Commonwealth Government

COVID-19 **Response Inquiry** Summary

Lessons for the Next Crisis

COVID-19 Response Inquiry Summary: Lessons for the Next Crisis

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Acknowledgement of Country

The Australian Government acknowledges the traditional owners and custodians of Country throughout Australia and acknowledges their continuing connection to land, waters and community. We pay our respects to the people, the cultures and the Elders past, present and emerging.

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Introduction

When the COVID-19 pandemic emerged at the start of 2020, governments around the world were ill prepared to respond to the scale and duration of a crisis that had ramifications for our health systems, our economies and the very function of our societies. Australia was no exception, with pre-existing pandemic plans limited in scope and lacking the resources to keep them up to date.

None of the plans anticipated that, when faced with the prospect of significant loss of life and an overwhelmed health system, leaders would choose the previously unthinkable to protect their citizens. As a result, we had no playbook for pivotal actions taken during the pandemic, no agreement on who would lead on taking these actions and no regular testing of systems and processes. It is telling that there were no plans for the execution of key measures, such as closing our international borders and enforced quarantine. As a result, the pandemic response was not as effective as it could have been.

Despite this lack of planning, Australia fared well relative to other nations that experienced larger losses in human life, health system collapse and more severe economic downturns. Our Inquiry, which focused on the actions of the Australian Government, has concluded that this was due to a combination of factors including early and decisive leadership and the collective efforts of the general public, community organisations, businesses, essential workers and the public service. Above all, Australia's success in responding to the pandemic was a testament to the willingness to put community interests ahead of self-interests and to all do our bit as part of 'Team Australia'.

The pandemic emergency response did not last weeks or months, but for more than two years. It involved community-wide sacrifices and health, economic and social impacts that continue to be felt almost five years after the pandemic started. Tragically, tens of thousands of Australians were directly impacted by the severe illness and loss of life. And every member of the community was impacted by the significant limits on freedom of movement, disruptions to schooling, reduced access to usual health care, separation from family and friends, or the loss of work and businesses.

While governments were united in their ambition to minimise the harm of the pandemic, there are lessons to be learned for the future. We have lived through the most significant global health emergency in 100 years, and have an opportunity to record what worked and what we would recommend the Australian Government does differently the next time it faces a pandemic.

The Inquiry was also asked by the Australian Government to provide its recommendations, based on what we learned through the COVID-19 pandemic, on the guiding principles and priorities for the Australian Centre for Disease Control (CDC). The CDC is an important addition to the public health infrastructure in Australia and it is taking early steps to strengthen our preparedness and improve our resilience.

We know that another pandemic could occur at any time, and it is imperative that governments are prepared. We know that the next pandemic may involve a more lethal virus that is harder to contain. We know that a future pandemic is likely to be compounded by concurrent crises which include natural disasters, cybersecurity threats and geopolitical tensions. Next time, we cannot say it was unprecedented. We must act now to apply lessons learnt during the COVID-19 response to strengthen our national resilience to the next crisis and avoid repeating the same mistakes.

Our approach

In undertaking its work, the Inquiry consulted widely and leveraged the latest data and evidence on the impact of key decisions taken during the crisis. The Inquiry heard from key decision-makers in leadership positions at the time, including the former Prime Minister, senior Cabinet ministers, Premiers, Chief Ministers and public servants. These leaders shared insights for their successors in the event of a similar crisis on actions to minimise harm and achieve the best possible health, social and economic outcomes.

The Inquiry received 2,201 public submissions from 305 organisations, 1,829 individuals and 67 anonymous contributors, representing a breadth of experiences and reflections from across governments, businesses, community organisations, unions and everyday Australians.

A total of 27 roundtables with stakeholders involving more than 300 individuals were held to test the Inquiry's understanding of what worked well and what needs to change. We commissioned a community input survey and lived experience focus groups to ensure the voices of a diverse range of Australians were considered in our review. We thank them for their commitment and trust in voluntarily and openly sharing their views, experiences and advice on how to make our future pandemic responses stronger.

These consultations have informed nine key recommendations aimed at shaping future pandemic responses. To place Australia in the best possible position to detect and respond to the next pandemic, the Inquiry has identified 19 immediate actions **(numbered 1 to 19 below)** to be undertaken in the next 12 to 18 months and seven medium-term actions **(numbered 20 to 26 below)** to be implemented ahead of the next pandemic. Organised around nine key pillars of an effective pandemic response, they provide a high-level playbook for the future.

This summary report evaluates the Australian Government's COVID-19 response through each of these pillars and the key lessons learned through Australia's experience of the pandemic. This report augments the Inquiry's main report, which provides more detail of the Australian Government's response, its impacts and the panel's evaluation, key learnings and actions. Together these reports document what worked well, what did not, what has changed since the pandemic and what still needs to be done to prepare for the next crisis.

COVID-19 in Australia

The story of COVID-19 in Australia is not a static one. As new waves and virus variants emerged, infection and transmission risks shifted, and government responses and community attitudes and behaviours changed.

For most Australians, their understanding of the pandemic was marked by their experiences: the time they spent away from loved ones, changes to work or study, health or financial challenges and personal tragedies. We are conscious that many Australians continue to be affected by the tail of the pandemic. Their experiences include fear of ongoing infection risk; health impacts from infection, vaccination or disruption to health care access; mental health impacts; and ongoing employment and financial impacts.

However, for ease of reference this report divides the period between the arrival of COVID-19 in January 2020 and today into four 'phases': **alert, suppression, vaccine rollout and transition/recovery.**

The alert phase: January to April 2020

Human-to-human transmission of SARS-CoV-2, the virus that causes COVID-19, was confirmed by health experts in China on 20 January 2020.[1] The first case of COVID-19 in Australia was detected just days later, on 25 January 2020.

Over the next two months, Australia began to activate its emergency settings in response to the threat posed by the virus. COVID-19 was added as a disease 'with pandemic potential' to the relevant determination under the Act by the Chief Medical Officer in January 2020. It was a critical moment when, on the advice of the Minister for Health, the Governor-General declared a 'human biosecurity emergency' under section 475 of the *Biosecurity Act 2015* (Cth) (the Biosecurity Act) on 18 March 2020.

When the human biosecurity emergency was declared, the Minister for Health had the capacity to access extensive powers under the Biosecurity Act to determine measures to prevent or control the entry or spread of COVID-19 in Australia. This was the first time that these powers under the Act had been used since its enactment.

On 11 March 2020, the World Health Organization declared COVID-19 to be a pandemic and by 22 March 2020, 1,765 confirmed cases, including seven deaths, had been reported in Australia.

Australia's crisis response rapidly escalated. All governments followed a 'precautionary' approach to slow the spread of COVID-19 in the community, protecting at-risk populations and preparing the health system. Governments restricted travel into and around Australia and introduced wide-ranging public health orders. Things came to a head when the first national lockdown was implemented on 29 March 2020.

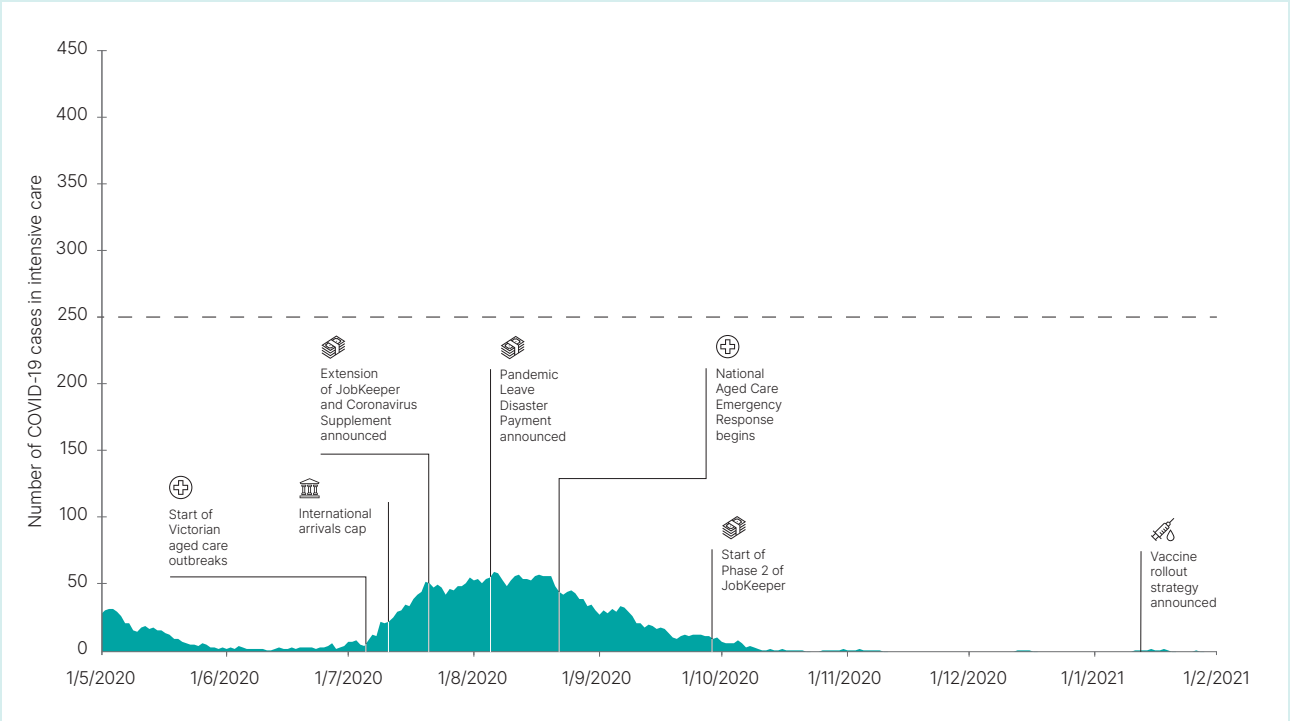
A series of economic packages in March represented the biggest ever fiscal expansion in Australia's history, totalling $213.7 billion. The biggest program, a wage subsidy scheme called JobKeeper, ended up supporting almost a third of jobs across the economy.[2]

Throughout this period, the country's most senior leaders met regularly through National Cabinet, which was established to address the pandemic and replaced less agile Commonwealth–state forums. Policy responses initially focused on the short-term public health implications, but quickly widened as the pandemic transformed into an economic and whole-of-society crisis.

For Australians, this period was marked by significant changes to their lives, uncertainty about the virus, and fear based on devastating images of COVID-19 experiences overseas. Globally, there was uncertainty about whether a vaccine or treatment for COVID-19 would be developed.

The suppression phase: May 2020 to January 2021

Figure 1: A timeline of COVID-19 in Australia during the suppression phase[3]



Australia moved into an extended period of striving to curtail transmission and keeping case numbers low to ensure that optimal care (especially in intensive care units) would be available to all COVID-19 cases, and minimising impacts on the access to usual healthcare for the general population.

This phase saw government responses begin to diverge as some areas maintained low case numbers and largely returned to life as normal, whilst others experienced high case numbers and imposed lengthy lockdowns.

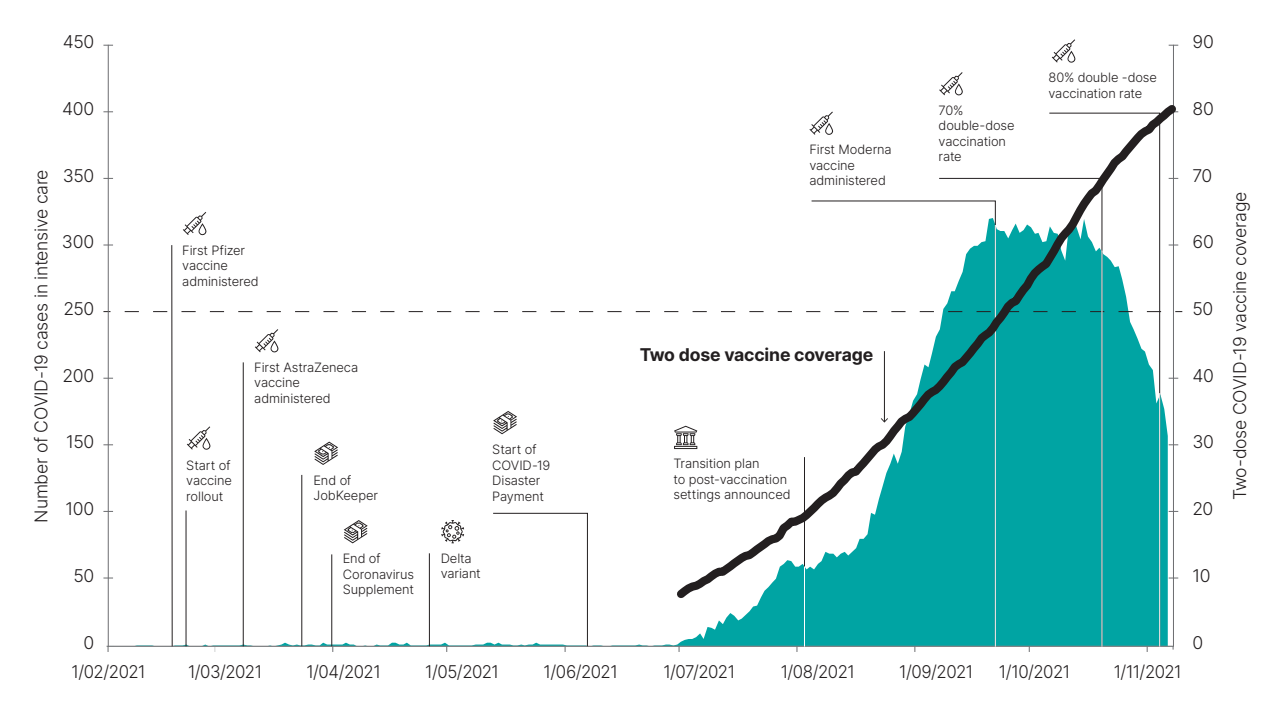
By late 2020 it had become clear that the pandemic would not be short-lived. Australians adapted work and study approaches where they could, and many experienced significant challenges juggling the demands of work and caring responsibilities. Essential workers in health, aged care, disability and early childhood education and care were particularly stretched and expressed concerns about the risks to their physical and mental health.

The significant burden beyond the health system became apparent during this period. In particular, many people were negatively affected by lockdowns and the closure of businesses that had implications for their financial security. The Australian Government continued to provide the financial supports that had been introduced in the alert phase and introduced a range of packages for specific sectors that had experienced ongoing disruption or had not benefited from earlier supports.

Meanwhile, experts around the world continued to work to develop vaccines, with trials focused on the effectiveness of vaccines in reducing the severity of illness and death. Countries took different approaches to secure vaccine supply, and Australia found itself struggling against more proactive efforts from other governments, perceptions of greater need given the success of our suppression strategies, and the lack of domestic manufacturing capability.

The vaccine rollout phase: February to November 2021

Figure 2: A timeline of COVID-19 in Australia during the vaccine rollout phase[4]



Australia's vaccine rollout commenced on 21 February 2021, using a phased approach that prioritised groups considered most at risk of exposure to the virus or of experiencing severe illness or death.

As Australia had been slower than some countries to approve the use of vaccines and secure supply, it continued to rely on suppression strategies and ongoing international border restrictions to manage the virus in the community. The main consideration was reaching an adult vaccination rate where enough Australians were protected from severe disease for the health system to cope alongside providing critical health services for non-COVID related medical conditions.

The delays in vaccine procurement and distribution, further complicated by concerns over serious side effects, ultimately affected the duration of the vaccine rollout and prolonged restrictive public health measures. The additional lockdowns that occurred as a result of these delays had a direct economic cost estimated at $31 billion.[5]

From the middle of this phase, the Delta variant spread through communities in the eastern states, triggering extended lockdowns in some jurisdictions. The spread of the virus also extended to areas that had previously remained free of COVID-19, including some remote Aboriginal and Torres Strait Islander communities.

Discussion regarding the path to easing restrictions began with agreement at National Cabinet and the release of the National Plan to Transition Australia's National COVID-19 Response on 9 July 2021. The plan set out a four-step transition to shift the focus from suppressing viral spread to preventing as much severe illness and death as possible as the virus became endemic in Australia. However, the plan had to be updated soon after its release to account for the arrival of the Delta variant and its increased transmission potential and disease severity. The amended plan was published on 6 August 2021. A key change was the increase in the adult vaccination target from 70 to 80 per cent, which was reached in November 2021.

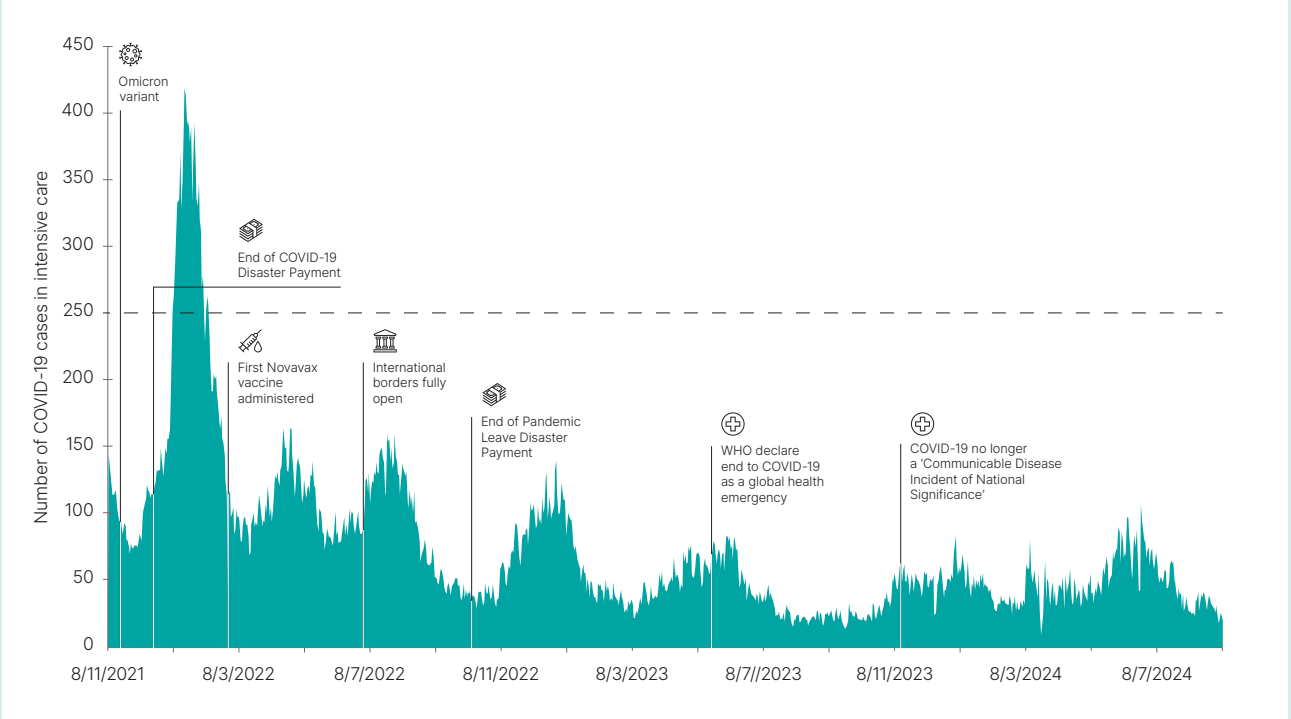
Vaccine mandates for health and aged care workers had been put in place, and these were extended by jurisdictions and employers to include a range of frontline workers and others, including construction workers in some jurisdictions. Governments also required people to be fully vaccinated to participate in some social and work-related activities. Those who were not fully vaccinated during this period were often still subject to restrictions.

Whilst vaccine effectiveness against infection waned after a few months, and more rapidly with the Delta variant, vaccines continued to protect people from severe disease and death, as well as being protective against long COVID.

Throughout this period, many Australians felt uncertain about when they would be able to return to normal life, while others were fearful about the lifting of restrictions. Those who lost employment or were unable to participate in some activities due to their vaccine status became increasingly distrustful of public health orders and angry about their treatment.

The transition/recovery phase: December 2021 to the present day

Figure 3: A timeline of COVID-19 in Australia during the transition/recovery phase[6]



Once vaccination targets were reached, the Australian Government announced that Australia could 'transition to living with COVID-19'. During this period, there was a reopening of state and international borders, an easing of restrictions and a strong economic recovery. As some looked to move on from the pandemic, there was a rapid de-escalation in COVID-19 communications. This caused many to feel uncertain as they had become accustomed to regular reporting of infection and vaccination statistics. The concept of 'living with the virus' was also polarising, with some arguing we should have done this all along, whilst others felt this was downplaying the importance of COVID-19, and implied tha it was the same as a cold or the flu.

The arrival of the more transmissible Omicron variant coincided with this period of opening up and consequently Australia experienced its first true community-wide exposure and infection. Omicron's arrival also made clear that containment measures could no longer work in the same way, and Australia had no choice but to consider COVID-19 an endemic disease and plan accordingly.

During this time, many Australians returned to a life not too dissimilar from the one they knew before the pandemic. However, some people felt unsafe as restrictions eased and others continue to grapple with the 'long tail' of physical and mental health impacts of the virus and the government response.

The pandemic has also had other consequences. There are much higher levels of vaccine hesitancy, a decline in COVID-19 booster uptake, and lower general vaccination uptake, including among priority populations and people over 75, who are generally more at risk of severe disease.

The Human Biosecurity Emergency Declaration under the Biosecurity Act lapsed on 11 April 2022, signalling the beginning of the end of the pandemic emergency response. On 20 October 2023, Australia declared that COVID-19 was no longer a Communicable Disease Incident of National Significance.

SARS-CoV-2 variants continue to circulate in our community today, and COVID-19 is monitored and managed as one of Australia's notifiable communicable diseases.

Actions to improve Australia's pandemic preparedness and response

Every pandemic will be different depending on the nature and spread of the infectious agent, the disease it causes, the availability of treatments and vaccines, and the nature, strength and agility of existing systems. However, what we do know is that responding to a pandemic will invariably require a whole-of-government response, led at the highest levels of government, to ensure the health, economic and social impacts are managed. Rather than seeing these issues in silos, our deliberations highlighted the interplay between them across nine key pillars for a successful pandemic response.

Minimising harm

Acknowledging harm caused by a pandemic and the response, and the importance of mitigating impacts.

Planning and preparedness

Robust systems and effective planning before, adaption during and review after the event.

Leadership and coordination

Leadership, clarity and coherence in roles and responsibilities.

Evidence and evaluation

The appropriate generation and use of fit-for-purpose evidence and evaluation in an uncertain and fast-evolving environment.

Agility and innovation

The ability to move quickly and respond in an uncertain and changing risk environment.

Relationships

Strengthening relationships and networks between systems, organisations and governments.

Trust

Building and maintaining trust in government, institutions and experts.

Equity

Monitoring and accounting for differences across the population in risk factors, and impacts arising from, the pandemic disease, and the design and delivery of public health measures.

Communications

Effective, tailored, timely, evidence-rich information sharing from respected and authoritative sources.

Minimising harm

Guiding recommendation: Decision-making processes in a pandemic need to fully account for the broader health, economic and social impacts of decisions, and the changing level and nature of risk to inform escalation and de-escalation of the response to minimise harm.

Pandemics increase the risk of ill health and death, and responses involve fundamental changes to the way we live and the operation of our economy. In this context, it is uncontroversial that governments should aim to minimise harm through taking proportionate responses at the various stages of a pandemic that fully account for the broader health, economic and social impacts of decisions. This objective is supported by the other eight pillars of a pandemic response and should factor into every decision made throughout a successful pandemic response.

Controlling the spread of COVID-19

During the initial alert phase of the COVID-19 pandemic, the Australian Government and state and territory governments acted swiftly to introduce precautionary measures to suppress transmission, 'buying time' to better understand the health threat, and to prepare the public health response and increase the health system's resilience. We heard from former Prime Minister Scott Morrison that leaders were motivated by the idea that a 'good decision made late was deadly'. The Biosecurity Act supported this focus on controlling the virus by giving extraordinary powers to the Commonwealth Minister for Health to act unilaterally.

Every Australian government is focused on slowing the spread of coronavirus to save lives...

Prime Minister Scott Morrison, 20 March 2020[7]

Measures enacted under the Biosecurity Act were restrictive, and their broader economic, social and mental health and human rights impacts were not always understood or considered. In future, additional checks, such as publishing the reasons and supporting advice that underpinned extensions, would have improved the Australian Government's transparency, accountability and discipline, and helped maintain public confidence and trust.

The strategy to 'buy time' was successful in suppressing the initial wave, which in turn saved lives, protected the health system and minimised the negative economic and social impacts of the pandemic.

Once more was understood about the virus threat and our healthcare system's resilience had increased, the pandemic response should have shifted from a reliance on the 'better safe than sorry' precautionary principle, where fast actions not necessarily informed by evidence are required, to a risk-based approach grounded in evidence. However, aspects of the response continued to rely on the precautionary principle, maintaining a low risk tolerance for COVID-19 case numbers, with inadequate consideration of the broader health, economic and societal impacts.

A real-time evidence-based approach gives decision-makers more confidence about introducing and modifying measures, and when it is safe to target the response rather than relying on broad restrictive health orders, reducing the severity and duration of restrictions. Such an approach also reduces fear and distrust in the community, by providing the evidence that public health measures are the right and proportionate thing to do.

While the Inquiry heard of real-time evidence-based approaches being employed during the pandemic, there was variation across jurisdictions over the course of the response. National Cabinet announced a coordinated approach across jurisdictions to gathering evidence to inform changes to isolation and quarantine ahead of Australia's opening up, but this did not eventuate, undermining public confidence and trust at this critical time.

A lack of staff and agency and surge workforce was repeatedly mentioned as the most significant challenge faced by aged care workers when dealing with COVID-19 and was a fundamental contributor to the degree of crisis faced by the sector.

2022 National Aged Care COVID-19 Survey[8]

Loss of lives in aged care

For many Australians, their acceptance of public health orders was driven by the understanding that measures were needed to protect the lives of older Australians during the pandemic. Older Australians were more vulnerable to severe disease regardless of whether they were living in aged care or the community. Many experienced extreme social isolation, due to the choice of older Australians and their family and friends to avoid interactions to reduce the risk of exposure to infection or because of visitation bans enforced in aged care facilities where older Australians lived.

Notwithstanding the early success in containing the spread of the virus, the majority of the approximately 900 COVID-19 associated deaths in 2020 were among older Australians,[9] primarily living in Victoria, the state with the most significant community spread during this period. While outbreaks impacted only a small number of residential aged care facilities, they accounted for 75 per cent of all COVID-19 deaths.[10] Pre-existing vulnerability in the aged care system, including insecure employment arrangements and workers operating across multiple facilities, a lack of planning and preparation, cases of weak leadership at the provider level, inadequate infection prevention and control and a lack of mechanisms to share learnings and experiences were all contributing factors.

Vaccines

Australia had a phased vaccine rollout that sought to prioritise those most at risk. After a slow start dogged by a lack of supply and logistical issues, Australia's eventual success in immunising more than 90 per cent of the country by the end of 2021 involved a number of policies designed to encourage uptake, including vaccine mandates linked to occupation. Historically Australia has high rates of vaccination, providing broad public health benefits, and this was relied on during COVID-19 to allow Australia to safely transition from pandemic to endemic.

Vaccine mandates were introduced in critical care settings when only 10 per cent of staff were fully vaccinated. This was justified due to the increased health risks associated with COVID-19 for those receiving care. The mandates also contributed to containing the spread of the virus during waves where recent vaccination reduced the likelihood of infection, reducing the risk of severe illness in the wider community and the health system being overwhelmed.

However, research indicates that the use of mandates has reduced the motivation of some people to be vaccinated for COVID-19 and has led to ongoing reluctance to receive vaccines. Of particular concern is the fall in critical routine vaccination uptake amongst children, and a rise in vaccine-preventable illnesses such as measles and whooping cough.

The Inquiry also heard profoundly tragic personal stories of vaccine injury. They highlight the need to always weigh up the risk of an adverse reaction to a vaccine against the risks of the disease itself, including the impacts on broader health outcomes if the spread of the virus is uncontrolled and the health system is overwhelmed.

This is particularly difficult when the people at greatest risk from infection are a different group to those at greatest risk of having an adverse reaction to the vaccine.

The COVID-19 Vaccine Claims Scheme provided those impacted by adverse events with compensation; however, the scheme is yet to be reviewed to assess its effectiveness and determine its appropriateness for a future pandemic.

Broader health impacts

The focus on controlling the spread of COVID-19 meant broader health issues were often given a lower priority. These issues included increased poor mental health due to the negative impacts of social isolation, pandemic disruptions and increased anxiety, and reduced access to usual health care, such as cancer and other disease screening, non-emergency surgery and chronic disease management.

Studies have also concluded that the increases in the rate of unemployment benefit and the implementation of a wage subsidy scheme were an important strategy in mitigating the negative mental health impacts of the pandemic. At the start of the pandemic, the Australian Government moved quickly to mitigate some of the impacts by expanding access to mental health services under Medicare, including through allowing online sessions, and increasing funding for helplines. These initiatives helped many Australians, but the benefits were not universal.

Decisions to pause cancer screening services and reduced attendance at scheduled screenings during the pandemic response are likely to have long-term implications. Independent modelling from Australian researchers anticipates an additional 1,186 deaths from colorectal cancer through to 2030 due to COVID-era disruptions to screening services.[11]

Almost five years after the pandemic commenced, large backlogs in elective surgery remain due to its suspension during the pandemic. The health system, while protected from being overwhelmed during the pandemic, has enduring issues. Workforce shortages across the system, burnout, ongoing sickness and the furloughing of staff have impeded health services in their recovery to business as usual, let alone enabling them to find the additional capacity needed to address substantial backlogs. These system-wide issues are having an ongoing impact on Australians in need of health care.

Social impacts

The negative social impacts of the pandemic included extended social isolation, increases in the incidence of family violence, and reductions in access to education, disability supports and secure housing.

Risk factors associated with family, domestic and sexual violence increased through the pandemic. Some women were forced into lockdowns with their abusers, unable to leave, to be checked on by family and friends, or access domestic violence support services. In addition, there was an increase in alcohol consumption, which is linked to higher rates of family violence. One important risk factor, financial stress, was reduced due to the increases in income support payments.

While some of the evidence is mixed, overall it indicates that a significant number of women and children experienced violence for the first time, and that there was also an increase in the severity of violence during the pandemic.

Children faced lower health risks from COVID-19; however, broader impacts on the social and emotional development of children are ongoing. These include impacts on mental health, school attendance and academic outcomes for some groups of children. The panel notes that while the Australian Health Protection Principal Committee never recommended widespread school closures, a lack of early and clear communication on the risks undermined public confidence, particularly for parents with school-aged children, teachers and unions. This created the environment for subsequent state-based decisions to transition to remote learning that impacted the quality and accessibility of education throughout the pandemic.

Everyone got JobSeeker payments ... you were getting double the money you usually made and when it stopped ... it stopped so suddenly ... It caused a lot of mental health struggles.

Focus group participant experiencing homelessness, Sydney[12]

The fear in the community, and wider impacts on children and young people, could have been mitigated through more proportionate decisions based on a balanced approach that used evidence on the risk of viral spread in school settings and the effectiveness of in-school measures. Earlier communication and greater transparency around decisions, and improved engagement with experts and advocates to feed into government decision-making, would also have minimised the long-term harm caused by the suspension of face-to-face learning.

There was a strong sense that people with disability were not a priority, despite many being at a higher risk from COVID-19 infection and pandemic-associated disruptions to their usual supports. Poor planning, inadequate communications and a lack of transparency around prioritisation decisions in the vaccine rollout exacerbated a sense of being forgotten by government. Additionally, public health restrictions often meant that people with disability faced challenges accessing health and support services and were not able to be supported by carers in accessing medical appointments, COVID-19 vaccination or testing. Guidelines to support the management of infection risk by disability support providers and in residential settings were lacking at the start of the pandemic.

Recognising the importance of secure housing in a pandemic, state and territory governments, local governments and community organisations moved quickly to implement programs to house in hotels those sleeping rough. These were highly successful programs that reduced risk for this key cohort through the pandemic.

In addition, measures such as increased social security payments and eviction and rent rise moratoriums meant that, rather than increasing, the number of households living in housing stress reduced through the pandemic. However, once supports were withdrawn, many people were in the same position as before the pandemic, if not worse off.

Economic impacts

The health crisis quickly became an economic crisis, and the Australian Government moved swiftly to provide economic supports that were focused on minimising harm by mitigating financial stress, poverty and labour force 'scarring'. Economic supports announced in March totalling $213.7 billion supported the health response, allowing individuals to isolate and restrict activity.

While Australia recorded its first recession in almost 30 years, with GDP falling by 6.9 per cent between the December quarter 2019 and the June quarter 2020,[13] it was able to largely mitigate severe economic impacts. The success of the health response in Australia meant it had a corresponding success in its economic outcomes during 2020.

Although economic activity contracted and the effects of the pandemic on the economy were large, Australia outperformed all major advanced economies in 2020.

Treasury[14]

That said, there were a number of ways in which the individual design of supports during this initial period could have been improved to ensure value for money for taxpayers and to support the economic recovery. A lack of planning for the economic impacts of a pandemic meant that the main economic support measure and biggest ever government spending program, JobKeeper, was developed while the Australian Government was responding to the health crisis. While the program was pivotal in Australia's health and economic response to the pandemic, the lack of planning led to delays that increased job losses and necessary compromises in policy design that reduced value for money for taxpayers. In addition, some policy decisions, such as excluding temporary migrants and foreign companies from JobKeeper, exacerbated skills shortages and inflationary pressures during the economic recovery.

The economic recovery was much stronger than anticipated, reflecting the success of Australia's public health and economic responses and widespread misjudgement as to the strength of demand following the pandemic. With the benefit of hindsight, there was excessive fiscal and monetary policy stimulus provided throughout 2021 and 2022, especially in the construction sector. Combined with supply side disruptions, this contributed to inflationary pressures coming out of the pandemic.

Australian policymakers were not alone in misjudging the nature and strength of inflationary pressures coming out of the pandemic, which have led to declines in real incomes across much of the developed world. Following a decade of low inflation, and based on prior pandemic experiences, inflation was not viewed as a credible risk by policymakers. The policy focus on getting unemployment down as far as possible also came with real benefits for households, businesses, and government finances. However, a stronger focus on supply side rather than demand side policies in plans for the economic recovery would have mitigated some of the inflationary pressures.

Lessons for a future pandemic

Minimising harms through a pandemic requires a broad consideration of the health, economic and social impacts of decisions and policies to mitigate negative impacts.

The stronger the existing systems and supports, the greater the resilience Australia will have in a future pandemic.

Many of the harms will be felt long after the pandemic is declared officially over, and consideration of recovery should factor in government decision-making.

Immediate actions

To meet the object of minimising harm, the Inquiry has identified the following immediate actions to be completed over the next 12 to 18 months:

1. **Address critical gaps in health recovery from the COVID-19 pandemic,** including prioritising greater investment in mental health support for children and young people, and a COVID catch-up strategy in response to a decline in the delivery of key health prevention measures.
2. **Review the COVID-19 Vaccine Claims Scheme,** with a view to informing the future use of similar indemnity schemes in a national health emergency for a wider profile of vaccines and treatments.
3. **Conduct post-action reviews of outstanding key COVID-19 response measures to ensure lessons are captured,** including a review of the *Biosecurity Act 2015* (Cth) and key economic measures.
4. **Establish structures to ensure young people and their advocates are genuinely engaged, and impacts on children are considered in pandemic preparedness activities and responses to future emergencies.** This should include establishing the role of Chief Paediatrician and including the Chief Paediatrician and National Children's Commissioner on the Australian Health Protection Committee.

Medium-term actions

In addition, the Inquiry has identified the following medium-term action to be completed prior to the next major health emergency:

20. **The Australian Government work with the states and territories to improve capability to shift to remote learning if required in a national health emergency,** including:
    - Incorporating competency in developing and delivering remote learning into initial teacher training and the Australian Professional Standards for Teachers
    - Investing in the development of a suite of remote learning modules consistent with the Australian Curriculum, made available to all schools, teachers and students to improve preparedness for future emergencies that may require school closures.

Planning and preparedness

Guiding recommendation: Develop and regularly stress test preparedness and a national response to a pandemic that covers the broader health, economic and social response and fully harnesses capability and resources across governments, academia, industry and the community sector.

Pandemic planning and preparedness can reduce the negative impacts of a pandemic by improving the processes for establishing, evaluating and refining pandemic responses that slow disease outbreaks and protect at-risk populations whilst minimising collateral negative impacts.

Preparedness

Preparedness involves building the strength and resilience of systems to efficiently respond to and manage an emergency as well as effectively move from response to recovery phases. Specific actions governments can take include strengthening the healthcare system, establishing early warning systems, building data collection, sharing and synthesis platforms, establishing trusted relationships and reducing inequality.

Preparedness also requires consideration of the national security of key supply chains, including our sovereign ability to produce personal protective equipment, medicines and vaccines during pandemic times, as well as maintaining the supply of other essential medical, food, fuel and basic items.

In 2017, a World Health Organization-led team of experts assessed Australia's health system as having a high level of emergency preparedness.[15] However, the last comprehensive test of communicable disease arrangements involving multiple levels of government occurred in 2008, over a decade before the COVID-19 pandemic. A 2018 Australian Government stress test to explore how the Department of Home Affairs and other departments would support the Department of Health in a national health crisis found that while systems and arrangements could sufficiently respond to an ordinary crisis, a 'very significant or near-existential crisis would push current arrangements beyond their limits'.[16]

Of concern, the responsible minister was not informed of this finding until after the COVID-19 pandemic had started.[17]

During the pandemic, the limited readiness of some key systems became evident. These issues related to the management of the National Medical Stockpile, the strength of the public health system both nationally and across several states, and building design in high-risk settings that had not accounted for disease spread risk. Australia's pandemic response also suffered from not having a national technical advisory body, such as the European Centre for Disease Prevention and Control, with the capacity to conduct risk assessments and evidence evaluation to support the national response.

As a critical piece of social and economic infrastructure, Australia's social safety net was found to be unable to adequately support households that suffered large falls in income due to the impacts of the pandemic and public health restrictions on activity. A particular gap was temporary visa holders, who accounted for one in 12 people living in Australia[18,19] but were generally not eligible for any social security support, or for many of the initial pandemic-specific measures.

Planning

Planning is a component of preparedness and involves establishing arrangements in advance to enable timely, effective, and appropriate responses to a hazardous event or disaster. While pandemics had been identified in risk assessments, the Australian Government had not planned for the length, complexity and severity of COVID-19 and its recovery period. Plans had largely focused on an influenza-based pandemic, and few government agencies had an active pandemic plan.

Where plans did exist, they did not interact well with each other or across levels of government. There were no plans for potentially high-risk settings, such as aged care or schools, or for priority populations, including Aboriginal and Torres Strait Islander people, children and young people, culturally and linguistically diverse communities, remote communities, people with disability and older Australians. There had also been little consideration of the economic impacts of a pandemic, including on critical supply chains, nor had policies to support households and businesses through such a shock been developed. There were also no strategies that considered workforce issues.

The Australian Government rapidly responded by adapting existing plans.[20] The national Australian Health Sector Emergency Response Plan was activated for novel coronavirus on 27 February 2020, just nine days after COVID-19 was declared a Communicable Disease Incident of National Significance in Australia. Subsequently, plans were developed to address the specific needs of some priority populations, including Aboriginal and Torres Strait Islander people, older Australians and people with disability. However, the panel heard consistently that there was a sense that throughout the pandemic, 'the plane was being built while it was flying', and this meant there was little ability to think ahead and anticipate the next challenges as the crisis unfolded.

There was early recognition by the Australian Government of the need to consider the transition out of the pandemic response, but National Cabinet struggled to agree a plan in the face of repeated waves of infection overseas and delays in reaching vaccine targets. In July 2021, National Cabinet developed a clear roadmap for reopening based on joint health and economic modelling. The focus on transition to post-pandemic settings was important; however, we heard that the plan lacked detail and sector-specific planning that would have provided greater certainty.

Pre-existing pandemic plans ruled out the use of a number of measures that were considered unlikely to be tolerated or ever implemented, such as school closures, border closures and supervised quarantine. However, these measures were deployed early in the COVID-19 pandemic. Because arrangements for implementation had not been developed, their delivery was not as well considered or, in some cases, as effective as it could have been. An additional challenge was that these measures were often governed by complex policy or legislative arrangements and required new decision-making systems which made national cohesion difficult, even where broad agreement on their use had been reached at National Cabinet.

The lesson for the future is that, in a pandemic, the unimaginable can quickly become necessary and planning should cover the full suite of possible responses – however hard their implementation may be to conceive outside a pandemic setting. No issue demonstrates this more than the decision to close Australia's international borders, which we heard repeatedly was the most important decision in our pandemic response, but one not factored into any pre-existing pandemic plans.

The Australian Government's closure of Australia's international borders had consequences for Australians overseas wishing to return home and for those with relatives overseas. Affected individuals experienced significant personal costs, including being stranded overseas in countries with higher COVID-19 risk, extended separation from children, parents and partners, and the financial costs of travelling home.

There were no plans in place to manage an efficient exemption process, and despite a system being set up from the outset, the lack of timeliness in response and low proportion of exemptions granted meant that the system did little to alleviate the anger or distress for those impacted. We heard from people that they considered the government had failed in its duty of care towards them. There was also an inadequate focus on communications and supports and, at times, a lack of compassion, fairness and timeliness in the process.

Lessons for a future pandemic

Planning and preparedness are critical components of an effective government response to a pandemic, and governments should develop and maintain comprehensive, scalable and adaptable national plans for a future pandemic. This needs to include consideration of post-action reviews and lessons learned, regular whole of health system risk assessments, technology and disease threat assessments. Planning should also include ongoing horizon scanning for emerging technologies that offer alternatives to traditional measures for monitoring or responding to pandemics.

Planning should be careful to test a range of scenarios, such as a crisis being an influenza pandemic, lasting for varying lengths of time or depending on whether testing, treatments and vaccines will be available. Plans should provide a framework that can be added to with modules relating to particular types of infectious threats, depending on the risk profile, transmission routes and who is most impacted in the population.

Pandemics are complex crises, and planning requires clear and agreed escalation triggers to activate and leverage whole-of-government responses and coordination structures while continuing to incorporate key health advice. De-escalation steps and trigger points and post-emergency recovery are equally important, and clarity on these, as much as is possible in a changing environment, can help Australians cope and remain engaged, both in the lead-up to and during the incident.

The capacity of systems to respond to a pandemic is an important part of preparedness and cannot be built at sufficient speed during a crisis. Australian governments need to ensure their collective resources, capabilities, services and workforce are ready ahead of time.

Regular audits of key capabilities and capacity should be performed and training provided to address skill and capacity gaps, under advice from independent experts. This includes reviews of public health and healthcare system capacity, interoperable data and surveillance systems, real-time research and modelling capability, workforce capability in logistics, emergency management, procurement, and public health and risk communication.

Exercises that test the readiness of people and systems in line with these plans is vital. These exercises are of most use when over time they include a range of possible pandemic scenarios to test how readily plans can be adapted and whether the base plan needs to be adjusted. Testing should be undertaken regularly and involve the Australian Government, state and territory governments and other key players.

Engaging in exercises can identify and resolve gaps in planning and resource readiness, increase participants' familiarity with their roles and responsibilities, and maintain workforce knowledge and ability. To do this effectively these lessons need to be key inputs into the proposed biennial reviews on pandemic preparedness.

Lessons for a future pandemic continued

An important element of preparedness and resilience is the ability to easily modify indoor environments to manage disease transmission risk, especially in high-risk settings such as hospitals, aged care facilities, congregate living facilities, or where people have extended indoor exposure to people from outside their home, such as educational settings and workplaces.

Gaps in plans during the COVID-19 pandemic led to significant, potentially avoidable consequences. Once a pandemic emerges, individual plans should be quickly adapted to take into account emerging information on the specific nature of the infectious agent and ensure the plan remains fit for purpose.

Immediate actions

The following immediate actions have been identified by the Inquiry for implementation in the next 12 to 18 months by the Australian Government and, where relevant, state and territory governments. National Cabinet should have broad oversight of these actions, with support from relevant ministerial councils.

5. **Develop updated health emergency planning and response arrangements in conjunction with states and territories, and key partners, including consideration of escalation and de-escalation points, real-time review and a focus on post-emergency recovery.** This should include:
   - An enhanced National Health Emergency Plan (updated National Health Emergency Response Arrangements) and updated National Communicable Disease Plan. These updated plans should align with the Australian Government Crisis Management Framework
   - Management plans under the National Communicable Disease Plan for priority populations
   - Modular operational plans for specific sectors, including high-risk settings, which can be deployed in response to a variety of hazards.
6. **Develop legislative and policy frameworks to support responses in a public health emergency,** including for:
   - international border management
   - identifying essential services and essential workers
   - quarantine
   - the National Medical Stockpile
   - an Economic Toolkit.

Immediate actions continued

7. **Finalise establishment of the Australian Centre for Disease Control (CDC) and give priority to the following functions for systemic preparedness** to become trusted and authoritative on risk assessment and communication, and a national repository of communicable disease data, evidence and advice:
   - Build foundations for a national communicable disease data integration system, enabled for equity and high-priority population identification and data interrogation, with pre-agreements on data sharing.
   - Commence upgrade to a next-generation world-leading public health surveillance system, incorporating wastewater surveillance and early warning capability.
   - Work with the Department of Health and Aged Care and jurisdictions on updated communicable disease plans.
   - Conduct biennial reviews of Australia's overall pandemic preparedness in partnership with the National Emergency Management Agency.
   - Establish an evidence synthesis and national public communications function.
   - Build foundations of in-house behavioural insights capability.
   - Establish structures including technical advisory committees to engage with academic experts and community partners.

Medium-term actions

Further to these immediate actions, the Inquiry has identified the following medium-term actions to be completed ahead of the next major health emergency:

21. **Build emergency management and response capability** including through:
   - regular health emergency exercises with all levels of government, interfacing with community representatives, key sectors and a broad range of departments
   - regular economic scenario testing, to determine what measures would be best suited in different forms of economic shocks and keep an Economic Toolkit up to date
   - training for a pandemic response.
22. **Develop a whole-of-government plan to improve domestic and international supply chain resilience.**
23. **Progress development of the Australian Centre for Disease Control in line with its initial progress review and to include additional functions to map and enhance national pandemic detection and response capability.**

Leadership and coordination

Guiding recommendation: Ensure the rapid mobilisation of a national governance structure for leaders to collaborate and support a national response that reflects health, social, economic and equity priorities.

The COVID-19 pandemic required rapid, decisive and resilient leadership to deliver an effective national response. The Australian public looked to the nation's leaders to work with a unity of purpose in the face of uncertainty and fear, having witnessed how other countries were grappling with COVID-19. While never substituting for the importance of the individuals in leadership positions, well-developed governance structures can support good leadership – particularly through a protracted crisis such as a pandemic.

The Inquiry considers that the decisive and difficult decisions taken by the Prime Minister and other Australian Government ministers at the outset of the pandemic demonstrated courageous leadership and actions consistent with the precautionary principle. The rapid response leaders implemented protected Australian lives in the first wave and set us on a path that reduced the overall negative impacts of the pandemic. Decisions included closing the international border, agreeing a national lockdown and moving to support jobs through a nationwide wage subsidy scheme. The Prime Minister quickly identified key weaknesses – including the operation of Commonwealth–state relationships through the Council of Australian Governments and the lack of established relationships between government, business and unions – and sought to rectify them through establishing new structures.

Courageous leadership also involves humility from our leaders to identify when something has not worked or we need to change course. Key failures through the pandemic, including the devastating aged care outbreaks in Victoria in 2020 and the stalled vaccine rollout, were themselves partly caused by failures in leadership at all levels. However, the Prime Minister acted decisively to address these failings, moving to establish the Victorian Aged Care Response Centre and making key changes to the leadership of Australia's vaccine rollout.

National Cabinet

National Cabinet was established to enable Australia's nine First Ministers to work collectively in delivering a national response. Replacing pre-existing structures that had become 'fossilised', led by the Prime Minister, it was an action-oriented body that set key national directions that played a significant role in Australia's broadly successful COVID-19 response. The forum capitalised on the merits of a federated model of government, acknowledging that much of the capability, expertise and workforce crucial to the pandemic response lay with state and territory governments. Over the course of the pandemic, it made many decisions critical to the nation's COVID-19 response, including on social gathering restrictions and hotel quarantine requirements.

However, there were challenges in the operation of National Cabinet. Key amongst them was that the unity of purpose demonstrated during the initial phases of the pandemic waned as the emergency continued, and trust between leaders eroded. Attempts by the Prime Minister to bring state leaders together to agree a reopening plan failed mid-pandemic, and this led to varied approaches being implemented across state and territory governments.

This contributed to Australians' sense of a lack of consensus between leaders and led to questioning of the validity of supporting evidence at a time when trust in Australia's leaders, as well as in the science behind COVID-19, was critical. Pre-planning could have mitigated such failures.

National Cabinet's structure also meant that broader health and non-health impacts were not consistently given the appropriate level of consideration. Instead, selected public health advice was the primary input to decision-making. While appropriate during the alert phase, as the crisis went on and leaders were variously looking to incorporate broader health, social and economic considerations, this approach undermined collective decision-making. As a result, we heard that the outcomes of some decisions created unnecessary hardship for Australians and missed opportunities to protect those most affected by the pandemic.

Federal Cabinet

Under the Biosecurity Act, the Minister for Health is given extraordinary powers to operate independently and without Cabinet oversight; however, federal Cabinet continued to operate during the pandemic with its established decision-making structures. Early in the pandemic, there were concerns about the extent of the powers vested in the Minister for Health and what would occur if he became unwell, and the Prime Minister was sworn in as Minister for Health. While the Prime Minister never exercised powers vested in the position of Health Minister during the pandemic, this action, alongside the Prime Minister also being sworn into four other portfolios during the pandemic, was judged in an independent inquiry as undermining public confidence in government.[21]

Federal Cabinet processes were adapted and expanded to suit the circumstances. The National Security Committee (NSC) of Cabinet effectively played the role of 'emergency Cabinet' and met frequently (as often as twice a day) to problem solve and make decisions. Overall, there were more meetings of Cabinet and its subcommittees than in any year since the end of the Second World War.

Membership of the NSC included the Prime Minister, Deputy Prime Minister, Treasurer, Minister for Defence, Attorney-General, Minister for Foreign Affairs and Minister for Home Affairs. The Minister for Health was co-opted to attend all NSC meetings related to health. The NSC was supported by the Secretaries Committee on National Security, which met regularly and mirrored the NSC agenda.

Unlike those of other Cabinet committees, NSC decisions did not require the endorsement of the full Cabinet, meaning they could be taken straight to National Cabinet or announced publicly. Using the NSC also brought senior public servants to the same table as ministers, which supported rapid decision-making. While serving a necessary function, there was concern that the use of the NSC created a bias towards a national security lens in a protracted health-driven, whole-of-society emergency. In particular, the NSC structure meant ministers and departmental Secretaries who were key to the response, such as from the Department of Social Services and Department of Industry, Science, Energy and Resources, were not always at the table. Including a wider range of ministers and departmental Secretaries would have benefited decision-making and the coordination of the response across government.

The Australian Parliament

Sending an important and reassuring signal to the public was the continued operation of the Australian Parliament throughout the pandemic. The Department of Parliamentary Services had a pandemic plan and was able to pivot its operations to facilitate the participation of parliamentarians. This was not the case for all state and territory parliaments.

Members of Parliament were provided with the opportunity to ask questions of the government through Parliament's Question Time. The Senate Select Committee on COVID-19, which was established in April 2020 to inquire into the Australian Government's response to COVID-19, operated through the pandemic, delivering its final report in April 2022.

During the pandemic, Parliament passed approximately 15 Bills per month, including significant emergency legislation to support implementation of the national response, such as Bills for appropriation of funds. Some parliamentary committees, such as the Parliamentary Joint Committee on Human Rights and the Scrutiny of Bills Committee, continued to meet remotely to ensure parliamentary scrutiny.

The Australian Public Service

The Australian Public Service provided Australia's leaders with the support needed to deliver a whole-of-government response to COVID-19. High-level forums, such as the Secretaries Board, COVID-19 Deputies Group and Commonwealth-State First Deputies Group, coordinated approaches, made decisions and shared information in pursuit of this outcome. Whole departments, including Finance, Health and Aged Care, Home Affairs, Prime Minister and Cabinet and the Treasury, took on leadership roles to develop and implement response measures.

However, the pandemic response and broader whole-of-government emergency management and resilience arrangements, such as the Australian Government Crisis Management Framework, were not fully integrated. The lack of integrated emergency management governance structures contributed to key departments, including the Department of Health, becoming overwhelmed at points during the pandemic response.

In addition to this, the public service relied heavily on key people to deliver its response, leading to burnout and fatigue as the pandemic progressed. There were other disadvantages, including an inability to efficiently and effectively adopt a holistic approach to decision-making that balanced public health considerations with other factors and the overall underutilisation of resources and expertise across government.

Lessons for a future pandemic

In the face of extreme uncertainty, decisive and courageous leadership is needed during the alert phase of the pandemic to protect the population.

National coordination across all levels of government is key to pandemic planning and responses. In a future pandemic, a national cabinet or similar entity should be used to bring together Australian Government and state and territory government leaders to act in the national interest of all Australians.

Governments need to take a holistic approach to decision-making in order to minimise the protracted health, safety, economic, social and human rights impacts associated with a pandemic and to ensure a balanced and proportionate response throughout.

Achieving this relies on incorporating public health considerations alongside broader health, economic, education, social and human rights issues and considering advice from a range of sources.

A successful pandemic response involves clear, well-understood and pre-agreed roles and responsibilities for leaders and senior officials at all levels of government and for key industry and community partners. These should be clearly outlined in planning documents.

Pandemic responses should align with the broader whole-of-government emergency management and resilience arrangements. This will enable the health response to more readily access and leverage additional capability and expertise.

Immediate actions

In order to strengthen governance and leadership during a future pandemic, the Inquiry has identified the following immediate actions to be completed in the next 12 to 18 months:

8. **Establish mechanisms for National Cabinet to receive additional integrated expert advice for a whole-of-society emergency,** including advice on social, human rights, economic and broader health impacts (including mental health considerations), as well as specific impacts on priority populations.
9. **Agree and document the responsibilities of the Commonwealth Government, state and territory governments and key partners in a national health emergency.** This should include escalation (and de-escalation) triggers for National Cabinet's activation and operating principles to enhance national coordination and maintain public confidence and trust.
10. **Agree and test a national Australian Government governance structure to support future health crisis responses, including an appropriate emergency Cabinet Committee and a 'Secretaries Response Group' chaired by the Department of the Prime Minister and Cabinet** that brings together the lead Secretaries and heads of relevant operational agencies, to coordinate the Australian Government response.

Medium-term actions

Further to these immediate actions, the Inquiry has identified the following medium-term action to be completed ahead of the next major health emergency:

24. **Maintain regularly tested and reviewed agreements between relevant national and state agencies on shared responsibilities for human health under the Biosecurity Act 2015 (Cth),** with a focus on facilitating a 'One Health' approach that considers the intersection between plant, animal and human biosecurity.

Evidence and evaluation

Guiding recommendation: Ensure systems are in place for rapid and transparent evidence collection, synthesis and evaluation.

The operating environment during the alert phase of a pandemic involves high levels of uncertainty, and there is an imperative for governments to act without the level of evidence that would normally apply. The more evidence that is available to decision-makers, the more confident they can be in their actions. Achieving the best possible outcomes requires interoperable data systems, investment in the capacity to collect and synthesise evidence, and a commitment to ongoing evaluation and evidence-based decision-making to ensure proportionality is achieved and maintained.

At the start of the pandemic there was limited knowledge about the origin of the virus, the method of transmission, the mechanism by which the virus caused illness and death, who was most at risk of severe disease, and the most effective treatment options. It was also unclear whether it would be possible to develop a vaccine. This required operating under the 'better safe than sorry' precautionary principle, which does not necessarily require evidence to act but prioritises protecting lives.

Moving to an evidence-based risk approach requires real-time evidence relevant to the Australian context. In the early stages of the pandemic, a lack of sufficiently detailed Australian data meant that epidemiologists, modellers and other experts relied on international data that did not necessarily reflect the risk profile or disease dynamics in Australia. The more Australia's experience of COVID-19 deviated from that of the rest of the world, particularly from Europe and the UK, where the data we heavily relied upon originated, the bigger the issue became. The accessibility and security of data was also an issue, with case and close contact data being recorded in Australia in hard copy and relayed to recipients by fax machines in some jurisdictions.

Data availability improved through the pandemic as Australian Government departments collaborated with each other, and with state and territory governments, to create, share and link datasets, building a more complete picture of the pandemic. This required overcoming entrenched barriers to data-sharing and innovation to create new data systems. The evidence base this created was invaluable to decision-makers.

Particular successes included:

- the Department of Health's rapid integration of multiple datasets held across different Australian Government departments, different jurisdictions and providers in order to increase understanding of vaccine uptake, drive research on the effectiveness of the COVID-19 vaccine and inform other tailored response measures, including for priority populations
- the Treasury obtaining credit card spending data from banks and mobility data from private companies like Google to monitor the effectiveness of lockdowns in reducing activity, and the economic impact of restrictions and response measures
- the Australian Bureau of Statistics (ABS) linking Australian Taxation Office, Treasury and ABS Multi-Agency Data Integration Project and Census data so that the Treasury could understand how coming off JobKeeper affected individuals
- the use of wastewater testing to detect COVID-19 at the local population level or on aircraft. The results signalled where public officials should target public health messaging and helped identify asymptomatic cases and new variants on incoming flights.[22]

However, gaps remained, particularly regarding the impact on different cohorts of Australians and the greater investment needed in interoperable data systems to provide the evidence to underpin a more effective, tailored, evaluated and equitable pandemic response. To this day, COVID hospitalisation counts – an important measure of impact – do not mean the same thing in different jurisdictions and so cannot be directly compared.

Inadequacies in disability data impacted governments' ability to develop tailored response measures, understand the extent of cases and deaths, or monitor the rollout of vaccinations. This is concerning given that some people with disability have a greater risk of acquiring COVID-19 and are more likely to have serious health consequences as a result. During the Delta wave, people receiving the Disability Support Pension and National Disability Insurance Scheme participants were 3.1 and 2.8 times more likely than the general population to be admitted to intensive care units with COVID-19. These rates increased to 4.7 and 4.8 times respectively in the first Omicron wave. While data linkages were created to track the vaccine rollout amongst some people with a disability, there is no longer a clear picture on vaccine coverage among this group. Regular boosters remain an important protective measure for people vulnerable to more severe COVID-19, and understanding where uptake is dwindling would help prioritise public health community engagement efforts.

Evaluation is a critical component of ensuring that government pandemic response measures are effective and remain appropriate in changing conditions. The Australian National Audit Office continued to undertake audits throughout the pandemic but adjusted their approach to account for changing circumstances. This helped ensure accountability while not losing the value of the audit function.

Public health interventions similarly required – but often lacked – real-time evaluation on implementation. A number of the more contentious measures, such as enforced quarantine, curfews and closing outdoor playgrounds, were not supported by pre-existing evidence, and would have benefited from being tested with epidemiologists and behavioural experts, and evaluated in real time to ensure proportionality.

There were also a number of economic response measures that had not previously been used in Australia. In particular, the pandemic saw the first use of a wage subsidy in the form of the JobKeeper payment. This represented the single biggest program by annual government spending in Australia's history, and the three-month review of the program allowed changes that improved its operation during its second phase.

A post-pandemic evaluation of JobKeeper was also undertaken, strengthening future preparedness and ensuring detailed lessons have been learned. However, outside JobKeeper and the Reserve Bank of Australia's reviews of their extraordinary monetary policy measures, a range of other significant economic programs – including the $35.9 billion Boosting Cash Flow for Employers program – have not been formally evaluated. Reviewing the full range of response measures deployed would maximise and consolidate the learnings for a future pandemic.

Lessons for a future pandemic

Pandemics invariably involve making decisions in the face of significant uncertainty. However, the existence of strong, secure, readily adapted, interoperable data systems, processes and capacity for generating, synthesising and communicating evidence can reduce this uncertainty by providing governments with the evidence-based intelligence they need to assess risks and minimise harm.

In order for this to occur, pre-agreements to collect, link and share data across the Australian and state and territory governments need to be established and maintained, allowing the real-time collection and use of relevant data at the start of a pandemic. If existing systems are found to be insufficient for supporting decision-makers early in the next crisis, there need to be mechanisms in place to identify this and rapidly establish new data collection and sharing arrangements.

Collecting specific health and socio-demographic data on priority populations needs to be part of the comprehensive integrated data system to inform responses tailored to their unique circumstances and needs. National research capability also needs to be harnessed as part of the national real-time evidence asset and coordinated nationally.

Ongoing real-time evaluation is required. Such evaluation should allow for the monitoring of impacts as conditions and risk change, community adherence shifts, new variants of the infectious agent emerge, more effective treatments are discovered and immunity is acquired.

Evaluation should also encompass broader health impacts that may be unintended consequences of public health measures, including differences in public health measure effectiveness or the severity of negative collateral impacts across different population groups.

Governments should also implement approaches for evaluating non-health response measures during a pandemic. In a crisis, governments should create ‘feedback loops’ to assess the efficacy of measures and to adjust or remove them in line with findings. In doing so, governments would ensure that measures remain appropriate, and are only employed for the time when benefits outweigh costs.

Comprehensive post-action reviews for all major response measures should be undertaken to determine the successes and lessons to be learned. The findings from reviews should inform responses to future pandemics. To ensure the success of this process, all government departments should take responsibility for leading the evaluation of their own response measures.

Immediate actions

The Inquiry recommends the following immediate action to strengthen evidence and evaluation approaches over the next 12 to 18 months:

11. **Improve data collection, sharing, linkage, and analytic capability to enable an effective, targeted and proportionate response in a national health emergency,** including:
    - improvements to timeliness and consistency of data collection and pre-established data linkage platforms across jurisdictions, including for priority populations
    - expanded capability in Australian Government departments to gather, analyse and synthesise integrated economic, health and social data to inform decisions
    - finalising work underway to establish clear guardrails for managing data security and privacy and enabling routine access to linked and granular health data, and establishing pre-agreements and processes for the sharing of health, economic, social and other critical data for a public health emergency to ensure rapid mobilisation of real-time evidence gathering and evaluation.

Medium-term actions

Ahead of the next pandemic, the Inquiry has identified the following medium-term action for government:

25. **Continue to invest in monitoring and evaluating the long-term impacts of COVID-19,** including long COVID and vaccination adverse events, mental health, particularly in children and young people, and educational outcomes.

Agility and innovation

Guiding recommendation: Build, value and maintain capability, capacity and readiness across people, structures and systems.

A pandemic fundamentally changes the everyday operation of households, businesses, community organisations and governments. The changes across society in response to the pandemic showed a spirit of innovation, resilience and community.

Our Inquiry heard of countless examples of Australians responding to the crisis with agility: community groups developed phone banks to check in on older Australians living at home; restaurants moved to online delivery to keep trading and the community fed; the Australian Living Evidence Collaboration was established to update evidence-based clinical guidelines weekly; craft alcohol distilleries pivoted to producing hand sanitiser; school teachers transitioned to remote learning; and Army engineers supported industry to produce ventilators.

Agility in response to a crisis of the scale and scope of a pandemic is critical, but limitations and gaps in the planning and preparation meant that it was even more central to the Australian Government's response to the COVID-19 pandemic. Having to 'build the plane while we were flying' often had an impact on the effectiveness of response measures. For example, we heard that not all schools had plans in place to deliver remote learning. This put significant pressure on the workforce and resulted in inequities in the type and level of support given to children and young people. We also heard that agility was easier to achieve in areas with existing structures and strong foundations.

During the alert phase of the pandemic, the public sector, like many workplaces across Australia, faced the challenge of maintaining services and navigating the additional challenges of the pandemic.

The Australian Public Service redeployed approximately 1.5 per cent of staff and ceased non-critical business-as-usual activities to focus on the pandemic response, and large government departments moved to remote working over a short period of time. While this was broadly successful, there was room for improvement. In particular, the approach to deploying the surge workforce was described as 'clunky'[23] with the acknowledgement that more needed to be done to reprioritise current activities and effectively mobilise a surge workforce in the future.

The Australian Public Service has begun to strengthen the emergency management and related capabilities required to effectively respond to crises, including pandemics. This work, which includes the establishment of the APS Surge Reserve in 2021 and jointly driven initiatives by the Australian Public Service Commission and the National Emergency Management Agency, will strengthen the capacity for future pandemic responses. However, work still needs to be done on improving capability within the public service.

The National Coordination Mechanism (NCM) was established early in the pandemic and is an unsung hero of our pandemic response. Bringing together the Australian Government, state and territory governments, non-government organisations and industry, the NCM works to identify and solve common problems. The NCM was designed to be agile, and able to be established and then decommissioned to deal with specific systematic issues caused by an emergency. From 6 March 2020 to 15 November 2022, 23 different areas were covered by COVID-19 related NCM taskforces, including aged care, emergency management, essential goods prioritisation, the food and grocery sector, freight, managing international arrivals, pandemic planning, rapid antigen test supply, remote and regional communities, and supply chains.

The establishment and embedding of the NCM represents an important innovation of the COVID-19 response, and its overall success has led to its being incorporated into ongoing emergency management systems, with improvements continuing to be made to its processes.

Quick and flexible funding was critical during the pandemic. The National Partnership on COVID-19 Response and the simplification of funding arrangements for community organisations, including the Aboriginal community-controlled sector, enabled financial supports to be rapidly provided for both COVID-related efforts and ongoing health service delivery. This helped mitigate some potentially negative impacts on health care generally as well as providing support for the broader pandemic response. However, the Commonwealth grants systems often impeded other measures and supports, particularly for business. At the time, this resulted in a patchy and slow response, with a lack of clarity about the roles of the Australian Government and state and territory governments.

The Australian Government also moved quickly to release research funding prioritised to key areas of the COVID-19 response through the National Health and Medical Research Council and Medical Research Future Fund programs. Whilst the grant review processes were cognisant of the need to release funds and get research underway, in some cases slowness in accessing data and protracted ethics clearance processes undermined the timeliness of the research and its translation.

Regulators such as the Australian Securities and Investments Commission, the Australia Prudential Regulatory Authority and the Australian Competition and Consumer Commission all demonstrated agility in making changes to regulatory settings or moving quickly to approve novel arrangements during the crisis. These efforts were fundamental to keeping our banking and financial systems sound, protecting mortgage holders and keeping groceries on our shelves.

In a period of such high uncertainty, real-time data are invaluable, and the Australian Bureau of Statistics developed new data products that provided more timely information on the impacts of the pandemic to policymakers. This included moving from annual mortality reporting, usually only available nine months into the following year, to produce interim mortality reports published within three months. Incorporating new data sources, such as Single Touch Payroll data from the Australian Taxation Office, also demonstrated innovation, agility and the power of strong relationships within government.

Single Touch Payroll, that had only become mandatory for all businesses in July 2019, was also pivotal in the speedy implementation of the nation-wide wage subsidy, JobKeeper. However, there were critical areas where governments were slow to act. In some cases, this was because they had not assessed the importance of some actions as a part of the pandemic response. For example, while governments did eventually respond to workforce shortages during the pandemic through expanding the scope of practice of many health professionals, this took too long, impeding access to health care and slowing the vaccine rollout.

In other cases, a slowness to act was driven by relying on systems that could not be quickly scaled up in a crisis. For example, the consular support system, while well practised in localised crisis responses, was not able to scale up quickly in a global crisis and, as a result, it took too long for those overseas to receive assistance at the start of the crisis.

Building on the experience of the COVID-19 pandemic will require embedding emergency response in the core capabilities of the public sector and maintaining strong systems and institutions.

The continuing failure of the healthcare system to utilise nurses and midwives to their full scope of practice is limiting consumer access to evidence-based, cost-efficient nurse and midwife-led models of care.

Queensland Nurses and Midwives' Union submission[24]

Lessons for a future pandemic

Pandemics will be periods of rapid innovation and change. The ability to respond quickly on the basis of the best available evidence is critical.

The stronger pre-existing relationships, systems and foundations are, the more able organisations and individuals are to be agile during a crisis.

Agility is not a substitute for planning or preparedness, and should not be relied upon to deliver a successful pandemic response.

Long, severe or complex crises need the response to be agile. To enable agility, the government must maximise the use of expertise, identify key information flows, and establish cross-cutting coordination and feedback mechanisms that can effectively identify and deal with consequences of emergency response measures.

During a pandemic, consideration should be given to the existing regulatory and research processes and settings to ensure they account for the changing risk trade-offs in a crisis setting and the urgency in decision-making.

Immediate actions

In order to support agility in a pandemic response, the Inquiry has identified the following immediate actions to be completed over the next 12 to 18 months:

12. **Develop a plan to build, value and maintain emergency management capability within the Australian Public Service, including planning and management of a surge workforce.**
13. **Agree nationally consistent reforms to allow health professionals to work to their full training and experience.**
14. **Embed flexibility in Australian Government grant and procurement arrangements to support the rapid delivery of funding and services in a national health emergency,** including to meet urgent community needs and support populations most at risk.

Medium-term actions

Ahead of the next pandemic, the Inquiry has identified the following action for government:

26. **Include a focus as part of ongoing systems upgrades on modernising and improving data, systems and process capabilities** to enable more tailored and effective program delivery in a crisis.

Relationships

Guiding recommendation: Maintain formal structures that include a wide range of community and business representatives, and leverage these in a pandemic response alongside the use of temporary structures.

Every crisis response involves people and organisations working together under stress to solve common problems, and this requires cooperation and trust. Australia's pandemic response relied heavily on a number of key pre-existing relationships to achieve outcomes. However, the response suffered when relationships were prioritised over formal structures – or where relationships did not exist prior to the pandemic.

Relationships within government

In the absence of formal emergency management structures, trusted relationships were relied on throughout the pandemic to break down barriers and deliver required outcomes. This accounted for some of the most significant achievements during the pandemic response, with Australia being well served by a number of key individuals with high levels of capability, existing networks and experience. This approach was successful in areas where strong working relationships were already in place, such as between key economic agencies, with Aboriginal and Torres Strait Islander leaders, or in areas which had recently been involved in delivering responses in other emergencies, such as the 2020 bushfires.

However, a reliance on relationships in lieu of planning and governance structures had an impact on the efficiency and effectiveness of the Australian Government's response. The tendency to rely on trusted relationships created a bias towards tasking some departments with additional roles that would have sat better with other departments. A reliance on senior officials to drive the response by using their relationships was also unsustainable in a long crisis and led to fatigue and may have contributed to increased turnover of staff post-pandemic.

The existence of relationships was sometimes not enough to negotiate the challenge of developing the pandemic response. Within the Australian Public Service, the absence of a visible emergency governance structure led to a lack of clarity regarding roles and responsibilities – especially which agencies should lead on specific issues.

Relationships outside government

The pandemic response required not just a whole-of-government but a whole-of-society response. Governments needed to work closely with unions, businesses, and community groups to address challenges throughout the pandemic.

Where relationships already existed, these could be quickly and effectively leveraged to manage the response. In some cases, this was supported by formal structures. For example, the electricity, fuel and gas sectors each had longstanding emergency management arrangements that could quickly focus on issues raised during the pandemic. The energy sector and its emergency management arrangements had recently been tested by the 2019-2020 bushfires and through cyber exercises. Similarly, strong relationships with the Aboriginal community-controlled health sector built over many years were integral to a rapid response to prevent outbreaks among Aboriginal and Torres Strait Islander communities.

However, there were many areas where relationships were not as strong or well established. Formal tripartite arrangements between employers, employees and government had been limited for a number of years – which, given the heavy unionisation of essential workers during the pandemic, created a key weakness in the response. The Minister for Industrial Relations took an active role in addressing these gaps at senior levels.

Relationships with business were also somewhat ad hoc and not coordinated through any formal mechanisms. This changed with the establishment of the Coronavirus Business Liaison Unit in Treasury, providing an important connection that remains in use today. We also heard that the Treasurer took initiative in solving some key issues with senior business leaders throughout the pandemic, leveraging existing relationships.

The Prime Minister was quick to recognise that gaps existed with regard to relationships critical to the pandemic response and established the National COVID-19 Coordination Commission (NCCC). The NCCC played an important role during the alert phase of the pandemic, with members leveraging pre-existing networks to solve a number of high-profile issues. However, as other mechanisms – including the National Coordination Mechanism – were established during the pandemic, its usefulness diminished.

Relationships also were non-existent between some key industries, unions and public health officials. This meant that industry often struggled to communicate with the relevant officials about risks posed by public health orders, including to critical supply chains. While relationships were developed during the pandemic, these have not been maintained, and there is a risk that similar issues will resurface in the future. We heard from stakeholders that if there was a pandemic tomorrow, Australia would be back at square one.

Community organisations played a critical role in the pandemic, providing support to individuals across Australia. This was often done without the coordination or involvement of government. However, these efforts were often not effectively leveraged to improve the overall pandemic response. There would be value in better leveraging the immense capacity of the community sector in a future pandemic, which should involve including the sector in planning and preparedness activities.

The establishment of advisory bodies during the pandemic was welcomed, and improved the response for some priority cohorts. However, advisory bodies for some cohorts were established too late, and would have been more effective had they been in place prior to the pandemic.

Links between academia and government were also difficult to establish once the crisis was underway and there were limited opportunities to formalise commissioning research and researcher engagement. NSW Health was the only public health department with a more formal portal for researcher engagement that allowed them to extend their research capacity and access technical capability to generate actionable insights.

In the case of infectious disease statistical modelling, existing working relationships between modellers and the Australian Government were extended to include COVID-19 related modelling. This allowed the rapid commissioning of modelling work with some of Australia's most experienced infectious disease modellers. That said, the heavy reliance on prior relationships rather than formal processes limited access to the breadth of external expertise, and led some to question to the process.

Lessons for a future pandemic

Relationships can support an effective pandemic response; however, they are not a substitute for well-established governance structures.

A pandemic response should utilise emergency management governance structures to ensure a sustainable, efficient government response to protracted or concurrent emergencies.

The existence of strong and well-functioning tripartite relationships between unions, business and government is critical in a pandemic that requires a whole-of-society response.

Fully utilising the expertise and capacity of the community sector during a pandemic requires relationships built prior to a crisis through consultation and joint planning. Engagement of priority groups through advisory bodies with clear mechanisms for providing advice to government is also critical.

Establishing stronger relationships between academia, research institutions and the Australian Government, including by establishing technical advisory groups within the Australian Centre for Disease Control, will create the mechanisms to enable the relevant expert input to be rapidly sourced in a crisis.

Immediate actions

In order to effectively use relationships during a pandemic response, the Inquiry has identified the following immediate action to be completed over the next 12 to 18 months:

15. **Ensure there are appropriate coordination and communication pathways in place with industry, unions, primary care stakeholders, local government, the community sector, priority populations and community representatives on issues related to public health emergencies.** Structures should be maintained outside of an emergency, and be used to provide effective feedback loops on the shaping and delivery of response measures in a national health emergency.

Trust

Guiding recommendation: Rebuild and maintain trust between government and the community, including by considering impacts on human rights.

Trust in government is an essential foundation to a successful pandemic response, given the need for people to drastically change their behaviour to avoid adverse outcomes such as severe illness and death.[25] Additionally, the public need to trust that their government is competently making decisions in their best interests, using reliable evidence, and engaging with trusted experts and institutions, as well as trusting that other people will follow the government's directions.

At the outset of the COVID-19 pandemic, Australians largely did what was asked of them and complied with public health orders that significantly restricted their movements and freedoms. This reflected a high level of trust in government that increased at the beginning of the pandemic, together with a general fear of personal harm, and a willingness to make individual sacrifices for the collective good.

Australians' ability to band together and make these sacrifices was demonstrated when lockdowns and quarantine requirements were first implemented. Restrictions had not been included in pandemic planning as there was a belief that people would not be willing to adhere to these strict controls. However, when leaders enacted these controls, the high level of public engagement put these beliefs to rest.

Trust is both needed to respond to the pandemic and is under threat due to it.[26]

Jennings et. al

The initial strengthening of trust in government did not continue for the duration of the pandemic response. By the second year, restrictions on personal freedoms were less accepted across Australia as outbreaks tended to be short lived and infection rates remained low. The decrease in levels of trust reflects the complexity of the relationship between trust and engagement – trust is vital to ensuring adherence to life-saving restrictions, but those same restrictions could risk increasing distrust the more effective they are and the longer they are in place.[27]

The Inquiry heard that there were many reasons for the decrease in trust. These varied within and across jurisdictions, but common drivers included concerns about the lack of transparency in and supporting evidence for decision-making, poor communication, the stringency and duration of restrictions, the implementation of mandated measures, access to vaccines and inconsistencies in state and territory responses.

During the pandemic, the advice underpinning the imposition or extension of control measures and the evidence that the measures were working or set at the right level were rarely made public. This fed the perception that the government did not trust the public to understand or interpret the information correctly[28] and contributed to the decrease in trust.

People also felt that restrictive measures became increasingly inappropriate over the long term and were too heavy-handed and controlling, and that there was a lack of compassion and too few exceptions based on needs and circumstances.[29] Any future public health emergency response should consider fairness and proportionality when implementing and enforcing restrictive measures, especially beyond the alert phase when more evidence-based approaches are advisable.

The Inquiry's public consultation indicated that it was the mandating of public health restrictions, especially vaccination, that had the biggest negative impact on trust. The combination of mandatory measures and the perception people had that they were unable to criticise or question government decisions and policies has contributed to non-mandated vaccination rates falling to dangerously low levels.[30]

In the future we need more transparency which means more trust ... they need to communicate more, for example why we are doing this or stopping this.

Focus group participant[31]

Different approaches being taken across the states and territories also led to distrust. Initially, National Cabinet was united in its approach, but this unity waned over the course of the pandemic and at times there were contradictory explanations of decisions by leaders, further fuelling confusion and mistrust.

While different approaches across states and territories could be appropriate where local conditions or different population risk profiles demanded them, some differences were not easily explained, and no rationale was provided. This included the operation of state border closures that states enacted unilaterally and that lacked consistency and compassion in implementation.

It is also important to acknowledge the individual nature of trust, as prior life experience or negative pandemic experiences impacting close family, friends and colleagues were reported to have undermined people's trust in government. This again highlights the need for increased compassion when enforcing restrictions in a future crisis, and the protective effect this can have on maintaining trust.

I don't think anything should be made mandatory, and having people backed into a corner takes trust away from the government. Where's the freedom of choice when our only options were get vaxxed or lose your job? How is that fair?

Community input survey participant[32]

Lessons for a future pandemic

The challenge before us is re-establishing and building trust in government responses prior to any future public health emergency. We cannot assume that the public will comply with similar restrictions in a future public health emergency. In particular, people's willingness to comply with a near-term crisis will depend on experiences during the COVID-19 pandemic. A proactive approach to rebuilding trust and resilience within populations, communities, and settings that were most negatively impacted by the pandemic and related measures is required.

Pandemic responses that are viewed as fair, compassionate, proportionate and transparent are more likely to maintain trust. Achieving this requires governments to treat the public as valued, active partners in a public health response. Specifically, governments should share the advice that underpins policy decisions and evidence that interventions are working, together with facilitating open dialogue and robust public debate.[33] Measures should also be implemented with greater input from risk assessment and communication experts and engage trusted spokespeople and community voices for delivery.

Establishing a trusted authoritative source of information through a pandemic, such as an Australian Centre for Disease Control, would help improve trust. During a pandemic it is important to understand the trade-offs between small decreases in transmission and eroding trust by hardening of public health measures, and less compassionate allocation of exemptions.

When attempting to encourage adherence to restrictions, the focus should be on appropriate policy levers and mechanisms to drive behaviours, goodwill, openness to information and trust, rather than the 'stick-based' approaches that are often perceived as 'punitive' and 'forceful'.[34]

The use of behavioural insights, including from sentiment and other targeted surveys, in shaping pandemic-related response measures and for monitoring can assist in understanding community interpretation of public health orders, tolerance levels, and in predicting (or identifying) and minimising unintended consequences.

Immediate actions

In order to effectively build and maintain trust during a pandemic response, the Inquiry has identified the following immediate actions to be completed over the next 12 to 18 months:

16. **Develop and agree transparency principles for the release of advice that informs decision-making in a public health emergency.**
17. **Develop a national strategy to rebuild community trust in vaccines and improve vaccination rates.**

Equity

Guiding recommendation: Ensure pandemic support measures include all residents, regardless of visa status, prioritise cohorts at greater risk, and include them in the design and delivery of targeted supports.

The COVID-19 pandemic confirmed that while everyone faces higher risks and negative impacts during a major health emergency, certain groups of people will experience a disproportionate level of risk and impacts. This may be due to pre-existing health, social or economic inequities – such as in the case of priority populations – or to employment circumstances or geographic location. Additionally, there may be new challenges arising from the specific features of the pandemic in question, including the population groups more susceptible to severe disease or death.

The pandemic also demonstrated that the Australian Government's response can have a significant impact on how populations experience a pandemic. For some groups, the actions of the Australian Government during the COVID-19 pandemic compounded the negative effect on their health and wellbeing.

Women, for example, were more likely to be working in sectors impacted by the public health orders, experienced a greater increase in caring responsibilities and faced a heightened risk of experiencing family and domestic violence.

I had my entire family move back in with me ... including my ex-partner who was abusive and the whole situation was just so traumatising.[35]

Focus group participant

A successful pandemic response requires governments to account for differences across groups in the design, delivery and implementation of responses. It is important that the government response recognises these differences and ensures measures do not exacerbate or create new inequities through exclusions from supports, or ill-designed policies. In particular, groups most likely to be at risk should be prioritised from the beginning of a crisis to maximise the effectiveness of responses and monitor for any unintended consequences.

As mentioned under 'Relationships', the Australian Government progressively established consultative forums for a number of priority populations during the pandemic, including Aboriginal and Torres Strait Islander people, older Australians, culturally and linguistically diverse communities, and people with disability. These were an important mechanism for the voices of key cohorts to be heard by the Australian Government to inform tailored responses.

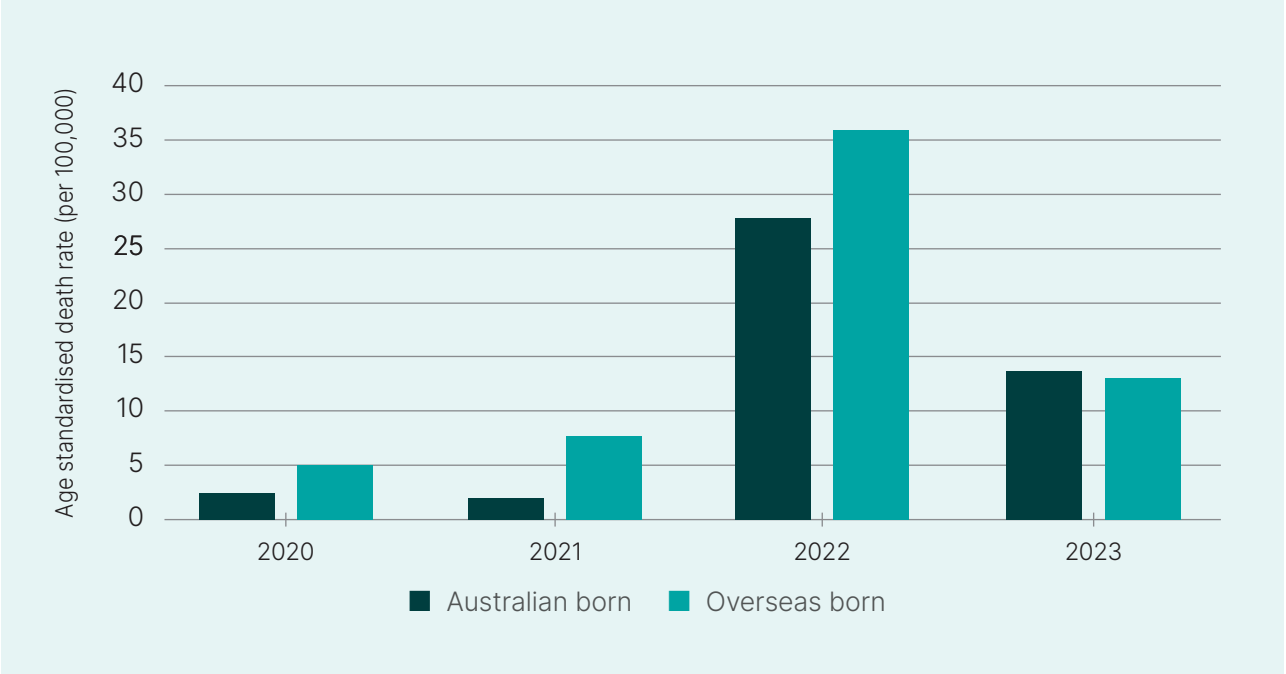
Early in the pandemic, the heightened risks that the COVID-19 virus posed to Aboriginal and Torres Strait Islander people were acknowledged. This recognition was underpinned by the knowledge of the widespread health inequities and socio-economic disadvantage experienced by many Aboriginal and Torres Strait Islander populations as an enduring impact of colonisation, and the particular pandemic risks for those living in remote communities.

In partnership with communities, Aboriginal Community Controlled Health Services and local governing bodies, governments implemented response measures that reflected local priorities and needs. These measures ranged from the design and dissemination of communications to the delivery of tailored health and vaccination services and the lockdown of some remote communities. In doing so, the community-controlled sector and governments jointly built upon years of work undertaken through the Closing the Gap reforms to ensure that Closing the Gap Priority Reform Areas were factored into all aspects of the response. These strategies helped delay transmission, bought time to build workforce capacity and contributed to better health outcomes, particularly in the first 18 months of the pandemic. These outcomes would not have been possible without the latent strength of the Aboriginal community-controlled sector that was well positioned to respond to a public health crisis, and the pre-existing relationships built through work on the Closing the Gap reforms.

In contrast, the Inquiry found that the additional risks faced by culturally and linguistically diverse (CALD) communities were not sufficiently anticipated, understood or addressed through much of the response. Throughout the pandemic in Australia, CALD people, particularly those born overseas, experienced substantially higher COVID-19 death rates than the general population (See Figure 4).[36] This is all the more alarming given that, in 2019, overseas-born Australians had lower standardised death rates than Australian-born individuals.[37]

In addition, the death rate for people born overseas was much higher at particular points of the pandemic: during the Delta wave it was 3.8 times the rate of people born in Australia. There were also significant differences in mortality rates among CALD communities. During the Delta wave, the mortality rate was 80 times higher for people born in Tonga and 47.7 times higher for people born in the Middle East compared to people born in Australia.[38]

Figure 4: COVID-19 age standardised death rates by country of birth, 2020–2023[39]



Despite these figures, there were no data or analyses to determine what was driving this higher risk and what policies might mitigate the higher levels of mortality. For example, we did not have data to understand the underlying barriers that might be contributing to the higher death rate. Were some CALD communities also over-represented among COVID-19 hospital admissions, seeking health care later than other populations? Without this information it was not possible to identify how risk of infection, disease or inadequate care may have contributed to the disparity in mortality.

Ensuring everyone is looked after in a pandemic can help reduce pressure on health and other services, maximise the achievement of health objectives and limit unintended consequences. The decision to exclude international students and other temporary visa holders from certain supports, including income support measures, reflected the continuation of prior policy settings but was not appropriate for a pandemic.

Many young temporary residents experienced considerable hardship during the pandemic as a result of being unable to work during initial lockdowns and, without access to income support, became increasingly reliant on food relief and financial assistance from universities, charities and state governments.[40] This placed unnecessary stress on these service providers during a period of already high demands.

Other temporary residents were forced to leave Australia, which contributed to labour shortages as Australia transitioned out of the pandemic. Later in the pandemic, some supports were provided regardless of residency or citizenship status, but this did not reverse the damage caused by those earlier exclusions.

They didn't consider us as human. We're just some aliens who don't belong here. No rent help, no food help, not even a single penny. I have been surviving with my superannuation money till now. Thank god they at least decided to give it.[41]

Focus group participant

Inequities in impact have continued after the pandemic was declared over, as witnessed through the impacts of long COVID and the ongoing increases in poor mental health being experienced by children and young people. Responding to these issues appropriately has been hampered by the lack of data on impacts, and while the Australian Government has provided some additional resources for research into long COVID, there remains a lack of strategy and of a coordinated approach.

Lessons for a future pandemic

During a pandemic, the Australian Government must ensure that everyone is looked after, regardless of ethnic background, visa status, health status or disability, age or gender. Where there are groups of people with pre-existing vulnerabilities, government response measures should be tailored to take these into account.

At-risk groups can be particularly affected by a lack of recognition of the risks they face and any delays in developing response measures to address these risks. Effective mitigations are complicated by the fact that responsibility for the relevant policy areas is often shared across departments. Noting that plans will most likely need to be updated to reflect the specific nature of a pandemic, the extent to which up-to-date plans are already developed will determine how responsive and effective tailored measures are, and the effectiveness of coordination between government departments.

Maintaining data systems that facilitate the assessment of differential risks and impacts facing different groups is critical to ensuring that priority groups are identified early in a particular pandemic, issues are identified quickly and disparities can be mitigated or addressed. If well established at the start of a pandemic, such intelligence systems can also facilitate ongoing monitoring and mitigation of the long-term impacts of a pandemic.

Involving priority populations in the design and delivery of response measures, including communications, is critical for a successful response. For some groups, this will involve using community consultation, partnerships and co-design. For others, advisory structures that enable input and feedback regarding the unique experiences and needs of populations to be communicated directly to decision-makers will be most appropriate. Representatives of priority populations should also be involved in leading the development and delivery of tailored communication materials.

Plans to transition out of a pandemic should also include provisions for priority populations. In particular, the impact of pandemic response measures being rolled back should be considered. Changes in risk conditions should be communicated so people understand how the threat is abating. Additionally, changes should be implemented gradually so that specific groups do not face increased health risk or fears associated with this risk.

Immediate actions

In order to support equity in a pandemic response, the Inquiry has identified the following immediate action to be completed over the next 12 to 18 months:

18. **Proactively address populations most at risk and consider existing inequities in access to services (health and non-health) and other social determinants of health in pandemic management plans and responses,** identifying where additional support or alternative approaches are required to support an emergency response with consideration for health, social and economic factors.

Communication

Guiding recommendation: Build and maintain coordinated national public health emergency communication mechanisms to deliver timely, tailored and effective communications, utilising strong regional, local and community connections.

Successful communication can mitigate some of the more harmful aspects of a pandemic; unsuccessful communication can lead to an irreversible loss of trust in government and uncontrolled spread of a virus.

COVID-19 was the first significant global communicable disease challenge in the era of a changing information ecosystem. Traditional news coverage had declined in its reach, replaced by widespread distribution of news and information on social media and other digital services.

In early 2020, the rise of COVID-19 cases and deaths in Australia saw a corresponding increase in demand for information and an overwhelmingly massive amount of data, media and commentary from a variety of sources. The Australian Government can only control its own communications, but needed to be aware of, and responsive to, the changing media landscape in agile ways in the pandemic. The modern information landscape means everyone lives in increasingly different information ecosystems depending on their socio-cultural background, age, gender and health risk.

The Australian Government actively addressed Australians' communication needs by communicating major National Cabinet decisions through media releases and press conferences, publishing Australian Health Protection Principal Committee updates on the virus and disease, increasing its social media presence and undertaking national communications campaigns. Government departments also produced messages on economic and other support measures. However, the Australian Government and state and territory governments often competed rather than collaborated to provide official information to the public that was clear and digestible amongst the overwhelming amount of information that was publicly available.

While there were positive aspects to its early communications approach, there were opportunities for improvement in future national communication strategies.

Attempts to achieve a nationally cohesive approach fell short, and communications did not meet the expectations of the public, community sector or industry. A key contributing factor was the perceived inconsistencies in the approach to the development and implementation of pandemic response measures across jurisdictions. National communications did not adequately address or explain why these inconsistencies were occurring, allowing confusion and mistrust to develop.

The speed that information was communicated was also an issue. Evidence and public health orders changed quickly, sometimes daily. While advice sought to be responsive to rapidly changing circumstances, the scale and speed of complex information being released added to confusion as individuals and communities wanted a clear answer about 'what this means for me and why'. This information was often not available when the announcements were made, and it was unclear which level of government was responsible for its communication.

There were instances when a more transparent approach was required in order to maintain trust amongst the general public. When the government placed limits on experts and advisory groups in engaging with the public, this fuelled distrust amongst Australians and allowed commentary on the pandemic and response measures to be undertaken by everyone except the experts best placed to explain.

Vaccine communication was one area where significant confusion and mistrust developed in the absence of clear communication from the government. The roles and responsibilities of the Australian Technical Advisory Group on Immunisation (ATAGI) as a medical expert advisory body and of the government in communicating decisions were not clearly enough defined, and a lack of pre-existing communication experience within ATAGI undermined efforts to communicate advice that was complex and changing due to emerging evidence and virus activity. The panel considers that in addition to having more defined roles and communication expertise, the existence of an Australian Centre for Disease Control performing this expert communications role during the pandemic would have mitigated some of the confusion that developed.

Messaging needed to be tailored to meet the needs of various groups within the population, including priority populations, people with specific risks, those with differing information needs, and businesses. This also demanded a capacity not easily met by government. Voluntary efforts by community organisations were relied on, often without additional funding or at the cost of other community supports they might have been able to provide.

A number of Disability Representative Organisations developed information resources tailored to people with disability, including webinars about the vaccine rollout for people with intellectual disability and their families and carers. Culturally and linguistically diverse community organisations produced translated materials, and bilingual and bicultural intermediaries undertook vital outreach activities. There were examples of local radio in some Aboriginal and Torres Strait Islander communities incorporating community services and broadcasting church and funeral services into programming when travel restrictions were in place.

While government communications with priority populations improved over time, communications generally relied on a universal communications approach and was therefore not simple, accessible or meaningful for all audiences. For example, Operation COVID Shield's first major campaign used the slogan 'Arm yourself against COVID-19' to encourage people to get vaccinated. However, this message was considered confronting and alienating, particularly for some culturally and linguistically diverse and Aboriginal and Torres Strait Islander communities. While the slogan was adapted to 'Protect yourself' for Aboriginal and Torres Strait Islander communities, many people in these communities were still exposed to the 'arm yourself' slogal through mainstream media.

Health has long been an area where misinformation is rife, and this was factored into the national health communication approach from the beginning of the pandemic. The widespread use of social media and digital technologies facilitated the rapid spread of misinformation and disinformation. This lead to issues such as vaccine hesitancy and people taking ineffective treatments not backed by science. In response, the government focused strategic communications on sharing evidence-based information and leveraged expertise in academia and communities. While necessary to build community understanding and prevent information voids, the government's approach did not access the full suite of potential actions available.

In this evolving area, initiatives to address misinformation and disinformation through literacy building, proactive communications, and regulatory approaches, as well as important longer-term initiatives to build societal resilience, are important.

Lessons for a future pandemic

Rebuilding public confidence in the Australian Government's communications is a critical component of the next pandemic response.

A pandemic creates a complex information environment in which to communicate. To effectively address this challenge, the Australian Government should ensure approaches are well designed, follow established principles, incorporate new evidence-based techniques, and are delivered in ways that meet the needs of the audience.

A joint approach between all levels of government is needed to ensure national consistency while maintaining sufficient flexibility to communicate the rationale behind different response measures. This is especially important when there are major shifts in the strategic direction or where there are perceived inconsistencies between jurisdictions.

Australian Government coordination and information-sharing mechanisms must be able to provide individuals, businesses and communities with a clear explanation about what measures mean for them and why they are being used.

Governments should tailor communication to different populations from the very beginning of an emergency. Achieving this requires governments to prioritise two-way communications, use relationships and implement agile funding for community-led delivery.

To ensure community input, partnerships must be established to ensure communities feel heard and valued and see their views reflected in the policies enacted by government.[42]

Communication should be shared through trusted community channels, and experts should reflect the diversity in the community so people can relate to the messenger, and so the communicator can tailor the response to the community context.

Governments should enable scientific sources and experts to communicate highly nuanced advice and evidence to the public in their role as some of the most trusted communicators of information. This approach should be supported by highly trained communication teams and experts from the public service and academia.

Governments must proactively plan for misinformation and disinformation to occur and work with health, communication and misinformation experts to strategically address these issues. This should be supported by using a range of other tools and evidence-based approaches that may be deployed in a crisis and focusing on longer-term community resilience-building activities.

Immediate actions

In order to support effective communication in a pandemic response, the Inquiry has identified the following immediate action to be completed over the next 12 to 18 months:

19. **Develop a communication strategy for use in national health emergencies** that ensures Australians, including those in priority populations, families and industries, have the information they need to manage their social, work and family lives.

Implementing the Australian Centre for Disease Control

The Australian Centre for Disease Control continued

The pandemic pushed our people, emergency response structures and communities to the limit and required rapid decision-making in times of great uncertainty. Some critical gaps and lessons revealed in the health response to the pandemic can be addressed by rapidly progressing and funding the establishment of a new national authority dedicated to disease prevention and control.

With the Australian Centre for Disease Control (CDC) permanently in place, in future we would have:

- a centre of expertise and an authoritative voice on disease prevention and control for Australia, and evidence support for decision-makers in the Australian Government and jurisdictions
- the technical expertise (in-house and through partnership with research and academic organisations) to support a nationally coordinated approach to the collection, analysis and synthesis of real-time evidence
- rapid risk assessment (pandemic threat, disease hotspots and at-risk segments of the community) and the evidence to support decisions on the introduction, escalation and de-escalation of public health measures through the oversight and coordination of:
  - multi-way data sharing across jurisdictions and with Australian Government and other organisations as appropriate
  - rapid linkage of datasets
- evidence on population and health system level impacts of the disease (acute and longer-term sequelae), and of the performance of public health interventions, to inform decisions on the extent and duration of interventions, and the transition out of the pandemic response
- an expanded One Health approach that considers the intersection between plant, animal and human biosecurity, linking departments, agencies and expertise to combat complex disease threats, including avian influenza
- a key contact point for international public health authorities for efficient intelligence sharing on emerging threats in health crises
- increased trust in public health interventions through the timely sharing and translation of evidence on effectiveness as part of a broader public health communication strategy on risk, and the balancing of risks in a public health emergency
- coordinated investment in pandemic and public health leadership training
- advice to government on urgent research priority areas to provide the real-time evidence required in public health operational responses across jurisdictions, and the health risk assessments and scenario projections that support policy decisions
- living pandemic-specific guidelines adapted for the various health professions, workplaces and high-risk settings, including aged care and disability service providers, and other high-risk or otherwise impacted settings.

Establishing a fully operational CDC expeditiously provides Australia a lasting legacy of the lessons learned about the central role evidence plays in supporting a nationally cohesive and proportionate response, and population trust and engagement in pandemic responses. Most importantly, it will ensure oversight of national preparedness that will put us in a safer and more resilient place ahead of the next pandemic.

The interim CDC, which commenced on 1 January 2024, is progressing work to embed and enhance Australia's national public health capability. The CDC, the National Emergency Management Agency (NEMA) and the Department of Agriculture, Fisheries and Forestry have worked together on preparing for and responding to the avian influenza threat. This is a good start, and highlights the merits of and urgent need for a standalone CDC which is integrated into our national emergency preparedness and response capability and infrastructure. To achieve this, it must be adequately resourced and have a laser-like focus on translating the lessons from COVID-19 and improving Australia's national resilience and our ability to respond to future pandemics.

Founding principles

We recommend that Australia's CDC be underpinned by the founding principles of:

- multi-way cooperative relationships with the states and territories and non-government organisations
- complementing and enhancing existing health and emergency governance architecture
- transparency, trust and independence
- certainty of funding for investment in world-leading data-sharing and surveillance systems
- building on the foundation established by the Interim CDC.

Multi-way cooperative relationships with the states and territories and non-government organisations

Responsibility for health is shared between the Australian and state and territory governments and key non-government organisations. The CDC should develop and maintain trusted relationships and systematic multi-way sharing of information, data and expertise that serves local responses as well as national-level surveillance and evidence synthesis.

Within the CDC there must be an expert understanding of the operational intelligence needs of the jurisdictions, and of the interaction of public health measures with the operation of the broader health system and work within state and territory agencies. This requires ongoing, close engagement with counterparts across governments and the broader health ecosystem, including reciprocal training and shadowing programs to ensure the CDC's enduring relevance, expertise and strong relationships.

The *Statement of intent: working together to support the Australian Centre for Disease Control*[43] provides that the development of the Australian CDC be designed to increase independence and transparency, improve national coordination, enhance international connections and allow for efficient utilisation of resources between the jurisdictions.[44] We support these objectives.

The statement of intent recognises the importance of governments working in partnership with First Nations people. This is strongly supported by the panel. As evidenced in Part E: Equity of this report, the panel also recommends that other priority settings and populations be closely engaged in the development of the CDC.

Complementing and enhancing Australia's existing emergency and health governance architecture

Organisational interfaces at national and state level need to be agreed to clarify roles and responsibilities and avoid duplication, delays or gaps. The states and territories have clear statutory and operational obligations and responsibilities under their respective health, public health and other emergency legislation. The CDC will not cut across these requirements.

Going forward, Ministers for Health should have a key role in directly advising National Cabinet. This will enable decision-makers to consider broader health perspectives to minimise the risk of harm, maximise achievement of health objectives and enhance coordination in a protracted national pandemic response.

In designing governance arrangements, we recommend that the head of the CDC:

- report to the Minister for Health to inform the Minister's use of the human biosecurity powers under the Biosecurity Act
- provide advice directly to National Cabinet at the invitation of First Ministers to enhance clear, coordinated and timely decision-making and communications at the national level
- provide advice to meetings of Health Ministers and the Health Chief Executives Forum to share world-leading evidence synthesis and advice to support national, state and territory decision-making
- be an ex-officio member of the Australian Health Protection Committee
- be informed by an advisory council. Members would be appointed by the Minister for Health and be representative of a broad skills base, with knowledge and experience relevant to the CDC functions, including expertise in pandemic responses, communicable disease epidemiology, behavioural insights and priority cohorts. This advisory group should have international representation and be adaptable to changing risk environments and be aware of the views of broader industry stakeholders.

The roles of the CDC and the Health portfolio under the Australian Government Crisis Management Framework must be articulated and understood by staff and external stakeholders.

Transparent, trusted and independent

The CDC's role and functions should be codified in legislation to ensure it is independent and skill based. To be influential, the CDC must remain proximate and relevant to key decision-making structures. CDC advice needs to routinely be made public, and published in parallel with policy that has drawn on its advice.

The CDC should also develop and issue consensus statements on issues within its remit, especially where there is not yet a settled view. Drawing on available research and experts, a consensus statement identifies areas of agreement and disagreement to provide recommendations based on collective opinion. Leveraging its trusted and authoritative reputation, the CDC can help address uncertainty and confusion in the public debate.

Investment in data sharing and surveillance systems

The CDC needs ongoing funding certainty to establish its most critical pieces on data consistency and sharing, surveillance infrastructure and evidence synthesis. Expert roundtables and interviews clearly expressed that the CDC should establish these functions as a priority. Doing so will be complex and take time, requiring funding certainty to build necessary supporting systems, attract the expertise required and establish key relationships across governments and the broader sector, and with priority populations.

Building on the foundation established by the Interim CDC

The Interim CDC is the first step in operationalising the government's election commitment to establish a standalone agency. While it is not widely known, good progress has been made within available resources to support future pandemic preparedness.

Including:

- driving work to reform Australia's overarching national health emergency response plan which sets out obligations, roles, responsibilities, functions and governance arrangements
- undertaking multifaceted health emergency exercise scenarios across multiple states
- enhancing surveillance activity, particularly around respiratory infections in aged care settings over the winter months
- increasing engagement with international partners – Australia increasingly has a 'seat at the table' because of the Interim CDC.

There are significant concerns about the current level of preparedness of the health system, and whether it has diminished due to impacts of post-pandemic backlogs, health budgets and loss of key capabilities. Continued uncertainty regarding the future scope and funding of a permanent CDC is counterproductive and delays the necessary decisive action to enhance Australia's level of preparedness.

Scope

We support a phased approach to establishing the CDC, with the necessary upfront funding to address agreed priorities and commence the building of supporting interoperable systems. The Interim CDC is building the necessary technical and system capability to embed core functions. A phased approach also provides time for the CDC to build trust and credibility with key stakeholders and the Australian community.

An initial progress review of the CDC should be undertaken 12 to 18 months after the establishment and funding of the permanent entity, and after the first biennial report to National Cabinet and Parliament on Australia's pandemic preparedness. This would assess its effectiveness in delivering on its core functions, and the biennial report will shape the work plan for its next phase. Based on performance outcomes, the CDC's remit should be expanded in a staged way, including non-communicable diseases so that the CDC has a complete health remit.

Core functions

Nationally interoperable data systems

Laying the foundations for a national communicable disease data integration system across Australia's health system is the CDC's highest priority. Because of our early and successful interventions against COVID-19, the Australian population had a unique immunity profile. Yet we were relying on evidence from countries that had levels of immunity from past infections that exceeded ours. When you take your own road, you need to pave it with your own data.

The CDC should coordinate the collection, storage and management of national public health data. It should have the authority to agree standardised case definitions and reporting requirements across jurisdictions, and the convening authority to coordinate access to relevant data from other custodians for the purpose of preventing, detecting, preparing for and responding to a health emergency. It should provide for secure, two-way data systems across the Commonwealth and the jurisdictions and, importantly, there must be capacity within the CDC to undertake meaningful analysis and synthesis of data for sharing with the states and territories, and tailored advice for other health stakeholders, including the health professions, health facilities and key industry and community stakeholders.

We recommend that the CDC prioritise coordinating and linking data for notifiable diseases, immunisation rates, hospitalisations, health system usage and workforce impacts, and excess mortality.

Priority should also be given to data linkage with residential aged care, the National Disability Insurance Scheme, the Australian Bureau of Statistics, the Australian Taxation Office and the Department of Social Services. Capability to match Medicare Benefits Schedule usage with hospitalisation rates and vaccination status, for example, would have allowed a far more efficient prioritisation of resources and targeted responses for vulnerable cohorts. Further, rapid linkage may be required in an emergency depending on the nature of the infectious agent, and in-house capability to oversee this will be essential.

Over time, and under the guidance of technical advisory committees that bridge the CDC and technical and research expertise across Australia, the CDC should become a curator of evidence tools that provide for a 'running start' in pandemic risk assessments, prevention and response. This could include protocols and pre-agreements with clinical partners for the rapid standing up of clinical trial platforms, first case cohort studies, and a library of statistical models that could be quickly adapted to a particular pandemic threat.

In the first 12 to 18 months after its commencement, the CDC should:

- finalise an evidence strategy and key priorities to drive optimal collection, synthesis and use of data and evidence, address data gaps and develop linkages to public health workforce capability data. This would include:
  - identifying inconsistencies and gaps in shared data with the states and territories to prioritise for national surveillance data linkage, and upgrading existing datasets by improving data consistency and enabling data linkage readiness
  - establishing technical advisory groups that bring together technical expertise as required to contribute to preparation of pandemic guidelines and rapid research gap advice; advise on developments in their fields that should be incorporated in future pandemic detection and response strategies; assist in designing and reviewing pandemic exercises; and advise on national technical capacity and training needs. This can rapidly contribute additional expertise in a crisis
  - finalise work underway to establish clear guardrails for managing privacy and enabling routine real-time access to linked, granular data
- publish a report on progress against key priorities identified in this data strategy.

Surveillance systems

The CDC should provide a world-leading public health surveillance system to inform horizon scanning and early warning advice on global emerging diseases and their transmission potential, disease pathways and trajectories, and population outcomes at a national level, before isolated cases turn into outbreaks. Surveillance should be scalable in an emergency to accommodate increased testing and case numbers. Surveillance should be complemented with early detection tools, including proactive population sample screening regardless of symptoms and wastewater surveillance (including on incoming planes), in collaboration with the states and territories, so the prevalence and virulence of variants in the community, and any changes to this, can be quickly assessed.

The CDC should be the primary contact point for communicable disease agencies in partner nations to share research, modelling, and horizon scanning and improve global preparedness.

An agreed implementation pathway will set out the appropriate sequencing of these priorities, given inter-dependencies.

In its first 12 to 18 months the CDC should:

- commence establishment of new comprehensive surveillance infrastructure that incorporates wastewater surveillance, to facilitate disease detection and monitoring, risk assessment, and national data-sharing, operating with state and territory systems to provide national updates on notifiable diseases
- develop a plan to improve at-risk cohort data collection and linkages to ensure cohorts are visible in an emergency and responses can be appropriately tailored
- ensure captured surveillance data meet the analytical needs of public health responders and support rapid research and real-time evaluation
- draft enhanced surveillance protocols for potential use in pandemic settings, including for proactive community screening and for the cohort of first cases to monitor for persistent symptoms resulting from infection
- enhance early warning surveillance capability and related modelling to inform procurement planning for the National Medical Stockpile (undertaken by the Department of Health and Aged Care)
- confirm linkages with New Zealand health authorities and other regional partners, and agree to near real-time data and intelligence sharing with them and other regional partners.

Preparedness and scenario testing

The CDC, working with the Department of Health and Aged Care and NEMA, should update communicable disease plans. These plans should be informed by the latest data and evidence and be regularly tested through health emergency scenario exercises. These scenarios should involve all partners identified in the plan, including key industries, priority populations, Primary Health Networks, unions and the states and territories. Broader scenario testing with a focus on concurrent plant, animal and human biosecurity incidents and involving the Department of Agriculture, Fisheries and Forestry and other relevant stakeholders should also be conducted. Discoveries and recommendations arising from scenario testing must be acted on in a timely way.

Pandemic preparedness relies on accessing the full breadth of our public health expertise to support surge workforce models. The CDC must have visibility of national health workforce trends, including in the public health workforce, through work done by the Department of Health and Aged Care and the Medical Workforce Advisory Collaboration. This would include oversight of surge workforce capabilities and gaps to be mapped, and advice to be provided to governments ready to be operationalised in a future emergency response.

Mapping of gaps for the public health workforce should be guided by and align with the World Health Organization's Global competency and outcomes framework for the essential public health functions.[45] It is also an important opportunity to map and monitor the availability of high-level expertise needed in pandemics (genomics, modelling, quantitative and qualitative epidemiology, behavioural science, mental health, social science and so on). The CDC needs to draw on these trend data to inform its advice on the pandemic readiness of the health system, and identify training needs.

In its first 12 to 18 months the CDC should:

- work with the Department of Health and Aged Care to:
  - finalise the National Health Emergency Plan, aligned to the Australian Government Crisis Management Framework
  - finalise the National Communicable Disease Plan, which would be agreed by the Health Ministers Meeting
- jointly hold a major pandemic drill with NEMA to assess national, whole-of-government preparedness, involving the Prime Minister, First Ministers and senior officials from Commonwealth, state and territory governments and the Australian Local Government Association
- determine responsibility and accountability for implementing actions arising from these scenarios, enabling continual updating and quality improvement, with support from the Department of the Prime Minister and Cabinet and NEMA. These should also be reported to the Secretaries Board.

Biennial pandemic readiness reporting

The CDC should conduct biennial reviews of Australia's overall pandemic preparedness. These reviews should be considered initially by the Commonwealth Minister for Health, then by National Cabinet prior to tabling in the Commonwealth Parliament.

This review would provide:

- summaries of new pandemic exercises held to date
- detailed reporting on local and national incidents in the past year to advise on how systems managed the response, to highlight strengths and weaknesses
- recommendations for system improvement.

These reports should build on mandated post-incident reviews that the CDC facilitates across the Commonwealth after a health emergency.

In its first 12 to 18 months the CDC should:

- jointly finalise with NEMA its first biennial pandemic preparedness report to the Commonwealth Minister for Health and National Cabinet prior to tabling in the Commonwealth Parliament
- report a preliminary view of how many public and private health workers might need to be deployed in response to different pandemic scenarios, as informed by an assessment of national capacity
- map national technical public health pandemic response and research capability to identify skills gaps and coordinate and resource training programs in partnership with the Department of Health and Aged Care and states and territories.

Public communication

The CDC should become a trusted, authoritative and accessible source of information on communicable diseases, both during a pandemic and as part of its business-as-usual activities.

During a pandemic, the CDC is to provide timely, transparent and reliable communication that effectively explains risk and promotes action to inform and support public health measures. It must have the capability and authority to take a lead role and support the Prime Minister and the Minister for Health to directly and effectively communicate with the community in a time of crisis and work in partnership with national, state and territory emergency communications to enhance coherence.

It should also be the public health emergency communications hub, providing a single place where the Australian public can find integrated information about the pandemic and emergency response. Communications products should reflect genuine engagement and co-design with Aboriginal and Torres Strait Islander people, culturally and linguistically diverse groups, and aged and disability care communities so they can be readily adapted for specific community and occupational settings. These products should be updated to incorporate lessons learnt either through to scenario testing or through public health incidents.

Working with the Department of Health and Aged Care, states and territories and the advice of relevant professional bodies, the CDC would be responsible for the development of best-practice guidelines on infection prevention and control across a wide range of settings, including testing for and tracing of emerging diseases.

This 'living guidance' needs to be developed and constantly updated with the states and territories to ensure messages can be tailored and delivered through local networks. It should build on existing material such as the Series of National Guidelines provided by the Communicable Diseases Network Australia.

In its first 12 to 18 months the CDC should:

- establish and embed a public communications function within the CDC that can support both business-as-usual communication activity and crisis communications in a public health emergency
- work with the Department of Health and Aged Care, NEMA and the Department of the Prime Minister and Cabinet to develop – including through co-design with those in priority populations, families and industries – a national communication framework for use in health emergencies to ensure that Australians have the information they need to manage their social, work and family lives. The framework should:
  - be informed by behavioural science and risk communication expertise
  - meet the diverse needs of communities across Australia
  - include mechanisms to coordinate and consolidate communications, including considering the timing and frequency of announcements
  - include a strategy for addressing the harms arising from misinformation and disinformation
- include communication as a focus for technical advisory group input, drawing from public and private channels to provide risk communication data synthesis and behavioural and social science expertise
- develop in-house expertise in evidence synthesis and communication.

Behavioural insights to support public health responses

An effective pandemic response relies on the community changing its behaviour to slow the spread of the virus. Behavioural science was used by government agencies to help develop and target public health messages to assist people to comply with public health measures.

In the medium to long term, the CDC should develop and embed behavioural insights capability to assess, refine and enhance the effectiveness of pandemic responses. This capability is required both during crisis periods and to support business-as-usual activities of the CDC, including providing public health evidence to Australians in effective ways that encourage healthier choices.

In its first 12 to 18 months the CDC should:

- map existing behavioural insights functions across the Australian Government with the Behavioural Economics Team of the Australian Government
- work with experts to develop a fully scoped and costed business case for an in-house behavioural insights capability.

Engagement with key academic and community partners

The CDC will not be a research organisation. However, it should have a role in supporting and leveraging the work of the research community to the benefit of the nation to support health emergencies. It should also have a role in advising government on pandemic-related research priorities to support government decisions on research funding calls, and moving to pandemic settings for enactment of pre-agreements on enhanced data sharing and expedited research support processes.

The CDC should have an ongoing relationship with research communities to identify research gaps and advise government on how these could be addressed. Inclusion of leading technical and research experts on the CDC technical advisory group will help to build the authority of the CDC and guide its development.

In its first 12 to 18 months the CDC should:

- draw on technical advisory structures to publicly report on work to support research and intelligence exchange with research institutions in Australia and abroad, including behavioural researchers, private scientists, and peak health industry bodies.

Phased functions for the CDC

By 31 December 2026 the CDC must be reviewed to identify progress towards meeting its core objectives. Establishing and developing a new organisation with a workforce capable of delivering on initial priorities will take time. Once established, there needs to be consideration of widening the CDC's remit to potentially include the following functions.

Non-communicable diseases

There is a strong link between pandemic preparedness and a healthy population with managed levels of non-communicable disease. Pandemics also have a direct impact on the prevalence and management of chronic diseases. Given the clear synergies, the CDC's pandemic response remit would benefit from a progressive expansion to include non-communicable diseases, using the data infrastructure and data linkage established by the CDC in its initial phase. However, the argument for inclusion of non-communicable diseases goes beyond this if we are to realise the CDC as a transformative national health asset: non-communicable diseases impact more Australians, for more of their lives; contribute to more deaths; and drive greater health disparities. In order to deliver trusted advice on risk assessment, and provide a comprehensive approach to pandemic preparedness and response, the CDC should be expanded to encompass chronic and communicable diseases when it has progressed preparedness priorities, and support existing advice pathways to government and the Department of Health and Aged Care on policy priorities for non-communicable diseases and the wider determinants of health.

Conclusion

Almost five years since the COVID-19 pandemic broke out, for most Australians there is a collective desire to move on and forget what was an immensely difficult period. There is undoubtedly much to forget, but there is also much to be proud of as a nation.

Our hope is that this Inquiry will ensure that the immense body of work undertaken by individuals, community organisations, businesses, universities and research organisations, and government will be recognised into the future. There is also, importantly, much to learn from our collective experiences.

Our objective in undertaking this Inquiry was to document what worked and what could be done better for a future crisis, and to ensure that the lessons are learned so that we are better prepared for the next pandemic. With individuals and communities less prepared to change their behaviour we will not be able to simply rely on what worked during COVID-19, and must learn the lessons to ensure a future response is effective.

We heard from many individuals across government and in the community about the toll that the pandemic response had taken. People worked beyond normal limits, and many of the public health professionals, frontline community service and health staff, political leaders, health experts and public servants we relied on to get through the pandemic are no longer in their positions. This poses risks to our resilience to face another crisis.

Trust has also been eroded, and many of the measures taken during COVID-19 are unlikely to be accepted by the population again. That means there is a job to be done to rebuild trust, and we must plan a response based on the Australia we are today, not the Australia we were before the pandemic.

The CDC will be an important part of rebuilding that trust and strengthening resilience and preparedness, providing national coordination to gather evidence necessary to undertake risk assessments that can guide the proportionality of public health responses in future crises. However, as we continue to face more complex and concurrent crises in the years ahead, there is a need to build broader resilience in our systems.

We have focused our priority actions on building that resilience now, but it will need to be maintained over time. We cannot predict when the next global health crisis will occur – it may occur at any time – in 12 months, in a decade or beyond our lifetime – but human history tells us that it will occur, and it will once again test us in ways that are hard to imagine. Acting today will ensure in the future we are better prepared, benefiting from our learnings of what worked well and what didn't during the COVID-19 pandemic.

Ms Robyn Kruk AO, Chair

Professor Catherine Bennett

Dr Angela Jackson

Endnotes

1 World Health Organization, *Covid-19: make it the last pandemic*, 74th World Health Assembly, World Health Organization, May 2021, 23.

2 N Ray, *Independent Evaluation of the JobKeeper Payment*, The Treasury, Australian Government, 2023.

3 *Critical Health Resource Information System*, extracted 18 September 2024. Data provided by the Department of Health and Aged Care. COVID-19 cases in ICU refers to COVID-19 positive patients admitted to intensive care.

4 *Critical Health Resource Information System*, extracted 18 September 2024. Data provided by the Department of Health and Aged Care. COVID-19 cases in ICU refers to COVID-19 positive patients admitted to intensive care.

5 R Holden and A Leigh, 'The race that stopped a nation: lessons from Australia's Covid vaccine failures', *Oxford Review of Economic Policy*, 2022, 35(4), 818-832.

6 *Critical Health Resource Information System*, extracted 18 September 2024. Data provided by the Department of Health and Aged Care. COVID-19 cases in ICU refers to COVID-19 positive patients admitted to intensive care.

7 S Morrison, Update on coronavirus measures [media release], Department of the Prime Minister and Cabinet, 20 March 2020.

8 M Peters and C Marnie, *National Aged Care COVID-19 Survey 2022*, Australian Nursing and Midwifery Federation, March 2022.

9 Australian Institute of Health and Welfare, *The first year of COVID-19 in Australia: direct and indirect health effects*, 2021, v.

10 Australian Institute of Health and Welfare, *The first year of COVID-19 in Australia*, vi.

11 J Worthington, Z Sun, R Fu, J Lew, K Chan, Q Li, A Eskander, H Hui, K McLoughlin, M Caruana, S Peacock, J Hai Ein Yong, K Canfell, E Feletto and T Malagón, 'COVID-related disruptions to colorectal cancer screening, diagnosis, and treatment could increase cancer Burden in Australia and Canada: a modelling study', *PLOS ONE*, 2024, 19(4).

12 ORIMA, *Final report on qualitative research with specific cohorts on their lived experiences with the COVID-19 pandemic*, Department of the Prime Minister and Cabinet, July 2024.

13 Australian Bureau of Statistics, *Australian National Accounts: National Income, Expenditure and Product, March 2024*, 2024.

14 Department of the Treasury submission.

15 World Health Organization, *Joint external evaluation of IHR core capacities of Australia: mission report, 24 November - 1 December 2017*, 2018, 4-5.

16 Australian National Audit Office, *Management of international travel restrictions during COVID-19*, Auditor-General Report No 12, 2021-22, para. 2.24; Information provided by the Department of Home Affairs.

17 Australian National Audit Office, *Management of international travel restrictions during COVID-19*, 2021, para 2.24.

18 Data.gov.au, *Temporary visa holders in Australia*, 26 September 2024, data as at 31 March 2020; Australian Bureau of Statistics, *National, state and territory population, March 2020*, 24 September 2020.

19 Australian Bureau of Statistics, *National, state and territory population, March 2020,* website, n.d.

20 Plans include the National Health Emergency Response Arrangements (2011), the Emergency Response Plan for Communicable Disease Incidents of National Significance (2016), the Emergency Response Plan for Communicable Disease Incidents of National Significance: National Arrangements (2018) and the Australian Health Management Plan for Pandemic Influenza (2019).

21 V Bell, *Report of the Inquiry into the appointment of the Former Prime Minister to Administer Multiple Departments*, Attorney-General's Department, 25 November 2022, para 20.

22 JM Basseal, CM Bennett, P Collignon, BJ Currie, DN Durrheim, J Leask, ES McBryde, P McIntyre, FM Russell, DW Smith, TC Sorrell and BJ Marais, 'Key lessons from the COVID-19 pandemic response in Australia', *The Lancet*, 2023, 30; J Halton AO, *National review of quarantine*, Department of the Prime Minister and Cabinet, 2021; Illumina submission; Qantas submission; W Ahmed, A Bivins, S L Simpson, P M Bertsch, J Ehret, I Hosegood, S S Metcalfe, W JM Smith, KV Thomas, J Tynan and J F Mueller, 'Wastewater surveillance demonstrates high predicative value for COVID-19 infection on board repatriation flights to Australia', *Environment International,* 2022, 158; ACT Government submission.

23 Meeting 17.

24 Queensland Nurses and Midwives' Union submission.

25 N Biddle, M Gray and I McAllister, 'Federalism and confidence in Australian Governments during the COVID-19 Pandemic', *Publius: The Journal of Federalism*, 2024, 54(2), 259.

26 W Jennings, G Stoker, V Valgarðsson, D Devine and J Gaskell, 'How trust, mistrust and distrust shape the governance of the COVID-19 crisis', *Journal of European Public Policy*, 2021, 28(8), 1174-96.

27 B Zaki, F Nicoli, E Wayenberg and B Verschuere, 'In trust we trust: the impact of trust in government on excess mortality during the COVID-19 pandemic', *Public Policy and Administration*, 2022, 37(2).

28 Meeting 135.

29 ORIMA, *Final report on qualitative research with specific cohorts on their lived experiences with the COVID-19 pandemic*, Department of the Prime Minister and Cabinet, July 2024.

30 Human Rights and Trust in Government Roundtable.

31 ORIMA, *Final report on qualitative research with specific cohorts on their lived experiences with the COVID-19 pandemic*, Department of the Prime Minister and Cabinet, July 2024.

32 SECNewgate Research, *COVID-19 Response Inquiry Community Input Survey: Final Report*, Department of the Prime Minister and Cabinet, August 2024.

33 University of Sydney Infectious Diseases Institute submission.

34 ORIMA, *Final report on qualitative research with specific cohorts on their lived experiences with the COVID-19 pandemic*, Department of the Prime Minister and Cabinet, July 2024.

35 ORIMA, *Final report on qualitative research with specific cohorts on their lived experiences with the COVID-19 pandemic*, Department of the Prime Minister and Cabinet, July 2024; Australian Bureau of Statistics, *COVID-19 mortality in Australia: deaths registered until 31 January 2024*, February 2024.

36 Australian Bureau of Statistics, *COVID-19 mortality in Australia: deaths registered until 31 January 2024*, February 2024.

37 Australian Bureau of Statistics, *Deaths, Australia*, 2019; Australian Bureau of Statistics, *COVID-19 mortality by wave*, 16 November 2022.

38 Australian Bureau of Statistics, *COVID-19 mortality by wave*, 16 November 2022.

39 Australian Bureau of Statistics, *COVID-19 mortality in Australia: deaths registered until 30 September 2023*, October 2023.

40 K Raynor and L Panza, 'Tracking the impact of COVID-19 in Victoria, Australia: Shocks, vulnerability and insurances among residents of share houses', *Cities*, 2021 (117).

41 L Berg and B Farbenblum, *As if we weren't humans: the abandonment of temporary migrants in Australia during COVID-19*, Migrant Worker Justice Initiative, 2020.

42 Federation of Ethnic Communities Councils of Australia submission.

43 Department of Health and Aged Care, *Statement of intent: working together to support the Australian Centre for Disease Control*, 10 November 2023.

44 Department of Health and Aged Care, *Statement of intent*, 10 November 2023.

45 World Health Organization, *Global competency and outcomes framework for the essential public health functions*, 10 June 2024.