



**Australian Government**

**Department of Health and Aged Care**

# **Towards Australia's National Immunisation Strategy 2025-2030**

Consultation Paper

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## Executive Summary

### **Australia needs a new National Immunisation Strategy 2025-2030.**

Australia's National Immunisation Program (NIP) is widely [acknowledged](#) as one of the world's most comprehensive national immunisation programs. It provides free vaccines in line with a recommended schedule. The program is an essential part of how Australia protects public health. Two previous National Immunisation Strategies (2013-2018, 2019-2024) have guided our collective efforts. It is time for the next National Immunisation Strategy.

Over the past 25 years, Australia's childhood immunisation coverage has increased from less than 80% to almost 95%, achieving and in some cases surpassing national targets. The National Immunisation Program has expanded from initial coverage of nine diseases to 17 diseases currently, and from children to adolescents and adults, increasingly taking a life course approach. Effective programs have meant Australia has stayed polio-free, in line with global polio eradication goals, and remained free of endemic measles since 2014.

The National COVID Vaccine Program delivered 68.7 million COVID-19 vaccines doses in just under three years of operation, making it the single biggest immunisation effort in our history. As the COVID vaccine program transitions to routine arrangements over coming years, it is important to identify the innovations that will improve delivery of the NIP and preparedness for future emergencies or pandemics.

Partnerships underpin the success of Australia's immunisation efforts. These partnerships support collaboration between levels of government, immunisation providers and experts, the vaccine industry and importantly, the Australian people. Previous National Immunisation Strategies have guided efforts and fostered and strengthened partnerships.

The development of Australia's next National Immunisation Strategy (2025-2030) comes at a time when there is a rapidly shifting immunisation landscape. This includes rapid technological advances, fluctuating community sentiment and some recent concerning declines in childhood vaccination coverage. First Nations people have lower coverage than the rest of the Australian population for almost every vaccine.

The development of the next strategy also comes at a time when lessons from the COVID-19 vaccine program could be harnessed to inform the NIP and wider approaches to immunisation in Australia. And the pipeline for new vaccine technology and delivery systems may present opportunities for more cost-effective prevention of new and existing diseases.

The *Towards a National Immunisation Strategy 2025-2030* consultation paper is informed by engagement with the Australian Health Protection Principal Committee (AHPPC) and key stakeholders in late 2023 and 2024. It outlines an approach to the next National Immunisation Strategy (NIS) through proposing a vision, mission, and six priority areas with opportunities for action.

Your responses to questions and general feedback can be provided through this [survey form](#). The online consultation survey will be open until 19 June 2024. In providing your responses, please note that the Department may make de-identified responses publicly available.

## Introduction

The next National Immunisation Strategy (2025-2030) will outline a shared mission to protect Australians from the harms of vaccine-preventable diseases. It will provide the opportunity to agree shared challenges and areas to focus national efforts, building on achievements from previous national strategies. It will also draw on lessons from the COVID-19 pandemic and recent emergency outbreaks, so we are better prepared for future emergencies. The Strategy will be a roadmap for national action on key priorities in immunisation in Australia.

This consultation paper outlines an approach to the National Immunisation Strategy (NIS) 2025-2030. It has been informed by consultation with the Australian Health Protection Principal Committee (AHPPC) and selected key stakeholders in late 2023 and 2024.

The intended audience for this consultation paper includes:

- decision makers at all levels, including Australian, state and territory governments who have responsibility for immunisation policies and programs,
- advisory committees and policy-making bodies at national and state and territory levels,
- national immunisation program managers,
- researchers and the research sector,
- vaccine industry,
- health professionals involved in immunisation service delivery, and
- people representing community perspectives on public and preventive health.

The consultation paper proposes a vision, mission, and six priority areas for the next NIS, including opportunities for action. Responses from public consultation will assist in development of the NIS by the end of 2024.

## Instructions on how to provide your feedback

Please provide your responses to the questions via [CitizenSpace link](#) up until 19 June 2024.

In providing your responses, please note that the Department may make de-identified responses publicly available.

## Vision and Mission

### Vision

Protect individuals and communities from the harms of vaccine-preventable diseases.

### Mission

Improve vaccine uptake and reduce the impact of vaccine-preventable diseases in Australia.

## Proposed priority areas

Six priority areas, each with specific challenges and opportunities for action and impact, will guide the National Immunisation Strategy 2025-2030. The priority areas build on two previous National Immunisation Strategies (2013-2018, 2019-2024) and are intended to focus national efforts to deliver on the Strategy's Vision and Mission. These priority areas will be enacted through an Implementation Framework for the NIS 2025-2030 which will be developed as the Strategy is finalised.

### Proposed priority areas:

- 1. Improve immunisation coverage through universal and equitable access to vaccination, with a focus on First Nations people.**
- 2. Strengthen community engagement, awareness and acceptance of immunisation.**
- 3. Strengthen program governance, how we manage programs and account to the public.**
- 4. Use data and evidence to target and monitor programs, build confidence, and improve outcomes.**
- 5. Strengthen a diverse immunisation workforce to work with Australia's diverse populations.**
- 6. Prepare for emerging infectious diseases and emergencies requiring rapid and/or targeted vaccination.**

## Priority Area 1: Improve immunisation coverage through universal and equitable access to vaccination, with a focus on First Nations people.

### Issues and opportunities

#### **There are unequal and concerning trends in childhood vaccination that need action.**

After significant achievements in childhood immunisation in Australia, including reaching the aspirational target of 95% coverage for 1- and 5-year-old children in 2020, there are concerning declines in coverage. Australia is not alone. The achievements of COVID-19 vaccination programs across the world came at the expense of routine immunisation programs, especially in children.

In Australia, downward trends in childhood coverage have persisted since June 2021. As at December 2023, the [national coverage rates](#) were 93% for all one-year-olds, 91% for all 2-year-olds, and 94% for all 5-year-olds. There have been even steeper declines in First Nations children.

Australia's aspirational target of at least 95% vaccination coverage for children at 1, 2 and 5 years of age is the rate needed to disrupt disease transmission for the most infectious diseases, such as measles. This target will continue to guide program efforts under the next NIS.

The COVID-19 pandemic drew attention from and challenged delivery of immunisation programs. But it is important to understand if and how this period amplified a pre-existing shift in community attitudes toward vaccination. Research into the drivers of these downward trends is important. For example, the Vaccination Insights project – a collaborative, Australian Government-funded initiative – is research on drivers of under-vaccination in Australia. Over the next two years, the study is investigating the reasons for under-vaccination in children aged under five years, specifically NIP-funded vaccines. It aims to get the data needed to develop strategies to increase routine vaccines in this age group.

#### **Declines in coverage amongst First Nations children are steeper than the rest of the population.**

In 2023, First Nations children at two years old fully vaccinated against measles, mumps and rubella (MMR) was 91% compared to 94% in 2021. In 2022, [national HPV coverage](#) was 70.1% in First Nations female adolescents, almost 10 percentage points lower than the 79.7% coverage for all female adolescents.

First Nations communities remain deeply affected by historical experiences and disadvantage persists in many areas of Australia. Targeted efforts to address disparity in vaccination coverage must be informed by this context and incorporate culturally sensitive approaches. These approaches need to prioritise First Nations' community engagement and leadership and evidence-informed strategies to increase vaccine uptake are needed. The Aboriginal Community-Controlled Health Sector (ACCHS) plays a vital role in culturally safe communication and administration of vaccines in First Nations communities. The COVID-19 vaccination efforts that were driven by the ACCHS and primary health care sector achieved [strong results](#) during the pandemic. The Closing the Gap priority [reforms](#) need to guide efforts to strengthen immunisation services, including through obligations on Governments on shared decision-making, support to the community-controlled sector and to evolve traditional practice models. Collaborative partnerships with communities and groups, especially those with low immunisation rates, remain critical to the success of immunisation programs.

#### **Improved monitoring and delivery of adolescent and adult vaccine programs is needed to drive performance.**

The National Immunisation Program (NIP) takes a life-course approach to vaccination with more vaccines funded for adolescents and adults, First Nations adults, pregnant women and people with medical conditions that increase the risk of serious disease outcomes. Over the last five years, these expansions have included a national adolescent meningococcal ACWY program, an expanded pneumococcal vaccine schedule for adults, and changes in the NIP-funded shingles vaccine to Shingrix, with expanded cohorts eligible.

Adolescent school-based programs delivered by states and territories in specific school years have achieved good coverage for many vaccines. For example, [in 2021](#), 76% of Australian 17-year-olds had received Meningococcal ACWY vaccine. However, inequities persist with only 67% of First Nations adolescents having

received MenACWY in the same year. Program innovations have improved uptake. A good example is the transition to flexible and online consent processes for students in several states and territories across Australia. Sustaining effective NIP-funded programs for adolescents requires ongoing attention to flexible delivery models, targeted and engaging communications and strategies to address coverage gaps, especially for First Nations adolescents.

However, monitoring of adult programs has lagged. The Australian Immunisation Register (AIR) expanded in 2016 to include adult vaccinations, but reporting of these data only became mandatory in 2021, when real-time coverage data were critical for COVID-19 vaccine monitoring and allocation. [Reported coverage](#) in 2021 varied with age and vaccine, from 30% zoster (shingles) vaccine coverage in people aged 70 years and over, compared to 70% uptake of influenza vaccine in the same age group. Improved quality and consistency of adult vaccine coverage data will provide the information needed to drive performance in these programs.

### **Working to promote vaccination in disability and aged care settings.**

The National COVID Vaccine Program (NCVP) employed levers to increase vaccination for high-risk settings and populations. Specific payments for primary care providers were designed to encourage provision of vaccines to high-risk populations in residential aged or disability care homes. To complement this measure, the NCVP published tailored COVID-19 vaccine information for people with disability and people who work in the disability sector. This initiative prioritised the need for greater accessibility by addressing communication and service availability gaps.

Continued efforts are needed to enable equitable vaccination access for people with disability and people in residential aged care. Data from 1 September 2023 indicated 47% of people 65 years of age and above, including those in residential care, had not received a recommended COVID-19 vaccine dose in the previous 6 months. Advisory groups, such as the Aged Care Advisory Group and the Advisory Committee for the COVID-19 Response for People with Disability, help to adjust strategies to boost immunisation rates among these populations, including for COVID-19 vaccines.

### **Making vaccines easier to access.**

Vaccine uptake can improve when access to vaccines is easier for people. For example, since 1 January 2024, the Australian Government is funding community pharmacies to administer NIP vaccines at no cost to individuals. States and territories have expanded regulations permitting more vaccines to be delivered from pharmacies. This initiative aims to eliminate costs for eligible consumers, a measure that helps under-vaccinated populations.

The National COVID Vaccine Program used innovative surge workforce and service delivery models to increase access to free COVID-19 vaccines. For example, the Vaccine Administration Partners Program (VAPP) Panel was established to support COVID-19 vaccine delivery in workplace and community settings by providing a source of approved vaccinators. Another [example](#) was the surge delivery support from the Royal Flying Doctor Service to consult with and deliver COVID-19 vaccinations to remote communities, mostly First Nations communities. Lessons from surge models are relevant to exploring ways to remove barriers to vaccination in a more sustainable way.

The Strengthening Medicare Taskforce Report recommendations offer opportunities to increase access to vaccinations as part of primary care. For example, the Taskforce encouraged new funding models for sustainable rural and remote practice in collaboration with people, providers and communities, and growing Aboriginal Community Controlled Health Organisations (ACCHOs) to commission primary care services for their communities, building on their expertise and networks in local community need. Efforts to improve access to primary care across Australia should also improve access to vaccination.

### **A question of targets.**

The National Preventive Health [Strategy](#) 2021-2030 includes 95% national childhood vaccination targets for all children and First Nations children aged 1,2 and 5 years by 2030. Through development of the next National Immunisation Strategy, there is an opportunity to consider additional evidence-informed targets for vaccine

coverage, by age group and/or by vaccine. For example, Australia's [National Cervical Cancer Elimination Strategy](#) has set a 90% HPV vaccination target by 2030, for all adolescents. Another example is the [NSW Immunisation Strategy 2024-2028](#) includes ten coverage targets in addition to the 95% target for children aged 1,2 and 5 years. These targets include cohort specific coverage targets for influenza vaccine (pregnant women, adults over 65 years), for zoster (shingles) immunisation coverage (adults 65 years and over, and Aboriginal adults 65 years and over).

### **Opportunities for action**

- Improve monitoring of vaccine coverage across all age cohorts, priority populations and at-risk groups and use these data to drive performance and accountability.
- Prioritise partnership and shared decision making with First Nations communities and the Aboriginal Community Controlled Health Sector in delivering immunisation services.
- Build collaborative partnerships with communities and groups with low immunisation rates, drawing successful models from COVID-19 programs, particularly those designed for disability, First Nations, and Culturally and Linguistically Diverse (CaLD) communities.
- Continue to develop and adjust vaccination strategies to protect people in settings such as aged care and residential care for people with a disability.
- Make vaccines easier to access through immunisation programs and the wider health system, especially primary care.
- Consider evidence-informed targets for specific vaccines or groups of people to focus national efforts during the implementation of the next National Immunisation Strategy.

## **Priority Area 2: Strengthen community engagement, awareness and acceptance of immunisation.**

### **Issues and opportunities**

Community confidence in vaccines and the healthcare system is integral to effective immunisation programs. Achieving high vaccine coverage requires people to accept vaccines are safe and effective, to be motivated to get immunisation for themselves or people in their care, and to not face barriers in accessing immunisation services. Community confidence leading to vaccine acceptance is not static. [Recent surveys](#) of parents with young children found support for routine childhood vaccination dropped to 84% in 2022 compared to 93% in 2017. Despite Australia reaching a two-dose COVID-19 vaccine coverage of approximately 81% by the end of 2022, there are emerging shifts in attitudes toward immunisation. Exposure to vaccine misinformation and disinformation is compounding the challenges in increasing community confidence in vaccines.

### **Embed community partnerships in design and delivery of communication.**

The National COVID Vaccine Program (NCVP) adopted advice from the Culturally and Linguistically Diverse Communities COVID-19 Health Advisory Group that led to the publication of vaccine information in more than 60 languages. Hundreds of grants were awarded to community groups across Australia to design and deliver activities encouraging vaccine uptake in their own communities. This highlighted the importance of collaborative partnerships with community and priority populations such as First Nations people, CaLD populations and people with disabilities to codesign communication and program strategies. Where there are gaps, new mechanisms to partner with communities for vaccination should be considered.

### **Use behavioural insights to inform communication strategies and tailor policy and practice.**

Some states and territories routinely monitor the sentiment of people toward vaccination through questions in regular population health surveys. Understanding concerns and reasons behind vaccine hesitancy is necessary to develop strategies that build vaccine confidence. Reasons will differ by population group and cohorts. Researchers have been working to better understand the reasons why people are hesitant to get themselves or people in their care vaccinated. More recently, national collaborations have established more active and targeted methods to understand under-vaccination. For example, Australia's Vaccination Insights

[project](#) is investigating the reasons behind under-vaccination in children aged under five years, for routine NIP childhood and influenza vaccines. The project results will be used to develop strategies and campaigns to increase vaccine uptake in this age group.

### **Measuring the impact of vaccine campaigns and communication strategies**

The Australian Government delivers activities and communication resources that promote vaccination, including through the National Immunisation Program and the National COVID-19 Vaccination Program. For example, annual campaigns aim to encourage influenza vaccine uptake across the population, including but not limited to NIP-funded cohorts.

Campaigns and resources include information on the risks of vaccine-preventable disease, the benefits of vaccination and eligibility for vaccines. For example, in 2017 the Department of Health launched the childhood vaccination campaign, 'Get the Facts', the first of six campaigns that ran from 2017 to 2020. [Evaluations](#) of these campaigns demonstrated recall and recognition of the information, and increased traffic to key websites and material. The campaigns also used innovative marketing strategies informed by immunisation data to target areas of low vaccination coverage. An [evaluation](#) of the 'Get the Facts' campaign found geo-targeted areas were more likely than the rest of Australia to take relevant action following the campaign (91% compared to 80%). However, an Australian National Audit Office (ANAO) audit in 2021 found there was room for improvement measuring the reach and influence of these national awareness campaigns. The Department of Health and Aged Care accepted the ANAO recommendation to improve reporting against performance targets for vaccination awareness campaigns.

Information needs are not static. Quality campaigns and information resources need to adjust for emerging attitudes and information needs on vaccination, informed by insights from research. But now these resources compete with misinformation and mistrust that circulate online and in the community, fuelled by anti-vaccine sentiment. Addressing these challenges requires evidence-based communication strategies and resources that provide accurate information, address concerns, and build trust in the safety and efficacy of vaccines.

### **Health professional recommendations are critical to vaccine uptake, when delivered in a respectful way.**

A positive recommendation by a trusted health professional is one of the most important factors in a person deciding to get vaccinated. Research shows that supporting immunisation providers to confidently discuss patient concerns and recommend vaccination increases vaccine acceptance. More specialised information and support to health professionals – who recommend and administer vaccines to people who hold a wide range of views – is needed.

Australia's approach emphasises giving health providers information and resources to help them recommend and administer vaccines. An example of an Australian Government funded resource is the Sharing Knowledge About Immunisation ([SKAI](#)) project. SKAI professional resources are designed to help doctors, nurses, midwives and other healthcare professionals meet the needs of community members, whether they are ready for vaccination, intend to decline vaccination, or have some questions they need to be answered. SKAI also provides accessible resources to support people who may be hesitant about vaccination to talk about immunisation with their healthcare provider.

### **No-fault compensation for vaccine injuries.**

Many countries around the world have [vaccine injury compensation systems](#), including the United Kingdom, New Zealand, USA, Japan and South Korea as well as several European countries. A common principle underpinning these schemes is that – while vaccines are overwhelmingly safe – governments should compensate individuals who experience a severe adverse reaction in the interest of protecting the broader community, and thereby enhancing confidence in vaccinations.

Prior to the pandemic, there had been [calls](#) to establish a no-fault compensation scheme for NIP-funded vaccines in Australia as part of the vaccine safety system. In 2021, the Australian Government set up a vaccine claims scheme for individuals who experienced adverse reactions to TGA-approved COVID-19 vaccines. The scheme offers compensation to eligible people. The period of the next NIS provides an opportunity to explore

the feasibility of extending the current COVID-19 claims scheme to all vaccines funded by the Australian Government.

### Opportunities for action

- Prioritise community partnerships and engagement in design, delivery and evaluation of communication campaigns and information resources – using appropriate national, state and local mechanisms.
- Track community sentiment using behavioural insights across age groups eligible for NIP vaccines to inform communication strategies and use this evidence to tailor policy and practice.
- Evaluate and report against the performance of vaccine awareness campaigns and other resources, including performance in First Nations communities, priority populations and most remote/rural populations.
- Provide quality resources for a diverse health workforce to respectfully engage with diverse individuals and communities on understanding and enabling vaccination.
- Consider the feasibility of a no-fault compensation scheme for Commonwealth-funded vaccines.

## Priority Area 3: Strengthen program governance, how we manage and monitor programs and account to the public.

### Issues and opportunities

#### Ensure ongoing robust national governance of immunisation in Australia.

The governance arrangements for immunisation in Australia are robust, reflecting the range of responsibilities of the Australian, state, territory and local governments, as well as the roles of many other stakeholders involved in the design, delivery and uptake of immunisation.

The [Essential Vaccines Schedule](#) describes the arrangements for funding and delivery of a national, coordinated approach to maintaining and improving immunisation coverage through the NIP, outlining roles and responsibilities of the Australian Government and states and territories, and a performance framework. Periodic renegotiation and renewal to this intergovernmental agreement are opportunities to continue to drive performance of the NIP.

Strong relationships between stakeholders, governments and committees support operation of the NIP. Committees and advisory groups have unique and complementary roles that guide decisions, advise and oversee programs. Briefly, these include:

- **Australian Technical Advisory Group on Immunisation (ATAGI)** advises the Minister for Health on the NIP and other immunisation policies, programs and issues.
- **Pharmaceutical Benefits Advisory Committee (PBAC)** evaluates the comparative effectiveness and cost-effectiveness of vaccines.
- **Australian Health Protection Principal Committee (AHPPC)** provides national leadership on health protection priorities, including immunisation.
- **Communicable Diseases Network Australia (CDNA)** coordinates national disease surveillance and responses including when responses require vaccination.

The next intergovernmental agreement on essential vaccines is one of the most important mechanisms to achieve the vision of the next National Immunisation Strategy. Developing the next agreement is an opportunity to re-commit to a shared vision and mission for the NIP, renew performance metrics and examine sustainable funding models.

#### Transition the national COVID-19 vaccine program into a sustainable operating model.

The COVID-19 pandemic demanded extraordinary measures of governments across the world, including in how vaccinations were procured, distributed and administered. In Australia, the National COVID Vaccine Program (NCVP) differed from usual arrangements under the NIP in several ways. For example, the Australian

Government has end-to-end responsibility for the NCVP. This included buying and storing vaccines, logistics, distribution and clinical advice, compliance, reporting, and policy. Under the NIP, the Australian Government assesses and purchases vaccines, with delivery logistics and reporting through states and territories. The achievements of the COVID program came at significant cost. As part of transitioning the COVID-19 program into a more sustainable operating model, there is an opportunity to consider which innovations and approaches could be incorporated to future NIP arrangements and national agreements.

### **Improve program monitoring and evaluation to drive performance and account to the public.**

Continuous monitoring and evaluation of immunisation programs is important. The implementation framework for the next NIS will include a monitoring and evaluation framework. The framework will set key performance indicators, and outline value-for-money and other assessments. These activities will continue to enhance the program's effectiveness and adaptability, including updating vaccination schedules in line with contemporary evidence from program reviews. For example, in 2023, the HPV vaccine was changed from two doses to a single-dose schedule based on robust scientific evidence. This change ensures ongoing population protection from HPV infections and cancers, delivered savings for the program and demonstrates the program's ability to review and adjust its settings. Further, a new and comprehensive HPV surveillance [strategy](#) will track the impact of this change and other preventative strategies on range of outcomes.

Transparency supports good immunisation governance, enabling public trust and confidence. Transparency means communicating clearly about decisions in a way that involves stakeholders. Current mechanisms to account to the public rely on reports about immunisation and the NIP, made available online and through publications such as the annual immunisation coverage [report](#). Governments – federal and state and territory – also report on expenditure and outcomes through existing accountability mechanisms for government programs.

### **Prepare for advances in vaccine technology and science.**

New vaccines and new vaccine delivery systems continue to be developed and may be relevant to Australia's National Immunisation Program. Vaccines against newly preventable diseases, such as respiratory syncytial virus (RSV) disease, have been developed based on decades of scientific advancements. New vaccine platforms such as mRNA technology and vaccine adjuvants offer the potential to protect against more serious and complex diseases. New delivery technologies, such as nasal spray or skin patches, may emerge and expand program options.

Reform of Australia's Health Technology Assessment (HTA) processes, regulatory and legislative frameworks, informed by the [2009 review](#), is underway. Recent [draft policy papers](#) on emerging technologies, including antibodies for passive immunisation, highlight HTA reform considerations for assessment or subsidy of new technologies. Technological advances may require significant adaptation in delivering immunisation programs and will always require deliberate efforts to build trust in new technologies. Communication with key stakeholders, including consumers, employers, community, and clinical groups, will continue to be essential to build confidence around new technologies.

### **Opportunities for action.**

- Shaping the next intergovernmental agreement on essential vaccines to reflect the shared vision of the National Immunisation Strategy.
- Continuing to deliver the national COVID-19 vaccine response while working with stakeholders to transition the COVID-19 vaccination program to a sustainable operating model.
- Strengthen accountability and generate evidence to inform improvements to programs and policy through transparent reporting against a monitoring and evaluation framework.
- Prepare for assessment of emerging vaccine technologies and for the opportunities and challenges that adopting new technologies may present to existing immunisation programs and delivery.

## Priority Area 4: Use data and evidence to monitor performance, target interventions and build confidence.

### Issues and opportunities

Australia uses vaccination coverage data and disease surveillance to monitor and evaluate and improve performance of the National Immunisation Program (NIP). Increasingly these data can be used in more powerful ways to build a comprehensive picture of the reach, impact and gaps in the NIP. This includes identification of areas and priority populations with lower immunisation coverage to target interventions. These interventions are being enhanced by data from behavioural insights and community attitudes to shape the design of targeted interventions in low coverage areas or populations.

#### **Harness the power of the Australian Immunisation Register through improving data quality and unlocking linkage opportunities.**

The Australian Immunisation Register (AIR) is a national register for recording vaccines given to people of all ages in Australia. Only vaccination providers – general practices, pharmacies or community health centres – can report to the AIR. In 2021 reporting to the AIR became mandatory for COVID-19 vaccines and all NIP vaccines. These changes enabled real time tracking of Australia’s COVID-19 vaccine coverage that was critical to spot regions with lower vaccination rates. It allowed for targeted interventions to improve coverage and address disparities.

AIR data quality has improved but ongoing attention is required. Data quality requires collaboration between the Australian and state and territory governments, especially for the real-time reporting of vaccination activities and administration. Quality assurance processes remain important, including accuracy of reporting coverage of ‘fully immunised’ children. There are opportunities to improve accessibility of AIR data, including through web-based dashboards.

The AIR does not record data that enables identification of those at highest risk of vaccine preventable diseases, such as people of CaLD backgrounds, people with disability, aged care residents, or those with medical risk factors (funded for additional vaccines under the NIP). Data linkage is helping bridge those gaps. For example, linkage of AIR data to the Person Level Integrated Data Asset (PLIDA) assists in monitoring immunisation coverage in these high-risk populations. PLIDA incorporates linked Australian Government datasets, which provide demographic information such as socio-economic status and cultural diversity alongside vaccination status from the AIR. In 2021, the AIR linkage with PLIDA provided high-quality information on COVID-19 vaccination uptake and barriers among different population groups. This information was used for targeted action to boost COVID-19 coverage. Planning to enable increased availability and use of linked data to assess vaccine impact and vaccine preventable disease outcomes is a priority over the next immunisation strategy period.

#### **Vaccine-preventable disease surveillance systems measure the impact of immunisation.**

Disease surveillance – finding, counting and analysing cases of infectious diseases - monitors the effectiveness of disease prevention strategies, such as national immunisation programs. In Australia, responsibility for infectious disease surveillance is shared between the Australian Government and states and territories. Australia’s interim Centre for Disease Control is leading efforts to improve national disease surveillance systems. Efforts are focused on reducing fragmentation and building links between relevant datasets – including laboratory, vaccination, and hospital data – to improve analysis of disease trends and impact of prevention programs. Disease surveillance data when matched with immunisation coverage data should support early responses to emerging risks of vaccine preventable diseases in the Australian population.

### **Timely data from Australia’s vaccine safety systems are used to respond to signals.**

Although no vaccine or medicine is completely without side effects, the delivery of immunisation to well population groups means that vaccine safety considerations are paramount.

Vaccine safety monitoring in Australia is overseen by the Therapeutic Goods Administration (TGA), the national regulator for therapeutic goods, including vaccines. Before a vaccine is approved for use in Australia, the TGA rigorously assesses its safety, efficacy, and quality. Once a vaccine is in use, the TGA continues to monitor its safety through post-market surveillance. This includes encouraging healthcare professionals to report any unexpected or serious side effects to the TGA, and enabling timely investigation and intervention when safety signals arise. The TGA collaborates with international regulatory agencies to share safety data and information, enhancing Australia’s ability to monitor and respond to vaccine safety. The TGA provides regular updates and reports on vaccine safety. It makes information accessible to healthcare professionals and the public. Annual vaccine safety surveillance [reports](#) are published, providing the community with information about vaccine safety.

Australia implements the AusVaxSafety system, the world’s first national active surveillance system for adverse events following immunisation (AEFI). Using sentinel sites across the country, AusVaxSafety involves healthcare providers, immunisation clinics, and the public to collect information on AEFI. AusVaxSafety uses SMS and email-based surveys, clinical investigations and electronic health records to detect and investigate adverse events. National protocols for program action have been agreed with the TGA, the states and territories to ensure a nationally consistent response to safety issues involving an NIP vaccine.

### **Opportunities for action**

- Boost compliance with mandatory reporting to the AIR, while improving quality and accuracy of AIR data.
- Expand the use of high-quality data linkage to inform specific policy or programmatic questions.
- Explore options to increase availability and accessibility of a range of timely population level vaccine coverage data from the AIR.
- Improve use of disease surveillance data – with vaccine coverage data – to better understand, respond to and mitigate risks of spread of vaccine-preventable diseases.
- Sustain robust vaccine safety systems including enhanced vaccine safety surveillance for new vaccine introductions.

## **Priority Area 5: Strengthen a diverse immunisation workforce to work with Australia’s diverse population.**

### **Issues and opportunities**

The immunisation workforce is made up of many health professionals. Roles, employment and training varies across the country with all contributing to ensure high quality accessible health services. To achieve higher uptake, vaccines need to be delivered in a diverse range of healthcare and community settings. Diversity of settings is important to enable equity of access. Building a workforce able to deliver culturally appropriate care and advice on immunisation is also important to ensure equitable access across the lifespan.

### **Improve availability and distribution of health professionals who can participate as immunisation providers, especially in areas of need.**

Before a health professional can administer vaccines without a medical order, some states and territories require special training and credentialing and – in some cases – enabling legislation. Continuing to align state and territory requirements for immunisation providers supports transferability of skills and qualifications between jurisdictions.

The ability for health professionals to administer vaccines also varies by profession and setting. For example, pharmacists are funded to administer NIP vaccines to people who are five years and older, if enabled by state or territory legislation. In hospital settings, typically authorised nurses or midwives are trained to initiate and administer vaccines. However, evidence suggests that additional system supports – such as vaccination reminders before patients are discharged from hospital – are needed in these settings.

Changing models of care or scope of practice to deliver vaccines can improve the number and distribution of immunisation providers. In some cases, this means enabling health professionals to work across their full scope of practice. Opportunities to safely expand the scope of practice of other health professionals should also be considered. This is especially relevant in areas of need, where workforce shortages can affect delivery of primary and community health care.

### **Build and strengthen a diverse immunisation workforce.**

Recommendations from a trusted health professional are a critical factor in people’s decision to vaccinate. Professionals who can offer culturally appropriate and safe immunisation services to priority populations, including First Nations people and CALD communities, are especially important. This requires cultural competence across all health professions and support for specific cadres of health workers.

Support for First Nations health workforce development, through enhanced training, enables provision of culturally appropriate services for First Nations people. For example, NSW Health is supporting development of a pathway to train and upskill First Nations Health Practitioners to initiate and administer vaccines.

### **Opportunities for action**

- Continue to improve availability and distribution of health professionals who are immunisation providers or who can support delivery of immunisation programs.
- Improve cultural competence in professions and settings where vaccinations are delivered through awareness, training and appropriate resources.
- Build a more diverse immunisation workforce through support to specific cadres of health professionals, including First Nations health practitioners, to work across a scope of practice that includes immunisation.

## **Priority Area 6: Prepare for emerging infectious diseases and emergencies requiring rapid and/or targeted vaccination.**

### **Issues and opportunities**

The emergence of new infectious diseases is difficult to predict. The re-emergence of vaccine preventable diseases, such as measles and diphtheria, can result from changes in vaccine coverage globally. It is reasonable to expect that during the next NIS period, additional and new vaccines will be available in Australia and/or rolled out under the NIP. Additional vaccines could be required urgently for management of infectious disease outbreaks and/or developed in response to novel pathogens.

### **Plan for emergency vaccination rollouts.**

The National COVID Vaccination Program was the biggest single immunisation campaign in Australia’s history. It was a significant procurement, assessment and logistics exercise, and has provided valuable lessons for planning large-scale vaccination rollouts. This includes the need for mechanisms to surge vaccine delivery to rural and remote communities and to increase availability of providers in workplace and community settings.

Recent infectious diseases outbreaks have also required rapid planning and distribution of vaccines, though at smaller scale and using existing arrangements of the National Immunisation Program and the purchasing capabilities of the National Medical Stockpile. In 2022, Australia’s response to Japanese Encephalitis Virus required the government to secure and administer [125,000 vaccine doses](#) to protect those at greatest risk of infection. Concurrently, the department established an [mPox vaccination program](#) that administered more than 50,000 vaccines to high-risk populations within the first six months.

Australian governments need to maintain ongoing readiness for emergency vaccination rollouts, at varying scale and complexity, and balance the speed of delivery with culturally accessible plans and engagement with priority populations and settings.

**Maintain and enhance Australia’s capabilities in research and development for new vaccines and related products and in social science of immunisation.**

Australia’s world class medical and life sciences research sector is supported by strong partnerships between academia, government science organisations, industry, health service and consumers. Efforts to advance basic research and development, high quality clinical development and commercialisation of vaccines and associated technologies in Australia are critical contributors to the immunisation system. Importantly, several research mechanisms have enabled world-leading Australian social and behavioural science research into immunisation that contributes to improving our immunisation programs. Immunisation research efforts should continue to be strengthened, through domestic and international partnerships and by investments through the Australian Research Council, the National Health and Medical Research Council, the Medical Research Future Fund, and Biomedical Translation Fund.

**Maintain and enhance Australian manufacturing capabilities for vaccines.**

The Australian Government ensures a readily available supply of pandemic influenza vaccines through partnership with the private sector. In 2020, additional investment was made to upgrade these vaccine manufacturing facilities to secure Australia’s long-term supply of critical health products including pandemic influenza vaccines. More recently, the [Australian Government](#) entered a 10-year partnership with Moderna and the Victorian Government for onshore manufacturing of mRNA vaccines. Once operational, the [facility](#) is expected to produce up to 100 million vaccine doses every year and reduce Australia’s dependence on imported mRNA vaccines and vulnerability to supply disruptions or delays. This capability may also be relevant for future infectious disease emergencies or pandemics, should an mRNA technology be safe and effective against the novel pathogen.

**Continue Australia’s support to regional and global immunisation efforts.**

Australia has a long history of supporting regional and global immunisation efforts. These include Australian experts leading and participating in immunisation committees at the World Health Organization (WHO). Efforts also include development cooperation led by the Department of Foreign Affairs and Trade that supports capacity development and health system strengthening across the Indo-Pacific region. These efforts support improvements to immunisation coverage and reducing the impact and international spread of vaccine-preventable diseases, contributing to regional and global health security.

**Opportunities for action**

- Continue to plan for emergency vaccine rollouts.
- Strengthen immunisation research capabilities through domestic and international partnerships and funding.
- Maintain onshore manufacturing capacity for critical vaccines.
- Continue Australia’s contribution to strengthening immunisation programs and disease prevention in the Indo-Pacific and globally.