Immunisation Strategy 2017–2022





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Foreword

The Queensland Government is committed to making Queenslanders among the healthiest people in the world.

Immunisation is an internationally recognised, proven and cost-effective way to protect communities against vaccine-preventable diseases and improve the overall health of a population. Vaccination has greatly reduced the burden of infectious diseases. The World Health Organization considers immunisation and clean water the most effective public health interventions of modern times¹.

To achieve the high standards and goals laid out in *My Health, Queensland's future: Advancing Health 2026*, we will work in collaboration with all immunisation providers and other key stakeholders to protect Queenslanders, especially children and other groups most at risk, from vaccine-preventable diseases.

Recent reports from the Australian Immunisation Register show increases in coverage rates with more than 91 per cent of Queensland children immunised in accordance with the National Immunisation Program Schedule. Queensland's target is to have 95 per cent of all children fully immunised at one year, two years and five years of age.

With Queensland's rates on par or above national benchmarks, the Queensland community demonstrates a high level of support for immunisation however there are pockets within the community that require greater support to increase immunisation rates. More needs to be done, for example, to close the gap between Aboriginal and Torres Strait Islander and non-Indigenous childhood immunisation rates at 12 months of age and to improve rates in several Queensland locations where low childhood immunisation rates are continually reported. The *Queensland Health Immunisation Strategy 2017–2022* will guide actions to address these challenges and reduce vulnerability to vaccine-preventable diseases.

Improving vaccination rates in Queensland is a key priority for the Queensland Government. This will require immunisation providers and other key stakeholders to work with individuals, families and communities. Together we can increase knowledge and awareness of vaccine-preventable diseases, further increase confidence in the extensive evidence base supporting our immunisation program and improve the commitment to lifelong protection through immunisation.

I appreciate your support and assistance to achieve our aim of protecting all Queenslanders from vaccine-preventable diseases and to achieve the specific objectives outlined in this immunisation strategy for a better and healthier Queensland.

The Hon Cameron Dick, MP

Minister for Health and Minister for Ambulance Services

Context

National

Since the introduction of routine vaccinations in Australia in 1953, and then the first nationally funded infant immunisation program against diphtheria, tetanus, pertussis and polio from 1975, death or disability from many once-common infectious diseases is now rare. However, the lack of visibility of these diseases in the community has its own challenges and can lead to complacency about the importance of immunisation.

Many Queensland organisations participate in the development and implementation of Australia's National Immunisation Strategies. The current *National Immunisation Strategy for Australia* 2013–2018² outlines a vision for the National Immunisation Program (NIP³).

The NIP commenced on 1 January 1996 as a joint state, territory and Australian Government initiative to reduce incidence of vaccine-preventable diseases in the Australian community. In Australia, a number of vaccines are funded under the NIP for children, adolescents, and adults.

Vaccines currently funded under the NIP can prevent the following diseases:

- measles
- mumps
- rubella
- polio
- diphtheria
- tetanus
- pertussis (whooping cough)
- varicella (chickenpox)
- hepatitis B
- Haemophilus influenzae type b (Hib)
- meningococcal C
- influenza
- human papillomavirus (HPV)
- pneumococcal disease
- rotavirus
- herpes zoster (shingles).

Additional vaccines are recommended and funded for Aboriginal and Torres Strait Islander people and medically at-risk children.

The National Partnership Agreement on Essential Vaccines (NPEV) formalises the relationship between the state, territory and Australian Governments for the NIP.

Under the NPEV, the state's obligations are to:

- purchase and distribute vaccines to immunisation providers
- manage the efficient and effective delivery of the immunisation program
- monitor and minimise vaccine wastage and unauthorised use
- provide data to national databases
- promote administration and storage of vaccines in accordance with national guidelines
- increase community understanding and support of immunisation.

The NPEV commits the Australian Government to reimburse/fund jurisdictions for their NIP vaccine requirements.

The Australian Technical Advisory Group on Immunisation provides clinical advice to Australian governments on the safe and appropriate use of vaccines in Australia. Expert clinical advice is provided for immunisation services in the Australian Immunisation Handbook⁴.

The Australian Childhood Immunisation Register (ACIR) was formally established in Australia in 1996. The data held in ACIR for children aged less than seven years, has enabled:

- tracking of immunisation coverage
- issuing of reminders for overdue immunisation
- provision of immunisation histories for parents.

From 1 January 2016, ACIR was broadened to capture immunisation information for young people under the age of 20 years, enabling implementation of the Australian Government's No Jab, No Pay measure. From September 2016, ACIR expanded to become the Australian Immunisation Register (AIR)⁵, a whole-of-life immunisation register.



Queensland

Adapted for Queensland, the National Immunisation Program (NIP) Schedule Queensland⁶ contains the recommended NIP vaccines and statefunded vaccines for those people who are eligible. A printable version of the NIP Queensland can be downloaded from the website:

www.health.qld.gov.au/publications/clinicalpractice/guidelines-procedures/immunisationschedule.pdf Adolescents are offered the recommended NIP vaccines through the Queensland School Immunisation Program (SIP). Since 2007, the SIP has been delivered across Queensland to approximately 550 public and private secondary schools. The program is managed and coordinated by Hospital and Health Services (HHS) and delivered by HHS or their contracted providers such as local councils, general practice and community nursing services.



In addition, the Queensland Department of Health provides vaccine for other disease prevention programs including:

- Japanese encephalitis vaccine for long-term residents of islands in the Torres Strait
- vaccines such as hepatitis A vaccine, rabies vaccine and meningococcal vaccine for public health responses where relevant
- pertussis (whooping cough) vaccine for pregnant women.

Vaccines are distributed by the Queensland Department of Health and administered by immunisation providers in accordance with supply and safety requirements. This process is closely monitored to minimise errors, avoid vaccine wastage and identify cold chain breaches.

The Queensland Immunisation Program⁷ functions effectively through successful partnerships built with all levels of government and with all immunisation providers including general practitioners, Hospital and Health Services, local government community health services and Aboriginal and Torres Strait Islander community-controlled health organisations.

Monitoring of the immunisation program relies on accurate reporting of vaccination information to immunisation registers.

The Queensland Department of Health has conducted several media campaigns promoting immunisation in recent years.





Partnerships/Stakeholders

The *Queensland Health Immunisation Strategy* **2017–2022** is coordinated by the Queensland Department of Health. It provides a statewide framework for addressing vaccine-preventable disease in Queensland.

The Queensland Immunisation Program involves the Department of Health, other government departments, Hospital and Health Services, private immunisation providers, local government, community-controlled health services and other non-government organisations.

The Department of Health's role is to:

- lead and support the delivery of the National Immunisation Program in Queensland
- manage statewide programs that are not part of the National Immunisation Program
- monitor vaccine supply, wastage and unauthorised use
- monitor program outcomes.

The Department of Health is responsible for the statewide supply of around 2.2 million doses of 21 different vaccines to more than 1800 immunisation providers across Queensland.

Hospital and Health Services also play an important role in the implementation of Queensland's immunisation program. In particular, Hospital and Health Services' public health units work locally to support immunisation providers to implement national and state immunisation programs and initiatives. Public health units:

- provide expert clinical and program advice
- undertake activities to improve immunisation data quality
- follow up children overdue for immunisation
- monitor adverse events following immunisation
- investigate cold chain breaches
- ensure delivery of Queensland's school immunisation program.

Hospital and Health Services also provide immunisation services to their local community.

In Queensland, childhood vaccination services are delivered by a range of immunisation providers, including:

- general practitioners (84 per cent)
- some local government authorities (6 per cent)
- Hospital and Health Services (6 per cent)
- other providers including Aboriginal and Torres Strait Islander community-controlled health organisations and the Royal Flying Doctor Service (jointly providing 4 per cent of immunisation services).

The Department of Health acknowledges the roles and responsibilities of all partners in supporting and/or delivering immunisation services in Queensland. Partners include:

- Queensland's Hospital and Health Services
- General practitioners
- Aboriginal community-controlled health services
- Queensland Aboriginal and Islander Health Council
- Local government
- Royal Flying Doctor Service
- Queensland's primary health networks
- Private medical specialists, nurses, midwives and pharmacists
- Royal Australian College of General Practitioners
- Australian Medical Association Queensland
- Local Government Association of Queensland
- Pharmacy Guild of Australia
- Pharmaceutical Society of Australia
- Catholic and independent secondary schools
- Queensland Department of Education and Training
- Queensland Department of Communities, Child Safety and Disability Services
- Health Consumers Queensland.

Epidemiology

Immunisation remains the safest and most effective way to stop the spread of many of the world's most infectious diseases. Before the major vaccination campaigns of the 1960s and 1970s, diseases like tetanus, diphtheria and whooping cough (pertussis) killed thousands of young children each year. Today, deaths from these diseases are extremely rare in Australia, and the rest of the developed world⁸.

Immunise Australia Program, 2016.

In 1998, when the Australian Childhood Immunisation Register started reporting immunisation rates, fewer than 70 per cent of Queensland children aged two years were fully immunised. Since then, immunisation rates have steadily improved and in the third quarter of 2016 had risen to 92.8 per cent. A fall in immunisation rates in the first half of 2015, (in all Australian states and territories) was due to a change in the national definition of fully immunised at two years. Coverage for children aged one year and five years has remained at high levels since 2010 with an upward trend since the first quarter of 2015 (Figure 1).

Measuring the success of the immunisation program is linked not only to immunisation rates, but to the number of new cases of vaccine-preventable diseases in the community. Notifications of diphtheria, *Haemophilus influenzae* type b (Hib), measles, meningococcal C, pneumococcal, polio and other vaccine-preventable diseases have significantly declined in Queensland following the introduction of immunisation programs.

Vaccine effectiveness is variable and maintaining low rates of vaccine-preventable disease relies on high immunisation coverage.

However, despite the generally high levels of immunisation coverage achieved in the childhood immunisation program, some vaccine-preventable diseases continue to circulate in the community. There are some areas in Queensland where lower immunisation rates indicate more children are unprotected from vaccine-preventable diseases.

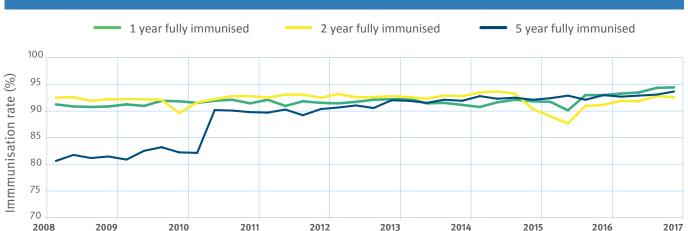


Figure 1: Trends in immunisation coverage by age group, Queensland 2008–2016

Some disease outbreaks in recent years have been linked to travellers entering Australia from countries where the disease is more common. Australia has routine disease surveillance systems which require that all detected cases of vaccine-preventable disease are reported to the relevant state or territory health department. This enables a quick response to prevent the spread of disease.

The most frequently notified cases of vaccinepreventable diseases in Queensland are varicella (chickenpox) and pertussis (whooping cough). Figures 2 and 3 show the notification rates for these diseases in Queensland since 2008.

As revealed in Figures 2 and 3, the number of cases of diseases notified to the Department of Health fluctuates. These fluctuations occur due to a number of variables including changing seasonal disease profiles, outbreaks occurring in populations of low coverage, and improvements in clinical diagnosis

and laboratory testing. The overall trend direction of annual notifications data over several years can be used to inform our understandings of diseases in the community.

Pertussis (whooping cough) is a highly contagious bacterial infection which causes severe breathing difficulties. There have been more than 15,000 notifications of whooping cough in Queensland over the past five years. Babies under six months of age are most at risk as they cannot receive their first vaccination against whooping cough until they are six weeks old. Babies with whooping cough are more likely to suffer from serious complications which can lead to death. Between 2000 and 2013, six Queensland babies died from whooping cough. Vaccinating pregnant women during their third trimester of pregnancy (preferably between 28 and 32 weeks) has been shown to be effective in protecting both the mother and newborn baby against whooping cough.

Figure 2: Varicella notification rates 2008-2016



In July 2014, Queensland Health implemented Australia's first pertussis vaccination program for pregnant women. Figure 4 shows the number of pertussis vaccine doses given to pregnant women in Queensland between July 2014 and February 2016.

The Queensland Immunisation Program faces a number of challenges, such as improving immunisation rates for Aboriginal and Torres Strait Islander children and increasing the uptake of vaccinations provided in the School Immunisation Program. Also, misinformation about the benefits of immunisation remains a major concern. The overall success of the Queensland Immunisation Program is reflected in low numbers of cases and minimal spread of vaccine-preventable diseases, particularly those diseases that in the past caused significant illness and death.

Figure 3: Pertussis notification rates 2008-2016

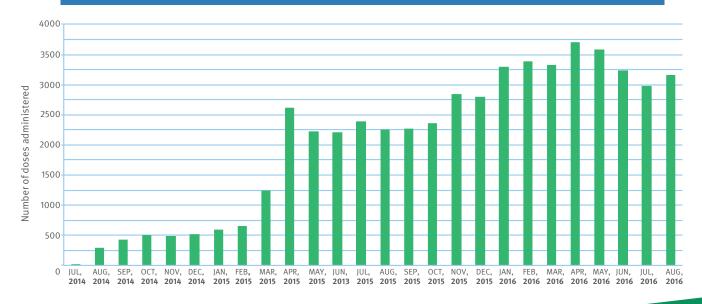


The ongoing success of the program relies on high immunisation rates in current and future generations.

Further information and data about immunisation rates nationally and in each state and territory are available on the Immunise Australia website (www.immunise.health.gov.au). Hospital and health service performance data on immunisation coverage is available on the Queensland Health website (www.health.qld.gov.au).

Further information and data on Queensland notifiable conditions is also available on the Queensland Health website: www.health.qld.gov.au.

Figure 4: Doses of pertussis vaccine administered to pregnant women from July 2014 to August 2016



AIM

All Queenslanders are protected from vaccine-preventable diseases.

Strategic Plan

Children under five years of age

5 KEY FOCUS AREAS

The *Queensland Health Immunisation Strategy* **2017–2022** has five key focus areas:

- Childhood immunisation
- Adolescents
- People with specific vaccination needs
- Communication and education
- 5 Monitoring, surveillance and research

PRIORITY POPULATIONS for vaccination

Aboriginal and Torres Strait Islander communities

Pregnant women

People from culturally and linguistically diverse (CALD) backgrounds, especially those in refugee resettlement programs

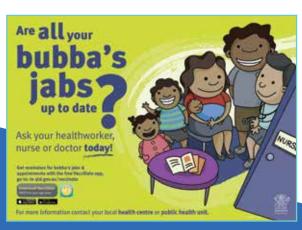
For each focus area, objectives and action statements have been developed to provide direction for the work to be led by Queensland Health over the five year term of the Strategy. Partner organisations may also find this document useful for future planning.

Childhood immunisation

Objectives	Actions
immunisation rate achieved for Queensland children at one, two and five years of age.	1.1.1 Identify geographic areas or cohorts where immunisation rates are low and design targeted interventions.
	1.1.2 Review the impact of the Queensland Government's childcare vaccination legislation.
	1.1.3 Investigate vaccination issues for children from specific groups, including those from culturally and linguistically diverse backgrounds and children under the care of the Department of Communities, Child Safety and Disability Services.
	1.1.4 Build on <i>Immunise to 95</i> to follow up children overdue for immunisation.
1.2 The gap in immunisation rates between Aboriginal and Torres Strait Islander children and non-Indigenous children reduced by 50 per cent.	1.2.1 Implement and evaluate innovative, culturally-appropriate projects to increase and maintain immunisation coverage rates for Aboriginal and Torres Strait Islander children and improve timeliness of vaccinations.







2 Adolescents

Objectives	Actions
2.1 An 85 per cent adolescent immunisation rate achieved through the School Immunisation Program.	2.1.1 Implement and monitor changes to the <i>Public Health</i> Act 2005 to enable disclosure of identifiable student information to vaccine service providers.
	2.1.2 Review consent and follow-up processes to streamline the School Immunisation Program.
	2.1.3 Implement and evaluate innovative projects to increase participation, including opportunistic vaccination, to ensure completion of the vaccination schedule.

3 People with specific vaccination needs

Objectives	Actions
3.1 People with specific vaccination needs have access to information and appropriate vaccination services.	3.1.1 Continue support of the Queensland Specialist Immunisation Service at the Lady Cilento Children's Hospital.
	3.1.2 Continue the funded pertussis (whooping cough) vaccination program for pregnant women. Implement and evaluate projects to increase uptake.
	3.1.3 Develop, implement and evaluate strategies that promote vaccination for Aboriginal and Torres Strait Islander people.
	3.1.4 Identify local barriers and improve access to services.
	3.1.5 Increase awareness and understanding among people traveling overseas about the risk of acquiring vaccine-preventable diseases overseas and the importance of vaccinations before traveling.
	3.1.6 Support healthcare worker (HCW) vaccinations through the Queensland Health HCW Vaccination Policy Framework.
	3.1.7 Develop appropriate resources for culturally and linguistically diverse populations.
	3.1.8 Support vaccination of people in Queensland's refugee resettlement programs.
	3.1.9 Address immunisation needs for older people as recommended in the National Immunisation Program Schedule including vaccination for influenza, pneumococcal disease and herpes zoster (shingles).

Communication and education

Objectives	Actions
4.1 Improved awareness and understanding of immunisation requirements in the Queensland community with a focus on target populations.	4.1.1 Implement, monitor and evaluate timely, targeted and evidence-based immunisation campaigns for priority populations.
	4.1.2 Use current and emerging communication tools/ technology to reach target audiences.
	4.1.3 Consult with target groups in the development of programs and resources to ensure these meet identified needs.
	4.1.4 Collaborate with partners and stakeholders listed in this strategy to promote the importance of immunisation for the health of the Queensland community.
4.2 Immunisation providers have greater knowledge about lifetime vaccination requirements and are skilled to provide appropriate services.	4.2.1 Provide a framework to support nurse immuniser training and skill maintenance.
	4.2.2 Facilitate online training for health providers and other key stakeholders.
	4.2.3 Support Aboriginal and Torres Strait Islander Health Workers in their role.

5 Monitoring, surveillance and research

Objectives	Actions
5.1 Program policy, planning and service delivery is supported by accurate immunisation data.	 5.1.1 Promote the Australian Immunisation Register. 5.1.2 Collaborate with the Australian Immunisation Register to identify and address data quality issues. 5.1.3 Continue to monitor and improve the collection and quality of Queensland's immunisation data.
5.2 Queensland's immunisation program is informed by quality research and supported with appropriate policies.	 5.2.1 Review the Adverse Event Following Immunisation process in line with legislative requirements. 5.2.2 Raise community and health professional awareness of vaccine safety surveillance systems to improve confidence in immunisation and the reporting of adverse events.

Governance

The implementation of this strategy will be led by the Communicable Diseases Branch, Department of Health. Governance of the strategy will be addressed through routine quality, safety and governance processes within the Prevention Division of the Queensland Department of Health under the stewardship of the Executive Director, Communicable Diseases Branch and the Chief Health Officer and Deputy Director-General, Prevention Division.

Monitoring, reporting and evaluating

Communicable Diseases Branch uses various communication channels to share and collect information to and from the Hospital and Health Services' public health units and other key stakeholders. These channels include conferences, forums, teleconferences and written updates.

Implementation of the strategy will be monitored by the Immunisation Program, Communicable Diseases Branch with a six-monthly progress report provided to the Executive Director, Communicable Diseases Branch and the Chief Health Officer and Deputy Director-General, Prevention Division. The Chief Health Officer will report on progress to the Director-General, Chief Executives of Queensland's Hospital and Health Services and to the Minister for Health and Minister for Ambulance Services.

Monitoring and reporting over the life of the strategy, together with an evaluation of the strategy in the final year of implementation, will inform future direction and the development of future strategic plans.

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