,542	13,698	7,699
ICU admissions*	11,844	6,295	2,966	1,629
Deaths	10,443	4,702	1,908	996

**ICU admissions are reported here and below assuming unconstrained capacity, even when national thresholds are anticipated to be reached or exceeded, so reflect 'true' requirements*

Table 4.2 As for Table 4.1 but for optimal TTIQ

	Vaccine Coverage			
	50%	**60%**	**70%**	**80%**
Symptomatic infections	113,553	6,551	2,762	1,160
Ward admissions	4,132	227	96	40
ICU admissions*	953	52	22	9
Deaths	726	39	17	7

Table 4.3: Cumulative symptomatic infections, ward admissions, ICU admissions and deaths over the first 180 days for coverage thresholds of 50%, 60%, 70% and 80% achieved assuming partial or optimal TTIQ, broken down by vaccination status#

	Partial TTIQ		Optimal TTIQ*	
Achieved eligible population coverage	**Vaccinated**	**Unvaccinated**	**Vaccinated**	**Unvaccinated**
50%				
Symptomatic infections	215,541	908,594	17,112	96,441
Ward admissions	15,386	33,856	1,169	2,963
ICU admissions	4,053	7,791	297	656
Deaths	3,708	6,735	246	480
60%				
Symptomatic infections	112,488	591,119	914	5,637
Ward admissions	8,410	19,132	62	165
ICU admissions	2,112	4,183	16	36
Deaths	1,656	3,046	13	26
70%				
Symptomatic infections	57,319	333,044	380	2,382
Ward admissions	4,063	9,635	27	70
ICU admissions	969	1,997	7	15
Deaths	672	1,237	6	11
80%				
Symptomatic infections	32,403	197,761	151	1,008
Ward admissions	2,245	5,454	11	29
ICU admissions	523	1,106	3	6
Deaths	347	649	2	5

**At high caseloads as anticipated in the 50% scenario, consistent maintenance of 'optimal TTIQ' is deemed highly unlikely*

 # Note that in the case of emergence of a 'vaccine escape' variant, both the total number of infections and the proportion of severe cases occurring in fully immunised individuals would increase dramatically.

As can be seen from Tables 4.4 and 4.5 (and the corresponding pair 4.6 and 4.7), the transmission reducing strategy's effectiveness at reducing symptomatic infections and severe outcomes across all age groups is markedly enhanced by maintenance of optimal TTIQ in the presence of ongoing 'low' restrictions.

Table 4.4: Cumulative symptomatic infections, ward admissions, ICU admissions and deaths over the first 180 days for the coverage threshold of 70% assuming partial TTIQ, broken down by vaccination status and age

	<16 yrs		16-39 yrs		40-59 yrs		60+ yrs		70+ yrs	
	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac
Denominator population*	0	5,075,816	4,599,519	3,930,112	5,505,295	3,237,854	5,161,851	506,030	2,736,171	224,478
Symptomatic infections	0	226,084	21,032	64,770	20,775	35,837	12,175	5,309	3,337	1,043
Ward admissions	0	1,983	478	2,125	1,151	3,108	1,691	1,801	743	618
ICU admissions	0	164	85	369	333	896	420	465	131	103
Deaths	0	46	13	84	86	338	365	524	207	245

**Note that 'denominator population' refers to numbers of persons at the time when 70% threshold coverage is achieved – vaccination continues during the simulations to 80% threshold values*

Table 4.5: As for table 4.4, assuming optimal TTIQ

	<16 yrs		16-39 yrs		40-59 yrs		60+ yrs		70+ yrs	
	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac
Denominator population*	0	5,075,816	4,599,519	3,930,112	5,505,295	3,237,854	5,161,851	506,030	2,736,171	224,478
Symptomatic infections	0	1,606	149	487	137	250	75	33	19	6
Ward admissions	0	14	3	17	8	23	11	12	4	4
ICU admissions	0	1	1	3	3	7	3	3	1	1
Deaths	0	0	0	1	1	3	3	4	2	2

**Note that 'denominator population' refers to numbers of persons at the time when 70% threshold coverage is achieved – vaccination continues during the simulations to 80% threshold values*

Table 4.6 Cumulative symptomatic infections, ward admissions, ICU admissions and deaths over the first 180 days for the coverage threshold of 80% assuming partial TTIQ, broken down by vaccination status and age

	<16 yrs		16-39 yrs		40-59 yrs		60+ yrs		70+ yrs	
	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac
Denominator population	0	5,075,816	5,847,392	2,682,239	5,656,653	3,217,835	5,269,008	398,730	2,783,769	176,800
Symptomatic infections	0	135,408	11,943	37,803	11,724	20,931	6,861	3,031	1,875	587
Ward admissions	0	1,128	265	1,218	634	1,762	937	1,006	408	340
ICU admissions	0	93	46	208	180	496	228	255	70	54
Deaths	0	25	6	45	44	176	190	276	107	128

Table 4.7: As for table 4.6, assuming optimal TTIQ

	<16 yrs		16-39 yrs		40-59 yrs		60+ yrs		70+ yrs	
	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac	Vacc'd	Unvac
Denominator population	0	5,075,816	5,847,392	2,682,239	5,656,653	3,217,835	5,269,008	398,730	2,783,769	176,800
Symptomatic infections	0	687	57	199	56	105	31	14	8	3
Ward admissions	0	6	1	7	3	10	4	5	2	2
ICU admissions	0	1	0	1	1	3	1	1	0	0
Deaths	0	0	0	0	0	1	1	2	1	1

TECHNICAL APPENDIX

Vaccine allocation scenario

Table S1.1: Distribution of vaccination coverage by age band by achievement of the 70% vaccination coverage threshold (1st November) for standard AZ dosing indications (60+, 12 week interval between doses) and the three age-based allocation strategies.

Age band	Eligible population	Oldest first	40+ years first	All adults	Transmission reducing
16-19	1190616	4.2%	86.1%	57.1%	34.3%
20-29	3577491	18.9%	52.6%	58.8%	38.4%
30-39	3761524	74.8%	16.6%	60.6%	74.9%
40-49	3295699	90.4%	90.6%	69.0%	84.4%
50-59	3127124	92.1%	92.0%	74.6%	87.1%
60-69	2707232	87.3%	93.8%	84.0%	89.6%
70-79	1897838	96.1%	93.3%	89.4%	93.1%
80+	1062811	95.2%	83.0%	86.3%	91.2%

**Note that for the first three allocation scenarios, the date on which 70% coverage is achieved in the simulation is 1st November, compared with the 'transmission reducing' strategy for which that date is 8th November*

Table S1.2: As for Table S3.1 but for an 80% achieved coverage threshold (16+ years population)

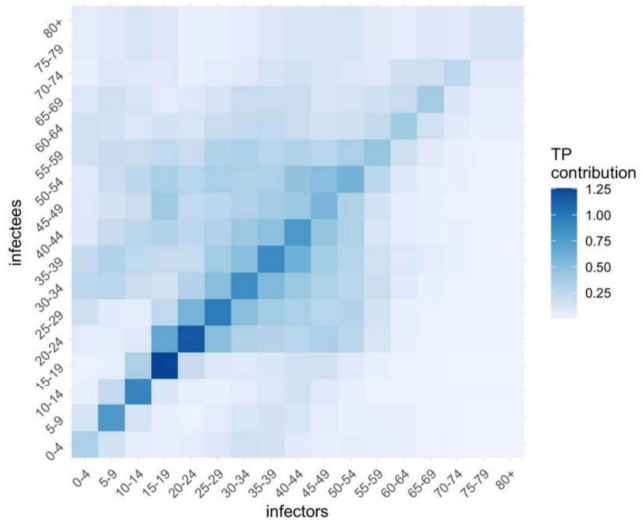
Age band	Eligible population	Oldest first	40+ years first	All adults	Transmission reducing
16-19	1190616	8.6%	86.9%	73.5%	57.1%
20-29	3577491	64.1%	87.1%	74.6%	59.7%
30-39	3761524	88.1%	41.4%	75.6%	80.6%
40-49	3295699	90.5%	90.6%	80.8%	87.0%
50-59	3127124	92.1%	92.0%	84.2%	89.2%
60-69	2707232	91.7%	94.2%	90.0%	91.8%
70-79	1897838	96.2%	95.9%	93.4%	94.6%
80+	1062811	95.2%	89.2%	91.4%	93.0%

**This coverage threshold is achieved by 22 November across all allocation strategies*

Population mixing assumptions

Population mixing within and between age groups is configured based on widely accepted social contact matrices published by Prem et al (PLoS Computational Biology 2017)(Figure S2.1). It has been expanded to include an 80+ age class (assumed to have the same mixing rates as 75-79 years). Age-specific susceptibility and transmissibility estimates from Davies et al. (Nature Medicine 2020) are used and transmission rates have been calibrated to our baseline population-wide TP (here denoted R) of 3.6. Of note, the greatest mixing intensities are anticipated between individuals aged from 15-24 years, remaining high through adults of working age. While intense school-based mixing is anticipated between children aged 5-14, the transmission matrix accounts for the relatively low observed infectiousness of this age group, associated with a high proportion of asymptomatic infections.

Figure S1.1: Age-based transmission matrix derived from Prem et al (2017)



The key message of Figure S2.1 is that in the absence of vaccination, individuals of different ages do not contribute equally to the spread of infection in the population.

The impact of vaccination on overall transmission will therefore be substantially influenced by the rate of vaccine uptake achieved **within distinct population age cohorts.** Table S3.2 shows the range of values for achieved coverage by age group underpinning 80% 'age eligible coverage' for our three hypothetical vaccine allocation strategies.

Figures S1.2-S1.5 provide a visual demonstration of the reduction in transmission achieved for each age band depending on the rollout scenario. Light grey bars show the contribution of each age group to transmission potential given different numbers of contacts and age differences in both susceptibility and infectiousness, in the absence of vaccination. Dark grey bars show the contribution of each age group to transmission potential for that vaccine allocation strategy and coverage. The 'all ages' strategy consistently produces the greatest proportional reductions in infectiousness across peak transmitting age groups.

Figure S1.2: Impact of the four different allocation strategies on TP by age category, resulting in the overall TP achieved by 50% age eligible population coverage

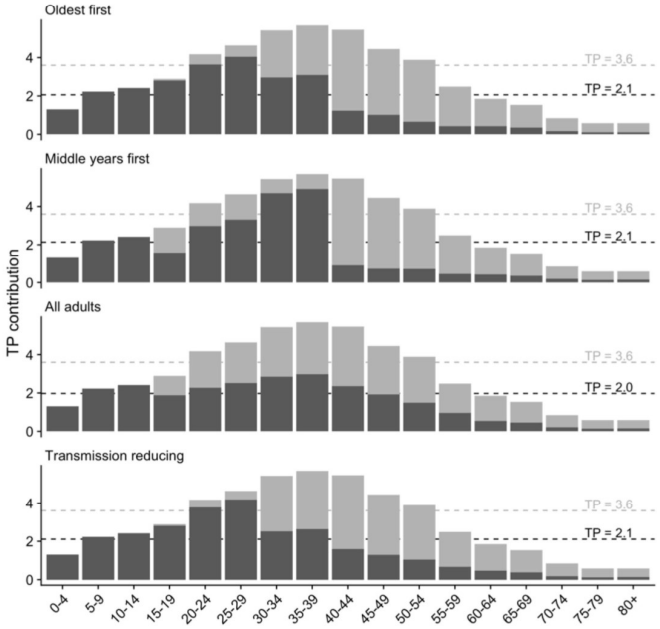


Figure S1.3: As for Figure S1.2, but for 60% age eligible population coverage

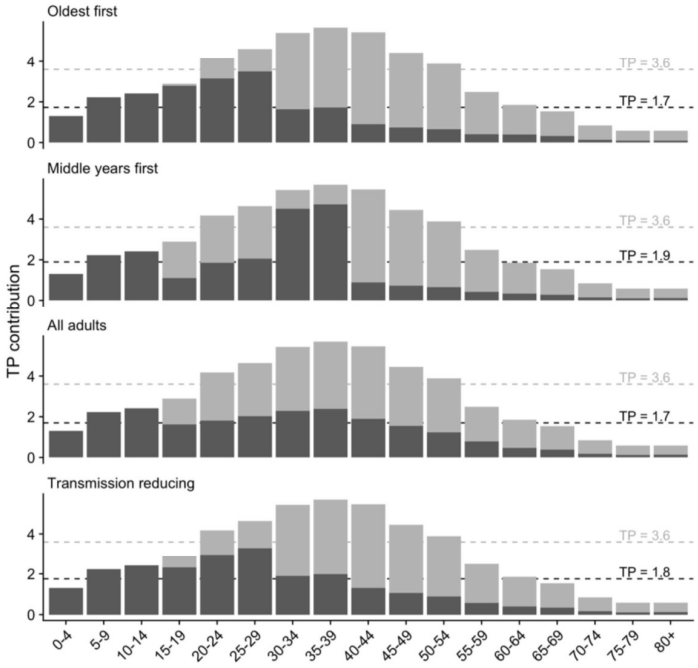


Figure S1.4: As for Figure S1.2, but for 70% age eligible population coverage

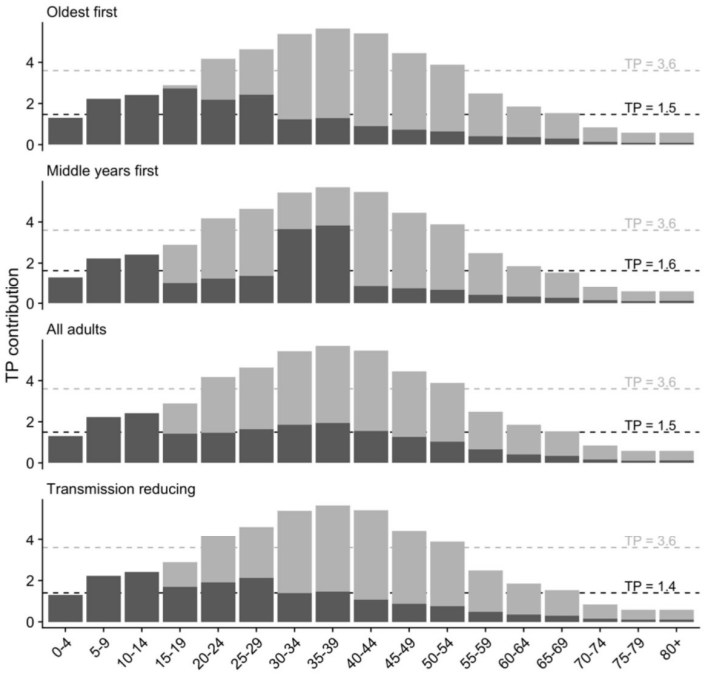
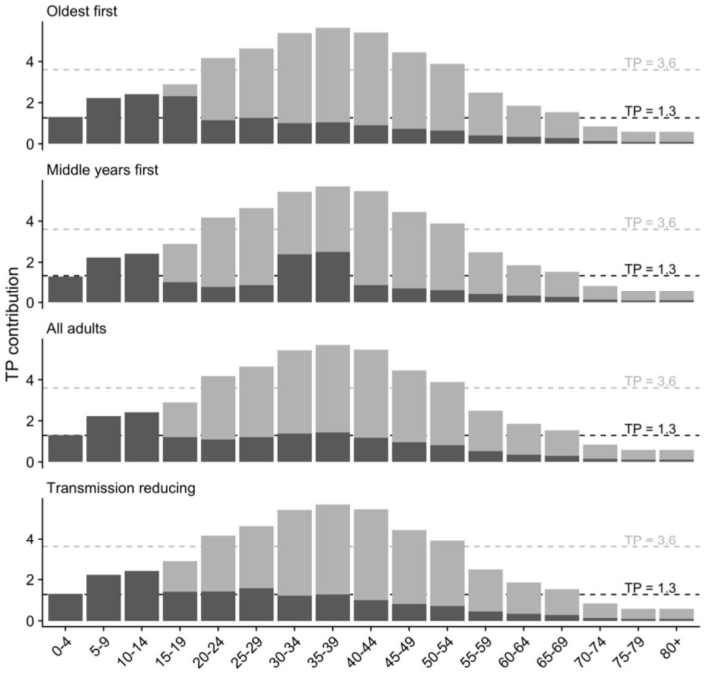


Figure S1.5: As for Figure S1.2, but for 80% age eligible population coverage



Impact of public health response and bundled social measures on TP

Table S2.2: Proportion of time lockdowns are needed to constrain transmission when the TTIQ public health response is only *partially effective,* due to high caseloads

Vaccine coverage	Allocation scenario	Light restrictions only	Moderate lockdowns only	Strict lockdowns only
50%	Oldest first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	89%
	40+ years first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	93%
	All adults	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	84%
	Transmission reducing	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	92%
60%	Oldest first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	67%
	40+ years first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	78%
	All adults	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	65%
	Transmission reducing	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	69%
70%	Oldest first	Not possible to constrain outbreak with light restrictions	77%	47%
	40+ years first	Not possible to constrain outbreak with light restrictions	99%	60%
	All adults	Not possible to constrain outbreak with light restrictions	81%	49%
	Transmission reducing	Not possible to constrain outbreak with light restrictions	68%	41%

80%	Oldest first	82%	47%	29%
	40+ years first	Not possible to constrain outbreak with light restrictions	59%	36%
	All adults	89%	51%	31%
	Transmission reducing	85%	49%	30%

Table S2.3: As for Table S2.2, but for an *optimally effective* TTIQ response

Vaccine coverage	Allocation scenario	Light restrictions only	Moderate lockdowns only	Strict lockdowns only
50%	Oldest first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	63%
	40+ years first	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	67%
	All adults	Not possible to constrain outbreak with light restrictions	94%	58%
	Transmission reducing	Not possible to constrain outbreak with light restrictions	Not possible to constrain outbreak with moderate lockdown	66%
60%	Oldest first	Not possible to constrain outbreak with light restrictions	67%	41%
	40+ years first	Not possible to constrain outbreak with light restrictions	86%	52%
	All adults	Not possible to constrain outbreak with light restrictions	64%	39%
	Transmission reducing	Not possible to constrain outbreak with light restrictions	71%	43%
70%	Oldest first	60%	34%	21%
	40+ years first	97%	56%	34%
	All adults	67%	38%	23%
	Transmission reducing	44%	25%	15%

80%	Oldest first	7%	4%	3%
	40+ years first	29%	17%	10%
	All adults	15%	8%	5%
	Transmission reducing	11%	6%	4%

Table S2.4: Proportion of time lockdowns are needed to constrain transmission when the TTIQ public health response is only *partially effective,* due to high caseloads, and where light restrictions are always in place.

Vaccine coverage	Allocation scenario	Moderate lockdowns only	Strict lockdowns only
50%	Oldest first	Not possible to constrain outbreak with moderate lockdown	82%
	40+ years first	Not possible to constrain outbreak with moderate lockdown	89%
	All adults	Not possible to constrain outbreak with moderate lockdown	75%
	Transmission reducing	Not possible to constrain outbreak with moderate lockdown	87%
60%	Oldest first	Not possible to constrain outbreak with moderate lockdown	49%
	40+ years first	Not possible to constrain outbreak with moderate lockdown	67%
	All adults	Not possible to constrain outbreak with moderate lockdown	46%
	Transmission reducing	Not possible to constrain outbreak with moderate lockdown	52%
70%	Oldest first	46%	18%
	40+ years first	97%	39%
	All adults	55%	22%
	Transmission reducing	25%	10%
80%	Oldest first	0%	0%
	40+ years first	4%	2%
	All adults	0%	0%
	Transmission reducing	0%	0%

Table S2.5: As for Table S2.4, but for an *optimally effective* TTIQ response

Vaccine coverage	Allocation scenario	Moderate lockdowns only	Strict lockdowns only
50%	Oldest first	Not possible to constrain outbreak with moderate lockdown	42%
	40+ years first	Not possible to constrain outbreak with moderate lockdown	49%
	All adults	87%	35%
	Transmission reducing	Not possible to constrain outbreak with moderate lockdown	47%
60%	Oldest first	23%	9%
	40+ years first	66%	27%
	All adults	15%	6%
	Transmission reducing	31%	12%
70%	Oldest first	0%	0%
	40+ years first	0%	0%
	All adults	0%	0%
	Transmission reducing	0%	0%
80%	Oldest first	0%	0%
	40+ years first	0%	0%
	All adults	0%	0%
	Transmission reducing	0%	0%

Attachment E – Escalation Management Planning

Escalation Management Planning

Regional COVID-19 Escalation Management Plans (EMPs) were developed early in the pandemic response, with the first iteration approved by the DoH Secretary on 3 April 2020. Prior to the development and approval of the EMPs, COVID-19 escalations levels were in line with the State Special Emergency Management Plan: COVID-19 (SSEMP: COVID-19) which was rapidly developed by DoH (based on the existing SSEMP: Pandemic Influenza 2019) in response to the COVID-19 pandemic, and formally approved by the State Controller on 17 March 2020.

The EMPs have been integral in guiding the operational response of Tasmania's major public hospitals and facilities to meet both COVID and non-COVID related demand throughout the pandemic.

Having these EMPs already in place provided a strong framework to help guide decision-making and actions at the local level to help ensure Tasmania's health system was in a strong position to respond effectively to increased case numbers following the re-opening of the state's borders on 15 December 2021.

There are three THS EMPs; one for each of the three major regions (THS-North, THS-NW and THS-South). Each regional plan is supported by a District Hospital Response Plan. These EMPs were in place well in advance of decision-making related to timing for reopening, to support the health system's capacity to continue to provide safe and effective care to the community throughout the pandemic response.

The EMPs:

- document regional command, control and coordination arrangements for COVID-19;
- outline the actions that the regions will undertake to prevent disease transmission between staff, patients and visitors;
- clarify the roles and responsibilities across the regions and partners for the response to, and recovery from, a COVID-19 pandemic;
- assist all sites and campuses of the regions to manage COVID-19 effectively, including management of outbreaks; and
- outline surge capacity and response of the THS in the event of an escalation.

Minor adjustments have been made to EMPs by the relevant Regional Health Emergency Management Teams (RHEMT) in response to new and emerging information and risks, including variants of concern and the borders re-opening. The current iterations of the EMPs were endorsed by the DoH Secretary, as State Health Commander, in December 2021.

Escalation levels and triggers

Each EMP sets out escalation levels and triggers points and actions for escalation levels. The EMP trigger points are designed to allow the RHEMT and/or the THS EOC to consider the need to recommend escalation. There are four escalation levels within the EMPS, namely:

- Level 1 is the Preparation Phase, which involves maintaining business continuity whilst plans are made for the region to prepare for an escalation to Level 2. The THS has been at Level 1 for most of the pandemic.
- Level 2 is the Response Activation Phase, involving an operationalisation of some plans and actions in preparation for an escalation to Level 3.
- Level 3 is the Response Phase, involving activation of strategies and actions to respond to an increase in COVID-19 presentations and inpatients that require treatment.
- Level 4 is a heightened Response Phase, where Level 3 capacity has been exceeded and a statewide system response is necessary to manage the number of presentations or patients with COVID-19.

Each EMP outlines the trigger points and actions for each escalation level. Any escalation or de-escalation between Levels 1 to 3 must be approved by the THS EOC Commander in consultation with the Chief Executive and Regional Commander at each site. The Emergency Coordination Centre and State Health Commander are also notified. Escalation or de-escalation between Levels 3 and 4 must be approved by the Secretary, as State Health Commander.

EMP Trigger points in isolation do not mean an automatic change in the level of response. The triggers that drive consideration of movement between escalation levels are:

- the number of patients admitted with COVID-19,
- the number of patients admitted requiring ICU-level care,
- the level of community transmission, and
- the level of service delivery compromise due to impact on staffing levels.

Measures taken under EMPs in response to increased case numbers

Following the re-opening of the state's borders the rapid increase in case numbers due to the emergence of Omicron as the dominant variant meant the health system had to quicky adapt and respond to this challenge. DoH was able to adapt its management strategies quickly and effectively guided by the EMPs. The THS regions and/or major hospitals escalated and de-escalated consistent with the escalation management plan triggers, and implemented operational responses consistent with the escalation level in place as the time.

As noted above, these EMPs are part of the broader COVID-19 emergency management planning that has helped guide Tasmania's health system response throughout the pandemic.

Some key measures undertaken as part of the EMPs escalation framework following the reopening of Tasmania's borders included (but were not limited to):

- standing up of external triage areas at emergency departments;
- the use of P2(N95) masks and protective eyewear for clinical areas;
- restrictions for unvaccinated visitors to THS hospitals;
- enhanced visitor screening and restrictions;

- testing of staff working in COVID-19 designated areas;
- the commencement of rapid antigen testing for emergency department patients and PCR testing of all patients admitted overnight;
- the establishment of a staff hotline to provide support to staff identified as close contacts or COVID positive; and
- increased testing of staff in high-risk setting or scenarios (e.g. staff with exemptions as discussed further below).

Health Screening

As part of the broader COVID-19 response DoH also has in place (implemented as part of Level I escalation measures) health screening for people entering DoH health services facilities (including staff, visitors, patients, students, contractors and volunteers).

Health screening aims to assess and manage the risk posed by staff members, patients, and visitors to health services facilities of spreading COVID-19 into and within a facility. This is undertaken via a Health Screening Questionnaire (HSQ), which contains both health screening and contact tracing capability. The questions within HSQ are adapted from time to time to capture current public health Directions and other legislative and policy requirements.

Elective Surgery

The increase in COVID-19 cases in January 2022 following the re-opening of the state borders presented some challenges for the state's elective surgery program. However, strategies were put in place, in line with the escalation stages within the EMPs, to ensure urgent elective surgery continued to be delivered. These strategies included, for example:

- moving outpatient services to Telehealth where clinically appropriate;
- reduction in outpatient activity to ensure the continuation of emergency and inpatient care;
- review of surgical services to ensure maintenance of emergency surgery and inpatient services; and
- continuation of existing outsourcing arrangements with private hospitals.

As a result, there were only 79 fewer surgeries performed in January 2022 compared to January 2021 (noting January is always a lower throughput month for elective surgery).

Tasmania was the last jurisdiction in Australia to apply elective surgery restrictions and the first to lift the restrictions. Tasmania has delivered more elective surgeries in February this year than last February, despite managing changing COVID-19 escalation levels in our hospitals.

Importantly, elective surgeries continued at all of the State's major hospitals, with only minor impacts on waiting list targets in January and February at the RHH, LGH and the North West Regional Hospital. The Mersey Community Hospital, in fact managed to continue to reduce their elective wait lists during January and February, which is no small feat.

Tasmania is on track to deliver more surgeries this year, than in 2020-21. Importantly, DoH have improved the public elective wait list by over 2,200 patients compared to this time last

year, and over boundary lists have reduced by 1,746, indicating we are targeting over boundary patients.

DoH remains on track to deliver the goal of the Four Year Elective Surgery Plan, ensuring most Tasmanians are treated within clinically recommended timeframes by June 2025.

Workforce

The COVID-19 response has required many areas to draw on the same workforce pool to deliver a variety of services and initiatives. For example, the State's clinical workforce has been widely used across COVID-19 testing clinics, the COVID-19 vaccination program, COVID@home, hospital and other health services (both in terms of the COVID-19 response and 'business as usual' services).

The EMPs include strategies designed to free up workforce capacity where required, to address workforce shortages relating to the COVID-19 pandemic. This include shortages due to increased demand for hospital services; furlough of staff who are positive COVID-19 cases or as close contacts; and/or need to make alternative work arrangements to protect vulnerable staff (i.e. those staff identified as being at higher risk of severe illness if they were to contract COVID-19).

Such strategies include:

- DoH Register of Health Professionals Agency (Medical, Nursing, Allied Health);
- utilising the student workforce across all disciplines;
- accessing the recently retired workforce, including via the national Australian Health Practitioners Regulation Agencies pandemic sub-register arrangements. (The sub register was implemented to support access to surge workforce where required in the pandemic response, and includes recently retired doctors, nurses, midwives, pharmacists, Aboriginal and Torres Strait Islander Health Practitioners, and allied health professionals);
- redeploying staff (including options for clinical staff in non-clinical roles); and
- identifying staff with previous ICU experience.

The EMP also include guidance regarding protecting vulnerable staff, including identification and appropriate management of such staff, in accordance with state and national guidance. For example, vulnerable staff not entering COVID-19 isolation areas, consideration of alternative duties, and/or working from home arrangements.

In addition to the strategies and guidance provided in the EMPs, DoH has implemented strategies to support staffing capacity during the COVID-19 response. These have included (but are not limited to):

- increasing staffing by 840 FTE (as time of borders re-opening, now by 872 FTE) since July 2020;
- upskilling workforce to free up clinical capacity (such as introduction of the expanded specimen collection workforce) and to help ensure clinical staff can be allocated to areas that enable them to best use their full scope of practice;

- broadening scope of practice (for example, enabling paramedics to provide COVID-19 vaccinations);
- redeployment of clinical staff (for example Child Health and Parenting Services nurses were seconded to support the COVID-19 vaccination roll-out to children aged 5 to 11 years); and
- enabling critical workers who are close contacts to apply for exemption from the Regional Health Commander to return to work (if granted, the exemption only applies for the purpose of travelling to and from work and while at work).
- DoH has, and continues to, support its workforce during the pandemic, and recognises the invaluable work and dedication of its workforce through-out the pandemic response. Supports to workers include (but are not limited to):
- access to COVID-19 leave for a number of situations (including where the employee has contracted COVID-19 and has exhausted their personal leave entitlements; or the employee is required to provide care or support to a relative or a member of their household who has contracted COVID-19);
- staff wellbeing programs;
- access via the DoH intranet to a range of health and wellbeing information;
- flexible working arrangements;
- implementation of COVID-19 Safe Workplace Plans across DoH, which include strategies to help minimise risk of COVID-19 exposure and transmission for DoH staff (and others entering DoH work environments); and
- access via the DoH Employee Assistance Program to free confidential, independent, and professional counselling services, through a number of providers for staff and/or their immediate family members.

Intensive Care Unit (ICU) Capacity

As previously outlined, modelling based on the Delta variant (as the dominant variant at the time) was used to help inform hospital capacity planning ahead of the re-opening of the state border. As such, DoH's preparedness included planning and investment to ensure significant ICU surge capacity was available. This included surge capacity of up to 114 ICU beds (as noted earlier in this section) and 367 ventilators.

A statewide COVID-19 ICU Surge Capacity Plan (the ICU Plan) was also developed, which aligns with other service-level EMPs. In accordance with the Australian and New Zealand Intensive Care Society COVID-19 Guidelines, the ICU Plan provides for a phased and tiered response based on the impact of COVID-19. It includes strategies to reduce routine demand, and increase capacity infrastructure, increase associated equipment and consumables including ventilators, and increase staffing and workforce requirements.

The emergence of the more highly transmissible, but generally less severe Omicron variant coincided with the opening of Tasmania's borders. While the different epidemiology of Omicron has resulted in less demand for ICU beds than predicted (as at 24 March 2022, Tasmania has the lowest rate per capita of ICU admissions compared to other states and territories) the planning and investment in hospital capacity, along with DoH's ability to be

flexible and quicky adapt to emerging situations, has positioned the Tasmanian health system to continue to respond effectively to challenges posed by the pandemic.

Pharmaceuticals stockpiles

Ahead of the re-opening, Tasmania's hospitals held $13.4 million worth of medications; an increase from $5.8 million prior to the pandemic. This meant that for the majority of medications, hospitals would be able to continue to provide acute care, including keeping the state's ICUs running for two to three months, even if supply chains were interrupted.

Attachment F - APHCC Statement on Omicron Public Health Implications

30 March 2022 – Coronavirus (COVID-19) health alert

30 March 2022 – Japanese encephalitis virus (JEV) health alert

Australian Government
Department of Health

AHPPC statement on the Omicron public health implications and response options

Australian Health Protection Principal Committee (AHPPC) statement on the public health implications of the Omicron variant and response options.

Date published:
22 December 2021

Type:
News

Intended audience:
General public

Refining Australia's public health strategy

Australia is undergoing a period of transition as we move from a national strategy of suppression with a goal of no community transmission, to a 'living with COVID-19' context, where the community is able to function more normally and disruptions to society and the community are minimised. When living with COVID-19, our health goals shift to controlling transmission in order to prevent serious illness,

hospitalisation and death. This will protect health system capacity and ensure sustained capability to manage the demands of COVID-19, whilst maintaining access for the community to the full range of health care including prevention services, and aiming to achieve broader societal, economic and educational goals.

The COVID-19 response transition continues to require close monitoring of the epidemiological situation and health system metrics, and integrating learnings from the international and local experience. This will guide implementation of proportionate public health measures. Consistent with the Doherty modelling for National Cabinet, case numbers are expected to increase across the country as restrictions ease and borders reopen, public health measures will aim to limit transmission, 'flatten the curve' and prevent serious illness, and protect vulnerable populations.

What we know about Omicron

The impact of Omicron on the progress of the pandemic is not yet clear although the signs of another epidemic wave are being seen in many countries, including Australia. While the variant has a large number of genetic mutations the impact of these mutations on key epidemiological characteristics is uncertain. Information on intrinsic transmissibility of the variant, disease severity and the effectiveness of current vaccines and treatments against transmission and clinical severity is emerging. The Department of Health is developing regular situation assessments and reviewing evidence as it becomes available. Evidence indicates that Omicron is substantially more transmissible than Delta in populations with a high previous exposure to COVID-19 and/or high vaccination coverage, with most recent estimates demonstrating that the number of cases doubles every 2-3 days. This suggests escape from vaccine and/or naturally derived immunity. Recent small studies indicate a reduction in laboratory indicators of vaccine protection compared to the ancestral and Delta variants and limited real world studies are also consistent with this finding. The efficacy of current vaccines to prevent serious disease from Omicron following a primary course is not yet known and requires further investigation. The combination of high transmissibility and vaccine escape may lead to rapidly escalating transmission in the context of high vaccine coverage and a significant caseload with the potential to strain health system capacity, even if disease severity is intrinsically reduced compared with previous strains.

Public health implications

Within a 'living with COVID' context, it is a priority to continue to slow transmission of Omicron into the community until more is known about the virus, and existing plans and public health responses can be adjusted accordingly. Given the emerging evidence on boosters, continuing to slow transmission is also important while the vaccine booster program is rolling out in line with ATAGI's recent recommendation to bring the booster dose interval forward from 6 to 5 months. Australia is in a good position with one of the highest fully vaccinated populations in the world. The timing to provide optimal protection for Omicron remains uncertain and only a small proportion of the fully vaccinated population has recently become eligible to receive a booster dose to date. Small sections of the population also remain unprotected (e.g. vaccine hesitant) or under-protected (e.g. single dose vaccinated, immune compromised). The 5 – 11 year old vaccination program is to commence on 10 January 2022.

We have been successfully moving through the National Plan to transition Australia's National COVID-19 Response (National Transition Plan), with surge responses limited to communities with lower vaccination coverage, and no instances of demand overwhelming health system capacity thus far. However, a rapid increase in cases and/or potential changes in disease severity associated with Omicron – including

amongst vaccinated individuals may impact on anticipated health system demand which has flow on effects to timely health care for all conditions. Proportionate measures are needed to prepare Australia to manage Omicron whilst continuing to safely progress the National Transition Plan.

Omicron is anticipated to become the dominant variant in Australia soon. There remains considerable community transmission of the Delta variant. Due to the increased transmissibility of Omicron and anticipated high case numbers in the short to medium term, the combined impacts of Delta and Omicron could cause increased demands on the health system including primary care. A particular impact is more likely to occur in sensitive settings such as aged care, disability care, correctional facilities, culturally and linguistically diverse communities and remote Aboriginal and Torres Strait Islander communities.

Response options

A proportionate and measured application of public health levers will slow transmission of Omicron into the Australian community. This delay will allow time to learn more about the variant to inform future management, to increase uptake of booster doses, achieve good vaccine coverage of those aged 5 – 11 years, and encourage those who are unvaccinated or not yet fully vaccinated to access the program. A combination of measures is intended to control transmission without significantly restricting Australia's freedoms. Implementing some of these measures now is intended to reduce the risk of requiring more restrictive measures in the longer term if the combination of Delta and Omicron variants were to result in a significant surge of cases with clinical illness requiring hospitalisation and other clinical care.

AHPPC recommended response options

The AHPPC, having considered the current context with the need to await further evidence regarding the impacts of Omicron, have agreed on several interim response options:

- **Recommending indoor face masks** – the AHPPC has agreed a recommendation for wearing of facemasks in indoor settings, noting that this is a particularly important in high risk settings. Face masks have a minimal impact on individuals and the economy, provide confidence to the community, and have shown to be beneficial in reducing transmission of disease. Masks should be mandated in all indoor settings including retail, hospitality when not eating or drinking, and entertainment facilities. Implementation of mask wearing measures should occur prior to Omicron case escalation to have maximum benefit.
- **Increase vaccination coverage including boosters** – the AHPPC has reiterated the need to ensure those who are partially vaccinated complete their courses and those who remain unvaccinated are encouraged to undergo vaccination. The AHPPC has agreed that booster doses will play an important role in reducing transmission and severity of the Omicron variant, based on currently available evidence. Public communications will need to reflect the importance and urgency of receiving booster doses once eligible. The AHPPC notes the updated booster advice reducing the dose interval to 5 months and notes ATAGI will continue to monitor the evidence and update its advice accordingly. AHPPC understands that ATAGI will consider whether a three-dose rather than a two-dose course meets requirements for full vaccination status, noting that there will be significant considerations for implementation if this definition changes
- **Maintaining test, trace, isolate and quarantine (TTIQ**) – the AHPPC has requested that the Communicable Diseases Network Australia (CDNA) consider current TTIQ requirements for Omicron particularly within sensitive settings. It is important to note that while TTIQ has been demonstrated to be effective, it is limited by operational factors and the community's willingness to be tested and comply with public health recommendations where required. Therefore, the overall contribution of

TTIQ to limiting transmission will decrease with higher case numbers. This may lead to a requirement in the future to rely more heavily on other levers, including indoor mask wearing and strategic use of rapid antigen testing, to control transmission and impacts, particularly in high-risk settings.

- **Adjusting the international current travel ban** – the AHPPC has noted that Omicron has now spread beyond those countries initially included in the current travel ban. The AHPPC has recommended not extending this travel ban as the number of countries where Omicron is present is rapidly increasing, and instead removing the initial travel ban and considering maintaining some universal international border measures such as post arrival testing and/or quarantine (see Table 1 for detail). Any measure that is implemented should be continuously reviewed against the local context and particularly local rates of transmission to ensure it is proportionate to risk.
- **Developing specific strategies to protect vulnerable settings and individuals** – the AHPPC recognises that in the context of community transmission specific strategies will be needed to protect vulnerable settings and those who work or visit these. These may include increasing or expanding use of rapid antigen testing (RAT) in settings such as aged care facilities, clear messaging to individuals at higher risk of severe disease to ensure they are fully vaccinated and have accessed a booster dose and ensuring access to therapeutics.

As local transmission increases, border measures become less important and other measures will need to be adjusted to ensure they are proportionate to the current context, whilst also maintaining health system capacity. The AHPPC will continue to consider other available response options as further evidence on Omicron emerges. Careful communications with the public will be needed to support engagement and compliance during this period of transition.

Table 1: Response options and recommendations

Levers of control	Recommendations	Considerations
Public health and social measures	**Require universal use of facemasks indoors** • Implement recommendations/requirements for universal indoor mask wearing over the coming months. **This needs to be implemented prior to Omicron case escalation to have maximum benefit.**	• Requires careful communications to government and the public to emphasise masks are easily implemented, provide confidence and are used universally in the spirit of community wellbeing. • Restriction fatigue, and resistance to facemasks may occur. • Consider only mandating for public settings (particularly high risk settings) and not in domestic indoor settings (although still recommended where in contact with vulnerable individuals in a private setting).

	Introduce and/or maintain minimal to moderate public health and social measures to decrease contact rates in the population
	• If appropriate and tailored to local circumstances introduction of temporary social measures to prevent transmission of Omicron in the community. This may include:
	  ◦ If able to, recommendations to work from home.
	  ◦ Re-introduction or increasing density restrictions.
	  ◦ Increased use of Rapid Antigen Tests (RATs), particularly in high risk settings for transmission and for essential workers.
	  ◦ Continued use of vaccine certificates. .
	  ◦ Additional measures in high risk and high transmission settings to prevent transmission (e.g. visitor restrictions, vaccine mandates).
	  ◦ Encourage gatherings in well ventilated and outdoor settings where possible.
		• Restriction fatigue, particularly in jurisdictions that have experienced outbreaks in 2021.
		• Density restrictions may impact on small businesses.
		• Note that the economy is also impacted by individual's behaviour, and spending behaviours may decrease in response to disease levels, regardless of restrictions.

Test, trace isolate and quarantine	**Maintain effective TTIQ** • Aligning with requirements for Delta. Where operationally feasible, a minimum 7 day quarantine period should remain for vaccinated close contacts of Omicron to slow transmission. TTIQ requirements will be reviewed on an ongoing basis including specific responses to Omicron in particular high risk settings and for individuals who work in or visit high risk settings.	• While TTIQ has been demonstrated to be very effective in controlling transmission, its effectiveness is limited by operational factors and the community's willingness to test and comply with public health recommendations. Therefore, the overall contribution of TTIQ to limiting transmission is likely to decrease with higher case numbers. • CDNA has been asked to review TTIQ recommendations, and adjustments may be required over time and depending on the status of states and territories. • Consideration should be given to more widespread use of RATs as part of TTIQ.

Vaccines	**Maximise uptake of booster doses in the eligible population** • Clear messaging is needed to maximise uptake of booster doses, including if ATAGI recommends accelerating shortening the duration between the second dose of vaccine and booster dose. • Early evidence suggests boosting markedly improves protection against Omicron.	• Emerging evidence indicates boosters will be an important lever in slowing the spread of Omicron and preventing severe disease. • Public acceptance of booster immunisation is likely to shift in the context of Omicron should it be demonstrated that a third dose is needed for protection and to maintain social freedoms.
	Bring forward booster doses • ATAGI has recommended bringing forward booster doses from 6 months to 5 months. ATAGI will continue to review this advice based on emerging evidence.	• Continued strong partnership between the Commonwealth, states and territories, GPs, pharmacies, the Aboriginal Community Controlled sector and other providers will be required in the coming weeks to ensure a smooth and rapid rollout of boosters.
Border	**Continue pre-departure testing** • Continuing requirement for international travellers to have a negative COVID-19 PCR test in the three days prior to departure for Australia.	• Moving the timing requirement to 24 hours pre-departure may increase the logistic difficulty without commensurately decreasing the risk

Continue and ensure compliance with arrival testing • Testing international travellers for COVID-19 upon arrival would support early detection and isolation of cases, thereby reducing the rate of importation into the community. This could include testing on airlines (e.g. using pooled saliva samples to minimise transmission risk) or at the airport, where feasible. • High levels of compliance are necessary for this to be effective. • A 72 hour isolation period is being used in three jurisdictions to allow collection, compliance and test return of the initial test (note the day 6 test falls outside of this time frame).	• Currently there is low compliance with testing after international arrival. • Systems will be required to support follow up and management. In particular, the need to ensure all travellers have local contact information recorded through the Australian Traveller Declaration (ATD) and a level of compliance monitoring. • Traveller data from ATD will be required to be efficiently and directly communicated to receiving jurisdictions electronic systems to facilitate automation of management.
Adjust current travel ban countries • The utility of the current travel bans and feasibility of implementation decreases overtime, as Omicron becomes established in many other countries.	• Travel bans negatively impact the community and the economy and provide a false confidence in the ability to prevent importation of Omicron. Omicron has now been detected in many countries globally and there are other measures (such as pre-departure and post arrival testing) that decrease the risk of importation.

	Maintain temporary quarantine requirements for international travellers • Quarantine is intended to identify individuals who may be incubating the virus and is different from the 72 hour isolation period imposed whilst awaiting the day 1 test result, currently in place in NSW, ACT and VIC. • Jurisdictions have different quarantine requirements in place (ranging from no quarantine to 14 days quarantine). Jurisdictions with less stringent quarantine requirements may consider short term adjustments. Time in quarantine may depend on vaccination status. • Measures will need continuous review whilst evidence on Omicron continues to emerge	• States and territories currently have different requirements for quarantine for international travellers. There is currently no restriction of onward domestic travel for international arrivals, in some jurisdictions. • As traveller numbers increase, monitoring quarantine and ensuring safe quarantine arrangements becomes a complex task. Managed hotel quarantine stock has significantly reduced in some jurisdictions. • Whilst international travellers currently have a higher likelihood of infection, this may change as Omicron spreads within the community. Need to continuously review the benefit of this measure.

Tags:

Communicable diseases | Immunisation | Travel health | Coronavirus (COVID-19)

← **All news**

Attachment G – Vaccination Rollout Campaigns

Why I'm Getting Vaccinated
More than 55 Tasmanians (including volunteer fire fighters, bicultural health workers, paramedics, business and tourism operators, general community members as well as educators, health professionals and local government Mayors) were featured in public communications to encourage Tasmanians to vaccinate.
The rolling campaign was run across numerous channels including social media, radio, TV, billboards, posters, print advertising (daily and community news) and promotion on buses.

Super Six
A six-week campaign which aimed to boost Tasmania's first dose vaccination levels past 60 per cent by mid-September 2021. From 23 August 2021, vaccinations were targeted for college students (aged 16 to 18 years old) with assistance from school nurses already familiar with student populations and in alignment with school examination schedules.
The Super Six campaign also targeted vaccination uptake in adults aged 30 to 59 years of age, in accordance with national modelling undertaken by the Doherty Institute at that time which had identified this age cohort (30 – 39 years) as a particular priority for vaccination.
Following the six-week campaign period (in early October 2021), Tasmania's vaccination rate was 61.4 per cent double vaccinated, which represented an almost 10 per cent increase from 20 September 2021 (with 52.9 per cent double vaccinated).

Spring into Summer
Aimed to achieve 80 per cent of eligible Tasmanians double vaccinated by 2 November 2021 and 90 per cent by 1 December 2021 (the first day of summer) and aligned to the requirement for states to achieve an average of 80 per cent of eligible people vaccinated before reopening. At 1 December 2021, 87.8 per cent of eligible Tasmanians had been double vaccinated.

Good Onya Jaydn
"Good Onya Jaydn" commenced on 29 October 2021 to boost vaccination rates among younger Tasmanians. The campaign ran until mid-January 2022 via social media platforms (Facebook, Instagram, YouTube, TikTok and Snapchat) and was supported by walk-in appointment availability in State Community Clinics.

5 to 11 years campaign
Vaccinations for Tasmanian children aged 5 to 11 years commenced on 10 January 2022. In an effort to provide every primary school aged child with the opportunity to have at least one dose of COVID-19 vaccine before going back to school, special children's clinics were established across Tasmania to administer the paediatric Pfizer dose.

These clinics are staffed with nurses trained in paediatric vaccination and accommodate longer appointment times. As the rollout for children aged 5 to 11 years progressed, State Community Clinic locations expanded, with some sites offering walk-in vaccinations.
Children living in regional and rural areas in Tasmania were able to access vaccinations through the Rural Flying Doctors Service mobile vaccination bus, which delivered mobile vaccination clinics to Strahan, Queenstown, Zeehan and Rosebery in early February 2022.