Western Australian
Auditor General's Report

WA's COVID-19 Vaccine Roll-out

Report 8: 2021-22
18 November 2021

Office of the Auditor General
Western Australia

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The Office of the Auditor General acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and community. We pay our respects to all members of the Aboriginal communities and their cultures, and to Elders both past and present.

WESTERN AUSTRALIAN AUDITOR GENERAL'S REPORT

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THE PRESIDENT
LEGISLATIVE COUNCIL

THE SPEAKER
LEGISLATIVE ASSEMBLY

WA'S COVID-19 VACCINE ROLL-OUT

This report has been prepared for submission to Parliament under the provisions of section 25 of the *Auditor General Act 2006*.

Performance audits and reviews are an integral part of my Office's overall program of audit and assurance for Parliament. They seek to provide Parliament and the people of WA with assessments of the effectiveness and efficiency of public sector programs and activities, and identify opportunities for improved performance.

The objective of this report is to provide transparency on whether the WA Department of Health is effectively managing its COVID-19 vaccine roll-out to meet State targets as quickly as possible.

I wish to acknowledge the Department's staff for their cooperation with this review.

CAROLINE SPENCER
AUDITOR GENERAL
18 November 2021

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Auditor General's overview

After clean water, vaccination programs have had the biggest government-led effect on public health over the last century. Vaccination offers a way to protect the community from severe health impacts of COVID-19 disease and to remove the emergency public health measures that have been in place for much longer than expected. In Western Australia (WA), vaccination against COVID-19 is strongly encouraged for people aged 12 years and over and is now mandatory for many workforces.

All of us who live in WA are fortunate to have gone through the pandemic with very few outbreaks, and with fewer restrictions and impacts on our daily routine than in many other parts of the world. A key part of that success has been the cooperation and compliance of the community in public health measures. Border controls have been the central policy response to reduce the risk of outbreaks in WA. Border controls protect everyone equally, and we are now at a turning point in the pandemic where we can swap the protection – and the isolating and disruptive restrictions - of border controls for the protection of vaccination. However, vaccination is not yet providing equal protection across the WA community, with vaccination rates for some vulnerable groups lagging behind overall rates.

My report highlights how the vaccination rollout has evolved from a Commonwealth-led program targeting priority at-risk groups, to a more shared effort between the State and Commonwealth following the shift to age-based eligibility. WA Health has demonstrated agility in its response to frequent policy changes and, in the early stages, uncertain supply. But through these changes, there has been a lack of clarity around roles and responsibilities and a lack of sustained coordination and planning for some of the most vulnerable and hard to reach communities, including Aboriginal people in metropolitan Perth. It is pleasing that providing access to these people is now a priority focus for both the State and Commonwealth governments.

Planning for exiting the emergency focus of the program will be an important next step for the near future, and there have been many lessons learned in the delivery of this program. A comprehensive evaluation by governments, informed by quality data and broad stakeholder consultation, will be important. It should examine the intended and unintended impacts of rapid decision-making in a declared emergency, and identify the approaches to planning and coordination for on-ground delivery across levels of government that were most efficient and effective. Such learnings will be critical to improving the capability for our State and our nation to rapidly respond to emerging future challenges. If we learn the right lessons from this period, our community can emerge stronger than before the pandemic.

This limited assurance review forms part of my Office's focus on the State's COVID-19 response. It provides transparency on key aspects related to whether the Department is effectively managing its COVID-19 vaccine roll-out to meet State targets as quickly as possible. To be clear, it is not the role of my Office to comment on the pandemic policy decisions taken by the Western Australian or other governments. While my Office has a role in examining whether the WA Department of Health and other agencies provide sound and comprehensive advice to government as part of their role in informing policy decisions, that is not part of the scope of this review. Advice from the Chief Health Officer, which considers some health impacts of COVID-19 policy responses, has been published by the State government.

Executive summary

Introduction

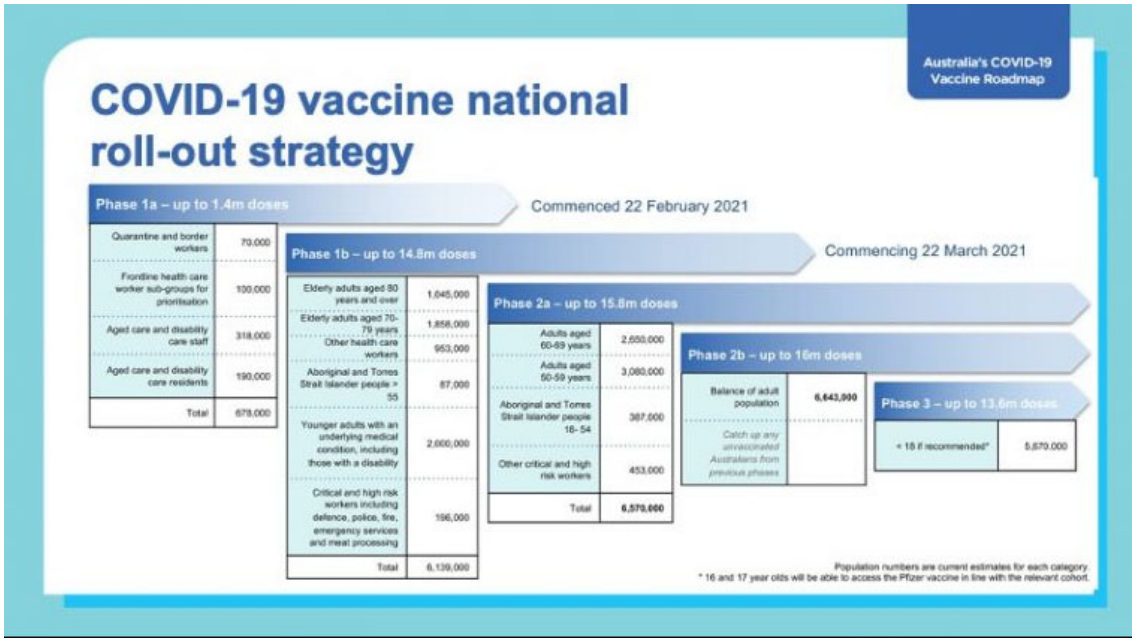
The objective of this report is to provide transparency on whether the Western Australian (WA) Department of Health (Department) is effectively managing its COVID-19 vaccine roll-out to meet State Government targets as quickly as possible.

Background

On 13 November 2020, National Cabinet (comprised of the Commonwealth, state, and territory governments) endorsed the *Australian COVID-19 Vaccination Policy*.[1] The policy states the key principles for the COVID-19 vaccine roll-out and emphasises the aim that a globally available, safe and effective vaccine will significantly improve the health outcomes and wellbeing of all Australians, as well as facilitate economic recovery.

In WA, the policy is supported by a *Western Australia COVID-19 Vaccination Program Implementation Plan*.[2] The plan was developed to be updated as more information was made available and sets out the high-level responsibilities of the State and Commonwealth governments.

The *National Rollout Strategy* was adopted in January 2021 (Figure 1). WA's COVID-19 vaccine roll-out began with Phase 1a on 22 February 2021 (Appendix 1), with frontline workers eligible to be vaccinated. Eligibility gradually expanded to other priority groups and age cohorts. By 13 September 2021, all West Australians aged 12 years and over were eligible to be vaccinated, and on 20 October 2021, the State Government mandated vaccinations for workers in certain occupational groups.



Source: The Commonwealth Government's *Australia's COVID-19 vaccine national roll-out strategy*[3] (January 2021)

Figure 1: National Roll-out Strategy, January 2021

[1] Commonwealth Government, *Australian COVID-19 Vaccination Policy*, 13 November 2020.
[2] Commonwealth Government and WA Government, Western Australia COVID-19 Vaccination Program Implementation Plan COVID-19 Vaccination Program, 13 March 2021.
[3] Commonwealth Government, *Australia's COVID-19 vaccine national roll-out strategy*, 7 January 2021.

In February 2021, following vaccine approval and delivery in Australia, the Department established the WA COVID-19 Vaccination Program to coordinate and deliver its responsibilities. The program team consists of approximately 50 staff members and operates as a branch of the State Health Incident Coordination Centre. This team was quickly established and brings together a range of public health and clinical staff from varying specialist areas under the leadership of a Chief Operating Officer.

On 24 August 2021, the State Government announced the appointment of the State Emergency Coordinator and WA Police Commissioner to the new role of Vaccine Commander. This appointment has led to a cross-government program involving both the Department and WA Police Force.

Conclusion

In an environment of uncertain supply and demand, the COVID-19 vaccination program in WA has been largely effective in delivering injections for the vast majority of people. A mix of delivery approaches by the Commonwealth and State governments has been an effective way to accelerate vaccination rates and make efficient use of vaccine supplies. The Department predicts that it will achieve its target for 80% of people aged 12 years and over in WA to be fully vaccinated by the end of 2021.

However, there are places and people, many of them vulnerable to the health impacts of an outbreak, that have been missed by the roll-out so far. Only 31% of Aboriginal people are fully vaccinated, and although some metropolitan areas have vaccination rates above 90%, others are at around 60%, and some country areas have rates under 40%. While hesitancy has played some role, access to vaccination has not been equitable. Some areas did not have local State-run clinics until recently, for example a clinic was only opened in Armadale on 18 October 2021. For some people having to make an appointment online and travel to a clinic was not practical.

The State and Commonwealth are now actively shifting resources to improve access for under-vaccinated groups. While pop-up and walk-in clinics and targeted outreach and in-reach are likely to be more effective for these people, such approaches tend to be slower and less predictable than mass community clinics. Based on current Department data, it could take until mid-2022 for some groups and areas to reach the vaccination rates set by Government as safe thresholds for re-opening borders and controlling the outbreaks that will then come.

Delivering the COVID-19 vaccination program is a shared responsibility between the State and Commonwealth governments, with the Commonwealth Government taking the lead role. The roll-out has changed from a focus on essential workers and at-risk and vulnerable groups to age-based eligibility. This has changed the roll-out duration and balance of expected effort, with the State having so far delivered 47% of the injections across the State, and, for the week ending 14 November, administered 35% of weekly total doses. But roles and responsibilities have not always been clear and explicit, and gaps in implementation plans have not yet been resolved. The State, in consultation with the Commonwealth, has only recently started to examine data in a systematic way to better identify and reach remaining vulnerable groups. It has not yet identified its plans for any ongoing COVID-19 vaccination program.

Recommendations

The WA Department of Health should:

1. Put coordinated plans in place to prioritise vaccine access for clinically vulnerable groups to minimise the impact from COVID-19 outbreaks.

   Implementation timeframe: As soon as possible

   Entity response: Accepted

2. In consultation with the Commonwealth, plan its approach for the conclusion of the emergency vaccination roll-out, and the extent to which any ongoing COVID-19 vaccination programs will be incorporated into existing arrangements for community vaccination and immunisation. Planning should incorporate lessons learned, identify intended outcomes, roles and responsibilities, and arrangements for data sharing, engaging at-risk groups, funding, monitoring and reporting.

   Implementation timeframe: January 2022

   Entity response: Accepted

Response from the WA Department of Health

The Department of Health acknowledges the findings of this review, in particular the importance of increasing the vaccination of vulnerable populations including Aboriginal people.

The Department is implementing a range of strategies to improve vaccination rates in groups with lower vaccination coverage and planning for delivery of vaccinations will continue into 2022.

Review focus and scope

This limited assurance review forms part of our focus on the State's COVID-19 response. It provides transparency on whether the Western Australian Department of Health (Department) is effectively managing its COVID-19 vaccine roll-out to meet State targets as quickly as possible.

As part of this review, we:

- reviewed key documentation underpinning the program
- interviewed key staff at the Department's COVID-19 Vaccination Program
- interviewed health service providers
- reviewed documentation released by the Commonwealth
- visited vaccination clinics
- used the Office of the Auditor General's financial audit work relating to the vaccination program.

This was a limited assurance direct engagement, conducted under Section 18 of the *Auditor General Act 2006*, in accordance with the Standard on Assurance Engagements ASAE 3500 *Performance Engagements* issued by the Australian Auditing and Assurance Standards Board. We complied with the independence and other ethical requirements relating to assurance engagements. The approximate cost of undertaking this review and reporting was $234,000.

This review varies in nature, timing, and extent from an audit. As such, the level of assurance provided in this report is substantially lower than for an audit.

We are tabling key findings to date in the interest of timeliness, but if there are any further matters of significance arising from further information sought regarding the vaccine program these will be reported to Parliament in a separate report.

It is not within the scope of this review, or the mandate of the Auditor General, to provide assurance on the Commonwealth's lead role in the vaccine program. However, the Australian Department of Health was provided an opportunity to comment on proposed reporting related to their involvement and we appreciate their comprehensive feedback.

Findings

The vaccination target has changed during the roll-out, but it has not been an effective mechanism in identifying low vaccination rates in higher risk groups

The target evolved over time

In March 2021, the State Health Incident Control Centre vaccination goal was to provide at least a single dose to 80% of WA's eligible population by the end of October 2021, in line with the Commonwealth Government's goal. Higher risk populations were identified early in the program (see Appendix 2).

The initial goal to provide a rate of 80% single dose coverage was then pushed back to a target date of 31 December 2021. Following the release of the National Transition Plan[4] on 31 July 2021, and agreed to on 6 August 2021, the goal changed to vaccinating 80% of the eligible population with 2 doses of a COVID-19 vaccine by the end of 2021. For most of the program, this target included West Australians aged 16 years and over, but from 19 October 2021, the target was expanded by the State Government to include children aged 12 years and over. This evolution of targets has meant that the Department has focussed on administering as many vaccines as possible within the expanding eligibility and policy parameters. Booster doses commenced from 1 November 2021.

On 5 November 2021, the State Government released the WA Safe Transition Plan[5] to minimise the impact of COVID-19 when the State's borders reopen. This plan states once 80% of the eligible population is fully vaccinated, a date to ease border controls will be set. The date will be informed by the State's estimate on when WA will reach a fully vaccinated rate of 90%.

The 80% target is silent on higher risk sub-groups

The Department has set a target of 80% (1.8 million people and 3.6 million doses) of eligible West Australians to be fully vaccinated (2 doses) by the end of 2021. This is based on modelling from the Doherty Institute. However, the Department has not been specific about whether achieving the target requires consistent coverage across cohorts, including those who are clinically vulnerable or hard to reach, and geographical areas. This means that 80% of the overall eligible population could be vaccinated, but there will be areas and vulnerable cohorts with lower vaccination rates and protection from a COVID-19 outbreak.

The modelling from the Doherty Institute states that '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'.[6] The modelling also says that in minimising the impact of community transmission the '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...'.[7]

[4] Commonwealth Government, National Plan to transition Australia's National COVID-19 Response, 6 August 2021.

[5] WA Government, *WA's Safe Transition Plan*, 5 November 2021.

[6] Doherty Institute, *Doherty Institute Modelling Report for National Cabinet*, 3 August 2021, p.2.

[7] Doherty Institute, *Doherty Institute Modelling Report for National Cabinet*, 3 August 2021, p.2.

Roles and responsibilities were not clearly defined

The WA Implementation Plan focussed on the early phases of the program, but key roles and responsibilities beyond Phase 1a were not set and key actions are still not done

In March 2021, the Commonwealth and State Government formalised the *Western Australia COVID-19 Vaccination Program Implementation Plan* (Implementation Plan). This high-level document focussed on Phase 1a of the program, primarily key workers in high-risk industries. As Phase 1a groups were split between the Commonwealth and State, it was sound to have a plan to coordinate this part of the roll-out.

The Implementation Plan stated the Commonwealth was 'responsible for leading the implementation of the program', and is broadly responsible for:

- buying vaccines from producers
- allocating and delivering vaccines to WA (to the State Government, primary care and aged care)
- setting eligibility criteria for access to vaccines
- overseeing vaccines administered in primary care (general practitioners (GPs), pharmacists, community pharmacies, Aboriginal Community Controlled Health Services) and aged care settings in WA.

The State Government, through the Department, is broadly responsible for:

- administering the vaccines it receives from the Commonwealth in line with eligibility criteria and clinical governance standards
- recording and sending information it collects from people getting vaccinated to the Commonwealth
- the Western Australia Country Health Service (WACHS) would collaborate with the Commonwealth and manage the State's role in regional areas, including vaccinating Aboriginal people.

This resulted in WACHS running joint clinics with Aboriginal Medical Services and other Commonwealth contracted entities, for example in the Kimberley.

These high-level roles and responsibilities helped the State and Commonwealth work together in the initial phase. Key roles and responsibilities beyond Phase 1a were not articulated and the WA Implementation Plan has not been updated since March 2021. The WA Implementation Plan lists several outstanding issues including clarity of responsibilities and definitions for population cohorts, some of which remain unactioned at the time of this review.

Priority populations were established to ensure that vulnerable groups had earlier access to vaccination

The eligible population grew during the vaccine roll-out. In the initial phase of the vaccine roll-out, only key risk groups could be vaccinated. The eligibility criteria were set to ensure that the limited supply of vaccines were available to the people who were most likely to contract COVID-19, such as frontline workers. It was also intended to protect people who would be most vulnerable should an outbreak occur in the community (Appendix 2).

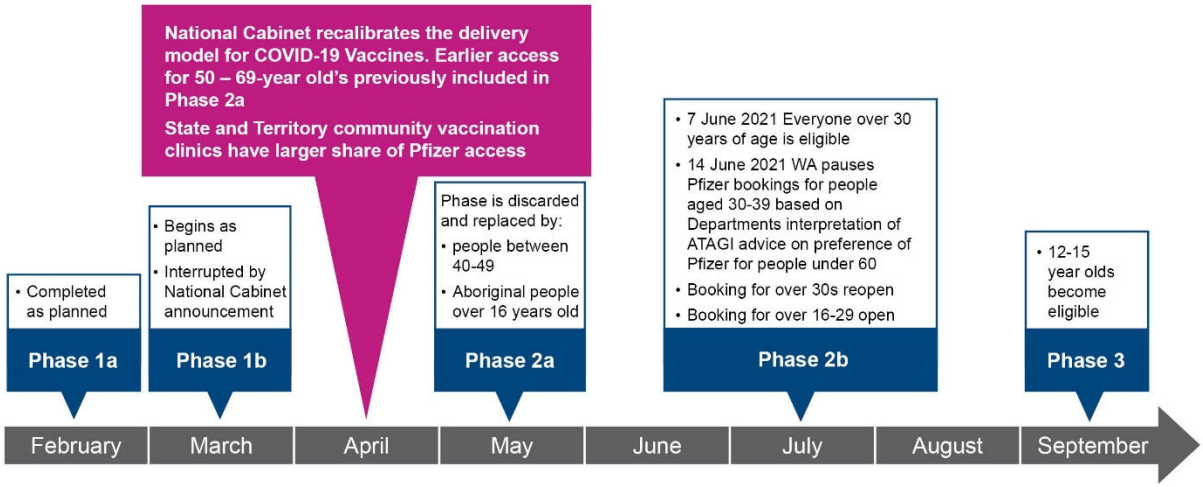
National Cabinet agreed to a phased approach for different cohorts based on risk. Phase 1a included frontline health workers through to Phase 2b where the balance of the adult population would be allowed access to vaccination. For example, Phase 1b included:

- other healthcare workers
- critical and high-risk workers including defence, police, fire, emergency services and meat processing
- other quarantine and border workers
- Aboriginal and Torres Strait Islander people aged over 55 years
- community dwelling adults over 70 years of age
- younger adults with underlying medical conditions, including those with a disability.

The national strategy changed, which increased the State's responsibility, but plans were not updated

The Implementation Plan details how, in Phase 1a, the State was responsible for delivering vaccines to key occupational groups that were eligible for vaccination in the early stages of the program. These occupational groups included healthcare, border and quarantine workers. The Implementation Plan states that the Commonwealth was responsible for aged care and disability residents and workers. The allocation of vaccines to the State was limited to the number of people in the cohort they were responsible for.

Changes in vaccine supply and evolving advice around the provision of vaccines meant that the planned phased approach (Figure 2) was revised during Phase 1b. The result was that the phased approach was accelerated. In effect, more cohorts became eligible for the vaccine earlier than expected.



Source: OAG using Commonwealth Government data: *Australia's COVID-19 vaccine national roll-out strategy* (January 2021)

Figure 2: Comparison of the planned roll-out of eligibility versus actual roll-out

On 22 April 2021, National Cabinet decided to increase states' access to Pfizer vaccines, while maintaining GPs as the lead in administering AstraZeneca. At this stage, Pfizer was the recommended vaccine for people below 50. This announcement had the impact of increasing the State's responsibility for vaccinating the broader WA population. The Commonwealth

also announced that it would provide additional funding to support WA in setting up community vaccination clinics. Yet, the State's role, and what it meant in terms of responsibility for targets or different cohorts was never formalised in documentation.

The State also had the additional challenge of managing the impact of Australian Technical Advisory Group on Immunisation (ATAGI) advice around the use of AstraZeneca. The Department decided, following the announcement on the ATAGI advice, to cancel all AstraZeneca appointments (13,109) for people aged under 60 on 18 June 2021. The impact of the change in advice was not limited to the affected age groups. Between May and August 2021, around 10,000 bookings for AstraZeneca were cancelled by people aged 60 to 69. This was despite ATAGI still recommending AstraZeneca for this age group. The change in advice led to hesitancy that has been a barrier to people getting vaccinated throughout the program.

As a result of increasing Pfizer supply, the State Government announced on 14 September 2021 that people aged 60 years and over were eligible for the Pfizer vaccine. This led to a significant spike in vaccination registrations for this cohort, despite being eligible for vaccination since mid-April. As of 12 November 2021, 88% of people vaccinated by the Department have received the Pfizer vaccine.

Even if WA achieves its 80% vaccination target by December as predicted, at-risk groups will have lower vaccination rates

The Department is confident that it can achieve its 80% vaccination target by the end of 2021

The Department predicts that WA is on track to reach an 80% fully vaccinated rate by the end of 2021. Assumptions underpinning the forecast include that:

- the Department will administer 50% of the required doses and the other 50% will be delivered by primary healthcare. The proportion of vaccines administered by the State has fluctuated during the roll-out, from around 50% to now 47%.
- high-level forward estimates of vaccine supply are accurate
- demand will slow after 60% of all eligible people are fully vaccinated. For example, the State administered 56,819 vaccines during the week of 25 October 2021. This compares to 93,931 during the week of 17 August 2021.

Aboriginal people have much lower vaccination rates, leaving them more at risk to COVID-19, and not much is known about other vulnerable groups

The spread of vaccine coverage in WA is not evenly distributed, which means Aboriginal people and certain other groups may be particularly vulnerable to COVID-19 outbreaks. The 80% vaccination target that the Department is working towards is based on the National Transition Plan, which has adopted modelling from the Doherty Institute.[8]

Vaccination rates among Aboriginal people in WA are consistently low throughout the State (Figure 3). Aboriginal people 18 years and over have been eligible for vaccination since April 2021. On 9 November 2021, only 31% of Aboriginal people in WA are reported as fully vaccinated, compared to an overall rate in WA of 67.8%.

[8] Doherty Institute, *Doherty Institute Modelling Report for National Cabinet*, 3 August 2021.

The Implementation Plan describes that the Commonwealth, State and Aboriginal community controlled health sector would work closely together to vaccinate Aboriginal people throughout WA. It states that WACHS would lead program delivery in regional and remote areas, and that existing and supplementary services, in partnership with the Aboriginal Health Council of WA and Aboriginal community controlled health sector, would lead delivery in the metropolitan area.

In addition to the Implementation Plan, the Commonwealth Government's *COVID-19 Vaccination Program Implementation Plan: Aboriginal and Torres Strait Islander Peoples*[9] was established in March 2021. This plan states that the Commonwealth will be 'leading the implementation of the COVID-19 vaccination program for Aboriginal people in consultation with state and territory governments and the Aboriginal Community Controlled Health Services sector'. It also identified the need for clear lines of responsibility at each stage of the process.

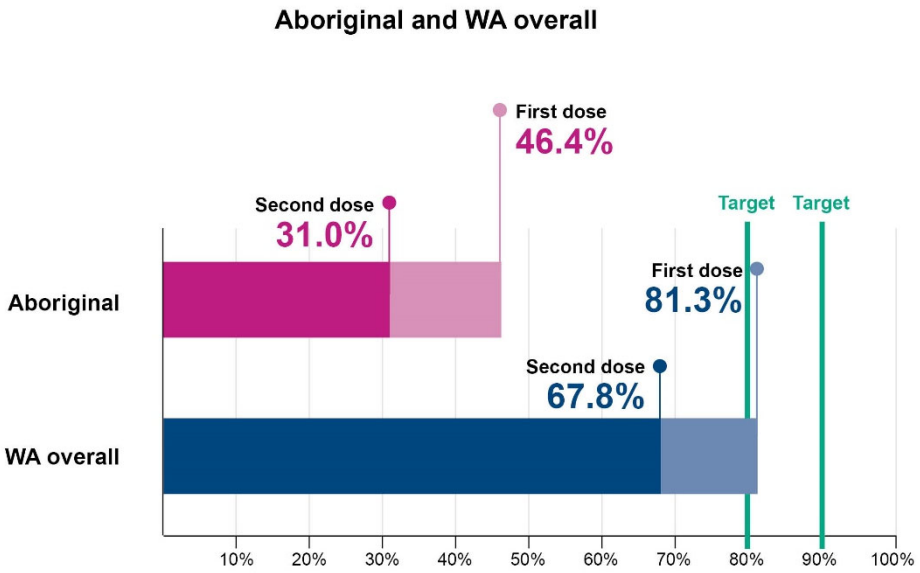
However, clear roles and responsibilities between the State and Commonwealth were not established. In June 2021, the Department began planning focussed initiatives for Aboriginal people. Prior to this, the State was relying on the Commonwealth to support the vaccination of Aboriginal people.

On 20 October 2021, the Department told us that it was working on a state-wide response for Aboriginal people. Some specific plans have been developed for aspects of the roll-out for Aboriginal people, but these are not comprehensive.

WACHS was responsible for collaborating with the Commonwealth in the vaccination roll-out for Aboriginal people in regional areas, but it has also not developed a specific implementation plan for Aboriginal people. In the absence of these plans, and clearly identified roles and responsibilities, there has not been a strategic or coordinated approach to addressing lower vaccination rates of Aboriginal people. However, WACHS has been working with local primary health providers and the Royal Flying Doctor Service in regional areas, to share information and carry out activities. The Commonwealth has been working with Aboriginal community controlled health organisations to vaccinate Aboriginal people.

At the current rate of progress, around 40% of Aboriginal people will be fully vaccinated by December 2021, and 80% of Aboriginal people will not be fully vaccinated until mid-2022, almost 6 months after the target date. For example, 1 of the local government areas with the lowest Aboriginal vaccination rates in the Gascoyne, may not reach the 80% rate until August 2022 based on current rates. This leaves Aboriginal people, 1 of the priority groups for vaccination, more vulnerable to COVID-19 outbreaks.

[9] Commonwealth Government, COVID-19 Vaccination Program Implementation Plan: Aboriginal and Torres Strait Islander Peoples



Source: OAG using the Commonwealth Government's vaccination data at 9 November 2021

Figure 3: Aboriginal COVID-19 vaccination rates compared to the total population

There is now a focussed effort by both the State and Commonwealth to improve vaccination rates of Aboriginal people. With the appointment of the Police Commissioner as Vaccine Commander on 24 August 2021, the Department has been able to leverage existing police networks, particularly among Aboriginal elders, to engage Aboriginal communities.

The Department does not have a clear picture of other vulnerable groups, though efforts have been made to reach them

The Department identified the need to develop strategies to vaccinate vulnerable populations, such as people:

- experiencing homelessness, sleeping rough or utilising emergency accommodation
- receiving alcohol and other drug treatment services
- in social housing, high/very high-density public housing
- living in mental health hostels
- who are culturally and linguistically diverse (CALD).

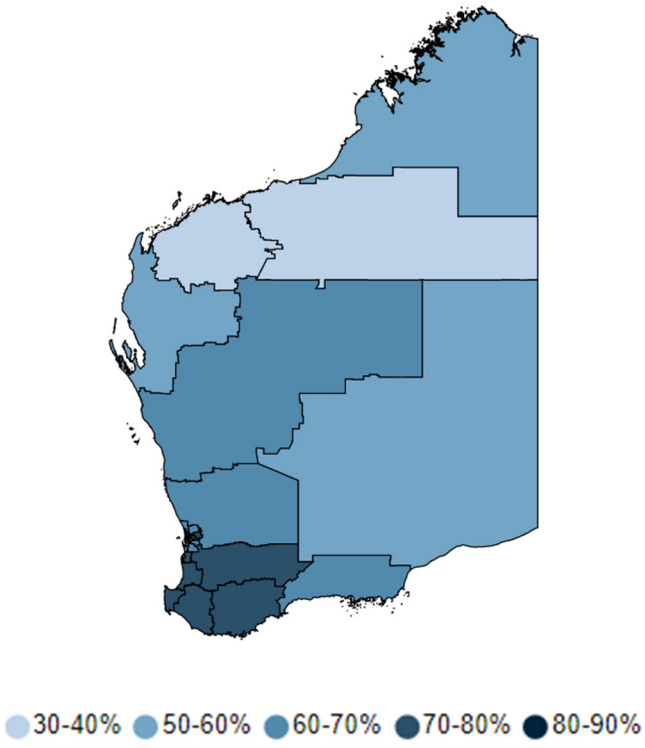
These vulnerable cohorts were identified because they are more likely to have underlying health conditions, are living in conditions that make it difficult to isolate and/or are less likely to access mainstream health services providing COVID-19 vaccinations.

Some strategies were developed to support vaccine uptake in these vulnerable cohorts. This included in-reach clinics, having immunisation services at public events, and working with local community leaders. For example, 3,500 vaccine doses were allocated to people experiencing homelessness. The program's in-reach services operated by partnering with existing community organisations, and 8 metropolitan clinics commenced in July and August and operated for a 6 to 12-week period based on demand. These services were not advertised to the general public to ensure their focus was on those accessing services from the partnering organisation. However, the Department has not been able to track vaccination rates for these groups. This means it does not know whether they are well protected in the

event of a COVID-19 outbreak. Recently, the Commonwealth has made more detailed data available to the State, including vaccination rates of CALD groups.

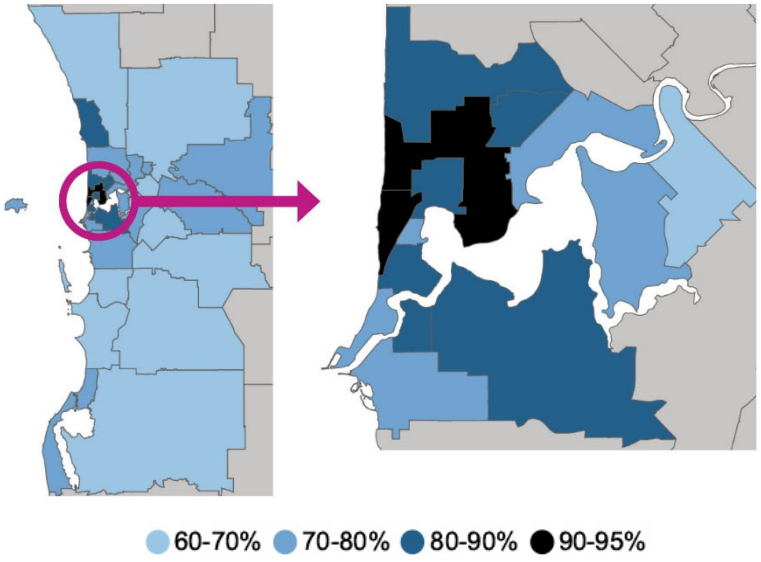
Some areas of WA have vaccination rates that are much lower than the 80% target

There is a significant difference in the vaccination rates across metropolitan areas, and some regional and remote areas of the State (Figure 4 and 5). For example, at 14 November 2021, the Pilbara had a fully vaccinated rate of around 35% and the Goldfields 53%. In the metropolitan area, Serpentine-Jarrahdale had a fully vaccinated rate of around 60%. This compares to some western suburbs of Perth that have an over 90% fully vaccinated rate. The Department is targeting areas with lower coverage. The risk in regional and remote areas is enhanced by the limited access to hospital care should a COVID-19 outbreak occur.



Source: OAG using the Commonwealth Government's vaccination data at 14 November 2021

Figure 4: Vaccination rates throughout WA



Source: OAG using the Commonwealth Government's vaccination data at 14 November 2021

Figure 5: Vaccination rates throughout the Perth metropolitan area

Community vaccination clinics reached large numbers of people, but have left gaps

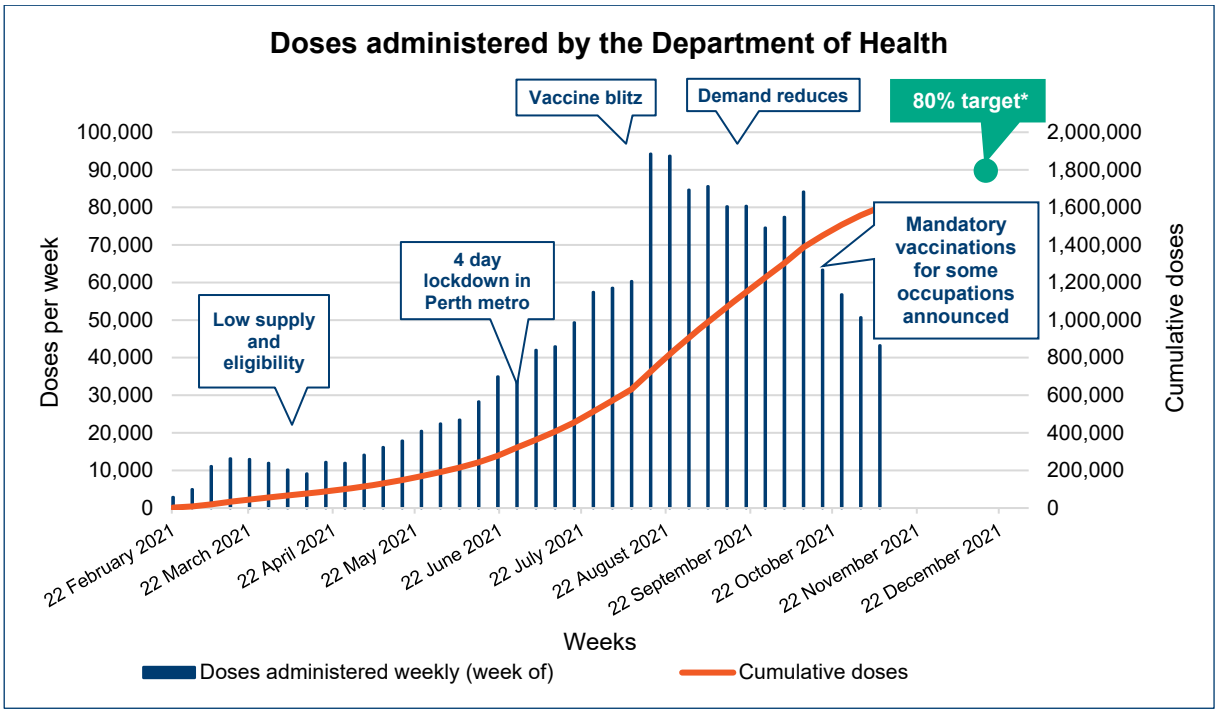
Community clinics were introduced to increase vaccine delivery capacity, which the Department advises had minimal impact to frontline health services

Once groups beyond at-risk workers became eligible, the Department primarily used community vaccination clinics in Claremont, Kwinana, Joondalup, Redcliffe, Perth, and Midland to administer its supply of vaccines. These clinics are designed to reach large numbers of people efficiently, through mainly appointment-based bookings with enough staff in each location to administer thousands of vaccine doses a day.

Claremont Showgrounds was selected as the earliest location with the most capacity as it is a well-known, State Government-owned location and accessible by train. However, no detailed analysis of other locations was undertaken. People in some locations, for example in Perth's south-east and some northern suburbs, have had less opportunity to access vaccination from State clinics. The Department's research showed that inconvenience is a key barrier to getting vaccinated and, subsequently, the Midland clinic opened on 6 September, while Armadale opened on 18 October 2021.

WACHS has been responsible for administering vaccines in regional areas. It has done this by establishing community vaccination clinics in regional areas, such as Bunbury, Busselton, Exmouth and Manjimup, and smaller temporary clinics in towns and remote communities.

Vaccine delivery capacity was increased at existing clinics as more doses were made available (Figure 6).



Source: OAG using Commonwealth Government and Department of Health data at 14 November 2021

**On the Department's assumption that it needs to deliver 50% of the remaining doses left to reach WA's target by the end of 2021.*

Figure 6: The State's delivery of its allocated COVID-19 vaccine doses weekly

Increasing the number of bookings available was enabled by the Department securing additional clinical staff. Securing a workforce was initially challenging because the Department wanted to ensure the program did not draw heavily on frontline health workers. Nurses and pharmacists are provided by the health service provider in which the clinics are located. While some staff have been redirected from frontline services, such as hospitals, this has been done as a last resort. Rather, workforce requirements have been met by a pool of staff that at peak activity reached around 900 through:

- recruitment of persons to vaccinator positions (largely casual employment arrangements, led by the Child and Adolescent Health Service)
- expanding the vaccination workforce to include nursing graduates and assistants-in-nursing, and recruiting recently retired nurses
- the use of laypersons as vaccinators, which is particularly valuable in country areas where there are workforce challenges.

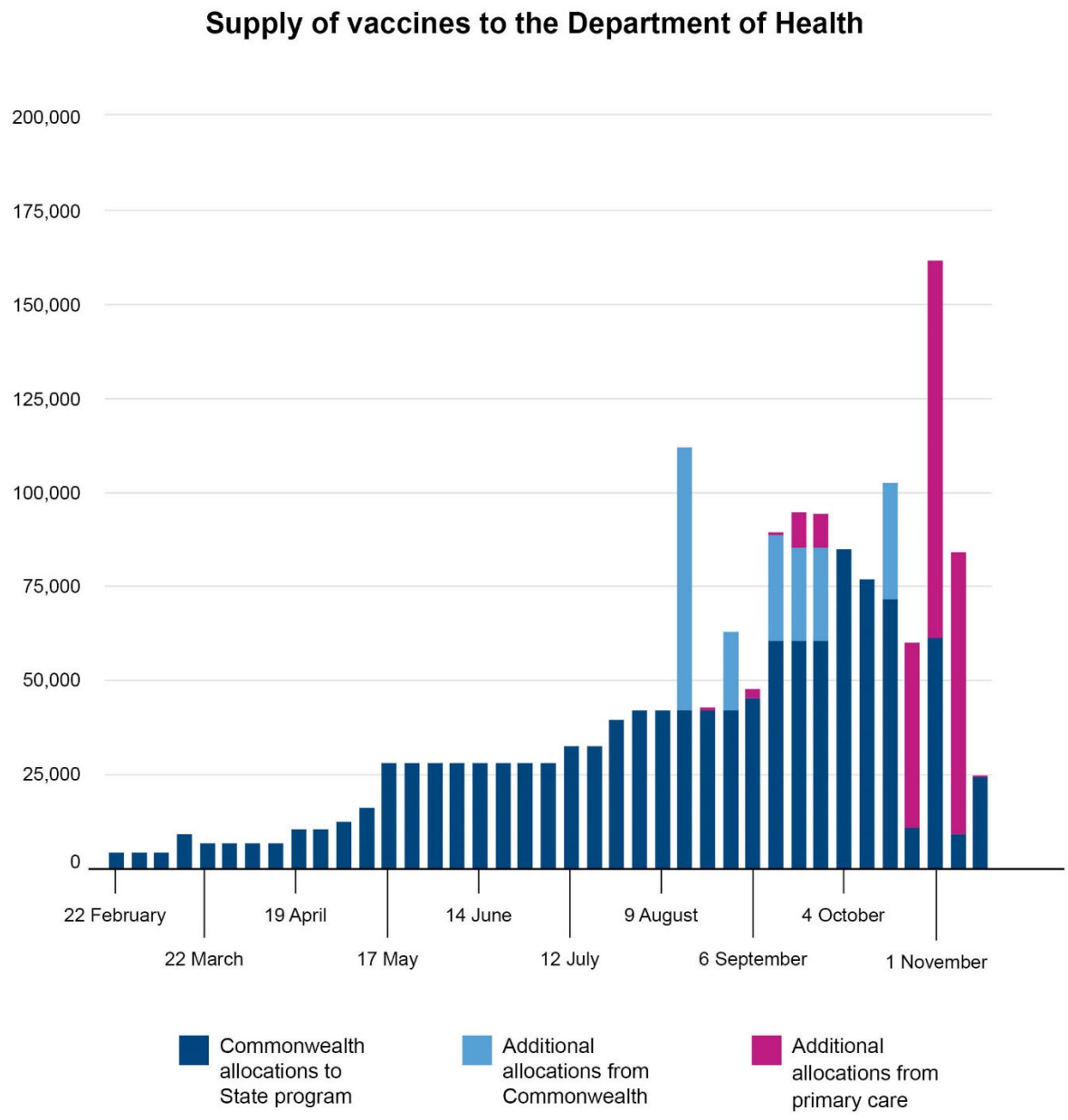
The Department established this workforce so that the vaccination program can continue to be staffed in the event of a COVID-19 outbreak. Metropolitan heath service providers told us that the program has not significantly impacted their frontline workforce, though it has been a challenge for WACHS.

The State has been allocated more vaccine supply than it originally anticipated which has led to it administering more vaccines

To date, the State has administered around 47% or 1.59 million vaccine doses in WA. The Commonwealth has administered 53% or 1.8 million doses. The Commonwealth has given additional vaccine supply to the Department (Figure 7), beyond initial estimates. As a result, more doses have been available for West Australians through the State vaccine clinics. The Department has also received additional doses from the Commonwealth, because primary

care in WA did not order its full allocation. The Commonwealth also increased its national supply by sourcing additional doses from other countries.

In addition to these doses allocated from the Commonwealth, the Department developed protocols with the primary care sector within WA to transfer vaccines. This has also worked in reverse. For example, the State redirected 40,000 doses to primary care in WA in October 2021, as primary care did not have enough supply to cover booked appointments.



Source: OAG based on Department of Health internal documentation at 15 November 2021

Figure 7: Supply of vaccines to the Department of Health

As the demand for vaccination in community clinics slows, targeted clinics were established to reach under-vaccinated areas and groups

To improve coverage in under-vaccinated areas, the Department has shifted into a new phase of the roll-out, which is moving away from a reliance on larger community vaccination clinics. This is partly driven by forward bookings from October, which showed that, until 24 December 2021, only 46% of the 561,000 appointments available across the larger

community vaccination clinics had been booked. As demand reduces, clinics, such as Claremont, Perth Convention and Exhibition Centre, and Kwinana will scale down or close.

In-reach clinics (more local, targeted, and temporary clinics) are being established to give communities with lower vaccination rates greater access to vaccination. This delivery model has been informed by available vaccination and demographic data. The Department is also in contact with the Commonwealth and other state and territory health entities to share knowledge about hard-to-reach populations. In-reach clinics are planned for shopping centres, sporting events, markets, places of worship and local libraries. Geographical analysis has been conducted to identify the best location for these clinics which includes:

- large populations
- low vaccination rates
- high proportion of culturally and linguistically diverse residents
- fewer pharmacies and GPs
- vaccine hesitancy.

These in-reach clinics involve a mix of walk-ins and bookings and are planned to run for 8 weeks to capture first and second doses, though demand will guide timeframes.

Regionally the approach has been similar, with WACHS now targeting areas based on vaccination rates, primary care coverage and significant Aboriginal populations. Due to limited workforce, WACHS is working closely with the primary care sector, Aboriginal medical services, and industry to coordinate vaccine clinics.

Vaccination rates through in-reach clinics are likely to be lower and less predictable, and require more resources

Although in-reach clinics may be better at reaching certain groups, they are less efficient than larger community vaccination clinics. For example, we visited a small clinic aimed at homeless people, in Perth's inner north, which vaccinated 62 people during its first clinic. This required 6 staff (2 pharmacists and 4 nurses). In contrast, the community vaccination clinic at Perth Convention and Exhibition Centre, which we also visited, had around 50 staff and was able to vaccinate around 1,500 to 2,000 people per day.

It is not only the volume of people vaccinated through community vaccination clinics versus in-reach clinics. In-reach clinics are also less predictable. The clinics cater to walk-ins so they can opportunistically reach as many people as possible. As a result, the number of people which will be vaccinated each day is uncertain. There are also logistical challenges for the Department too, such as knowing the number of staff and doses required to ensure they are fully stocked to service the number of people who walk-in. Although progress may be slow, as 80% of the population has already received 1 dose at 14 November 2021, the overall 80% target is still likely to be met.

Appendix 1: Timeline of the COVID-19 roll-out in WA

 Eligibility  Capacity  Other key developments

Week	Key event	
Week 1 22 February 2021		WA COVID-19 Vaccination Program starts with Phase 1a roll-out (priority workers, disability care and aged care residents)
Week 5 22 March 2021		GPs begin administering AstraZeneca
		Phase 1b commences (aged 70+, Aboriginal people aged 55+, people with underlying conditions, high-risk workers)
Week 6 29 March 2021		**Claremont** Showgrounds clinic opens, AstraZeneca only
Week 7 5 April 2021		Australian Technical Advisory Group on Immunisation (ATAGI) advises that Pfizer is the preferred vaccine for people under 50 years
		WA COVID-19 Vaccination Program cancels all AstraZeneca appointments for people aged under 50 years
Week 9 19 April 2021		State Government introduces mandatory vaccination policy for hotel quarantine workers
		National Cabinet agrees to recalibrate the delivery model for the COVID-19 vaccine
		Commonwealth Vaccination Roll-out Strategy limits Pfizer vaccine to people under 50 (except in very limited circumstances), bringing forward vaccine access to Phase 2a (people aged 50 to 69 years, Aboriginal people 18+ and other high-risk workers), allowing Pfizer and AstraZeneca clinics to run at the same time at suitable sites and by states establishing mass vaccination clinics
Week 11 3 May 2021		Premier announces cancellation of Pfizer appointments for people aged 60+
Week 12 10 May 2021		**Kwinana** community vaccination clinic opens, AstraZeneca only; **Joondalup** community clinic opens, AstraZeneca only
Week 14 24 May 2021		VaccinateWA accessible to public as a booking system
Week 15 31 May 2021		National Cabinet discards Phase 2a and instead opens eligibility for people aged 40-49 years old, and Aboriginal people aged 16+
Week 16 7 June 2021		The State Government announces that people aged 30+ are eligible
		The WA COVID-19 phoneline,13 COVID, starts taking Pfizer bookings
Week 17 14 June 2021		ATAGI recommends the COVID-19 Pfizer vaccine as the preferred vaccine for those aged 16 to 59
		WA COVID-19 Vaccination Program pauses Pfizer bookings for people aged 30-39s (existing bookings honoured)

Week	Key event
	Claremont Showgrounds starts Pfizer 7 days per week and continues AstraZeneca 3 days per week
Week 18 21 June 2021	**Kwinana** and **Joondalup** clinics start providing Pfizer vaccine
Week 19 28 June 2021	National Cabinet agrees that the vaccination of residential aged care workers will become mandatory by mid-September 2021
	Redcliffe clinic starts providing Pfizer
Week 20 5 July 2021	GPs (nationally) begin receiving Pfizer vaccine, increasing each week until October
Week 21 12 July 2021	Regional and remote pharmacies begin receiving AstraZeneca
Week 24 2 August 2021	ATAGI recommends that children aged 12 to 15 years be prioritised for vaccination if they have a specified medical condition, are ATSI and/or live in a remote community
	Bookings open for West Australians aged 30 to 39 with 2-week vaccination blitz planned to commence August 16
	National Cabinet fully agrees to the 4-step National Plan to transition Australia's National COVID-19 Response
Week 25 9 August 2021	WA's Chief Health Officer approves directions to ensure that any person working at a residential aged care facility has received at least 1 dose of an approved COVID-19 vaccination on or before 17 September 2021
Week 26 16 August 2021	The WA vaccine roll-out eligibility is expanded - people aged 16 to 29 years are eligible for vaccination with Pfizer
	Perth Convention and Exhibition Centre clinic opens to public. WA receives additional 70,000 Pfizer doses
	Three-week vaccination blitz commences with 250,000 doses expected over 3 weeks
	Pop-up **airport** COVID-19 vaccination clinics aimed at FIFO workers
Week 27 23 August 2021	The State Government announces the appointment of State Emergency Coordinator and Police Commissioner to the new role of Vaccine Commander
Week 28 30 August 2021	COVID-19 vaccination to become mandatory for West Australian health care workers
Week 29 6 September 2021	Clinic at **Midland** opens
	Children 12 -15 eligible for vaccination in WA
Week 30 13 September 2021	State Government announces West Australians aged 60+ are eligible for Pfizer
	The **Tom Price** clinic opens, a joint initiative of WA Country Health Service, industry, and local government
Week 31	COVID-19 vaccination to become mandatory for West Australian at-risk port workers

Week	Key event	
20 September 2021		Moderna COVID-19 vaccine available at selected WA pharmacies
Week 33 4 October 2021		COVID-19 vaccine to be mandatory for workers in the WA resources industry
Week 36 18 October 2021		Mandatory COVID-19 vaccination policy announced for most occupations and workforces in WA
		**Mirrabooka** and **Armadale** clinics open, bookings not required

Source: OAG adapted from the Department of Health's COVID-19 Vaccination Program Implementation Strategy (July 2021) and Government announcements

Appendix 2: Advice on people at higher risk of COVID-19

Commonwealth Department of Health: Who is at greater risk of severe illness[10]

You are at greater risk of severe illness from COVID-19 if you are unvaccinated and are:

- 70 years of age or over
- solid organ transplant recipients who are on immune suppressive therapy
- bone marrow transplant recipients
- on immune suppressive therapy for graft versus host disease
- blood cancer e.g., leukaemia, lymphoma, or myelodysplastic syndrome
- non-haematological cancer diagnosed within the past 5 years or on chemotherapy, radiotherapy, immunotherapy, or targeted anti-cancer therapy (active treatment or recently completed) or with advanced disease regardless of treatment
- survivors of childhood cancers
- chronic inflammatory conditions requiring medical treatments
- primary or acquired immunodeficiency
- chronic renal (kidney) failure
- heart disease (coronary heart disease or failure)
- chronic lung disease (excludes mild or moderate asthma)
- a non-haematological cancer (diagnosed in the last 12 months)
- diabetes
- severe obesity with a body mass index higher than 40 kg/m^2
- chronic liver disease
- some neurological conditions (stroke, dementia, other) (speak to your doctor about your risk)
- poorly controlled blood pressure (may increase risk – speak to your doctor)
- pregnant people
- significant disability requiring frequent assistance with activities of daily living
- severe mental health conditions.

[10] People at higher risk of coronavirus (COVID-19) | Commonwealth Government Department of Health, last updated 12 October 2021

WA Department of Health: Who is most at risk of COVID-19?[11]

All people are at risk of infection, but some groups are at higher risk of becoming seriously ill. These groups include:

- Aboriginal and Torres Strait Islander people 50 years and older with 1 or more chronic medical conditions
- people 65 years and older with chronic medical conditions. See the Department of Health website for more information
- people 70 years and older
- people with compromised immune systems.

[11] COVID-19 (coronavirus) (healthywa.wa.gov.au), last reviewed 1 November 2021

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Auditor General's 2021-22 reports

Number	Title	Date tabled
7	Water Corporation: Management of Water Pipes – Follow-Up	17 November 2021
6	Roll-out of State COVID-19 Stimulus Initiatives: July 2020 – March 2021	20 October 2021
5	Local Government COVID-19 Financial Hardship Support	15 October 2021
4	Public Building Maintenance	24 August 2021
3	Staff Exit Controls	5 August 2021
2	SafeWA – Application Audit	2 August 2021
1	Opinion on Ministerial Notification – FPC Arbitration Outcome	29 July 2021

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